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Improving Advance Directive Completion Rates Through Advance Care Planning

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Abstract

According to Centers of Disease Control and Prevention (CDC), 70% of Americans are without advance directives (Centers for Disease Control and Prevention [CDC], 2017). An evidence-based practice project was conducted to assess the effectiveness of a multimodal intervention to increase advance care planning discussions (ACP) and advance directive (AD) completion rates in an urban senior health center. A total of 122 patient records were reviewed to assess for advance directive completion. A total of 64 patients ages 65 and older were included in the intervention. At three-month completion, 23% of patients completed AD’s prior to ACP meetings with mailer intervention only, and 13% AD completion with mailers plus ACP discussion and telephone follow up. A total of 17 ACP meetings were conducted, out of which 35% of patients completed AD’s without follow up, and 12% completed an AD after receiving a one week follow up telephone call. Findings suggest the need to be proactive and purposely discuss advance care planning with the elderly population.

Keywords: advance directives, advance care planning, end of life
Improving Advance Directive Completion Rates Through Advance Care Planning

Advance care planning (ACP) and advance directives (AD) is the continuing discussion and recording of patient preferences and goals of care in the event the patient loses capacity to speak for themselves. The Center of Disease Control and Prevention (CDC) estimates that 70% of Americans are without AD’s (Centers for Disease Control and Prevention [CDC], 2017, p. 1). “Of the 2.6 million people who died in the U.S. in 2014, 2.1 million, or eight out of 10, were people on Medicare, making Medicare the largest insurer of medical care provided at the end of life” (Kaiser Healthcare Foundation, 2015). Spending on Medicare beneficiaries in their last year of life accounts for about 25% of total Medicare spending on beneficiaries age 65 or older (Kaiser Healthcare Foundation, 2015). This unbalanced share of Medicare spending that goes to beneficiaries at the end of life is not too surprising given that many have multiple comorbidities, and often use expensive services in their last year of life, including inpatient hospitalizations.

While 82% of Californians say, it is important to have end-of-life wishes in writing, only 23% say they have done so (California Health Care Foundation, 2012). Furthermore, roughly 80% of Californians say they would like to talk with a doctor about end-of-life care, but only 7% have had a doctor speak with them about it (California Health Care Foundation, 2012). Interestingly, the same participants in this survey stated it would be a good idea if providers were paid for such discussions. This consistent gap in health care has led the Centers for Medicare and Medicaid Services (CMS) to begin reimbursing providers for advance care planning consultations (CDC, 2017).
At a senior health center in San Diego, California, there were no protocols in place to discuss advance care planning and advance directives. A retrospective randomized audit of 151 charts revealed 80% of patients were without advance directives. Agency for Healthcare Research and Quality (AHRQ) funded studies have shown that discussing advance care planning and directives with their providers increased patient satisfaction among patients 65 and over (Agency for Healthcare Research and Quality [AHRQ], 2014). AHRQ national guidelines and major recommendations include “initiating a guided discussion, assisting the patient in advance care planning, documentation and implementation of advance directive and patient goals, and revision of advance care plans at least annually” (AHRQ, 2014). Advance care planning helps to ensure patients are receiving care that is consistent with their wishes. Advance care planning has improved multiple outcomes including higher rates of AD completion and patient satisfaction (AHRQ, 2014).

**Theoretical Framework**

The Transtheoretical Model (TTM) was the framework for this evidence based project (EBP). The transtheoretical model is a collaborative, cyclical model that focuses on the process of purposeful behavior change. Incorporated into this model is Bandura’s theory of self-efficacy which theorizes how the level of self-confidence is related to how a desired behavior is maintained in situations that may cause relapse (Lin & Wang, 2013). The model is dynamic and suggest that people move through different stages when making or attempting to make a behavioral change.

There are five stages that individuals progress through when changing a behavior. The five stages include: (1) pre-contemplation; (2) contemplation; (3) preparation; (4)
action; and (5) maintenance. Theses stages of change rarely follow a straight path and is more spiracle, beginning at one stage and moving through different stages at any given time (Lin & Wang, 2013, p. 190). One study developed four questionnaires based on TTM to assess the behavior, completing a healthcare proxy (HCP) (Finnell, Wu, Jezewski, & Meeker, 2011). The aim was to integrate the TMM constructs into completing advance directives (Finnell, et al., 2011).

