


Virtual Interviews: Concerns for Rural Residency Programs

Daniel Waldman , MD
Heather Kovich, MD

The transition to remote residency interviews, initiated by the COVID-19 pandemic, altered the application processes for both applicants and programs. While there are benefits,¹ there are also potential downsides that may differ between rural and urban residency programs. Rural programs are often located in areas that few applicants have previously visited, and it can be difficult for applicants to obtain an authentic impression of rural life and training through a video interview.

Shiprock-University of New Mexico (UNM) Family Medicine is a new small residency program located in the Navajo Nation. In this article, we detail our recent experiences and express concerns regarding the potential impact of virtual interviews on our core mission: placing rural physicians to provide primary care for Native American populations. We are particularly interested in how virtual interviews affect rural programs, though this discussion also applies to any program in less-traveled areas.

Rural Health Care and Rural Training

“Rural” is an inexact term, but it is often understood as any region not containing an urban area with a population of more than 50 000.² Eighty percent of the United States’ landmass is rural and is home to 20% of the US population.³ Rural Americans have more health needs, worse outcomes, and less access to health care.³ Rural training exposure during residency has consistently been found to influence rural job placement, but 98% of residents train in urban areas.⁴ In states such as New Mexico, rural programs and tracks have been the focus of state-level initiatives aimed at addressing the rural physician shortage.

Interview Format Recommendations

For the 2022-2023 interview season, the Association of American Medical Colleges (AAMC) recommended that programs conduct virtual interviews for all applicants,⁵ citing travel costs, applicant preference, time away from training, carbon emissions due to travel,

and efforts to reduce bias. These concerns are amplified by the growing number of applications submitted per applicant through the Electronic Residency Application Service.⁶ The 2022 AAMC recommendation “strongly discouraged” hybrid interviews, in which a program offers the choice of an in-person or virtual interview, due to the potential for bias. Following this recommendation, our institution required virtual interviews but permitted exceptions with institutional approval. In June 2024, the AAMC updated its recommendation, encouraging residency and fellowship programs to continue virtual interviews while acknowledging that each program should evaluate the optimal format for their context.¹

In contrast, the American Association of Colleges of Osteopathic Medicine (AACOM) suggested that virtual interviews disadvantage DO students and minoritized communities, and initially recommended “hybrid” residency interviews.⁷ AACOM later modified their initial recommendation, suggesting that programs choose an interview format that best suits the program setting.⁸

What Do We Know So Far About the Impact of Virtual Interviews?

Information on the impact of virtual interviews is accumulating, though the data for rural programs are limited. Surgical residency directors reported having a harder time assessing program fit and “commitment to specialty.”⁹ Other studies note that virtual interviews may not lead to increases in underrepresented applicants,¹⁰ but may be associated with increases in application numbers in family medicine and lower family medicine program fill rates.¹¹

The total average cost of applying to residency dropped by \$3,566, and average time spent interviewing decreased by 13.3 days.¹² Program recruitment costs in one family medicine program decreased substantially as well.¹³ A study performed in a large pediatric residency program showed that virtual interviews were associated with matching residents who lived closer, which may be a warning sign for more remote programs and programs further away from medical schools.¹⁴

DOI: <http://dx.doi.org/10.4300/JGME-D-24-00756.1>

Given that the location of a residency program is typically the most important factor cited in how family medicine and internal medicine residency applicants choose programs,^{15,16} virtual interviews may negatively impact programs located in more remote places, especially places applicants have never had the opportunity to visit.

Our Experience in Shiprock

In 2020 we created a new training partnership between UNM and the Northern Navajo Medical Center (NNMC). The program accepts 2 residents per year. Trainees spend 1 year in Albuquerque then 2 years at NNMC, which is located in the town of Shiprock, within Diné Bikéyah, the Navajo Nation. We are the first and currently the only residency program located within a federal Indian Health Service facility. For the first 2 years participating in the Match (2021 and 2022) our new program held only virtual interviews. We included photographs and videos in our interview day presentations, with the hope that we could impart a realistic understanding of the complexities and joys of our remote location. We found this challenging.

