**Brief Opinion** 

## **Applying to Radiation Oncology Amid a Pandemic**

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The global coronavirus disease 2019 (COVID-19) has affected every aspect of modern-day life, and residency applications are no exception. Most medical schools adapted by shifting to online courses, pulling students off clinical clerkships, and cancelling visiting medical student participation in away rotations.<sup>1</sup> Medical students will miss opportunities to explore radiation oncology, find mentors, and experience research, but among the hardest hit are fourth year medical students who will be going through the residency match.<sup>2-4</sup> To assess the effect of COVID-19 on the radiation oncology match 2020-21, we conducted a cross-sectional survey study of all radiation oncology program coordinators across the United States. Here, we attempt to summarize the findings of the survey while suggesting solutions to the issues that might face the applicants and programs alike.

Because of the current pandemic, many radiation oncology hopefuls are already finding themselves with gaps in their application compared with previous years. To comply with the federal regulations, the United States Medical Licensing Examination (USMLE) examinations were put on hold, including the USMLE Step 1, Step 2 Clinical Knowledge (Step 2 CK), and Step 2 Clinical Skills (Step 2 CS), all of which are considered essential for the match and certification.<sup>5</sup> Even after examinations

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resumed 2 to 3 months after being suspended, many students had extreme difficulties in rescheduling due to limited spots in dedicated Prometric testing centers and last-minute mass cancelations to comply with social distancing measures. As such, when the match season is upon us, applicants may find themselves applying with missing licensing examinations. Even with the National Resident Matching Program postponing the application deadline from September 2020 to October 2020, whether applicants will have time to finalize their examinations remains unclear. This is further augmented with the recent suspension of the USMLE Step 2 CS examination, which may disproportionately affect foreign medical graduates who at the time of writing this article are still required to be certified by the Educational Commission for Foreign Medical Graduates before the match.

Of the 27 out of 90 respondents to our survey (response rate 30%), more than half of the programs are open to considering applicants who did not complete their USMLE Step 2 CK/CS (18; 67%), which may alleviate some challenges that the applicants might face. The results of the survey are in line with the recommendations that the Associate for Directors Radiation Oncology Program recently presented, urging programs to have a holistic approach in selecting applicants for interviews instead of numerical screening methods.<sup>6</sup> Licensing examinations are one aspect of the application being affected; other issues include limited access to away rotations, little clinical exposure to radiation oncology, lack of letters of recommendation, and scarce research opportunities.

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The decision to halt away rotations to minimize the spread will potentially affect all residency applicants, but specifically applicants to medical fields where away rotations play a major role, like radiation oncology. A study by Sidiqi et al<sup>7</sup> offered radiation oncology residency applicants a survey to assess their experience and perspective toward clinical rotations completed at different institutions. The study showed that around 89% of respondents had participated in at least 1 away rotation. Such experiences will be greatly limited this year due to the current pandemic. Out of the 27 of 90 programs that responded to our survey, only 3 (11%) are allowing away rotations with medical students from other institutions. On the other hand, around half of respondent programs (n = 12; 44%) are still allowing their own medical students to attend radiation oncology clinical rotations. Despite a majority of programs not allowing away rotations, only 5 (19%) are currently offering alternative methods to physical rotations (most notably in the form of virtual rotations). Although the number of virtual rotations that are being designed remains low, many programs like the Radiation Oncology Virtual Education Rotation program and Radiation Oncology Education Collaborative Study Group have stepped up to provide medical students with greatly needed resources.8,9 Similar programs are important to fill the gap created by the absence of away rotations, and as such provide younger medical students and students who are getting exposure to the field with accessible clinical education scenarios. However, these programs do not address an important aspect of away rotations, which is the ability to network and secure letters of recommendation from radiation oncologists. In their statement, Associate for Directors Radiation Oncology Program encouraged medical students to prioritize their home institution's clinical rotations instead.<sup>6</sup> They also highlight nontraditional methods, such as online mentorship by radiation oncologists, online discussions with residents, discussions through Twitter, and most notably, virtual rotations. Although these recommendations are important, many issues still remain. Thus, we encourage programs and radiation oncologists to establish an online presence that prospective applicants can use to get access to more information and personal mentoring.

The issues faced by applicants and programs also extend to the match interview and selection process. With the restrictions of air travel, there have been increasing calls for a virtual interview season by different stakeholders. In our survey, most programs are considering a shift to virtual interviews for this cycle (20; 74%). Although virtual interviews offer added benefits such as decreasing travel costs for applicants and leveling the playing field, other issues such as an impersonal interview process are important to address. With the loss of the inperson experience, applicants will not get a feel of the city and area or connect with residents in the same ways as before. This could be of particular concern for programs in areas that are often viewed as geographically unappealing. This problem also works in reverse, where programs and their residents may not be able to fully assess the fit of the applicant beyond online meetings, and therefore may decide to favor homegrown applicants due to easier in-person evaluations. Hence, we urge programs to implement methods where applicants can connect socially with current residents to allow for exchange of information through multiple different formats with the goal of 2-way transparency and communication.

The current COVID-19 pandemic is an unprecedented situation that has huge implications for the future. The field of radiation oncology is not immune to such changes, especially with the dwindling number of applicants the field has been witnessing over the past 2 cycles.<sup>10</sup> Although the imminent threat is to the current applicants, the field has a chance to use these troubling times to appeal to future generations. Virtual resources can be used to reach younger medical students who are considering applying in the future, as well as students who are getting acquainted with this specialty. Hence, we call on all programs to implement initiatives that increase visibility, mainly through implementing virtual rotations, online mentoring, and resorting to a holistic approach in evaluating potential applicants. The future of radiation oncology will depend on how it reacts in times of darkness, hence let us make sure we use this opportunity to portray the character that radiation oncology is known for.

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