



From Diversity and Inclusion to Antiracism in Medical Training Institutions

Argueza BR, Saenz SR, McBride D. Acad Med. 2021 Jun 1;96(6):798-801. PMID: 33637659

The year 2020 has brought into the light the difficulties communities of color, particularly the black community, have experienced for a long time. While many medical training institutions have denounced racism and expressed solidarity, there has been little progress in increasing diversity and inclusion at the academic level. The authors of this article, early-career physicians of color, highlight common barriers to progress and give nine recommendations to implement an antiracist approach to increasing diversity and inclusion in academic medicine.

The first recommendation is commitment to antiracism; institutions must commit to equity and justice to foster a diverse and inclusive workforce. The next recommendation is to investigate an institution's policies that may be rooted in systemic racism in order to effectively create antiracist policies. Third is a very important recommendation which emphasizes transparency by collecting, reporting and responding to data on racial inequities and using the metrics in implementing policy. Next, while commitment to antiracism and investigation into policy are important, it is hard to put them into action without proper funding and resources. The institutions must be willing to put time, money and resources to put policy into action. The fifth recommendation involves avoiding "minority tax" by not putting burden on people of color who may not want to do antiracist work; instead, by supporting physicians who are willing to engage in the work and by hiring external experts when necessary. The next recommendation is to share and yield decision-making power by putting people of color in positions of influence rather and having them play a key role in setting agendas. Next, the authors recommend institutions to address racism intentionally by identifying which groups are underrepresented at their institution and directing resources to those who experience the greatest inequities. The eighth recommendation is for institutions to develop antiracism curricula which provide training in giving actionable items so everyone has tools to practice antiracism. And, the authors' final recommendation is to utilize allies with privilege to leverage it for positive change by advocating with their colleagues of color for antiracist policies.

In this Scholarly Perspective, the authors provide nine actionable recommendations that are beneficial in taking an antiracist approach to bring about an institutional change. It would be interesting to see the results of medical training institutions that systematically implement these recommendations as they move towards an antiracist approach in recruitment and faculty retention.

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Quarterly Medical Education UPdate



Prevalence of Discrimination, Abuse and Harassment in Emergency Medicine Residency Training in the US

Lall MD, Bilimoria KY, Lu DW, Zhan T, Barton MA, Hu YY, Beeson MS, Adams JG, Nelson LS, Baren JM. JAMA Netw Open. 2021 Aug 2;4(8):e2121706. PMID: 34410392

Many do not choose to go into medicine with the knowledge that they will be working in a hostile environment. Unfortunately, harassment in medicine is a long standing issue and not getting any better. The downstream effects of harassment are known to directly affect job performance and productivity. According to recent research, more than two-thirds of female orthopedic residents reported sexual harassment during their training ranging from physical to verbal harassment.

Sadly new research addressing this same topic in emergency medicine (EM) shows we are not doing much better than our specialty colleagues. In the winter of 2020 a survey was offered to all EM residents who participated in the 2020 American Board of Emergency Medicine in-training exam. The survey was administered electronically following the end of the exam and consisted of thirty-five multiple choice questions that addressed frequency, sources and types of mistreatment. Additional questions addressing suicidal thoughts were also included. Mistreatment was sorted into 3 main exposure groups: none, few times a year, or few times or more per month.

Given the distribution method for this survey, the authors were able to accomplish a 94% response rate to a portion of survey and 79.7% response rate for survey completion. Only one residency program did not participate in the survey. Responders were a majority male (62.1%) and non-Hispanic white (64.0%). Around 6% of residents answering identified as LGBTQ+ and 77.5% of all residents reported being married or in a relationship.

Shockingly, almost half (45.1%) of all residents reported exposure to a form of workplace mistreatment. This mistreatment included discrimination, abuse or harassment. One of the primary sources of mistreatment was patients and/or their families. This mistreatment included gender discrimination (58.7%), racial discrimination (67.5%), physical abuse (85.2%) and sexual harassment (69.1%). Other sources of mistreatment included attending physicians, nurses and other residents or fellows. Attending physicians were responsible for almost 1 in 5 cases of verbal abuse and 1 in 4 episodes of discrimination based on pregnancy or childcare status. Nursing also was found to be discriminatory based on pregnancy/childcare status and gender in just over 20% of cases.

Suicidal thoughts that occurred within the past year were present in 2.5% of the residents with almost equal prevalence across gender and race/ethnicity.

One limitation acknowledged was that exam related anxiety could have played a role in answers while taking the survey post-exam, possibly in a negative or positive way.

