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Advance Care Planning and Advance Directives Completion of Elderly Patients at a Rural Health Clinic on a Regional Medical Campus
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Abstract
Advance care planning is the shared decision-making process between physicians, patients, and families regarding the patient’s preferences for end of life care. These conversations increase compliance with patient wishes, decrease hospitalizations, increase likelihood of patient selected location of death, and decrease stressors that may lead to depression in surviving family members. Even though there is proven benefit from advance care planning, these discussions are often not prioritized. The purpose of this study is to evaluate rates of advance care planning and advance directive completion rate of 245 geriatric patients at our rural health clinic training site. We searched the electronic medical record to determine the number of patients who were asked about advance directives, stated they had a living will or medical power of attorney (MPOA), and had a living will or MPOA scanned into their chart. Out of the study population, 45% of patients stated they had some form of advanced directives. Of these patients, only 22% and 25% had a living will and MPOA scanned into their chart, respectively. This study demonstrates the need for detailed discussion about advance care planning with patients and additional follow-up to ensure documentation is readily available.

Introduction
Advance care planning (ACP) is the ongoing shared decision-making process between patients, family, and healthcare providers regarding patient preferences for end of life care. Conversations should include the patient’s medical conditions, prognosis, options, and values. It is best for this dialogue to take place in primary care offices where patients have built relationships with their providers and have more time to discuss their goals in a low-pressure environment. However, it is also imperative for patients’ wishes to be revisited with each hospital admission and/or changes in health status.

ACP increases the likelihood that patients receive the care they want, decreases the probability that family stress over making difficult decisions, and decreases the chance that healthcare providers face ethical dilemmas. Additionally, this planning decreases hospitalizations and life-sustaining treatments prior to death, reducing healthcare costs without increasing mortality. Planning also increases utilization of options for hospice and in-home deaths, increasing patient quality of life and family satisfaction. Furthermore, ACP increases advance directive completion.

Advance directives (AD) are legal documents completed by patients when they have medical decision-making capacity that outline their end of life care preferences. These documents are only used in the instance that the patient loses medical decision-making capacity as deemed by a physician. The most common types of AD documents include living will, medical power of attorney (MPOA), and physician orders for scope of treatment (POST).

A living will defines a patient’s wishes for future medical care, including CPR, intubation/ventilation, tube feeds, implantable defibrillators, dialysis, pain control, and chemotherapy.

A MPOA designates the person that the patient would like to make medical decisions on their behalf. This is still important even if a patient has a living will as a living will cannot cover every possible medical scenario. A combined directive incorporates both a living will and MPOA into one document.

A POST indicates physician orders for life-sustaining treatment, including CPR, intubation/ventilation, and tube feeds, which is portable across most states. This covers out-of-hospital DNR orders and more and is particularly important in emergencies.

Patients are more likely to complete AD if they have the following features: Caucasian, elderly, suffering from chronic disease, high socioeconomic status, and high education level. Although all participants were Caucasian with chronic disease, few were of high socioeconomic status or education level. Low education level is associated with low health literacy.

Although there are numerous benefits, only 70% of elderly Americans have completed an AD. Based on observations in clinic, it was hypothesized that the advance directive completion rate of elderly patients at our rural health clinic would be below the national average.

Methods
The charts of 245 patients who met inclusion criteria – age 65 years and older who visited our rural clinic between 1/23/2019 and 1/30/2019 – were reviewed by these authors.
There were no exclusion criteria. Our clinic provides over 30 000 visits per year with an average of 655 visits per week. The most common insurances used by our patients are: Medicaid (25%), Blue Cross and Blue shield (22%), Commercial (22%), and Medicare (7%). An average of 7% are self-pay visits. This rural health clinic is located in a county of 57 146 people where the median age is 40.2 years old. The poverty rate is 9.1%, the population is 88.9% white, and 30.8% of people have a bachelor’s degree or higher level of education.

Demographic data, including age, gender, and marital status were noted. Then, the following terms were searched in each chart: “advance directive”, “living will”, “MPOA”, “DNR”, and “POST form”. Next, the “Encounter” portion of the chart was reviewed for the most recent hospital admission date. Then, the “media” portion of the chart was reviewed for upload of advance directive documents, including a living will, MPOA, and POST form. Finally, data was entered into Microsoft Excel and then analyzed to create the tables and graphs presented in the results section.

