Residency Interview Video Conferencing

Dear Editor:
The ophthalmology residency matching has been used in the United States for over 30 years. Each institution reviews www.sfmatch.org/residency/ophthalmology/index.htm. However, total interviewing expenses can be costly for applicants, and interview schedules among different institutions may conflict.

Video conferencing has been used for personal and business connection, as well as patient care (telemedicine). At the University of Arizona (UA), we developed a Video Conference Interview (VCI) option in addition to traditional FFI s for residency selection in December 2010. Our goals were to minimize applicants’ costs and increase the opportunity for exposure between both applicants and our department. To our knowledge, this was the first VCI for ophthalmology residency selection in the United States.

Selected candidates chose the method of interview (either FFI or VCI) based on their preference and on a first-come, first-served basis. Face-to-Face Interview candidates spent 2 hours (eight 15-minute sessions) on interviews and 2 hours on departmental tours with an optional evening social event with residents. Video Conference Interview candidates spent 30 minutes (two 15-minute sessions) on interviews using free software (Skype, Technologies S.A., Luxembourg), and an optional separate departmental tour (SDT) was available. Forty-eight candidates (27 [56%] by FFI and 21 [44%] by VCI) completed the interviews. Of the 21 VCI candidates, 12 (57%) had SDT. There were 16 interviewers involved in both the FFI and VCI sessions.

To evaluate the utility of the VCI compared with the FFI, an anonymous online survey (SurveyMonkey.com) was conducted between the dates of submission of rank lists and the disclosure of match results in order to minimize bias (the survey is available as Fig 1 at http://aaojournal.org). The protocol was approved by an Institutional Review Board/Ethics Committee of the UA, and was conducted in accordance with the principles of the Declaration of Helsinki. Response rates were 77% for the interviewees and 94% for the interviewers.

Demographic characteristics and ophthalmology interview-specific information of the FFI and VCI respondents were summarized in Table 1 (available at http://aaojournal.org). There were no statistically significant differences in age, gender, board scores, number of programs applied, number of interviews offered, and number of interviews completed by the respondents between the 2 groups. The respondents reported an average total expense of 4530 US dollars ($) (range, $1200-10,000) to complete ophthalmology interviews, and approximately half of them (49%) had to borrow money for this purpose. There was no difference in the UA interview cost for the respondents in the FFI group and the VCI group with SDT ($504± 273 vs $517± 222, P = 0.896). However, the VCI without SDT did save money for the applicants (average cost $3). Nine (50%) of the 18 VCI respondents reported that the VCI expanded their chance to complete more interviews. All of the interviewer respondents would consider a VCI for future residency selection; however, most suggested that a SDT should be mandatory for all VCI applicants.

There was no statistically significant difference in the percentage of the FFI versus the VCI subjects who were ranked in the top 25 (P = 0.573), which included 13 (48%) from the FFI and 12 (57%) from the VCI groups (7 [58%] with and 5 [56%] without SDT).

This study did not aim to demonstrate equivalencies between the FFI and VCI, since there were several additional differences between the 2 interview protocols. A head-to-head comparison of the FFI to the VCI for future residency interviewing may be helpful.

In conclusion, our data suggest that a VCI is an acceptable alternative to a FFI. As a major benefit to some applicants, the VCI has shown to expand applicants’ chance to complete more interviews in half of the VCI respondents. However, a VCI would reduce applicants’ costs only if a SDT was not scheduled by the applicants. Another possible financial benefit for the training centers is that VCIs can be held during evening or weekend hours to avoid potential loss of clinical revenue, with the trade-off of being a possible loss of leisure time for the individual faculty member. Future development of a VCI protocol is warranted to improve the process of ophthalmology residency selection in the United States in order to eliminate a SDT and to help reduce applicants’ expense, while allowing the programs to confidently rank their potential residents.

