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COMMENTARY

Rethinking residency recruitment, application, and interview processes to benefit applicants and programs long-term

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ABSTRACT

Pharmacy residency recruitment and interviews have been significantly impacted by the COVID-19 pandemic. Many traditional recruitment events and interviews were transitioned from in-person to virtual, and new approaches to recruitment, such as virtual open houses, were developed. There are limited data on how these changes impacted pharmacy residency applicants and programs, and the future of virtual events is currently unknown. We highlight recommendations for virtual recruitment and interviews and provide suggestions for residency programs and national organizations to improve virtual processes in the future.

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Background

The COVID-19 pandemic has presented numerous challenges to residency applicants and programs. During the 2020–2021 academic year, students endured virtual didactic education, altered pharmacy practice rotations, and a disrupted residency application process. In the face of this unprecedented situation, national leaders and professional organizations offered some guidance; however, there was limited standardization across programs, especially regarding residency recruitment. Residency programs diverged from their traditional candidate evaluation strategy by reducing or eliminating in-person contact and increasing use of virtual tools for candidate evaluation and recruitment. Unfortunately, this disruption continued into the 2021–2022 cycle with uncertainty arising from the continuing pandemic.

The pharmacy residency process had significant challenges before the COVID-19 pandemic. While the number of post-graduate year 1 residency applicants declined in 2021 and 2022, it still dwarfed available residency positions.¹ In addition

to the mental strain of competing for limited spots, the median cost of pursuing residency ranged between \$1756 and \$2280 based on results from 2 pre-COVID-19 surveys.^{2,3} Many applicants use student loans to cover the cost of pursuing residency, which adds to the substantial debt for the graduating students.² This mental and financial strain is important to consider as the profession of pharmacy strives to promote well-being among trainees and pharmacists, especially with the added stresses accompanying COVID-19.

The aforementioned pandemic-associated changes have had a dramatic impact on the traditional processes of recruitment, application, and candidate selection. What remains unknown is which changes will leave a permanent impact on pharmacy residency in the future and which processes will return when COVID-19 becomes endemic. This is a unique opportunity to re-evaluate the process for residency applicants and programs and assess optimal use of virtual communication. As the 2022–2023 application cycle nears, we should reflect on both the positive and negative outcomes resulting from these changes and consider what improvements can be made to better meet the needs of applicants and programs moving forward.

Recruitment

Prior to the COVID-19 pandemic, recruitment for pharmacy residency programs occurred through several different avenues. The most popular and helpful recruitment events

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Key Points**Background:**

- Pandemic-associated changes have had a dramatic impact on the traditional processes of recruitment, application, and candidate selection for pharmacy residency programs.
- Limited data are available to guide best practices for engaging in virtual recruitment and interviews for pharmacy residency programs and applicants.

Findings:

- Allowing candidates the option for in-person or virtual interviews provides an equitable approach that accounts for differences in resources and availability. If a hybrid approach is pursued, national guidance should ensure virtual interviewees are not disadvantaged.
- Residency personnel and national organizations should be willing to adjust their historical processes to better meet the needs of the applicants and programs in this new environment.
- Authors share recommendations for improving virtual recruitment and interview processes and move residency recruitment and commitment forward into a more equitable, sustainable process for the future.

were showcases,^{4,5} which were also the ones most impacted by the pandemic. While in-person interactions have been the cornerstone of residency recruitment in the past, virtual showcases and open houses have endeavored to fill this role throughout the COVID-19 pandemic. Virtual showcases have occurred on a local, regional, and national scale, allowing programs to connect safely from afar for >2 years. However, virtual connections can be difficult to navigate. Anecdotally, showcasing “culture” and “fit” has been challenging for programs and applicants. Technological issues have become a common problem for both applicants and residency programs during recruitment events and interviews. These issues are difficult to anticipate and often cannot be avoided. Platforms used are inconsistent between institutions, determined predominantly by access, sponsoring organization, or availability. As a result, applicants must learn to navigate multiple platforms to communicate effectively with programs of interest.

Despite these challenges, virtual showcases present several advantages, like decreased cost and time for the hosting organization, residency programs, and applicants. In a survey conducted following the 2020 Match, residency programs reported a median cost of \$3708 for recruitment (national, regional, and local showcases and meetings), and students spent a median of \$890 on recruitment activities.² The total median time for recruitment was 59.5 hours for residency programs.² No data are available yet on time and cost of recruitment during the COVID-19 pandemic, but anecdotally it seems the financial cost and time involved have been significantly less for the programs and applicants.

A recruitment strategy implemented during the pandemic by many programs is virtual open houses. These have allowed applicants to speak with residency representatives in a more intimate environment than virtual showcases. However, attending a virtual open house for every program an applicant is interested in can be extremely time-consuming. The explosion of open houses also created scheduling issues for students due to the sheer number hosted and differences in time zones. Additionally, locating information about when virtual open houses are occurring may be challenging for applicants due to the heterogeneity in how recruitment information is shared. This model may not promote the best life-work balance for applicants during recruitment season; therefore, national, regional, and local showcases may be more sustainable options for recruitment after the pandemic.

