AFTER THE MATCH

The Virtual Match is Like the Toilet Paper Rush

By Thomas P. Cook, MD

No one saw it coming. Not just the pandemic, but also the lengths to which people would go to mitigate the sense that they were losing control. They lost the ability to work, worship, go out to eat, and take their kids to school, but they also lost the security of knowing they had enough toilet paper. So, we did what we always do: We hoarded.

Three months ago, Jason Adler, MD, and I wrote about three superb applicants to emergency medicine residency programs who did not match when they should have. (EMN. 2021;43[8];7. https://bit.ly/3ElfAyM.) We postulated that this was likely a consequence of the pandemic’s effect on the number of interviews accepted by superior applicants and the downstream impact on other applicants. In short, the opportunity to hoard interviews because they were all conducted virtually had radically altered the landscape of the match.

A paper published earlier this year by Vikram Manjunath, PhD, and Thayer Morrill, PhD, both professors of economics at major universities, reviews the implications of a virtual match. (“Interview Hoarding.” Feb. 22, 2021; arXiv:2102.06440v3.) It begins with removing the restraints that keep the best applicants from accepting too many interviews: time and money. Switching from in-person to virtual interviews dramatically decreases the cost of interviewing. Debt-ridden medical students don’t have to spend thousands of dollars to travel and are not forced to take time off from their clinical rotations. That allows star applicants with lots of offers to interview at more programs, even where they are not likely to rank highly.

Why do the stars accept so many interviews when they do not need them? Because interviews are like toilet paper. They want to make sure they have enough. Unfortunately, this influences their peers to apply to more programs, and a vicious cycle develops.

This creates a trickle-down effect for very good but not star applicants who could interview at several competitive programs when interviews are in person. Now, however, they are boxed out from interviewing at many of these programs because of hoarding by superior applicants.

Then there are the below-average but solid applicants who make great impressions on away rotations or get interviews through recommendations or other associations. The very good but not star applicants now box them out. The net effect is that many applicants do not end up matching at programs they prefer, and some do not match at all when they should have.

An obvious solution to this problem pointed out by Drs. Manjunath and Morrill is for programs to increase the number of interviews: “Through our simulations and theoretical results, we predict that unless hospitals also increase the number of interviews they offer, the 2021 NRMP match will result in a lower percentage of positions being filled and a less stable matching.”

Follow the Money

Programs offering more interviews are not going to happen soon. Program directors feel overwhelmed by having to review hundreds of applications and conduct many interviews. Program directors are unlikely to change their strategy unless there is a real threat that their program will not fill through the match.

This is ironic. We predict that the applicant demand for training in emergency medicine will drop significantly during the next decade, as we have discussed. (EMN. 2021;43[4]; https://bit.ly/3sqgEzF; EMN. 2019;41[10]; http://bit.ly/2or6qkm.) Naturally, this would encourage EM program directors to interview as many applicants as they reasonably can, and then the opposite problem will occur: not enough applicants to conduct more interviews.

Another solution to hoarding virtual interviews is a centralized method to limit the number of interviews each applicant can accept. Of course, the simplest way to accomplish this is through the National Residency Matching Program (NRMP). But guess who benefits from panicked medical students submitting more applications in the match? Well, that would be the American Association of Medical Colleges (AAMC).

More than 40 percent (around $220 million) of the AAMC’s annual revenue comes from the NRMP, and the annual revenue from the NRMP has almost doubled in the past decade despite a stable match rate of roughly 95 percent. More applications per applicant do not improve the match rate, but they do increase AAMC revenue. (J Grad Med Educ. 2021;13[3];316; https://bit.ly/3kgboIl.)

The first two options to fix the match seem unlikely to work due to conflicts of interest (real or perceived). The applicants are terrified of not getting into a residency program and will do nearly anything to avoid getting called to the dean’s office before match day. Like someone drowning (or in need of toilet paper), they will grab nearly anything they can get their hands on. The NRMP, on the other hand, receives an annual financial windfall that supports AAMC operations and payroll.

Is there something else we can do?

Simple Solution

There is, and it’s called transparency. Program directors have no idea how many programs an applicant has applied. And applicants do not know how many applicants are offered interviews by a program. What if we just opened this up?

Let’s say you are a star applicant. It’s not going to look good if you schedule 30 interviews when everyone knows you will get something in your top five. Of course, everyone says he plays by the rules when no one can see what he does. But with transparency, everyone is looking.

On the other hand, let’s say you are a below-average overachiever. Then, later during the interview season, when a program director is looking to fill out his calendar with capable applicants he can match, he is more likely to offer a slot to someone with only six interviews instead of 16.

Based on statistics from NRMP, the probability of matching for an applicant interviewing at 12 programs is more than 95 percent. A program director who must choose between two evenly weighted applicants for an interview will select the applicant with fewer interviews.

The beauty of this system is that it levels the playing field by providing a single number. Unfortunately, it’s November, and the 2022 match is already underway. It certainly is still possible for the NRMP to offer this information for this match cycle.

Nonetheless, it stands to reason, given our experiences over the past two years, that virtual interviewing for the match will continue for some or all applicants. With this in mind, transparency offers a simple solution to our natural tendency to hoard when we feel threatened. EMN