1 Introduction

National Matching Services Inc. (NMS) conducted a survey of all program coordinators from residencies that registered for the 2014 Optometry Residency Match (ORMatch). The survey was developed in conjunction with the ORMatch Steering Committee of the Association of Schools and Colleges of Optometry (ASCO).

The purpose of the survey was to gather information on the recruitment process for optometry residency positions from the perspective of the recruiter. To compile this report, NMS combined data from the survey responses with applications, ranking and Match result data from NMS databases.

Disclaimer

The recruitment process for optometry residencies is complex and involves assessment and evaluation of quantifiable and non-quantifiable factors, many of which are not addressed in this report. This report is being provided for informational purposes only and is not intended to represent any specific guidance, direction, strategy, or advice. It is a summary analysis of validated and unvalidated historic data collected by a self-selected sample of registrants in the Match.

Without prejudice to the generality of the foregoing paragraph, we do not represent, warrant, undertake or guarantee that the use of information in the report will lead to any particular outcome or result.

We will not be liable for any losses, including without limitation loss of or damage to income, anticipated savings, employment, contracts, or goodwill.

Limitations

- Data in this report is based on survey responses as well as applicantion, ranking, and result information for survey respondents in the 2014 ORMatch. Therefore, aggregate values presented in this report may not be the same as those reported in the annual Match statistics on the ORMatch web site.

- The survey data is self-reported and the accuracy of the responses is not verified. As such, there may be selective memory, attribution, and exaggeration issues with some responses.

- Responses to individual survey questions were optional. As a result, answers were missing for some questions which may have impacted the analysis.

- The survey was distributed after the results of the 2014 Match were released. It is possible that program coordinators’ survey responses may have been biased by the outcome they received in the Match.

- The survey did not obtain any data at the individual program or track level. Therefore, individual responses from program coordinators responsible for multiple tracks or programs were attributed to all of their programs. This may have introduced attribution issues when analyzing data at the program level, such as for Match results.
2 Survey Respondents

Participation in the survey was strong. There were 95 program coordinators who responded to the survey (46% of registered program coordinators). All but 2 submitted a Rank Order List for the Match. The following figures provide a breakdown of the demographics of program coordinator respondents, and the number of survey respondents by program type with a comparison to the number of Match registrations.

2.1 By Program Type

The breakdown of survey respondents is compared with the total number of 2014 residency registrations for the Match by program type. While there were respondents from each program type, the samples were not large enough to conduct analysis by program type that would be statistically significant.

![Registered Residencies and Survey Respondents, by Program Type](image)

In this report, programs are classified by program type based on one or more of the following areas of focus for their clinical and didactic curricula.

- BIR - Brain Injury Rehabilitation
- CCL - Cornea and Contact Lenses
- CH - Community Health Optometry
- FP - Family Practice Optometry
- GER - Geriatric Optometry
- LVR - Low Vision Rehabilitation
- OD - Ocular Disease
- PEC - Primary Eye Care
- PED - Pediatric Optometry
- ROS - Refractive and Ocular Surgery
- VTR - Vision Therapy and Rehabilitation

Residency programs where a substantial portion of the clinical and didactic curricula for the program is described by multiple program types are included in the counts of each program type which applies. Therefore, the number of registered residencies by type in this figure exceeds the number of residencies reported in the Match statistics on the ORMatch web site.

Figure 1: Match Registrations and survey respondents by program type
2.2 Demographics

Figure 2: Age and gender of survey respondents
3 Applications

This section provides information on program coordinators’ self-assessed attractiveness of their program to applicants on various factors, and a distribution of the number of applications received by program type.

3.1 Program Coordinators’ Perceived Attractiveness of Program to Applicants

Program coordinators were asked to rate the attractiveness of their program to applicants on various factors. Attractiveness was rated on a five point scale.