For the 2023-2024 season, we obtained institutional approval to conduct hybrid interviews. We encouraged applicants to interview in person at Shiprock but allowed them to opt out and interview virtually. The decision to interview in person was not part of the program's ranking decisions. If the applicant opted for a virtual interview, they were asked to fill out a supplemental form explaining their reasons; no requests were denied. Crucially, we created our new residency program with the support of a grant from the Health Resources and Services Administration and were able to utilize grant funds to support applicant travel. We offered compensation of up to \$500 for interviews performed in person.

For the 2023 interview season, 23 of 44 interviews were conducted in person. Common reasons for applicants opting out of in-person interviews included previous rotations with us at Shiprock, preexisting knowledge of the area and community, family obligations, and distance. The content of in-person and virtual interviews were the same, other than a community tour and an optional pre-interview dinner. Our program was the only one visited in person by many interviewees.

The results of the 2024 Match were encouraging, and both of our matched candidates had been able to see the program and community. One interviewed in person, while the other had both grown up in the community and completed a rotation with us. Internal analysis showed that location on our program

BOX Representative Quotes From In-Person Interview Feedback

"I knew it was going to be rural and knew what that meant in theory, but didn't understand until I saw it."

"I saw what rural New Mexico looks like, as it is distinct from other rural areas I've been to in the country. I got to see how faculty and the residents all interacted, which is more difficult to see virtually."

"The \$500 toward reimbursement defrayed costs considerably. Only a small few of my interviews were in person, and all 3 of those I left with a better feeling about the program compared to the ones where I did a virtual interview. It really does help give a better feel for the place you'll be living, working, and with whom you'll be working."

"I really enjoyed my in-person interview experience. I believe visiting in person gave me a better understanding of and deeper appreciation for the program, the community I would serve, the Northern Navajo Medical Center, on-site housing, and the surrounding Four Corners area."

"I loved going to visit Shiprock in person, and it definitely gave me a better feel for the program. I believe it is to the benefit of med students to have virtual and in-person options for reasons of equity/cost of travel but loved the opportunity to see the hospital for myself and see how passionate the physicians at Northern Navajo Medical Center are about the care they provide and their role in the community."

"Being on-site gave me a true sense of the program's strengths and challenges, along with a transparent view of what day-to-day life would be like here."

rank list did not correlate with interview modality. Our sample size is small, but we feel strongly enough about the experience that we hope to continue offering in-person interviews and supporting travel financially, for as long as possible. A representative sample of feedback received by applicants is included in the BOX.

Where Should We Go From Here?

The geographic distribution of the physician workforce is influenced by a complex system, including where residents choose to train. Some factors affecting recruitment are inherent and non-modifiable for programs, such as physical location and community characteristics. Preventing a worsening geographic maldistribution of graduate medical education trainees is challenging but important, and rural residency training is already seen by many as a strategy to address rural health disparities.¹⁷

We recommend collecting and sharing data on the impact of virtual recruiting across specialties, locations, and community sizes. For example, the National Resident Matching Program could collect data on the interview modality used and expand its publicly available Match data to include the average

number of ranked applicants needed to fill specialty positions, broken down by interview modality, community size, and geographic region.

We recognize the importance of minimizing costs for applicants. Programs considering in-person interviews should find creative ways to aim to support travel expenses, provided this does not place additional strain on financially struggling health systems.¹⁸ Finally, organizations that fund rural health initiatives have a unique opportunity to address this challenge by prioritizing travel expenses for grants or additional funding—an investment that could significantly strengthen rural recruitment efforts.

