Medical Student Advising: Informed Individualized Advice Is the Key

Eva Aagaard, MD

I have been advising medical students for more than 15 years. Most have been students who are interested in internal medicine, but a number of them were applying for preliminary years, the "couples match," and had difficulty finding someone in their desired specialty to talk with, or were unsure of what they wanted to do for the next 4 to 5 decades of their life. Fourth-year advising generally focuses on 2 primary domains: (1) how to maximize success in the Match, and (2) how to best prepare for internship. The students I have advised ranged from highly competitive and dedicated applicants who were overly anxious, to learners with poor insight, little chance of matching in their desired fields, and in need of significant additional training prior to graduation. Regardless of the situation, advising them always felt like a high-stakes discussion—a critical time where all the decisions the students had already made and the decisions they would make in the coming months would determine their fate. This *determined fate* would come about in the form of the name of a program written on a little piece of paper on Match Day, setting the stage for the beginning of their professional career as a physician.

In recent years, the stakes have felt even higher. Medical school applicants have increased, and first-year core residency positions have grown much more slowly. Some have compared this experience to the National Football League Draft, especially now that these high-stakes dramas are played out not just in large ceremonies but also almost instantaneously sent out into the world via simulcasting and social media.[1] Despite concerns, the 2015 US Match results were stable compared to the last decade, with a 93.9% match rate for US allopathic seniors. Among the 18 025 MD seniors in the United States, 16 932 matched into a first-year residency position.[2]

In addition to questions regarding the match itself, many students seek advice regarding their fourth-year schedule. The final year of medical school has been the focus of much interest of late, with some calling for elimination and others touting its value.[3–5] To this end, recommendations have been made for standardization around core outcomes with individualization for career development. In 2014, the Association of American Medical Colleges published the Core Entrustable Professional Activities (EPAs) for Entering Residency,[6] and started a 10-program pilot and an open listserv to promote further discussion regarding EPAs and the standardization of medical student skills. How these efforts will align with the Accreditation Council for Graduate Medical Education's new accreditation system[7] and the milestone initiatives across the various specialties remains to be seen. Input from individual specialties about how their needs differ from the Association of American Medical Colleges' core EPAs will be critical.

In this issue of the *Journal of Graduate Medical Education*, Chretien and colleagues[8] present the results of 11 questions within the annual Clerkship Directors in Internal Medicine Survey that were focused on fourth-year advising. This survey had an excellent response rate of 76%, with 88% of respondents reporting that they are involved in medical student advising. A significant proportion of respondents advise large numbers of students and have done so for more than 10 years. The major limitation of this article is that it was restricted to internal medicine clerkship directors and, therefore, is likely not fully generalizable to other specialties.

Nevertheless, several elements probably generalize. Specifically, we all agree that each applicant must be reflective and gain input regarding his or her true competitiveness for the specialty and the programs he or she is considering. This information is remarkably hard for students to get on their own, and it is up to their advisors to provide an honest appraisal. This requires that we be reflective about the advice we are giving as well. We must follow up with our advisees to see if what we have told them is corroborated in their experience. Did they get interviews at those "reach" programs? How about those choices we felt were "safety" programs? Was their experience at those programs what we expected? What did they learn from the experience? Without this feedback on our advising, it is unlikely that we will be able to stay current in our advising practices

DOI: http://dx.doi.org/10.4300/JGME-D-15-00230.1

and achieve the goal of helping our medical students succeed.

Second, I believe that all specialties want their students to match into a program that is a "good fit." For me, this means that the program's goals are aligned with the learner's goals, both in terms of education and career development. If a program's goals are primarily the development of subspecialty researchers, and a learner's goals are to become a rural primary care physician, it is unlikely the learner will find the mentors and support he or she will need to thrive during residency. Each program also has a personality based on its program director, faculty, and existing residents. Is this a place the student will be supported in both his or her learning and personal development? If the applicant has a family or significant other, will that individual also be supported? Interestingly, the challenge of best fit often is hardest for the most competitive applicants. When you can choose to go most anywhere, do you choose by reputation? Or by where you will likely be happiest? Is the given learner self-aware enough to know the difference?

A third area of agreement seems to be in the domain of fourth-year scheduling. Chretien and colleagues[8] demonstrate that clerkship directors strongly recommend that all students interested in internal medicine complete a medicine subinternship. Our prior study of program directors across multiple specialties found that a medicine subinternship was considered valuable regardless of specialty choice.[9] Interviews suggested that this was related to the ability of students to perform critical intern functions, such as clinical decision making, with increasing autonomy and efficiency.

Where do we likely diverge in our advice and why is it critical to ensure effective specialty-specific advice? An important divergence lies in our respective definitions of competitiveness for the specialty and programs. Each specialty has defined the attributes of the "ideal applicant," and each has a sense of the relative competitiveness of specific programs. In their annual *Charting the Match* report, the National Residency Matching Program (NRMP) provides general advice as well as specialty-specific information regarding those students who matched in the prior year.[10] The report demonstrates the number of programs that matched and unmatched students ranked, step scores, and other variables, including research and volunteer experiences across specialty-specific domains. While it would be valuable if the NRMP could provide specific information regarding the relative competitiveness of specific programs, this information is not currently available. For now, learners are dependent on the expertise of their advisors to provide them with critical information, including: How many programs must students apply to in order to get sufficient interviews to match? Which programs are most suited to their interests and competitiveness? It is notable that this aspect will vary greatly for different specialties and different students.

