NIHR | Applied Research Collaboration Kent, Surrey and Sussex

Factors used by clinicians in Emergency Departments for end-of-life care (EOLC) decision-making with older patients

Dr Marianne Markowski, Research Fellow, Institute for Lifecourse Development, University of Greenwich.

Susie Walker, Research Assistant, Centre for Health Service Studies, University of Kent.

Stuart Jeffery, Senior Research Fellow, Centre for Health Service Studies, University of Kent.

CHSS University of Kent

UNIVERSITY OF GREENWICH

Summary

This report provides a rapid evidence synthesis to answer the question "What factors does a clinician in ED use to decide to initiate compassionate end-of-life care?"

A key concern was the decision to initiate of active treatment of disease rather than the commencement of end-of-life (EOL) care for patients who may benefit more from EOL care.

A review of evidence considered 22 sources and identified factors in three broad areas: clinical prognosis, patient wishes and gaining agreement.



Key findings

- Improving the recognition that death is coming, for example the use of tools or the "surprise question" to assist with the identification of EOL patients.
- A need for integrated working between palliative care services and EDs, particularly with access to specialists.
- Training in communication and goals of care along with the use of guides to these discussions.
- Ensuring understanding of the distinctions between palliative care and end-of-life care.

Background and methods

While the two terms are often used synonymously, end of life care (EOLC) is defined by the NHS as the "support for people who are in the last months or years of their life"(1) which differs slightly from palliative care defined as "an approach that improves the quality of life of patients … associated with life-limiting illness, usually progressive."(2). This evidence synthesis focuses on EOL care.

There was a concern expressed that some patients have active treatment of disease initiated after presentation at ED rather than being identified as being in need of EOLC.

The aim of this rapid evidence synthesis was to collate and synthesize the literature on the factors on EOLC decision-making by clinicians in emergency departments. Our objectives were to look at the academic literature that discussed factors that influenced EOLC decision-making by clinicians in A&E and what evidence was provided.

Our research question was *"What factors does a clinician in ED use to decide to initiate end-of-life care?"*

Initial database searches identified 1,010 papers which were filtered down to 22 (the most relevant). These were analysed for themes and key points.



Results

While this evidence synthesis focused on the decisions in ED by clinicians, it is important to note that the clinicians include the wide clinical team, e.g. nurses, doctors, palliative care specialists, etc.

Factors fell into three areas: clinical prognosis, patient wishes and gaining agreement.

Results

Prognosis:

Clinical(3)

- Acute disease process (4, 5)
- Severity of acute illness (6)
- Reversibility of acute illness (7)
- End stage illness (4, 5, 8).

Patient specific issues(3)

- Trajectory of chronic illness (5, 6)
- Past medical history (6)
- Comorbidities / Age (5, 7, 9, 10)
- Functional capacity (5, 6, 8, 11)
- Frailty (4)
- Independence at home (5)
- Quality of life (5)
- Cognitive state (4, 5,10).

Tools for assessment

- SPICT (11)
- CRISTAL (Criteria for Screening and Triaging to Appropriate aLternative care) (4, 10, 12)
- Wang and Heidt (8)
- SOFA (13)
- Palliative care trigger tool (6)
- Surprise question: "Would you be surprised if your patient dies within the next 30 days" (8,14).

Other information(3,15)

- GP records (16)
- Specialist input and previous healthcare (16)
- Access to records (16)
- Advanced Care Plans (ACPs) (15,17–20).

Clinician factors

- Experience / seniority (7, 21)
- Training / education / knowledge (19, 21, 22)
  - Ethics (23)
  - Law (23)
  - Communication skills (9)
  - Understanding of palliative / EOLC (9, 23).

Role (7)

Values – paternalistic vs collaborative (5, 7, 15, 22).

Access to End-Of-Life / Speciality Palliative Care (SPC) clinicians (16,19).

Patient factors:

Patient and Family wishes including advance care directives (3, 7, 8, 15, 17–20).

Discussing and Gaining agreement:

- Environmental (15,16)
  - Staff time / resource (9, 21)
  - Location (16)
  - Privacy (16)
  - Time of day (9,21).
- Communication (9,18,19,22)
  - Goals of care discussions (18, 22)
  - Guides (24)
  - Leaflets for patients and their families (19).

Discussion

We adapted a diagram from Walzl et al (3) to include a wider range of factors identified and to more clearly segment the areas that those factors seem to fall into (Figure 1).

