

Evaluation of Resident Physician's Understanding of Living Wills and Do Not Resuscitate Orders

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Introduction

- **Almost 1 out of 4 people 65 years and older visit the emergency department at least once a year**
- **A study of patients admitted to skilled nursing facilities under Medicare found the presence of an advanced directive varied by state from 10.4 % to 59.7%**
- **Goals of care discussions are often performed by resident physician in an academic setting, and discussions are often completely lacking or inadequate**
 - **Studies show they often do not provide essential information about cardiopulmonary resuscitation such as likelihood of survival, failed to elicit the patients' values**

DNR

- There are currently two types of Do Not Resuscitate (DNR) orders in Ohio and they are separate from a “Living Will”:
 - DNR Comfort Care (DNR CCO): states that the person receives any care that eases pain and suffering, but no resuscitative measures to save or sustain life
 - DNR Comfort Care – Arrest (DNR CCA): Comfort measures only in the case of respiratory or cardiac arrest

Living Will

- A “Living Will” addresses the withdrawal or withholding of care in case you are ever in a permanently unconscious state or has a terminal condition
- A health care power of attorney (POA): Patient designates a proxy to make health care decisions if the patient is unable in the future

Study Objectives

- **Primary Objective:**
 - To assess resident/fellow understanding of advanced directives and the role of a health care power of attorney.
- **Secondary Objective:**
 - To assess experience with advanced directives

Methods

- **Survey distributed to resident or fellow physicians by email through Redcap. Survey definitions of advanced directives are adopted from the Ohio Department of Health and the Ohio Revised Code**
- **Data analysis: We reported proportions of subjects with correct responses with 95% confidence intervals**
- **Data storage: Data was entered into Redcap via online survey emailed to possible participants. Data was downloaded from Redcap and stored on a password protected network drive.**

Methods

- Inclusion criteria:

- Over 18 years old
- Resident or fellow physician at Summa Health System or Western Reserve Hospital

- Exclusion criteria:

