to implementation. Survey availability was advertised to all residents at a three-site urban academic Emergency Medicine program and was implemented at one site. A postgraduate year 2 or 3 resident was asked to lead survey completion with members of ED staff each morning and evening shift. Once complete, an automated email initiated a restocking mechanism. Data was collected over 12 weeks, encompassing 3 academic blocks (each with new resident staffing), and analyzed retrospectively.

Results: The Control Block and Block 1 display similar equipment readiness, with a large number of items "Not Checked" in Block 1. Block 2 showed a marked improvement in percentage of equipment ready, which was maintained in Block 3. There was a ~21.47% response rate for surveys. Completion during night shifts was lower compared to days. Postgraduate year status did not play a major role in completion rates. Staff transitions did not result in consistent response trends.

Conclusions: Implementation of a resident-led critical care supply checklist completed by an interdisciplinary team improved equipment readiness across postgraduate years and staffing/block transitions. Working a night shift was identified as a barrier to completion, while postgraduate year was not. Identification of other survey completion barriers and survey impact on resident equipment familiarity requires further investigation.

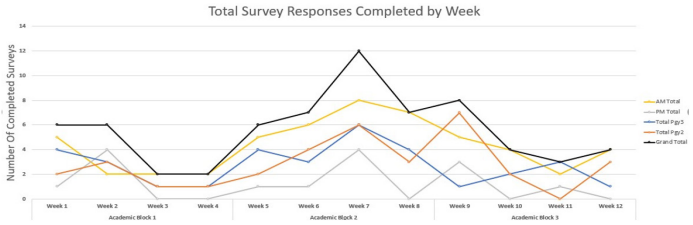

Figure 1. Total survey responses complete by week: displays total number of critical care equipment check surveys completed by residents by each week. Curves are broken down by post graduate year 2/3 and AM vs PM shifts.

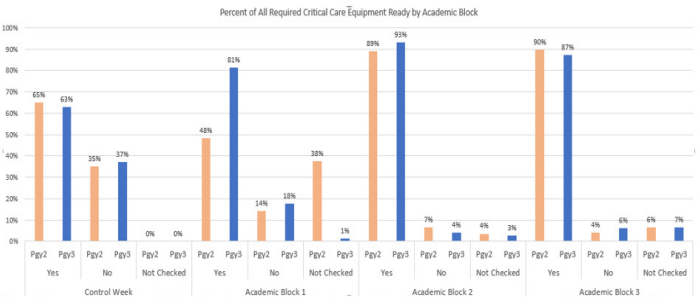

Figure 2. Percent of all required critical care equipment ready by academic block: displays the percent response of "Yes", "No", or "Not Checked" (survey default response) by academic block when responses are averaged across all survey items.

19 Do 4th Year Medical Students Applying to Emergency Medicine Match Where They Rotate?

Diana Labrada; Wesley Barnett, MD; Sameer Desai, MD

Learning Objectives: To identify if 4th year medical students applying to emergency medicine are more likely to match at a program where they rotated to identify factors influencing an applicant's program rank list order

Background: An impactful portion of applying to an emergency medicine (EM) residency is participating in away rotations to obtain Standard Letters of Evaluations (SLOEs) to gain residency interviews to participate in the NRMP Match.

Objectives: To identify if fourth year medical students going into EM are more likely to match where they rotated. Since away rotations allow applicants to evaluate a program in person, we hypothesize most students match at a program where they rotated.

Methods: This is a retrospective observational survey. The survey was sent to EM residents in ACGME approved programs via the Council of Program Directors listserv sent by the EM Program Director of the University of Kentucky. Two hundred and thirty-nine responses from 12/06/2019-02/10/2020 were received. Inclusion criteria included being a current EM resident at an ACGME approved program. Exclusion criteria included an incomplete survey or not completing away rotations.

Results: Of 235 applicants, 106 applicants did 3 months of Emergency Medicine during their 4th year curriculum. Out of 226 applicants who ranked their away rotations, 73% ranked one of their away rotations in their top 3. Notably, 9/235 of applicants who rotated did not rank their away rotation, while 136/235 agreed that lack of a rotation at an institution would have affected their decision to rank a program. The top two factors affecting a programs' rank included fit (n=99) followed by location (n=80). Finally, 121 (51.5%) students matched to a place they rotated.

Conclusions: Although 51.5% of students ultimately matched to a program they rotated, 48.5% did not. Fit and location continue to be the leading factors affecting rank list order. Limitations to this study were inability to separate students who did not initially match upon graduating medical school, inability to account for students who did not have a home program, and including a home rotation as an away rotation.

20 Does QBank Participation Impact In-training Exam Performance?

Lauren Walter; Maxwell Thompson, MD; Matthew Delaney, MD; Charles Khoury, MD

Learning Objectives: To assess the impact of QBank participation and performance as it correlates with EM resident ITE performance.

