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Rosh Review in the Clerkship: Utilization of a Test-Enhanced Learning Resource and Performance on the National Board of Medical Examiners Emergency Medicine Advanced Clinical Exam

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**Impact/Effectiveness:** The quality of presentations varied significantly. The majority of residents included most of the components of the HO tool, but all omitted critical information regarding care of the patient. Interns were less likely to identify anticipated problems and issues requiring follow-up. With one exception, everyone encouraged questions. One team that missed key injuries gave the most organized and efficient HO, showing that the HO quality and medical management quality are distinct issues. Further education on using the tool would be necessary to ensure a culture shift in how residents give and receive presentations. Evaluation may require closer observation of HO in the clinical setting, as well as in didactic sessions. Also, re-examination of the tool is important when evaluating the resident's use of it. During our simulation, we noted that the tool itself might not be ideal for the HO of critically ill patients. The HO skill and the tool both require repetitive practice with feedback.

## 18 Email for Staff Education: The Good, the Bad, the Ugly

*Nelson J, Schroeder Hevesi S, Welborn R, Weiers A, Eide B, Carlson K /Regions Hospital/HealthPartners Institute, St. Paul, Minnesota*

**Background:** Mass casualty incidents (MCI) are part of our reality. The response plans that emergency departments (ED) prepare frequently change and are infrequently practiced, yet must be enacted quickly. Education must happen despite heavy cognitive load, limited budget, and even more limited attention span. E-mail is not optimal, but it's what we have.

**Educational Objectives:** We developed a discipline-specific, spaced learning, e-mail curriculum to teach staff our department's MCI plans. As part of a prospective observational crossover trial, each staff member received a weekly short or long e-mail from a dedicated project-specific e-mail account. Each e-mail covered a small portion of the MCI plans. We hypothesized shorter e-mails would be preferred, leading to improved retention.

**Curricular Design:** Brief overviews of portions of the MCI plan were tailored to various disciplines (physicians, nurses, coordinators and ED technicians). Short (<250 words) and long e-mails (>500 words) covering the same topic were sent using marketing software (MailChimp, Atlanta, GA) to track the rates at which e-mails were opened. Each staff member received one e-mail per week for a total of eight months. Pre-, mid-, and post-implementation quizzes occurred to quantify retention of material. A post-study survey collected impressions from recipients.

**Impact/Effectiveness:** Weekly e-mails were sent to 442 employees. Open rates were uninterpretable. Overall, scores minimally changed across all groups from pre-test (50.6%

correct) to mid-test (53.8% correct) to post-test (52.5% correct). Recipients of short e-mails had greater improvement in scores than recipients of longer e-mails. A survey was sent to all staff. Respondents generally felt more prepared than in the prior year. There was a preference in length of e-mail, with 66% of staff preferring shorter e-mails. Many staff reported even shorter e-mails would be more efficient. While the test scores failed to impress, we learned many lessons about using e-mail to educate: 1) Marketing software is inaccurate and makes useful e-mail look like spam; 2) e-mail not from a known person is less trusted; 3) bullet points are helpful; 4) shorter is better; and 5) conversational style, humor and pictures are very useful. Overall, staff confidence in our ED MCI plans improved through spaced learning via weekly e-mails to staff members, despite relatively similar test scores.

## 19 Rosh Review in the Clerkship: Utilization of a Test-Enhanced Learning Resource and Performance on the National Board of Medical Examiners Emergency Medicine Advanced Clinical Exam

*Bonfiglio C, Fisher J, Whitting T, Smith J / Maricopa Medical Center, Phoenix, AZ*

**Background:** Students who perform well on emergency medicine (EM) clerkships and end-of-clerkship exams are more likely to successfully match into an EM residency. The EM advanced clinical examination (ACE) was released by the National Board of Medical Examiners (NBME) in 2013, and has been used across the nation to rate clerkship performance and future potential of both EM-bound and non-EM-bound medical students since that time. The most commonly used resource for the U.S. Medical Licensing Exam step and ACE exams do not include a subset of EM questions. Rosh Review is an online question bank originally designed for residents and board preparation that uses test-enhanced learning with high-fidelity images and customized testing modalities to prepare medical students to take the EM ACE examination. We predict that use of this resource will positively impact student outcomes on the ACE examination.

**Educational Objectives:** To determine the usage and effect of implementing an online question bank on performance on the NBME ACE exam.

**Curricular Design:** Rosh Review was made available to all students in a required fourth-year, four-week EM clerkship from May–November 2018. Students were given access to over 600 EM Rosh Review questions. They received credit toward their grade based on the number of questions completed. Student performance was tracked on the software's dashboard.

