

# Perspectives of US Medical Residency and Fellowship Applicants on No-Stakes Campus Visits

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## ABSTRACT

**Background** Virtual interviews may limit an applicant's ability to ascertain the culture of a training program. No-stakes campus visits (NSCVs) have been offered but their value is unknown.

**Objective** The purpose of our study was to determine factors that influence applicants' rank lists and determine barriers to and perceptions of NSCVs and their impact on applicants' final rank lists.

**Methods** All interviewed applicants of graduate medical education (GME) programs who agreed to participate in the study were emailed a survey after the 2023 National Resident Matching Program Match. The survey contained sections on demographics, perspectives on factors affecting ranking decisions, and perceptions of NSCVs.

**Results** Of 796 applicants, 183 (22.9%) who interviewed at 16 different Mayo Clinic GME programs responded to the survey. Of 131 respondents who answered whether they accepted an NSCV offer, 39 (29.8%) accepted. Of 35 respondents who answered whether they thought attending NSCVs impacted their rank, 19 (54.3%) were either uncertain or said yes. Of 34 respondents who answered whether the NSCV influenced their ranking of the program, 16 (47.1%) said their rank did not change, 12 (35.3%) said they ranked the program higher, and 5 (14.7%) said they ranked the program lower. For respondents who did not attend NSCVs, financial burden and lack of time were primary reasons.

**Conclusions** NSCVs are perceived positively by most respondents. Many either believed they influenced their position on the program's rank list or were unsure. Most respondents said NSCVs either improved or did not change their ranking of the program.

## Introduction

Given the expected continuation of virtual interviews, applicants have provided feedback stating that the application experience could be augmented by in-person, second-look visits emphasizing resident interactions, facility tours, and familiarization with the surrounding area and program culture.<sup>1</sup> These no-stakes campus visits (NSCVs) are conducted after programs have finalized their rank lists, and therefore cannot impact the applicant's rank on a program's list. However, according to recent data, these second-look experiences may influence an applicant's rank of the program visited.<sup>2-4</sup> Furthermore, a recent study of 6 internal medicine residency programs offering optional in-person visits found that those interviewed recommended that the in-person visits should be offered the following year and that the process was equitable.<sup>5</sup>

The purpose of our study was to ascertain factors that influence our interviewed applicants' ranking of a variety of residency and fellowship programs in the current post-COVID-19 Public Health Emergency period. In addition, we sought to learn the barriers experienced by our resident and fellow applicants to NSCVs, their perceptions of NSCVs, and the impact of NSCVs on their final rank lists.

## Methods

### Study Subjects

The Mayo Clinic School of Graduate Medical Education (GME) has more than 300 residency and fellowship programs with more than 1800 active trainees across their sites in Arizona, Florida, Minnesota, and Wisconsin. The program directors of our GME programs who opted to offer NSCVs during the 2022-2023 National Resident Matching Program (NRMP) Match cycle to their interviewed applicants were invited to participate in the study. Interviewees of programs who agreed to participate were emailed a survey link.

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*Editor's Note: The online supplementary data contains the survey used in the study, a list of participating training programs, and further data from the study.*

## Survey

The authors developed the survey de novo and used the survey platform Qualtrics XM (Qualtrics International Inc). The link was emailed on March 18, 2023, with reminders sent on day 14 and day 19. The survey closed on April 7, 2023.

## Statistical Analysis

Continuous variables were summarized using the sample mean and standard deviation. Categorical variables were summarized with number and percentage of participants. Comparisons of survey responses according to Mayo Clinic location, race, ethnicity, and gender identity were made using Fisher's exact test, Kruskal-Wallis rank sum test, or Wilcoxon rank sum test. No adjustment for multiple comparisons was made in these exploratory analyses, and *P* values of  $<.05$  were considered statistically significant. All statistical tests were 2-sided. Statistical analysis was

performed using R version 4.1.2 (R Foundation for Statistical Computing).

This minimal risk study was conducted with approval from the Mayo Clinic Florida Institutional Review Board (IRB10545.001).

