

A Challenge to Disrupt the Disruptive Process of Residency Interview Invitations

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A novel rite of passage for senior medical students has emerged in recent years, one that lacks the pomp of a white coat ceremony, the intrigue of patient care, or the excitement of Match Day, but has arguably become more important than any of the aforementioned: the frantic checking of smartphones and e-mail for residency interview invitations. As early as 1985, the “excessive focus” on securing residency positions was criticized by Walling and Merando¹ as an “epidemic of educational disruption.” Today, that epidemic continues to spread, and digital communication serves as a primary vector. As one applicant observed, students are “explicitly encouraged to attend *as soon as possible* to every vibration in their pockets,” lest they miss the chance to schedule a coveted interview.² This creates an incentive that is perverse and, yet, entirely iatrogenic. As Luftig notes²: “The student who interrupts a patient interview to immediately answer an e-mail is rewarded while the student who continues the interview may miss out.” The current focus on scheduling residency interviews “diverts the attention of students away from their training goals,” disrupts learning and patient care, and must be addressed.³

Linking senior medical students to a residency position has been challenging since the inception of postgraduate training. For the first half of the 20th century, the process was unregulated and chaotic. In an effort to create a more orderly system, various algorithms iteratively emerged to pair applicants and training programs, culminating with the National Resident Matching Program, which is still used today.⁴

To achieve any likely success in the Match, applicants must first interview at several programs. In recent years, several specialties have adopted Internet-based scheduling in an effort to streamline the interview process. These services allow applicants to select an interview date from a list of available options, obviating the need for multiple telephone calls or e-mail exchanges with a program coordinator.

The benefits of online scheduling include increased satisfaction and time savings for applicants, decreased workload for program coordinators, and improved coordination of travel arrangements.^{5–7} In 2007, an obstetrics and gynecology residency program using online scheduling reported filling their interview slots within 4 days.⁸ Anecdotally, many programs fill their slots even quicker today.

Applicants find themselves facing increased competition as the number of US medical school graduates increases faster than the number of residency positions.⁹ The pressure to apply to more programs may be fueled in part by medical schools, which understandably desire all their graduates to match.¹⁰ Residency programs may also contribute to the sense of urgency to secure an interview by offering more invitations than available interview slots.

The rise in the number of applications per applicant, while certainly multifactorial, is facilitated in part by the ease of online interview scheduling, and it occurs amid calls by medical educators for a renewed emphasis on the fourth year of medical school.^{11,12} Balancing the educational mission of the fourth year with the demands of securing postgraduate training will require ongoing effort on the part of medical educators. The issue of interview invitations represents a small piece of this puzzle, but one that can be improved with relative ease.

In the current environment, applicants who receive an interview invitation while they are in a situation where interruption is impossible—such as taking a clerkship examination, assisting in an operating room, performing a bedside procedure, participating in a difficult conversation with a patient or family, rounding on the wards, or simply being asleep as a result of time zone differences—are effectively penalized. A delay in response may result in the inability to schedule a favorable date or an increase in the cost to travel to an interview at a less convenient time, or it may preclude an interview altogether if all interview slots have been taken. Medical students deserve a solution that recognizes the importance of scheduling residency interviews but does not incentivize distraction from educational or clinical responsibilities.

Different strategies exist to address this problem. Some specialties, such as otolaryngology, tend to schedule interviews on a select few dates, thus potentially limiting an applicant's ability to over apply to a large number of programs.¹³ Shappell and colleagues¹⁴ reported a novel collaboration among emergency medicine residency programs to schedule interviews on adjacent days. A majority of applicants who participated in this intervention reported increased ease of interview scheduling. As part of this process, applicants were informed in advance of the date and time that the online scheduling system would be available for selecting interview slots. The interview dates were similarly shared with applicants in advance.

We propose a 2-step process that we believe balances the need for residency programs to recruit applicants and schedule interviews with the goal of preserving an environment that allows students to maintain their commitment to their educational and patient care responsibilities. We recommend the following process:

Step 1: A program informs an applicant of an invitation for an interview. In that communication, the program shares the interview dates and indicates the date and time when online interview scheduling will become available. This allows medical students to plan in advance when they need to be briefly excused from clinical or educational responsibilities to attend to interview scheduling.

Step 2: At the time indicated in the initial communication, and no earlier than the day after that communication, the online interview scheduling system opens to applicants.

In the absence of widespread integration of these steps into all of the online scheduling tools, pre-notifying applicants when online interview scheduling goes live requires minimal additional effort or technical expertise for residency programs and could notably reduce the stress and distraction associated with scheduling interviews.