Results
Demographic information is summarized in charts 1, 2, and 3. The age breakdown (Figure 1) was twenty-six percent 65-69 years old, thirty-one percent 70-74 years old, eighteen percent 75-79 years old, fifteen percent 80-84 years old, seven percent 85-89 years old, and three percent 90+ years old. The gender breakdown (Figure 2) was 33% males and 67% females. The marital status breakdown (Figure 3) was 53% married, 13% single, 12% divorced, and 22% widowed.

Out of the study population (n=245), 99.6% of patients has been asked if they had a living will or MPOA. Out of the patients that stated they had a living will and MPOA (n=110), only 22% and 25% had a living will and MPOA scanned into their chart, respectively. Of the patients who stated they did not currently have a living will or MPOA (n=134), 74% were offered additional handouts about advance directives. Only 5% of patients stated they had a POST form and only 2% had one scanned into their chart.

Of the patients with a recorded hospital admission (n=184), 62.5% had a code status recorded in their charts.
Unfortunately, our internal chart review demonstrated that the AD completion rate at our clinic of 45% is well below the national average of 70%. A number of factors may be contributory to this discrepancy.

One theory identified by the authors is that while AD status is being briefly addressed by the medical assistant (MA) during the check-in process, it is not being followed up by the provider and thus informative conversations and documentation are not taking place. Providers should ask the patient for their understanding of their condition and prognosis and offer information on their prognosis and options. Patients should identify their preferences and providers should encourage patients to document their preferences and discuss with family. Future interventions could provide education and set expectations with providers to see if documentation rates change. Similar to how Medicare reimburses documentation of ACP, our clinic could consider incentivizing ACP and AD discussion and documentation.

Another contributor may be the effects of low socioeconomic status and/or low education levels of our patients. One limitation of this study is that we did not collect socioeconomic status and health literacy data on patients whose charts were reviewed, and thus were unable to draw conclusions regarding whether patients with higher socioeconomic status and/or health literacy were more likely to have documented advance directives. Future iteration of the study could track this information and document that patients received appropriate education materials to see if this resulted in higher uptake of advance directives being completed and documented. In the future, our providers should ensure the informational packet offered to patients is of appropriate reading level. Other specific tools that could be incorporated into a future intervention could be the “PREPARE for your care” website. Not only does it offer step wise instructions in the form of video stories, but one study found that this resource increased AD completion by 10%.

Another tool providers could be encouraged to use in their approach to improve documentation would be to direct patients to the West Virginia Center for End-of-Life care E-Directive Registry website. West Virginia is one of only 4 states with a statewide AD registry, allowing providers easy access to AD across health care settings.

Finally, yet another opportunity for increasing documentation of current AD wishes includes at the time of hospitalization. Over one third of participants who were previously hospitalized (n=184) did not have code status documented (n=69). While these numbers are most likely inflated (hospitalizations date back to 1986 whereas notes and orders discussing code status do not), it is imperative that AD are revisited continually. Although patient preferences are more likely to stay stable over time if they have an AD, 7-9% will change their preferences during admission. This is even more likely in the elderly. In the future, our providers should ensure they are readdressing AD, especially upon admission.

While this chart review revealed some eye-opening data, it is only preliminary. Future research should analyze a larger sample size at various primary care offices. They should incorporate how the rate of ACP discussions differs between healthy and sick patients. They should also examine how AD completion rates vary depending on socioeconomic status, education, health literacy, and computer/internet access.

Conclusion

| Number of patients asked about his or her advance directives | 244 |
| Number of patients that stated they have a living will | 110 |
| Number of patients that stated they have an MPOA | 110 |
| Number of patients with a recorded code status | 115 |
| Number of patients that stated they have a POST form | 13 |
| Number of patients with no advance directives | 134 |
| Number of patients given additional information if no advance directives | 99 |

Table 1

Discussion

Unfortunately, our internal chart review demonstrated that the AD completion rate at our clinic of 45% is well below the national average of 70%. A number of factors may be contributory to this discrepancy.

Figure 4

Bar chart: Percentage of Patients with Each Advance Directive

- Living Will
- MPOA
- POST Form

- Stated They Had
- Scanned In

Living Will: 0%
MPOA: 20%
POST Form: 40%

Percentage of Patients with Each Advance Directive

- Stated They Had
- Scanned In

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Although ACP discussion is beneficial to patients, families, and health care providers, geriatric patients at our rural health clinic are falling short of the national AD completion rate for the elderly. Routine follow up is necessary to ensure AD documentation, which will lead to more successful end of life care.

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