

work has demonstrated that end-of-shift assessments often overestimate proficiency. There is a lack of literature regarding the role of consistent portfolio assessments by the Clinical Competency Committee (CCC) in real-time to establish milestone rankings expediently.

**Objectives:** We developed an assessment tool to generate improved real-time milestone-based feedback for EM residents and program leadership.

**Methods:** We developed an end-of-block (EOB) assessment to be completed at the end of every block by core faculty trained in milestone assessment in the 2022-2023 academic year at a single institution. This assessment evaluated 20 of the 22 current sub-competencies in EM. Every core faculty member assessed each resident they clinically worked with in the preceding block and assessed their performance in simulated settings, didactic presentations, and other interactions. The sub-competencies were averaged and reported to the CCC as a baseline dataset. We analyzed differences in the average of the assessment compared to the ultimate milestone rating assigned by the CCC.

**Results:** Faculty completed 399 EOB assessments, resulting in 960 independent milestone averages. The intraclass coefficient was 0.976 for single measures and 0.9888 for average measures. These correlations were strongest in postgraduate year (PGY)-3 class but less for PGY-2 residents.

**Conclusions:** While this study was conducted at a single site and in a specific specialty, which may limit the generalizability of the results, our results indicate that a CCC can utilize EOB assessments as an assessment tool for milestone determinations. The shorter interval assessment allows for immediate review of resident performance and can be used in real-time by residents to track their progression through the milestones.

## 52 Not so Soporific: 3 Years of Stimulating Sleep Curricula

*Luz Silverio, Ashley Rider*

**Introduction:** The ACGME requires EM residency programs to provide education on recognizing signs of fatigue, managing alertness, and mitigating fatigue. This is critical for EM trainees due to frequent night shifts and circadian disruptions. While sleep and wellness education positively impacts learners, programs often struggle with presenting this material in an engaging way that avoids tedium.

**Educational Objectives:** Learners will be able to: Describe strategies for maintaining sleep and mitigating fatigue in an engaging format. Contrast positive and negative sleep patterns, including the effects of substances on sleep.

**Curricular Design:** Modules were delivered annually within the conference curriculum. The first module was presented virtually in pajamas from bed, incorporating visual cues to encourage healthy sleep habits. The session included recent sleep research, audience polls, and interviews with attendings on night shift strategies. The second in-person module reviewed substance influence on sleep and literature on fatigue impact during driving and test-taking. Residents rotated through small group sessions using sleep masks and a modified “heads up, 7 up” game, to reinforce learning. The third module was a virtual flipped classroom. Residents tracked their sleep, exercise, and substance use in NIH sleep diaries prior to the session, and reviewed their tracking in small groups, followed by a large group debrief. Residents provided written anonymous feedback to faculty on sessions 2 and 3.

**Impact:** This curriculum meets ACGME requirements while promoting healthy sleep. For session 2, residents appreciated the small, rotating groups and interactive elements. For session 3, residents liked the journaling exercise and the opportunity to discuss shared challenges. Suggestions for improvement included offering a checklist of tips and holding all sessions in person. The curriculum will be repeated every three years with ongoing refinement for engagement.

## 53 Impact of the Away Rotation on Program Match Rates in Era of Virtual Residency Recruitment

*Jennifer Kaminsky, Leslie Bilello, Nicole Dubosh*

**Introduction:** Since the COVID-19 pandemic, many EM residencies have transitioned to virtual interviews, providing less in-person exposure for applicants. Away rotations offer applicants the opportunity to gain in-person exposure to EM programs beyond the virtual interview environment. Whether or not the away rotation is more important now and leads to higher rotator match rates in the virtual recruitment era remains unclear and warrants investigation.

**Objectives:** The aim of this study was to determine the percentage of EM interns who completed an in-person rotation with the residency program in which they matched and compare this to pre-COVID match rates.

**Methods:** This was a multicenter study of EM residency programs. Surveys were distributed via email from August to September 2024 to a convenience sample of programs representing the 9 SAEM US geographic regions. Only programs that shifted to virtual interviews post-pandemic were included. Respondents answered questions regarding the number of matched interns who completed an in-person rotation in their respective ED and the number of matched interns who were “home” versus “away” rotators. Data was

gathered for the 2017-2024 application years. The first 3 years were defined as pre-COVID and the last 3 as post-COVID. The 2020-2021 academic year was excluded given the pandemic and elimination of most away rotations.

**Results:** Of the 13 EM programs surveyed, 11 (85%) responded representing 8 of the 9 SAEM regions. Pre-COVID, 95/384 (24.7%, 95%CI 20.5-29.4%) of interns completed a rotation at the residency program in which they matched. Post-COVID, this ratio decreased to 84/384 (21.9%, 95%CI 17.8-26.3%),  $p = 0.63$ . Focusing solely on “away” rotators, 48 matched interns completed a rotation at their residency program pre-COVID compared to 47 interns post-COVID ( $p = 0.819$ ).

**Conclusions:** EM residency program match rates of interns who completed an in-person rotation remain unchanged despite the recent shift to virtual interviews.

