

Virtual “matchmaking” without visiting electives: Overview of the early U.S. experience and potential applications to the 2021 Canadian urology match

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Introduction

The COVID-19 pandemic has disrupted healthcare systems around the world with profound consequences on medical education.¹ The surge in cases comes at a time when many medical students interested in urology are preparing to embark on visiting electives, a capstone of the didactic transition to residency training. In addition to providing a rich educational experience, visiting electives are an opportunity for medical students to assess fit with potential programs for their postgraduate training. For Canadian urology program directors, visiting electives serve as a

critical component of medical student evaluation and have been shown to be the most important factor when selecting future urology residents.²

However, in June 2020, the Association of Faculties of Medicine of Canada (AFMC) announced the suspension of visiting electives for the 2020-21 academic year in response to public health measures limiting travel, growing concerns over student safety, and reduced capacity to welcome visiting students in the midst of the outbreak.³ In a recent CUAJ article, Mann et al. discussed the potential challenges imposed by such restrictions on Canadian urology residency programs and applicants.⁴ While appropriate given the circumstances, in the setting of a separate AFMC policy that limits student elective exposure within any single-entry specialty to a maximum of 8 weeks,⁵ the field of urology now faces another barrier to “matchmaking” that may undermine the 2021 Canadian match.

To overcome these challenges, Canadian programs and applicants are seeking new ways to convene online in order to gain exposure to one another. In the United States, where the residency application cycle occurs much earlier than in Canada, the pivot to a “virtual” urology match has already begun.⁶ In this commentary, we review opportunities for virtual engagement during the 2021 CaRMS Match, with a particular focus on lessons learned from the American experience.

Virtual electives

Following the outbreak of COVID-19 and subsequent cancellation of clinical rotations in the United States, “virtual electives” were proposed as an immersive educational experience designed to emulate core aspects of traditional, in-person electives.⁷ At Harvard Medical School, leadership at three affiliated urology residency programs worked together to pilot one of the first virtual electives in urology in May 2020. The month-long program had four objectives:

1. Equip students with the knowledge base needed to provide urologic care at the sub-internal level via a didactic curriculum comprising lectures, case-based discussions, and detailed intra-operative walkthroughs with attending physicians;
2. Continue clinical training through participation in telehealth clinics;
3. Offer insight into resident life, culture, and training within a specific program through resident-only Q&A sessions and informal, “fireside chats” with faculty;
4. Provide access to personalized mentorship, research opportunities, and letters of recommendation.

Although the virtual elective was intended for home students in the setting of a mandatory lockdown, it has been suggested that this model could be used to replace visiting electives for away students.⁸ While virtual visiting electives are prohibited under the current AFMC policy, reconsideration of this policy may provide a valuable opportunity for students to gain exposure to programs outside their own institution in the context of a pandemic, and would be especially useful for students without a home program. To facilitate virtual visiting electives in the United

States, The Society of Academic Urologists has published guidelines which include a standardized curriculum, skills challenges, and assessment tools.⁸ However, to date, few virtual visiting electives in urology have been offered, with concerns raised about their value relative to in-person clinical opportunities at a student’s home institution.

Virtual events and social media presence

Many of the goals of traditional visiting electives can be achieved with shorter, virtual events. In the United States, the Vanderbilt University Department of Urology has created a lecture series comprising twelve weekly sessions covering topics across the spectrum of urologic conditions. Whereas the pandemic has given rise to a number of new online curricula targeting urologists and residents,⁹ these sessions are specifically designed to meet the learning needs of medical students. The lecture series complement large faculty-led open houses and more intimate resident-only mixers that offer insider perspectives from near-peers, which together provide applicants a holistic overview of the program designed to reflect an in-person experience.

Social media platforms such as Twitter represent an additional opportunity for residency programs and applicants to engage each other. In a 2019 study, only 3 of 13 (23%) Canadian residency programs had Twitter accounts.¹⁰ Since the onset of the pandemic, however, there has been a dramatic increase in the number of programs and applicants on the platform. Notably, of the 10 Canadian residency program accounts currently on Twitter, 4 have joined the platform since June 1st, 2020. Updated websites can also complement social media presence by offering formal information on programs.

One-on-one mentoring programs

Visiting electives enable medical students to foster ties with attendings and residents that often grow into mentor-mentee relationships. Effective mentorship has been shown to improve match outcomes,¹¹ and more importantly play a significant role in the growth of most trainees. While it may be challenging to reproduce the appropriate settings for such bonds to form in an organic way, virtual mentorship programs are beginning to take root within urology social media.

Recently, UroStream 101 was developed by urology residents and is an example of a program fostering mentorship. Medical students are paired with a resident outside their home institution and choose a topic to be researched and presented via a Tweetorial. The process is analogous to a traditional clerkship presentation, except that students can gain much broader exposure once they share their Tweetorial. Examples of Tweetorials can be found using the hashtag #UroStream101.

Direct outreach to under-represented in medicine applicants

As highlighted by Nagdee in a timely and important CUAJ commentary, there is a pressing need to increase minority representation in Canadian urology.¹² Research on unconscious bias in

business settings have shown that ambiguous assessment criteria are used to filter out people in marginalized racial and ethnic groups – labeling candidates as not having “the right cultural fit.”¹³ Visiting electives play an important role in countering this bias by offering underrepresented in medicine (URM) applicants valuable exposure to specific programs and presenting students with the opportunity to create meaningful connections with institutions.¹⁴ Without visiting electives, however, URM applicants will be particularly disadvantaged in this match cycle, necessitating more concerted outreach on the part of residency programs.

An example of such an initiative is the Michigan Urology Academy. This day-long, virtual event offered sessions that included sharing stories and challenges in the journey to becoming minority surgeons, role-playing sessions on how to address microaggressions, and a “how-to” session for clinical students who would be embarking on the residency application process. This program is an initial step in empowering applicants with shared-experiences and practical advice and part of a much needed broader effort to promote diversity and inclusion within urology.¹⁵ Online programs could also target other demographics under-represented in urology, such as women, by leveraging multiple institutions to pool a national cohort of female faculty and trainees, providing more representation and mentorship to potential applicants.

Virtual exposure: Here to stay?

While some proposed innovations such as virtual away electives are likely unsustainable and not as effective as their in-person equivalent, some virtual exposure formats could be here to stay. For example, virtual open houses are highly relevant considering the AFMC electives cap as they may offer medical students a better picture of available programs before selecting which schools to visit while providing programs with an opportunity to interact with prospective applicants. Another non-negligible benefit of these low-cost practices is that they reduce certain barriers to applying to urology, potentially promoting equity and access to the specialty for medical students, with few, if any, pitfalls as long as they do not replace other existing initiatives and are offered as helpful adjuncts rather than mandatory events. Further research is needed to determine the impact of virtual platforms on application equity.

Conclusions

Despite visiting electives being cancelled due to the COVID-19 pandemic, there are a number of innovative ways for programs and applicants to engage online in a time of social distancing. Leveraging virtual formats has the potential to mitigate the challenge of reduced in-person exposure and ensure that the 2021 match is as successful, equitable, and inclusive as possible for both programs and applicants.

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