Received: 9 February 2022 | Revised: 31 August 2022 | Accepted: 2 September 2022

DOI: 10.1111/acem.14592

RESEARCH LETTER

Quality measures for palliative care in the emergency department

The emergency department (ED) offers specific challenges and opportunities for palliative care–related programs and initiatives. ED providers serve an important role in both the initiation and the continuation of palliative care for the seriously ill as ED visits often increase within the last 6 months of life.[1] Palliative care is specialized care for the seriously ill that focuses on improving quality of life at any age and at any stage of disease. Palliative care can be provided along with curative treatment in the ED and often improves patient quality of life, symptom control, and transitions of care, without shortening survival or disrupting potential life-prolonging interventions.[2,3] Hospice care is applicable for a subset of seriously ill patients with less than 6 months of expected survival. ED referrals and care transitions from ED to hospice[4] may similarly impact patient outcomes and quality of life. However, systematic quality measurements of the impact of ED-palliative care interventions are rare.

National organizations such as Center to Advance Palliative Care (CAPC), American Academy of Hospice and Palliative Medicine (AAHPM), and the Hospice and Palliative Nurses Association (HPNA) provide guidance to programs by identifying quality metrics for palliative care.[5–7] For example, CAPC categorizes metrics into outcome measures, process measures, and transition plans.[5,6] Measuring What Matters (AAHPM and HPNA) is a consensus recommendation for a portfolio of ten performance measures to guide hospice and palliative medicine programs for assessment and improvement.[5,6] In addition, AAHPM developed an implementation guide for patient-reported outcome performance measures for quality improvement and regulatory reporting efforts.[7] These quality measures were designed for hospitalized (>24 h) or hospice patients and are not specific to the ED setting. Therefore, there is little guidance on how to measure quality improvements specifically related to ED palliative care interventions. This gap was explored by a committee on convened by the Palliative Medicine Section of the American College of Emergency Physicians, in 2017, to develop a consensus on best practices for ED palliative care.[8] We present the work of this committee to articulate a set of relevant ED palliative care quality measures using an expert consensus approach (Table 1).

The committee included academic (MR, RG, SL, EI) and community (TL, RP) EM and HPM physicians (DW, KA) and an EM nurse (GC), with representation from EM administrative leadership and those with dual EM and HPM board certification. The committee retained its structure with no attrition or addition of members throughout the modified nominal group expert consensus process. The group convened via a 60-minute monthly conference call that occurred for approximately 2 years (October 2017–July 2019).

The quality measures were defined via five consensus process phases: (1) identifying preassessments and personnel needs for ED palliative care quality measurement; (2) identifying specific ED palliative care quality measures via literature review and expert consensus; (3) categorizing ED-palliative care quality measures into the three domains of clinical outcomes, operational sustainability, and patient satisfaction; (4) within each domain, grouping the measures for ED palliative care initiatives along the patient care continuum—from arrival in ED to identification of eligible patient to final disposition; and (5) conference calls and face-to-face meetings to finalize the document (Table 1).

We derived the three main domains of clinical outcomes, operational sustainability, patient satisfaction from the domains of quality care set forth by the Centers for Medicare & Medicaid Services (e.g., clinical outcomes, operational sustainability, patient satisfaction, financial impact, and adherence to the joint commission standards).[9] Clinical outcome measures focus on assessing the quality of clinical care services provided in the ED for patients with palliative care–related needs, for example, assessment and management of pain and distressing symptoms in a timely manner. Operational sustainability measures focus on processes such as patient flow, disposition, readmissions, and resource utilization. For example, use of palliative care order set or the ED length of stay in those with ED palliative care consultations. Patient or customer satisfaction measures assess the patient and/or their family member/caregiver's perceptions of quality of care provided in the ED; for example, through Press Ganey scores or other surveys. We also reviewed and modified some of the previously defined quality measures[6–8] that had ED relevance. For example, screening for distressing symptoms, psychosocial needs, spiritual/religious concerns, and documentation of health proxy or advance directives.