Advance care planning discussions may play a crucial role in advance directive completion. Advance care planning offers information on key elements that help patients make decisions about end of life care. For purposes of this quality improvement project, it was hoped that those who attend ACP educational meetings were in the contemplative / preparation stage of the transtheoretical model. They are most likely past the contemplative stage and recognize their need for change. The contemplative stage is the stage in which individuals change within six months (Lin & Wang, 2013). Individuals in this stage see the change as beneficial to their own self. By sending out mailers that included advance directive information and instructions, the goal was for the patient to acknowledge the need for change and AD completion, also identify pros and cons in doing so.

The preparation stage is the stage in which the individual acts within the next month. In this stage, the individual has begun to make a change within the last year and have an action plan in place such as joining an AD educational class, or consulting their physician for ACP (Lin & Wang, 2013). The goal was to move into action and have an actionable, completed advance directive on file. This course of action is maintained
through telephonic intervention and visitation of the advance directive at least annually and as health conditions change.

**Method**

The purpose of this evidence-based practice project was to assess the effectiveness of a multimodal intervention to increase advance care planning discussions and advance directive completion rates. Multimodal interventions including mailers, advance care planning conversations and telephone follow ups to improve health outcomes were chosen for this project and required strategic planning. Search engines utilized included CDC, CINAHL, Health source: Nursing/academic edition, Psych INFO, and the Cochrane library including Cochrane central register of controlled trials and Cochrane database of systematic reviews. Key words used for searching engines were as follows: Advance Directives, Advance Care Planning, POLST, gerontology, telephone follow up, motivational interviewing, chronic illness, CMS, end of life issues, AD practice guidelines, theoretical models. Search engines yielded over 100 articles, some inaccessible, and many unrelated specifically to the proposed interventions. A total of 25 articles and references were reviewed, and 14 were used in the proposed evidence based project. There was not much evidence that specified the exact process of how to implement a multimodal intervention to increase AD completion, however the evidence that does exist supporting the use of multimodal interventions and the importance of advance directives is of good quality.

A meta-analysis demonstrates that “the most effective method of increasing the use of advance directives is the combination of informative material and repeated conversations over multiple clinical visits” (Simón-Lorda, et al., 2010, p. 1). The
presence of an AD was associated with a decreased rate of hospitalization, decreased chances of dying in the hospital, decreased use of life-sustaining treatment, and an increased use of hospice or palliative care (Brinkman-Stoppelenburg, Rietjens, & van der Heide, 2014).

**Participants**

This was a single setting evidence based quality improvement project conducted at a senior health center in San Diego, California. Patients were recruited based on the lack of advance directive on file. This was a convenience sample of 122 possible candidates based on annual or follow up appointments scheduled during the 3-month implementation period. Fifty-four out of 122 patients were included in the intervention. Inclusion criteria included Medicare beneficiaries 65 years and older with at least one chronic disease, and a scheduled appointment on the designated day of the week. Medical decision making capacity was also part of inclusion criteria for the project. The goal was to increase the number of patient completed advance directives. Institutional Review Board approval was obtained September 4, 2016, and project implementation began October 06, 2016.

**Design**

Prior to implementation, participants were mailed a letter of intent discussing the need for AD, and the California Advance Directive Health Care form at least two weeks prior to their scheduled appointment. Following the 2016 CMS guidelines for reimbursement of ACP, a 30-minute face to face discussion focusing on ACP was conducted for consenting participants after their scheduled appointment with their provider.
Patients were encouraged to complete the advance directive form during the encounter. Patients who were unable to complete documentation during the visit received a one-week telephone call to follow up. Using the 5A’s model of behavior change, patients were guided in completing the AD and were provided further information and education as needed during the follow up call as well as the face to face encounter.

5 A’s of Behavior Change

Assessment of behavior change through the 5 A’s served as a useful tool in ACP discussions and telephonic intervention. “The ‘5As’ model of behavior change provides a sequence of evidence-based clinician and office practice behaviors (Assess, Advise, Agree, Assist, Arrange) that can be applied in primary care settings to address a broad range of behaviors and health conditions” (Glasgow, Emont, & Miller, 2009, p. 1). Use of the 5 A’s involved the following: Asking permission to discuss AD and ACP. Assessing age, chronic illnesses, AD completion state. Assessing age, chronic illness and AD completion state. Also, assessing drivers and complications of AD completion. Advising the patient about end of life care, personal goals, the need for long-term strategy, and treatment options. Agreeing on realistic AD goals, and specific details of the treatment plan (i.e. advance directive form). Lastly, assisting in consulting with appropriate services (i.e. social work, palliative care, hospice), and arranging regular follow up annually.

