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Honoring Patient Choices With Advance Care Planning

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Patients in Hawai'i are spending their dying days in the hospital and the intensive care unit. In Hawai'i, as of 2014, inpatient spending during the hospitalization in which death occurred was $5518, and US national average was $3802; 18.5% died in the intensive care unit compared with the US national average of 14.4%. Hawai'i has a high elder population who frequently have longer length of stays and are being readmitted to our facilities; 26.7% of deaths occur in Hawai'i hospitals versus the national average of 21.0% from 2003 to 2014. Furthermore, these patients are often not receiving the care that they would choose if informed of their options. The objective of this quality improvement project was to develop, implement, and evaluate the usefulness of an advance care planning (ACP) approach to assist clinicians in identifying and honoring patient choices. A target patient population (''Last Stages'') was identified for the project, and an ACP registry was created. Retrospective chart review showed that, for Last Stages patients, ACP documentation increased from 28.90% to 87.03%, and Provider Orders for Life-Sustaining Treatment completion rates rose from 12.89% to 53.90% after implementation of the ACP approach. Of the patients admitted to the hospital with Provider Orders for Life-Sustaining Treatment, 94% of these patients' documented wishes were honored. Advance care planning processes did improve clinician adherence to patient choices, reducing the risk of patients receiving unwanted care.

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Patients in Hawai'i are spending their dying days in the hospital and the intensive care unit (ICU). In Hawai'i, as of 2014, inpatient spending during the hospitalization in which death occurred was $5518, and US national average was $3802; 18.5% of Hawai'i patients died in the ICU compared with the US national average of 14.4%.[1] Hawai'i has a large elder population, and its residents frequently have longer length of stays and are being readmitted to hospitals. Furthermore, 26.7% of deaths occur in Hawai'i hospitals versus the national average of 21.0% from 2003 to 2014.[2]

Many patients at the end of life (EOL) will receive unwanted care. Research has shown that 70% of Americans prefer to die at home; however, 70% die in institutions, with many receiving invasive medical interventions associated with higher length of stay and death in the ICU.[3]

Patient wishes may be unknown, and it may be challenging for clinicians to discuss wishes with patient and families.[3] An advance directive (AD), also known as a living will, is a set of written health care instructions (recognized under state law) for an individual's wishes at the EOL or when he/she is incapacitated.[4] As of 2013, only 26.3% of Americans had an AD.[5]

In 2015, the Institute of Medicine report *Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life* addressed many systemic barriers to ADs.[6] Barriers can create a disconnect between the patient's wishes and the actual care received at the EOL. When patients are admitted to the hospital, critical decisions have to be made in crisis mode. If the AD is not present and available to the clinical team caring for the patient in the early crisis period, care may be provided that is not consistent with choices the patient would have made if he/she were able. One of the barriers is the accessibility of ADs in hospitals at the time the patient presents for care.[6] Patients may not share the document with their family or physicians. Even if an AD is shared with a patient's physician, it may not have been sent to the hospital to be on file in the medical record. In addition, if the AD is present in the hospital chart but not easily accessible for a new admission, it is likely to be overlooked. It may also be difficult to anticipate which hospital(s) should receive the AD information. Advance directives may not be suitable for the current acute medical decisions. An AD is not a medical order.[7]

Many people presenting with an acute medical situation at the EOL may lack capacity to make their own medical decisions. Hospitalized patients often receive care from physicians who may not know their preferences.[7] These barriers prevent the clinical team from following patient wishes when acutely ill patients are admitted to the emergency department or hospital with no written directives. In this situation, the default mode is life-sustaining care. As noted in *Dying in America*, many people prefer to choose care to relieve pain and suffering at the EOL. The goal for planning is to ensure patient preferences are honored.[6]

