

Everyone Looks the Same in ERAS!

Differentiating Between an Increasingly Homogenous Pool of Graduate Medical Education Applicants

Matthew G. Tuck¹, MD, MEd, FACP

Erica N. Johnson², MD, FACP, FIDSA

Chavon Onumah³, MD, MPH, MEd, FACP

Gail M. Sullivan, MD, MPH

As we head into another residency recruitment season, program directors (PDs) face a myriad of challenges. One of the primary challenges is sifting through a vast pool of candidates applying to their programs. With a limited number of residency positions available, PDs must carefully evaluate numerous applications in the Electronic Residency Application Service (ERAS) to identify the most promising candidates. PDs seek candidates who not only possess strong academic credentials, but also align well with the program's mission, values, and culture as well as the goals and requirements of their institution and specialty. Furthermore, ensuring fairness and objectivity in the selection process is critical. Adding to these challenges is the increasingly apparent homogeneity of the applicant pool in ERAS, particularly when PDs cite that United States Medical Licensing Examination (USMLE) step scores, clerkship grades, and the Medical Student Performance Evaluation (MSPE) factor so highly in their decisions about whom to interview.¹ With the increasing similarity of applicants' objective academic performance data, it is critical to develop, study, and disseminate new strategies, to assure selection of candidates who will be able to thrive in their chosen specialties and programs.

The Problem

In a 2016 national survey of residency PDs about the residency selection process, top "pain points" were difficulty in comparing information across different medical schools, a large volume of applications, and lack of reliable information about personal characteristics.² These sentiments have persisted over the years for multiple reasons, some more recent and others longstanding.

One contributor may be the 2022 change of the USMLE Step 1 from a numeric score to a pass/fail

grading scheme, because the primary purpose of the USMLE is licensure, not residency selection.³ Letters of recommendation (LORs) historically have been written in narrative form, often uniformly laudatory, vulnerable to gender and racial biases, and not shown to reliably distinguish between applicants.⁴ Some programs have therefore decided to shift to standardized letters of evaluation (SLOE) in an attempt to convey a broader spectrum of competency-based data for evaluating and selecting candidates, with some success.⁵ Some medical schools have adopted pass/fail grades in the preclinical years or in clerkships, and some no longer rank their students. Consequently, PDs are skeptical of using the MSPE to distinguish between residency candidates.⁶ There are also concerns that tiered clerkship grading, narrative assessment comments, and the MSPE perpetuate biases.^{7,8} Finally, personal and professional attributes may be evident in the applicant's personal statement; however, there is no uniform requirement for the content. Some PDs have consequently placed less emphasis on the personal statement over more quantifiable portions of the application when ranking candidates.⁹

This leaves few factors for PDs to evaluate when considering applications. Namely, Alpha Omega Alpha (AOA) Medical Honor Society and Gold Humanism Honor Society selection (though not all schools have these societies and bias exists in this process too),¹⁰ the curriculum vitae, supplemental application responses, program signaling for select specialties, and the interview. Compounding the issue is the increasing number of applications to graduate medical education (GME) programs. From 2018 to 2023, the number of applications submitted in ERAS increased by approximately 3000.¹¹ As a result, residency programs are less likely to conduct the holistic reviews of applications recommended by the Association of American Medical Colleges (AAMC),¹² and a majority have altered their recruitment strategies.¹³ The AAMC pilots of the

DOI: <http://dx.doi.org/10.4300/JGME-D-23-00574.1>

supplemental applications and program signaling have resulted in a higher probability of interview invitation for some applicants. However, there are no outcomes data with regard to likelihood of matching or resident performance after the Match.¹⁴

Should GME Programs Differentiate Between Applicants?

As candidates look ever more similar in their applications, the existential question exists: Should GME programs differentiate between applicants? Operating under the assumption that their undergraduate medical education (UME) has adequately prepared medical students for residency training, the answer to this question should generally be “no” with some caveats, such as alignment with program mission and career-oriented training opportunities. Medical schools cite improved medical student well-being and less burnout as rationale to shift to a pass/fail grading system.¹⁵ However, PDs still need credible assurances that applicants have met a minimum competency threshold and are prepared for patient care in a residency training environment.

Residency programs may benefit from placing less emphasis on medical knowledge, over other competencies. For example, greater medical school competency-based information across all domains, such as direct observation of patient care, interpersonal and communication skills, systems-based practice, and interprofessional collaboration may provide better information for programs.¹⁶ Ultimately, the GME community’s job is to train the next generation of physicians to provide high-quality care for patients. Without objective measures from medical schools, PDs are hampered in assuring their program is ready to meet residents at their current level of competency. As outcome-based competencies have become the model for UME and GME, some have argued that residency applications should be restructured to allow programs to better align residency selection metrics with UME performance outcomes.¹⁷ In addition, residency training programs may also have areas of focus (eg, research emphasis, community health mission, rural population, etc) for which they are seeking applicants with aligned interests. The ERAS application process has not historically made this key information readily available.

