1 Introduction

National Matching Services Inc. (NMS) conducted a survey of all applicants who registered for the 2014 Optometry Residency Match (OMatch). The survey was developed in conjunction with the ORMatch Committee of the Association of Schools and Colleges of Optometry (ASCO).

The purpose of the survey was to gather information on the recruitment process undertaken by applicants for optometry residencies that participate in ORMatch. Specifically, the survey gathered information on influencing factors and outcomes of the application, interview, rankings and Match processes.

To compile this report, NMS combined the data from survey responses with application, ranking and Match result data from NMS databases.

Disclaimer

The recruitment process for optometry residencies is complex and involves 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 ORMatch.

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 application, ranking, and result information for survey respondents in the 2014 ORMatch. Therefore, aggregated values presented in this report may not be the same as those reported in the annual Match statistics on 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 so 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 an individual’s survey responses may have been biased by the outcome the individual received in the Match.
2 Survey Respondents

Participation in the survey was strong. There were 228 respondents to the survey (43% of total applicant registrations), 224 of whom submitted a Rank Order List in the Match (46% of total applicant participants). The following figures provide a breakdown of survey respondents by demographics, program type and outcome in the Match. Some figures include the number of Match registrations for comparative purposes.

2.1 By Program Type

While the survey response was strong, the response was not large enough to provide statistically significant samples at reasonable confidence levels and intervals for analysis by program type.

Match Registrations and Survey Respondents, by Program Type

![Graph showing Match Registrations and Survey Respondents by Program Type]

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

Match Registrations and survey respondents are based on the program types to which the applicant applied. Applicants applying to more than one program type are counted in the distributions of each of program type to which the applicant applied.

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

![Survey Respondent Demographics]

Figure 2: Age and gender of survey respondents
2.3 By Applicant Outcome

Applicants who withdrew from the Match or did not submit a Rank Order List for the Match are categorized as Non Participants. Overall, the survey had a higher response rate from matched applicants (52%) than from unmatched applicants (31%) or non-respondents (11%).

Figure 3: Match registrations and survey respondents by applicant outcome in the Match.
3 Applications

This section provides information on the timing when applicants began identifying programs of interest, sources of information in applicants’ search for programs, factors influencing applicants’ decision to apply to programs, the number of applications submitted, and average GPA and NBEO examination scores reported on applications.

3.1 Timing for Identifying Programs of Interest

A large cohort of applicants, over 17%, began identifying programs of interest for their residency placement by March 2013, more than one year before the applicant might expect to start their training. Over 60% of applicants began their search for programs between September and January.

![Percentage of Applicants Beginning Search for Programs, by Month](image)

Figure 4: Percentage of applicants beginning search for programs of interest by month
3.2 Sources of Information on Programs

Applicants were asked to evaluate the usefulness of various sources of information on optometry residency programs. Evaluations were made on a five point scale.

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

It is helpful to consider two types of sources: primary sources which are provided directly by an individual program, and third-party sources which are resources that aggregate information on programs. Direct communication with programs was rated to be the most useful source of information on residency programs. The ASCO Web Site/Residency Directory and the ORMatch web site were rated as the most useful third-party sources of information on programs.

<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Average Usefulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Communication with Program</td>
<td>3.99</td>
</tr>
<tr>
<td>ASCO Web Site/Residency Directory</td>
<td>3.8</td>
</tr>
<tr>
<td>ORMatch web site</td>
<td>3.75</td>
</tr>
<tr>
<td>Web site/brochure Published by Program</td>
<td>3.49</td>
</tr>
<tr>
<td>Optometry School</td>
<td>2.97</td>
</tr>
<tr>
<td>AOA Publications</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Figure 5: Average usefulness of sources of information in search for programs of interest
3.3 Factors Influencing Applicants’ Decision to Apply

Applicants were asked to rate the importance of various factors in influencing their decision to apply to a program. 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

On average, all factors were considered at least *Moderately important*. The average rating for each factor ranged from 2.9 to 4.6.

The chart below orders each factor from most important to least important. Factors reflecting quality of education, like quality of curriculum and training, quality of faculty, and reputation of program ranked in the top four most important factors. Feedback from past and current residents was also cited as an important factor in influencing an applicant’s decision to apply.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of curriculum and training</td>
<td>4.63</td>
</tr>
<tr>
<td>Quality of faculty</td>
<td>4.42</td>
</tr>
<tr>
<td>Feedback from current or past residents</td>
<td>4.37</td>
</tr>
<tr>
<td>Reputation of program</td>
<td>4.25</td>
</tr>
<tr>
<td>Program setting (e.g., urban, rural)</td>
<td>4.18</td>
</tr>
<tr>
<td>Geographic location</td>
<td>4.04</td>
</tr>
<tr>
<td>Quality of facility</td>
<td>3.97</td>
</tr>
<tr>
<td>Communication directly with program</td>
<td>3.91</td>
</tr>
<tr>
<td>Size/diversity of patient caseload</td>
<td>3.85</td>
</tr>
<tr>
<td>Work/life balance</td>
<td>3.84</td>
</tr>
<tr>
<td>Event hosted by program</td>
<td>3.44</td>
</tr>
<tr>
<td>Size of program</td>
<td>3.14</td>
</tr>
<tr>
<td>Salary and benefits</td>
<td>2.94</td>
</tr>
<tr>
<td>Discussion with other applicants</td>
<td>2.92</td>
</tr>
</tbody>
</table>

Figure 6: Factors influencing decision to apply
3.4 Average Number of Applications Submitted

A boxplot for the number of applications submitted by applicants is shown below. The orange dot represents the median number of applications submitted. 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.

