



Charting Outcomes in the Match

Specialties Matching Service®, Appointment Year 2011

Characteristics of Applicants Who Matched to Their Preferred Specialty

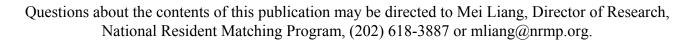
1st Edition

Prepared by:

National Resident Matching Program and Association of American Medical Colleges

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www.aamc.org www.nrmp.org



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2011

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2011 Introduction

The first edition of *Charting Outcomes in the Match* was published in August 2006 for the **Main Residency Match**® with subsequent editions 2007, 2009, and 2011. This report, modeled after its predecessor, examines outcomes for selected fellowship Matches conducted by the National Resident Matching Program (NRMP).

NRMP's **Specialties Matching Service**® (**SMS**®) conducts Matches for advanced residency and fellowship positions. Data in this report are for the 2011 appointment year and include 40 subspecialties participating in 20 Matches. All specialties that participated in the *Specialties Matching Service* are included in the overall tables and charts, but only specialties that offered 200 or more positions or had 200 or more applicants are reported separately.

This report is a collaboration of the National Resident Matching Program and the Association of American Medical Colleges (AAMC). Combining data from the NRMP, the AAMC's Electronic Residency Application Service (ERAS) and other AAMC data sources, and USMLE scores from the National Board of Medical Examiners (NBME) and the Educational Commission for Foreign Medical Graduates (ECFMG), we identified ten applicant characteristics that contribute to match success. Probability analysis was used to evaluate the association between match success and contiguous ranks and USMLE Step scores. For the purposes of this report, success was defined as a match to the specialty of the applicant's first-ranked program because that is assumed to be the specialty of choice. Lack of success includes matching to another specialty as well as failure to match at all. No distinction was made based on whether applicants matched to their first, second, third, or last choice program.

Four applicant groups are included in the report: U.S. allopathic medical school graduates, U.S. citizen international medical school graduates, non-U.S. citizen international medical school graduates, and graduates of osteopathic programs. Because of the small number of applicants, the report does not include Canadian medical school graduates and graduates of Fifth Pathway programs. Osteopathic applicants were excluded from some charts due to the small number of observations.

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2011 Summary

Some general observations apply to all of the specialties in this report. Applicants who are successful in matching to their preferred specialty are more likely to:

- · rank more programs within their preferred specialty
- · be U.S. graduates
- · have higher USMLE Step 1, Step 2, and Step 3 scores
- · be members of Alpha Omega Alpha Honor Medical Society (AOA)

Although some other measures seem to be related to match success for some specialties, the relationships were not consistent enough to draw broad conclusions across specialties. In addition, the data sources used for *Charting Outcomes* did not include other important applicant factors such as program director evaluations, reference letters, and the Medical School Performance Evaluation.

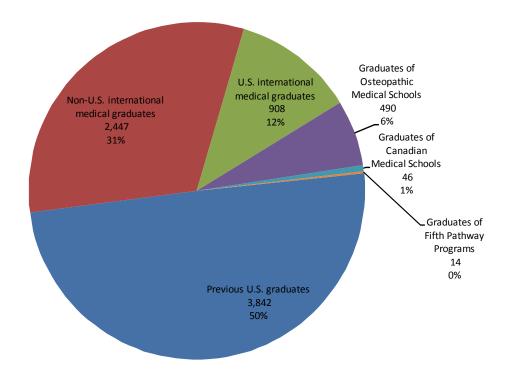
Despite the fairly strong relationship between USMLE Step scores and match success, the distributions of scores show that program directors consider other qualifications, and a high score is not a guarantee of success. Even in the least competitive specialties a few individuals with higher scores are not successful. Neither is a lower score a bar to success.

The data in this report support the following straightforward advice one should give to an applicant:

- · Rank all of the programs you really want, without regard to your estimate of your chances with those programs.
- · Include a mix of both highly competitive and less competitive programs within your preferred specialty.
- · Include all of the programs on your list where the program has expressed an interest in you and where you would accept a position.
- · If you are applying to a competitive specialty and you would want to have a fellowship position in the event you are unsuccessful in matching to a program in your preferred specialty, also rank your most preferred programs in an alternate specialty.
- Include all of your qualifications in your application, but know that you do not have to be AOA, to have the highest USMLE scores, to have publications, or to have participated in research projects to match successfully.



Active Applicants in the Specialties Matching Service, 2011 Appointment Year by Applicant Type



Source: NRMP Data Warehouse

Chart 1 shows the number of all active applicants who participated in the Specialties Matching Service (applicants who submitted rank order lists of programs) by applicant type.