Implications for UME

PDs want an accurate representation of each applicant. This includes information about the levels of competency achieved for applicants matriculating into specialty training, if additional training or

remediation will be needed, ultimate career goals, and whether applicant and program values are aligned. To achieve this, GME must partner with the UME community to improve the application and selection process. This would seem an attainable goal as UME and GME programs are often housed at the same institution. However, there are countervailing motives of UME institutions in guaranteeing students match successfully, for financial and reputational reasons. Bias-free, accurate, and holistic summative evaluations by UME through competency-based assessments would lead to greater trust by GME leaders.¹⁶ Because this is not the current state, the Undergraduate Medical Education-Graduate Medical Education Review Committee and others have called for major reforms to the application and selection process.¹⁸

Strategies for PDs to Implement Now

While major stakeholder groups recognize there is a strain on the current residency selection system, there are few evidence-based strategies for PDs to employ to ensure compatibility between applicants and GME programs. Reviewing program mission and core values annually prior to the start of recruitment cycle to ensure these translate into a clear and distinct program identity, or “brand identity,” can help potential applicants better understand the unique aspects of a training program and whether that program identity resonates with their own values and training needs.¹⁹ Holistic review using mission-driven filters and rubrics created from the experience attributes and metrics framework from AAMC can help PDs determine which applicants may be a good match and enhance diversity in GME training programs.^{12,20} Careful review of personal statements and supplemental applications may prove beneficial. The use of signals may aid programs in identifying applicants genuinely interested in a given program, region of the country, or program’s mission. We caution against using the absence of signaling as an exclusionary criterion when reviewing applications. PDs should recognize the potential shortcomings of clerkship grades, LORs, and MSPEs, and also recognize that interviews are now higher stakes for applicants and programs alike. In addition, GME interviewers should be mindful that one-time interactions do not fully represent an applicant’s character. The use of structured behavioral interviews can mitigate some of the bias in the interview process, help programs identify applicants with key qualities of interest, and are better able to predict residency performance than traditional interviews.^{21,22}

Once trainees matriculate, programs can use tools like structured clinical observations with standardized patients, direct observations, and the in-training

examination to identify learners' areas of strength, opportunities for growth, and needs for early remediation. Taking this a step further, some specialties have piloted UME-to-GME individualized transition learning plans for use after the Match to help programs plan curricula and start conversations about growth-directed learning with new interns based on their self-reported needs.²³ This may prove to be helpful in bridging the UME-to-GME transition and should generate studies regarding best practices and benefit.

Next Steps for Study

In this editorial, we have outlined the problem with what is perceived as an increasingly homogenous applicant pool. While ERAS and others are experimenting with potential solutions to this issue, we suggest strategies PDs can employ and study now, to help match prospective residents with knowledge, attitudes, and skills that align with training programs' needs and missions. Areas for study and outcomes of interest include use of UME competency-based metrics to predict residency performance, innovations in the use of program mission to target recruitment, associations between use of program signaling and successful matches to geographical area and/or program mission, and curricular outcomes for UME-to-GME transition projects. The *Journal of Graduate Medical Education* encourages scholarship in these areas and looks forward to receiving manuscripts on these issues.

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Matthew G. Tuck, MD, MEd, FACP, is Residency Site Program Director, Washington DC VA Medical Center, Associate Professor of Medicine, The George Washington University, Associate Clinical Professor of Medicine, Uniformed Services University of the Health Sciences, and Associate Editor, *Journal of Graduate Medical Education* (JGME); **Erica N. Johnson, MD, FACP, FIDSA**, is Internal Medicine Residency Program Director, Johns Hopkins Bayview Medical Center, Associate Vice Chair for Diversity, Equity and Inclusion in Education, Department of Medicine, and Assistant Professor of Medicine, Johns Hopkins University; **Chavon Onumah, MD, MPH, MEd, FACP**, is Internal Medicine Residency Program Director and Associate Professor of Medicine, The George Washington University; and **Gail M. Sullivan, MD, MPH**, is Editor-in-Chief, JGME, and Associate Director for Education, Center on Aging, and Professor of Medicine, University of Connecticut Health Center.

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Corresponding author: Matthew G. Tuck, MD, MEd, FACP, Washington DC Veterans Affairs Medical Center, matthew.tuck@va.gov