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Advocating for a New Residency Application Process: A Student Perspective

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OBJECTIVE: The COVID-19 pandemic provided an opportunity for surgical residency programs to rethink their methods of evaluating and recruiting candidates. However, the past year has not been seamless, with a soaring number of applications, reports of programs and applicants having difficulty evaluating each other, and an increasingly uneven distribution of interviews among applicants. Consequently, many have called for national changes to the residency application process to address these long-standing concerns.

RESULTS: Here, we review the evolving literature and advocate for the permanent adoption of visiting rotations, virtual interviews with a universal release date and data-driven attendance limits, and opportunities for in-person applicant visits.

CONCLUSIONS: We believe these changes leverage the strengths of each format, allow for satisfactory bidirectional evaluation, and promote principles of justice, equity, diversity, and inclusion. (J Surg Ed 79:20–24. © 2021 Published by Elsevier Inc. on behalf of Association of Program Directors in Surgery.)

KEY WORDS: residency match, virtual interviews, justice, equity, diversity, inclusion

COMPETENCIES: Interpersonal and Communication Skills, Professionalism

INTRODUCTION

The COVID-19 pandemic upended the residency application process, preventing visiting rotations and in-person interviews from occurring. This opened an opportunity for programs to innovate traditional approaches to recruitment, resulting in new initiatives such as virtual sub-internships, socials, and interviews. The implementation of these changes highlighted pre-existing challenges of the residency application process, such as high travel costs for applicants and ever-ballooning numbers of applications.¹⁻³ It also brought on new ones, including the difficulty of programs and applicants to form impressions of each other over virtual formats.⁴⁻⁶ As we emerge from the pandemic, establishing efficient application processes that also maximize justice, equity, diversity, and inclusion (JEDI) for all applicants remains a widespread goal. Thus, this discussion aims to provide a student's perspective on the optimal path forward.

VISITING ROTATIONS

Visiting sub-internships play an important role in allowing students to express their interest in programs and gain further knowledge of the specialty. However, they come at a significant cost to students, ranging from \$2000 to \$4000 on average.⁷⁻⁹ This presents a challenge to students from underrepresented backgrounds, many of whom report spending much more than they can afford.¹⁰ Nonetheless, we believe that visiting rotations represent an important opportunity for students to broaden their network and learn about differences in practice across institutions.

Programs have utilized several strategies to promote JEDI in visiting rotations. Many have developed diversity

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programs for students from underrepresented backgrounds, providing formal mentorship and stipends to cover rotation costs. There has also been a rise of virtual sub-internships, which can incorporate didactic lectures, virtual socials, and livestreams of surgical procedures. Data on the utility of these rotations is emerging, but anecdotal reports suggest they are an excellent opportunity for students to learn about programs they cannot rotate at.¹¹ We believe in the efficacy of these initiatives to advance JEDI and advocate for their expansion to serve a wider audience.

UNIVERSAL INTERVIEW INVITATION RELEASES

In most specialties, interview invitations span all hours over the course of several months. Furthermore, many programs send more offers than the number of available interview slots. This has left applicants constantly tethered to their email in order to respond to invitations as quickly as possible, or risk losing a potential interview date. It has also led competitive applicants to “hoard” invitations due to the uncertainty of how many interviews they will ultimately be awarded.¹²

By contrast, specialties such as plastic surgery and obstetrics and gynecology have limited interview offers to the number of slots available and implemented universal interview release dates with 72-hour response periods. Similarly, otolaryngology instituted a 3-week interview invitation window, limiting the period during which applicants must remain vigilant.¹³ In obstetrics and gynecology, over 90% of applicants reported these reforms reduced anxiety in the application process, with the 72-hour response period representing the most important change.¹⁴ Additional benefits include fewer distractions for students participating in clinical rotations during this period, reduction in hoarding, and fewer late cancellations as applicants receive invitations from more desirable programs. We advocate for all specialties to adopt similar guidelines.