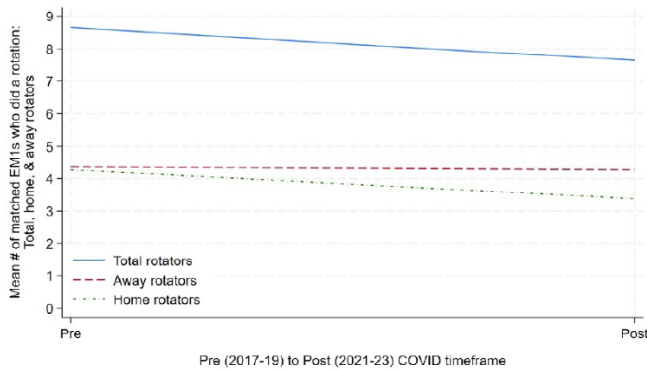


Figure 1. Pre- and post- COVID EM rotator match rates.

## 54 Development and Results of a Novel Emergency Medicine Residency Research Immersion Program

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**Introduction:** Barriers to emergency medicine (EM) resident research exist at the individual, program, and departmental levels.1 Given the demands of clinical residency, residents have difficulty completing scholarship as outlined per the ACGME requirement.2 Barriers to scholarly projects include lack of interest, time, mentoring, support, and skills.3 Implementation, interpretation, and quality of the scholarly project vary considerably among programs.4 To address these challenges, the Residency Leadership Team and Research Division collaborated to develop and implement a novel immersive research program.

**Objectives:** 1) Advance the quality of the resident scholarly activity through implementation of a sustainable

immersive research program for first-year EM residents. 2) Assess residents’ confidence in research methodology, interest in research, and perceived importance of research experience before and following the program.

**Design:** The year-long curriculum consists of five phases and four 1-hour didactic sessions. The phases included: 1) preparation; 2) study design and research question; 3) data collection; 4) analysis; and 5) scientific communication. Didactics were led by a senior EM resident with research faculty mentors in attendance. We utilized a 32-item survey to evaluate resident confidence in research methodology, interest in research, and importance of the research experience.

Table 1. Participant demographics from both first-year resident cohorts.

Variable	Year 1 Cohort (2022-2023) N=12		Year 2 Cohort (2023-2024) N=13		Overall	
	N	%	N	%	N	%
Prior research experience	10	83%	12	92%	22	88%
Type of Research Experience						
Clinical	0		7		13	
Basic Science	3		2		5	
Both	1		3		4	
Years of research experience, mean, SD	3.4	2.9	2.0	1.0	3.0	2.3
Additional graduate degree	3	25%	2	15%	5	20%
Prior formal course on statistical analysis	0	0%	5	38%	11	44%

Table 2. Survey questions to assess confidence in research methodology, enjoyment of research, interest in pursuing research during and after residency, and the perception of research importance using a 5-point Likert Scale.

Survey Questions	Pre-Curriculum Survey Response (n=20)	Post-Curriculum Survey Response (n=21)	Difference (95%CI)
<b>Confidence in Research Knowledge – How confident are you in your ability to...</b>			
appraise the quality of a scientific journal article?	2.40	2.81	0.33 (-0.19, 0.85)
to define research?	3.00	3.24	0.24 (-0.26, 0.73)
Identify various types of research?	2.88	3.29	0.41 (-0.08, 0.89)
recognize stages of clinical/translational research?	2.32	3.00	0.68 (0.12, 1.24)*
to list different types of epidemiology studies?	2.17	2.57	0.40 (-0.19, 1.00)
to define key characteristics and limitations of cross-sectional studies?	2.58	2.88	0.30 (-0.30, 0.90)
define key characteristics and limitations of cohort studies?	2.52	2.88	0.34 (-0.25, 0.93)
<b>Confidence in Research Skills – How confident are you in your ability to...</b>			
Identify an appropriate research mentor and to develop a research project?	2.58	2.67	0.11 (-0.52, 0.74)
Identify steps of the scientific method?	3.24	3.43	0.19 (-0.39, 0.77)
use PubMed for literature searches?	3.32	3.52	0.20 (-0.48, 0.87)
use Google Scholar for literature searches?	3.16	3.43	0.27 (-0.40, 0.93)
Identify resources for conducting an effective literature search?	3.20	3.38	0.18 (-0.47, 0.84)
list the various types of publications?	2.78	3.10	0.34 (-0.29, 0.98)
describe the elements of a manuscript?	3.00	3.57	0.57 (-0.09, 1.23)
describe an effective abstract?	2.68	3.10	0.22 (-0.42, 0.86)
list resources for improving one’s writing skills?	2.44	2.80	0.46 (-0.17, 1.10)
describe the need for transparency and its impact on the research process?	3.00	3.48	0.48 (-0.08, 1.04)
describe the need for rigor and reproducibility and their impact on the research process?	3.12	3.48	0.36 (-0.28, 0.99)
Identify approaches to enhance the transparency, rigor, and reproducibility of your research project?	2.68	3.29	0.61 (0.02, 1.19)*
list resources for study design and data analysis?	2.29	2.88	0.57 (0.00, 1.13)*
list venues for presenting research projects?	2.28	3.00	0.72 (0.07, 1.38)*
<b>Interest in Research</b>			
How much do you enjoy conducting research?*	2.38	1.85	-0.41 (-0.87, 0.15)
I am interested in pursuing research opportunities DURING residency.†	3.52	3.00	-0.52 (-1.16, 0.12)
I am interested in pursuing research opportunities AFTER residency.†	2.88	2.39	-0.58 (-1.29, 0.13)
Perception in importance#			
Research experience is important to my residency training.	3.44	3.24	-0.20 (-0.76, 0.36)