

**Charting the Course: Advance Care Planning Conversations with Primary Care Providers
During Medicare Wellness Visits**

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Author's Note

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She has no known conflict of interest to disclose.

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Abstract

Background: Advance Care Planning (ACP) conversations are discussions between patients, providers, and loved ones addressing key care decisions in the event of incapacity. Nearly two-thirds of US adults have not completed an Advance Directive (AD), yet ACP conversations rarely occur in practice. The objective of this quality improvement project was to implement workflow changes with a reminder system to facilitate ACP conversations during Medicare Wellness Visits (MWV).

Method: Social Cognitive Theory describes the complex relationship between variables that can influence an individual's decision to address ACP. Providers in a primary care office in the Southwestern United States participated in an ACP education session and confidence survey. Patients presenting for the MWV were screened for ACP, and visual reminders were attached outside the exam room for provider review. Aggregate data were used to evaluate provider surveys. Descriptive statistics were used to evaluate patient characteristics and the Chi-square Test of Independence, and Fisher's test was used to compare the pre-and post-intervention advance directive documentation.

Results: Qualitative feedback from the survey indicates reminders and easily accessible resources may help facilitate ACP conversations. Of the 251 MWVs, 21 (8%) had an AD documented, significantly less than the nationally reported rate of 37.7% ($p < 0.05$, $z = -2.39$).

Conclusions: Healthcare providers face multiple barriers preventing or delaying ACP conversations in practice. System-level changes and provider education can improve the rate of ACP conversations and impact patients' care at the end of life.

Keywords: advance care planning, quality improvement, reminder system

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Charting the Course: Advance Care Planning Conversations with Primary Care Providers During Medicare Wellness Visits

Across the lifespan, quality health care that aligns with the patient's values is paramount to patient satisfaction. Advance directives (ADs) impact individuals at any age who are unable to make their own health care decisions due to an emergency, illness, or end-of-life (EOL). An AD is a legal document that becomes effective when the individual becomes incapacitated and details the type of medical care they would want to receive (National Institute of Aging [NIA], 2018b; Sudore et al., 2017). Planning for the unexpected by completing ADs allows individuals to express their values and wishes concerning EOL care (NIA, 2018a). If necessary, available ADs can help guide the surrogate decision-maker to prioritize the patient's preferences and advocate for these choices (Devnani et al., 2017). Targeted patient education to those who can benefit the most from ADs may increase the completion rate and result in more appropriate medical care that aligns with the patient's wishes.

Problem Statement

The United States is predicted to have rapid growth in people 65 years of age or older over the next 30 years (Roberts et al., 2018). According to the Centers for Disease Control and Prevention (2018), ADs are an essential part of health management in older adults with one or more chronic conditions. Nevertheless, nearly two-thirds of US adults 18 years of age and older have not completed ADs, a figure that has not changed over the previous six years (Yadav et al., 2017). In addition, comparable rates for AD completion occurred in patients with chronic diseases and healthy adults. The Institute of Medicine (IOM) first addressed the subject of death and dying with a landmark report that promoted improvements in advance care planning (ACP) and EOL care in addition to physician reimbursement for ACP conversations by Medicare (Field

et al., 1997). A later IOM (2015) report emphasized the need for more ACP conversations with health care providers (HCP) with documentation in electronic health records.

A recent consensus statement defined ACP as a way of aiding "adults at any age or stage of health in understanding and sharing their personal values, life goals, and preferences regarding future medical care" and to "ensure that people receive medical care that is consistent with their values, goals, and preferences during serious and chronic illness" (Sudore et al., 2017, p. 826). Discussions may begin at any time and are continually adjusted based on the patient's current health status (IOM, 2015; Sudore et al., 2017). ACP should prepare the person to make an educated decision regarding medical care goals and may include identifying another trusted individual in making medical decisions. Yadav et al. (2017) suggest that AD policies and interventions should focus on populations with low AD completion rates and a high risk for adverse EOL outcomes.

ADs may include a living will, medical durable power of attorney (MDPOA), and other documents such as Do Not Resuscitate orders, and organ and tissue donation documents (NIA, 2018a). Living wills are documents that communicate to HCPs which procedures, or conditions in which procedures, may apply if the person is dying or otherwise unable to communicate their treatment decisions. An MDPOA is a legal document naming a health care proxy; someone trusted to make medical decisions on a person's behalf. If the individual wishes to have specific instructions for other issues not covered by the living will, additional orders and forms may require the provider's completion.

Purpose and Rationale

As the world faces the novel coronavirus pandemic, patients and providers must become accustomed to a new reality that resources can quickly become scarce, and health conditions can

dramatically change (Curtis et al., 2020). Before a severe acute illness, ACP discussions regarding care goals should be a high priority, especially for patients with chronic medical conditions. The completion rate for ADs has remained unchanged in recent years, prompting the need for ACP discussions, and increasing patient understanding of ADs at a time when resources are limited (Yadav et al., 2017).

Background/Significance

Community-Dwelling Adults

Overall, ACP conversations can be of great value, prompting the patient to explore their options and discuss these decisions with their HCP and other trusted individuals. According to a recent systematic review, patients 65 years of age or older were significantly more likely to have completed an AD (45.6%) compared to younger adults (31.6%); however, the highest rates of completion were among patients in hospice or palliative care (59.6%) and nursing homes (50.1%) (Yadav et al., 2017). Patients included in another review emphasized that the ACP conversation should happen sooner rather than later, and it is easier to manage when in relatively good health (Zwakman et al., 2018). Furthermore, some patients felt they were not ready to discuss ACP and had some resistance, while most reported having a positive experience.

ACP education

With an increase in electronic health record (EHR) utilization, secure patient electronic messaging has rapidly increased in utilization. In 2017, almost 91% of Arizona office-based physicians used an EHR (Myrick et al., 2019). Fine et al. (2016) found technology to be a valuable tool to facilitate ACP and AD documentation in EHRs. A recent randomized controlled trial assessed the impact of personalized ACP EHR messages through a secure patient electronic messaging [PEM] system on AD completion in a primary care setting among older adults (Tieu

et al., 2017). Patients with older age and higher medical complexity had statistically significant increases in AD completion ($p < .001$ and $p = .017$, respectively). A personalized approach may improve the experience of ACP, considering the individual's needs and coping styles (Zwakman et al., 2018).

Some older adults may be reluctant to use EMRs for AD documentation. In contrast, others are more likely to use an electronic format with easy-to-find features and embedded resources for AD completion (Portz et al., 2020). Portz et al. (2020) utilized ACP portal tools with evidence-based resources, the ability to send messages to the ACP support team and follow-up, and to complete a legally valid, state-specific electronic MDPOA form. PEMs can be directed to specific, at-risk populations and sent at multiple time points, allowing for a continued conversation as the patient's understanding grows (Tieu et al., 2017). Tieu et al. (2017) utilized a personalized PEM explaining the ACP process with encouragement to complete and a link to an ACP workbook to guide the patient and their loved ones through the process. This intervention is both cost-efficient and potentially sustainable. Furthermore, as patients experience increased ACP engagement levels, there is an associated increase in positive perceptions of EOL experiences (Levoy et al., 2020).

Usual Care

Providers often view ACP discussions as a vital tool for EOL conversations that can provide a multitude of benefits to the patients and their relatives. However, the frequency of ACP conversations in practice remains low and may be attributed to patient barriers such as fear of death, planning, and concern of burdening their loved ones (Zwakman et al., 2018). Most ACP interventions have been informational, and focused on increasing AD completion rates and improving proxy-decision making; however, there is a lack of high-quality research that

evaluated ACP interventions (Johnson et al., 2018; Weathers et al., 2016). Stagnant AD completion rates may be associated with HCP concerns that ADs have not been used to their potential and result in decreased provider promotion of use (Yadav et al., 2017). Authors suggest ADs need updated content and format to better describe the essential elements of ACP conversations, such as patients' values and goals, and the individual's care preferences.

Outcome

Across studies, there are various measures of ACP completion. Frequently, ACP programs are evaluated at the healthcare system level by data obtained from documents. The most common outcome measure is EOL treatment wishes followed by ACP/AD/EOL care discussions (Biondo et al., 2016). Biondo et al. (2016) note identifying the quality of ACP conversations is challenging to evaluate and may be assessed by patient outcomes. A recent multidisciplinary Delphi panel ranked the importance of ACP outcome constructs and evaluated ACP interventions' success into an organizing framework to define successful patient-centered ACP (Sudore, Heyland, et al., 2018). Among the top three patient-centered outcomes were: (1) care consistent with goals; (2) patient chooses a surrogate; (3) documentation of the surrogate. The authors raised caution regarding the challenges of measuring "care consistent with goals" and matching most recently documented goals. Research is needed to explore how individuals want ACP conversations started and outlined, support providers in introducing ACP, and increase public understanding (Rietjens et al., 2020).

Internal Evidence/ Setting Generated Data

In a small primary care office affiliated with a large healthcare organization in Southwest Arizona, patients rarely discuss ADs or ACP during their Medicare Annual Wellness Visits (AWV). For AWVs or new patient appointments, patients complete a form with only one

question addressing ADs. Time is a significant barrier limiting provider initiation of ACP conversations. If ADs or ACPs are not addressed during the visit, there is little to no follow-up regarding ACP discussion. Reluctance to discuss EOL care is another observed barrier for both patients and providers. The Care Coordinator and Social Worker note these conversations would be easier to discuss if they happened before the patient was facing a dramatic decline in health status. A provider also identified a lack of follow-up scheduling appointments to address ACP or provide information when patients express interest.

At least one provider does not routinely document ACP status or conversations on further investigation of documentation practices. Within the charting system, there is a notice that ACP is required for “Welcome to Medicare” visits (WMV) and is optional for initial AWV and subsequent AWVs. Further, within the EHR, there is a template for AWVs that includes checkboxes for ACP discussions/documentation and patient information regarding ADs. One provider noted she was not aware there was a template for this type of visit.