In each of the three main domains, we further subcategorized the quality measures to reflect the fact that ED palliative care initiatives

Supervising Editor: Dr. Tammie Quest

TABLE 1 Metrics and measuring quality of ED palliative care initiatives[a]

Patient screening and identification	Assessment and management of palliative care–related needs	Referrals of palliative care services	Transitions of care	Protocol/order set/other
Clinical outcomes				
–No. using surprise question: “Would you be surprised if the patient died in the next year (or during this admission)?” screening positive or “no surprise,” deaths within 30 days –No. using surprise question: “Would you be surprised if the patient died in the next year (or during this admission)?” screening positive or “no surprise,” deaths within 6 months –Percentage or No. of patients measured with __ score (% or No.) for frailty or functional decline (for example CFS, PPS) –Percentage or No. of patients measured with __ score (% or No.) for total disease burden/ comorbidities/ mortality risk (for example, using CCI) –Percentage or No. of patients measured for spiritual distress or loneliness	–Percentage of patients with *pain* assessment documented (total vs. those screening positive) –Percentage of patients prescribed *pain* medications *or* medications for other *distressing symptoms* (nausea, vomiting, dyspnea, etc.) in ED –Time from X symptom/pain assessment to delivery of medication for symptom/pain relief –Percentage or No. of patients offered *spiritual support* in ED (spiritual support offered for patients with deaths within 24 h of ED arrival) –Percentage of family members offered *spiritual support* after ED patient death –Percentage of family members offered *grief support* after ED patient death –Percentage of family members screened for *caregiver strain* –Percentage with ED ventilator use; pressor use in patient screened positive for palliative care needs –Percentage of in-hospital ventilator use, pressor support, artificial nutrition, dialysis, etc., use in patient screened positive for palliative care needs in ED	–No. of X intervention after palliative care consultation –No. of total deaths and/or ICU/ non-ICU or floor deaths within 24, 48, or 72 h of ED admission –No. of deaths (ICU/ floor) after ED palliative care consultation within 24, 48, or 72 h of ED admission –Percentage or No. of patients admitted total and/or after palliative care consultation to: • Non-ICU/floor • ICU • Palliative care unit	–Percentage of ED and/ or in-hospital use of ventilator, pressor support, artificial nutrition, dialysis, etc., after palliative care consultation vs. all total patients receiving ventilator, pressor support, artificial nutrition, dialysis, etc. –Percentage with readmission to the hospital within 30 days (total vs. those with palliative care consultation in ED) –Percentage of repeat ED visits within 30 days (total vs. those with palliative care consultation in ED) –Percentage discharged to home and screened positive for palliative care needs –Percentage discharged to skilled nursing facility/ long-term care and screened positive for palliative care needs –Percentage discharged on hospice care –No. of patients who died within 24/48/72 h of ED admission with a documented family meeting (in those with ED palliative care consultations vs. in all patients)	–Percentage of patients in target population (e.g., elderly from skilled nursing facility or metastatic solid organ malignancy) with documented screening for palliative care needs –Percentage of patients with documented health proxy or decision maker in medical records (total vs. those who screened positive for palliative care needs) –Percentage of patients with do not attempt resuscitation status (total vs. those who screened positive for palliative care needs) –Percentage with documentation of advance directives/ POLST/MOLST (total vs. patients in target population—such as those admitted to ICU) –No. of patients who died within 24/48/72 h of ED admission with documented health proxy or decision maker in medical records

TABLE 1 (Continued)

