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COUNCIL OF RESIDENCY DIRECTORS IN EMERGENCY MEDICIN

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The resident experience with psychological safety during interprofessional critical event debriefings

Hitchner L, Yore M, Burk C, Mason J, Sawtelle Vohra S. AEM Educ Train. 2023 Apr 1;7(2):e10864. PMID: 37013133

This was a qualitative study aimed at determining factors that enhance psychological safety during critical event debriefings. Eight residents at a single institution participated in semi-structured interviews regarding their experience with debriefings. Responses were transcribed, coded, and themes were generated using an inductive approach and concepts from social ecological theory. Psychological safety, a term coined by Dr. Amy Edmundson, is "a shared belief that the team is safe for interpersonal risk taking." Psychological safety is an important condition for interpersonal and intrapersonal growth. Ten themes were identified and grouped into intrapersonal, interpersonal, and institutional factors that impacted resident psychological safety. The authors suggest seven elements to cultivate a safe learning environment, three of which will be highlighted. First, standardize the practice. The study institution incorporated a standard debriefing form that opens with a statement: "The purpose for debriefing is for educational, quality improvement, and emotional processing. This is a not a blaming session. Everyone's participation is welcome and encouraged." Creating time and space, outside of the resuscitation room, was identified as an important element for standardization. Second, attendings who model vulnerability set the tone for honest, specific feedback. One resident commented, "I think when you're willing to be vulnerable you like drop yourself way down [in the hierarchy] and you allow yourself to be a position where if people want to, they could really take advantage of that." Third, allow space for validating statements. "I think it is good having other people share the journey, be present, maybe make you feel just a little bit more confident that despite something not going as you had hoped, there were things that were good," recounted one resident. Allowing space for validating statements, and even including this in the formal script, can increase confidence, familiarity with feedback, and interprofessional bonds. These are helpful tips when conducting your next debriefing. Most importantly, critical event debriefings are important growth opportunities for everyone on the team. This article was an important reminder for me to not miss this growth opportunity, and it contains some helpful strategies for successful incorporation.

-Benjamin Cooper, MD, MEd

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Coaching the coach: A randomized controlled study of a novel curriculum for procedural coaching during intubation

Miller KA, Auerbach M, Bin SS, Donoghue A, Kerrey BT, Mittiga MR, D'Ambrosi G, Monuteaux MC, Marchese A, Nagler J. AEM Educ Train. 2023 Mar 14;7(2):e10846. PMID: 36936084

With the widespread use of video laryngoscopy (VL) for intubations in Emergency Medicine, attending physicians can now provide real-time feedback for learners. This is particularly valuable for pediatric intubations, which are low-frequency and high-risk. The authors' primary objective was to craft a curriculum for VL intubation procedural coaching, and then evaluate its efficacy in a randomized controlled trial.

Investigators analyzed a series of interviews with pediatric emergency medicine attendings to develop a fifteen-minute virtual coaching curriculum. They then conducted a multicenter randomized controlled trial, randomizing attending physician participants to either the developed coaching module, recordings of intubations without narration, or a module on ventilator management. Outcomes included a pre and posttest where participants had to choose the correct feedback to provide based on a video of a laryngoscopy attempt, self-evaluation of confidence in their ability to coach a learner, and narrative comments on the strengths and weaknesses of the curricula in which they participated.

Ultimately, there was no difference in overall score between pre and post assessments between groups. Participants randomized to the coaching module reported increased confidence in their procedural coaching abilities. This was not seen in other participants. There was no correlation between confidence and score on the assessment. Coaching module participants were also more likely to say they would use what they learned in practice. The authors note that there were issues with the pre and posttest that threaten its validity as a learning measurement in this context.

This virtual intubation coaching module increased attending physician confidence related to coaching but did not result in significant change in scores on a pre and posttest. Given the limitations of the assessments it is unclear if the intervention truly had no impact. The curriculum is otherwise well-designed and seems like a useful faculty development tool.

