incorrect post 0.68% (0-33.33%) compared to pre 1.30% (0-5.08%; p = .047). The general distribution of post- and pre-exercise transcription errors based on the total number of characters typed achieved significance only for the day shift (p = .001) with fewer transcription errors post-exercise than pre; the difference between post and pre was not significant for evening and overnight shifts (see Table 1).

Conclusion: Cardiovascular exercise during ED shifts can improve cognitive function of EMR physicians as reflected by improved typing output and improved transcription accuracy.

Table 1. Percentage of incorrect responses based on total number of characters typed (median, range) n=35.

Day Shift		Evening Shift		Overnight Shift	
Pre	Post	Pre	Post	Pre	Post
1.01% (0-4.58%)	0.408% (0-2.7%)	1.82% (0.39-5.08%)	0.913% (0-33.33%)	0.895 (0-4.14%)	1.28% (0-3.49%)
P = .001		p= .514		P = .466	

28 Effectiveness of near-peer instruction during emergency medicine clerkships on fourth-year student end-of-year eFAST performance

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Background: Limited trained faculty is a barrier to successful incorporation of the extended Focused Assessment with Sonography in Trauma (eFAST) into undergraduate medical education (UME) ultrasound (US) curricula. Aligning resident skills with UME needs has the potential to be effective and sustainable.

Objective: To evaluate the effectiveness of a resident-led eFAST session administered to 4th-year medical students during their emergency medicine (EM) clerkship by measuring students' end-of-year eFAST performance and confidence.

Methods: This was a single-site cross-sectional study of all graduating medical students exposed to a required vertical US curriculum and enrolled in 4th-year clerkships from May 1, 2022 to April 30, 2023. Exclusion criteria were an excused absence or failure to consent. A 90-minute eFAST session (intervention) was added to students' 4th-year EM clerkship orientation in September 2022, taught by EM residents on their academic site rotation. End-of-year performance and confidence assessments were conducted prior to students' 2023 graduation, using a 20-point objective structured clinical examination (OSCE) and 5-point Likert scale, respectively. The mean OSCE and confidence scores for control and intervention groups were compared using two-sample t-tests. An ANOVA was performed to control for unbalanced additional US experiences with Tukey-Kramer adjusted p-values.

Results: Of 113 anticipated students, 103 students participated; 48 in the control and 55 in the intervention group. The intervention group scored higher on the OSCE than the control, 11.9 ± 4.6 vs 9.9 ± 5.1, p = 0.04; and reported higher confidence, 3.2 ± 1.0 vs 2.8 ± 1.2; p = 0.09. When controlling for additional US experience, results were similar (p = 0.004 for OSCE and p = 0.007 for confidence improvement).

Conclusion: Resident-taught eFAST instruction during UME EM clerkship orientation led to improved end-of-year 4th-year medical student eFAST performance and confidence.

29 The Effect of Excessive Use of Force on the Mental, Physical, and Social Health and Workplace Environment of Medical Professionals

Thomas Medrano

Background: Excessive use of force (EUOF) has been linked to several physical and mental health sequelae such as diabetes, hypertension, obesity, PTSD, and depression. The work of emergency physicians is interwoven with law enforcement as care is provided to patients who have encounters with police. However, the impact of EUOF on the physical and mental health of emergency room physicians has not been studied in depth.

Objectives: The objective of this study is to evaluate the effect of EUOF on the mental, social, and physical health of emergency medicine physicians.

Methods: This was an observational cross-sectional survey study. Links to the survey were emailed to designated points of contact at five Texas-based institutions to be then distributed to emergency medicine residents, fellows, and attendings in their emergency departments. Fisher's exact test or Wilcoxon rank sum test were used to assess the mental impact and work impact EUOF had on EM physicians.

Results: 65% of participants report being mentally impacted. Affected participants reported that "Any reminder brought back feeling about it" (p = 0.037), "[They tried not to] to think about it" or "talk about it" (p = 0.04, 0.043 respectively), "pictures popped into [their] mind[s]" (p = 0.045) and " [they were] jumpy and easily startled" (p = 0.019). 34% of participants interacted with police officers differently (p = <0.001), while 25% of participants cared for patients differently (p = <0.001). 54% of the participants who identified as Black became aware of EUOF by law enforcement in the last 24 months via experience with family members (p = 0.008). Participants who identified as White