- Not over 18 years old
- Not active staff

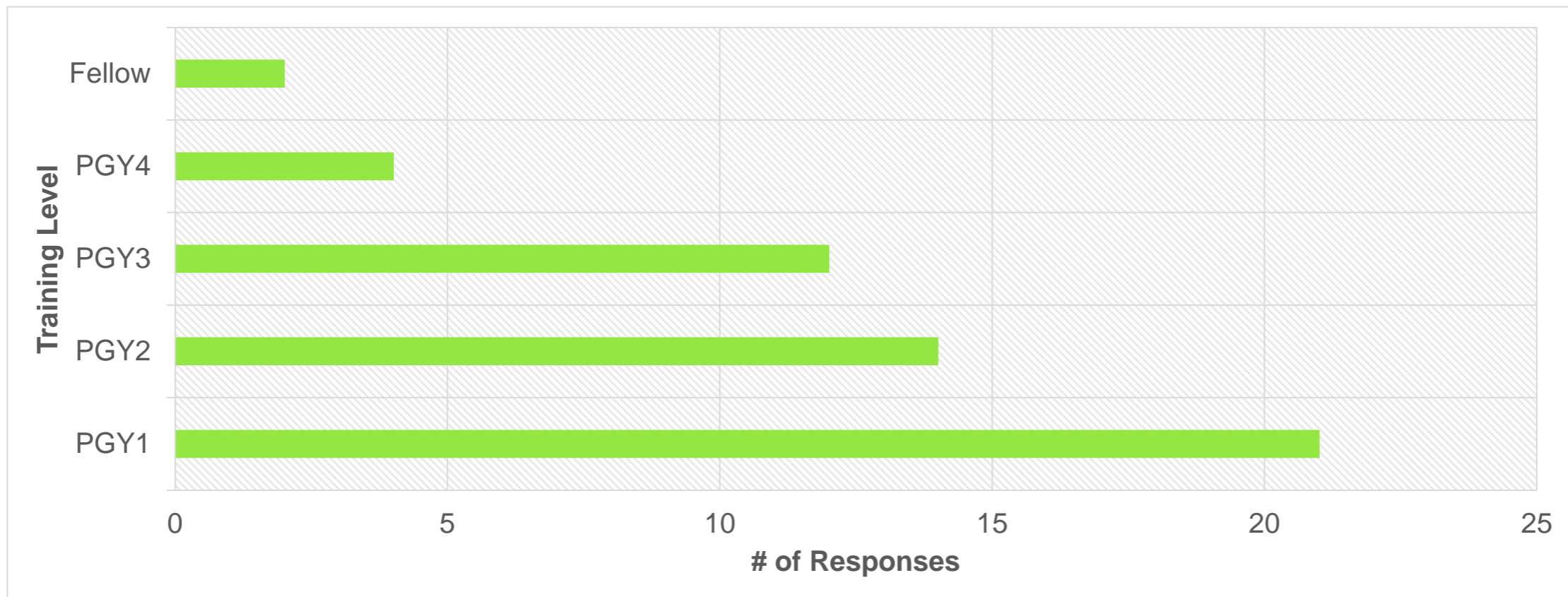
Methods

- **Setting:** Summa Health System (Akron City/St. Thomas Hospitals and Barberton Hospital) and Western Reserve Hospital
- **Sample size:** We collected surveys from up to 57 of 400 subjects.
- **Sample size calculation:** 385 surveys from subjects provides a 95% confidence interval of +/-5%.

Methods

- **Data analysis:** We reported proportions of subjects with correct responses with 95% confidence intervals
- **Data storage:** Data was entered into Redcap via online survey emailed to possible participants. Data was downloaded from Redcap and stored on a password protected network drive.

Figure 1. Total number of responses by training year



Age: mean 29.8, range 25-41

Sex: female 49%, male 51%

Figure 2. Comparison of Correct Responses Pertaining to Definitions Involving Advanced Directives.