Assessing Healthcare Literacy

Providers often use words that patients do not understand or recognize. It was important to identify which advance directive form was appropriate for each patient.
Advance directive forms including the ‘California Health Care Directive Form’ and ‘Five Wishes’ were reviewed. The Rapid Estimate of Adult Literacy in Medicine-Short Form (REALM-SF) was used to help assess health literacy in patients prior to completion of AD during the ACP meeting. The REALM-SF is a 7-item word recognition test to provide health care providers with a quick and efficient way to assess patient’s health literacy (AHRQ, 2016). The REALM-SF is a reliable and validated questionnaire that is brief and can be used in the primary care setting. The REALM-SF allows the patient to read aloud a series of medical words such as “Jaundice” and “Antibiotics.” The patient is instructed to ‘pass’ if they do not recognize the word. Scores as illustrated in table 1 determines their grade range equivalent and their ability to read health care printed materials, such as advance directive forms. Advance care planning discussions and the type of advance directive form used was tailored toward participant-reported needs and their REALM-SF score. Scores for all participants were three or greater and thus were provided at least low health literacy advance directive forms as illustrated in addendum B.

Table 1

Scores and Grade Equivalents for the REALM-SF

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade range</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>Third grade and below; will not be able to read most low-literacy materials; will need repeated oral instructions, materials composed primarily of illustrations, or audio or video tapes.</td>
</tr>
<tr>
<td>1-3</td>
<td>Fourth to sixth grade; will need low-literacy materials, may not be able to read prescription labels.</td>
</tr>
<tr>
<td>4-6</td>
<td>Seventh to eighth grade; will struggle with most patient education materials; will not be offended by low-literacy materials.</td>
</tr>
</tbody>
</table>
Note. Rapid Estimate of Adult Literacy in Medicine-Short Form (REALM-SF). Table reproduced from Agency of Healthcare Research and Quality.

Mailer Intervention

Studies have shown that combination methods are an effective method in increasing the use of advance directives. Sending out mailers is an effective way to inform patients about advance directives. Mailers were sent out two weeks prior to the patients scheduled appointment. Mailers included a letter of intent, explaining the need for AD completion, and a low health literacy form - The California Healthcare Directive form.

Advance Care Planning

The California Advance Directive Health Form was used to measure effectiveness of this multimodal intervention. Advance care planning is the ongoing discussion about one’s care and the decisions that are made based on personal values, preferences, and quality of life. Completed and actionable forms included those that were notarized or had two witness signatures. Per CMS guidelines for ACP reimbursement, voluntary advance care planning discussions must be face to face with Medicare beneficiaries or their surrogates, and must cover the patient’s specific health conditions, options of end of life care, and the potential for advance directive completion (Department of Health and Human Services; Centers for Medicare and Medicaid Services [CMS], 2016). Codes 99497 and 99498 are Current Procedural Terminology (CPT) codes created to allow billing for providers for ACP conversations (CMS, 2016). Advance care planning discussion intervention was used in increasing advance directive completion.

Telephone Phone Follow Up
Follow up phone calls were made to patients whom ACP discussions were conducted but declined filling out the AD in office. These patients were encouraged to bring in their completed forms to their next follow up appointment. Telephonic follow up intervention provides an adjunct to advance care planning by providing additional instruction and motivation needed to complete the advance directive and provide support for unanswered questions. Factors that influenced the need for telephonic intervention included those patients unable to complete AD’s in office due to lack of notary or witnesses required for signing, patients who wanted to have additional conversation with family members, and/or patients stating they had a completed AD at home. Patients who had an AD at home were also encouraged to bring the completed form to their next provider appointment or sooner if possible.

**Method of Evaluation**

The measurable outcome for this EBP project was to increase advance directive completion rates in the senior healthcare clinic. After three months of project implementation, this project’s aim was to improve the number of completed advance directives on file by 20 for those patients with scheduled provider appointments during implementation period.

