

Emergency Department Intervention Program for Enhancing Choice at the End of Life: A Quality Improvement Project at a Comprehensive Cancer Center

Maria T Cruz-Carreras^{1*}, Patrick Chaftari¹, Carmen Gonzalez¹, Rowena Enojo² and Jayne Viets-Upchurch¹

¹Department of Emergency Medicine, The University of Texas MD Anderson Cancer Center, Houston, Texas

²Department of Emergency Center, The University of Texas MD Anderson Cancer Center, Houston, Texas

*Corresponding author: Maria T. Cruz-Carreras, Department of Emergency Medicine, The University of Texas MD Anderson Cancer Center, Houston, Texas, Tel: (713) 745-4516; Email: macruz3@mdanderson.org

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Abstract

Background: Advance care planning (ACP) for end-of-life care is especially important for individuals with terminal illnesses such as advanced cancer. It ensures that patients' wishes are honored and alleviates the decision-making burden on family members and medical providers. It reduces unnecessary medical costs, and prevents waste of valuable resources. We proposed a quality improvement project to improve documentation of advanced care directives in the Emergency Department (ED) of a tertiary cancer center.

Methods: We developed a pocket card to help emergency physicians screen patients in need of ACP. The goal was to assist ED staff in initiating conversations about end-of-life issues, and encourage patients and their caregivers to get involved in decisions about their medical treatment.

Intervention: The project was implemented in a Plan-Do-Study-Act design. Baseline data was collected from the medical records of all patients visiting the ED on seven consecutive days prior to the distribution of the pocket card tool. After the launch of the intervention, the charts of all patients visiting the emergency center were reviewed for documentation of advanced care planning. Metrics polled included presence of a health care power of attorney and determination of code status, specifically the do-not-resuscitate (DNR) status.

Results: 429 patients who visited the ED seven consecutive days prior to institution of the screening tool. Of these, we found that 66 (15.4%) had indicated their do-not-resuscitate (DNR) status in their charts, and 82 (19.1%) had a health care power of attorney. Post launch of the intervention, 391 patients visited the ED over seven consecutive days. Of these, 125 (32.0%) indicated their DNR status in their charts before leaving the ED, and 95 (24.3%) had a health care power of attorney. After implementation of our screening tool, there was a 107.8% increase in documentation of DNR status and a 76% increase in patients with a health care power of attorney.

Conclusions: In this quality improvement project, a straightforward, low cost intervention was successfully implemented to improve documentation of patients' ACP goals.

Keywords: End of life; Cancer; Emergency department; DNR; Medical power of attorney; Advanced directives; Palliative

Introduction

Problem description

Advance care planning (ACP) allows patients to make decisions about the kind of care they would like to receive. It is particularly helpful in the setting of patients nearing the end of life owing to terminal disease. The process involves the patient learning about available medical treatments and making decisions about which therapies they elect to receive or forego. ACP allows these wishes to be clearly communicated to family and healthcare professionals. Should a patient become unable to speak for themselves, ACP provides a platform upon which the patient's medical proxy and health care team can base decisions made on the patient's behalf [1,2].

Documentation of ACP may be made in the form of advance directives. In the United States, these documents most commonly include a living will, which provides directives regarding treatment, and a durable power of attorney for health care, which appoints a surrogate who can make medical decisions on an individual's behalf.

What this Paper Adds

Section 1: What is already known on this subject

ACP is an essential tool employed to document and honor patient wishes with regard to health care that is particularly valuable as the patient approaches end of life care.

Section 2: What this study adds

This pilot project employed a low cost intervention (pocket cards) and structured documentation to improve ACP rates and documentation.

During ACP, decisions about specific treatments can also be documented, the most common being a decision to withhold cardiopulmonary resuscitation made by signing a do not resuscitate (DNR) order.

Available knowledge

Emergency department physicians and other medical providers should consider discussing end-of-life issues-including out-of-hospital DNR orders, with cancer patients nearing the end of life [3]. Patients who have made their end-of-life care wishes known through ACP spend fewer days in the hospital in the last year of life and have reduced hospital costs [4,5]. Among patients who prefer to die at home, a group which includes many patients with advanced cancer [6], those with a DNR order are less likely to die in the hospital.

