

a video on cricothyrotomy. Residents with prior clinical cricothyrotomy experience were excluded. All enrolled residents performed a cricothyrotomy on a simulation model. Primary outcomes included time to completion and number of mistakes which were recorded by a blinded surveyor. Secondary outcomes, rated on a Likert scale, included comfort level and preparation level. Outcomes were compared by paired t-test.

**Results:** Of the 31 of residents enrolled, 27 met inclusion criteria, 15 received visual instruction and 12 received written instruction. Both comfort level of cricothyrotomy and average time to completion were significantly better for visual instruction compared to written instruction. Level of preparation and number of mistakes was not significant between groups. Year of training did not influence results.

**Conclusion:** Visual instruction improved the time to completion and resident level of comfort when compared to written instruction for residents performing a cricothyrotomy on a simulation model. With limited time and resources for rare procedural training during residency, visual instruction from FOAM prior to procedural training may help improve resident competency.

## 26 Ethical Issues Confronting Beginning Medical Students During a Clerkship in Emergency Medicine

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**Background:** Little is known about the ethical issues confronting medical students during their first exposure to emergency medicine (EM).

**Objectives:** The aim of this study was to review student narratives for insight into ethical situations and the impact they might have on our students as they adapt to the clinical world.

**Methods:** This was a prospective observational study of first and second-year medical students, completing an EM clerkship at three university-affiliated hospitals between 2014-2017. During the study period, medical students were asked to write a short narrative description of three cases that had the greatest impact on them. Each narrative essay was deidentified and independently analyzed by three EM investigators using a national classification scheme. Descriptive and kappa statistics were used to summarize the data.

**Results:** During the four-year study period, 292 consecutive student essays were evaluated from 103 medical students. A total of 194 specific incidents were coded across 20 categories of ethical standards. Common categories were incidents related to: access to and equity in healthcare (16.5%); consent (10.8%); miscommunication (9.3%); death and dying (8.8%); and the right to refuse treatment (8.8%). Overall, 74.2% (144/194) were depictions of exemplary

instances of ethical issues, 13.9% (27/194) were considered normal interactions, and 11.9% (23/194) were categorized as unethical behavior. While students were impressed by their observations of EM physicians and staff, their eyes were opened to the improper treatment of acutely ill patients, be it poor pain management, discrimination, inadequate education, or a perceived lack of empathy.

**Conclusions:** Student narratives provide insight into learning not easily measured by traditional evaluation. Analysis of these cases reveals that many interactions are intimately tied to the student's role on the medical health care team, and how that role can lead to ethical compromise.

## 27 Evaluating Evaluations: Can Emergency Medicine Residents Reliably Evaluate Medical Students

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**Background:** Evaluation of learners is a critical task in medical education. The standardized letter of evaluation (SLOE) is the most important factor in determining which applicants to interview. At most programs, residents evaluate students on shift and these evaluations contribute to the SLOE. To date, there is limited published data evaluating the ability of residents to evaluate medical students.

**Objectives:** The hypothesis of this study is that the scores that residents give to rotating medical students do not follow a normal distribution. This study aims to better characterize the way residents evaluate medical students.

- Discuss methods for student evaluation by residents.
- Describe the skewed distribution that residents assign to students.

**Methods:** We conducted a retrospective cross-sectional study. We obtained evaluations performed by residents for all students that rotated with the University of Oklahoma Department of Emergency Medicine between July 2019 and October 2019. Evaluators are asked to assign each student to a tertile based on the clinical areas outlined in the SLOE. We used chi-squared testing to determine significance.

**Results:** Between July and October 2019, 35 fourth year medical students rotated through our emergency department. We collected 283 on-shift evaluations from the residents. When asked the question, "How does this student compare overall to peers?" 20% of students were assigned "Top 10%," 47% of students fell in the "Top 1/3," 30% of students in the "Middle 1/3" and 3% of students in the "Lower 1/3" ( $p < 0.0001$ ). Distribution was also statistically significant for all other questions on the shift evaluation form.

**Conclusions:** Residents are hesitant to assign a "lower 1/3" designation to medical students. Letter writers are required to redistribute students for the SLOE and eventual rank list. Future interventions and training to more accurately