## Results

Sixteen of 22 program directors who opted in for NSCVs consented to participate in the study. The 16 participating programs are listed in the online supplementary data. Fifteen of the 16 programs ultimately offered NSCVs (1 program director was not able to complete NSCVs due to time constraints). All 796 interviewed applicants from these 16 different programs (13 residency and 3 fellowship) from 4 states (Arizona, Florida, Minnesota, and Wisconsin) were offered NSCVs and received the survey link. One hundred and eighty-three applicants (22.9%) completed the survey. Online supplementary data TABLE 1 shows demographic information. Online supplementary

**TABLE**  
Survey Responses Regarding No-Stakes Campus Visits

Variable	No. of Subjects (%)
Did you attend an in-person campus visit outside of Mayo Clinic? (N=166)	
Yes	50 (30.1)
No	116 (69.9)
Was a no-stakes campus visit offered by the program you applied to? (N=167)	
Yes	132 (79.0)
No	35 (21.0)
If a no-stakes campus visit was offered by the program you applied to, did you elect to attend the visit? (N=131)	
Yes	39 (29.8)
No	92 (70.2)
Do you feel that attendance at a program's campus visit impacted how the program ranked candidates? (N=35)	
No	16 (45.7)
Yes	12 (34.3)
Uncertain	7 (20)
How did the no-stakes campus visit influence your ranking of the residency program? (N=34)	
I ranked the Mayo Clinic program higher after attending this event	12 (35.3)
I ranked the Mayo Clinic program lower after attending this event	5 (14.7)
Attending this event did not change the order of my rank list	16 (47.1)
I am not sure whether this event influenced my ranking of programs	1 (2.9)
Did you believe that the visit was truly no-stakes? (N=35)	
Yes	24 (68.6)
No	3 (8.6)
Not sure	8 (22.9)
Would you encourage future applicants to attend no-stakes campus visits? (N=35)	
Yes	32 (91.4)
No	0 (0)
Unsure	3 (8.6)

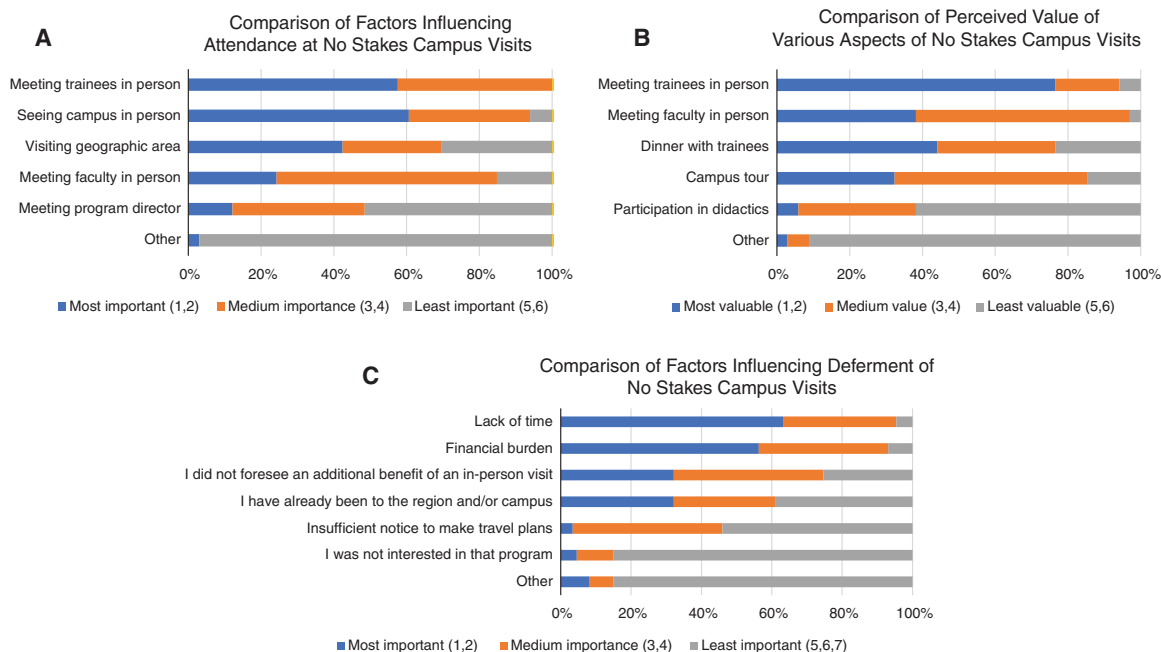
data TABLE 2 shows responses regarding program ranking decisions. The TABLE shows survey responses related to NSCVs. When asked if they accepted the offer of one of our programs' NSCVs, 39 of 131 respondents (29.8%) said yes. Of these 39, 35 answered 3 NSCV questions and 34 answered the fourth question. Sixteen of 34 (47.1%) respondents did not change their rank list after the NSCVs, whereas 12 (35.3%) moved the program higher, and 5 (14.7%) moved the program lower. When asked if they believed NSCV attendance impacted how the program ranked candidates, 19 of 35 respondents (54.3%) were either uncertain or said yes. Thirty-two of 35 respondents (91.4%) would recommend NSCVs to future applicants. The FIGURE demonstrates the factors influencing NSCV attendance and the most valuable aspects of NSCVs.