Initial interest in ADs and ACP led to examining the current evidence to determine a better intervention for documenting the completion of ADs. This literature review led to the clinically relevant PICO question, "In the primary care setting, how do adults who receive ACP information before annual wellness visits compared to those who receive standard care affect the completion of an advance directive?"

Evidence Synthesis

Search Strategy

An exhaustive literature review was performed in the following databases: Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMed, PsychINFO, and The Cochrane Library. These databases were selected for their relevance to the topics of AD and

ACP. Moreover, these databases are known for their rigor, medical relevance, research base, and peer review. Keywords included: *adult(s) AND advance care planning OR advance directives* with filters applied to publication dates between 2016 – 2021, peer-reviewed journal articles, and the English language yielded 325 results in CINAHL, 702 results in PubMed, 254 results in PsychINFO, and 61 results in Cochrane Reviews. Intervention terms were not specifically identified as the search became too narrow. Rather, operational terms were used: *education, patient education, and promotion*. The outcome was specified with the terms: *completion, knowledge, attitudes, and electronic medical record*. Mesh and Boolean terms were also used to broaden the search relevancy.

CINAHL

Additional search terms were added to include *community, outpatient, or home*, resulting in 764 articles. The last search included prior search information with the addition of the term *education*, resulting in 18 articles.

PubMed

Secondary searches included additional filters for Meta-Analysis, Randomized Controlled Trial, and Systematic Review, resulting in 69 articles. Searches that included *community-dwelling, outpatient, and primary care* were too narrow of a search, resulting in only two articles. Further searches with the original search terms and limits, in addition to *primary care* and *completion*, resulted in 64 articles.

PsychINFO

Another search in PsychINFO included *community-dwelling* and *annual wellness exam*, resulting in 21 articles. Ancillary searches included *patient education, alerts, and electronic*

notifications, resulting in 34 articles. With the addition of the term *Medicare*, 8 studies were finally identified.

Critical Appraisal and Synthesis of Evidence

After a thorough literature search of ACP in primary care, and the application of rapid critical appraisal tools, 10 randomized control trials, and systematic reviews were selected for further analysis. All of the studies are high-level, meaning there is a lower risk of bias and are more applicable to a broader range of people. Most of the studies were conducted in the US or included a majority of studies from the US. All studies were performed within the last five years (2016-2021), and most were inferred to use the Cognitive Behavioral Model (CBM) as a theoretical framework. Six of the studies disclosed sources of funding and bias were minimal or none declared. Significant homogeneity was apparent in demographics, most participants were White women with a mean age in their 60s-70s. Only one study included an intervention developed for Spanish-speaking participants (Sudore, Schillinger, et al., 2018). Four of the studies identified participants with lower health literacy or education levels. One study randomized 200 patients to receive the intervention, with 2294 participants in the control group (Tieu et al., 2017). The number of participants was heterogeneous across studies, ranging from 91 – 2526 (see Appendix A, Table 1).

On further analysis, the majority of studies utilized a form of ACP education with a reminder system. In addition, most studies included an outcome measure of the documentation of ADs in the EHR and a discussion of ADs. Several of the studies conclude multi-level interventions, including system-level changes, could provide the greatest impact on increasing the completion rate of ADs. The systematic reviews found relatively low levels of evidence for

various interventions. Several of the studies utilized low-cost or free interventions (see Appendix A, Table 2).

Conclusions

The literature includes various instruments that report positive findings in the documentation of ADs or ACP discussions in the EHR, however, there is a lack of consistent evidence regarding the efficacy of one single tool. There is overall low-quality evidence for structured communication tools to assist with EOL discussions in ambulatory care settings which may increase the completion of ACP. However, there is compelling evidence to suggest that interventions targeting more than one step in the ACP process have greater increases in ACP completion. Using this information, interventions targeted to routine Medicare Wellness Visits (MWVs) with the use of standardized templates, patient education, and reminders, can feasibly increase the documentation of ADs and ACP conversations in the EHR.

Theoretical Framework & Implementation Framework

Theory Application

The Social Cognitive Theory (SCT) was selected to describe the complex relationship between variables that can influence an individual's decision to engage in ACP. SCT describes how individuals regulate their behavior, considering an individual's past experiences and the environment in which the behavior would occur (Bandura, 1989). The central components of the SCT are behavioral factors, environmental factors, and personal cognitive factors (See Appendix B, Figure B1). These components exert bidirectional influence on one another to achieve behavior change. Some areas of influence may be stronger than others and the influences may occur at different times. A person's age, gender, ethnicity, health status, personal expectations, beliefs, and goals regarding ACP can shape and drive their behavior to complete ADs. In

addition, social factors, such as who prompts the conversation of ACP and the relationship between provider and patient can affect the environment. Environmental factors related to ACP include time constraints for patient visits, the use of appropriate templates, and whether providers view ACP as a process that should be revisited annually or as a patient's health status changes. Most of the studies did not implicate the use of SCT in their design, however many of these elements appear to be used in evaluating the documentation of ADs.

Implementation Framework

The Rosswurm and Larrabee model for evidence-based practice was developed from theoretical and research literature based on evidence-based practice and change theory (see Appendix B, Figure 2). This model serves as a guide for practitioners through the process of evidence-based practice and has been tested in the acute care setting (Rosswurm & Larrabee, 1999). The first step is to assess for change in practice through the collection of internal data and comparison to external data. With the identification of a problem in one part of practice, stakeholders can be recruited to participate in discussing and detailing the problem. The next step is to define the problem and link it to interventions and outcomes. The following step synthesizes the research evidence with a critical appraisal of the literature. Then, practitioners design a change in practice using the research evidence, environmental variables, and stakeholder feedback to develop the study protocol. Next, implementation of a pilot study with close monitoring of the process with follow-up reinforcement of the intervention. The data is collected and interpreted with the inclusion of staff opinions. The final step describes the implementation of the new practice into the standard of care.

The steps outlined in the Rosswurm and Larrabee Model are in alignment with the requirements of a doctoral quality improvement project. The investigator can proceed through

the steps in numerical order, return to a previous step, or begin again as warranted by the situation. The Rosswurm and Larrabee Model will serve as the implementation framework for this doctoral project. At this stage, the first three steps of the model have been completed. The next step is to design the intervention, identify resources necessary for the project, plan the study, and define outcomes of interest. After design and approval from internal review boards, the next step will be the implementation of the intervention and evaluation of the process and outcomes. Finally, the results of the intervention will be evaluated to determine if the results support practice change and presented to key stakeholders.

Implications for Practice Change

Recent research indicates the most successful interventions that increase the completion of ADs are aimed at a combination of patient, provider, and system levels, over multiple visits (Risk et al., 2019). Person-to-person interaction was found to be a strong contributing factor compared to more fixed interventions. Also, most studies utilized some form of reminders to patients or staff regarding ACP discussions. Internal evidence at this practice site indicates there are gaps in workflow and follow-through that lead to missed opportunities to discuss ACP. Additionally, stakeholders identified that templates called “SmartSets”, often used by providers for MWVs, do not contain prompts regarding AD. This leads to missed opportunities for ACP discussion and lack of documentation in the chart, and ultimately failing to meet Medicare requirements as part of the initial WMV visit.

Key stakeholders note patients often complete a Health Risk Assessment with medical assistants at the start of the MWV. This is an opportune time to ask patients if they are interested in learning more about ADs. When patients acknowledge an interest, it is the duty of the healthcare provider to provide information regarding ADs. The feasibility of the intervention will

be met by a free AD information packet provided by the Office of Arizona Attorney General, Mark Brnovich (Arizona Attorney General, 2021). This information will be available in print with funding supported by key stakeholders at the site. Stakeholders also suggest providing a tip sheet to providers regarding coding and presentation regarding the implementation of the study at the clinical site. Routine check-ins with staff and other stakeholders throughout project implementation will ensure the intervention is timely, informational, and addresses the needs of the patient. Barriers will be evaluated with input from stakeholders to collectively develop solutions to these issues. Educational materials will be provided in English, most patients at this site list English as their primary language. All components of any deliverables will remain available to patients and providers to be used on a continual basis. Baseline data regarding the number of patients without a documented AD prior to their MWV will be collected from a pre-intervention chart review. Follow-up data after the intervention will be collected to measure outcomes of AD and ACP discussion documentation in the chart from a chart review. If the results indicate a significant positive effect, the goal of the project will be to present to the Chief Medical Officer and Regional Medical Directors the results and incorporate questions regarding ADs in the provider template for all MWVs and implement the intervention on a larger scale.

Potential Outcomes

The design of the intervention will be developed with sustainability, feasibility, and quality improvement. If the results of this study demonstrate that patients are responsive to early AD education and providers begin to code for ACP discussions, tracking ACP conversations will become easier and the providers will ensure they fulfill Medicare requirements during their visits. Normalizing the conversation of ACP with annual visits can create a ripple effect, prompting patients to discuss their wishes and beliefs with family members and their providers.

Ideally, most people should have some form of AD on file in case of an emergency. ADs decrease the burden on family members to make difficult decisions and allow some comfort that providers are following the expressed wishes of the patient. The ultimate goal is to provide care at EOL that is consistent with the goals and wishes of the patient.

