

## Preference Signaling for the Otolaryngology Interview Market

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The impact of the coronavirus disease 2019 pandemic extends beyond patient care and into graduate medical education (GME). The pandemic has created disarray in the residency application process. Visiting rotations and residency interviews—two cornerstones of the application cycle—are gone.

Just as the pandemic has exposed healthcare disparities in medical care, it also shines a light on inequalities with GME. Even before the pandemic, many residency specialties observed a meteoric rise in the number of applications submitted by each applicant. In 2019, otolaryngology applicants submitted an average of 72 applications, an 80% rise over 15 years.<sup>1</sup> This increase drives a cycle of programs receiving more applications and students feeling the need to apply more broadly to maintain competitiveness. Students with monetary resources are better able to mitigate match risk through prolific residency application and by traveling for away rotations to cultivate faculty advocates. Financially disadvantaged applicants may find it more difficult to amass influential social capital.

With the deluge of applications, applicants are unable to distinguish themselves from the crowd. Such dilution impairs the applicants' abilities to credibly convey interests to programs. Similarly, the program director has a hard time selecting candidates from a pool of excellent applicants for interview.

The interview is a limited resource. Selection committees often react to this scarcity by declining to interview qualified candidates they *think* (but do not really know) are unlikely to choose their program and instead interview candidates who they *think* (but do not really know) are more likely to accept an offer. This approach is inefficient.

Preference signaling is an intriguing solution. Since 2006, the American Economic Association has operated a signaling service to facilitate job interviews for graduate students. This applicant-initiated concept aligns goals of interested applicants with programs. Students send signals to up to two employers to indicate their interest in receiving an interview. In reviewing their outcomes, signals were found

to increase probability of interview, especially for niche scenarios (nongraduate applicants, applications to liberal arts colleges, and small city locations).<sup>2</sup> Signaling has received interest among medical residency specialties as well.<sup>3,4</sup>

Signaling could be adopted in residency interview selection because:

- The fixed number of signals per applicant establishes a defined value to each signal, and likewise credibility.
- Programs are better able to discern potential interest and fit because signals are a better marker of sincerity.
- Absence of a signal is not a sign of disinterest. Programs should consider all applications, regardless of signal accompaniment.
- Signals are not a substitute for application review but may provide insight into applicant interest and spark holistic review. Programs should extend interviews to interested and highly qualified applicants, even in the absence of a signal. Applicants likewise should expect to receive interviews from programs they did not signal.
- Signaling empowers the applicant. Applicants will weigh personal considerations including alignment of departmental interests with their interests when determining where to send signals. Signals can bring attention to unique circumstances and qualities not initially recognized by programs. Strategically, applicants may benefit more from signaling programs in niche markets.
- Signaling does not violate match rules because both applicants and programs are free to express interest in each other; however, they shall not solicit verbal or written statements implying a commitment.<sup>5</sup>
- Participating programs agree to a code of conduct:
  - Programs shall *not* divulge identification of applicants who have signaled.
  - Programs shall *not* ask interviewees where they have signaled.
  - Programs shall *not* divulge number of signals received.

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(COSA), and the Electronic Residency Application Service (ERAS)—along with the National Resident Matching Program (NRMP). We are hopeful that signaling will improve the residency interview selection process by facilitating the successful pairing of applicants with programs.

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