Patient screening and identification	Assessment and management of palliative care–related needs	Referrals of palliative care services	Transitions of care	Protocol/order set/other
Operational sustainability				
–Percentage of completion rate/use of screening tool for palliative care needs –Percentage of patients with X diagnosis who were screened –No. of transfers from a long-term care facility –No. of patients with multiple ED visits and hospitalizations in X time (total vs. those who screened positive for palliative care needs) –Time from ED arrival to completion of palliative care screening –Person completing the screening tool	–Percentage or No. of patients screened positive for palliative care needs using X tool –Percentage or No. of patients with X diagnosis screened positive for palliative care needs –Percentage of X order set placed by an ED clinician in those patients who screened positive for palliative care needs –Percentage of X order sets placed by an accepting clinician in those patients who screened positive for palliative care needs –Percentage or No. of patients admitted (ICU/floor) or discharged after screened positive for palliative care needs	–No. of ED referrals for palliative care consultation *or* No. of ED referrals for hospice service –Time from consult to response by palliative care team member or hospice agency staff –ED length of stay for patients with palliative care consult (and/or in those who screen positive for pall care needs) vs. ED length of stay for all patients, all discharged patients, all admitted patients –Hospital length of stay for patients with palliative care consultations in the ED vs. hospital length of stay for all patients	–Percentage or No. of canceled palliative care consultations by admitting clinician –Percentage of patients who received pain medications within X hours of arrival to floor/ICU/palliative care unit etc. (in those who screened positive for palliative care needs or received ED palliative care consult) –Percentage of patients who received medications for distressing symptom control within X hours of arrival to floor/ICU/palliative care unit etc. –Time from ED request for palliative care/hospice consultation to final disposition	–Percentage or No. of palliative care templates or order sets used in all ED patients –Percentage of palliative care templates or order sets used in ED patients with X condition –Percentage or No. of X order sets placed by an ED clinician –Percentage or No. of X order sets placed by an accepting clinician –Percentage or No. of X order set placed (in those who screened positive for palliative care needs or received ED palliative care consult)

(Continues)

TABLE 1 (Continued)

Patient screening and identification	Assessment and management of palliative care–related needs	Referrals of palliative care services	Transitions of care	Protocol/order set/other
Patient and/or family member satisfaction				
–Press Ganey scores or other patient and/or family member satisfaction scores on patients who screened positive for palliative care needs –Press Ganey scores or other patient and/or family member satisfaction scores on patients who screened positive for palliative care needs vs. overall satisfaction score for all ED patients	–Percentage of patients and/ or family members reporting excellent/very good end-of-life care for an ED patient death –Percentage of patients and/or family members reporting a high level of shared decision making with ED providers *Survey sample questions*:[b] –Did ED providers listen carefully to the patient/family member when they talked about problems with their care? –Did ED providers explain things in a way that was easy to understand?	–Percentage of patients and/or family members reporting high level of satisfaction with health care team communication –Percentage of patients and/or family members reporting excellent end-of-life care after a patient's hospital death within 24 or 72 h of ED arrival *Survey sample questions*: –Did patient/family member receive emotional or psychosocial or spiritual support from ED providers (or while in the ED)?	–Percentage of patients and/ or family members highly satisfied with pain or symptom management in the ED –Percentage of patients and/or family members reporting excellent coordination of care to the next health care setting from ED *Survey sample questions*: –Did patient get as much help with pain/other symptoms relief as needed and how often? –Did patient/family member report whether they were kept informed about the family member's condition while in ED?	–Rating of the ED by patient/family member on a Likert-like scale (worst possible to best possible) *Survey sample questions*: –How likely are patient/family member to recommend this ED to other friends or family? –Did ED providers treat patient/family member with dignity and respect?

Abbreviations: CCI, Charlson Comorbidity Index; CFE, Clinical Frailty Scale; ICU, intensive care unit; MOLST/POLST, practitioner/medical orders for life-sustaining treatment; PPS, Palliative Performance Scale.

[a] Metrics are grouped in columns for ease of representation; however, measures may be applicable across multiple categories (for example, pain management metrics may fall within all three domains—clinical outcomes, operational sustainability, and patient satisfaction—and for multiple column categories that represent the ED continuum of care such as assessment and transitions of care).