As the authors noted, previous research has shown “many EM clinicians consider verbal abuse, insults and derogatory behavior to be normal and just a part of the job.” To say this is an expectation for EM physicians and a normal part of our day is completely unacceptable. This study shows we have much work to do and the problem not only lies with those we are treating, but those who work alongside and train our future EM physicians. We can and should do better.

- Christopher Sampson, MD



Exploring the Association Between USMLE Scores and ACGME Milestone Ratings: A Validity Study Using National Data From Emergency Medicine

Hamstra SJ, Cuddy MM, Jurich D, Yamazaki K, Burkhardt J, Holmboe ES, Barone MA, Santen SA. Acad Med. 2021 Sep 1;96(9):1324-1331. PMID: 34133345

This paper investigates the relationship among USMLE STEP 1 and 2 CK scores and the performance of Emergency Medicine (EM) residents measured by ACGME milestones. Data was collected from 2013 to 2018 and included 6,618 EM residents from 158 training programs who had graduated from allopathic (MD) schools in the United States. This study employed a convergent and discriminant validity evidence design. A group of subject matter experts judged the expected association strength for each combination of STEP scores and EM milestones. Based on expected associational strength the top 3 (MK-01, PC-04, PC-05) and bottom 6 milestones (PC-6, PC-08, PC-09, PR-01, SBP-02, ICS-01) were selected for multilevel regression analysis. Both STEP examinations had the highest correlation with MK-01, (medical knowledge); 0.06 for STEP 1 and 0.12 for STEP 2. All other milestones had weak positive correlations with USMLE scores. Only STEP 2 correlations rose to statistical significance.

STEP 2 CK has a stronger correlation with Medical Knowledge assessed in residency than STEP 1; however, the association is small. The authors cite an increase of 1 SD in STEP 2 CK score would predict a 0.12 increase in MK-01 milestone rating. For those concerned with losing STEP 1 to evaluate applicants' medical knowledge as it transitions to pass/fail, they can be comforted that STEP 2 CK is likely a better predictor. However, at the end of the day only a very large score difference would be associated with a noticeable difference in residents' knowledge in residency.

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Quarterly Medical Education UPdate



Comprehensive Reform and Greater Equity in Applying to Residency – Trainees’ Mixed Responses to a Pass/Fail USMLE Step 1

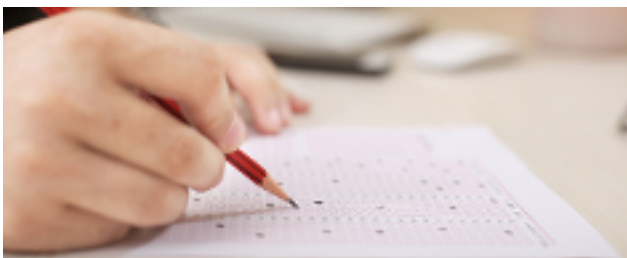
Ganesh Kumar N, Pontell ME, Makhoul AT, Drolet BC. J Grad Med Educ. 2021 Oct;13(5):711-716. PMID: 34721801

The upcoming shift from numerical to pass/fail scoring for USMLE Step 1 has been a controversial change in undergraduate medical education. Many are left wondering how this will affect the residency application process for all students, but specifically for underrepresented minorities and DO/IMG applicants. The goal of this survey was to assess perspectives of medical students, residents, and fellows regarding the upcoming transition. Anonymous surveys were distributed to over 1,000 medical school deans and DIOs throughout the summer of 2020. While the response numbers were large (> 11,000), this represents only 3.3% of the total trainee population in the US.

Students (43%) favored the change more than residents/fellows (31%). Nearly 14% of medical student respondents were considered underrepresented in medicine (UIM), which falls between the national average of MD students (21%) and DO students (8.5%). Authors found that this group was more likely to favor the change (50% vs 34% for non-UIM trainees) and agreed that it would decrease socioeconomic disparities (44%) more often than non-UIM trainees (25%). Finally, analysis also evaluated perspectives of DO and IMG trainees, and found that nearly twice as many of these trainees felt that they would be disadvantaged compared to MD students because of the change (61% vs 31%).

As numeric Step 1 scores functioned as a standardized metric among all types of medical trainees, authors speculated this could explain the resistance to the change seen from DO/IMG students. Overall, authors of this article found mixed reactions to the new USMLE Step 1 scoring system, which only stirs up more questions about the implications of this transition for minority and DO/IMG applicants.

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The Otolaryngology Residency Preference Signaling Experience

Pletcher SD, Chang CWD, Thorne MC, Malekzadeh S. . Acad Med. 2021 Oct 5. PMID: 34618735.

