

**Conclusions:** A spaced repetition, ultra-low fidelity in situ simulation improved EM resident competence and confidence in the medical resuscitation team lead role. Our results suggest that the model contributed to high content retention over time.

## 25 Emergency Medicine and Internal Medicine: Perceptions of the Relationship and Professionalism

*Navdeep Sekhon, MD; Anisha Turner, MD; Adedoyin Adesina, MD; R. Michelle Schmidt, MD; Erica Lescinskas, MD; Malford Pillow, MD, MEd; Sarah Bezek, MD*

**Learning Objectives:** To assess the current state of the relationship and professionalism between Emergency Medicine and Internal Medicine Physicians at a county, academic hospital.

**Background:** Collaboration between Emergency Medicine (EM) and Internal Medicine (IM) providers is essential in assuring safe patient care transitions from the emergency department (ED) to inpatient services, but can be prone to conflict.

**Objectives:** We used a cross-sectional survey to investigate the perceptions of EM and IM residents and faculty regarding their attitudes in regards to collaboration, respect, and mistreatment in interdepartmental interactions.

**Methods:** This cross-sectional survey was administered to the EM and IM faculty and residents of a county, academic hospital. This study was a performance improvement project to evaluate each specialty’s current perception of professional behaviors by the other specialty in order to identify areas for improvement via a survey. The survey items were answered using a 5-point Likert scale. P-values were calculated using the unpaired t-test.

**Results:** 68 residents and faculty completed the survey, 32 (59.4% residents) from EM and 36 (94.4% residents) from IM. 11.8% of all respondents reported experiencing unprofessional behaviors from the other department at least once a month. EM most frequently reported the following unprofessional behaviors: condescension (82.1%), dismissiveness (60.7%) and rudeness (50.0%); while IM reported dismissiveness (50.0%) and unwillingness to help (38.5%) as being common. EM clinicians, compared to IM clinicians, reported experiencing condescension (p-value<0.0001) and rudeness (p-value= 0.0041) more frequently. Challenges identified by EM physicians included time to consult, recommendations, and disposition. Challenges identified by IM included difficulty contacting EM physicians and lack of communication regarding patient’s clinical status changes.

**Conclusion:** This study is a first look at the prevalence of negative attitudes and misperceptions between EM and IM providers. Further studies can be done to determine how these attitudes and misperceptions can be lessened.

**Table 1.** Unprofessional behaviors that disturbed respondents.

|                                  | Emergency Medicine | Internal Medicine |
|----------------------------------|--------------------|-------------------|
| They were dismissive             | 17 (60.71%)        | 13 (50%)          |
| They were not appreciative       | 9 (32.14%)         | 7 (26.92%)        |
| They were overly confrontational | 10 (35.71%)        | 6 (23.07%)        |
| They were just plain rude        | 14 (50%)           | 5 (19.23%)        |
| They were unwilling to help      | 6 (21.43%)         | 10 (38.46%)       |
| They were condescending          | 23 (82.14%)        | 7 (26.92%)        |

**Table 2.** Situations that present challenges to professional and collegial interactions between services ( 1=Never, 2=Rarely, 3=Occasionally, 4=Frequently)

| Situation  | Emergency Medicine |    | Internal Medicine |    |
|--|--------------------|----|-------------------|----|
|  | Average Score      | n  | Average Score     | n  |
| Requests for routine consultation                        | 1.87               | 23 | 2.07              | 27 |
| Requests for disposition                                 | 2.66               | 29 | 2.74              | 31 |
| Uncertainty over responsibility of completing procedures | 2.13               | 29 | 2.42              | 31 |
| Communications of changes of patient status              | 2.29               | 31 | 2.88              | 32 |
| Expectations for turnaround time for consults            | 2.82               | 28 | 2.45              | 29 |
| Ease of contacting the other service                     | 2.19               | 27 | 2.52              | 33 |
| Uncertainty over guidelines                              | 2.04               | 28 | 1.90              | 29 |

