I. Introduction

The Association of Pulmonary and Critical Care Medicine Program Directors (APCCMPD) consists of program leaders from Critical Care Medicine (CCM), Pulmonary Medicine, and Pulmonary and Critical Care Medicine (PCCM), and represents 96% of Accreditation Council for Graduate Medical Education (ACGME) accredited fellowships in these subspecialties. The APCCMPD's mission is to foster excellence in training as well as to mentor future educators in pulmonary and critical care medicine. In addition, the APCCMPD provides a communication channel among fellowship programs and with stakeholder organizations.

As part of our mission, the APCCMPD takes a vested interest in all aspects of fellowship recruitment. In March 2022, the APCCMPD assembled an Interview Task Force to make recommendations for fellowship interviews for the 2022-2023 recruitment cycle. The Interview Task Force was composed of 11 volunteer APCCMPD members, representing training programs in both CCM and PCCM, with diverse geographic distribution and program size. Task Force members included Program Directors, an Associate Program Director, two fellows-in-training, and a Program Coordinator to ensure broad representation.

II. Background

For the last two interview cycles, the Coalition for Physician Accountability (an umbrella group of several national organizations including the ACGME and the National Residency Matching Program (NRMP)), the Alliance for Academic Internal Medicine (AAIM), and the APCCMPD recommended virtual interviews for all applicants (1-5). Similarly, for the 2022-23 interview cycle, the Association of American Medical Colleges (AAMC) is recommending virtual interviews for all applicants and is strongly discouraging hybrid interviews (6).

Although virtual interviews were born out of necessity due to the SARS-CoV-2 pandemic, it has become clear that they represent a feasible, valid, economic, and equitable way to conduct interviews for graduate medical education (GME) (7). Importantly, they are also environmentally friendly, significantly reducing carbon emissions due to travel (8). As the world moves towards less restrictive travel policies, it is essential to consider the best way to conduct GME interviews in the years to come. The goal of this Task Force was to consider all of the options and recommend the best approach for a future interview format.

To achieve this, the Task Force sought input from our membership during the 2022 APCCMPD Annual Conference by surveying all in-person and virtual attendees regarding their preferred interview format, as well as the specific concerns and questions the 2022 Interview Task Force should consider in their recommendations. The Task Force also reviewed the published data about applicants and program directors’ experiences and opinions of the virtual interview format (9,10).
III. Process for Developing Recommendations

The Interview Task Force convened over three virtual meetings. During the first meeting, we reviewed the input from respondents to the APCCMPD member survey, as well as published surveys of PCCM applicants (9) and all applicants participating in the 2021 Main Residency Match (10).

Of the 247 participating APCCMPD members, 136 (55% response rate) responded to the survey at the annual meeting: 38% preferred virtual interviews exclusively, 32% virtual interviews with an optional in-person visit, 17% applicant choice of virtual or in-person interviews, and 10% preferred in-person interviews exclusively. Over 50% of responding members highlighted equity as a priority. Other themes from comments included the need for uniformity, consideration of applicant and program leader perspectives, sufficient time for programs to prepare for the interview season, concerns about bias with optional in-person visits and applicants being given a choice of interview format, and concerns about how to highlight programs that are smaller or located outside of large cities.

A 2020 survey of PCCM applicants revealed that respondents were able to evaluate clinical experiences, curriculum, and potential for academic development equally well with virtual interviews as compared to in-person interviews, though most believed that virtual interviews hindered their ability to evaluate program culture, faculty-fellow relationships, locations, facilities, and their “fit” with a program (9). While 43% of respondents preferred virtual interviews with an optional in-person visit, most respondents preferred continued virtual interviews in some format. If given a choice between in-person or virtual interviews, 89% of respondents feared that their choice would affect their ranking by the program. In the Main Residency Match, applicants felt comfortable with virtual interviews, but reported applying to, and interviewing at, more programs as a result (10).

Task Force members were each asked to contribute to a shared document highlighting the pros and cons of four potential interview formats: 1) in-person only, 2) virtual only, 3) virtual with optional in-person visit, and 4) applicant choice of in-person or virtual interview.

During the second meeting, Task Force members engaged in discussion about the benefits and challenges of different interview formats. The Task Force prioritized equity and uniformity, and was guided by member input, including applicant- and program-centric considerations. At the end of a comprehensive and robust discussion, a consensus recommendation was reached. A third meeting was held to finalize the recommendation.

IV. Recommendation for the 2022-2023 Recruitment Season

1. We strongly recommend CCM, Pulmonary, and PCCM fellowship interviews be virtual-only for all applicants, including local applicants, in the 2022-2023 interview cycle.

2. We strongly recommend against CCM, Pulmonary, and PCCM fellowship programs offering optional in-person (“second-look”) visits to applicants in 2022-2023.

V. Rationale

Task Force members reviewed and discussed virtual-only, in-person-only, and hybrid interview formats for the 2022-2023 recruitment cycle and unanimously recommended virtual-only interviews. Virtual-only interviews provide the most equitable experience for candidates and programs. In addition to time and cost savings for applicants, virtual interviews offer broader access to programs across the country. They are also more efficient for training programs, offering greater flexibility for faculty interviewers while also minimizing environmental impact.
Offering a virtual-only interview format eliminates the need for applicants to choose between virtual or in-person options. Applicants are apprehensive that this choice could be perceived by PDs as a sign of interest in a program and can be an additional source of stress, especially for applicants with limited time or resources. All Task Force members acknowledged the difficulty applicants face in getting a sense of program and city culture. Task Force members also acknowledged the difficulty in showcasing smaller programs or those located outside of well-known metropolitan areas. Finally, they voiced concerns over application inflation due to reduced barriers of cost and time, leading to interview allocation disparities.