Methods

Ethical Considerations

Four ethical principles provide the foundation for this doctoral-level project: autonomy, beneficence, justice, and nonmaleficence. Providers approached to participate in this project reserve the right to autonomy, which is the freedom to make one's own decisions (American Nurses Association [ANA], 2015). The project adheres to this principle by respecting the individual's right to choose to participate after receiving sufficient information to make an informed decision (ANA, 2015, Provision 3.2). Participants received full written information regarding potential risks and benefits of participation, offering opt-in to participate, and notification they can opt out of participation at any time. The goal of this project is to increase the frequency of ACP conversations with primary care providers, which guides patient care at end-of-life and is based on the principle of beneficence. Beneficence refers to benefitting others, by preventing or removing harm, and serving the patient's best interests (ANA, 2015). The project will adhere to this principle by providing patient education on ACP after patients express interest in further information. This project also follows the ethical principle of justice, whereby each person will be treated equally (ANA, 2015). Provider documentation practices will be reviewed for all patients who present for their annual Medicare Wellness visit. Nonmaleficence is the final principle, which represents a duty not to harm and to stabilize unavoidable harm with improved outcomes (ANA, 2015). This project has little to no foreseeable harm anticipated, although it may

produce discomfort for the individual in having conversations regarding end-of-life. A letter of support was obtained from the Practice Manager at the Primary Care office (Appendix C). This project was deemed non-research by the organization's Institutional Review Board (IRB) and received approval from the Network Nursing Research Council to begin the quality improvement project (Appendix D). The Arizona State University IRB approved the project as an Initial Study (Appendix E). Informed consent was obtained from participants prior to starting the project (Appendix F).

Practice Setting and Participants

The project site was a primary care office affiliated with a large healthcare organization in the Southwestern United States. The office has four physicians, two nurse practitioners, one social worker, one office manager, and several front- and back-office staff members. The education and recruitment of providers were held during the quarterly provider meeting at the end of the workday. Support staff were invited to participate and received education on ACP at the following morning huddle meeting.

The participants contributed a portion of the meeting time and did not receive any direct or indirect compensation for participation in the education session. Inclusion criteria are all providers and support staff at this location. No providers or support staff were excluded as all have the potential to encounter patients at MWVs. Exclusion criteria are providers whose primary language is not English.

Intervention

This project was constructed in a pre-post design with an educational intervention and follow-up data collection on billable ACP rates in addition to ACP education and AD documentation. Providers voluntarily attended a 10-minute structured education session about

ACP that included verbal discussions and written material. The written material included a tip sheet for billable International Classification of Diseases-10, Current Procedural Terminology, and Healthcare Common Procedure Coding System codes, and a screenshot of how to find documentation templates appropriate for visit type. Participants completed a Level of Confidence subscale of the *Knowledge, Attitudinal, and Experiential Survey on Advance Directives* (KAESAD) survey to assess provider confidence in ACP before the intervention (Jezewski et al., 2005). The total time to complete the survey was approximately 5 minutes.

The education session included information on the importance of ACP discussions, finding the documentation templates that correspond to MWVs, and billable codes for the service. The program educated providers through verbal instruction and written materials. There was the additional time allotted for questions and discussion of ACP materials and surveys. Support staff received education regarding the importance of ACP conversations and changes their workflow to facilitate these conversations. Patients presenting for a MWVs complete a Health Risk Assessment, a tool currently in use with the organization. If patients report they would like more information regarding ADs, living will, or end-of-life planning, the medical assistant (MA) or licensed practical nurse (LPN) will attach the ACP information packet to the binder clip outside the exam room door. However, if the patient declines information on ADs, living will, or end-of-life planning, no changes in the workflow are taken by the MA/LPN. Providers routinely review documents posted outside the exam room door before conducting patient visits. The ACP packet serves as a visual reminder for providers to discuss ACP with patients during their visit and can serve as an educational handout for patient education. Providers will then conduct their visits, document, and bill in the EHR.

The intervention and provider survey was conducted in October 2021. Data collection occurred between October 2021 and January 2022, and data analysis occurred between March and April of 2022. The final presentation and development of this report took place between March and April of 2022 with project dissemination in April and May 2022.

Outcome Measures

The primary outcome of this project is to increase the occurrence and documentation of ACP conversations during Medicare Wellness visits through staff facilitated prompts and provider education on ACP documentation and billing practices. A secondary goal is to increase the completion rate of advance directives related to the increased frequency of advance care planning conversations between provider and patient. The data will be collected from the patient's MWV note in the EHR record by the organization's Information Technology department for the three months pre-intervention compared to the data three months post-intervention.

Instruments

A questionnaire was developed by the investigator to collect data to assess provider documentation practices of ACP, preparedness for ACP conversations, and barriers to ACP discussions (Appendix G).

Providers also completed a Level of Confidence subscale of the *Knowledge, Attitudinal, and Experiential Survey on Advance Directives* (KAESAD) developed by Mary Ann Jezewski, RN, PhD, FAAN to assess their confidence in Advance Care Planning conversations (Jezewski et al., 2005). Permission was granted by Dr. Jezewski to reproduce this portion of the instrument with the understanding that it would not be published or attached to this report. This portion of the survey contained 10 questions on a five-point Likert scale that measured the confidence in ACP

(Cronbach $\alpha = 0.95$). The reliability and validity of this instrument were established by registered nurses and do not apply to the general public.

Data Collection & Analysis

Provider surveys were administered at the intervention, and data collection from Medicare wellness visits was collected three months before and three months post-intervention. The rate of ACP codes billed by providers was tracked by the organization's Information Technology department. All data analysis was performed using IntellectusStatistics™. Chi-squared will be conducted to compare the two different samples, prior to implementation of the intervention and following the implementation to determine the difference in responses. Provider surveys will be evaluated using descriptive statistics and aggregate data.

Budget

The total cost for the project was estimated at \$2,190.00 USD (Appendix H). In-kind support in the amount of \$1,790.00 USD was provided by the project site. Education materials were \$5.00 USD per provider.

Results

The intervention was implemented on October 19, 2021. A retrospective chart review revealed 145 patients were seen for their MWV in the three months before the intervention, and 106 patients were seen for a MWV in the three months after the intervention. A statistical significance calculator was used to evaluate the significance of the following findings. Of the 251 MWVs, 21 (8%) had an AD documented, significantly less than the nationally reported rate of 37.7% ($p < 0.05$, $z = -2.39$) (Yadav et al., 2017). Comparing the 145 MWVs pre-intervention (10 had an AD completed before the visit, 0 completed an AD after the visit) and 106 MWVs post-intervention (10 had an AD completed before the visit, and 1 completed an AD after), the

results were *ns* ($p = 0.126$). Although not significant, only one patient had completed an AD after the intervention which is clinically significant and supports a practice change.

Provider Surveys

Qualitative feedback from the survey indicates reminders and easily accessible resources may help to facilitate conversations. In addition, the provider noted they do not recommend follow-up appointments to discuss ACP. Additional barriers to ACP conversations are forgetting to discuss ACP during the visit, and that they are not confident in implementing institutional policies and procedures for ADs. One provider returned a completed survey; therefore, it is unknown if these factors are consistent across all providers. Although this feedback cannot be evaluated by statistical analysis, it does provide clinical significance and support practice change progress through the identification of barriers to implementing ACP conversations.

Descriptive Findings

Descriptive statistics were calculated to determine the frequencies and percentages for Race, Gender, AgeGroup, AD documentation in the chart (ADdoc), and AD date of service documentation (ADdts) for all MWV during the data collection period. The most frequently observed patient for a MWV was White or Caucasian ($n = 240, 95.62\%$), Male ($n = 144, 57.37\%$), 65-74 years old ($n = 164, 65.34\%$), no AD documented ($n = 230, 91.63\%$), and no date for ADdts ($n = 230, 91.63\%$). In addition, descriptive statistics were calculated to determine the frequencies and percentages for patients with a documented AD during the data collection period, including Race, Gender, AgeGroup, ADdts, and VisitType. The most frequently observed patients with a documented AD were White or Caucasian ($n = 21, 100.00\%$), Male ($n = 12, 57.14\%$), aged 75 or older ($n = 11, 52.38\%$), AD documentation on 09/09/2020 ($n = 3, 14.29\%$), and seen for an Annual Wellness Visit, subsequent ($n = 19, 90.48\%$). These findings

suggest interventions targeting ACP during MWV should account for these demographics in implementing a practice change. However, the exact visit date where ACP conversations or education led to AD documentation cannot be determined from this data.

Advance Directives

The following Chi-square Test of Independence and Fisher Exact Tests were run to examine whether the specified values were independent: MWV date of service (MWVdts) and ADdts; AgeGroup and ADdoc; Gender and ADdoc; and AgeGroup and ADdts.

The results of the Chi-square test for MWVdts and ADdts were not significant based on an alpha value of .05, $\chi^2(324) = 336.00, p = .311$, suggesting that MWVdts and ADdts could be independent of one another. The results of the Fisher exact test were not significant based on an alpha value of .05, $p = 1.000$, suggesting that MWVdts and ADdts could be independent of one another. The results of the Chi-square test for AgeGroup and ADdoc were not significant based on an alpha value of .05, $\chi^2(3) = 5.37, p = .147$, suggesting that AgeGroup and ADdoc could be independent of one another. The results of the Fisher exact test were not significant based on an alpha value of .05, $p = .103$, suggesting that AgeGroup and ADdoc could be independent of one another. The results of the Chi-square test for Gender and ADdoc were not significant based on an alpha value of .05, $\chi^2(1) = 0.00, p = .982$, suggesting that Gender and ADdoc could be independent of one another. The results of the Chi-square for Gender and ADdts were not significant based on an alpha value of .05, $\chi^2(19) = 18.30, p = .502$, suggesting that Gender and ADdts could be independent of one another. The results of the Fisher exact test were not significant based on an alpha value of .05, $p = .702$, suggesting that Gender and ADdts could be independent of one another. The results of the Chi-square for AgeGroup and ADdts were not significant based on an alpha value of .05, $\chi^2(57) = 60.89, p = .338$, suggesting that AgeGroup

and ADdts could be independent of one another. The results of the Fisher exact test were not significant based on an alpha value of .05, $p = .104$, suggesting that AgeGroup and ADdts could be independent of one another. Although these findings are not statistically significant, they do imply that the observed frequencies were not significantly different than the expected frequencies.