In July 2009, the Physician Orders for Life-Sustaining Treatment (POLST) form was legalized in Hawai'i. Expanded signing privileges were authorized for advance practice registered nurses in July 2014, and the name was revised to Provider Orders for Life-Sustaining Treatment.[8] The POLST is a set of portable medical orders that allows the patient to designate choices such as cardiopulmonary resuscitation or do not attempt resuscitation preferences. It also includes treatment choices for medical interventions including intensive care treatment (eg, intubation and mechanical ventilation), less aggressive care on a medical ward (eg, noninvasive breathing machine), or nonaggressive care focused on comfort to relieve pain and suffering. The POLST is recommended for patients with advanced, progressive illness and/or frailty or when clinicians would not be surprised if their patients died in the next year.[9] In the areas where the POLST paradigm has been approved, there is a standard, identifiable, and brightly colored form that can be easily recognized by clinicians. Studies show that health care providers agree that the POLST is an effective medical order to guide patient care. Hospice and emergency medical services personnel have determined that POLST is useful in preventing unwanted resuscitation and avoiding unwanted hospitalization.[10]

Advance care planning (ACP) is an ongoing process to elicit patient health care goals for current and future EOL wishes. Patient priorities and values and goals of care discussions with patient should also involve patient's health care agent, family, and friends. Advance care planning may include the completion of ACP documents stating patient wishes.[11] Structured ACP programs can help to improve this communication and ensure adherence to patients' documented wishes.

OBJECTIVE

The objective of the quality improvement project was to develop, implement, and evaluate the usefulness of ACP as a process to honor patient choices. The hospitals implemented a series of actions to improve clinicians' knowledge of, and adherence to, patient choices during their EOL care. The organization identified a target patient population for ACP activities and created and evaluated a number of process improvements in this population.

STRUCTURE

In 2011, the hospital system collaborated with the Gundersen Health system's "Respecting Choices" (RC) program. An ACP coordinator was hired to establish, teach, and promote the ACP program at all 4 hospitals in the system. The coordinator also collected data to monitor the success of the program. Advance care planning steering committees were established at each of the hospitals to oversee and promote this initiative. Members of the steering committees included individuals from the inpatient and ambulatory settings, such as nurses, social workers, physicians, quality directors, and hospital executives.

PROCESSES

Models/Methods

An institutional review board specialist was consulted, and the project was reviewed by the institution and determined to be a quality improvement project.

The hospital system reviewed different models for ACP in the United States and found that Wisconsin's Gundersen Health System RC ACP program provided the model that would work best with the existing system. The key elements of the model that influenced this decision were clinician-patient structured communication, professional education and development, and delivery of person-centered and family-oriented care.[12] The RC model assists organizations in initiating and sustaining best practices for ACP.

Patient Selection

The steering committees chose to use the "Last Stages" (or Last Steps) RC POLST program to identify patients who would benefit from the ACP model. This program specifically addressed frail older adults or persons who may be within the last 12 months of their life.[12] The goal was to introduce quality ACP goal-directed discussions using the POLST paradigm, which emphasizes the importance of shared decision making that may result in POLST completion.[13] The POLST functions as medical orders across the local health care settings. Specifically for the organization, "Last Stages" patients were defined as patients requesting limited resuscitative orders during their hospital admission, hospitalized patients older than 80 years with 2 admissions in the past 6 months, hospitalized patients older than 90 years, and/or patients who were discharged to hospice services. The organization kept the term "Last Stages" patients and did not switch the term to the newer name from RC program to "Last Steps."

ACP Facilitators

Potential ACP facilitators in the community were identified. The goal of the ACP facilitator was to assist patients and their surrogates with conversations about EOL medical decisions using the POLST orders as a framework. Clinicians from the 4 hospitals and affiliated community organizations, such as long-term care facilities and hospices, were invited to attend ACP facilitator training conducted by our ACP trainers. Clinicians included nurses, social workers, physicians, chaplains, child life therapists, and others who would engage in ACP during their workflow.

