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Reply

We thank Dr Auobore for his question on the methodology we applied for determining carotid stenosis and appreciate the care and detail with which he read the article. In the integrated health system in which this study was based, we used an Intersocietal Commission for the Accreditation of Vascular Laboratories (ICAVL)-accredited vascular lab. This vascular lab reports carotid stenosis in ranges of 1%-39%, 40%-59%, 60%-79%, and 80%-99%. As a result, we used the same ranges for carotid stenosis levels in this study. In constructing the database for this study, we put forth a good faith effort to best reconstruct the stenosis values as recorded in the reports. Readers should note that this means we did not differentiate between stenoses of 1%-19% and 20%-39%, as some other vascular may labs do. Furthermore, this is not possible as there is currently no standard for differentiating between them, as you pointed out. The range of stenosis for our Level 1 criteria is actually 1%-39% (not 20%-39%). In the article referenced by Dr Auborie (Ref #2), von Reutern et al described a stenosis of 10%-40% in the NASCET system as an average PSV of less than 160 cm/s and stated that the primary criterion for a stenosis in this range was evaluation with B-mode imaging, which ICAVL-accredited vascular labs, including ours, employ as part of the carotid duplex evaluation process.

It is correct that our criteria are different from the original NASCET criteria, which only had cutoffs of <50%, 50%-69%, and 70%-99%. Given the use of more finely grained measurements, our expectation should be more frequently observed progression. For example, an increase from 70% to 90% would be recorded as progression in our study but not according to NASCET criteria. Similarly, we would also expect a greater incidence of rapid progression, though this was not the case, as alluded to by Dr Auborie. Ultimately, although the carotid stenosis measurement intervals may not be as commonly used as those in other vascular labs, we believe that keeping them the same was important for two reasons: (1) it provided sufficient continuity data to perform this analysis and (2) tighter ranges of carotid stenosis led to a better estimation of carotid stenosis.

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Vascular virtual interviews for the 2020-2021 National Residency Matching Program during the COVID-19 pandemic early experience and lessons learned


The COVID-19 pandemic has profoundly impacted our traditional daily interactions. Vascular residency interviews are a part of the national matching programs. Programs need to seek and find the best candidates, while at the same time the candidates need to make assessments and rank choices about the programs for the match to be successful. This COVID-19 match-year offered the adoption of virtual interviews as one approach to mediate and manage the spread of COVID-19. Traditionally, residency and fellowship training program applications have been on-site and in-person interviews. However, to cope with and manage the general social distance protocols, our program along with many others has adopted the virtual interview for 2021 vascular residency applications.¹

As with any new innovation, we dealt with many concerns and fears, and had to resolve multiple technological dilemmas. In-person interviews with all its main components of assessing all potential candidates normally require the interaction with other residents, attending physicians, and staff. The candidates need time to talk about their life, skills, accomplishments, activities, and future planning. They also need to know the general dynamic of the institution, which includes the operating room, cardio dynamic laboratory, resident on-call room, and so on.

The main concern is how to transition all of the normal candidate interviews into a virtual one. A virtual visit would be sufficient to validate a final recommendation for ranking. In light of this concern, our faculty adopted a virtual approach that used evidence-based practices. First, we developed a general process flow and protocols for the structure of the interview. Next, we tested the audiovisual equipment and performed mock interviews. On the basis of a panel review, we discussed our recent experiences with the virtual interview process. On the basis of personal perceived experiences, we discussed and summarized the advantages and disadvantages of the virtual interview format. Also, we outlined and summarized the candidates' personal experiences through a survey questionnaire that was distributed via email before the virtual interview. We discussed and described all potential biases that may have been intensified by the virtual interview format, and discussed how to prepare for an upcoming generation of interviews based on the new era of virtualism.²⁻⁶ Finally, we also prepared a proposed agenda for conducting vascular virtual interviews and discussed the possibility of developing electronic materials and local virtual social events to approximate the interview day.⁴ We believe that with adequate

preparation, the virtual interview experience can yield positive and equitable results for both applicants and graduate medical education training programs.

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REFERENCES

1. Robinson KA, Shin B, Gangadharan SP. A Comparison Between In-Person and Virtual Fellowship Interviews During the COVID-19 Pandemic [e-pub ahead of print]. *J Surg Educ*.
2. Bernstein SA, Gu A, Chretien KC, Gold JA. Graduate medical education virtual interviews and recruitment in the era of COVID-19. *J Grad Med Educ* 2020;12:557-60.
3. Chesney TR, Bogach J, Devaud N, Govindarajan A, Wright FC. How we did it: creating virtual interviews for postgraduate medical trainee recruitment and keeping it personal. *Ann Surg* 2021;273:e60-2.
4. Hill MV, Bleicher RJ, Farma JM. A how-to guide: virtual interviews in the era of social distancing. *J Surg Educ* 2021;78:321-3.
5. Jones RE, Abdelfattah KR. Virtual interviews in the era of COVID-19: a primer for applicants. *J Surg Educ* 2020;77:733-4.
6. McKinley SK, Fong ZV, Udelsman B, Rickert CG. Successful virtual interviews: perspectives from recent surgical fellowship applicants and advice for both applicants and programs. *Ann Surg* 2021;273:e55-9.

<https://doi.org/10.1016/j.jvs.2021.01.031>