Rationale

Cancer patients would ideally address ACP decisions with their primary oncologist outside the setting of the ED. Unfortunately, for many patients, this does not occur in the outpatient setting. We set out to equip ED clinician with a tool to identify patients in need of ACP and to initiate meaningful conversations with the patient and family regarding their healthcare choices.

Specific aims

In this study, we implemented the use of a screening tool to identify patients who would most benefit from ACP. We aimed for a 20% increase in the number of patients at The University of Texas MD Anderson Cancer Center who were dispositioned from the ED (whether it be to be discharged home or to be admitted to the hospital) with advance directive documentation in their medical records. We also focused on identifying the barriers preventing emergency physicians from addressing end-of-life issues with patients at the ED.

Methods

Context

Our ED is a 43 bed unit with an annual volume of 26,000 patients. The department is integral to the functioning of the cancer center. Over 40% of inpatient encounters are initiated by the emergency department. The majority of these have established care with our facility for treatment of their cancer. In addition to the treating ED clinician, the care team for established patients includes their primary oncologist, nursing, case management, social work and chaplaincy (if desired).

Intervention

Utilizing a Plan-Do-Study-Act (PDSA) methodology, our project consisted of three phases [7]. A screening tool was developed to identify patients in need of proactive advance care planning. Baseline data was collected over a one week period in the pre-pilot phase. The pilot phase included the distribution of the screening tool and physician education in its use. The post-pilot phase examined the results of the intervention with data being collected over another one week period.

Pre-pilot phase

We reviewed the medical records of all patients discharged from the ED over a period of seven consecutive days before the screening tool was instituted. Of those patients, we recorded how many had documentation of advance directives (medical power of attorney, living will, and/or DNR order).

Over a period of seven consecutive days prior to institution of the screening tool, 429 patients visited the ED at MD Anderson. Of those, we found that 66 patients (15.4%) had indicated their DNR status in their charts, and 82 patients (19.1%) had a health care power of attorney.

A screening tool was developed in the form of a pocket card (Figure 1). The front of the card asked the providers to consider the two questions:

- 1) "Is your patient rapidly deteriorating for health reasons that are not reversible?" We hypothesized that patients who have experienced an acute deterioration may not have had the opportunity or inclination to discuss ACP with their primary oncologist.
- 2) "Would you be surprised if this patient were alive two months from now?" This is variant of the typical "surprises question" [8]. The two month endpoint was chosen to underscore the acute nature of the ED patient population.