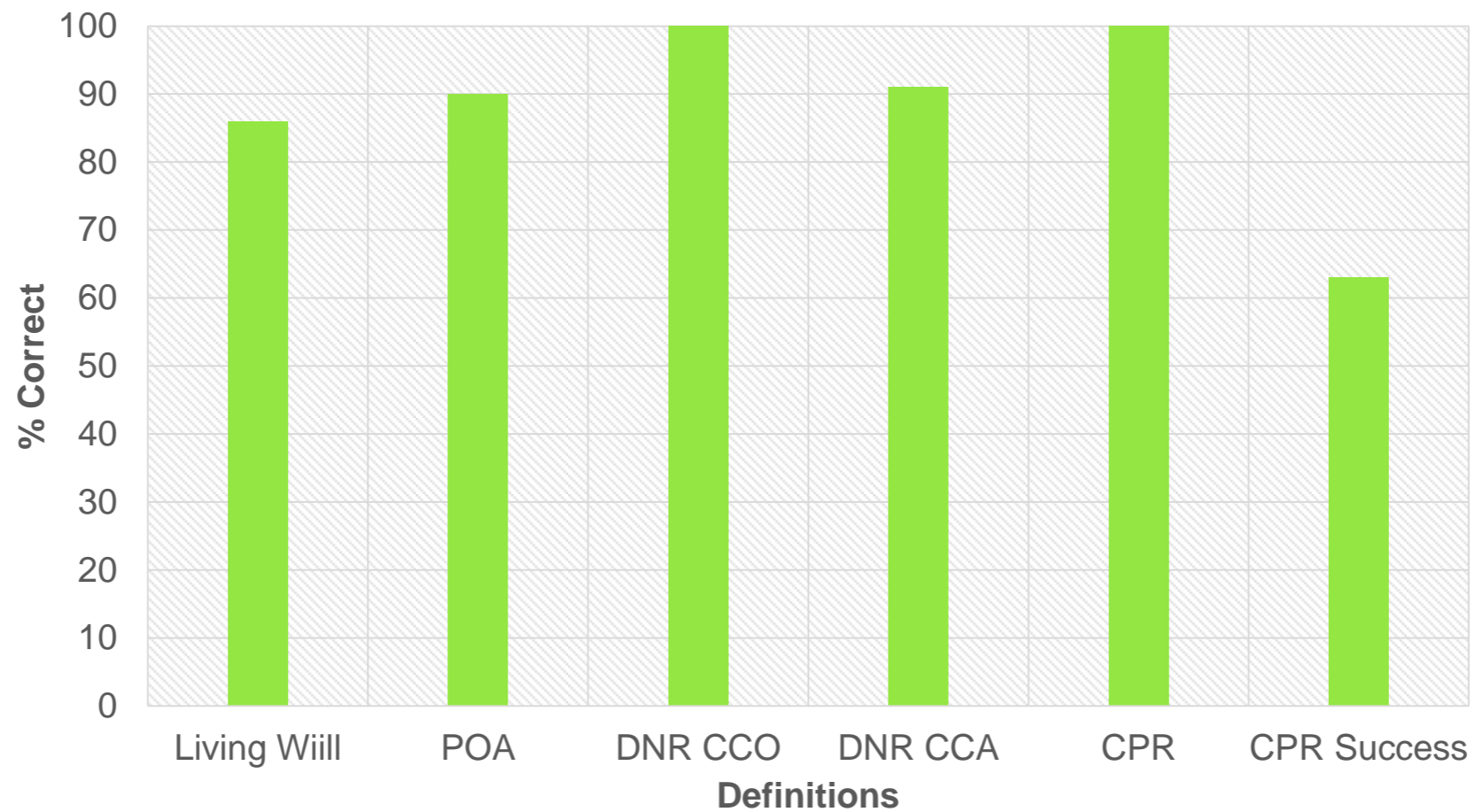
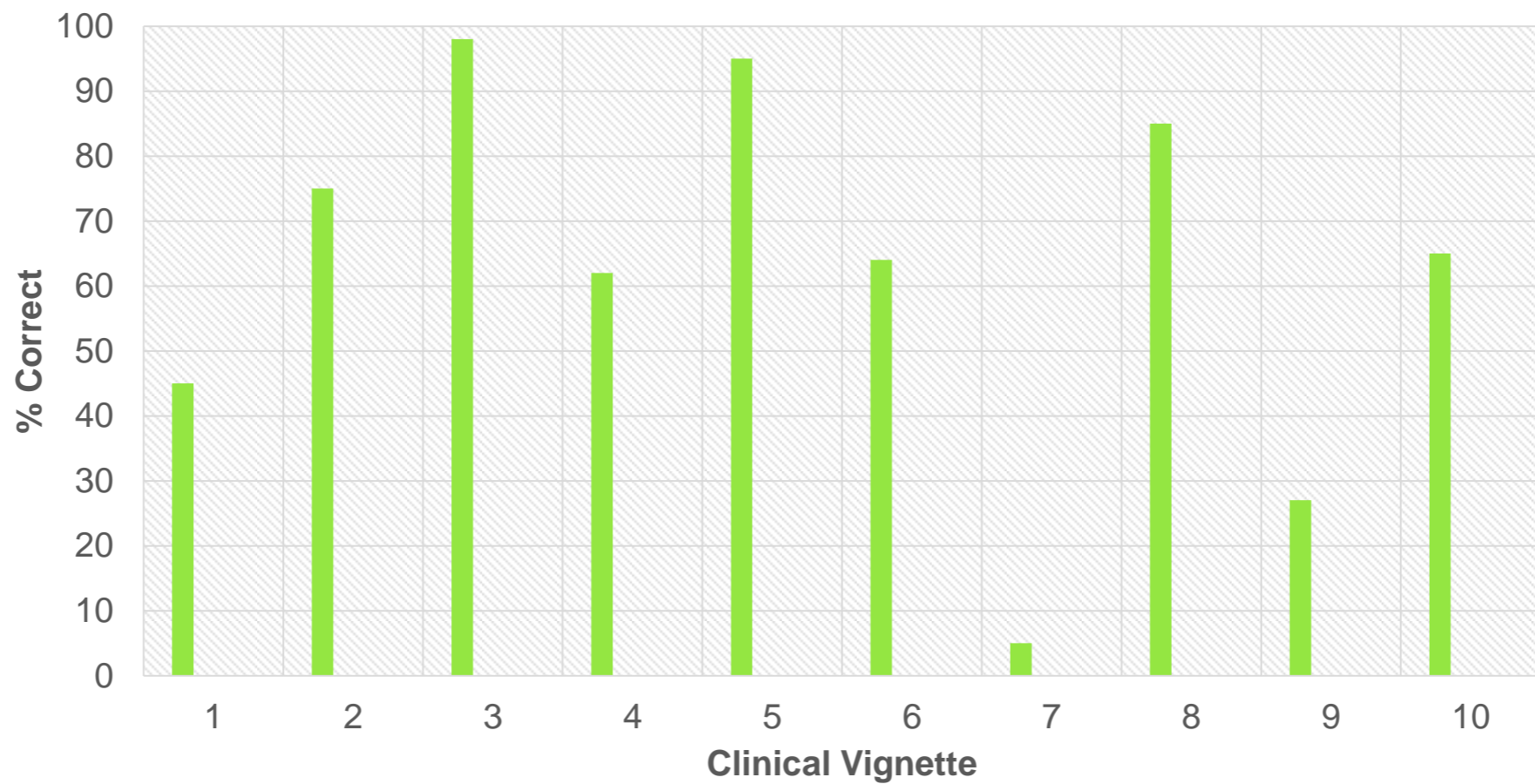
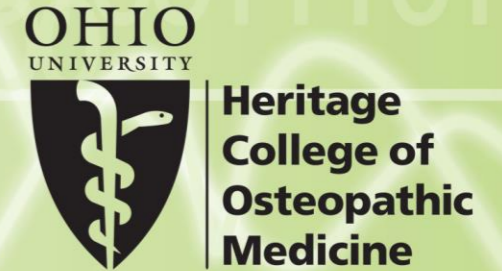