**Results**

At three-month completion, 122 charts were assessed, 64 mailers were sent, 17 ACP conversations were conducted, nine follow-up phone calls were attempted, and 23 advance directives were completed. All patients who did not have advance directives on file were sent educational mailers. At three-month completion, 23% of patients completed AD’s prior ACP meetings with mailer intervention only, and 13% AD
completion with mailers plus ACP discussion and telephone follow up. A total of 17 ACP meetings were conducted, out of which six completed AD’s without follow up and two completed after receiving a one week follow up telephone call. Evaluation of pre/post project implementation data using paired T-Tests demonstrated the advanced directives mailer and advance care planning follow up quality initiative project significantly improved completion of advance directives on average 23 AD’s, from 55 to 78 (95% confidence Interval, 21, 34) and was statistically significant at p < .001. This was proven to be clinically significant improving completion of advanced directives by 20%.

Figure 1. Overall advance directive completion process.
Figure 2. Pareto chart: Interventions are plotted in decreasing order of relative frequency, depicting mailer intervention as most significant.

Figure 3. Overall improvement of advance directive completion with multimodal intervention.

Discussion

Results showed an increase in AD completion rates and increase in ACP discussions. Most AD’s were completed by patients at home without ACP discussions and with mailer intervention only, indicating that mailers may be sufficient and time/cost effective in increasing AD completion rates. As shown in figure 2, 65% of patients
completed advance directives with mailer intervention only, depicting mailer intervention as most significant. With patients who require additional assistance, face to face discussion serves as an effective tool in ACP.

During project intervention, it was important to capture completed advance directives the same day as ACP discussions because it was less likely that patients would return on a subsequent day to bring the completed form back, as evidence by only two patients had done so. As depicted by the Pareto chart in figure 2, telephone follow up was not be the most effective tool for this population in improving advance directive completion rates.

Patients who engaged in ACP discussions but declined completing an AD during the visit received telephone follow up calls. Nine follow up calls were conducted, of which only two patients could be contacted through telephone follow up intervention. The additional patients received voicemail messages with no callbacks to this researcher. Two patients completed advance directives and followed up by providing a copy to this researcher via telephone intervention.

With 17 ACP discussions completed, $1,462.00 was shown to be reimbursable for the senior health center at completion of project. Providers may bill Medicare for ACP services under codes 99497 and 99498. This project aimed to implement a patient centered approach to improve advance directive completion rates and may help in establishing patient preferences and goals of care in advance care planning in the primary care setting.

Conclusions
IMPROVING ADVANCE DIRECTIVE COMPLETION RATES

Multimodal interventions have shown to increase completion rates. Multimodal interventions such as mailers, telephone follow up and ACP discussions may help guide patients in advance directive completion. Providers are in the best position to know when to bring up sensitive topics such as end of life care. At times, patient’s or their loved ones may not be ready to discuss end of life care. If individuals do not see change as necessary or do not believe ACP or AD completion is important, then change may not take place. If patients perceive AD completion as something that gets done when they are terminally ill or hospitalized, then this could also hinder progress.

A lack of knowledge of advance directive forms and advance care planning may build resistance as well. This resistance may also come from the provider. If the provider does not see this as a necessary intervention or concludes time constraints as an issue, then resistance may be met. These are barriers that may be addressed prior to advance directive implementation.

Studies have shown that advance care planning may help reduce the high rate of hospitalizations and invasive medical treatment that patients often do not favor towards the end of life. This project aimed to improve a patient centered approach to improve advance directive completion. This project successfully improved completion rates through multimodal interventions including, mailers, telephone follow up, and face to face advance care planning discussions.
References


doi:10.1177/0269216314526272


IMPROVING ADVANCE DIRECTIVE COMPLETION RATES


Improving Advance Directive Completion Rates


Interventions to promote the use of advance directives: an overview of systematic reviews. Patient Education & Counseling, 80(1), 10-20.

doi:10.1016/j.pec.2009.09.027
Dear Patient,

You have an appointment coming up with your Sharp health care doctor.

Your health file shows we do not have an advance directive on file for you. An advance directive is a form that lets you have a say about how you want to be treated if you get very sick.

This form lets you choose the type of health care you want so people that care for you do not have to guess if you are too sick to tell them yourself.

Please look over the form inside and share it with your friends and family. We would like to help you fill out this form and answer any questions you have when you see your doctor.

I look forward to meeting you.

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Appendix B- California Advance Health Care Directive Form