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Ischemic ECG Pattern Recognition to Facilitate Interpretation While Task-switching: A Parallel Curriculum

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an increase of 18%. Qualitative feedback was valuable to suggest learning modalities, including different simulation equipment, alteration of team dynamics and other improvement projects. Results suggest that simulation modalities should be utilized to optimize multiple aspects of pediatric resuscitations in the ED.

33 In-Person to Remote Transition of the New York University Emergency Medicine Underrepresented in Medicine Fellowship During the COVID-19 Pandemic

Yue Jay Lin, MD; Janelle Lambert, MD; Mukul Ramakrishnan, MD; Masashi Rotte, MD; May Li, MD; Audrey Bree Tse, MD

Learning Objectives:
1. Provide a virtual learning experience showcasing EM for pre-clinical URM medical students with no prior EM exposure.
2. Guide students through a scholarly presentation exploring basic study design in EM specific topics.
3. Provide individualized mentorship with URM EM residents and faculty.

Abstract:
The EM Department at NYU Langone hosts a month-long fully funded summer fellowship for rising second year underrepresented in medicine (URM) students from medical schools across the country. During the COVID-19 pandemic, our fellowship transitioned to remote learning to limit disease transmission.

Learning objectives typically taught via in-person workshops and clinical shifts were presented in virtual presentations and interactive demonstrations. Equipment such as suture kits, splinting supplies, and wilderness medicine gear was mailed to students prior to the start date. Google classroom, Zoom, and Webex were used to facilitate the online classroom. 15 faculty and 8 residents participated through workshops, didactics, panel discussions, journal clubs, 1:1 mentoring, and Q&A sessions. Each student worked on a scholarly project throughout with their resident and faculty mentor and then presented it on the last day. The focus of the scholarly project was changed from a clinical focus to a social medicine issue in the students' local communities.

We hosted 4 visiting URM students and 2 NYU students. The curriculum was rated from 0 to 10, with resident didactics (7) rated 8.17 (SD 1.91), faculty lectures (15) rated 8.05 (SD 2.20), resident simulation workshops (2) rated 8.75 (SD 1.60), and resident procedural workshops (2) rated 8.58 (SD 1.96). Every participant reported that they are more likely to pursue EM after the fellowship compared to before. This successful transition to a virtual classroom is a viable option to consider for programs seeking to continue education while reducing risk of disease transmission.

34 Integrating POCUS Education With Critical Care in the Era of Distance Learning

Matthew VandeHei, MD; Molly Thiessen, MD; Manuel Montaño, MD; Matthew Riscinti, MD

Learning Objectives: Teach the use of POCUS in critically ill patients with respect to image acquisition, image interpretation, and clinical decision-making in the setting of distance learning.

Abstract:
Introduction: Point-of-care ultrasound (POCUS) is integral to Emergency Medicine Residency training and often a fundamental component of a senior medical student EM rotation. The Covid-19 pandemic has dramatically limited in-person instruction and necessitated innovative methods of ultrasound education. Using video-conferencing software, we created a novel simulation experience that integrates POCUS into the core EM content delivery of a virtual EM sub-internship.

Curricular Design: Following a brief didactic session, a group of 20 sub-interns was divided into 5 "breakout rooms," each with 1 resident facilitator. The students then progressed through 4 critical care cases in slide format. For each case, students were able to choose from a variety of diagnostic and therapeutic options, and when the students selected POCUS, they then chose both the order and anatomic region of the scans. Images of normal and abnormal findings were provided in GIF format as they pertained to the given case. After verbalizing and interpreting the findings, students could then perform additional scans or interventions until the patient was stabilized. Following the initial session, some ambiguity was added to the vignettes to increase the number of scans typically performed prior to intervening.

Impact/Effectiveness: Based on post-session feedback, students felt this approach was highly effective in helping interpret POCUS images and apply the information to a clinical scenario. Mean Likert scale feedback on organization, applicability to clinical practice, and effectiveness was 4.92 out of 5 for each of the categories based on 25 total responses. Written feedback revealed students would have preferred less didactic time and more time with cases. Qualitatively, this feedback did not notably differ from similar in-person sessions held previously. Similar approaches could be used to teach these skills to providers of all levels from the next room or a location across the world.