Figure 3. Percent Correct on Clinical Vignettes





1. Upon arrival, you find the patient unresponsive. The family produces a DNR Comfort Care Only form signed by the physician but not the patient. What should you do?
 - a. Evaluate the patient and perform life saving procedures
 - b. Evaluate the patient but only provide comfort measures
 - c. Unsure

1. Upon arrival, you find the patient unresponsive. The family produces a DNR Comfort Care Only form signed by the physician but not the patient. What should you do?
 - a. Evaluate the patient and perform life saving procedures
 - b. Evaluate the patient but only provide comfort measures (45% correct, CI 95% 32-59)**
 - c. Unsure

2. Upon arrival, you find the patient in respiratory arrest secondary to choking on a hot dog. The family produces a DNR Comfort Care Arrest form, but the patient's Power of Attorney who is present asks you to ignore the DNR and resuscitate the patient, stating that it is what the patient would want. What should you do?

- a. Evaluate the patient and perform life saving procedures
- b. Evaluate the patient but only provide comfort measures
- c. Unsure

2. Upon arrival, you find the patient in respiratory arrest secondary to choking on a hot dog. The family produces a DNR Comfort Care Arrest form, but the patient's Power of Attorney who is present asks you to ignore the DNR and resuscitate the patient, stating that it is what the patient would want. What should you do?

a. Evaluate the patient and perform life saving procedures (62%, CI 95% 49-75)

b. Evaluate the patient but only provide comfort measures

c. Unsure

3. Upon arrival, you have found that the nurses did an ECG on the patient which shows a STEMI. The patient complains of chest pain but has dementia. The patient has a DNR Comfort Care Arrest Form. What should you do?
- a. Provide aspirin but do not transport the patient to the catheterization laboratory unless the Power of Attorney gives permission
 - b. Provide STEMI medications per protocol and transport the patient to the catheterization laboratory
 - c. Provide comfort measures only
 - d. Unsure

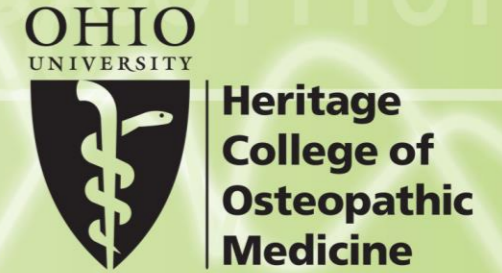
3. Upon arrival, you have found that the nurses did an ECG on the patient which shows a STEMI. The patient complains of chest pain but has dementia. The patient has a DNR Comfort Care Arrest Form. What should you do?

a. Provide aspirin but do not transport the patient to the catheterization laboratory unless the Power of Attorney gives permission

b. Provide STEMI medications per protocol and transport the patient to the catheterization laboratory (64%, CI 95% 51-77)

c. Provide comfort measures only

d. Unsure



28. Upon arrival, you find the patient who has terminal metastatic cancer in respiratory distress. The patient has a living will but no DNR order. What should you do?

- a. Evaluate the patient and perform life saving procedures
- b. Evaluate the patient but only provide comfort measures
- c. Unsure

28. Upon arrival, you find the patient who has terminal metastatic cancer in respiratory distress. The patient has a living will but no DNR order. What should you do?

a. Evaluate the patient and perform life saving procedures

b. Evaluate the patient but only provide comfort measures (5.6% correct, CI 95% <1-12)

c. Unsure

31. Upon arrival, you find a patient vomiting. The patient has a DNR Comfort Care Only order. What should you do?

- a. Evaluate the patient and give IV fluids and IV antiemetics
- b. Evaluate the patient, give oral disintegrating ondansetron, and recheck for symptom relief in 20 minutes
- c. Evaluate the patient and give IV fluids and IV antiemetics OR oral disintegrating ondansetron and recheck symptom relief in 20 minutes.
- d. Give no medications or treatment
- e. Unsure

31. Upon arrival, you find the patient vomiting. The patient has a DNR Comfort Care Only order. What should you do?

- a. Evaluate the patient and give IV fluids and IV antiemetics
- b. Evaluate the patient, give oral disintegrating ondansetron, and recheck for symptom relief in 20 minutes (27% correct, CI 95% 15-39)**
- c. Evaluate the patient and give IV fluids and IV antiemetics OR oral disintegrating ondansetron and recheck symptom relief in 20 minutes.
- d. Give no medications or treatment
- e. Unsure

Results

- **Total Surveys completed: 57**
- **65%** had some advanced directive training during residency
- **40%** had an goals of care discussion within one week, **61%** in the last month
- **35%** stated that they felt very comfortable with goals of care discussion
- **77%** thought they would benefit from more goals of care training

Discussion

- **Based on survey, most residents understand advanced directive definitions**
- **The residents did poorly applying this knowledge to clinical scenarios**
- **A standardized curriculum should be developed to improve application of advanced directives and goals of care discussions**

Limitations

- **Number of survey responses**
- **Majority of responses from junior level residents**

Conclusions

- **A large population of geriatric patients are being treated in the hospital, making understanding of goals of care vital to comply with patient wishes**
- **Based on survey, residents did well with definitions but had difficulty applying them to scenarios**
- **Residents overall felt uncomfortable with their previous training, application of knowledge, and wanted more formal training**

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