-Aaron Danielson, MD, MAS

Inclusivity in Leader Selection: An 8-Step Process to Promote Representation of Women and Racial/Ethnic Minorities in Leadership

Holladay CL, Cavanaugh KJ, Perkins LD, Woods AL. Acad Med. 2023 Jan 1;98(1):36-42. PMID: 36044272

Discrimination against women and minorities with respect to leadership positions in the medical field has been an ongoing issue for many years. Previously conducted research suggests that unconscious biases tend to lead individuals to select others who are similar to themselves. Unfortunately, these biases have historically led to the unintended consequence of withholding equal opportunities for career advancement to women and racial/ethnic minority populations. However, more organizations are now realizing the negative effects of such biases due to heightened awareness brought on by movements such as the Me Too, Black Lives Matter, and Stop Asian Hate. This, in turn, has caused the organizations to place more emphasis on their diversity, equity, and inclusion (DEI) efforts. While the increased focus on DEI has helped create a more diverse workforce in the medical field, many organizations still lack appropriate representation of women and racial/ethnic minorities in leadership positions. The authors acknowledged that there have been significant attempts at improving DEI amongst many large medical organizations. However, the efforts to address inclusivity in leadership selection remains a relatively underdeveloped and underutilized process. They found that, when selecting for these leadership positions, the emphasis tends to be on a candidate's curriculum vitae (CV) rather than the characteristics and competencies that comprise a great leader. As alluded to previously, candidates from minority backgrounds tend to lack the same opportunities for CV-enhancing experiences and are left at a disadvantage under the current selection system. As a result, it was determined that a deviation was needed from the traditional selection process marked by heavy reliance on an individual's CV. The authors developed a sequential eight (8) step leader selection process that focused more on one's leadership characteristics and competencies in an effort to create a more fair and unbiased approach to leadership selection. The eight (8) step process was derived from multiple literature searches and surveys of current leaders at the University of Texas MD Anderson Cancer Center.

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It was aimed at identifying the characteristics and competencies of leaders. The characteristics and competencies were divided into two (2) major categories; those focused on leading one's self and those focused on leading others, i.e. teams/leaders/institutions. The characteristics/competencies that they were able to identify as essential to effectively leading one's self were inclusion, drive, professionalism, emotional intelligence, and coachability. The characteristics/competencies that were identified as essential to the leading others category were accountability, knowledge sharing, and capacity building. They used these identified characteristics and competencies to provide the framework for the selection process. The eight (8) step process included the following: 1) Policy update; 2) Selection of interview panel; 3) Training of panelists; 4) Screening the candidate pool; 5) Structured interview guides; 6) Final candidate slates; 7) Assessments of final candidates; and 8) Development of the newly selected leader. This selection process was put into effect at the University of Texas MD Anderson Cancer Center and results were gathered over a three (3) year period immediately following its implementation. At the executive leadership level, gender inclusion went from 0/8 (0%) women to 5/14 (36%) women, while racial/ethnic minority inclusion rose from 3/8 (38%) to 6/14 (43%). At the executive director level, gender inclusion rose from 31/56 (55%) women to 52/74 (70%) women while racial/ethnic minority inclusion rose from 12/56 (21%) to 45/74 (61%). Finally, the department chair level saw an increase of gender inclusion from 19/66 (29%) women to 25/74 (34%) women and the racial/ethnic minority inclusion rate rose from 25/66 (38%) racial/ethnic minorities to 32/74 (43%). The authors also noted that there was an increase in employees' perception that their institution valued DEI. In 2021, 91% of employees felt that their organization valued DEI compared to 78% the year prior to the implementation of the selection process in 2017. Systemic biases have plagued our country and the organizations within it for years. Inclusion of populations that have been the subject of prejudice makes for stronger organizations. In order for this to occur, one must first be aware of the biases which have helped perpetuate discrepancies in leadership representation. Secondly, one must implement policies directly aimed at addressing the identified biases, just as the authors did here. Equal representation amongst women and racial/ethnic minorities in leadership positions may not yet be where it needs to be, however, strategies such as the one proposed in this article is a step in the right direction.