Additionally, the intervention was implemented without additional staff or added workload. Interviews with stakeholders reveal the intervention was successfully incorporated into the clinic workflow and supports sustainability beyond the project timeframe. Providers have readily accessible ACP education material that is a visual reminder and functions as an educational handout for patients.

Discussion

By utilizing visual reminder tools, such as the ACP packet, the intervention was successful in increasing the documentation of AD after a MWV. The one additional AD documented after the MWV, although not statistically significant, does imply that the intervention was successful. Patients may return at future visits with completed ADs or request visits to discuss ACP, however, due to timeline limitations, these findings cannot be included in the data. The intervention was incorporated into the current clinical practice and required no additional staff or extensive training. Providers and staff were receptive to ACP education and actively participated in its discussion. Support from the site champion, office manager, and staff facilitated the implementation of this intervention. The cost of the intervention was relatively small which adds to the sustainability of the intervention.

Limitations and Barriers

There were significant limitations and barriers to successfully evaluating the occurrence and documentation of ACP in the EHR. Project development and implementation in partnership with a large healthcare organization offered many communication challenges. Also, due to the timeline of the project and the annual nature of the MWVs, a pre-/post-direct comparison was not possible. The most challenging barrier was the inconsistent sites for ACP documentation in the EHR. Additionally, there are multiple locations where patients can document their ACP, including with attorneys, health care providers out-of-state, and the Arizona Healthcare Directives Registry. Individual chart review for all patients seen for MWVs to determine if ACP conversations or education were documented was not possible. Evaluation of ADs in the EHR is not a direct comparison for ACP, although it is a good indicator that these conversations do occur. Patients may return at any time in the future to document their AD in the EHR and may not be closely tied to a MWV. Additionally, there was minimal provider participation in the survey. A more robust response could have provided additional insight into barriers or limitations to ACP from the provider's perspective.

Implications

The findings from this project indicate there was some measure of success in using visual reminders to facilitate ACP conversations during MWVs. Additionally, provider education on ACP documentation and Medicare requirements increases Medicare compliance. A low-cost intervention that provides a visual reminder and an education handout for patients is a sustainable tool to support ACP during MWV in primary care.

Recommendations for Further Study

This project highlights the need for further study of ACP in primary care. Future studies should evaluate the use of checkboxes in the EHR templates to increase the compliance rate.

Checkboxes are already used in the EHR templates, however, the boxes for ACP are not included in all visit types for MWVs. Additionally, a review of the workflow processes at the site revealed there is a need to facilitate the documentation of ADs in the EHR. Further investigation into follow-up and reminders for the patients to bring in their ADs to the provider's office could increase the number of ADs documented.

Conclusion

Primary care providers can have a significant impact on the EOL care needs of patients. Addressing ACP during wellness visits provides an opportunity to plant the idea or broaden the conversation to increase the patients understanding of their options. The literature identifies many positive benefits of ACP and ADs, for patients, their loved ones, providers, and the healthcare system. ACP should be addressed early and revisited as a patient's condition or wishes change. Addressing ACP is especially important for patients with chronic diseases and can be easier to address while in relatively good health. Documentation of ADs can provide EOL care consistent with the patients' wishes and reduce unnecessary costs to the healthcare system.

The purpose of this project was to evaluate the impact of ACP education and a reminder system on the occurrence of ACP conversations and their documentation in the EHR during MWVs. Despite the lack of statistically significant findings, the results were clinically significant and support the sustainability of this intervention. One patient returned with completed ADs after their MWV post-intervention, providers and staff increased their knowledge of ACP and ACP documentation, additional barriers to ACP were identified, and the 106 patients seen post-intervention had the opportunity to take home an ACP education packet for review. Due to the timeline of the project, it is possible that the patients seen after the intervention may return at a future visit with some form of ACP completed.

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Appendix A

Evaluation and Synthesis Table

Table A1

Quantitative Evaluation Table

Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measureme nt/ Instrument ation	Data Analysis (stats used)	Findings/ Results	Level of Evidence; Decision for practice/ application to practice
<p>Citation: Sudore et al. (2018). Engaging diverse English- and Spanish-speaking older adults in ACP: The PREPARE randomized clinical trial</p> <p>Country: USA Funding: Grant from the NIH NIA and a PCORI award. Bias: None declared.</p>	<p>None stated; inferred Cognitive Behavioral Theory</p>	<p>Design: RCT Purpose: Compare the efficacy of PREPARE plus the easy-to-read AD vs AD alone on ACP documentation in the medical record and patient-reported ACP engagement.</p>	<p>N= 986 n= 505 (CG) n= 481 (IG)</p> <p>Demographics: F: 613 Spanish: 320 Latino or Hispanic: 499 ≤ High school ed.: 576 Setting: primary care clinics within the San Francisco Health Network. IC: 55+ y/o, spoke Eng. or Span, had 2+ chronic medical conditions, 2+ visits with PCP, and 2+ additional outpatient, inpatient, or ED visits in past year.</p>	<p>IV- PREPARE materials in Eng/Span, review the AD, and provided a summary of My Wishes and website log-in. DV1- Documentation of ACP in EHR DV2- Engagement in ACP process</p> <p>Definitions:</p>	<p>ACP Engagement Survey ($\alpha = .94$), PHQ-8 ($\alpha = .85$) and GAD-7 questionnaires ($\alpha = .89$).</p>	<p>Unpaired <i>t</i> tests, X^2 tests, Fisher exact tests, Wilcoxon rank-sum test, and analysis of variance.</p>	<p>New AD documentation at 15 mo. higher in IG vs CG (43% vs 33%; $p < .001$).</p> <p>Behavior change (97.5% vs 87.3%) and action scores (94.8% vs 78.4%) were higher in IG vs CG.</p> <p>Increases in all types of ACP activities were significant for English- and Spanish-speakers (89.5% CG and 98.1% IG, $p < .001$).</p>	<p>LOE: II Strengths: PREPARE and an easy-to-read AD enable patients to initiate and engage in the ACP process on their own, without the need of trained facilitators. Research staff blinded to all follow-up assessments. Weakness: Generalizability, however sample was diverse. Do not have info on questions asked of research staff when pts viewed the interventions. Study interviews and</p>

Key: **ACO-** accountable care organization; **ACP-** advance care planning; **AD-** advance directives; **AMSTAR-** Assessment of Multiple Systematic Reviews measurement tool; **ANOVA-** analysis of variance; **AWV-** Annual Wellness Visit; **CG-** control group; **DM-** decision maker; **DS-** databases searched; **DV-** dependent variable; **EC-** exclusion criteria; **EHR-** electronic health record; **EOL-** end-of-life; **GAD-** generalized anxiety disorder; **GoC-** goals of care; **GRADE-** Grading of Recommendations Assessment, Development, and Evaluation; **HF-** heart failure; **IC-** inclusion criteria; **IG-** intervention group; **IV-** independent variable; **LOE-** level of evidence; **MA-** meta-analysis; **MDPOA-** Medical Durable Power of Attorney; **MOST-** Medical Orders for the Scope of Treatment; **N-** number of studies (if SR) or number of population enrolled; **n-** number of participants; **NCATS-** National Center for Advancing Translational Sciences; **NIA-** National Institute on Aging; **NIH-** National Institutes of Health; **PCORI-** Patient-Centered Outcomes Research Institute; **PEM-** patient electronic messaging; **PCP-** primary care provider; **PHQ-** Patient Health Questionnaire; **POA-** power of attorney; **PTS-** patients; **QOC-** quality end-of-life communication; **RCT-** randomized control trial; **SR-** systematic review.

Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measureme nt/ Instrument ation	Data Analysis (stats used)	Findings/ Results	Level of Evidence; Decision for practice/ application to practice
			EC: mod-severe cognitive impairment, blind/deaf, delirium, psychosis, active drug/alcohol abuse, no phone, or inability to answer consent teach-back questions in 3 attempts, or those who previously engaged in ACP. Attrition: Total retention rate was 85.9% (832 of 969).	PREPARE is a patient-directed, interactive, online ACP program in Eng. and Span. developed by the authors.			reminder calls could have activated people to engage in ACP. Feasibility: PREPARE materials are free to the public. Licensing required for research and/or quality improvement projects.	
Citation: Lum et al. (2020). Effectiveness of ACP group visits among older adults in primary care. Country: USA Funding: None declared. Bias: Licensed PREPARE for use in the study.	ACP Engagement Theory, Collaborative Learning Theory	Design: RCT Purpose: To test whether the Engaging in ACP talks (ENACT) group visits intervention improves ACP documentation and readiness in older adults compared with a control of mailed ACP materials.	N= 110 n= 55 (CG) n= 55 (IG) Demographics: F: 66 M. age: 77.2 White: 87 Married/partnered: 69 Postgrad education: 56 Caregiver in last 12 mo.: 24 ACP in HER at baseline: 46 Setting: University of Colorado Hospital Seniors Clinic. IC: Primary care PTS age 60+ and reviewed by PCP. EC: English not preferred; dx of cognitive impairment or dementia; dx of deafness;	IV- ENACT group meetings with ACP tools DV- presence of ACP documentation in the EHR Definitions: ENACT group visits – 8-12 pts for two 2-hr sessions, 1 month apart and facilitated by a healthcare practitioner to lead discussion of ACP topics.	ACP Engagement Survey ($\alpha = .94$).	<i>t</i> -tests, multivariate logistic regression analyses, bivariate Pearson correlation.	At 6 mo f/u, 71% IG compared to 45% CG had an AD documented in the EHR ($p < .001$). 93% IG had a DM documented vs 73% CG ($p < .001$). New documentation of ACPs at 6 months was significantly different in IG (39) vs. CG (5) ($p = .0017$). ACP engagement increased sig. in IG by 22.5% ($p = .02$) and CG by 7.5% increase ($p = .05$).	LOE: II Strengths: planned as a pilot study and showed a clinically meaningful effect. ENACT intervention is integration with pt medical care. Weakness: compares to a lower cost intervention. 20% IG did not attend a group visit. Potential selection bias for individuals with high levels of education and SES. Recruitment rate of 13%.