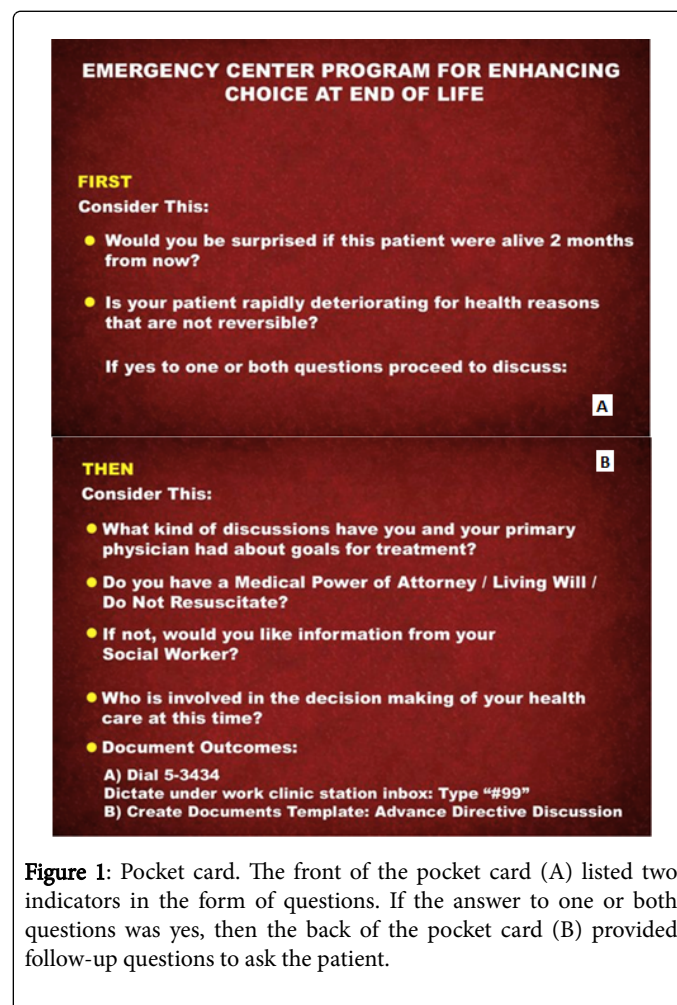


Figure 1: Pocket card. The front of the pocket card (A) listed two indicators in the form of questions. If the answer to one or both questions was yes, then the back of the pocket card (B) provided follow-up questions to ask the patient.

An affirmative answer to one or both of these questions prompted the provider to consider initiating a discussion regarding ACP. Prior to any discussion, the patient's chart would be checked for advance directives or evidence of end-of-life care preferences. The patient's primary oncologist (or the oncologist on call) would be contacted to assist in establishing the overall prognosis and obtain feedback from the oncologist as to his/her opinion regarding the appropriateness of DNR status.

If an emergency medicine physician determined that a conversation regarding end-of-life issues was necessary, the conversation was held with the patient and family members while the patient was still in the ED. The back of the pocket card provided recommendations or scripted ideas on how to initiate the conversation. Among them, physicians were to ask the patient and family about prior discussions of goals of care and whether there was already a health care power of attorney, living will, or DNR documents. Before the patient was discharged home or admitted to the inpatient floor, social workers and ED registered nurses reinforced these end-of-life conversations.

An Advance Directive Discussion Template (Figure 2) was used to record and document in the medical record the patients' status, prognosis, and decision-making capability. If advance directives could not be completed or were difficult to obtain for any reason, the reasons for this could also be documented in the Discussion Template.

Review of current medical records/discuss with primary oncologist

Functional status:
 Oral intake status:
 Estimated prognosis:
 Previously completed advance directive:
 Medical power of attorney: Yes No
 Living will: Yes No
 If has medical power of attorney, health care agent's name:
 Out-of-hospital DNR: Yes No

Assess patient's decision-making capacity

Does the patient have capacity to make his/her medical decisions re: life-sustaining treatment?:

If no prior health care agent has been identified:
 Does the patient have capacity to choose a health care agent?:
 If yes, then was there referral to social work to assist patient in completing MPA?:

Discussed goals of care with patient and/or family

Reviewed what patient/family know about patient's condition/prognosis:

Review/revise advance directive (MPA & LW) and Do Not Resuscitate Orders

If not completed previously, is patient interested in discussing?: Yes No Not capable
 MPA discussed?: Yes No
 If yes, name of health care agent:
 Living Will discussed?: Yes No
 If yes, was copy provided?: Yes No
 Was code status discussed?: Yes No
 Was a DNR? Yes No
 If DNR already completed:
 Were goals reviewed?: Yes No
 Was content reviewed, updated, and signed?: Yes No
 If not completed, is patient interested in discussing?: Yes No
 If interested, were wishes about CPR/DNR discussed?: Yes No
 Were goals and wishes about other life-sustaining therapies discussed?: Yes No
 If patient lacks capacity, was discussion with the family completed?: Yes No

If directives not completed, summarize any identified barriers to completion:

Additional comments:

Figure 2: Advance directive discussion template for insertion into medical record. DNR: Do Not Resuscitate; MPA: Medical Power of Attorney; CPR: Cardiopulmonary Resuscitation; LW: Living Will.

Pilot phase

The proposed intervention was reviewed and physician buy in was obtained over the course of several faculty meetings. The pocket card screening tool was distributed to the ED clinical faculty and implemented for a one month period. Physicians were educated in the use of the screening tool and all questions were answered. Likewise,

social workers and case managers actively rounded on patients to explore whether they may meet screening criteria. Figure 3 is a patient flow map that for the intervention. Red lines and text are representative of changes to the previously existing patient flow model.

