

# Decoding Code Status: Assessing End of Life Care Knowledge in High-Risk for Mortality ED Populations Deena Abdelhalim, DO, Mariah Arneson, MD, Erika Richey, PA-C, Alaina Sturkie, MD

## Background

The National Institute on Aging projects that the U.S. population over age 65 will nearly double by 2050, placing further strain on an already burdened healthcare system.<sup>1</sup> The emergency department (ED) plays a critical role in caring for this vulnerable population, initiating intensive care for approximately 2,000 older adults daily.<sup>2</sup> However, such care often conflicts with the treatment preferences of most Americans; 80% of older adults report a desire to avoid intensive care and repeated hospitalizations at the end of life (EOL).<sup>3</sup> While prior studies have examined the prevalence of advance care directives (ACDs) in this population, few have quantitatively assessed patients' knowledge of code status, ACDs, and EOL treatment options as we aim to do in this study.

## Methods

We surveyed 187 high-risk ED patients or their surrogate decision-makers on their knowledge of code status, ACDs, and CPR's efficacy and risks. High-risk patients were identified utilizing guidelines from consensus literature consistently demonstrating these patients to be mortalityprone and thus most likely to benefit from code status discussions.<sup>4</sup> Retrospective chart reviews were conducted to analyze prior hospitalizations, ICU stays, and documented code status discussions.



oncologic malignancy, many having multiple associated diseases such as ESRD & CHF

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## **Results**

Among 187 patients, 84% reported never having heard of code status options (of those who had, 73% were primarily English-speaking) and 83% were unaware of their current code status. Additionally, 74% lacked any ACDs. Regarding CPR, 80% believed it successfully restarts the heart of sick patients more than 50% of the time, while 83% and 84% had never been informed about what CPR entails or its associated risks, respectively.



Fig. 2 Assessing CPR Efficacy. 80% of patients believe CPR to be effective more than 50% of the time or are unsure.

#### Conclusions

This quantitative analysis reveals that high-risk ED patients have limited knowledge of code status, CPR, and ACP, with a significant proportion unaware of their current code status or the realities of CPR. These findings highlight an urgent need for improved EOL education and ACP interventions in the ED setting to align care with patient preferences.

# **Next Steps**

Future studies will investigate demographic disparities in code status knowledge and ACD completion, focusing on language barriers, age, comorbidities, and insurance status. Additionally, future analyses on healthcare utilization patterns, including hospital and ICU length of stay and 30-day readmissions will reinforce the objective impact of advance care planning on future care costs and resource utilization.

## References

- PMID: 34353647.





1) Pallin, D.J., Espinola, J.A. and Camargo, C.A., Jr. (2014), US population aging and demand for inpatient services. J. Hosp. Med., 9: 193-196. https://doi.org/10.1002/jhm.2145

2) Cairns C, Kang K. National Hospital Ambulatory Medical Care Survey: 2020 emergency department summary tables. Centers for Disease Control and Prevention; 2020. Accessed December 1, 2024

3) The Dartmouth Atlas of Health Care website: Available Accessed 2024 Dec 1 4) Loffredo AJ, Chan GK, Wang DH, Goett R, Isaacs ED, Pearl R, Rosenberg M, Aberger K, Lamba S. United States Best Practice Guidelines for Primary Palliative Care in the Emergency Department. Ann Emerg Med. 2021 Nov;78(5):658-669. doi: 10.1016/j.annemergmed.2021.05.021. Epub 2021 Aug 2.