The training provided an overview of the Last Stages ACP stage of planning, including the key features of a POLST paradigm program. The curriculum provided strategies to use when preparing for a Last Stages ACP conversation. The training emphasized that an individual's goals, values, fears, and concerns need to be identified so that the resultant treatment plan is consistent with his/her goals of care. This training also provided learners with a variety of scenarios and role-play opportunities for practicing their facilitation skills.[14] Education about ACP for the health care system employees and affiliated clinicians was completed annually through learning modules, staff meetings, nursing skills fairs, continuing medical education, and other venues throughout the organization. In the community, ACP facilitators educated the public on ACP, ADs, and POLST at their residences, skilled nursing facilities, public seminars, retirement clubs, and senior fairs.

Clinical Workflow

As ACP incorporated into the hospital workflows the need to easily and consistently locate current ACP documents, ADs and POLST within the electronic medical record (EMR) became apparent. Clinicians also needed a reliable way to record updated conversations and decisions for all care providers. A specific documentation type was used to allow consistent tracking of documents filed in the EMR. A flag on the main header in the clinical chart that is always present if a patient has a POLST on file was also created to notify providers. Standardized documentation of any ACP discussion as a problem list entry for ACP in the EMR allowed clinicians in both the inpatient and outpatient settings to view the ACP discussions over time in one predictable, centralized area.

To facilitate appropriate documentation in the EMR, Health Information Management (HIM) (the medical records department) was made responsible for receiving, scanning, and entering ACP documents in the EMR. In 2011, HIM committed to scanning ACP documents within 24 hours of receipt in support of honoring patient wishes. It also created a specific fax number for each facility to achieve the 24-hour turnaround time.

Having developed a system where ACP documents were reliably present and visible to the clinicians, physicians were expected to review the POLST (when present in the EMR or brought in with the patient) for all patients who were admitted to the hospital either from the emergency department or directly to the inpatient units. In addition, code status orders reflecting the wishes expressed in the POLST orders were expected to be in the EMR. If changes were made, documentation of the discussion with the patient or health care decision maker was also required. Manual audits were performed to determine whether POLST wishes were honored (ie, if the patient's code status orders were reflective of the POLST). Physicians were encouraged to document this within 12 hours of arrival.

To ensure that Last Stages patients received ACP services before discharge, a new type of consult was created in the EMR—"ACP consult"—which sent a message to the social services department for trained ACP facilitator response. Advance care planning tools included ADs, POLSTs, and educational materials on cardiopulmonary resuscitation, ventilator support, tube feedings, and ACP videos. Videos regarding ACP topics were made accessible on the television in our patient rooms, with additional access possible at home or in the hospital library.

Community Education

Advance care planning education with community partners increased significantly for the past 5 years as part of the effort to improve ACP services. Community education was conducted at the skilled nursing facilities for residents, families, and staff. Public education was conducted at the organization's annual cardiac and cancer conferences, which host approximately 500 to 800 attendees each. Other venues included senior clubs, senior/health fairs, and collaboration with the state's hospice and palliative care speaker's bureau. Two-hour public ACP workshops were provided with a notary public to assist with the completion of a person's AD.

Data Repositories

Data were collected from the EMR and retrospectively audited by the ACP coordinator using an established data collection protocol. In 2013, data were extracted from the EMR to create an ACP registry for the Last Stages patients to track these patients over time. Registry data included vital patient information, documentation of ACP discussions, scanned ACP documents, hospital admissions, discharge disposition, length of stay, ICU length of stay, and date of death. The information technology (IT) department created a monthly report that was reviewed by patient and quality department staff. The ACP coordinator audited the registry to ensure accuracy of ACP information and conducted chart audits to measure processes and patient care. The ACP reports were summarized and available on each hospital's executive dashboard. Charts for all patients who entered the hospital with POLST on file and all Last Stages patients who died with POLST were reviewed monthly. The goal for each hospital was to comply with the patients' wishes 100% of the time.

Outcomes

Success of the program was measured by numbers of patients having ACP discussions and completing ADs and/or POLSTs, accessibility of these documents in the EMR, and, most importantly, the percentage of patients' wishes honored as a result of increased clinician awareness and education.