- 1 - Not at all attractive
- 2 - Slightly attractive
- 3 - Moderately attractive
- 4 - Quite attractive
- 5 - Extremely attractive

Quality of curriculum, quality of faculty, and size/diversity of caseload were perceived to be the most attractive elements to applicants. While the top two factors are consistent with data on the factors influencing an applicant’s decision to apply as reported in the companion 2014 Applicant Survey Report (figure 6), size/diversity of caseload was perceived to be more important by coordinators than it was for applicants.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Average Perceived Attractiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Curriculum</td>
<td>4.47</td>
</tr>
<tr>
<td>Quality of Faculty</td>
<td>4.36</td>
</tr>
<tr>
<td>Size/Div. of Caseload</td>
<td>4.34</td>
</tr>
<tr>
<td>Reputation</td>
<td>4.18</td>
</tr>
<tr>
<td>Quality of Facility</td>
<td>4.15</td>
</tr>
<tr>
<td>Work/life Balance</td>
<td>3.97</td>
</tr>
<tr>
<td>Size of Program</td>
<td>3.84</td>
</tr>
<tr>
<td>Salary and Benefits</td>
<td>3.48</td>
</tr>
<tr>
<td>Geographic Location</td>
<td>3.33</td>
</tr>
</tbody>
</table>

Figure 3: Overall attractiveness of programs
3.2 Average Number of Applications Received

Boxplots for the total number of applications received and the number of applications received per position are shown below. The orange dot represents the median number of applications received. The inner end of the grey lines, closest to the median dot, represent the 25th and 75th percentiles. The outer ends of the grey lines are the minimums and maximums, excluding outliers. Outliers are represented by grey dots.

The average residency received 10 applications. Programs in the third quartile received, on average, 3 times more applications per position than programs in the first quartile. This suggests that there is significant variability in the demand for positions across programs.

Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

Figure 4: Number of applications received
4 Interviews

This section provides information on the factors influencing program coordinators’ decision to interview an applicant as well as data on the number of interviews conducted.

4.1 Factors Influencing Program Coordinators’ Decision to Interview

Program coordinators were asked to rate the importance of various factors in influencing their decision to interview an applicant. Importance was rated on a five point scale.

- 1 - Not at all important
- 2 - Slightly important
- 3 - Moderately important
- 4 - Quite important
- 5 - Extremely important

The figure below ranks each factor from most important to least important. Letters of reference and applicants’ perceived interest in the programs were rated to be the most important factors.

| Average Importance of Factors in Determining Which Applicants to Interview |
|------------------------------------------------|----------------|
| Letters of Reference                                  | 4.23 |
| Applicant's Perceived Interest in Program             | 4.17 |
| Communication Directly with Applicant                 | 3.86 |
| Optometry College Transcripts                         | 3.63 |
| NBEO Score Reports                                    | 3.44 |
| Volunteer/Extracurricular Activity                    | 3.24 |
| Awards, Honors, or Certifications                     | 3.13 |
| Applicant's Other Life Experience                     | 3.13 |
| Feedback from Current Residents                       | 3.1  |
| Optometry School of Graduation                        | 2.75 |
| Personal Prior Knowledge of Applicant                 | 2.73 |
| Class Quartile/Ranking                                | 2.6  |
| Languages Spoken                                      | 2.57 |
| Undergraduate College Transcripts                     | 1.94 |

Figure 5: Factors influencing decision to interview
4.2 Average Number of Interviews Conducted

Boxplots for the total number of interviews conducted by the residency and the number of interviews conducted per position are shown below. The orange dot represents the median number of interviews conducted. The inner end of the grey lines, closest to the median dot, represent the 25th and 75th percentiles. The outer ends of the grey lines are the minimums and maximums, excluding outliers. Outliers are represented by grey dots.

Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

Figure 6: Number of interviews conducted
5 Rankings

This section provides information on tools used by program coordinators to determine their rankings of applicants, the factors influencing program coordinators' decision to rank an applicant and data on the number of rankings submitted per residency and per position. Finally, there is an analysis of the variation of an applicant’s rank positioning on program Rank Order Lists.

5.1 Tools Used to Determine Ranking Preferences

Program coordinators were asked which tools, if any, they use to help determine their ranking preferences of applicants. Over half of program coordinators evaluated applicants using a list of pro and cons and a similar percentage used some sort of averaging to incorporate the input from multiple evaluators. A majority of coordinators used a Rank Order List Worksheet to help organize and plan their rankings for submission.

![Bar graph showing the percentage of program coordinators using various tools to determine ranking preferences.](image)

Figure 7: Percentage of program coordinators using various tools to determine ranking preferences
5.2 Factors Influencing Program Coordinators’ Decision to Rank

Program coordinators were asked to rank the importance of various factors in influencing their decision to rank an applicant. The importance was rated on a five point scale.

- 1 - Not at all important
- 2 - Slightly important
- 3 - Moderately important
- 4 - Quite important
- 5 - Extremely important

The 3 factors that were rated to be the most important are all personal in nature. The top-2 factors are based on the applicant’s direct interaction with the program while the third most important factor is the reference letter(s) written about the applicant.