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References


General Correspondence

Resident Cataract Surgery

Dear Editor:
We are writing regarding the recent report by Woodfield et al about resident cataract surgery complication rates. We definitely agree that it provides useful information that we might apply to our Ophthalmology Residency Training Program. However, it is also true that the results provided in this article are rather controversial.
Demographic data
- Age _______ years
- Gender [ ] Male [ ] Female
- Category [ ] US Seniors [ ] US Grads [ ] International Medical Graduates (IMGs)
- USMLE step 1: 3-digit score ____, 2-digit score ____
- USMLE step2CK: 3-digit score ____, 2-digit score ____
- Degree(s) or expected degree(s)
  [ ] MD [ ] MD, PhD [ ] MD, MPH [ ] MD, MBA [ ] Other, specify ______

Ophthalmology interview (in general)
- How many programs did you apply to? ______
- How many interviews were you offered? ______
- How many interviews did you complete? ______
- How many ophthalmology interviews offered did you need to turn down due to conflicts in interview schedules with other ophthalmology or internship programs?
  o Turned down because conflicted with other ophthalmology programs ______
  o Turned down because conflicted with internship programs ______
- About how much did it cost you for each ophthalmology interview? (include travel, hotel, food): Range $______ to $______
- About how much did it cost you for all your ophthalmology interviews? (include travel, hotel, food, application fees): $______
- Did you have to borrow money to cover the costs of your ophthalmology interviews? [ ] Yes [ ] No

Ophthalmology interview at the University of Arizona (UA) and the University of Arizona/University Physicians Healthcare (UA/UPHK) Graduate Medical Education Consortium programs
- Which programs did you apply to? [ ] UA only [ ] UA/UPHK only [ ] both programs
- Did you have a chance to choose the method of interview?
  [ ] Yes, and I chose face-to-face interview
  [ ] Yes, and I chose video conference interview with separate departmental tour
  [ ] Yes, and I chose video conference interview without separate departmental tour
  [ ] No, I did not have chance to choose because of unavailability of my preferred choice.
- Which method of interview did you actually complete?
  [ ] Face-to-face interview
  [ ] Video conference interview with separate departmental tour
  [ ] Video conference interview without separate departmental tour
- If you had a chance to choose again, which method of interview would you select?

Figure 1. Online Supplemental Materials: Interviewee and Interviewer Survey.
[ ] Face-to-face interview
[ ] Video conference interview with separate departmental tour
[ ] Video conference interview without separate departmental tour

- About how much did it cost you for your Arizona ophthalmology interview? (Include travel, hotel, food) $______

**For video conference interviewees only**
- Main ONE reason that you had video conference interview
  [ ] Conventional interview sessions conflicted with my other interviews
  [ ] Financial reason
  [ ] I already rotated to or recently visited UA, Department of Ophthalmology.
  [ ] I preferred a face-to-face interview, but all spots were taken.
  [ ] Other, please specify ______________________________

- Did you have difficulty or problems with the internet connection during your interview?
  [ ] Yes, frequent disconnection
  [ ] Yes, poor image quality
  [ ] Yes, poor audio quality
  [ ] Yes, very minor, and considered insignificant
  [ ] Not at all

- For applicants who **did not** come to visit the department, do you think that information provided on our website and information you obtained by talking with residents and faculty during interview sessions was enough for your decision on ranking process?
  [ ] Yes  [ ] No

- For applicants who **did** come to visit the department, what was/were your main reason(s) for the visit/departmental tour? (more choose more than one item)
  [ ] To learn about the program(s)
  [ ] To learn about the city of Tucson
  [ ] To maximize the chance of being matched
  [ ] To participate in grand rounds and residents’ activities
  [ ] I did not visit the department.

- Do you think that doing the interview via video conference saved you money?
  [ ] Yes  [ ] No

- For applicants who had a departmental tour, please rank numbers 1 to 6 for the most helpful factors for your decision on ranking our programs (1 = most helpful, 6 = least helpful)
  o Campus tour ______
  o Interaction with residents ______
  o Interaction with program directors ______
  o Our website ______

Figure 1. (Continued)
Letters to the Editor

- Grand rounds
- Video conference interview session
- [ ] N/A (I did not visit the department.)