This timely article summarizes Otolaryngology (ENT)'s experience with preference signaling. Signaling is one of the proposals aimed at mitigating the issues associated with large numbers of residency applications received by each program. In the past, applying to a program was considered a signal, or significant expression of interest in the residency. Currently, programs receive dozens of applications for each position, hence the application signal is too weak to be of any benefit; students therefore use alternative signals to express interest, such as securing away rotations at programs of interest. Programs search for signals such as letters from known faculty, geography, etc; these signals are often unclear. Preference signaling allocates a small, fixed number of "signals" to each applicant. When a program receives a "signal" along with a student's ERAS application, they should interpret that as an expression that she is truly interested as she sent one of her limited signals to them. Accordingly, she stands out from the other applicants and may deserve special consideration for an interview. The student would be best served by sending her signals to programs that would typically not have invited her, such as those outside her home program.

ENT implemented a signaling process in the 2020-21 interview season. Each applicant was provided up to 5 signals to use to express special interest in a program. All programs elected to participate, and 558 of 611 student applicants ultimately used signals. Number of signals received per program was 22 +/- 17 (median 16, range 0-71). About half of all applicants and PDs responded to a survey about the process, with 77% of responding applicants and 91% of PDs favoring continuation of the process. Signals appeared to yield the expected benefit to applicants, as signaled programs were more likely to invite them. Major drawbacks appear to be the lack of a control group, focus on preliminary outcomes and a relatively large number of signals per applicant. It is unclear if programs were blinded to an applicant's choice to participate in signaling.

This study demonstrated that the average ENT program was able to identify 22 applicants from a pool of ~300 who were highly interested in their program. It's unclear if these applicants would have been invited regardless of signal, or whether applicants were able to secure positions at residencies that would not typically have considered them. ERAS 2022 is piloting a signaling process with Internal Medicine, General Surgery and Dermatology, and this is likely to yield interesting insights into whether preference signaling will come to EM in the future.

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Quarterly Medical Education UPdate



A phenomenological investigation of patients' experiences during direct observation in residency: busting the myth of the fly on the wall

Rietmeijer CBT, Deves M, van Esch SCM, van der Horst HE, Blankenstein AH, Veen M, Scheele F, Teunissen PW. Adv Health Sci Educ Theory Pract. 2021 Oct;26(4):1191-1206. PMID: 33765197

Investigators from the Netherlands attempted to answer the question, "What is it like for patients to have a consultation with a resident while the supervisor is observing the resident?" offering a unique, patient perspective on direct observation (DO) in medical education. They did so in a general practice context in which the attending physicians have an established patient relationship, but not necessarily the resident. The introduction highlights many barriers to DO including resident fear of being characterized as incompetent, "unnatural" behavior with an observer present, and fear of being criticized in front of the patient leading to loss of trust. Despite these potential pitfalls, the authors acknowledge that DO can be indispensable for purposes of feedback and assessment. There is a paucity of literature describing DO from a patient perspective.

The researchers used a phenomenological approach, which seemed a bit nebulous, but involves the absence of pre-fixed interview method and a focus on pre-reflective experiences (i.e. what they experience before they have reflected on it). A total of 11 patients across five practices agreed to participate and were interviewed after a DO encounter. The researchers were surprised by how much effort it required to solicit patient thoughts about the DO experience. After a rather complex series of transcript reading, reflective writing and coding, the authors identified five essential elements of the patient experience: Patients experience DO situations (1) as a choice, (2) as two doctors interacting with one another and with them, (3) as a junior doctor who was observed by a senior doctor, (4) as occasions where an unknown, or little known, doctor was being observed by a more familiar one, and (5) as offering them a new role as collaborators in medical education.

While the aforementioned essential elements are not surprising, there were at least two worthwhile conclusions to consider when employing DO. First, when done well and after obtaining consent, DO is generally well-received by patients. Adverse effects were rare, and patients perceived DO as a win-win situation: they valued their contribution to education, and they felt that they received even better care. Second, patients tended to prefer some interaction with the supervising physician; thus, the authors argue, the frequently practiced "fly on the wall" approach should be abandoned in favor of "participative direct observation" (PDO). The authors argue that PDO may alleviate the resident-perceived threat of assessment and facilitate a less awkward encounter that better addresses patients' needs.

While there are many obvious methodological issues that limit generalizability to emergency medicine, the premise that a more participative approach to direct observation yields a better patient and resident experience may still translate well to our environment. During your next DO encounter, consider abandoning the fly on the wall approach in favor of a more participatory one.

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