**Impact/Effectiveness:** Forty-one students completed a total of 17,381 questions. The median number of questions completed was 375 with an interquartile range of 265-612.

Thirty-six percent of students completed the entire question bank. The mean NBME ACE exam was 81.5 (standard deviation 6.2) vs the national fourth-year mean of 77.8.

## 20 Just Checking In: A Peer Mentor Program for Emergency Medicine Residents

*McPartlin A, Dehon E, McParlane J, Birnbaumer D / Harbor UCLA Medical Center, Torrance, California; University of Mississippi Medical Center, Jackson, Mississippi; Beaumont Hospital, Farmington Hills, Michigan; Harbor UCLA Medical Center, Torrance, California*

**Background:** Approximately half of resident physicians report symptoms of burnout and depression. Burnout and depression not only have deleterious effects on resident well-being, but also carry consequences directly affecting patient care. Despite efforts by residency programs across the country to implement programs to improve resident well-being, there is little existing evidence that any of these initiatives are significantly effective. Existing efforts may be limited by residents' hesitancy to seek support.

**Educational Objectives:** Just Checking In (JCI) is a peer-to-peer mentoring program characterized by regular contact with all residents, not just those who are showing clear signs of distress. The program is intended to foster a sense of community, provide support, and act as a screening tool for any burgeoning issues.

**Curricular Design:** Peer mentors are recruited through a combination of peer selection and volunteering. All residents are assigned one peer mentor from the resident class immediately senior to their own. A fellow and nonadministrative faculty member are chosen as mentors for the fourth-year residents. Each mentor works with approximately 5-8 resident mentees. Every month, the mentors send text message "check-ins" to their designated resident mentees to inquire about their well-being with additional resources for mental health provided on an as-needed basis. All mentors receive training on good mentoring habits, available mental health resources, and the limits of confidentiality. Specific pathways for resident depression, suicidality, substance abuse, domestic violence, sexual assault, and bullying are discussed. This training is adapted from Stanford's Peer Support Program and is delivered with the oversight of a psychiatry faculty member. Bimonthly mentor meetings are held during the program to provide support and address any issues that have arisen with program implementation.

**Impact/Effectiveness:** All 64 residents in our program are included in this intervention. The efficacy of JCI is being assessed (pre/post) using validated inventories for burnout and depression. Use is assessed by tracking total number of text messages between mentors/ mentees as well as by the number of referrals provided. Anonymous surveys using open-ended

questions will be administered to assess resident satisfaction with JCI. Post data will be collected this spring.

## 21 Residency Families: The Development of a Peer Mentoring Program in an Emergency Medicine Residency

*Tausch K, Grock A, Weichenthal L, Kahale K, Turner-Lawrence D / Beaumont Health, Royal Oak, Michigan; UCLA, Los Angeles, California; UCSF Fresno, Fresno, California*

**Background:** Promoting wellness and resilience is important to combat the high rate of burnout in emergency medicine (EM). Mentoring can potentially ease the demands and stressors of residency. Senior residents may be the ideal mentors for junior residents as they most recently progressed through their junior residency years. Although effective peer mentoring may decrease resident burnout, little has been published on creating effective mentoring relationships.

**Educational Objectives:** At the end of the education intervention, EM residents will have improved wellness/resiliency as measured by the Professional Quality of Life Scale (ProQOL) and Major Depression Inventory (MDI), and they will have Improved understanding of the value of mentorship families as evaluated by a short survey.

**Curricular Design:** Beaumont Health's EM residency program has a resident-faculty mentoring program; however, no formal peer mentoring program exists. Faculty may not be able to effectively advise residents on the day-to-day realities of being a resident, how to thrive on specific rotations, or the nuances of managing current residents' scheduling. Thus, it is valuable to have a peer mentor who can offer this guidance. This type of mentoring can simplify the transition from medical school while providing valuable insight into post-residency plans and goals. The peer mentoring program will involve voluntarily placing each resident into a resident family. Each family will consist of a postgraduate year (PGY) 1, 2, and 3 resident. Residents were surveyed to assess their preferences in a peer mentor. Factors used to assign resident families included gender, home address, future interests, hobbies, and availability. The ProQOL and MDI will be used to assess resident well-being following the one-year intervention. Additionally, a structured questionnaire will further evaluate the effectiveness of the peer mentoring program.

**Impact/Effectiveness:** Almost 80% of the PGY-1 and 2 residents and 60% of the PGY-3 residents completed the survey and were matched to a family. Three PGY-3 residents were each assigned to two families due to a larger number of interested junior residents. Moving forward, we will plan to have families that consist of one member from