For face-to-face interviewees only
- Main reason(s) that you chose a face-to-face interview
  - [ ] I was unsure if how video conference interview would work.
  - [ ] I wanted to visit and learn more about the programs anyway.
  - [ ] I believed that I would have a better chance in the match if I came for face-to-face interview, and showed my interest of the programs.
  - [ ] Other, please specify _______________________________

- Please rank numbers 1 to 6 for the most helpful factors for your decision on ranking our programs (1 = most helpful, 5 = least helpful)
  o Campus tour
  o Interview sessions
  o Interaction with residents
  o Exploring the city by yourself
  o Our website

- For applicants who had an evening social event with residents, do you think that the social event was helpful?
  - [ ] I did not have the social event with residents
  - [ ] Yes, it was helpful, but did not affect my decision on ranking.
  - [ ] Yes, it was helpful, and affected my decision in a positive way.
  - [ ] Yes, it was helpful and affected my decision in a negative way.
  - [ ] No, it was not helpful.

Figure 1. (Continued)
**Interviewer Survey**

- Please rank numbers 1-7 for the most important factors for your decision on ranking the applicants (1 = most important, 7 = least important)
  
  - Overall academic achievement
  - USMLE step 1 score
  - USMLE step 2CK score
  - Research and publications
  - Interpersonal skills and personality
  - Interest in our program(s)
  - Method of interview (in person/video conference)

- If the applicants had a video conference interview and visited our department, did you rank them differently than those who had face-to-face interview?
  
  [ ] Yes  [ ] No

- Did you feel reluctant or discomfort to ranking applicants who had video conference interview and did not make arrangement to visit our department?
  
  [ ] I felt discomfort to rank them without seeing them in person.
  [ ] I felt that the applicants may not be interested in our program(s).
  [ ] No, I had no difficulty at all if they showed sensible reason(s) for not being here.
  [ ] Other reason, please specify ________________________________

- How often did you experience difficulty during a video conference sessions? (including poor quality video conference that preclude the right decision making on ranking process)
  
  [ ] Not at all  [ ] 1-20% of the time  [ ] 21-40% of the time
  [ ] 41-60% of the time  [ ] 61-80% of the time  [ ] 81-100% of the time

- Would you consider a video conference interview as an alternative for future residency selection?
  
  [ ] Yes, definitely
  [ ] Yes, with some improvement, please specify __________________________
  [ ] No, I do not think we should do video conference interview again in the future

- Other suggestions or comments ________________________________

Figure 1. (Continued)
Table 1. Demographic Characteristics and Ophthalmology Interview-Specific Information of the Respondents in the Face-to-Face and the Video Conference Interview Groups