The remaining interview formats were acknowledged to have benefits and downsides:

**A. In-person interviews only**

This format was the least popular in surveys of applicants and with Task Force members due to concerns regarding financial cost and time cost, which inevitably leads to a differential in access and inequity in the interview process. Additionally, there is a measurable environmental impact of the travel associated with in-person interviews. Conversely, due to the higher cost of interviewing, applicants are likely to interview at fewer programs with this approach and would have the opportunity to meet with faculty and fellows in-person. Programs would have a better ability to discern true interest from applicants who accept the interview. For smaller or more rural programs, in-person interviews allow for showcasing the program and city in a way that is difficult to replicate virtually.

**B. Choice of in-person or virtual interviews**

While seemingly applicant-centric, Task Force members highlighted several challenges with this approach. Most importantly, 89% of PCCM applicants voiced concerns that choosing a virtual interview over an in-person interview would result in a lower ranking by programs. Members of the Task Force acknowledged that, despite efforts to treat all applicants equally, programs may have an unconscious bias towards those who interview in person. Applicants would then be pressured to signal strong interest by choosing in-person interviews at their top programs, resulting in increased costs and an inequitable process favoring applicants with the time and money to travel to in-person interviews. For programs, having two separate interview formats may project a logistical challenge. Finally, programs with limited numbers of both in-person and virtual interview slots may not be able to guarantee requested interview formats for all applicants. Of note, 39% of applicants did acknowledge that less interest in a program would lead them to choose a virtual interview over an in-person one, however this does not solve the challenge that application inflation causes for programs.

**C. Virtual interviews with an optional in-person visit**

While this seemed at first to be the most attractive option and the one favored by PCCM applicants, Task Force members raised concerns about how to do this in an equitable manner. Logistically, this increases work for programs and lengthens the recruitment season. It also results in a greater time commitment for applicants, many of whom may not have sufficient time for travel during residency training. There was great concern about bias towards applicants who chose to visit to show interest in the program. As noted above, the majority of applicants would feel pressured to attend an optional in-person visit to increase their chances of a successful match. GME-sponsored in-person visits were discussed, but not all GME programs may have the capacity to host such visits. In addition, a generic GME visit may not be useful for subspecialty fellowship applicants. Even with a gap between rank order list deadlines for programs and applicants (with applicant lists due later), it would not be feasible for all fellowship applicants to travel to their selected programs in a narrow time window.
VI. APCCMPD Interview Task Force recommendations for virtual interviews

The Task Force continues to recommend the following best practices, in addition to those outlined by Huppert and colleagues (11):

**Scheduling**
- Only extend an interview invitation to an applicant if an interview position is truly available and consider that there may be fewer interview cancellations with a virtual format.
- Programs may create a waitlist of applicants in case of cancellations, though it should be clearly communicated that this is an invitation to join a waitlist.
- When possible, schedule all interviews for a given applicant on one day, rather than over multiple days.

**Overcoming technical difficulties**
- Train program leaders and interviewers in the use of the virtual interview platform.
- Provide clear instructions to applicants in the use of the virtual platform.
- Include a phone number to call in case of technology failure – this will lower applicant stress in case of technical challenges.

**Meeting with current fellows**

To address concerns about cultural fit and fellow satisfaction, provide opportunities for applicants to virtually interact with current fellows one-on-one or in a group setting with other applicants (not attended by faculty or program leaders).

**Location and facilities**

Develop educational content for introductions to the program, institution, and city for applicants to review ahead of the interview visit with the goal of recreating important aspects of the in-person interview day.

**Uniform treatment of all applicants**
- All applicants, including internal candidates, should be interviewed virtually.
- To ensure equity, programs should not meet in-person with candidates who choose to travel to the program’s location.
- Regardless of program approach, equity for applicants should be prioritized.

Additional on-line resources can be found here: https://apccmpd.memberclicks.net/apccmpd-advocacy-on-applicant-recruitment-

VII. Considerations for future interview cycles

While the shift to virtual interviews occurred in response to the global COVID-19 pandemic, virtual interviews remain advantageous due to financial and time cost, environmental impact, and equity. Strong consideration should be given to permanently conducting virtual interviews. This transition will require consideration of other revisions to the interview process, including consideration of limits to the number of applications and/or addition of preference signaling by applicants. Programs will also need to determine how best to showcase their fellowships, people, and geographic environment.
References


Authors:
J. Shirine Allam, MD*; Başak Çoruh, MD*; Andrea Braun, MD; Garth Garrison, MD; Christopher Ghiathi, MD; Edward Kilb, MD; Cheryl Loudd; Maryl Kreider, MD, MSCE; Matthew Miles, MD, MEd; Jason Moore, MD, MS; Kathryn Robinett, MD; Rachel Quaney, MD, MAEd

*APCCMPD Interview Task Force Co-Chair