Statistical Analysis of Outcome Measures

Statistical analysis was performed using SAS version 9.4 (SAS Institute, Cary, North Carolina). The level of significance was set at $P < .05$. Annual and/or monthly data were summarized, and regression analysis was applied for trend testing. Fisher exact test was used for comparing categorical variables.

Patient Population

In 2011, when Last Stages patients were identified, there were 481 patients who met the criteria. This increased to 3061 patients in 2015, representing a 6.4-fold increase when compared with 2011. This may reflect the increased number of patients with a completed POLST (more patients with documented wishes for limited resuscitation) or other changes in the demographics of the population over time.

ACP Facilitator Training

From 2011 to 2016, 510 ACP facilitators were trained. Two hundred ninety-eight were hospital-based clinicians, and 212 were from community partners. Community partners included 31 short- and long-term care facilities, 24 clinics and other clinical sites, and 4 hospice agencies.

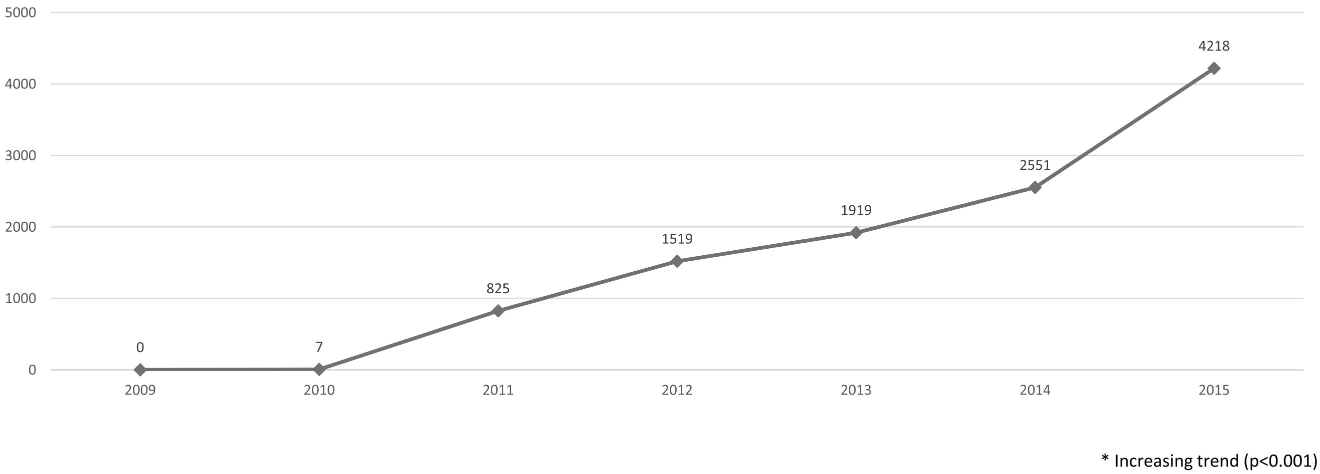
DOCUMENTATION

Scanned POLST

The POLST was legalized in Hawai'i in July 2009. There were no POLST documents in the EMR in 2009. In 2010, there were 7 POLST forms scanned under the "other" column in the EMR. In 2011, the document title of POLST was created, enabling data collection. Our ACP program started in 2011, and the number of POLSTs scanned increased significantly between 2009 and 2015 ($P < .001$), as shown in Figure 1. Some POLST documents were received more than once so the total number of unique POLST documents is not known.

ACP Documentation

Advance care planning reports for Last Stages patients captured any ACP documentation for this patient population upon discharge from the hospital. Advance care planning documentation included ACP discussion documented on the ACP problem list and scanned copies of either an AD, POLST, power of attorney, surrogate, or guardianship documents in the EMR. In 2011, ACP documentation for Last Stages patients was 28.90% and increased every year thereafter (Figure 2). This increase



* Increasing trend (p<0.001)