## 26 Emergency Medicine Clerkship Director Experience Adopting Emergency Remote Learning During the Onset of COVID-19 Pandemic

*Xiao Chi Zhang, MD, MS; Ronnie Ren, MD; Kendra Parekh, MD; Doug Franzen, MD, MEd, FACEP; Molly Estes, MD; Melanie Camejo, MD; Mark Olaf, DO, FACEP*

**Learning Objectives:** To survey EM clerkship directors (CDs) on their experience adapting an EM virtual rotation (VR) curriculum during the onset of the COVID-19 pandemic.

**Background:** The recent outbreak of the coronavirus disease 2019 (COVID-19) altered the traditional paradigm of clinical medical education by necessitating distance learning, employing new educational platforms such as video conferencing and virtual simulation in order to reduce disease transmission, and to minimize the loss of student learning in lieu of reduced clinical exposure. While individual clerkships have shared their curricular adaptations via social and academic networking media, there is currently no organizational standard in establishing a non-clinical, EM virtual rotation (VR).

**Methods:** A 21-item survey with quantitative and qualitative questions was disseminated between June and August 2020 to EM clerkship directors (CDs) via CDEM Listserv to describe their experience and perspectives in adopting a virtual EM rotation during the spring of 2020.

**Results:** 59 out of 77 EM clerkship survey responses were analyzed. 52.5% adopted a VR while 47.5% did not. Of those who adopted a VR, 71% of CDs had 2 weeks or less with 84% reporting usual or increased clinical load while

creating a new curriculum. Clerkships significantly diversified their asynchronous educational content and utilized several instructional models to substitute the loss of clinical experience. 71% of CDs did not feel comfortable writing a standardized letter of evaluation for students during the VR, with the majority citing inability to evaluate students' competencies in a clinical context. See Table 1 and Figure 1 for details.

**Table 1.** Clerkship Experience Adopting EM Virtual Rotation (N=31)

| Time Available to Develop Virtual Rotation (VR)  | % Respondents | n  |
|--|---------------|----|
| Less than 1 week   | 32.26%        | 10 |
| 1-2 weeks  | 38.71%        | 12 |
| 2-4 weeks  | 22.58%        | 7  |
| More than 4 weeks  | 3.23%         | 1  |
| <b>Time Spent Developing VR</b>  |               |    |
| Less than 12 hours   | 12.90%        | 4  |
| 12-24 hours  | 38.71%        | 12 |
| 24-72 hours  | 32.26%        | 10 |
| 72 hours or more   | 12.90%        | 4  |
| <b>Clinical Load during VR Development</b>   |               |    |
| Reduced clinical load  | 12.90%        | 4  |
| Usual clinical load  | 67.74%        | 21 |
| Increased clinical load  | 16.13%        | 5  |
| <b>Grading Scheme Utilized</b>   |               |    |
| Ordinal (i.e. A, B, C, D)  | 12.90%        | 4  |
| Pass/Fail  | 74.19%        | 23 |
| <b>Faculty Interaction with Students Outside Clinical Shifts</b>   |               |    |
| Increased  | 41.94%        | 13 |
| No change  | 6.45%         | 2  |
| Decreased  | 38.71%        | 12 |
| <b>I am able to get to know the student as an individual better in a VR</b>  |               |    |
| Strongly Disagree  | 41.94%        | 13 |
| Somewhat Disagree  | 22.58%        | 7  |
| Neither Agree or Disagree  | 6.45%         | 2  |
| Somewhat Agree   | 16.13%        | 5  |
| Strongly Agree   | 0.00%         | 0  |
| <b>I am able to evaluate the student's clinical competencies better as specified by the Standardized Letter of Evaluation (SLOE) in a VR</b> |               |    |
| Strongly Disagree  | 58.06%        | 18 |
| Somewhat Disagree  | 19.35%        | 6  |
| Neither Agree or Disagree  | 3.23%         | 1  |

**Conclusion:** A crisis, such as COVID-19 necessitates change in all facets of medical education. While EM educators demonstrated the ability to create emergency remote learning with limited time, this was not equivalent to formal development of pre-planned virtual rotation experiences. Future faculty development and curriculum innovation are required to fully transition an in-person immersive experience to a non-inferior virtual experience.

