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Brief Opinion

Resident Considerations for Virtual Interviews in Radiation Oncology: Perspectives From the Sunshine State



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Introduction

Residency candidate selection in radiation oncology has traditionally consisted of formal in-person interviews, which occur in groups, each over 1 to 2 days. This format was largely adopted due to the efficiency it provided programs in interviewing the most applicants in a given day and reducing faculty time away from clinical responsibilities. However, because of the ongoing threat of severe acute respiratory syndrome coronavirus-2, or coronavirus disease 2019, and the associated social distancing measures, the Association of American Medical Colleges, the Accreditation Council for Graduate Medical Education, and the National Resident Matching Program have recommended virtual interviews for the 2020 to 2021 residency application cycle. 1-3 This recommendation will result in a marked shift from tradition and requires significant alterations to the typical recruitment process for residents. We aim to discuss changes in applicant habits, logistical hurdles for programs, and how to ensure applicant exposure to current residents from the viewpoint of current residents.

Effect of Applicant Habits

Radiation oncology residency programs have faced significant changes in the last several years, with a marked decrease in the number of US seniors applying to the field and an increase in the number of unfilled positions in the Match.⁴ These changes are multifactorial and beyond the scope of this brief report. It is clear, however, that incorporating virtual interviews to the Match will affect applicant habits, likely in a meaningful way. We therefore urge programs to consider the following issues as they develop their virtual interview platforms.

In the 2020 Match, 128 US senior applicants ranked radiation oncology residency programs 1735 times for an average of 13.6 ranks per US senior applicant.⁵ Considering that an applicant is exceedingly unlikely to rank a program for which they did not interview, we estimate an average 13.6 interviews per US senior applicant, which is an increase from 10.9 interviews in 2015.⁶ We anticipate that the average number of interviews will significantly increase in the 2021 Match cycle for several reasons. First, a major limiting factor to the number of interviews that an applicant could pursue was travel time, something

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that will no longer be a significant concern given the virtual nature of the interviews. Second, the cost burden of interviewing for various residency programs will be significantly reduced. Although data specific to radiation oncology is sparse, recent emergency medicine residency applicants attended an average of 1.6 away rotations and 13.7 interviews, spending over \$8000 on the process. Those costs are undoubtedly higher in radiation oncology given the need to apply for internships as well. This is a significant financial burden given the average indebtedness at graduation from medical school is approximately \$200,000.8 Virtual interviews will unquestionably reduce these costs, allowing for an increase in the number of interviews attended. Third, given the recent increase in unmatched positions in the field, program directors may consider extending more interviews to avoid unmatched residency spots. Considered alongside the recent concerning trends in radiation oncology residency applications and matching, we strongly recommend that program directors consider these factors as they embark on reviewing which and how many applicants to interview this autumn.

Thought leaders in other fields of medicine have suggested making additional changes to the structure of the Match, including limiting the number of interviews that applicants can accept. We are concerned regarding the implementation of this limitation, especially given the many unknowns of the residency application process this year. With the shift to virtual interviews and uncertainties associated with the new process, it is reasonable for applicants to want to expand their horizons and gain exposure to as many programs as possible. Limiting their ability to do so may prohibit applicants and programs from finding their correct "match."

Changes to the Interview Day

The introduction of virtual interviews will present new challenges to both applicants and programs. As current residents, our collective experience has taught us that the most important considerations during interview day include the ability to (1) acquire information regarding the program, (2) become acquainted with the professional culture of the faculty and residents, and (3) determine the suitability of the city in which the residency resides. These considerations are typically addressed during physical visits and will need to be replaced within the virtual process.

Perhaps the simplest concern to address is how to properly relay information regarding the program. Often, information regarding rotation structure, research opportunities, and educational programs is available on the program website. We urge coordinators to ensure their websites are current, clear, and concise and highlight the unique features of their program. We further emphasize

the importance of social media platforms, especially Twitter, in engaging potential applicants. Several residency programs have launched virtual "meet and greets" well in advance of Electronic Residency Application Service application deadlines, and we specifically commend their efforts to improve the information available to prospective resident physicians. 10 Away rotations are the primary method by which applicants familiarize themselves with the programs they are most interested in; yet, these rotations are highly unlikely to occur this summer and fall. We predict that, due to fewer away rotations resulting in less exposure to programs, and/or to apprehension in selecting a program in an unknown city, applicants will favor their home programs or cities they are more familiar with from prior experience. Therefore, we encourage program directors to implement virtual away rotations; we are overwhelmingly encouraged by the nearly 20 programs offering flexible virtual away rotations. 11 The structure outlined by Kahn et al 12 offers prospective applicants a formalized program that appears to be well-liked by students going through the experience. Program directors should also coordinate with their institution's graduate medical education office and local tourism boards to offer applicants engaging and informative videos or virtual tours of their departments, campuses, and hometowns.