FIGURE 1. Number of scanned POLSTs from 2009 to 2015.*

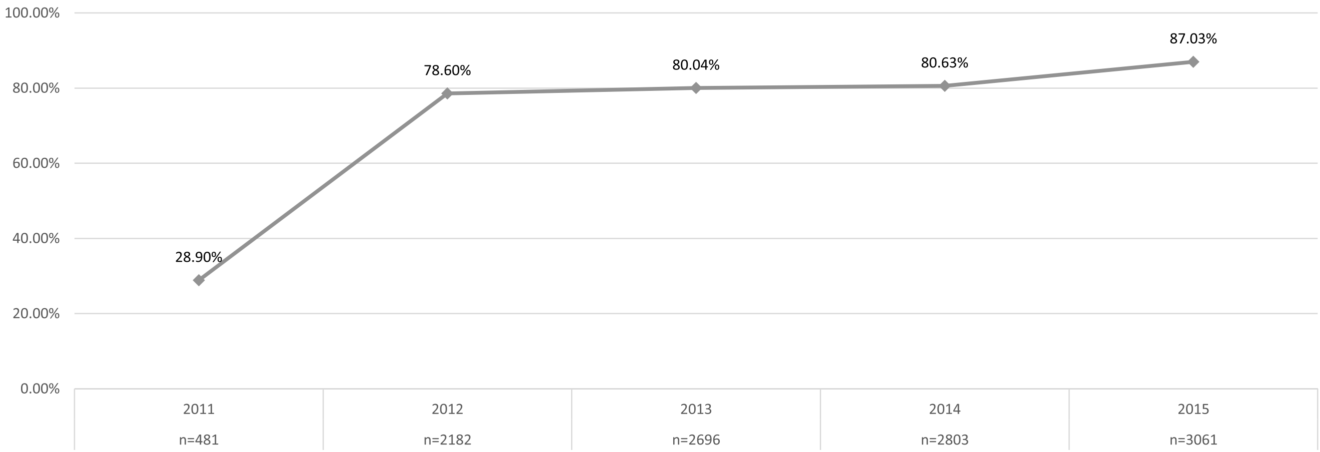


FIGURE 2. Last Stages patients discharged with ACP documentation.

from 2011 to 2015 was statistically significant ($P < .0001$); however, there was an initial large increase from 2011 to 2012, followed by a more gradual increase after 2012. For Last Stages patients with a POLST on file, there was a continual, steady improvement over time from 12.89% in 2011 to 53.90% in 2015. This change was statistically significant with $P < .001$.

Patient Care

POLST Wishes Honored

An important measure of program success was determining whether patient wishes were honored for all patients who provided or had a POLST on file, regardless of whether they were admitted from the emergency room or directly into the hospital. Baseline data were not available for POLST wishes until 2014, when this measure was added to physicians' quality pay-for-performance measure. In 2014, 93.64% of patients' POLST wishes were honored, and in 2015, this increased to 94.16%, a clinically but not statistically significant ($P = .56$) change. During 2014 and 2015, monthly review revealed that patient wishes were honored at least 90% of the time in 21 of the 24 months. The goal for the hospital system is to achieve 100% compliance. In 2016, the hospital system reached a 95.2% compliance rate for honored POLST wishes.

ACP Discussions

The providers and the ACP facilitators were encouraged to document ACP discussions using the ACP problem list entry for every ACP encounter. In 2011, when the ACP problem list documentation process was first used in the EMR, ACP discussions were documented in 629 patients in 2011, in 2626 patients in 2012, in 3011 patients in 2013, in 3891 patients in 2014, and in 5096 patients in 2015. This increase was statistically significant with $P < .01$.

AD and/or POLST at the Time of Death

Another ACP measure included checking whether Last Stages patients had an AD and/or a POLST at the time of death. Last Stage patients with an AD and/or a POLST at the time of death declined from 63.81% in 2013 to 59.53% in 2015. The number of Last Stages patients increased in from 315 in 2013 to 677 in 2015. During this period, providers honoring patients' wishes improved from 97.35% (n = 339) in 2014 to 98.63% (n = 364) in 2015 for all patients who had died in the hospital.

