2020-2021 Recruitment Cycle: Issues for Programs Considering Diversity and the COVID-19 Pandemic

The COVID-19 pandemic has affected nearly every aspect of medical education in 2020. Already, the 2020-2021 residency recruitment cycle has been impacted in several ways, including restrictions on candidates' ability to travel, the cessation of external fourth-year rotations, and the introduction of video interviewing. The penultimate year for most domestic applicants has been disrupted, and many have had difficulties completing coursework and testing, suffered financial hardships, and/or have had difficulties in the application process for numerous reasons. Underrepresented in medicine (URiM) candidates may be at a particular disadvantage this year due to the disruption of longstanding programs and processes that play important roles in advancing diversity in US residency and fellowship programs.

For programs considering diversity, below are issues and insights that may assist in these challenging times.

Issue #1: Loss of Away Rotations
To increase diversity, many programs have used a visiting clerkship program for fourth-year medical students, allowing a program to determine firsthand whether students look as promising in person as would be anticipated from their formal application. For many URiM students, a strong performance during a clerkship may allay concerns inferred from their academic record. Programs are often inclined to offer visiting students interviews that they might not otherwise have been given were it not for the experiential evidence of excellence observed during the rotation. Conversely, one of the continuing problems residency programs have in attracting URiM candidates is demonstrating the inclusiveness of their learning environment. It is important that URiM residents trust that a program will support them and see evidence of how well-suited it is to embrace diverse learners. One of the leading causes for attrition in graduate medical education (GME) programs is a described lack of "fit" in the environment between the resident and program. The away rotation allows both parties to assess the fit of the candidate with the program.

In the absence of personal experience with applicants, there may be an emphasis on standardized testing as a measure of applicant quality because there is limited other knowledge of the candidate's true cognitive potential and clinical skills acquisition abilities. Evidence suggests that URiM medical students do not score as highly as non-URiM learners on standardized examinations, but licensing tests were not designed to assess clinical skills acquisition potential or to predict success in clinical practice. Seeking evidence to gain additional familiarity with applicants' cognitive abilities beyond the standardized examination is essential in increasing diversity.

Finally, in the absence of direct personal experience with applicants, the weight of letters of recommendation and class rankings within the Medical Student Performance Evaluation are subject to interpretation. There is considerable evidence for gender bias in letters of recommendation and performance evaluations in medical school and residency. Evidence is growing that there may be similar issues with regard to race. It is likely impossible that structural racism that is embedded in society can be discounted when a letter or an assessment is composed without intentional thought applied to attempt to mitigate bias. In-person witnessing

of an individual performing in the capacity needed for accurate assessment is the true standard missing from this year's cycle with the loss of the visiting clerkship.

Programs might:
a) Consider developing virtual electives for fourth-year medical students to allow applicants to engage intellectually with a program and demonstrate their capabilities and potential beyond their academic record, and to determine whether the pedagogy, tone, and temperament of their interactions with faculty members and residents are consistent with their expectations of fit within the program.
b) Work with specialty associations or national medical societies to create opportunities for URiM residency applicants to virtually present their research or case presentations to programs for review.
c) Consider including an opportunity for candidates to present an optional video case or research synopsis, either live or prepared, as part of their residency interview process.
d) Consider preparing a video presentation of the program highlighting the evidence of inclusive practices; testimonials of diverse current learners, alumni, and faculty members; and descriptions of patient, medical center employee, resident and faculty member demographics. Statements of systematic, ongoing, mission-driven efforts to increase workforce diversity and provide inclusive learning environments articulated by program and institutional leadership could be helpful to applicants in such a presentation. Testimonials of community partners and potentially even patients served by the program/institution could give candidates a feel for the environment.
e) Consider the use of situational judgement tests and holistic admission practices that emphasize more elements of a candidate's complete portfolio than an emphasis on standardized testing alone would provide. This may include abandonment of the three-digit USMLE Step 1 score this cycle, considering the exam only as a P/F floor for applicants, or deemphasizing the use of Step 1 thresholds that fuel competition but do not improve candidate quality. Consider the use of this year's experience with COVID-19 to assess resilience and character of individuals who have had to overcome barriers and have demonstrated a deeper sense of community through adversity.

Issue #2: Loss of In-Person Interviews
In this cycle of residency recruitment, all interviews will be virtual. Based on where a candidate lives, the access to broadband and wireless service may differ. Many URiM applicants may lack sufficient resources personally or in their communities to have adequate Internet service. Further, many may be less prepared in video interviewing skills and may be unable to receive personal coaching on how to effectively use this format for communication.

Programs might:
a) Develop or work with program director associations, specialty societies, and professional organizations to develop resources on skills to enhance virtual interviewing for both applicants and selection committee members who conduct virtual interviews for their programs. The ACGME's online learning portal, Learn at ACGME, includes a short video presentation that provides all learners with a number of suggestions to improve their online presence during interviews. No login or password is required to access this video, and program directors are free to refer applicants to it or link to it from their own sites.
b) Engage residency selection committees in implicit bias training to mitigate unconscious preferences and stereotyping of URiM applicants and to allow as fair and equitable interviews as possible. This includes addressing prejudicial impressions regarding appearance, interview setting backgrounds, and connection issues that may be more

difficult for applicants to control. This also includes consideration of the appropriateness of natural hair styles (e.g., curls, braids, locs) in professional settings.

