Reckoning with Racism in the Match Process

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Each fall, residency program directors across the USA set out to recruit a new class of trainees via the Match. It is a long and complex process for programs and applicants whereby each attempts to learn the attributes of the other using limited contact and carefully curated information. Leaders in Graduate Medical Education (GME) and the teams of faculty and trainees who help to carry out recruitment and interviewing each year review many applications submitted by people they may not meet and meet many applicants in interviews who they may not see again. The National Resident Matching Program (NRMP) releases to programs the Match outcomes only for applicants who were ranked by that program. The outcomes for other applicants are not known. So part of the process, too, includes wondering if these applicants, new junior colleagues, have been able to secure positions for themselves and hoping that they are pleased with their Match.

The 2021 Match was made even more challenging as residency programs and applicants attempted this process for the first time on virtual platforms and amid the pain and upheaval of the dual pandemics of COVID-19 and a reckoning with longstanding racism in the USA. The questions about what had happened to certain applicants became more acute, particularly, in the authors’ experience, as we considered the applicants belonging to racially and ethnically minoritized groups whom we interviewed and whose applications we read. Applicants shared their stories with us, relative strangers, earnestly, bravely, via their computer screens and their essays. Conversations about racial justice and health equity surrounded us all and were particularly salient to the narratives of applicants seeking psychiatry training. The environment prompted some applicants to share harrowing experiences from their own lives and the lives of patients they had cared for. We could see the toll that the time and process had taken on these students and the end of our time together felt painfully abrupt.

The conflicting dynamics of humanism and evaluation, of gatekeeping and collegial responsibility, were made ever more poignant by the awareness that both program leaders and applicants have known for some time that traditional evaluation metrics broadcast and perpetuate the systemic disadvantages that students have accumulated across generations. Before arriving at the point of applying for residency training, these students have had to contend with gateway exams [1], clerkship grades [2, 3], letters of recommendation [4, 5], and honors society nominations [6, 7] that have been shown to be biased against students who belong to groups underrepresented in medicine. Additionally, the learning environment has failed to protect minoritized students from high levels of racial harassment and social isolation which can also affect academic performance [8]. Perhaps it is as difficult to contend the knowledge that little has been done to correct these disadvantages.

A Dearth of Data

What would be most helpful to guide effective action against inequities in the Match process is an accurate description of the situations encountered by medical students who belong to racially and ethnically minoritized groups as they apply for residency training conveyed via data that thoroughly describes application patterns, interview invitations, and Match results for all applicants, over time, and specifically since the Match of 2021: for instance, understanding the positive or negative impact of the structural and individual changes that occurred as a result of the COVID-19 pandemic, such as virtual interviews that did not require students to spend resources on travel and hotels and interview attire; limited STEP II information because exams were canceled due to...
COVID and not always able to be rescheduled before applications were submitted; and efforts and priority that programs granted to diversity and equity initiatives. To provide context to these changes, it is crucial for the GME community to work together with the AAMC and the NRMP to begin to collect and report out data that will promote understanding of whether racial disparities exist in the number of interviews offered and, even more critically, in the rates of students who go unmatched. Examination of this data is particularly important as the number of GME training spots fails to keep pace with the number of applicants for training. In the 2022 Match, there were 39,205 available training positions for 42,549 applicants who submitted preference lists. For US MD seniors, there were 19,902 applicants who submitted program choices and 18,486 who matched to PGY-1 positions. For US DO seniors, there were 7,303 applicants who submitted program choices and 6,666 who matched to PGY-1 positions [9].

Currently, the available data by demographic factors is limited to the number of students who apply to residency by specialty, and to the current total number of residents in all US programs by specialty. Based on the available data, African American or Black, Asian, and Hispanic or Latino students who applied to psychiatry residency training programs in 2017 through 2020 had a lower proportion enrolled in a residency training program in 2021 which is when they would be expected to be in training than did White students who applied to psychiatry residency training programs (Table 1). There is not a way to fully understand currently why these disparities in application and matriculation patterns between students who belong to racially and ethnically minoritized groups and White students exist. Nor is it possible to determine where in the pathway to residency these disparities originate. Nonetheless, the disparity suggests that it is imperative that schools of medicine and departments of psychiatry prioritize addressing the loss of potential psychiatrists along the application, Match, and potentially training process and not focus exclusively on a presumed underrepresented psychiatrist “pipeline” problem.