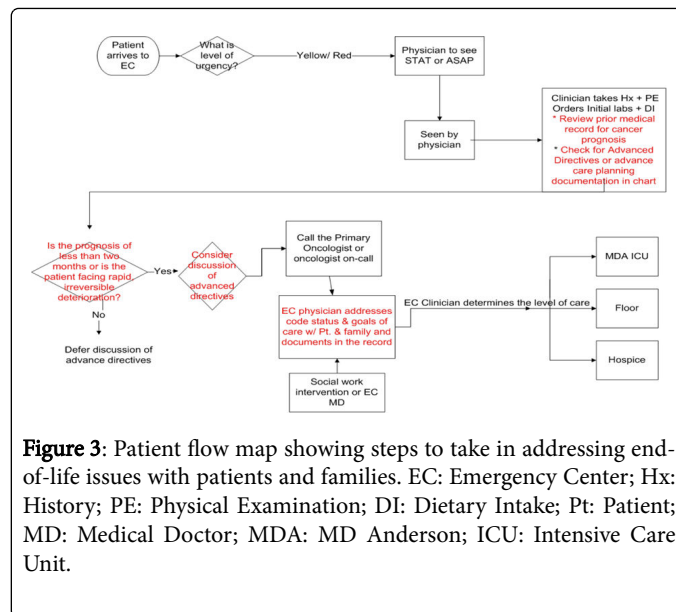


Figure 3: Patient flow map showing steps to take in addressing end-of-life issues with patients and families. EC: Emergency Center; Hx: History; PE: Physical Examination; DI: Dietary Intake; Pt: Patient; MD: Medical Doctor; MDA: MD Anderson; ICU: Intensive Care Unit.

Post-pilot phase

During seven consecutive days, one month after the screening tool was instituted, 391 patients visited the ED. Of those, 125 patients (32.0%) indicated their DNR status in their charts before leaving the ED, and 95 patients (24.3%) had a health care power of attorney in their charts before leaving the ED.

Ethical considerations

This project was approved by our institution's Quality Board. We report our findings here according to SQUIRE 2.0 guidelines which provides a framework for reporting new knowledge about health care improvement [9].

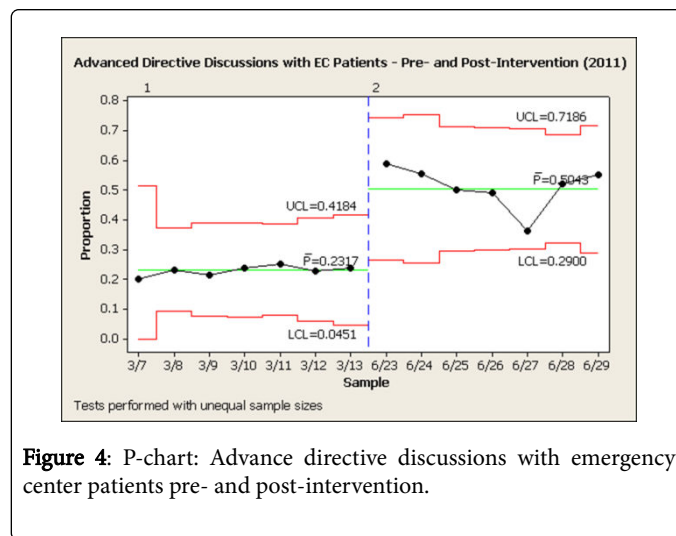


Figure 4: P-chart: Advance directive discussions with emergency center patients pre- and post-intervention.

Results

Comparing the number of patients who were discharged from the ED with documentation of DNR status and health care power of attorney before and after implementation of the screening tool, there was a 107.8% increase in documentation of DNR status and a 27.2% increase in patients with health care power of attorney (Figure 4). We surpassed our goal of increasing by 20% the number of patients discharged from the ED with documentation in their medical record of their wishes regarding advance directives.