Online resources also play a vital role in recruitment. Residency directories provide basic information about most programs but are limited in their ability to be rapidly updated and have not traditionally displayed recruitment event details. Residency websites are good sources for available rotations, requirements, current preceptors, benefits, and recruitment information. From the applicant perspective, staying up to date with recruitment details by checking individual residency websites is a difficult task, especially if applying to many programs. Students were creative during the COVID-19 pandemic and developed a shared online document with recruitment information for many programs, similar to those circulated for residency interviews in the past (unpublished data); however, these documents often are not all-inclusive. During COVID-19, there has been a dramatic rise in the number of residency programs using social media for recruitment.⁶ Optimized use of these platforms has the potential to increase engagement with interested applicants and amplify knowledge of recruitment events and other residency information. As with other online recruitment strategies, there are challenges with using social media, including time needed to create content and determining how to reach the target audience. An appraisal of each online resource, particularly those at the national level, should be undertaken to ensure the applicants' and programs' needs are met if virtual recruitment continues in the future.

Recruitment has significantly changed during the COVID-19 pandemic, and some of these changes may persist. Virtual recruitment activities may create challenges for discussion and dissemination of information, but they lower the financial cost commitment of recruitment, potentially allowing programs to reduce financial barriers and geographic limitations. Determining which recruitment strategies optimize both time and value for both the candidate and program will be important for the future.

Applications

Until COVID-19, the number of pharmacy applicants participating in the Match increased annually.¹ Even during the first year of the pandemic, residency applicants from 2020 to 2021 were essentially unchanged (7364–7321).¹ However, a large decline in applicants for the 2022 Match (7321–6417) was seen, and it is unclear how this trend will continue. Nevertheless, while the number of positions continues to rise,

Table 1
Best practices and recommendations for virtual recruitment, applications, and interviews

Recruitment	
Applicants	<ul style="list-style-type: none"> Practice with microphone and camera at the location you will be interviewing to identify audio and/or internet connectivity issues beforehand Keep up to date with recruitment events through several strategies (social media, website, email, online shared documents)
Programs	Virtual events <ul style="list-style-type: none"> Provide a contact number if WiFi/internet problems arise during virtual open houses or showcases Increase opportunities for small group discussions (e.g., breakout rooms during virtual open houses) Online resources <ul style="list-style-type: none"> Update website with recruitment details Consider standardizing information provided on websites (rotations, preceptor profiles, research requirements, teaching certificate, positions available, stipend, staffing requirements, and benefits) Ensure up-to-date information available on ASHP and other residency directories
National/regional/local organizations	<ul style="list-style-type: none"> For showcases, send timely instructions on how to join and what to expect for both programs and applicants Identify best practices for local and regional showcases to ensure high quality for programs and applicants, especially those who may not be attending national showcases Develop a centralized location to post recruitment events (e.g., new section on ASHP website or state society) Consider hybrid virtual/in-person conferences to decrease financial impact for students and programs
Interviews/applications	
Applicants	<ul style="list-style-type: none"> Maintain professional attire, demeanor, and environment in virtual interviews If unfamiliar with the virtual platform, review beforehand and identify important features like chat and screen share, especially if presenting If presenting and the program will be controlling the slides, consider sending your presentation to a colleague to make sure it can be opened by the recipient.
Programs	Structure <ul style="list-style-type: none"> Provide an itinerary and/or calendar invites with time zones included Provide multiple short breaks between sessions for water/bathroom/etc. Consider minimizing breaks >1 h Provide a postinterview wrap-up session at the end for final questions Consider adding activities that demonstrate and highlight the culture of the program and showcase the location Film a tour of the hospital and parts of the city, if possible Technological <ul style="list-style-type: none"> Provide a contact number if WiFi/internet problems arise Practice with technology beforehand Feedback <ul style="list-style-type: none"> Consider asking for feedback from applicants from previous virtual interviews to improve the experience Hybrid <ul style="list-style-type: none"> Consider developing guidance for hybrid virtual/in-person interviews for the future, including training for identifying biases
National/regional/local organizations	Applications <ul style="list-style-type: none"> Examine current state of application inflation and determine strategies to tackle the issue if present Hybrid <ul style="list-style-type: none"> Consider developing guidance for hybrid virtual/in-person interviews for the future, including training for identifying biases Feedback <ul style="list-style-type: none"> Solicit feedback from residency programs and applicants regarding virtual conferences, interviews, etc. to improve processes for the future

Abbreviation used: ASHP, American Society of Health-System Pharmacists.

they are not increasing at a pace to contend with the number of applicants, thus leaving many applicants without residency positions every year. This mismatch prompts students to apply to more programs in an effort to increase their chances of matching. This information is not necessarily evident in the publicly available American Society of Health-System Pharmacists (ASHP) National Matching Services data, as the number of applicants is the metric tracked. The Match rate underestimates the number of applicants who unsuccessfully pursue residency, as this number does not account for students who do not receive any interviews and cannot submit a rank list.