		U.S. Gra	aduates	0.0	ernational Graduates	Non-U.S. Ir Medical G		Osteopathic Graduates	
Measure		Matched U (n=3,259)	Jnmatched (n=583)	Matched (n=486)	Unmatche (n=422)		Unmatched (n=1,051)	Matched ((n=328)	Jnmatched (n=162)
1.	Mean number of contiguous ranks	s 7	4	6	3	6	3	5	3
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	222	214	214	208	226	220	n/a	n/a
4.	Mean USMLE Step 2 score	229	216	217	209	229	221	n/a	n/a
5.	Mean USMLE Step 3 score	217	209	207	200	207	201	n/a	n/a
6.	Mean number of research experiences after last degree	0	0	1	1	1	1	0	0
7.	Mean number of abstracts, presentations, and publications after last degree	2	3	3	4	6	5	1	2
8.	Mean number of work experiences after last degree	0	0	1	1	2	2	0	0
9.	Mean number of volunteer experiences after last degree	0	0	0	0	1	1	0	1
10.	Percentage who are AOA members	13	4	n/a	n/a	n/a	n/a	n/a	n/a

n/a: Not applicable or little/no reliable data were available.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; measures 6-10 are from the AAMC Data Warehouse.

Note: USMLE Step 1 scores are not available for most osteopathic medical school graduates included in the independent applicant group. Table 1 provides summary statistics by applicant type and match outcome on the 10 measures presented in this report. This table reports on all 40 fellowship specialties with 2011 appointments. For specialties with 200 or more positions or 200 or more applicants, data on each of these measures will be displayed graphically by preferred specialty on the following pages. Of the 10 measures, only the United States Medical Licensing Examination (USMLE) scores had significant missing data. Overall, there were Step 1 scores for 91.5 percent of applicants, Step 2 scores for 91.8 percent and Step 3 scores for 73 percent of the applicants. Almost all U.S. graduates and 95 percent of U.S. IMGs and non-U.S. IMGs reported their Step 1 and Step 2 scores. Only 75 percent of U.S. graduates, 74 percent of U.S. IMGs and 83 percent of the non-U.S. IMGs reported a Step 3 scores. Almost all of the osteopathic applicants did not have any USMLE scores. They either take an alternative examination (the Comprehensive Osteopathic Medical Licensing Examination, or COMLEX-USA) or they take the USMLE exams but those data are not shared with the AAMC.



Number of Applicants and Positions in the Specialties Matching Service, 2011 Appointment Year by Preferred Specialty*

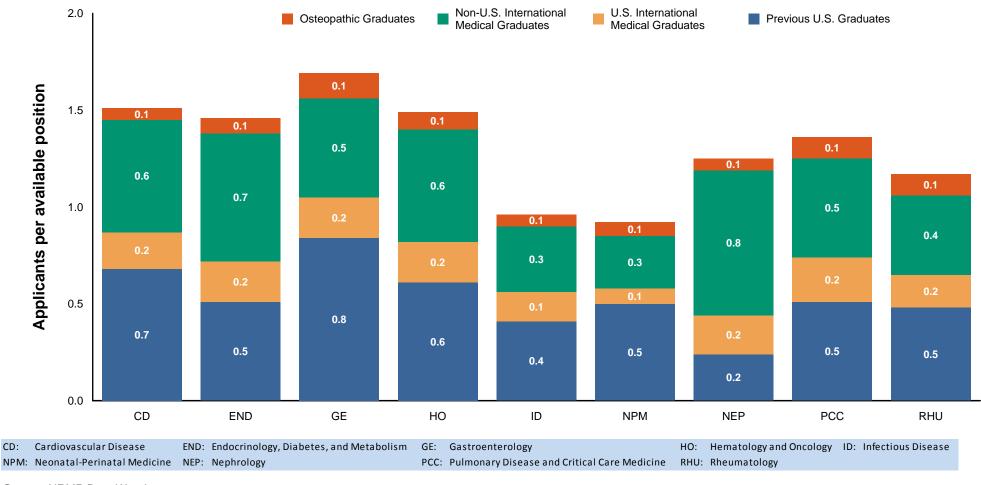
	Total	Total	Number of	U.S. Graduates		U.S. International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic	
Preferred Specialty	Positions Offered	Number of Applicants	Applicants Per Position	Matched	Not Matched	Matched	Not Matched	Matched	Not Matched	Matched	Not Matched
Cardiovascular Disease (CD)	729	1,106	1.5	425	71	62	76	201	225	28	15
Endocrinology, Diabetes, and Metabolism (END)	233	341	1.5	102	16	21	28	79	74	11	7
Gastroenterology (GE)	383	648	1.7	251	69	26	55	68	129	16	32
Hematology and Oncology (HO)	458	688	1.5	234	47	40	56	132	135	26	15
Infectious Disease (ID)	314	303	1.0	124	5	31	16	94	13	14	5
Neonatal-Perinatal Medicine (NPM)	223	205	0.9	105	6	13	4	52	9	12	4
Nephrology (NEP)	380	481	1.3	91	2	42	35	189	96	15	8
Pulmonary Disease and Critical Care Medicine (PCC	2) 417	570	1.4	190	24	54	40	123	91	27	17
Rheumatology (RHU)	184	217	1.2	79	9	19	12	53	22	9	11

^{*}Preferred specialty is the specialty ranked first on an applicant's rank order list. Source: NRMP Data Warehouse.