<table>
<thead>
<tr>
<th></th>
<th>FFI (n=19)</th>
<th>VCI (n=18)</th>
<th>All (n=37)</th>
<th>P value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years; mean ± SD)</strong></td>
<td>27.3 ± 2.2</td>
<td>27.0 ± 2.7</td>
<td>27.2 ± 2.5</td>
<td>0.717</td>
</tr>
<tr>
<td><strong>Male (%)</strong></td>
<td>12 (63.2)</td>
<td>12 (66.7)</td>
<td>24 (64.9)</td>
<td>0.823</td>
</tr>
<tr>
<td><strong>Category</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.736</td>
</tr>
<tr>
<td>-US Seniors (%)</td>
<td>18 (94.7)</td>
<td>16 (88.9)</td>
<td>34 (91.9)</td>
<td></td>
</tr>
<tr>
<td>-US Graduates (%)</td>
<td>0 (0.0)</td>
<td>1 (5.6)</td>
<td>1 (2.7)</td>
<td></td>
</tr>
<tr>
<td>-IMGs (%)</td>
<td>1 (5.3)</td>
<td>1 (5.6)</td>
<td>2 (5.4)</td>
<td></td>
</tr>
<tr>
<td><strong>USMLE scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-3-digit step 1 (mean ± SD)</td>
<td>237 ± 13 (n=18)</td>
<td>240 ± 10 (n=17)</td>
<td>238 ± 12 (n=35)</td>
<td>0.440</td>
</tr>
<tr>
<td>-2-digit step 1 (mean ± SD)</td>
<td>97 ± 3 (n=18)</td>
<td>98 ± 2 (n=17)</td>
<td>97 ± 3 (n=35)</td>
<td>0.374</td>
</tr>
<tr>
<td>-3-digit step 2CK (mean ± SD)</td>
<td>236 ± 19 (n=13)</td>
<td>242 ± 14 (n=11)</td>
<td>239 ± 17 (n=24)</td>
<td>0.392</td>
</tr>
<tr>
<td>-2-digit step 2CK (mean ± SD)</td>
<td>96 ± 6 (n=13)</td>
<td>98 ± 4 (n=11)</td>
<td>97 ± 5 (n=24)</td>
<td>0.513</td>
</tr>
<tr>
<td><strong>Expected degrees</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.073</td>
</tr>
<tr>
<td>-MD or equivalent</td>
<td>18 (94.7)</td>
<td>14 (77.8)</td>
<td>32 (86.5)</td>
<td></td>
</tr>
<tr>
<td>-MD,PhD</td>
<td>1 (5.3)</td>
<td>0 (0.0)</td>
<td>1 (2.7)</td>
<td></td>
</tr>
<tr>
<td>-MD,MPH</td>
<td>0 (0.0)</td>
<td>2 (11.1)</td>
<td>2 (5.4)</td>
<td></td>
</tr>
<tr>
<td>-MD,MBA</td>
<td>0 (0.0)</td>
<td>2 (11.1)</td>
<td>2 (5.4)</td>
<td></td>
</tr>
<tr>
<td><strong>Number of programs applied (mean ± SD)</strong></td>
<td>64 ± 21</td>
<td>57 ± 21</td>
<td>61 ± 21</td>
<td>0.318</td>
</tr>
<tr>
<td><strong>Number of interviews offered (mean ± SD)</strong></td>
<td>13 ± 4</td>
<td>16 ± 8</td>
<td>14 ± 7</td>
<td>0.155</td>
</tr>
<tr>
<td><strong>Number of interviews completed (mean ± SD)</strong></td>
<td>10 ± 4</td>
<td>12 ± 4</td>
<td>11 ± 4</td>
<td>0.138</td>
</tr>
<tr>
<td><strong>Number of interviews turned down due to conflict with other interviews (mean ± SD)</strong></td>
<td>3.1 ± 2.3</td>
<td>3.7 ± 4.0</td>
<td>3.4 ± 3.2</td>
<td>0.577</td>
</tr>
<tr>
<td><strong>Total ophthalmology interview expense ($; mean ± SD)</strong></td>
<td>4468 ± 2411</td>
<td>4594 ± 2379</td>
<td>4530 ± 2401</td>
<td>0.874</td>
</tr>
<tr>
<td><strong>Arizona ophthalmology interview cost ($; mean ± SD)</strong></td>
<td>504 ± 273</td>
<td>317 ± 309</td>
<td>413 ± 302</td>
<td>0.059</td>
</tr>
<tr>
<td><strong>Number of applicants who had to borrow money for interviews (%)</strong></td>
<td>8 (42.1)</td>
<td>10 (55.6)</td>
<td>18 (48.6)</td>
<td>0.413</td>
</tr>
</tbody>
</table>

FFI = face-to-face interview; IMGs = international medical graduates; MBA = Master of Business Administration; MD = Doctor of Medicine; MPH = Masters Degree in Public Health; PhD = Doctor of Philosophy; SD = standard deviation; step 2 CK = step 2 (Clinical Knowledge); USMLE = United States Medical Licensing Examination; VCI = video conference interview; $ = US dollars

*P value – compared between FFI and VCI groups