Challenges and Perspectives to the Rise in General Psychiatry Residency Applications

James R. Agapoff IV¹ · Celeste Tonai¹ · Diane M. Eckert¹ · Gretchen Gavero¹ · Deborah A. Goebert¹

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Psychiatry residency applications are on the rise. According to the Association of American Medical Colleges (AAMC), the average number of allopathic applicants to psychiatry in 2013 was 316. This number rose to 477 applicants in 2017. The average number of osteopathic applicants to psychiatry also increased during this time period, from 1130 to 1401 applicants. This rise in U.S. applicants (allopathic and osteopathic) was buffered by a decrease in international applicants to psychiatry from 4178 applicants in 2014 to 3363 in 2017 [1]. Following the national trends, our program had a total of 486 ERAS applications to review in 2013. For ERAS 2018, we have 805 applicants. The increase in U.S. applicants accounted for most of that increase with applications from U.S. applicants rising by 289% from 2013 to 2018 (Fig. 1).

Despite these modest changes, there has been a drastic increase in total applications per applicant since 2013. Allopathic applications submitted an average of 36.4 applications (up from 21.4 in 2013), osteopathic applicants completed approximately 43 applications (up from 23.5 in 2013), and international medical graduates submitted an average of 47.2 applications to general psychiatry in 2017 (up from 30 in 2013) [1]. Supporting these trends, recent data released from the Electronic Residency Application Service (ERAS) as of mid-January 2018 shows the average application per U.S. applicant to be 44, which amounts to a 77% increase since 2014. The average number of applications per program has increased 134% since 2014.

Anecdotally, one could argue that the field is becoming more competitive; however, the National Resident Matching Program (NRMP) match data indicates that the proportion of U.S. graduates matching into psychiatry only rose slightly

from 5.1% in 2013 to 5.4% in 2017, indicating a modest shift in competitiveness. U.S. graduates filled 61.7% of the 1495 categorical psychiatry positions offered in 2017, a nearly 10% increase from 2013. When analyzed in terms of the ratio of positions to those applicants choosing psychiatry as their preferred choice, psychiatry positions per U.S. applicant were 1.9 in 2013 and dropped to 1.5 in 2017. Highlighting this modest rise in competitiveness, the non-match rate for psychiatry was only 3.1% in 2013 and rose to 7.4% in 2017. Collectively, these national and regional data illustrate that interest in psychiatry has increased over the last 5 years, resulting in both a reduced ratio of available positions to U.S. graduates and a rise in unmatched applicants [2].

Many explanations have been proposed to explain the rise in applications. Some have argued that perceptions of competitiveness may persuade even strong applicants to apply to multiple programs [3]. According to the regional medical school, applicants want to be invited to schedule at least ten interviews to ensure a high likelihood of match. Traditionally, this could be accomplished by applying to less than 20 programs, but, as the number of U.S. applicants not matching into psychiatry rises, U.S. medical school advisers may encourage students to apply to more programs without weighing each applicant's strengths and weaknesses. Others have speculated that difficulty obtaining ideal interview dates may be driving up the number of applications as applicants seek out programs that can fit their schedules [4].

In our program, we fill all interview positions ($n = 82$) within the first 2 weeks of ERAS opening. This creates little flexibility for interested applicants who may have committed to interview dates with other programs. It also leads to applicant cancellations in the later part of the interview season.

Additionally, changes to the Post-Match Supplemental Offer and Acceptance Program (SOAP) may also be motivating individuals to apply to more programs. The NRMP offered six SOAP rounds, which was reduced to four in 2014. In 2017, this number dropped to three. While a majority of positions are filled in the first two rounds, a reduction in

✉ James R. Agapoff, IV
jra2129@hawaii.edu

¹ University of Hawai'i at Mānoa, John A. Burns School of Medicine, Honolulu, Hawai'i, USA

Fig. 1 Residency applications by submission type for one program, ERAS averages per program and ERAS applications per applicant by year 2014–2018

SOAP rounds will likely be interpreted by many applicants as a decreased opportunity to match and consequently, another reason to apply to more programs [4].

Another factor that may be driving up psychiatry applications is a rise in competitiveness in other specialties. As this occurs, applicants may be applying to psychiatry as a back-up specialty and driving up application numbers. Medical school deans advise their students to apply to a back-up specialty if their chosen specialty is competitive or if the applicant is not competitive for their chosen specialty [3].