### Table 1

| Race/Ethnicity                      | 2017–2020 Total Applicants | 2021 Residents (PGY1-4) | 2021 % Applicants Enrolled |
|-------------------------------------|----------------------------|--------------------------|----------------------------|
| African American or Black           | 2116                       | 455                      | 21.5%                      |
| Asian                               | 5945                       | 1307                     | 22%                        |
| Hispanic, Latino, or of Spanish Origin | 1604                 | 506                      | 31.5%                      |
| White                               | 6788                       | 2806                     | 41%                        |

### A Way Forward

The NRMP decision to begin collecting demographic data with the 2022 Main Residency Match is a critical step toward enabling a complete understanding of the ways in which racial and gender-based inequities are impacting residency applicants [12]. It is essential that these data be comprehensive while maintaining the integrity of the Match and the preferences of Match participants. Using data that is currently collected from applicants, the NRMP and the American Association of Medical Colleges (AAMC) through the Electronic Residency Application System (ERAS), could collaborate to generate de-identified reports for all specialties by race, ethnicity, and gender that detail the number of applications submitted, interview invitations accepted, number of programs ranked, and rates of going unmatched before and after participation in the Supplemental Offer and Acceptance Program. This could be accomplished with an enhancement to the NRMP Advance Data Tables to include race, ethnicity, and gender demographics in the number of total applicants and number of total matches columns in the Match Summary tables for MD and DO seniors each year. For programs without an adequate sample size to avoid a single applicant in any demographic category, meaningful categories for data aggregation could be determined. As residency programs use the ERAS Program Director WorkStation to invite applicants to interview, the number of interview invitations extended or the proportion of applicants in each of the already existing demographic categories who is extended an interview could be added to the current format of the ERAS statistics reports overall and for each specialty annually. To best serve individual residency programs, the NRMP could provide reports of the demographics of applicants who are ranked, ranked to match, and ultimately matched to their programs. While program directors may already have this data and many programs collect it on their own, such reports, particularly if they include multiple years of data, will serve to highlight any areas of poor representation, assist programs in localizing any points in their process during which racial/ethnic or gender representation...
declines significantly, and to encourage tracking of progress or regression over time. It is important that demographic data be included in the reports that are easily and routinely accessed by GME leaders as opposed to having access limited by the need to request special reports that require additional time, effort, or fees.

Applicant privacy is a crucial concern and it is important that these reports remain de-identified and focused on program behavior as opposed to applicant behavior. While some programs do this currently, supplying programs with reports of the demographics of applicants on their rank lists may result in more individual programs choosing to make the demographic characteristics of the applicants on their rank lists publicly available on websites or in recruitment materials. While we support transparency as a means of encouraging progress toward racial equity, programs must also consider the risk to applicants or current trainees of being “featured” in this way. There is a risk that trainees who belong to under-represented groups in medicine could feel tokenized at the same time as the program wishes to celebrate progress. Additionally, programs with few trainees of a particular gender or who belong to racially or ethnically minoritized groups should be mindful of the ways in which identifying trainees, even in aggregated data, could cause those trainees to feel singled out or identified against their will. Programs must weigh these concerns carefully and we suggest conversations with trainees and faculty to help GME leaders understand how public data sharing would impact trainees in their programs. In contrast to these concerns, such public, program level reporting could benefit applicants by allowing them to have a more thorough understanding of an individual program’s commitment to racial and gender representation. For example, an applicant for whom racial representation in their training program is a priority might choose to rank a program that has better racial and ethnic representation among their current trainees or their past rank lists higher than a program that has poor racial representation among current residents and that has also ranked few applicants who belong to groups under-represented in medicine in recent years.

The kind of reporting that we propose would also support the work of GME leaders who wish to develop more equitable practices and that of researchers who seek to further the understanding of racist or gender-based disadvantages and provide solutions to counteract them. Those responsible for equity-focused work find themselves repeatedly — in the GME space and elsewhere — in the position of not having access to the necessary data to support their research and quality improvement efforts in an academic environment that rightly prioritizes data-supported approaches. De-prioritizing and/or remaining silent on the need for data collection and accessibility of data to guide equity in medical education work, is a primary means of reproducing the inequitable system currently in place, and this type of complicity translates into a clear example of structural racism, defined as differential access to opportunities by race or ethnicity [13].

There is reason to believe that intention to improve representation in GME training programs is growing. However, the problems of poor racial representation in medicine are too severe and too important to equitable patient care to leave to chance and good will. Systematic and complete data collection and monitoring of the residency Match process and the regular and open reporting of this data to the GME community will allow the type of scholarship, innovation, and accountability to priorities that is required to meet a challenge as great as this. Racially and ethnically minoritized students and the patients who need them deserve better from those who hold the privilege of training and educating young physicians. It is our duty to take bold, purposeful steps toward equity in education and training as one means of repairing the inequities in the field.

Declarations

Disclosures On behalf of all authors, the corresponding author states that there is no conflict of interest.

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