35 Ischemic ECG Pattern Recognition to Facilitate Interpretation While Task-switching: A Parallel Curriculum.

Caitlin Schrepel, MD; Ashley Amick, MD, MS; Madeline Sayed, BA; Anne K Chipman, MD, MS

Learning Objectives: Educational Objective: By the end of this course, all learners will have increased confidence and

accuracy in identifying which ECGs require immediate cath lab activation while task switching from a parallel activity.

Abstract:

Introduction: Managing interruptions is a critical skill for emergency physicians (EPs). EP's activities are often interrupted for other concurrent clinical responsibilities, such as emergent electrocardiogram (ECG) interpretations. These interruptions can increase cognitive load and precipitate medical error. EPs learn to balance these responsibilities using a process called task switching. Task switching is a skill that requires practice to master, yet EPs have little exposure to exercises that purposefully integrate task switching during their training. We aimed to address this gap by exposing trainees to task switching events in the form of critical ECG interpretation while they were engaging in concurrent bootcamp activities. Curricular Design: The curriculum was carried out in 2 phases. First, 12 PGY2 residents engaged in a small group session that tested their baseline confidence and ECG interpretation skills on 20 ECGs representing critical cardiac conditions as well as normal variants. The learners assessed each ECG as either "no activation", "activate cath lab", or "no activation but immediate cardiology consultation." The group then reviewed the correct interpretations and critical diagnostic elements of the 20 ECGs. The second phase of the curriculum was longitudinal. During concurrent bootcamp activities study investigators (acting as medical assistants) interrupted tasks and requested the trainees interpret the same 20 ECGs when presented in random order in 10 seconds or less. Confidence as well as percentage of correct interpretations were compared from phase 1 to phase 2. Impact/Effectiveness: Participants showed improved confidence (2.46±0.59 to 2.93±0.60; p=.021; 5-point Likert scale) and increased mean percent correct (0.68±0.11 to 0.79±0.12; p=0.009) following the curriculum. Our curriculum provides a pragmatic, reproducible approach to enhancing critical ECG interpretation with task switching in a way that mirrors the EM practice-environment.

36 Mitigating Interview Day Bias: Pre-Defining Merit to Create Standardized Targeted Questions

Kamna Balhara, MD; Logan Weygandt, MD, MPH; Michael Ehmann, MD, MPH, MS; Linda Regan, MD, MEd

Learning Objectives:

1) Mitigate impacts of bias by defining merit before residency interview season

2) Create behaviorally-based questions addressing those areas of merit

3) Implement questions in a standardized manner for each interviewee

Abstract:

Introduction: Residency interviews are uniquely susceptible to bias. Best practices for equitable interviewing exist in cognitive psychology and corporate literature, yet are rarely implemented in residency interviews. Fewer than 5-22% of residency programs use standardized questions, though this is a known best practice. We describe how we defined merit prior to interview day and created standardized, scale-scored questions addressing those areas of merit.

Educational Objectives: Mitigate impacts of bias by defining merit before interview season;

Create behaviorally-based questions addressing those areas of merit;

Implement questions in a standardized manner for each interviewee.

Curricular Design: Pre-defining merit has been shown to mitigate effects of bias on hiring. Before the 2019-20 interview season, we convened key stakeholders (residency leadership, program staff, faculty, residents) to pre-define merit, specifically the values our program embodies and the characteristics our most successful residents possess. Next, we searched the corporate/cognitive psychology literature to identify behaviorally-based interview questions related to three key characteristics, and applied anchor-based rating scales for responses. Interviewers were trained to ask one of the three questions during each interview and immediately complete the rubric to ensure reliability. We considered standardized question performance during applicant ranking.

Impact/Effectiveness: Merit-based standardized questions represent a low-cost intervention that can be easily implemented at any training program. Interviewers responded positively to our intervention and indicated that it revealed unexpected insights and changed their initial perceptions of applicants. Review of interviewee feedback revealed no significant negative impressions of the standardized questions. This intervention represents a simple step programs can take towards building an inclusive workforce.

37 Novel Medical Student Basic Ultrasound Curriculum

Diandra Escamilla, MD; Sean Burns, MD; Laura Welsh, MD; Kelly Mayo, MD

Learning Objectives: Most students reported not having prior introduction to ultrasound before their ED rotation. Our objectives were for learners to be introduced to the basics of ultrasound, knobology, basic ultrasound physics, and image acquisition prior to their rotation in a virtual based format.

Abstract:

Introduction/Background: As ultrasound becomes increasingly used in different medical specialties, ultrasound training is increasingly incorporated into undergraduate medical education. However, much of the published curricula focus on specific applications. We