Key: **ACO-** accountable care organization; **ACP-** advance care planning; **AD-** advance directives; **AMSTAR-** Assessment of Multiple Systematic Reviews measurement tool; **ANOVA-** analysis of variance; **AWV-** Annual Wellness Visit; **CG-** control group; **DM-** decision maker; **DS-** databases searched; **DV-** dependent variable; **EC-** exclusion criteria; **EHR-** electronic health record; **EOL-** end-of-life; **GAD-** generalized anxiety disorder; **GoC-** goals of care; **GRADE-** Grading of Recommendations Assessment, Development, and Evaluation; **HF-** heart failure; **IC-** inclusion criteria; **IG-** intervention group; **IV-** independent variable; **LOE-** level of evidence; **MA-** meta-analysis; **MDPOA-** Medical Durable Power of Attorney; **MOST-** Medical Orders for the Scope of Treatment; **N-** number of studies (if SR) or number of population enrolled; **n-** number of participants; **NCATS-** National Center for Advancing Translational Sciences; **NIA-** National Institute on Aging; **NIH-** National Institutes of Health; **PCORI-** Patient-Centered Outcomes Research Institute; **PEM-** patient electronic messaging; **PCP-** primary care provider; **PHQ-** Patient Health Questionnaire; **POA-** power of attorney; **PTS-** patients; **QOC-** quality end-of-life communication; **RCT-** randomized control trial; **SR-** systematic review.

Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis (stats used)	Findings/ Results	Level of Evidence; Decision for practice/ application to practice
			nonlocal residence; or prior participation in earlier ACP group visits. Attrition: At 6 mo. f/u lost 18 (IG) and 6 (CG).					Feasibility: Relatively low cost with reimbursement for services, including co-payments.
Citation: Gabbard et al. (2021). Effectiveness of a Nurse-Led Multidisciplinary Intervention vs Usual Care on ACP for Vulnerable Older Adults in an ACO: A RCT Country: USA Funding: The Duke Endowment and Wake Forest Center for Healthcare Innovation and other grants. Bias: None declared.	None stated; inferred Cognitive Behavioral Model, ACP engagement theory.	Design: RCT Purpose: To determine whether combining nurse navigators with an EHR interface during Medicare AWV, improved ACP documentation in the EHR for vulnerable older adults in the primary care setting.	N=765 n= 383- 379 (IG) n = 382- 380 (CG) Demographics: F: 455 Mean age 77.7 White: 617 Comorbidities: Renal disease: 412 DM w/ compl: 387 DM w/o compl: 315 Setting: 8 separate primary care clinics in NC. IC: affiliated with an ACO, 65 or older, seen PCP in last 12 mo., multimorbidity. EC: mod-severe hearing loss, non-English speakers, no phone # available, and significant memory impairments. Attrition: 71 deaths	IV- Previsit ACP phone discussion, scheduling for dyad visit in conjunction with AWV or independent ACP visit, and a mailed ACP packet. DV1 –ACP discussion documentation in the EHR DV2- quality of ACP discussions Definitions: ACPWise- an integrated ACP EHR interface developed by authors.	Weighted Charlson Comorbidity Index ($\alpha = .93$), electronic frailty index ($\alpha = .737$), Short Portable Mental Status Questionnaire ($\alpha = .88$), QOC survey ($\alpha = .83$).	Generalized linear mixed models, Cox proportional hazards regression models, mean cumulative count estimator, inverse probability of treatment weights with logistic regression.	160 (42.2%) IG documented ACP within the EHR compared to 14 (3.7%) in CG ($p < .001$). Large increases in naming surrogate decision maker, having an AD, living will, or POA; and completing a MOST form (all $p < .001$). Use of billing codes occurred in 96(25.3%) IG compared to 5(1.3%) CG ($p < .001$). 87 (85% response rate) completed the QOC survey.	LOE: II Strengths: pragmatic design, automated identification of eligible participants, integration of ACP documentation into EHR, with supplemental information on healthcare use. Weakness: Implementation challenges in locations without a nurse navigator or other resource limitations, no contact to controls, generalizability. Feasibility: cost assessment was a weakness due to the short duration of the study.

Key: **ACO-** accountable care organization; **ACP-** advance care planning; **AD-** advance directives; **AMSTAR-** Assessment of Multiple Systematic Reviews measurement tool; **ANOVA-** analysis of variance; **AWV-** Annual Wellness Visit; **CG-** control group; **DM-** decision maker; **DS-** databases searched; **DV-** dependent variable; **EC-** exclusion criteria; **EHR-** electronic health record; **EOL-** end-of-life; **GAD-** generalized anxiety disorder; **GoC-** goals of care; **GRADE-** Grading of Recommendations Assessment, Development, and Evaluation; **HF-** heart failure; **IC-** inclusion criteria; **IG-** intervention group; **IV-** independent variable; **LOE-** level of evidence; **MA-** meta-analysis; **MDPOA-** Medical Durable Power of Attorney; **MOST-** Medical Orders for the Scope of Treatment; **N-** number of studies (if SR) or number of population enrolled; **n-** number of participants; **NCATS-** National Center for Advancing Translational Sciences; **NIA-** National Institute on Aging; **NIH-** National Institutes of Health; **PCORI-** Patient-Centered Outcomes Research Institute; **PEM-** patient electronic messaging; **PCP-** primary care provider; **PHQ-** Patient Health Questionnaire; **POA-** power of attorney; **PTS-** patients; **QOC-** quality end-of-life communication; **RCT-** randomized control trial; **SR-** systematic review.

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<p>Citation: Myers et al. (2018). Provider tools for ACP and goals of care discussions: A systematic review.</p> <p>Country: Canada</p> <p>Funding: Ontario Ministry of Health and Long-Term Care</p> <p>Bias: None stated.</p>	None stated; inferred Cognitive and Behavioral Theoretical Models	<p>Design: SR of guidelines, RCTs, non-RCTs, and SRs</p> <p>Purpose: To outline and summarize the evidence regarding existing health-care provider tools and/or practices that address the processes for ACP or GoC discussions.</p>	<p>N: 38</p> <p>DS: MEDLINE, EMBASE, and American Society for Clinical Oncology Palliative Care Symposium meeting abstracts.</p> <p>IC: English; pts living with chronic illness and/or their substitute DM or simulated pts; HCP tools; at least 1 outcome of interest; comparative data; non-comparative data; minimum study size 30 pts.</p> <p>EC: Case studies, commentaries, & editorials</p>	<p>IV1: Respecting Choices</p> <p>IV2: Availability, current issues, and anticipation tool</p> <p>IV3: Making Your Wishes Known tool</p> <p>DV1: enable HCP to introduce ACP discussions</p> <p>DV2: enable HCP to facilitate ACP discussions</p> <p>DV3: documentation of ACP discussions</p>	Cochrane Risk of Bias tool; Risk of Bias In Non-Randomized Studies—of Interventions tool	AMSTAR	<p>IV1: most often used; value based; can result in increased AD completion; increased appointment of surrogate; consistency between wishes and medical interventions; increased ACP knowledge.</p> <p>IV2: no significant difference with control groups.</p> <p>IV3: Increased HCP confidence in engaging ACP, increased satisfaction</p> <p>Most ACP and ADs are not scanned into EHR.</p>	<p>LOE: I</p> <p>Conclusions: greatest impact for ACP is likely a system-wide approach.</p> <p>Weakness: Lack of consistent pt outcomes evidence to support a single tool. Tools structured for PTS/caregivers without clinical support were excluded. Lack of studies that address GoC discussions.</p> <p>Feasibility/Applicability: Respecting Choices training has a fee, time requirement may limit provider involvement. However providers can earn CME credits.</p>
<p>Citation: Tieu et al. (2017).</p>	None stated; inferred Cognitive	Design: RCT	<p>N= 2526</p> <p>n= 2326 - 2294 (CG)</p>	IV1: Personalized	John’s Hopkins	χ^2 test, logistic	5.5% IG completed and returned AD, compared	LOE: II

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Utilization of patient electronic messaging to promote advance care planning in the primary care setting Country: USA Funding: None declared Bias: None recognized	Behavioral Model	Purpose: Measure the impact of a personalized ACP electronic message on AD completion in the primary care setting.	n= 200 - 199 (IG) Demographics: M: 1203 F: 1290 Setting: Patients empaneled to a Mayo PCIM provider in Rochester, MN M age: 72 Need for interpreter: 40 Chronic medical conditions: HTN: 1494 Vascular disease: 589 Diabetes Mellitus: 445 IC: 65+, did not have an AD on file within EHR, and had access to Mayo Online Services system. EC: None stated Attrition: 1.3%	PEM explaining ACP process and encouraging to complete an AD. Also included a link to an ACP workbook. DV1: ACP completion DV2: utility of completed AD	Adjusted Clinical Group Elder Risk Assessment score ($\alpha = .94$).	regression analyses, 2-sample <i>t</i> test.	to 2% CG (OR 3.2, CI [1.6-6.3]). Additional factors associated with completion of AD: higher medical complexity ($P = .017$) and older age (OR per 5 year age increase 1.5, $P < .001$). Among those who returned ADs, IG more likely to include a personal expression of health values ($P < .02$). Of the 200 in the IG, 74.5% opened their electronic message.	Strengths: Feasibility and utility. Materials can be tailored to target specific, at-risk populations. Sustainable. Weakness: planning needs vary and may require intensive face-to-face conversation. Must have computer access. Potential selection bias to those with greater economic security and higher health literacy. May have been exposed to other ACP awareness measures during the study time. Feasibility: low cost
Citation: Oczkowski et al. (2016). Communication tools for EOL decision-	None stated; inferred Cognitive and Behavioral Theory.	Design: SR & MA Purpose: To conduct a SR to determine	N = 67 DS: MEDLINE, EMBASE, CINAHL, ERIC, and the Cochrane Database of RCTs.	IV1: structured communication tool	Cochrane risk of bias tool.	GRADE. Random-effects model.	Use of structured communication tools increased: Frequency of ACP/AD discussions (RR 2.31, 95% CI 1.25-4.26, $p =$	LOE: I Strengths: Rigorous search strategy and includes a wide variety of interventions.

