Internal medicine residents' and program directors'

¹Department of Medicine, Queens University, Ontario, Canada; ²Office of Professional Development and Educational Scholarship, Queen's Universit, Ontario, Canada; ³Division of Hematology, Department of Medicine, Queen's University, Ontario, Canada Correspondence to: janet.lui@queensu.ca

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Introduction

The coronavirus disease 2019 (COVID-19) pandemic has imposed travel restrictions and physical distancing policies that make conducting traditional in-person interviews logistically difficult and potentially unsafe. As such, all Canadian Residency Matching Service (CaRMS) interviews for medicine subspecialty programs will be conducted in a virtual format for the first time this year. While there are possible benefits of virtual interviews such as reduced financial burden and scheduling conflicts, potential challenges for prospective residents include reduced networking opportunities, impaired ability to understand a program's culture, inability to tour the facilities and city, and the possibility of technical issues degrading the interview experience.¹ Virtual interviews introduce potential challenges for residency programs as well, including reduced informal interactions with residents to determine compatibility, and perhaps increased acceptance of interviews due to fewer scheduling barriers, making it difficult to discern genuine interest in a program.¹

Studies on virtual interviews in medical residency show conflicting results with respect to resident and program satisfaction.^{2–7} If the continuing COVID-19 pandemic

necessitates that virtual interviews continue beyond this year, it is critical to improve the virtual interview process to provide the best experience, and thus match outcome, for both residents and programs. The reality of implementing a new process means that unforeseen benefits and consequences will occur and need to be studied. This study aims to explore the perceptions and experiences of internal medicine residents and subspecialty program directors during the 2020 virtual interviews during the COVID-19 pandemic.

Methods

An internal peer review with fellow educational researchers at Queen's University has identified the salience of the problem and guided the development of our aims and methods. A voluntary, anonymous survey will be emailed to all third-year internal medicine residents who participated in CaRMS interviews in 2020. The study information and survey will also be emailed to internal medicine program directors at all Canadian universities, who will then disseminate the information to the residents in their program. As well, subspecialty program directors will be invited to participate in a separate survey branch through an email from the principal investigator. All

survey

La perception des directeurs de programme et des résidents en médecine interne quant aux entrevues virtuelles pendant la COVID-19 : une enquête nationale

perception of virtual interviews during COVID-19: a national

surveys will be sent using an anonymous survey link on the Qualtrics platform, which will take approximately 10 minutes to complete. No personal identifying information will be collected to ensure anonymity of participants. Participants will create a unique 4-digit study identification (ID) to protect their identity. The only purpose of the study ID is to identify responses should participants wish to withdraw from the study. Informed consent will be implied from the completion of the survey. The branched survey will consist of 5-point Likert scales and open response items (23 Likert and 16 open-response items for residents; 11 Likert and 10 open response items for interviewers/program directors). To mitigate bias, the survey will be distributed to residents and program directors after the submission of rank lists, such that participation in this study will not affect residency match outcomes. Statistics including descriptive statistics for displaying the results of the participant responses, Chi-Square goodness of fit tests for comparing binary items or those with non-normal distributions, as well as inferential tests such as ANOVA will be performed to explore differences between demographic groups on responses to normally distributed items. The open responses will be thematically analysed and nested with the quantitative findings, creating a systematic exploration of the descriptive and statistical trends followed by the narrative and thematic insights provided by the qualitative items. This study has been reviewed for ethical compliance by the Queen's University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board.

Investigators require that internal medicine program directors disseminate the study information and survey to residents in their program. As such, investigators welcome collaboration from researchers at other sites.

Summary

This survey study aims to understand the perceptions and experiences of internal medicine residents and subspecialty programs directors during virtual CaRMS interviews in the evolving COVID-19 pandemic. In the likely event that medicine subspecialty interviews occur virtually again next year, findings from this survey can help inform and improve the experience for residents, program directors, and faculty. **Conflicts of Interest:** NR, ES, and JL have no conflicts of interest to disclose.

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