Regardless of the cause, the rise in applications has consequences to both programs and applicants. A rise in applications means programs, and program directors must devote more time to reviewing applications. For example, if a program director takes 10 min to review each application in a program that receives 500 applications from U.S. students alone, then it takes about 10 days reviewing applications 8 h/day to review them all. This may force many programs to reconsider how they screen and even interview potential applicants.

As more programs are applied to, applicants too are feeling the pinch. For example, an individual applying to 40 psychiatry programs would pay \$629.00 [$\$99.00 + (10 \times \$13.00) + (10 \times \$17.00) + (10 \times \$23.00)$] under the current system. This does not include the cost of USMLE/COMLEX transcripts (\$80.00), nor travel costs (hotel and lodgings), which can cost thousands of dollars and are not covered by federal student loans.

The literature offers a number of solutions to address the rising costs of the interview process for applicants and programs, some more provocative than others [3, 5–7]. The general reaction to a rise in applications has been to consider increasing the number of interview slots and days. This can have a

significant impact on the clinical learning environment as faculty and administrative staff are having to allocate more time to the interview process [5]. In our program, development of grading systems to rank applicants, timely interview invitations, and meticulous attention to filling cancellations has allowed us to maintain the same number of interview slots and days.

One extreme proposal to address the rise in applications is to adopt a “free market” approach to the match where graduation-eligible students are permitted to directly apply to residency programs and accept or reject offers within a timetable set by the program. Under this system, many graduates and programs would likely save on costs as strong applicants could accept offers early in the application process, while those programs having filled their positions could stop interviewing and reinvest those resources back into the program. This strategy also offers both programs and applicants the ability to make adjustments based on individual needs. Applicants having trouble getting interviews might focus on less competitive programs, while programs having difficulty scheduling interviews, or hiring applicants, might increase incentives, or choose to interview less competitive applicants [8]. However, an adoption of a “free market” system could also have negative consequences for programs and applicants. For programs, this approach would likely create a system of “haves” and “have nots,” with increasing inequality among programs. Medical students under this system would face pressure to sign residency contracts early in their academic careers, a condition that existed before the creation of the match.

Another proposal to address the rise in applications is to limit the total amount of applications per applicant. Weissbart et al. demonstrated mathematically that the odds of a successful match did not improve with an increasing number of applications. Using the 2013 match as an example, his team

showed that simply by limiting the maximum number of applications to 20 per applicant, there would be significant cost savings to applicants and profound time savings to program directors. Using the prisoner's dilemma model of game theory, they show that applying to more programs only improves the odds of matching if other applicants do not do the same [6].

Still others have recommended changing the match to include several rounds where application number is restricted during the initial rounds [7]. This would theoretically motivate applicants to focus on those programs in which they have a genuine interest.

Perhaps the most easily adoptable and least provocative approach to address the costs of rising applications are to evaluate applicants more holistically with an emphasis on person-organization and person-job “fit.” This strategy improves the applicant selection process, rather than simply increasing the quantity [5, 9]. The AAMC offers guidance on best practices for interviewing potential applicants and determining “fit.” Interview days that require very little preparation, and minimal knowledge about the program, may motivate applicants who are less enthusiastic about the program to apply [5]. Evidence suggests that use of behavioral or situational questions, standardization of question content, and asking specific job-related questions, all improves rater validity [9]. Another strategy is the use of multiple-mini interviews (MMIs). MMIs are a series of short, independent assessments, typically timed, which are then scored to obtain a composite score. MMIs demonstrate improved reliability and validity over traditional interview approaches [10]. Use of multiple interviews is also supported by the AAMC.

The rise in general psychiatry applications has taken many programs by surprise. Competitiveness for residency positions has increased; however, in a system that strongly favors U.S. applicants, it is still a “buyer's market” for U.S. students. Paradoxically, it is also a “seller's market” as programs have the potential to interview and recruit more highly qualified applicants. Whether or not this results in a stronger match is yet to be seen; however, if these numbers do represent increased interest by “fit” applicants, there is reason to be optimistic.

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Compliance with Ethical Standards

This paper describes the process of reviewing applications and is not considered research. IRB and consent were not required for this project.

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