Preference Signaling for Competitive Residency Programs in the NRMP

Whipple and colleagues aptly summarized in a recent issue of the *Journal of Graduate Medical Education* one of the biggest problems with the current National Resident Matching Program (NRMP) Main Residency Match: "As students apply to an increasing number of programs, program directors lose the ability to discern sincere interest."[1] This leads to residency programs creating standardized filters (eg, United States Medical Licensing Examination scores) and conducting less holistic reviews of candidates. In some cases, the status quo inadvertently eliminates applicants with a great interest in their program—who otherwise, if identified, may have been strongly considered by the program. The authors, using an innovative computer model, propose a simple solution: allowing applicants to voluntarily add program preferences.[1]

We wholeheartedly agree with the authors. In fact, Salehi et al previously proposed a preference signaling model—referred to as "The Star System"—in the Otolaryngology–Head and Neck Surgery (OTO-HNS) literature in 2018.[2,3] Of note, Whipple et al used the 2016 OTO-HNS Match to simulate their computer model.[1] Preference signaling systems have also been proposed in the orthopaedic literature,[4] and successfully implemented since 2006 by the American Economic Association job market for economics graduate students.[5] Such signaling systems have been shown to alleviate interview congestion and increase the odds of applicants receiving preferred interviews,[3–5] supporting assertions by Whipple et al.

The authors detail several alternatives previously proposed to help curb excessive applying by candidates, namely increasing costs per application, placing a hard cap on total applications, and adopting a mandatory program-specific paragraph for each program applied to.[1] Yet all of these proposals are fraught with disadvantages, such as limiting diversity, handicapping financially disadvantaged students, and increasing time burden on students during an already stressful period of their lives. Moreover, there is limited evidence that such interventions would even have their desired effects.[2] For instance, during the 2016 and 2017 Match, OTO-HNS mandated program-specific paragraphs from all applicants. This requirement failed to have its intended effect of curbing excessive applying (ie, there was no significant decrease in the mean number of applications per applicant), made OTO-HNS seem unwelcoming to students coinciding with an uncharacteristic drop in total applicants, and in many cases, resulted in applicants submitting generic paragraphs paradoxically increasing the time burden on programs.[2]

We favor a system that empowers applicants to highlight their residency preferences without applying a restrictive approach. Medical students, especially those applying to competitive specialties, are a bright, resilient group of individuals who are not easily deterred. Moreover, as witnessed in the recent OTO-HNS Match cycles, creating barriers to applying may lead to unintended consequences.[2] Signaling may play an important role for competitive specialties when evaluating many well-qualified applicants.

In summary, we support the contention that a preference signaling system is a straightforward means to ameliorate one of the largest shortcomings of The Match: identifying genuine applicant interest. Such a system is simple, increases transparency, minimizes time commitment by applicants and programs, and is logistically feasible. Signaling has proven successful in the economics world, and Whipple and colleagues' computer model exemplifies its promise within The Match.

Parsa Pamenari Salehi, MD
Resident Surgeon, Department of Surgery, Division of Otolaryngology–Head and Neck Surgery, Yale University School of Medicine

Babak Azizzadeh, MD, FACS
Director, Center for Advanced Facial Plastic Surgery, and Associate Clinical Professor, Division of Head and Neck Surgery, Department of Otolaryngology–Head and Neck Surgery, David Geffen School of Medicine, University of California, Los Angeles

Yan H. Lee, MD
Assistant Professor, Department of Surgery, Division of Otolaryngology–Head and Neck Surgery, Yale University School of Medicine

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