-Brady Winfield DO (PGY-2) / Amrita Vempati MD

Exploring Match Space: How Medical School and Specialty Characteristics Affect Residency Match Geography in the United States

Hasnie UA, Hasnie AA, Preda-Naumescu A, Nelson BJ, Estrada CA, Williams WL.Acad Med. 2022 Sep 1;97(9):1368-1373. PMID: 35703188

Optimizing the UME to GME transition continues to be an extremely important topic, with recent efforts focusing on improving the effectiveness of the application process. With an increasing emphasis on holistic review and recent declines in the US MD senior student interest in our specialty, our program directors are looking for ways to identify applicants with the most interest in their program. Per NRMP data, students consistently report that geographic location is one of their most important considerations while deciding where to apply; this has led to ERAS introducing a mechanism for applicants to explicitly signal their geographic preferences. In this interesting study, the authors look at Match and ERAS data to understand how students' geographic history affects their program placement. The study looked at 2018 to 2020 graduates (n = 26,102) of LCME-accredited MD-granting US medical schools (n = 66 schools). The authors created a new metric of geographic relationship between medical schools and residency programs, called "match space." This was a 5-point ordinal scale by where the student matched: 1 = home institution, 2 = home state, 3 = an adjacent state, 4 = the same or adjacent U.S. Census division (and not adjacent state), and 5 = skipped at least one U.S. Census division. Primary results were that 16% students used match space 1, 19% match space 2, 15% match space 3, 25% match space 4 and 25% match space 5. A higher match space (i.e., a geographically distant match) was associated with private medical schools and specialty competitiveness (an endpoint based on three surrogates - number of PGY1 positions available, US senior fill rate and salary after graduation). Schools that had a higher percentage of in-state matriculants had a lower match space, as did graduates of top NIH-funded schools (indicating that these students matched closer to their medical school). While the results are not suprising, they do have important implications for our resident recruitment processes, and for future workforce distribution needs. The data is also pre-COVID, and perhaps these results are no longer valid. The "match space" metric may be a useful future measure of geographic trends and forms an interesting target for future study.

-Nikhil Goyal, MD

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Early vs Single Match in the Transition to Residency: Analysis Using NRMP Data From 2014 to 2021

Ashlagi I, Love E, Reminick JI, Roth AE. J Grad Med Educ. 2023 Apr;15(2):219-227. PMID: 37139220

The transition to residency has become increasingly time-consuming and expensive. To address this issue, the Early Result Acceptance Program (ERAP) has been proposed as an optional, binding "early match" for residency recruitment in obstetrics and gynecology (OB/GYN). This program aims to reduce the burden of applications and interviews by allowing applicants to submit a limited number of applications to OB/GYN programs. However, concerns have been raised about the potential destabilization of the residency Match and the impact on applicants who do not match early.

To evaluate the impact of ERAP, researchers conducted a data-driven analysis using National Resident Matching Program (NRMP) data from 2014 to 2021. Through computer simulations, they compared the outcomes of the ERAP to the historical Match for each year. The simulations revealed that the implementation of ERAP would result in a significant number of mutually dissatisfied applicant-program pairs, leaving a large percentage of applicants with less preferred matches.

The researchers used de-identified NRMP rank order lists (ROLs) and Match results from 2014 to 2021 for all residency programs and applicants. They validated the matching algorithm used by the NRMP and simulated ERAP using a computer model. In the early match round, OB/GYN-preferring applicants applied to their top 5 OB/GYN programs, and programs offered up to 50% of their available positions. Applicants and programs unmatched after the early match proceeded to the main match round.

The results indicated that ERAP would lead to a substantial number of less preferred outcomes for applicants and create blocking pairs, where both the applicant and program would prefer each other over their ERAP-determined match. These findings suggest that ERAP could destabilize the residency market, potentially leading to rule-breaking behavior and further destabilization in subsequent years. It would disproportionately affect applicants with DO degrees and international medical graduates (IMGs) and create difficult decisions for couples applying to multiple specialties. Sensitivity analyses explored different application limits and percentages of positions offered in the early round, and similar trends were observed.

The study has limitations, including the huge assumption that historical data reflects future preferences of applicants and programs. My personal belief is that applicant rank lists would be different if the applicants knew they were entering a early-match system.

This study suggests that implementing ERAP would have negative consequences, destabilizing the residency market and disproportionately affecting certain applicant groups. These findings raise important considerations for the future of residency recruitment and emphasize the need for careful evaluation and potential modifications to any proposed changes.

- Samuel D. Luber, MD, MPH / ChatGPT

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