Discussion

Numerous barriers may prevent emergency physicians from having end-of-life discussions and obtaining advance directives. For physicians, these barriers included a fear that the patient would see the provider or treatment as a failure, cultural differences, and a reluctance to have in-depth conversations with patients and family members that the ED physician had never met before—especially if the patients had not previously had such discussions with physicians familiar with their case history. For patients and their families, barriers included cultural differences, a reluctance to initiate an end-of-life discussion, fear of patient abandonment, and denial of the need for a discussion about end-of-life issues, mortality, or poor health status. Barriers identified within the environment included time constraints and a belief among both providers and patients that the ED was not the most appropriate setting for a discussion about end-of-life issues. Barriers in the process included not knowing where to find advance directive forms or resources for end-of-life planning. Finally, barriers regarding documentation included concerns about the legal correctness of the advance directive documents and the process of extracting patients' prognoses from the medical record.

The combined use of the screening tool and Advance Directive Discussion Template, addresses a number of barriers to discussing end-of-life issues. Nonetheless, it takes training and practice to become comfortable with addressing end-of-life issues with patients and families and subsequently documenting those discussions in the medical record. Structured documentation has been shown to increase follow through of the aim to have it entered in the chart. It is essential to identify roles within the ED team to avoid duplicity of work; a stronger definition of these roles of the various members of the staff is needed to strengthen implementation of the intervention in the future; and it would be helpful to have a multidisciplinary ACP document that is accessible to all providers for each patient. By addressing these barriers, we could potentially increase the percentage of patients leaving the ED with advance directives even further.

Healthcare providers need to be educated in EOL issues and care. The American College of Emergency Physicians recommended in the Choosing Wisely Initiative [10] "To not delay engaging in available palliative and hospice care services in the ED for patients likely to benefit." To address the providers concern of time constrictions to conduct those sensitive conversation about EOL, we recommend to study other emergency centers wherein a palliative care team is incorporated into other Emergency Departments [11].

During this study, we noted many other benefits of addressing ACP through the ED. These included building trust and teamwork between patients, patients' families, and health care teams; reducing uncertainty and conflict about the appropriate level of future care; providing peace of mind for patients and their families; and establishing a trustworthy, shared decision-making process.

In order to maintain our improvements in ACP in ED patients, we plan to coordinate an educational intervention to coach all ED clinicians on how to effectively address end-of-life issues. Physicians will also be trained to get code status clarification prior to hospital admission and to avoid unnecessary, expensive testing and aggressive therapy that is not aligned with a patient's wishes and goals of care.

Limitations

This project was undertaken in the ED of a comprehensive cancer center. While the general barriers to ACP discussion may be universal, our patients represent a very specific subpopulation.

Our ED patients have generally established care at our facility which provides our clinicians with a wealth of information regarding the patient's health status and social support. On call specialists for each of the oncologic services are available 24/7. A separate palliative care unit is available for patients whose goals of care have changed from curative intent to palliation at end-of-life. Patients seen in community emergency department setting will not likely have this extensive network of resources.

Rapport is a key element in these conversations. As a dedicated unit in a cancer center, our patients may be seen by the same ED provider across multiple visits. In keeping with their complexity and frequent comorbidities, our average patient stay is longer than those of a typical emergency center. These factors may allow our clinicians to establish a stronger rapport with the patient and their family than is typically seen in a community setting.

Patients with widely metastatic cancer, or who have failed multiple lines of therapy, may well have privately addressed the issue of their mortality outside of the medical setting. As they experience functional declines, they likely become more willing to address ACP with healthcare providers. Emergency departments in the community certainly see patients with chronic health issues. However they also have a large population of previously healthy patients whose acute illness, no matter how catastrophic, has left them little time to process the severity of their condition.

Conclusions

As physicians, our goal is to overcome disease. When this is not possible we must help patients understand their medical treatment options and allow them to make decisions regarding their care. While end-of-life conversations naturally involve grief and bereavement, they are essential to establish and honor the patient's wishes. It is important to develop tools that address barriers to discussions about advanced care planning. Proactive interventions allow physicians to overcome these barriers and their own reluctance to discuss this topic and may provide a tool by which to document the patient's wishes clearly in the record.

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