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measureme nt/ Instrument ation	Data Analysis (stats used)	Findings/ Results	Level of Evidence; Decision for practice/ application to practice
<p>making in ambulatory care settings: A SR and MA.</p> <p>Country: Canada Funding: Grant from Technology Evaluation in the Elderly Network. Bias: None recognized.</p>		<p>the impact of communication tools for EOL decision-making with adult PTS in ambulatory care settings on the completion of ADs, the concordance between PTS wishes and medical orders for care, and concordance between the care desired and the care received by PTS at EOL.</p>	<p>IC: RCTs or prospective observation studies with a control group in peer-reviewed journals; English; PTS > 18 y/o; evaluated a communication tool in comparison to CG.</p> <p>EC: Interventions designed for information-sharing. Control groups had to receive either use care, a sham intervention, or a minimal/low intensity intervention.</p>	<p>DV1: completion of ACP DV2: concordance between ADs and medical orders for care DV3: concordance between PTS desires and care received</p> <p>Definitions: Structured communication tool: traditional decision aids in any format and other structured approaches to help with DM.</p>	<p>Newcastle-Ottawa scale.</p> <p>National Institutes of Health rating system.</p>	<p>Revman 5.3 software Kappa statistics.</p>	<p>0.007, low quality evidence).</p> <p>Completion of ADs (RR 1.92, 95% CI 1.43-2.59, p < 0.001, low quality evidence).</p> <p>Concordance between AD preferences and medical orders (RR 1.19, 95% CO 1.01-1.39, p = 0.028, very low quality evidence, 1 observational study).</p> <p>Concordance between care desired and received (RR 1.17, 95% CI 1.05-1.30, p = 0.004, low quality evidence, 2 RCTs).</p>	<p>Weakness: Challenge in identifying studies of interventions that facilitate EOL decision making due to lack of consistent terminology. Highly heterogeneous populations and interventions studied. Conclusion: Structured communication tools may improve communication processes and some downstream PT outcomes, but there is uncertainty in the magnitude of effects due to low quality of evidence. No single tool is considered 'best'.</p> <p>Feasibility/Applicability: Not enough evidence to support a particular tool</p>

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<p>Citation: Risk et al. (2019). Barriers, enablers and initiatives for uptake of ACP in general practice: a SR and critical interpretive analysis</p> <p>Country: Australia</p> <p>Funding: None declared.</p> <p>Bias: None declared.</p>	Socioecolog ical conceptual framework	<p>Design: SR and critical interpretive synthesis.</p> <p>Purpose: To understand how the knowledge, attitudes and practices of clinicians and consumers in general practice are understood as barriers and/or enablers to achieving uptake of ACP.</p>	<p>N = 54 (majority from USA)</p> <p>DS: Ovid Medline, Cumulative Index to Nursing and Allied Health Literature, Scopus, ProQuest and Cochrane databases.</p> <p>IC: English; published in a peer-reviewed journal, primary care research with scope limited to general practice, and adult populations.</p> <p>EC: focus on acute care, aged care facilities, palliative care or clinical management at EOL; legal focus; mental health focus; or issues for minority groups.</p>	<p>IV1: interventions across patient level, provider level and system level</p> <p>DV1: barriers to ACP in general practice</p> <p>DV2: enablers of ACP in general practice</p> <p>DV3: initiatives/strategies to increase ACP in general practice</p>	Joanna Briggs Critical Appraisal Checklist	Decision matrix.	<p>Identified barriers: lack of pt (15 studies) and HCP understanding of roles (13), knowledge (18); provider skills and experience (18); patient (7), family (6), and HCP attitudes (9), and system issues related to time pressure (12), documentation challenges (6) and mechanisms of information sharing (5).</p> <p>Key enablers: doctor-patient relationship (10 studies), GP and practice nurse education and communication (8), IT systems (8), business as usual processes and protocols (11), and Models of care (10).</p>	<p>LOE: I</p> <p>Strengths: Evaluated a large number of studies, majority from the USA.</p> <p>Weakness: Studies focused on interventions limited. Study quality varied. Lack of consistent terminology. Individual and interpersonal levels of influence were least researched.</p> <p>Conclusions: Interventions targeting multiple levels of influence are said to reinforce each other, with the expectation to yield greater and more sustainable interventions than targeting a single level.</p>
<p>Citation: Schichtel et al. (2019).</p>	None stated; inferred Cognitive	Design: SR and MA	N = 13	IV1: Interventions that promoted	Template of Intervention Description	RevMan 5.3.5 Random	Patient-mediated interventions using the PTS to change	LOE: I

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<p>Clinician-targeted interventions to improve ACP in HF: A SR and MA</p> <p>Country: UK Funding: None declared. Bias: None declared.</p>	<p>and Behavioral Theory</p>	<p>Purpose: To synthesize the evidence for interventions with the greatest potential to engage clinicians with ACP in HF.</p>	<p>DS: CINAHL, Cochrane, Embase, ERIC, Ovid MEDLINE(SP), Ovid MEDLINE(R), Science Citation Index, Social Science Citation Index & Conference Proceedings and PsychINFO.</p> <p>IC: RCTs and cluster RCT of clinician-targeted interventions compared with standard professional development.</p> <p>EC: studies that did not explicitly include patients with heart failure or only used ACP in pediatric but not adult EOL care. Also excluded interventions only on do-not-attempt-cardio-pulmonary-resuscitation orders.</p>	<p>the implementation of any form of ACP</p> <p>DV1: completion of ACP document</p> <p>Definitions: Clinician-targeted interventions – interventions designed to bring about behavior changes in HCP</p>	<p>and Replication. Cochrane Collaboration reporting items for SR and MA. GRADE, EPOC taxonomy.</p>	<p>effects models, Egger’s Test</p>	<p>clinicians’ behavior had the greatest effect (OR, 5.23; 95% CI [2.36-11.61], p<.001) on the implementation of ACP in HF followed by reminder systems (3.65; 95% CI [1.47-9.04], p = .005), educational meetings (OR, 2.35 [1.29-4.26], p=.005), and academic detailing (OR, 1.66; 95% CI [1.09-2.52], p = .02).</p>	<p>Strengths: robust search strategy, assessed quality of evidence, rated risks of bias, explored intervention synergy with TIDieR, and performed sensitivity analysis. Almost all studies based in USA.</p> <p>Weakness: overall quality of evidence was moderate to low. The studies included secondary care, community or hospital settings.</p> <p>Feasibility/Applicability: Interventions were targeted at different times around hospitalization and may not apply.</p>
<p>Citation: Barker et al. (2021). The effect of health literacy on a brief intervention to</p>	<p>None stated; inferred cognitive and behavioral theory</p>	<p>Design: RCT</p> <p>Purpose: To evaluate an intervention designed to enhance AD</p>	<p>N = 529 n = 263 (IG) n = 266 (CG)</p> <p>Demographics: Age: 64 F: 296 (56%)</p>	<p>IV1: guidance on completion of AD using a standardized script at 7th grade reading level</p>	<p>Rapid Estimate of Adult Literacy in Medicine—Short Form</p>	<p>Randomization table.</p> <p>t-tests and Chi-square tests.</p>	<p>Overall AD completion: 21.7%</p> <p>DV1: 22.4% IG and 22.2% CG, p = .94, OR 1.01, (95% CI 0.67-1.53). Adequate literacy</p>	<p>LOE:II</p> <p>Strengths: include those over 50 years, delivered intervention within a practice setting in real time to a</p>

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<p>improve AD completion: A RCT</p> <p>Country: USA Funding: Gatorade Trust Bias: None declared</p>		<p>completion rates for patients in general internal medicine clinics with a single brief ambulatory intervention followed by several reminder calls. Also sought to evaluate intervention effectiveness based on health literacy of patients.</p>	<p>Adequate literacy: 264 White: 234 (63.1%) Medicare: 270 (51%) Setting: Enrollment from 2 internal medicine outpatient clinics in Gainesville, Florida. IC: age 50+, English speaking, no documented AD in HER, and no diagnosis of dementia on problem list. EC: not included Attrition: 54 withdrew, 18 lost to follow-up</p>	<p>DV1: AD completed and uploaded to EHR DV2: results of patient questionnaire</p>	<p>tool ($\alpha = .98$). CSQ-8 ($\alpha = .83-.94$)</p>	<p>Logistic regression. Pearson chi-square test.</p>	<p>28.4%, limited literacy 16.2%, $p < .05$. DV2: CSQ-8 scores high and similar in IG and CG. 85.6% CG and 87.3% IG ($p = .28$) felt addressing AD enhanced clinical encounter. Trend toward more agreement that addressing AD enhanced the visit: 90% limited literacy versus 82.88% adequate literacy ($p = .06$). 85.4% felt AD should routinely be addressed at visits to the doctor, no difference between CG and IG, but more prevalent in limited compared to adequate literacy (89.6% vs 84.9%, $p = .09$).</p>	<p>diverse population. In this study, providing education materials was as effective as intervention with researcher. Large sample size, randomization.</p> <p>Weakness: Brief intervention. Institutional barriers prevented notification to provider that their PTS received AD materials.</p> <p>Feasibility: Low-cost intervention with low-resource utilization.</p>
<p>Citation: Rolnick et al. (2021).</p>	<p>None stated. Inferred cognitive</p>	<p>Design: RCT</p>	<p>N = 91 n = 45 (CG) n = 46 (IG)</p>	<p>IV1: Our Care Wishes</p>	<p>Canadian Healthcare Evaluation</p>	<p>Chi-square test, <i>t</i>-test, and</p>	<p>DV1: 13 (28%) IG and 7 (16%) CG ($p = .14$). No</p>	<p>LOE:II</p>