Background: Performance on the American Board of Emergency Medicine (ABEM) annual In-training Examination (ITE) for Emergency Medicine (EM) residents has been shown to correlate with subsequent performance on the ABEM qualifying exam. As such, significant planning is often committed to ITE preparation, both from an individual resident and a residency program perspective. Online question banks (QBanks) represent a popular media for ITE preparation however, the specific impact of QBanks on ITE performance is unclear.

Methods: ITE and QBank performance results were collated over two academic years, 2018-19 and 2019-20, from a three-year EM residency program. ITE raw scores and percentile rank for training level scores were compared with performance on a QBank provided for independent resident study, including QBank average performance score as well as number of QBank questions completed. The Pearson correlation coefficient was used to measure the strength of a linear association between ITE performance and QBank correlates.

Results: Sixty-two sets (30 residents in 2018-19, 32 residents in 2019-20) of ITE performance data and QBank correlates were included. The mean number of QBank questions completed was 1155 with a standard deviation of 768. Raw ITE scores and number of QBank questions completed were found to have a significant, positive correlation, $r(60) = .34$ ($p < .05$). Likewise, ITE percentile rank for training level scores were also found to have a significant, positive correlation with number of QBank questions completed, $r(60) = .35$ ($p < .05$) (Figure 1). ITE percentile rank for training level correlated positively with QBank average performance, albeit weakly, and was not found to be significant ($p = .16$).

Conclusion: Participation in a QBank, quantified specifically by number of QBank questions completed, is associated with improved resident performance on the ITE. Incorporation of QBank self-study may be an effective mode of ITE preparation.

21 Educational Model for Corneal Foreign Body Removal in Emergency Medicine Residency

Gregory Black, MD; Alex Tymkowicz, MD; Danielle DiCesare, MD; Jillian Davison, MD

Learning Objectives: The objective of this study is to evaluate the efficacy of a low fidelity educational model used for teaching corneal foreign body removal to EM students and residents by using a survey to assess the comfort levels of participants before and after a corneal foreign body skills lab.

Background: Corneal foreign body (CFB) removal is a difficult and highly skilled intervention required of EM physicians. When CFBs are not properly removed, patients are at risk for complications including infection, ulceration, and vision loss. Only 0.19% of ED visits are related to ocular foreign bodies, thus this important skill can be missed during EM training.

Objectives: To evaluate the efficacy of an educational model used for teaching CFB removal by using a survey to assess the comfort levels of participants before and after a CFB removal skill lab.

Methods: This was a prospective study on an educational model for teaching CFB removal using a survey to assess pre- and post-skill lab comfort with CFB removal by medical students and PGY1-3 EM residents. The study included one 2-hour skill session at an ACGME-accredited EM residency at a Level 1 Trauma Center. The study evaluated the comfort levels based on year of education and whether or not participants had previous experience removing CFBs. Participants ranked their overall comfort of removing CFBs on a scale of 1 to 10 before and after the skills lab. Analysis was completed using Wilcoxon signed-rank test on SPSS.

All participants (N=22) showed an increase in comfort level with CFB removal from 3.81 to 7.09 ($p < 0.00001$). Those with no experience in CFB removal gained a statistically greater benefit than those with experience (p 0.0003 vs. 0.068). Medical students showed an increase in comfort levels from 1.6 to 4.6, which was not statistically significant (p 0.066). PGY1 increased from 3.22 to 5.55 (p 0.027), PGY2 increased from 2.14 to 6.4 (p 0.042), and PGY3 increased from 4.57 to 7.28 (p 0.02).

This educational model for CFB removal showed benefit across all levels of medical education. The greatest improvement in comfort levels was seen in those who had less experience in CFB removal and resident physicians. This suggests utility for CFB removal skill labs earlier in EM residency training.

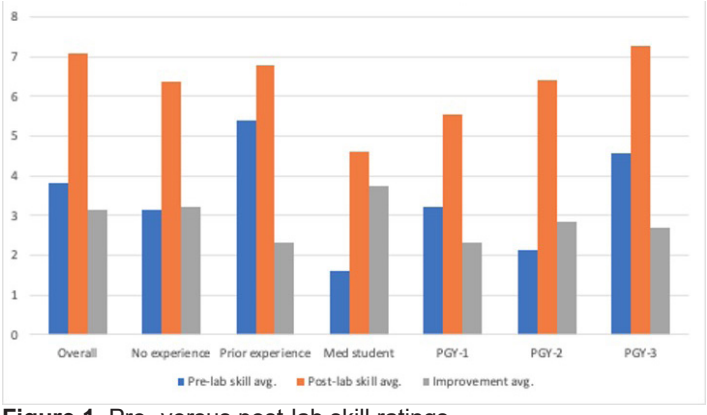

Figure 1. Pre- versus post-lab skill ratings.