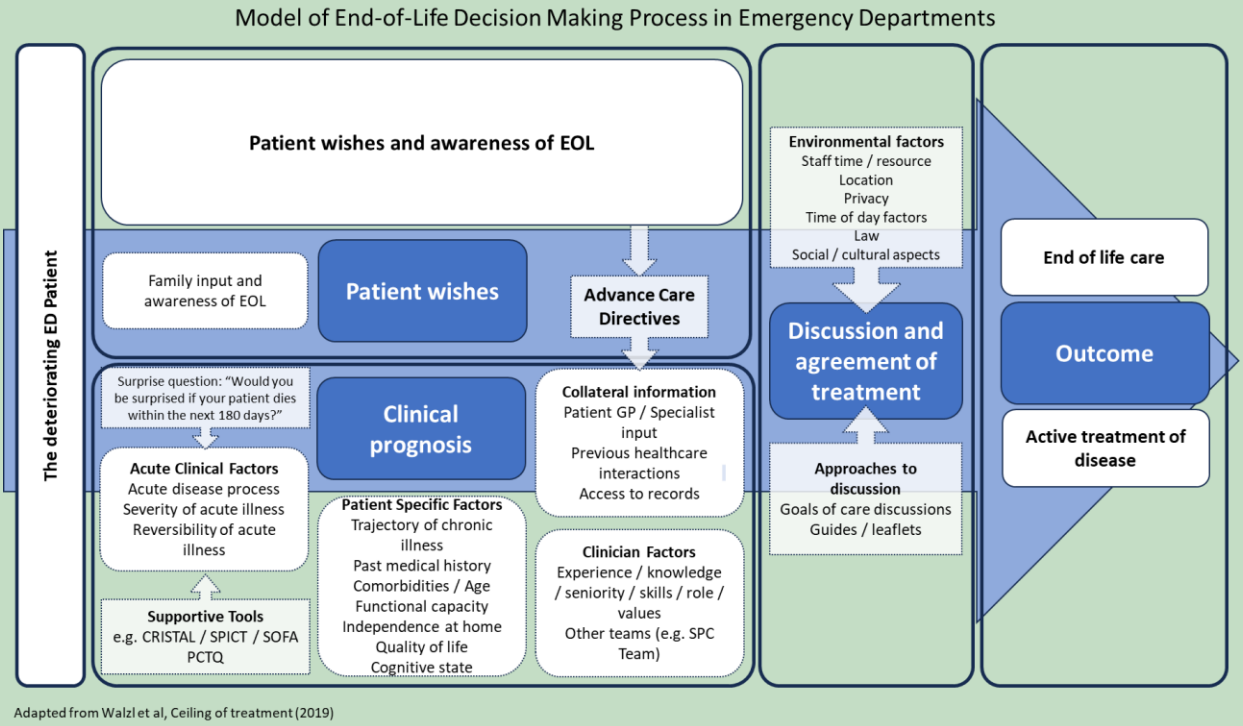


Figure 1: End of life decision making in Emergency departments (adapted from Walzl et al)

There was broad agreement within the papers on the factors used (or that influence) the decision making for EOLC. We have split these into three areas: clinical prognosis, patient wishes and gaining agreement.

The use of a variety of tools for identifying EOL patients was evident in the papers. These tended to draw in clinical and non-clinical factors such as disease specifics, functional capacity and quality of life. We did not examine the tools themselves but have listed the ones that were identified in Appendix 1. In addition, the use of the "surprise question" was identified as a starting point of identification.

The clinicians' factors such as experience, training, values and access to a wider pool of expertise also play into the decision making. Access to records, such as those held by GPs and ACPs, were felt to be factors.

Patient wishes, placed centrally in Figure 1, were generally expressed in the papers as advanced care plans, i.e. prior wishes, there was little found on the patients wishes as expressed solely in ED. The literature was light on how the family had input into the process but it was clear that they were a factor.

There were a range of factors that influenced the discussions held between clinicians and patients / family. These were obvious environmental factors such as having time and privacy for discussions but also the approach used, i.e. goals of care and the information available to patients / families.

We have expressed the process as a linear one in Figure 1 but we recognise that there is both a degree of feedback loops as decisions, expectations and attitudes change and that the clinical prognosis may often follow after the patient has made their wishes clear. We also recognise the need for the time required for patients and families to fully understand the situation, particularly where previous discussions have not happened.