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<p>Comparison of web-based and paper ADs: A pilot randomized clinical trial</p> <p>Country: USA Funding: grant from the National Center for Advancing Translational Science Bias: One author has received compensation from several organizations.</p>	<p>and behavioral theory</p>	<p>Purpose: To evaluate the potential of a self-contained, web-based AD creation tool that could be completed anywhere and automatically transmit the directive to the EHR.</p>	<p>Demographics: Age: 61.4 F: 48% ≥ college degree: 51% White: 77% Setting: Penn Medicine Infusion Center, Pennsylvania. IC: Adults with gastrointestinal and lung malignancies with a 5-year expected survival under 25% and active patient portal accounts. EC: no email address/no email use last month, not willing to be contacted by email, already have a living will, lack English proficiency, do not have patient portal account, or oncologist requested not to contact. Attrition: Data analyzed from all participants; 4 died, 1 withdrew</p>	<p>DV1: New AD or ACP note in EHR, excluding only information on surrogate DM DV2: Change in satisfaction of EOL plans</p> <p>Definitions: Our Care Wishes – website with a series of modules designed to elicit detailed information on preferences, values, and goals and can generate document of surrogate DM</p>	<p>Project questionnaire ($\alpha = 0.63-.93$)</p>	<p>Wilcoxon rank sum. Ordinary least squares regression. Fisher exact test.</p>	<p>statistically significant in DV1 in younger (9 of 46) versus older adults (11 of 45), ($p = .57$). No difference in DV1 in M (11 of 47) versus F (9 of 44), ($p = .73$). CG 7 (16%) completed a new AD or ACP note versus 13 (28%) IG, $p = .14$. DV2: Survey submitted by 30% IC versus 58% CG ($p = .08$). Mean score of 4 in both groups. No statistically significant change in DV2.</p>	<p>Strengths: Results suggest larger study of web-based EHR-transferrable AD are needed. Most who accessed the site completed at least one module, 3.6 on average. Choice architecture that includes active choice and default option setting is a promising component of AD use. Weakness: Did not include those without patient portal access, study population was clinically heterogeneous and small. Feasibility: With implementation of EHR platform, this may be a feasible and accessible intervention.</p>

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Table A2

Synthesis Table

Study Characteristics	Sudore et al.	Lum et al.	Gabbard et al.	Myers et al.	Tieu et al.	Oczkowski et al.	Risk et al.	Schichtel et al.	Barker et al.	Rolnick et al.
Year	2018	2020	2021	2018	2017	2016	2019	2019	2021	2021
SR/MA/I				•		•	•	•		
RCT/II	•	•	•		•				•	•
Sample										
<i>n</i> subjects/studies	986	110	759	38	2526	67	54	13	529	91
White	688	87	617						234	103
Female	603	66	455		1290				296	64
Mean Age	63	77	77		72				64	62
≤ High school/Limited literacy	576	8							265	28
Country	USA	USA	USA	Canada	USA	Canada	Australia	UK	USA	USA
Independent variables										
ACP Education	•	•	•		•	•	•	•	•	•
Structured communication tool	•	•	•		•	•			•	
Electronic Format	•		•		•	•				•
In-person	•	•	•			•		•	•	
Telephone			•			•				
Individual	•		•		•	•		•	•	•
Group		•				•				
Clinician-directed Intervention				•		•				
Patient-mediated intervention	•	•	•		•		•	•		•
Reminder system	•	•	•		•			•	•	•
Educational meetings			•					•		
Link to MWV			•							

Key: **ACPES**- Advance Care Plan Engagement Survey; **ACPET**- Advance Care Plan Engagement Theory; **CHEPQ**- Canadian Healthcare Evaluation Project Questionnaire; **CLT**- Collaborative Learning Theory; **CRB**- Cochrane Risk of Bias; **EFI**- Electronic Frailty Index; **ERA**- Elder Risk Assessment; **GAD-7**- Generalized Anxiety Disorder-7 Questionnaire; **JHACG**- John’s Hopkins Adjusted Clinical Group; **LQ**- low quality evidence; **MWV**- Medicare Wellness Visit; **NO**- Newcastle Ottawa scale; **PEM**- Personalized electronic message; **PHQ-8**- Patient Health Questionnaire-8; **QOC**- Quality of End-of-Life Communication Survey; **REALM-SF**- Rapid Estimate of Adult Literacy in Medicine-Short Form; **ROBINS-I**- Risk of Bias In Non-Randomized Studies of Intervention; **SPMSQ**- Short Portable Mental Status Questionnaire; **SS**- statistically significant; **WCCI**- Weighted Charlson Comorbidity Index.

Applicable Measurement Tools	ACPES, PHQ-8, GAD-7	ACPES	WCCI, EFI, SPMSQ, QOC	CRB, ROBINS-I	ERA, JHACG	CRB, NO, NIH rating system	Joanna Briggs Critical Appraisal Checklist	GRADE, EPOC taxonomy	REALM-SF, CSQ-8	CHEPQ
Framework	CBT	ACPET, CLT	CBT, ACPET	CBT	CBT	CBT	Socioecological	CBT	CBT	CBT
Dependent variables										
<i>ACP Documentation</i>	↑	↑	↑	↑	↑	↑ (LQ)		↑	↑ (not ss)	↑ (not ss)
<i>ACP Discussions</i>	↑	↑				↑ (LQ)			↑	
<i>Behavior change</i>	↑									
<i>Action change</i>	↑	↑								
<i>Depression</i>	-			↓						
<i>Anxiety</i>	-			↓						
<i>ACP billing codes</i>			↑							
<i>Improved communication</i>						↑ (VLQ)			↑	
Findings										
<i>Easy to read ACP + online ACP ed.</i>	•								•	•
<i>Focus on value-based discussions</i>				•		•				•
<i>System-level changes</i>				•						
<i>Multi-level changes</i>						•	•			
<i>Interprofessional practice</i>		•	•	•			•		•	
<i>Provider education: billing codes</i>			•							
<i>PEM as motivational tool</i>					•					
<i>Barriers: Knowledge/roles, documentation issues</i>							•			
<i>Enablers: relationship, communication, IT</i>							•			
Feasibility	Free	\$		\$\$	Free-\$				\$	\$

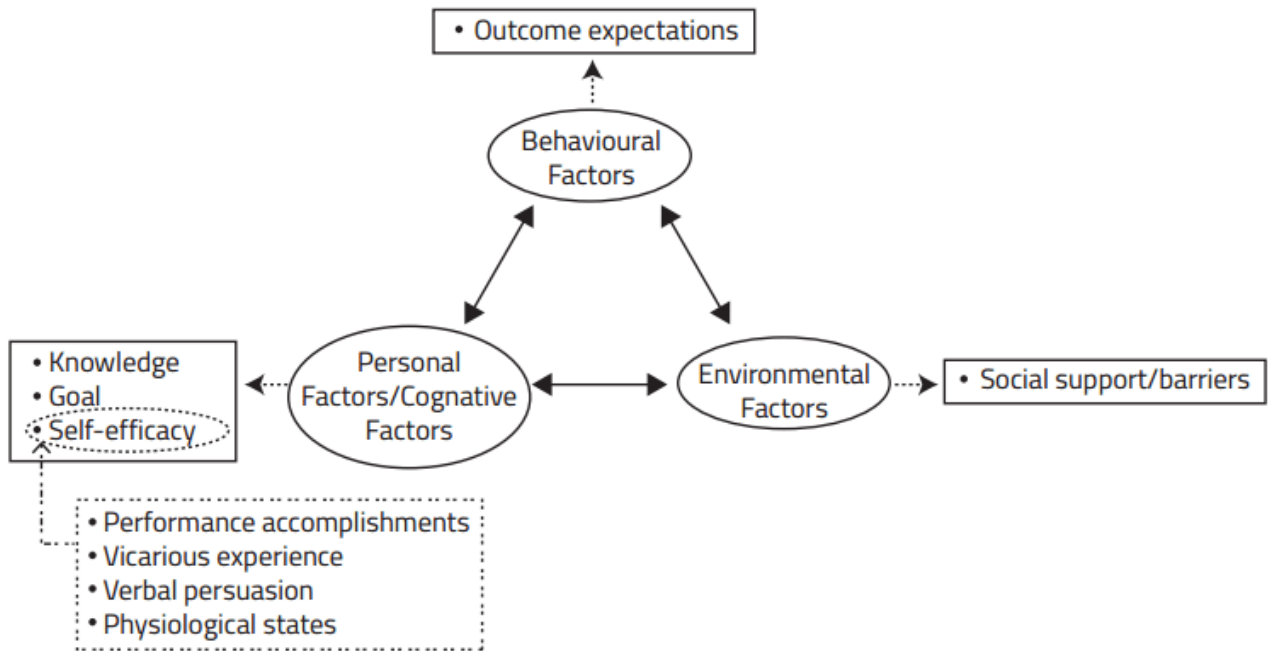
Key: **ACPES**- Advance Care Plan Engagement Survey; **ACPET**- Advance Care Plan Engagement Theory; **CHEPQ**- Canadian Healthcare Evaluation Project Questionnaire; **CLT**- Collaborative Learning Theory; **CRB**- Cochrane Risk of Bias; **EFI**- Electronic Frailty Index; **ERA**- Elder Risk Assessment; **GAD-7**- Generalized Anxiety Disorder-7 Questionnaire; **JHACG**- John’s Hopkins Adjusted Clinical Group; **LQ**- low quality evidence; **MWV**- Medicare Wellness Visit; **NO**- Newcastle Ottawa scale; **PEM**- Personalized electronic message; **PHQ-8**- Patient Health Questionnaire-8; **QOC**- Quality of End-of-Life Communication Survey; **REALM-SF**- Rapid Estimate of Adult Literacy in Medicine-Short Form; **ROBINS-I**- Risk of Bias In Non-Randomized Studies of Intervention; **SPMSQ**- Short Portable Mental Status Questionnaire; **SS**- statistically significant; **WCCI**- Weighted Charlson Comorbidity Index.