The average importance of factors in determining which applicants to rank are as follows:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Average Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant Response to Interview Questions</td>
<td>4.58</td>
</tr>
<tr>
<td>Applicant’s Perceived Interest in Program</td>
<td>4.4</td>
</tr>
<tr>
<td>Letters of Reference</td>
<td>4.08</td>
</tr>
<tr>
<td>Communication Directly with Applicant</td>
<td>3.84</td>
</tr>
<tr>
<td>Optometry School Transcripts</td>
<td>3.49</td>
</tr>
<tr>
<td>NBEO Score Reports</td>
<td>3.36</td>
</tr>
<tr>
<td>Feedback from Current Residents</td>
<td>3.21</td>
</tr>
<tr>
<td>Volunteer/Extracurricular Activity</td>
<td>3.12</td>
</tr>
<tr>
<td>Applicant’s Other Life Experience</td>
<td>3</td>
</tr>
<tr>
<td>Awards, Honors, or Certifications</td>
<td>2.91</td>
</tr>
<tr>
<td>Personal Prior Knowledge of Applicant</td>
<td>2.88</td>
</tr>
<tr>
<td>Optometry School of Graduation</td>
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<tr>
<td>Languages Spoken</td>
<td>2.4</td>
</tr>
<tr>
<td>Undergraduate College Transcripts</td>
<td>1.77</td>
</tr>
</tbody>
</table>

Figure 8: Factors influencing decision to rank
5.3 Average Number of Ranks Submitted

Boxplots for the number of ranks submitted per residency and the number of ranks submitted per position offered are shown below. The orange dot represents the median number of ranks submitted per position offered. The inner end of the grey lines, closest to the median dot, represent the 25th and and 75th percentiles. The outer ends of the grey lines are the minimums and maximums, excluding outliers. Outliers are represented by grey dots.

The data reported here is close to but not entirely consistent with similar calculations reported in the annual Match statistics on the ORMatch Match website. This figure includes data only for respondents to the survey while the Match statistics include data for all individuals who participated in the Match.

Figure 9: Number of ranks submitted
5.4 Rank Variation

The following figure provides a measure of the variability of rank positioning for a given applicant on program Rank Order Lists. It attempts to answer the question: “How similar is my ranking of an applicant to the rankings that applicant received from all other programs?”.

Variation less than 1.0 implies that the rank assigned to an applicant by a program was less than 1 position different (higher or lower) than the average ranking that applicant received from all programs. The majority of program have a rank variation of less than 1 which suggests there is a considerable amount of consistency in the way different programs rank the same application. However, it is interesting to note that for approximately 10% of programs, the rank variations are over 1.5. For these programs, the ranking they assigned to their applicants was substantially different than the average ranking received by those applicants from all other programs. This suggests that for these programs, there may be substantial differences in the methods and results of the evaluations they use in their recruitment processes.

For the purposes of this analysis, each residency’s rankings were converted to a “standardized rank”. This is best explained by example: if the number of positions to be filled from a Rank Order List was three, then the first three applicants on this List were considered to be “first choice” applicants and given a standardized rank of 1. The next three applicants on that List were defined as “second choice” applicants and given a standardized rank of 2. And so on.

This figure includes rankings data on all programs that submitted Rank Order Lists to the Match, not just survey respondents.

Figure 10: Rank variation on program rank order lists
6 Results

This section provides information on the results obtained by programs in the Match, segmented by various survey and Match data.

6.1 Program Result Segemented by Number of Applications, Interviews and Ranks

The figure below shows the differences in the average number of applications received, interviews conducted and ranks submitted per position for programs that filled all of their positions in the Match compared to programs that were left with unfilled positions. Programs that filled all of their positions had more applications, conducted more interviews, and ranked more applicants than programs that did not fill all of their positions.

Match Result by Number of Applications, Interviews and Rankings Per Position

- Filled Program
- Unfilled Program

Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

(*) Small sample size (n=2) for unfilled programs

Figure 11: Match result segmented by various survey and Match data
6.2 Program Result by Perceived Attractiveness

The figure below shows the program coordinator self-reported rating of the attractiveness of their program to applicants, segmented by the Match result obtained by the program. Programs with unfilled positions perceive the quality of their curriculum to be lower than programs that filled all of their positions.

Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

Figure 12: Match result by perceived attractiveness