

Introduction

- Patients suffering from certain conditions can become unable, unwilling, or unavailable to make decisions regarding their end-of-life care¹.
- In these cases, a court appointed guardian is responsible for carrying out medical decisions on behalf of the patient².
- Patients with guardians tend to receive more aggressive care, regardless of the benefit, because it is perceived as safer³.
- Guidelines and laws for medical decision-making for patients with guardians are inconsistent, leaving this population vulnerable⁴.

Aims and Objectives

The general objective of this study is as follows:

- Aim I: Compare the rate of aggressive medical procedures between subjects with and without legal guardians admitted to intensive care.

The specific objectives of the study are as follows:

- Aim II: Compare rates of tracheostomy and/or gastrostomy tube placement between subjects with and without legal guardianship.
- Aim III: Compare occurrence of CPR between subjects with and without legal guardianships.

Methods

- This is a case-control study.
- Adult patients admitted to the ICU at William Beaumont Hospital (Royal Oak) were queried from EPIC.
- Cases and controls were matched up on a 1:1 basis using similar age, gender, and ICU severity score.
- Cases were defined as ICU patients with guardianship, while controls were ICU patients without guardianship.
- Data was statistically analyzed using unequal variance two sample t-test and chi-square tests to compare rates of medical treatments between cases and controls.

Results

Table 1. Demographic data

		No Guardian	Guardian
		N = 571	N = 571
Mean Age (SD)		61.1 (18.42)	61.5 (18.43)
Mean ICU Severity Score (SD)		19.3 (9.54)	19.5 (9.07)
Sex	Female	254 (44.5%)	254 (44.5%)
	Male	317 (55.5%)	317 (55.5%)