Appendix B

Models and Frameworks

Figure 1

Social Cognitive Theory



Chin & Mansori (2018).

Figure 2

Rosswurm and Larrabee's Model for Evidence-Based Practice



Rosswurm & Larrabee (1999).

Appendix C

Organizational Letter of Support

HONORHEALTH

HONORHEALTH MEDICAL GROUP - DYNAMITE - PRIMARY CARE
4712 E DYNAMITE BLVD
CAVE CREEK AZ 85331-6243
Phone: 480-342-8711
Fax: 480-342-7077

July 01, 2021

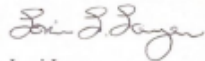
To Whom It May Concern,

On behalf of HonorHealth, I am pleased to support the quality improvement project titled "Quality Improvement Initiative to Increase Advance Care Planning Conversations with Community-Dwelling Adults" as proposed by Dr. Elizabeth Reifsnider, PhD, RN, FAANP, FAAN and Elizabeth Smith, RN, BSN, DNP graduate student.

Our organization agrees to serve as the quality improvement project site for data collection, education sessions, workflow improvements, and data analysis.

Thank you for providing the opportunity for HonorHealth to be a part of this important project.

Sincerely,



Lori Layer
Practice Manager
(480) 342-8711
llayer@honorhealth.com

Appendix D

Network Nursing Research Council Approval Letter



Elizabeth Smith <eecarlto@asu.edu>

Quality Improvement project

Melanie Brewer <mbrewer@honorhealth.com>
To: "eecarlto@asu.edu" <eecarlto@asu.edu>

13 September 2021 at 14:39

Elizabeth,

This email will serve as confirmation that your project "Quality Improvement Initiative to Increase Advance Care Planning Conversations with Community Dwelling Adults" as submitted to the IRB and Network Nursing Research Council at HonorHealth has been deemed non-research. You have made the changes as requested to your documents for a quality improvement project. You have permission from the NNRC to begin your project.

Please submit a project completion report to the NNRC when the project is complete. You may submit utilizing my HonorHealth email address. Please contact Donna Egnatios or me if you have questions or need assistance.

Best regards,

Melanie Brewer

Melanie Brewer, DNSc, RN, FNP-BC, NEA-BC, FAANP

Director of Research | Center for Clinical Excellence

P: 480.587.5324 | HonorHealth.com

Appendix E

Arizona State University Institutional Review Board Approval



EXEMPTION GRANTED

[Elizabeth Reifsnider](#)
[EDSON: Administration](#)
 602/496-1394
Elizabeth.Reifsnider@asu.edu

Dear [Elizabeth Reifsnider](#):

On 10/15/2021 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Quality Improvement Initiative to Increase Advance Care Planning Conversations with Community-Dwelling Adults
Investigator:	Elizabeth Reifsnider
IRB ID:	STUDY00014553
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none"> • ACP Project Patient DataCollection.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • ACP Project ProviderSurvey DataCollection.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • citiCompletionReportGCPmbrewer.pdf, Category: Non-ASU human subjects training (if taken within last 3 years to grandfather in); • citiCompletionReportIRBmembermbrewer.pdf, Category: Non-ASU human subjects training (if taken within last 3 years to grandfather in); • citiCompletionReportmbrewer.pdf, Category: Non-ASU human subjects training (if taken within last 3 years to grandfather in); • citiCompletionReportRCRmbrewer.pdf, Category: Non-ASU human subjects training (if taken within last 3 years to grandfather in);

	<ul style="list-style-type: none"> • HH Approval email.pdf, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • HonorHealth Data Use Agreement Email, Category: Other; • HONORHEALTH MEDICAL GROUP - DYNAMITE - PRIMARY CARE.pdf, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • SmithE ASU IRB Social Behavioral Protocol (1)_ERdataanalysisonly.docx, Category: IRB Protocol;
--	--

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (4) Data, documents, or specimens on 10/7/2021.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

REMINDER - All in-person interactions with human subjects require the completion of the ASU Daily Health Check by the ASU members prior to the interaction and the use of face coverings by researchers, research teams and research participants during the interaction. These requirements will minimize risk, protect health and support a safe research environment. These requirements apply both on- and off-campus.

The above change is effective as of July 29th 2021 until further notice and replaces all previously published guidance. Thank you for your continued commitment to ensuring a healthy and productive ASU community.

Sincerely,

IRB Administrator

cc: Elizabeth Smith
 Elizabeth Reifsnider
 Melanie Brewer
 Elizabeth Smith

Appendix F

Participant Informed Consent

Quality Improvement Initiative to Increase Advance Care Planning conversations with Community-Dwelling Adults

October 18, 2021

Dear Participant,

I am a family nurse practitioner graduate student under the direction of Professor Dr. Elizabeth Reifsnider PhD, RN, FAANP, FAAN in the Edson College of Nursing and Health Innovation at Arizona State University. I am inviting you to participate in a quality improvement project regarding advance care planning in primary care.

I will be providing an education session that will include a brief review of advance care planning and tools to assist primary care providers in documenting advance care planning in the electronic health record after discussing advance care planning with patients during scheduled Medicare wellness visits.

The education session will be provided during the scheduled provider meeting to all providers within the practice. In addition, a survey will be distributed to providers at the completion of the project. Total time for the presentation will be approximately 10 minutes and time to complete the survey will be approximately 5 minutes. Additional time will be available to answer any questions regarding the education material and survey.

Your participation in the survey and education is voluntary. You can skip any questions on the survey that you do not wish to answer. If you choose not to participate or withdraw from the project at any time, there will be no penalty. Participation status will not affect your work or your role in the organization prior to, during, or after participation in the project. Responses to the survey will be to evaluate knowledge, attitudes, and behaviors regarding advance care planning. There are no known risks with participating in this quality improvement project.

Your responses to the survey will be anonymous. We will not collect your name or other personal identifying information. The results of this survey may be used in reports, presentations, or publications as aggregate data only and your name will not be used.

Attending the educational session and returning the survey will be considered your consent to participate. If you have any questions concerning this project, please contact the research team at:

Dr. Elizabeth Reifsnider, PhD, RN, FAANP, FAAN at 602-496-1394 or elizabeth.reifsnider@asu.edu

If you have any questions about your rights as a research subject you may call the office of the HonorHealth Institutional Review Board (IRB) at 480-323-3071. The IRB is a committee that oversees research at this Institution.

Verbally agreeing (saying "Yes") to participate in this project means that a member of the research team has explained to you the purpose of this project, including the above information, and that you voluntarily agree to be in the project. You may keep this printed summary about the project.

Sincerely,
Elizabeth Smith, BSN, RN, DNP student
Dr. Elizabeth Reifsnider, PhD, RN, FAANP, FAAN

By signing below you are agreeing to be part of the study.
Name:

Signature:

Date:

Appendix G

Provider Survey

Advance Care Planning Provider Survey

Your participation in the survey is voluntary and your responses will be anonymous. You can skip any questions on the survey that you do not wish to answer. If you choose not to participate or withdraw from the project at any time, there will be no penalty. Participation status will not affect your work or your role in the organization prior to, during, or after participation in the project.

Thank you for your participation and time. Please return the survey to Lori Layer, Practice Manager, by **November 01, 2021**.

1. Do you utilize SmartSets in Epic to document patient encounters?

Yes	No
-----	----

2. Do you believe prompts within SmartSets improve your documentation?

Yes	No
-----	----

3. Do you feel confident in your training/education to discuss Advance Care Planning with patients? If not, what are your areas of concern?

Yes	No
If No : _____	

4. Are visual reminders, such as SmartSet|prompts, helpful in reminding you to discuss Advance Care Planning during the patient encounter?

Yes	No
-----	----

5. Do you recommend follow-up appointments to discuss Advance Care Planning with your patients? If yes, how often?

Yes	No
If Yes : Never Rarely Sometimes Always	

6. Are there any areas you would suggest improvement to facilitate Advance Care Planning discussions?

7. Other than time constraints, what additional barriers prevent you from discussing Advance Care Planning with your patients?

8. How would you rate your comfort level in discussing Advance Care Planning with patients and/or surrogates? 1-5

Uncomfortable	Mild discomfort	Neutral	Some Comfort	Comfortable
1	2	3	4	5

9. How often do you engage in Advance Care Planning discussions with your patients during Medicare wellness visits?

Never	Rarely	Neutral	Sometimes	Always
1	2	3	4	5

Appendix H
Proposed Budget

Projected cost

Expense Items	Cost	Subtotal	Total
Personnel			
Project director (DNP student) 20 hrs @ \$40/hr	\$800.00		
Practice Manager	\$60.00		
Initial training and organization of event 3 hr @ \$20/hr			
Primary Care Providers (4)	\$75.00		
Initial training 0.25 hr @ \$75/hr			
Nurse Practitioners (2)	\$22.50		
Initial training 0.25 hr @ \$45/hr			
Support staff (10)	\$37.50	\$995.00	
Initial training 0.25 hr @ \$15/hr			
Equipment/Materials			
Print provider resource materials (orange paper)	\$20		
Print Advance Care Planning Packet 100 patients x 22 pages/patient @ \$.09/page	\$198	\$218.00	
Office/Operations			
IT access and Epic training	\$400		
Computer with Internet access	\$200		
IntellectusStatistics™ Software \$54/month @ 4 months	\$177		
ASU cloud and Excel access	\$200	\$977.00	\$2,190.00