[b] *Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey*. Centers for Medicare & Medicaid Service.[9]

may often be implemented along the continuum of a patient's course in the ED. Therefore, the subcategories range from ED arrival to final disposition, including: (1) patient screening and identification, (2) assessment and management of palliative care needs, (3) referrals for palliative care services, (4) appropriate transitions of care, and (5) other categories such as order set/protocol-related measures.

We prioritized the inclusion of ED palliative care quality measures that were time based, patient specific, and actionable. ED performance management is often centered around improving patient flow and reducing crowding; thus, throughout-based, "nonclinical" metrics are highly relevant for ED palliative care interventions.

One example is ED arrival time to palliative care screening or time from palliative care consultation to final disposition. "Clinical" time-based measures such as time from pain assessment to delivery of pain management are important considerations. To assess the full impact of ED palliative care interventions, the time period for assessing quality may need to extend to 24 to 72 h after admission. For example, when assessing whether an ED palliative care consultation leads to a higher rate of having an early family meeting in those patients who died, a program may need to gather data 24 to 72 h after admission from ED.

Patient-specific measures are valuable to an ED for: (1) identifying the patient population of interest for screening/implementation of ED palliative care initiatives—for example, an ED serving multiple long-term care facilities should focus their palliative care screening efforts on the elderly patients arriving from those facilities and identify a suitable tool (e.g., frailty); (2) identifying an individual ED patient's palliative care needs, for example, the number of patients who screen positive for the "surprise" question—"would you be surprised if the patient died within this year?"; (3) identifying and allocating appropriate institutional resources based on patient load, for example, number of ED palliative care consultations or ED hospice referrals requested; and (4) measuring financial impact and outcomes, for example, number of interventions such as ventilator or dialysis after an ED palliative care consultation.

Actionable ED palliative care quality measures help standardize ED best practices and transitions of care. Examples include documentation of advance directives (e.g., in those admitted to the intensive care unit), use of palliative care order sets, or number of ED deaths where spiritual/chaplain support was offered. Also, reviewing patient suggestions via satisfaction surveys and implementing changes based on data has the potential to impact overall patient care in the ED.

We recognize that there exists a wide variability in ED access to resources related to palliative and hospice care. Reviewing ED palliative care quality measures before implementation may help guide an ED in defining how and where to focus an ED palliative care initiative. Measuring the impact of initiatives can provide meaningful feedback for an organization and help make the case for strategic institutional investment. ED data collection has unique challenges, often related to time constraints and limited personnel support. Therefore, measures that are easy to collect/document and fit within preexisting ED processes and roles of staff are most likely to be successful. One example is having a triage nurse to identify patients (using set criteria) to be screened for palliative care needs. Similarly automatic triggers and alerts in the electronic record may assist data entry and collection, such as use of palliative care order sets or smart phrases for documenting goals of care conversations or advance directives. What measures to report (ED readmissions vs. cost savings) and to whom will be based on alignment with departmental and institutional goals.[8,10]

Partnerships of ED palliative care champions with the palliative care team members are valuable. This is helpful for assessing impact and effectiveness of ED initiatives during the hospital stay in addition to defining the roles and responsibilities of interdisciplinary team members outside and within the ED such as case managers, chaplains, or social workers in screening, needs assessment, management, and data gathering for ED palliative care initiatives. Staff education is a very important aspect of any quality improvement initiative; however, the scope of this paper does not list ED palliative quality measures related to educational initiatives such as increased knowledge or impact provider attitudes related to ED palliative care.

In conclusion, these ED palliative care quality measures seek to provide guidance for EDs seeking to define a problem, assess the department's palliative care needs, and/or measure the progress/impact/effectiveness of an implemented ED palliative care initiative across the patient care continuum. Ideally, these ED palliative care quality measures would be used for a continuous cycle of quality improvement.

KEYWORDS

hospice, metrics, palliative care, quality measures

ACKNOWLEDGMENT

The authors acknowledge the Palliative Care Section of American College of Emergency Physicians.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

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