Issue #3: Elimination of the Need for Travel

Since all interviewing will be virtual, restrictions based on the physical limitations and associated expense of applicant travel may make it considerably easier for applicants to accept more interviews. As such, the number of each candidate's applications to programs will be limited only by the hours in a day available for interviews. If the number of interview opportunities programs offer remains fixed based on historical projections, programs of a certain tier may find they are all interviewing the same small set of "low-risk" candidates, meaning that "intermediate" and "higher-risk" candidates might be left with fewer opportunities to interview. This would in turn create additional issues during the Supplemental Match, because fewer applicants may have received initial interviews. Programs will have difficulty using previous experience in determining how long a rank list they will have to submit in order to increase the likelihood of filling available positions. Having too few interview slots this year may disadvantage URiM candidates because they are perceived to be disproportionately in the "intermediate" and "higher-risk" candidate groups.

Travel to a program for an interview was a selection criterion that demonstrated commitment to ranking a program if the applicant was willing to invest in a trip to a program in a distant part of the country. To compensate for the uncertainty in knowing the likelihood of a candidate to rank and matriculate at a program for which there is little apparent connection, some programs may give historical preference to feeder schools, or greater weight to the pedigree of an applicant. This practice may inadvertently disadvantage URiM students who are less represented in the elite schools for which pedigree is favored.

For URiM applicants, who may have fewer resources, the ability to interview without incurring travel expense provides programs with a greater opportunity to attract diverse candidates to areas of the country with less diversity. Previously, the risk of interviewing in such programs may have been too expensive for a URiM candidate to take the chance on paying to travel there only to find it was not a good fit.

> **Programs might:**
> a) Consider expanding the number of interview slots offered to accommodate the likelihood that many programs will interview and rank the same small subset of applicants; or, establish a practice as to who should be granted an interview that takes into account factors that transcend medical school pedigree and an emphasis on standardized testing.
> b) Give greater attention to how a rank list is composed, because there may be increased risk of having greater competition for the lowest-risk candidates.
> c) Rigorously prepare to engage in a competitive Supplemental Offer and Acceptance Program, because there could be a large number of unmatched individuals if interview slots aren't expanded and/or rank lists aren't extended, and give deeper consideration of candidates outside the program's typical candidate pool.
> d) Act in accordance with the NRMP Match Code of Conduct which discourages program directors from soliciting or post-interview communication that is disingenuous for the purpose of influencing applicants' ranking preferences.

Issue #4: Effective Recruitment of URiM Candidates

One of the most effective means to educate fourth-year medical students about GME opportunities is the Student National Medical Association Annual Education Conference. It's

residency recruitment fair runs three days and is attended by a large number of GME programs and institutions that want to demonstrate their commitment to diversity and wish to build rapport with a number of the over 2000 attendees. It offers the chance for students to meet potential mentors and ambassadors for programs and increases exposure to programs through the vast network that is established there. Additional recruitment events take place at the Latino Medical Student Association National Meeting and the National Hispanic Medical Association Annual Conference, and there are networking opportunities for residents at the AAMC Annual Meeting. All of these were cancelled this year due to the pandemic. Since a number of visiting clerkships addressed in Issue 1 above were also eliminated, the network of advisors, mentors, and sponsors for URiM students has been greatly reduced. Programs will have to find other opportunities to let prospective applicants know of all the elements they have created to increase diversity and make their learning environments more inclusive and equitable. This includes correcting misconceptions that pose barriers prospective applicants may harbor regarding the qualifications for consideration for the specialty and program.

Programs might:
a) Consider working with the American Medical Association (AMA), American Osteopathic Association (AOA), Association of American Colleges of Osteopathic Medicine (AACOM), Association of American Indian Physicians (AAIP), Association of American Medical Colleges (AAMC), Association of Native American Medical Students (ANAMS), Latino Medical Student Association (LMSA), National Hispanic Medical Association (NHMA), National Medical Association (NMA), and Student National Medical Association (SNMA) and others to develop direct links between programs and diverse applicants through programming, newsletters, advertising, and other means to increase visibility and directly interact with student applicants. SNMA hosted a virtual Residency Recruitment Fair in September and other such student organizations may do the same to provide opportunities for their students to communicate with potential mentors and recruiters from specialty programs who may attend.
b) Engage specialty mentoring groups, such as Minority Ophthalmology Mentoring, American Society of Anesthesiology's Mentorship Program, NextGen Pediatrics, etc. to assist in increasing program visibility. This may include research or case presentation symposia for students to display their interests, abilities, and experience that transcend their written applications.
c) Consider co-development of virtual events with local chapters of the above organizations, such as research symposia, Jeopardy!, or other activities to build program recognition.
d) Engage programs' current URiM residents, fellows, and faculty members, minority housestaff associations, offices of diversity and inclusion, and URiM alumni in efforts to inform the applicant community about opportunities at the institution. Programs may wish to engage with these resources internally to seek their opinions about their networks of potential applicants and involve them actively in the change required to make their learning environments more inclusive.

Issue #5: Use of Tiering Algorithms to Schedule Resident Interviews
In response to the scheduling challenges projected in the 2020-2021 Match, several commercial technical solutions have become available to the GME community. Companies propose using artificial intelligence or other machine-based algorithms to tier candidates and to recommend scheduling lists of these individuals to programs that use their service. Using algorithms based on existing patterns of recruitment may risk only recapitulating current outcomes. If a goal for a program is to enhance current diversity outcomes, the process used for interview selection will

need to incorporate and weight information that has not been viewed as significant in deference to more easily quantifiable metrics, such as standardized examination scores.

Programs might:
a) Thoroughly understand the algorithms used for candidate ranking by commercial vendors to avoid the practice of tiering candidates based on a univariate item, such as USMLE Step 1 scores.
b) Engage in thoughtful decision-making regarding incorporating holistic candidate information and weighting it in innovative ways to promote diversity and fulfill service needs of society's underserved populations.