Key points:

- Improving the recognition that death is coming, for example the use of tools or the "surprise question" to assist with the identification of EOL patients.
- A need for integrated working between palliative care services and EDs, particularly with access to specialists. (9)
- Training in communication and goals of care along with the use of guides to these discussions.
- Ensuring understanding of the distinctions between palliative care and end-of-life care(22).



Appendix 1: Tools

CRISTAL (Australia, Ireland, Denmark, US) – looks at age (years), median (IQR), length of stay (days), median (IQR), nursing home resident, advanced malignancy, any mental impairment, dementia only, proteinuria, chronic kidney disease, Fried frailty score > 3, congestive heart failure, chronic obstructive pulmonary disease, new or previous myocardial infarction, new cerebrovascular accident, chronic liver disease, hypoglycaemia, low urinary output, abnormal ECG, abnormal oxygen saturation, Meet > 2 RRS criteria, hospital admission in the past year, ICU admission in the past 12 months, two or more chronic conditions. See: (4,10,12)

Wang and Heidt: 1) presence of end-stage illness, (2) functional limitation to mostly bed or chair, and (3) clinician would not be surprised if the patient died this hospitalization. See (8)

SPICT: looks at 6 general indicators of health deterioration and 23 indicators of severity of specific-diseases which aim at identifying patients with a palliative profile. See (11)

SOFA: Sequential Organ Failure Assessment. Uses clinical metrics to predict mortality. See (13)

Palliative care trigger tool: Activity of daily living items were developed from the Outcome and Assessment Information Set and the Palliative Care Performance Scale (PPS). See (6,25)
Surprise question: "Would you be surprised if your patient dies within the next year?" See (14)

Appendix 2: Authors

Dr Marianne Markowski, Research Fellow, Institute for Lifecourse Development, University of Greenwich.

Susie Walker, Research Assistant, Centre for Health Service Studies, University of Kent.

Stuart Jeffery, Senior Research Fellow, Centre for Health Service Studies, University of Kent.

This research was funded by the National Institute for Health and Care Research (NIHR) Applied Research Collaboration Kent, Surrey and Sussex. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care.

References

1. NHS. What end of life care involves [Internet]. 2022 Apr [cited 2024 Jan 30]. Available from: https://www.nhs.uk/conditions/end-of-life-care/what-it-involves-and-when-it-starts/
2. NHS. Palliative and end of life care [Internet]. n.d. [cited 2024 Jan 30]. Available from: https://www.england.nhs.uk/eolc/
3. Walzl N, Jameson J, Kinsella J, Lowe DJ. Ceilings of treatment: a qualitative study in the emergency department. BMC Emerg Med. 2019 Dec;19(1):9.
4. Cardona M, Lewis ET, Kristensen MR, Skjøt-Arkil H, Ekmann AA, Nygaard HH, et al. Predictive validity of the CriSTAL tool for short-term mortality in older people presenting at Emergency Departments: a prospective study. Eur Geriatr Med. 2018 Dec;9(6):891–901.
5. Sabbagh C, Saliba R, El Rassy E, El Chaer F. Withholding life-sustaining therapy in the emergency department: The perspective of emergency physicians in a conservative society. Prog Palliat Care. 2017 Jan 2;25(1):27–31.
6. O'Mahony S, Blank A, Simpson J, Persaud J, Huvane B, McAllen S, et al. Preliminary Report of a Palliative Care and Case Management Project in an Emergency Department for Chronically Ill Elderly Patients. J Urban Health. 2008 May;85(3):443–51.
7. Richardson PG, Greenslade J, Isoardi J, Davey M, Gillett M, Tucker A, et al. End-of-life issues: Withdrawal and withholding of life-sustaining healthcare in the emergency department: A comparison between emergency physicians and emergency registrars: A sub-study. Emerg Med Australas. 2016 Dec;28(6):684–90.
8. Wang DH, Heidt R. Emergency Department Admission Triggers for Palliative Consultation May Decrease Length of Stay and Costs. J Palliat Med. 2021 Apr 1;24(4):554–60.
9. Wright RJ, Lowton K, Robert G, Grudzen CR, Grocott P. Emergency department staff priorities for improving palliative care provision for older people: A qualitative study. Palliat Med. 2018 Feb;32(2):417–25.
10. Cardona M, O'Sullivan M, Lewis ET, Turner RM, Garden F, Alkhouri H, et al. Prospective Validation of a Checklist to Predict Short-term Death in Older Patients After Emergency Department Admission in Australia and Ireland. Shah MN, editor. Acad Emerg Med. 2019 Jun;26(6):610–20.
11. Bourmorck D, De Saint-Hubert M, Desmedt M, Piers R, Flament J, De Brauwer I. SPICT as a predictive tool for risk of 1-year health degradation and death in older patients admitted to the emergency department: a bicentric cohort study in Belgium. BMC Palliat Care. 2023 Jun 24;22(1):79.
12. Cardona M, Lewis ET, Turner RM, Alkhouri H, Asha S, Mackenzie J, et al. Efficacy of a tool to predict short-term mortality in older people presenting at emergency departments: Protocol for a multi-centre cohort study. Arch Gerontol Geriatr. 2018 May;76:169–74.
13. Lee JS, Kwon OY, Choi HS, Hong HP, Ko YG. Application of the Sequential Organ Failure Assessment (SOFA) score in patients with advanced cancer who present to the ED. Am J Emerg Med. 2012;30(2):362–366. doi:10.1016/j.ajem.2010.12.017.
14. Haydar SA, Almeder L, Michalakes L, Han PKJ, Strout TD. Using the Surprise Question To Identify Those with Unmet Palliative Care Needs in Emergency and Inpatient Settings: What Do Clinicians Think? J Palliat Med. 2017 Jul;20(7):729–35.