## 27 Emergency Medicine Radiology Education: A National Needs Assessment

Stephen Villa; Natasha Wheaton, MD; Steven Lai, MD; Jaime Jordan, MD, MAEd

**Learning Objectives:** Our objective was to explore the current state of radiology education in Emergency Medicine (EM) residency programs.

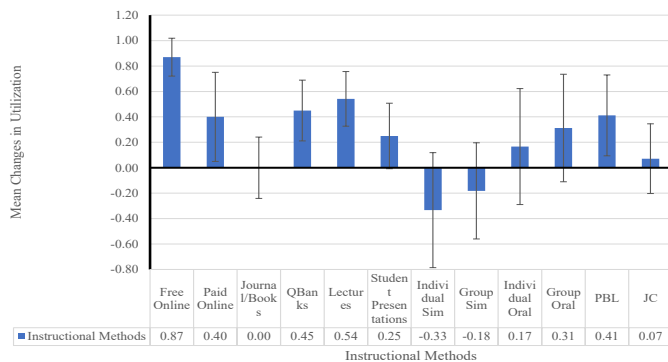
**Background:** Radiology training is an important component of medical education, but its delivery has been variable. Program directors have reported a lack of radiology skills in incoming interns. A needs assessment is a crucial first step to improving radiology education.

**Methods:** This was a cross sectional survey study of all ACGME-accredited EM programs in the U.S. Program leadership completed an online survey consisting of 16 items: 7 Likert, 8 Multiple choice, 1 free response item. Descriptive statistics were calculated and reported.

**Results:** 142/252 (56%) of eligible EM programs completed the survey. Program Demographics are shown in Table 1.

88/142 (62%) of EM programs did not have formal instruction in radiology. Of the instruction that is provided, 127/142 (89.44%) provide instruction via didactics/lectures and 115/142 (81%) rely on instruction during clinical shifts. Only 51/142 (36%) provide asynchronous opportunities and 23/142 (16%) have a dedicated radiology rotation.

134/142 (95%) of leadership felt that it was extremely or very important for ED providers to be able to independently interpret their x-ray results. 129/142 (91%) either sometimes or always relied on their independent x-ray interpretations



**Figure 1.** Mean Changes in Utilization of Instructional methods from In-Person Rotation to Virtual Rotation on a 3-point scale (-1 = decreased, 0 = did not change, +1 = increased). Brackets represent margin of error based on a 95% confidence interval. Qbank = question banks; PBL = problem-based learning; JC = journal clubs.

**Table 1.** Program demographics.

| Program Format  | N* (% of total) |
|---|-----------------|
| PGY 1-3   | 105 (74.47%)    |
| PGY 1-4   | 36 (25.53%)     |
| <b>Primary Clinical Site</b>  |                 |
| County  | 21 (14.89%)     |
| University  | 58 (41.13%)     |
| Community   | 54 (38.30%)     |
| Other   | 8 (5.67%)       |
| <b>Program Region</b>   |                 |
| Western Region (AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY) | 23 (16.31%)     |
| North Central Region (IA, IL, IN, MI, MN, ND, NE, OH, SD, WI)       | 29 (20.57%)     |
| South Central Region (AR, KS, LA, MO, OK, TX)                       | 14 (9.93%)      |
| South East Region (AL, FL, GA, KY, MS, NC, PR, SC, TN, VA, VI, WV)  | 28 (19.86%)     |
| North East Region (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT)  | 47 (33.33%)     |

\*1 respondent opted out of the demographic portion of the survey leaving a total of 141 responses available for analysis