Programs should synchronize initial interview offerings at the local, regional, and national levels to minimize the disruption of multiple, uncoordinated interview invitations. Programs should also limit interview offer communication to times when students are less likely to be engaged in academic or clinical duties, such as the late afternoon or early evening. Sending communications after 5 PM Pacific Time will help ensure that the majority of applicants are not penalized as a result of their time zone. This potentially places an additional burden on program

coordinators and directors to send an e-mail outside of regular business hours but does not require additional technical skill to operationalize. We feel this small inconvenience to program leadership may significantly improve medical students' engagement with educational activities.

Rather than existing in a state of perpetual trepidation over missing an invitation, students could instead focus on completing patient care responsibilities. Secure in the knowledge of when the online scheduling software will open, applicants could attempt to plan their interview schedule and travel in a proactive, rather than reactive, manner.

In an effort to further decrease pressure to reply immediately to an interview invitation, programs should also ensure that the number of initial invitations does not exceed the number of interview slots available. Additional interview offers from a wait-list could occur as needed based on unclaimed interview slots or subsequent cancellations.

Ultimately, residency and medical school leadership have similar goals. We are trying to ensure that our graduating students are well prepared to enter residency and achieve a successful match. A shared solution with a new approach to offering and scheduling interviews may help to better meet this goal.

References

1. Walling A, Merando A. The fourth year of medical education: a literature review. *Acad Med*. 2010;85(11):1698–1704. doi:10.1097/ACM.0b013e3181f52dc6.
2. Luftig D. The residency interview scheduling process: unintended consequences and a proposal for change. *J Grad Med Educ*. 2015;7(1):134. doi:10.4300/JGME-D-14-00603.1.
3. Sklar D. Making the fourth year meaningful. *Acad Med*. 2014;89(4):527–528. doi:10.1097/ACM.000000000000184.
4. Roth AE. The origins, history, and design of the resident match. *JAMA*. 2003;289(7):909–912.
5. Wills C, Hern HG Jr, Alter H. Residency applicants prefer online system for scheduling interviews. *West J Emerg Med*. 2015;16(2):352–354. doi:10.5811/westjem.2015.1.24615.
6. Hern HG Jr, Wills CP, Alter HJ, Bowman SH, Burns BD, Loyd J, et al. Residency applicant preferences of online systems for scheduling interviews. *J Grad Med Educ*. 2016;8(5):759–762. doi:10.4300/JGME-D-16-00072.1.
7. Hoops HE, Brasel KJ, Stephens CQ, Anderson EM, LeBlanc L, Krishnaswami S. Computerized residency interview scheduling: a randomized controlled trial of

- categorical general surgery applicants. *J Surg Educ*. 2019;76(1):36–42. doi:10.1016/j.jsurg.2018.06.001.
8. Metheny W. Invited applicant evaluation of an online interview schedule implemented by a residency program in obstetrics and gynecology. *Obstet Gynecol*. 2007;110(1):109–112. doi:10.1097/01.AOG.0000266978.58166.7c.
 9. Hayek S, Lane S, Fluck M, Hunsinger M, Blansfield J, Shabahang M. Ten year projections for US residency positions: will there be enough positions to accommodate the growing number of US medical school graduates? *J Surg Educ*. 2018;75(3):546–551. doi:10.1016/j.jsurg.2017.08.021.
 10. Berger JS, Cioletti A. Viewpoint from 2 graduate medical education deans: application overload in the residency match process. *J Grad Med Educ*. 2016;8(3):317–321. doi:10.4300/JGME-D-16-00239.1.
 11. Cosgrove EM, Ryan MJ, Wenrich MD. Empowering fourth-year medical students: the value of the senior year. *Acad Med*. 2014;89(4):533–535. doi:10.1097/ACM.0000000000000191.
 12. Stevens CD. Commentary: taking back year 4: a call to action. *Acad Med*. 2010;85(11):1663–1664. doi:10.1097/ACM.0b013e3181f53487.
 13. Lee AH, Liao R, Young P, Yi PH, Reh D, Eisele DW, et al. Otolaryngology residency interviewing dates and practices: what should an applicant expect? [published online ahead of print December 19, 2018] *Laryngoscope*. doi:10.1002/lary.27626.
 14. Shappell E, Fant A, Schnapp B, Craig JP, Ahn J, Babcock C, et al. A novel collaboration to reduce the travel-related cost of residency interviewing. *West J Emerg Med*. 2017;18(3):539–543. doi:10.5811/westjem.2017.1.33085.



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