A second area of major discrepancy exists in how students should spend their fourth year. Most specialties prefer that learners spend at least some time in their chosen field, usually in the form of a subinternship or other advanced rotation. How much time and what rotations to complete depend on the specialty, as well as the individual student's current level of ability and personal goals. For example, a learner who is struggling with his or her clinical reasoning would likely benefit from rotations where this skill is prioritized, such as emergency medicine and internal medicine, regardless of their chosen specialty. In contrast, a learner who has already excelled in their desired specialty may wish to spend time gaining additional training in other areas to benefit future practice. For instance, a future surgeon may benefit from completing a medicine consult elective, and a future primary care physician may gain skills from dermatology or orthopedics rotations. Which rotations are of most benefit are best determined by a specialty-specific advisor.

The need for "audition," or away rotations, also varies greatly. Chretien et al[8] demonstrate that within internal medicine, there is controversy regarding the purpose and potential risks and benefits of such rotations. Within internal medicine, the choice to do an away rotation seems to be based on a learner's skills and his or her specific goals for the rotation. In other specialties, an away rotation appears to be nearly a requirement.[11–13] To navigate this decision, students will need specialty-specific, individualized advice.

Given the complexity of medical students' decisions about specialty choice and training location, it is critical that advisors are effective. Medical schools, departments, faculty, and students each play important roles in ensuring advising success. Medical schools must ensure that departments and faculty are well trained in advising and are up-to-date on NRMP processes. Specialty departments must identify and support advisors who are unbiased, student-centered, and knowledgeable regarding programs around the country. As faculty, we must strive to provide individualized advice and honest feedback to our students, advocate for them, and seek feedback regarding the advice we are giving. Finally, students must seek out advisors who are knowledgeable, gather input from multiple perspectives, and assimilate that information to make informed career decisions.

References

1. Robeznieks A. Modern healthcare: Match Day nears, with worries there still aren't enough residency slots. http://www.modernhealthcare.com/article/20150318/NEWS/150319897. Accessed May 18, 2015.
2. Greenberg R; Association of American Medical Colleges. Match Day: celebration and a call to increase residency slots. https://www.aamc.org/newsroom/reporter/april2015/429690/match-day.html. Accessed May 18, 2015.
3. Reddy ST, Chao J, Carter JL, Drucker R, Katz NT, Nesbit R, et al. Alliance for Clinical Education perspective paper: recommendations for redesigning the "final year" of medical school. *Teach Learn Med*. 2014;26(4):420–427.
4. Emanuel EJ, Fuchs VR. Shortening medical training by 30%. *JAMA*. 2012;307(11):1143–1144.
5. Wolf SJ, Lockspeiser TM, Gong J, Guiton G. Students' perspectives on the fourth year of medical school: a mixed-methods analysis. *Acad Med*. 2014;89(4):602–607.
6. Englander R, Carraccio C. From theory to practice: making entrustable professional activities come to life in the context of milestones. *Acad Med*. 2014;89(10):1321–1323.
7. Nasca TJ, Philibert I, Brigham T, Flynn TC. The next GME accreditation system—rationale and benefits. *N Engl J Med*. 2012;366(11):1051–1056.
8. Chretien KC, Elnicki DM, Levine D, Aiyer M, Steinmann A, Willett LR. What are we telling our students? A national survey of clerkship directors' advice for students applying to internal medicine residency. *J Grad Med Educ*. 2015;7(3):382–387.
9. Lyss-Lerman P, Teherani A, Aagaard E, Loeser H, Cooke M, Harper GM. What training is needed in the fourth year of medical school? Views of residency program directors. *Acad Med*. 2009;84(7):823–829.
10. National Resident Matching Program. Charting outcomes in the match characteristics of applicants who matched to their preferred specialty in the 2014 main Residency Match. August 2014. http://www.nrmp.org/wp-content/uploads/2014/09/Charting-Outcomes-2014-Final.pdf. Accessed May 28, 2015.
11. Al Khalili K, Chalouhi N, Tjoumakaris S, Gonzalez LF, Starke RM, Rosenwasser R, et al. Programs selection criteria for neurological surgery applicants in the United States: a national survey for neurological surgery program directors. *World Neurosurg*. 2014;81(3–4):473–437.e2.
12. Wagoner NE, Suriano JR, Stoner JA. Factors used by program directors to select residents. *J Med Educ*. 1986;61(1):10–21.
13. Jacobson RA, Daly SC, Schmidt JL, Fleming BP, Krupin A, Luu MB, et al. The impact of visiting student electives on surgical Match outcomes. *J Surg Res*. 2015;196(2):209–215.

Eva Aagaard, MD, is Associate Dean for Educational Strategy, Director, Academy of Medical Educators, and Director, Center for Advancing Professional Excellence, University of Colorado School of Medicine.

Corresponding author: Eva Aagaard, MD, University of Colorado, Division of General Internal Medicine, MS F495, Room 4102A, 13070 East 19th Avenue, Aurora, CO 80045, 303.724.5866, eva.aagaard@ucdenver.edu