15. Smith AK, Fisher J, Schonberg MA, Pallin DJ, Block SD, Forrow L, et al. Am I Doing the Right Thing? Provider Perspectives on Improving Palliative Care in the Emergency Department. Ann Emerg Med. 2009 Jul;54(1):86-93.e1.
16. Jelinek GA, Marck CH, Weiland TJ, Philip J, Boughey M, Weil J, et al. Caught in the middle: Tensions around the emergency department care of people with advanced cancer. Emerg Med Australas. 2013 Apr;25(2):154–60.
17. Street M, Ottmann G, Johnstone MJ, Considine J, Livingston PM. Advance care planning for older people in Australia presenting to the emergency department from the community or residential aged care facilities. Health Soc Care Community. 2015 Sep;23(5):513–22.
18. Marck CH, Weil J, Lane H, Weiland TJ, Philip J, Boughey M, et al. Care of the dying cancer patient in the emergency department: findings from a N ational survey of A ustralian emergency department clinicians. Intern Med J. 2014 Apr;44(4):362–8.
19. Weinick RM, Wilcox SR, Park ER, Griffey RT, Weissman JS. Use of Advance Directives for Nursing Home Residents in the Emergency Department. Am J Hosp Palliat Med. 2008 Jun;25(3):179–83.
20. DeVader TE, Jeanmonod R. The Effect of Education in Hospice and Palliative Care on Emergency Medicine Residents' Knowledge and Referral Patterns. J Palliat Med. 2012 May;15(5):510–5.
21. Levinson M, Walker KJ, Hanning J, Dunlop W, Cheong E, Mills A. Medical perspectives regarding goals-of-care consultations in Emergency Departments. Psychol Health Med. 2019 Oct 21;24(9):1137–47.
22. Wong KH, Yang LCM, Woo KWR, Wong OF, Kwong WY, Tse CF, et al. Attitudes and educational needs of emergency doctors providing palliative and end-of-life care in Hong Kong: a cross-sectional analysis based on a self-report study. BMC Palliat Care. 2021 Dec;20(1):48.
23. Walker LE, Bellolio MF, Dobler CC, Hargraves IG, Pignolo RJ, Shaw K, et al. Paths of Emergency Department Care: Development of a Decision Aid to Facilitate Shared Decision Making in Goals of Care Discussions in the Acute Setting. MDM Policy Pract. 2021 Jul;6(2):238146832110580.
24. Babcock M, Gould Kuntz J, Kowalsky D, Calitri N, Kenny AM. The Palliative Performance Scale Predicts Three- and Six-Month Survival in Older Adult Patients Admitted to the Hospital through the Emergency Department. J Palliat Med. 2016;19(10).
25. Lee JS, Kwon OY, Choi HS, Hong HP, Ko YG. Application of the Sequential Organ Failure Assessment (SOFA) score in patients with advanced cancer who present to the ED. Am J Emerg Med. 2012;30(2):362–366. doi:10.1016/j.ajem.2010.12.017.