Becoming acquainted with faculty and current residents will also be a challenge. Owing to the structural changes and logistics behind virtual interviews, it may be convenient for programs to develop a condensed interview process consisting of interviews with the program director and a limited number of faculty. However, we strongly encourage programs to avoid this condensation of the interview day and to involve as many faculty as feasible to represent the entire breadth of clinical experiences in the residency program and to ensure that applicants interact with a broad cross-section of faculty. Likewise, an enhanced number of interviews both with faculty and senior residents will allow for improved evaluation of potential applicants, and to better determine which applicants may best fit into each residency program.

Incorporating Current Residents into the Interview Process

Although we are not aware of survey evidence to support this, it is our collective view that one of the most valuable resources on interview day is unfettered time with current residents. We believe that program directors also view this interaction as important given the expenses dedicated to interview dinners exclusively for residents and applicants. Such an essential interaction between applicants and residents will be one of the most

	Residency applicants	Current residents	Residency programs
Preinterview	Identify programs of interest through AAMC website Assess availability of virtual rotations Visit residency program websites and review official materials Participate in ASTRO/ACRO/ACR events for medical students Reach out to current residents in home program or programs of interest	Work with residency program leadership to update public resources Engage in social media Allow medical student access to contact information Participate in virtual mentorship Participate in ASTRO/ACRO/ACR events for medical students	Update and improve residency website Provide contact information of program director and residents for interested students Develop virtual curriculum for medical student rotations Compile resources regarding th city and make available online Participate in ASTRO/ACRO/ ACR events for medical student Rigorously test virtual interview platform
Interview day	Do not judge programs based on differences in virtual interview technology Remain professional, have an appropriate space and reserved time for interviews, and treat candidates with the same professionalism as an in-person interview Ask directed questions about work environment, relationship with staff, average workday, and life outside of work in the city of the residency program	Arrange for dedicated time with applicants during interview Encourage and engage in informal discussions rather than formal interview questions Consider group interview with several residents so that applicants can see group dynamics Offer chance to see common work areas (eg, resident room)	Convey information as efficiently and accurately as possible in electronic form Encourage all faculty that typically participate in interviews to be included in virtual interviews Allow a forum for residents and applicants to have informal discussions Have IT staff available for immediate assistance Eliminate excessive
Postinterview	Continue to reach out to programs with specific questions that may arise	Maintain open dialogue with applicants about changes in program	presentations on interview day Allow for open communication with applicants.

challenging activities to replicate in the transition to virtual interviews.

We propose several options to incorporate current residents into the interview process. Senior residents could take an active role with a dedicated interview including a subset of residents. Our anecdotal experiences suggest that a dedicated resident interview is customary among some programs, but not most. Such a format may be too formal for applicants to feel they can freely ask questions. Hosting a virtual "happy hour" before or after the interview day would provide an informal setting to offset the formality of the interview sessions. Although this event may resemble the current preinterview dinner, we acknowledge that its virtual nature could introduce awkwardness and inhibit the natural flow of conversation, especially break-out conversations because a virtual format demands a single speaker at a given time. One last strategy to consider is the creation of program-specific virtual "meet the residents" sessions during the 2020 American Society for Radiation Oncology Annual Meeting. Ideally, registration for these sessions would be

free to all medical students (even those not attending the American Society for Radiation Oncology meeting) and would provide short bursts of interaction between 1 medical student and a small group of residents from that given program. Medical students would register in advance for their programs of interest, provided those programs were enrolled in the session. Although no single strategy is perfect, ensuring interactions with residents will ensure that applicants receive vital information regarding the professional culture of each department rather than relying on other avenues of information to make decisions regarding their rank lists. Our hope is that these ideas will spark further discussions to identify ever more optimal methodologies for applicant-resident interactions.

Conclusions

The shift to virtual interviews will impose significant changes to applicant behavior and require substantial

alterations to the interview process. We present a residentcentric view of key issues that may be important to applicants and programs as they navigate these changes. In Table 1, we summarize several suggestions. This manuscript builds on a recent contribution of recently matched residents who discussed many concerns both for this interview season and for those going forward.¹³ We concur with the suggestions of Sherry et al¹³ on incorporating a "virtual hangout" to simulate the waiting room experience and a common release date of interview applications. We further concur with regional coordination of interview dates to minimize travel when in-person interviews do resume. We expand significantly on this manuscript in discussing many additional methods to promote applicant, resident, and faculty engagement in the interview process. Considering the reduced cost of a virtual interview season, applicants are likely to interview with more programs and programs are likely to interview more applicants. Program efforts should focus on providing applicants with sufficient information to make this major life decision. We also encourage programs to develop novel ways for applicants to interact with residents throughout the interview process. We have the pleasure of working in a field that is constantly evolving. We have no doubts that any challenges introduced by the shift to virtual interviews will be overcome, and we look forward to engaging in discussions to optimize our collective success.

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