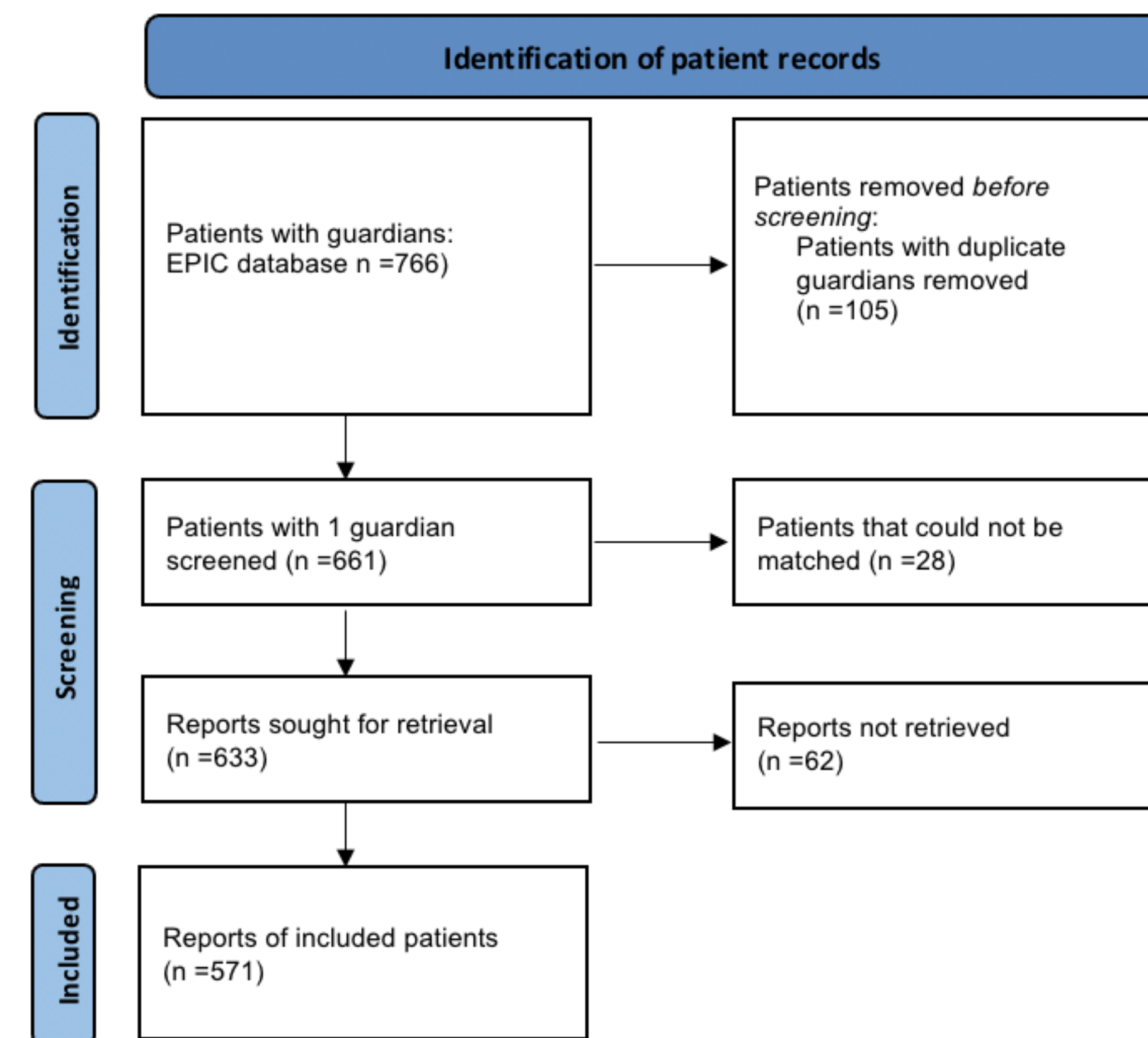


Figure 1. Identification of cases and controls

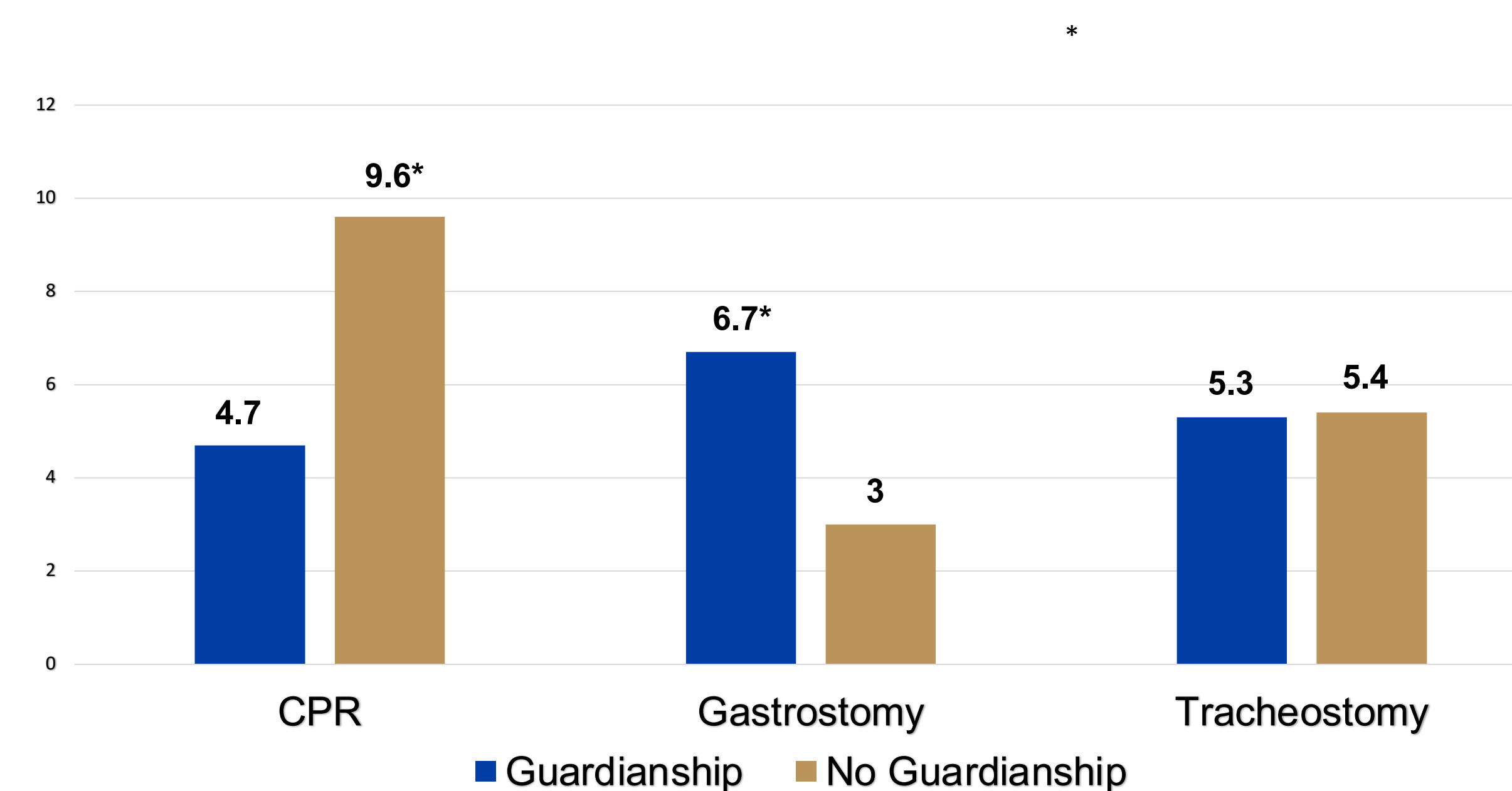


Figure 2. Comparison of procedures with and without guardianship

Results

- Based on chi-square analysis, the rate of CPR was significantly higher in the control group (9.6) compared to the case group (4.7), p=0.001.
- The rate of gastrostomy tube placement was significantly higher in the case group (6.7) compared to the control group (3), p=0.0037.
- There was no significant difference in placement of tracheostomies between case (5.3) and control (5.4) groups (p=0.8953).

Conclusions

- Patients without guardianship had increased occurrences of CPR when admitted to the ICU.
- Patients with guardianship had increased placement of gastrostomy tubes when admitted to the ICU.
- There was no significant difference in tracheostomy placement between patients with and without guardians who were admitted to the ICU.
- Limitations of this study include that the sample size is limited by the number of patients admitted to the ICU.
- Future studies could include data from other Beaumont Hospital locations to increase sample size.
- These results may impact critical care treatment protocols in the future.

References

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