Figure 7: Number of applications submitted
3.5 Average Scores on Applications

A boxplot for the NBEO examination scores and GPAs listed on applicant applications is shown below. The orange dot represents the median number of applications submitted. 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.

Figure 8: Average scaled scores on applications
4 Interviews

This section provides information on the number of interview offers received.

4.1 Average Number of Interview Offers Received

A boxplot for the number of interview offers received is shown below. The orange dot represents the median number of applications submitted. 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. Note: The scale has been adjusted to remove some outliers to allow for easier viewing of the data.

On average, the ratio of interview offers received to applications submitted was 0.86.

Figure 9: Number of interview offers received
5 Rankings

This section provides information on the tools used by applicants to determine their ranking preferences and the factors that influenced applicants’ decision to rank a program.

5.1 Tools Used to Determine Ranking Preferences

Applicants were asked which tools, if any, they use to help determine their ranking preferences for the Match. The majority of survey respondents used qualitative assessment techniques, like a list of pros and cons or their “gut-feel” to determine their preferences. A quantitative analysis was used by less than 5% of survey respondents.

Figure 10: Percentage of applicants using various tools to determine ranking preferences
5.2 Factors Influencing Applicants’ Decision to Rank

Applicants were asked to rank the importance of various factors in influencing their decision to rank a program. 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 chart below order each factor from most important to least important. On average, all factors were considered at least *Moderately important*. The average rating for each factor ranged from 3.0 to 4.6.

Quality of curriculum and training and quality of faculty were the top two factors influencing applicants’ decision to rank a program. These were the same top factors cited for influencing an applicant’s decision to apply as shown in figure 6. This suggests that applicants have a strong notion of which programs will be ranked before they interview.

![Factors Influencing Applicants' Ranking Decision](image)

Figure 11: Factors influencing decision to rank
5.3 Average Number of Ranks Submitted

A boxplot for the number of ranks submitted by respondents is shown below. The orange dot represents the median number of rankings submitted. 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 data reported here is close to but not entirely consistent with similar calculations reported in the annual ORMatch statistics on the ORMatch web site. This figure includes data only for respondents to the survey while the ORMatch statistics include data for all individuals who participated in ORMatch.

Figure 12: Number of ranks submitted
6 Results

This section provides information on the results obtained by applicants in ORMatch, segmented by various survey and Match data. The following figures provide a breakdown of applicant results by gender, the number of applications submitted, gpa and NBEO examination scores reported by applicants, the number of interview offers received, and the length of an applicant’s Rank Order List.

6.1 Results by Gender

The percentage of respondents, applications submitted, interview offers received, rankings submitted, and matches are broken out by gender below. Women made up the majority of survey respondents. In absolute terms, they had the majority of applications, interviews, rankings and matches. However, their share of applications submitted, interview offers received and rankings submitted was slightly less than the proportional share of their responses.

![Applicant Results by Gender](image)

Figure 13: Percentage of applications, interviews, rankings and matches, by gender
6.2 Match Rate by Total Number of Applications Submitted

Match rates are segmented by the total number of applications submitted. Match rates were the highest for applicants who submitted 4-6 applications. Applicants who submitted more than 10 applications did not have better Match rates than those who submitted at least 4 applications.

![Match Rate by Number of Applications Submitted](image)

Figure 14: Match rate by number of applications submitted
6.3 Match Rate by Average GPA and NBEO Scores

Match rates are segmented by the average GPA and NBEO scores reported by applicants. Applicants with higher scores had higher match rates, but the differences were not large enough to be statistically significant.

Average Scores for Matched and Unmatched Applicants

<table>
<thead>
<tr>
<th>GPA</th>
<th>Part 1</th>
<th>Part 2</th>
<th>Part 3</th>
<th>TMOD</th>
<th>ISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4</td>
<td>519</td>
<td>632</td>
<td>530</td>
<td>89</td>
<td>81</td>
</tr>
<tr>
<td>3.3</td>
<td>490</td>
<td>594</td>
<td>505</td>
<td>88</td>
<td>81</td>
</tr>
</tbody>
</table>

Figure 15: Match rate by average GPA and NBEO scores
6.4 Match Rate by Number of Interview Offers Received

Interviews are a signal of interest in an applicant by a program. Generally, match rates increased with the number of interview offers received.

**Figure 16: Match rate by number of interview offers received**

<table>
<thead>
<tr>
<th>Number of Offers</th>
<th>Match Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0−2</td>
<td>75.8%</td>
</tr>
<tr>
<td>3−4</td>
<td>80.2%</td>
</tr>
<tr>
<td>5−6</td>
<td>87.8%</td>
</tr>
<tr>
<td>7+</td>
<td>82.6%</td>
</tr>
</tbody>
</table>
6.5 Match Rate by Length of Rank Order List

There is a positive correlation between Match Rate and the number of rankings on an applicant’s Rank Order List, up to a point. There are occurrences where applicants submit rankings of programs where they have not applied or interviewed. Applicants should ranks all programs where they would be willing to accept a position. Adding programs to a Rank Order List where an applicant is not being considered does not improve the probability of matching.

![Match Rate by Number of Ranks Submitted](image)

**Figure 17:** Match rate by length of rank order list