Changes to AD or POLST at the Time of Death

How often the patient and/or his/her decision maker changed the AD or POLST at the time of death was also measured. In 2014 and 2015, there were no Last Stages patients who requested changes on their AD or POLST when presenting for inpatient care. However, there were 1.77% patient decision makers (n = 6) who requested changes in 2014 and 3.85% (n = 14) in 2015.

DISCUSSION

The goal of this project was to design, implement, and evaluate an ACP program to assist clinicians in identifying and honoring EOL patient wishes within a specific patient population. This project identified several factors that are related to developing and implementing a successful ACP program:

1. Agreement on a measureable population for initial interventions: This allowed for the deployment of a standard approach using tools in the EMR to move the project forward across 4 hospitals concurrently.
2. The adoption of a specific ACP curriculum for all facilities and for community education efforts to ensure consistency of approach to ACP discussions with individuals and families and, in particular, POLST education: The curriculum required an 8-hour

ACP facilitator training, with continuing education credits offered for nurses and, more recently, for physicians. Community partners such as hospice providers and long-term care facilities were encouraged to send their clinicians who were likely to engage in ACP conversations within their organization. The organizational leadership at the 4 hospitals supported ACP facilitator training (without a charge) to community partners to promote enrolment of participants in POLST education. Physicians were encouraged to attend, and 19 physicians (many of whom are palliative care specialists) have completed the training.

3. Having the IT team and HIM staff participate in the creation of improved ACP processes: This cross-department approach allowed for the creation of a specific tab in the EMR for all ACP documents, a standardized area for documentation of ACP discussions, and alerts for clinicians when a patient had a POLST on file and when the patient met criteria for Last Stages. In addition, the monthly ACP data reports for patients with POLST and Last Stages patients built by IT allowed for timely progress monitoring.
4. Coordinated education efforts about the importance of ACP: The ACP coordinator provided education to the HIM staff so they understood the importance of scanning the ACP documents within 24 hours. Education also included instructions for reviewing the ACP documents for accuracy and completeness before scanning to ensure that the most current documents are visible in the EMR. Education provided to clinicians and the community was critical in ensuring patient wishes were documented and followed. Currently, POLST wishes are honored (>95%), and the number of Last Stages patients with documentation of ACP activities is 87%.
5. Adoption of ACP metrics in the physician quality program: Adoption of ACP metrics in the Accountable Care Organization for the hospital system's physician quality program significantly increased awareness of ACP.
6. Identification of an ACP champion at each hospital: These leaders (physicians, nurses, and social workers) had more extensive ACP training and were specifically asked to be key resources. Having an ACP physician champion was critical when engaging other physicians about workflow and other concerns.
7. Standardized approach for discussing ACP with Last Stages patients: The standard approach for discussing ACP used a consultation service provided by hospital social workers. This process was implemented after first trying to have bedside nurses initiate conversations with appropriate patients. Some nurses were very enthusiastic about this addition to their nursing role and were trained as facilitators; however, bedside nurses with patient care assignments found it very challenging to find the time for an ACP discussion. Advance care planning conversations do require more time than is possible for a usual bedside nurse. The ACP steering committees all agreed that the social services team should be primarily responsible for the ACP referrals. This approach has worked well, and the hospitalist staff, in particular, have expressed gratitude for having a trained resource to assist in these ACP conversations.

CONCLUSIONS

The implementation of the RC ACP program allowed this 4-hospital system to achieve the key recommendations identified in the Institute of Medicine *Dying in America* report in 2015. The report recommends delivery of person-centered, family-oriented care; clinician-patient communication in ACP; and professional education and planning. The RC ACP program provided key elements of clinician-patient structured communication, professional development, and development and delivery of person-centered and family-oriented care. To implement sustainable change in the hospital system and achieve the goal of honoring patient wishes, leadership and a collaborative team approach are required. Informed ACP discussions are the first step for clinician adherence to patient choices. Visible documentation of patient choices allows individuals to avoid receiving unwanted care. Hospitals should invest in ACP for their patients to ensure the delivery of the right care at the right time, every time.

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