References

- Association of American Medical Colleges. Interviews in GME: where do we go from here? Published June 2024. Accessed December 12, 2024. <https://www.aamc.org/about-us/mission-areas/medical-education/interviews-gme-where-do-we-go-here>
- Rural Health Information Hub. Am I rural? Classification help. Accessed December 22, 2024. <https://www.ruralhealthinfo.org/am-i-rural/help#classification>
- US Department of Health and Human Services. Rural Action Plan. Published September 2020. Accessed December 22, 2024. <https://www.hhs.gov/sites/default/files/hhs-rural-action-plan.pdf>
- United States Government Accountability Office. Graduate Medical Education: Programs and Residents Increased during Transition to Single Accreditor; Distribution Largely Unchanged. GAO-21-329. Published June 2021. Accessed December 12, 2024. <https://www.gao.gov/assets/gao-21-329.pdf>
- National Resident Matching Program. NRMP supports AAMC interview guidance for 2022-23 residency selection cycle. Published May 16, 2022. Accessed December 12, 2024. <https://www.nrmp.org/about/news/2022/05/nrmp-supports-aamc-interview-guidance-for-2022-23-residency-selection-cycle/>
- Carmody JB, Rosman IS, Carlson JC. Application fever: reviewing the causes, costs, and cures for residency application inflation. *Cureus*. 2021;13(3):e13804. doi:10.7759/cureus.13804
- American Association of Colleges of Osteopathic Medicine. AACOM strongly recommends hybrid residency interviews for 2022-23 cycle. Published May 13, 2022. Accessed April 1, 2025. <https://www.aacom.org/news-reports/news/2022/05/13/aacom-strongly-recommends-hybrid-residency-interviews-for-2022-23-cycle>
- American Association of Colleges of Osteopathic Medicine. AACOM recommendations on interview format for entry into residency and medical school. Published May 4, 2023. Accessed December 12, 2024. <https://www.aacom.org/news-reports/news/2023/05/04/aacom-recommendations-on-interview-format-for-entry-into-residency-and-medical-school>
- Asaad M, Elmorsi R, Ferry AM, Rajesh A, Maricevich RS. The experience of virtual interviews in resident selection: a survey of program directors in surgery. *J Surg Res*. 2022;270:208-213. doi:10.1016/j.jss.2021.09.011
- Villacampa MM, Nadeau MT, Barajas KS, Wood R. Virtual interviews: outcomes and lessons learned. *Fam Med*. 2023;55(5):339-344. doi:10.22454/FamMed.2023.788985
- Grace AJ, Teigen K, Buck K, et al. Evaluating changes in family medicine applicant characteristics following the onset of virtual interviewing. *Fam Med*. 2022; 54(10):791-797. doi:10.22454/FamMed.2022.625652
- Nilsen K, Walling A, Johnson M, et al. The impact of virtual interviewing during the COVID-19 pandemic on the residency application process: one institution's experience. *Acad Med*. 2022;97(10):1546-1553. doi:10.1097/ACM.0000000000004761
- Frame KA, Fortenberry KT, Cochella S, et al. Impact of virtual recruitment on costs, time spent, and applicant perspectives within a family medicine residency program. *PRiMER*. 2023;7:38. doi:10.22454/PRiMER.2023.262017
- Cheston CC, Michelson KA. Association of virtual interviews with residency application geographic diversity and match. *Acad Pediatr*. 2023;23(5):855-859. doi:10.1016/j.acap.2022.09.016
- Wright KM, Ryan ER, Gatta JL, Anderson L, Clements DS. Finding the perfect match: factors that influence family medicine residency selection. *Fam Med*. 2016; 48(4):279-285.
- Quave A, Ayutyanont N, Akhondi H. The important factors applicants consider when choosing a residency: a survey study. *HCA Healthc J Med*. 2022;3(1):13-22. doi:10.36518/2689-0216.1367
- Hawes EM, Fraher E, Crane S, et al. Rural residency training as a strategy to address rural health disparities: barriers to expansion and possible solutions. *J Grad Med Educ*. 2021;13(4):461-465. doi:10.4300/JGME-D-21-00274.1
- University of North Carolina at Chapel Hill Cecil G. Sheps Center for Health Services Research. Rural hospital closures. Accessed December 17, 2024. <https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/>



Daniel Waldman, MD, is Vice Chair of Education, Department of Family and Community Medicine, University of New Mexico (UNM) School of Medicine, Albuquerque, New Mexico, USA; and

Heather Kovich, MD, is Program Director, Shiprock-UNM Family Medicine Residency, Shiprock, Diné Bikéyah (Navajo Nation), New Mexico, USA.

Disclaimer: The information and views expressed here are solely those of the authors and do not represent the University of New

Mexico Health Sciences Center, the Regents of the University of New Mexico, or the Indian Health Service.

Corresponding author: Daniel Waldman, MD, University of New Mexico School of Medicine, Albuquerque, New Mexico, USA, dpwaldman@salud.unm.edu