INTERVIEW LIMITS

Many strategies have been proposed to distribute interviews more evenly across the applicant pool. One reason for the consolidation of interviews among a minority of applicants is the exploding number of applications submitted.¹⁵ US allopathic seniors that matched in general surgery applied to a median of 51 programs in 2019, more than 2.5 times the median in 2000.⁶ To address this, some have proposed limits on the number of applications submitted by applicants.⁵ However, this may

disadvantage less competitive applicants who are advised to apply broadly to receive a handful of invitations. Alternatively, limiting the number of interviews a candidate can attend would distribute interviews more evenly.^{12,16} Some authors have proposed setting a finite number of interview days per specialty, creating scheduling conflicts that force applicants to withdraw from those they are less interested in.¹⁷ Otolaryngology recently trialed a system in which applicants send preference signals to 5 programs maximum prior to the release of interview invitations,¹⁸ allowing programs to more easily identify and interview applicants with sincere interest. It remains unclear whether this has affected the overall number of applications or the distribution of interviews among applicants.

To ensure a more even distribution of interviews, we advocate for interview caps that are indexed to existing data on the number of interviews required to match. For example, US MD applicants to general surgery who ranked 14 contiguous programs had a greater than 95% chance of matching in 2020.¹⁹ Accordingly, a limit in the range of 14 to 16 interviews might be viable, though this target should be revised as the impact of virtual interviews is better understood. Standardized release dates for interview invitations is vital to this change. This prevents programs sending early invitations from facing waves of cancellations as new programs release invitations. We acknowledge that there are barriers to implementing this change, including the current absence of a regulatory body to enforce these rules and threats to applicants' rights, but feel they will be beneficial to the overall application process.

VIRTUAL INTERVIEWS

Perhaps the most controversial question is whether virtual interviews provide sufficient opportunities for applicants and programs to evaluate each other. Data from fellowship programs show virtual interview programs are successful, and associated with high applicant satisfaction and significant cost savings for applicants and programs alike.^{20,21} Nevertheless, the reception among residency candidates and program directors has not been universally positive. Applicants' priorities include assessing a program's culture, often through informal interactions, in addition to presenting themselves in the best light possible, which some feel is hampered by the virtual format.^{6,22,23} Likewise, some programs have expressed dismay at the difficulty in assessing an applicant's “fit” and surgical aptitude.²⁴⁻²⁶

The benefits of conducting virtual residency interviews outweigh the disadvantages. The cost of applying to a surgical residency has significantly increased in

recent years, with most applicants spending over \$4,000 on travel alone.^{7,8,27,28} This cost disproportionately disadvantages low-income individuals, adversely impacting the diversity of interviewed applicants. Inequities persist as interviews become virtual, so programs should consider abiding by best practices to mitigate bias. Examples include asking standardized questions and considering the applicant's time zone while scheduling interviews.^{2,29} Medical schools may support applicants by providing quiet interview spaces with reliable internet connections and high-quality video equipment.³⁰

IN-PERSON VISITS

Regardless of the interview format used, the utility of applicant visits is well-documented. Applicants often apply to programs in unfamiliar cities and find their visits essential in determining whether to relocate.²⁰ Many applicants also find value in touring the facilities of prospective programs, with most reporting that virtual tours are inadequate replacements.²¹ In-person events represent an opportunity for applicants to interact with the greater graduate medical education community, familiarize themselves with institution-specific JEDI initiatives, and network among residents, faculty, and peers.

We recommend that applicants be provided with standardized opportunities to visit in person, with “second look” days. These visits should focus on activities that cannot be offered virtually, such as informal gatherings with residents, tours of the facilities, and JEDI events. We recognize the potential inequities that may be exacerbated by these visits, especially among applicants who do not have the financial resources or available time to attend. Therefore, we recommend that participating programs finalize rank lists prior to the scheduled visit, ensuring equity and inclusivity among all applicants. This would preclude the use of attendance at “second look” days as another criterion for evaluation and prevent applicants from seeing these visits as compulsory to successfully match. Socioeconomic barriers to these visits would be reduced compared to traditional interviews, and scholarships could be feasibly proposed to address remaining barriers.

CONCLUSION

The COVID-19 pandemic provided an unprecedented opportunity for surgical residency programs to trial new evaluation formats and ways of interacting with applicants. Grounded in available data and the witnessed experiences of our peers, we propose that universal interview release dates, interview caps, virtual

interviews, and non-evaluative second look visits be part of the surgical residency application process. We believe these changes will benefit MD, DO, and international medical graduate applicants by reducing the increasingly exorbitant resources required to find the best match between applicants and programs, while promoting JEDI. Regardless of the specific improvements ultimately made, however, we believe the time for change has arrived.

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