However, there is historical context within the medical literature that indicates “application inflation” may be occurring.⁷ “Application inflation” is described as an increase in the

number of residency applications submitted to programs despite the lack of evidence that this practice assists applicants in securing a residency position. Factors that contribute to this “application inflation” include peer pressure, suggestions from recent graduates from the same institution, fear of not matching, program website data, advice from advisors, and social media. While students may perceive a benefit to increasing the number of applications they submit to programs, this can actually negatively impact both the programs and students. An increase in the number of applications submitted to programs can result in more time spent reviewing applications, changing the standards for whom to invite, or adding more interview days to accommodate more applicants.⁸ When applying to more programs, students will consequently face a rise in costs based on applications alone.

During the 2020–2021 and 2021–2022 residency years, the increased cost from applications could have been offset by decreased travel costs when almost all programs conducted virtual interviews. However, the 2022–2023 recruitment season could change this if any programs plan to return to in-person interviews. It is imperative that national pharmacy residency leaders determine if “application inflation” is occurring in pharmacy residencies and investigate ways to assist both programs and applicants through this process.

Interviews

ASHP strongly discouraged in-person interviews during the COVID-19 pandemic, and most residency programs only offered virtual interviews accordingly.⁹ Many parts of the interview had to be altered, including day-of format and informal activities, but all programs worked to emulate in-person interactions as best as possible. Some difficulties associated with virtual interviews were similar to those described for recruitment (technological issues, multiple platforms, “fit” assessment), while others were unique and may have affected programs and applicants differently. For example, students may not have dependable internet connectivity, leading to suboptimal interview impressions and experiences.¹⁰ Preceptors, residents, and residency program directors remained in close proximity during virtual interviews, and the camaraderie and discussions after the interviews would have expected to remain similar. Applicants, however, endured sitting alone for hours in front of a computer. In the absence of normal social cues, verbal prompts during virtual interviews can be awkward more so for interviewees. In-person interview breaks often gave time to decompress but among fellow applicants, which may have provided moments of levity during a stressful day. Virtual breaks are equally important but can be isolating and, if extremely long, may add to the applicants’ anxiety level. Due to the loss of most informal interactions, both programs and applicants were less able to assess group dynamics and individual/institutional personalities. Overall, the changes necessitated by virtual interviews influenced the evaluation and ranking process, though the full impact will be determined by future studies.

Despite the obstacles faced, there are advantages associated with virtual interviews. A completely virtual interview process lowers the barrier cost of time and money for application. Reed et al.² reported interview travel and accommodations cost students a median of \$485 (interquartile range, \$50–\$1100) before pandemic. A separate survey found their respondents spent a median of \$840 for traveling to onsite interviews.³ Applicants likely spent little to no cost with virtual interviews, and decreasing expenses across the spectrum of residency search–related activities offers a more equitable opportunity for all applicants. In addition, several studies evaluating pandemic-associated virtual interviews for medical residencies and fellowships have reported a generally positive experience.^{11–13} While applicants and programs in these studies showed a preference for in-person interactions, the results demonstrate that virtual is a feasible strategy for some or all of the interview process.^{11–13}

Due to the advantages and disadvantages of in-person versus virtual interviews, leaders in pharmacy residency should evaluate the interview process moving forward. There is

great variability in applicants’ strengths, needs, and financial status, and allowing the candidates to have an option for in-person or virtual may be the most equitable approach. If a hybrid approach is pursued, national guidance will be imperative to ensure virtual interviewees are not disadvantaged. Increased vigilance to ensure objectivity in applicant evaluations will be important, especially for aspects like “fit” that will be easier to assess for those who opt for in-person interviews.

Conclusions and recommendations

There are advantages and disadvantages associated with residency recruitment whether virtual or in-person, which have been thrust into the spotlight given the COVID-19 pandemic. Evaluating lessons learned during the past 2 recruitment cycles provides an excellent baseline for moving the residency process forward, and residency personnel should be willing to adjust their historical processes to better meet the needs of the hosting organizations, residency personnel, and applicants. Our recommendations to improve the residency process for programs and applicants are outlined in Table 1. In addition, we implore national organizations and the residency governing bodies to support program administration in these efforts, providing guidance for virtual or hybrid recruitment and interviews moving forward. By supporting programs and applicants in this manner, we believe that we can move residency recruitment and commitment forward into a more equitable, sustainable process for the future.

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