Survey responses are compared according to race, ethnicity, and gender identity in online supplementary data TABLES 3, 4, and 5, respectively. Statistically significant differences were identified, particularly with respect to race. Three of 13 (23.1%) Black/African American respondents reported that program faculty was the No. 1 rank factor, whereas this was a minor factor for White/Caucasian (2 of 83 [2.4%]) and Asian (1 of 34 [2.9%]) respondents. Black/African American respondents also ranked financial reasons as the most important factor for not attending NSCVs significantly more often than other race groups (online supplementary data TABLE 3B).

## Discussion

Many GME programs are continuing to conduct virtual interviews of applicants. Some of these programs have offered NSCVs to allow applicants the opportunity for an in-person experience. Although our school required the visits to be no-stakes and that this requirement be clearly conveyed to applicants, our survey found that many NSCV attendees either believed that their attendance impacted their rank or were unsure.

Our results show the most likely reasons for attending NSCVs were meeting the trainees and faculty in person, which speaks to the innate human desire to "fit in." The 2 most common reasons to not attend NSCVs were lack of time and financial burden of travel. There were significantly more respondents who identified as Black/African American or non-White/Caucasian race not otherwise specified who chose not to attend NSCVs due to financial reasons compared to respondents who identified as White/Caucasian or Asian. Studies have shown that individuals with low socioeconomic status who are underrepresented in medicine face greater financial obligations and burdens before, during, and after medical school.<sup>6</sup> Unfortunately, applicants who are underrepresented in medicine may be more likely to worry about whether they fit into a program and therefore might experience the most benefit from NSCVs.



**FIGURE**  
Comparison of Factors Regarding No-Stakes Campus Visits

If NSCV attendance was found to positively impact the applicant's rank of the program, this could serve as an incentive for program directors to provide NSCVs. In our survey, most respondents (82.4%) either moved the program up or did not change the position of the program on their rank list. The effect of NSCVs on ranking decisions demonstrated no statistical difference between campus location, gender, race, or ethnicity. Our survey did suggest that NSCVs may not be as effective for attracting applicants underrepresented in medicine as they are for White/Caucasian applicants. Subsidization of the NSCV may help bridge this gap.

Potential future strategies to improve the perception and value of NSCVs would include wider adoption and a more standardized and broadly adopted statement by institutional GME leadership supporting and monitoring the no-stakes visit process. Ultimately, a mechanism for programs to certify rank lists officially with the NRMP and have this status posted for applicant viewing may help to alleviate concerns.

There are limitations to our study. Our survey was conceived after most NSCVs were held, so applicants were not aware of the survey in advance, which may have negatively impacted the response rate. Also, there was a low number of non-White/Caucasian respondents. There was potential for selection bias in our results in that those respondents who elected to accept the NSCV offer may have been more likely to believe their attendance impacted their rank on the program rank list.

## Conclusions

NSCVs were perceived positively by more than 90% of those who attended. Most NSCV participants believed their attendance impacted their ranking on the program rank list or were unsure. Most NSCV participants also either moved up or did not change the rank of the program.

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