Table 2 provides a summary of the numbers of positions offered and applicants preferred each specialty for selected specialties for the 2011 appointment year. Only those specialties offering 200 or more positions or having 200 or more applicants are included. The numbers of applicants matched by applicant type (U.S. graduates, U.S. IMGs, non-U.S. IMGs, and osteopathic graduates) also are provided in this table.



Ratio - Applicants Ranking Specialty First / Available Positions by Preferred Specialty



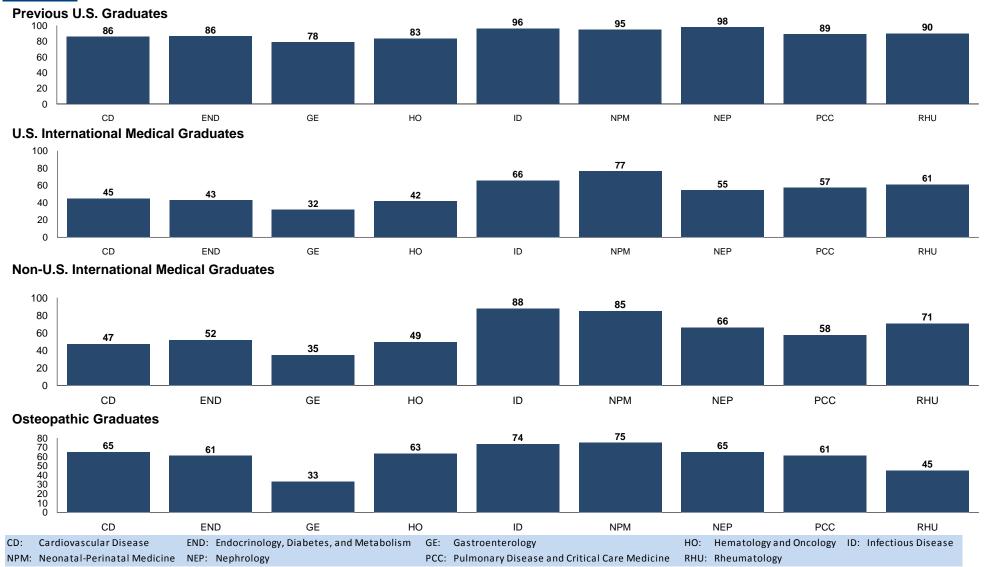
Source: NRMP Data Warehouse

Chart 2 shows the ratios of applicants to available positions in each specialty for the four applicant types: U.S. graduates, U.S. international medical graduates, non-U.S. international medical graduates, and osteopathic graduates. Take Cardiovascular Disease for example, for each available position there were, on average, 0.7 previous U.S. graduate, 0.2 U.S. international medical graduate, 0.6 non-U.S. international medical graduate, and 0.1 osteopathic graduate who ranked the specialty first on their Rank Order List. For Infectious Disease and Neonatal-Perinatal Medicine, there were more available positions than applicants who preferred the specialty. In comparison, for each Gastronenterology or Cardiovascular Disease position there were more than 1.5 applicants who preferred that specialty.

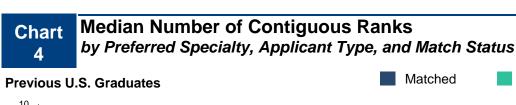


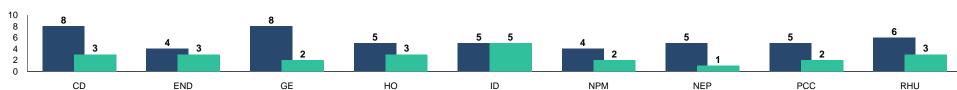
Match Rates

Percent Matched by Preferred Specialty and Applicant Type



Source: NRMP Data Warehouse



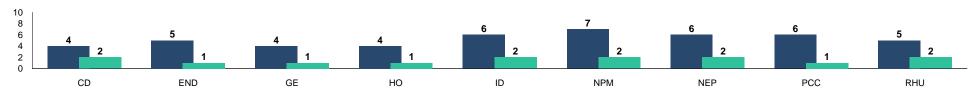


Not Matched

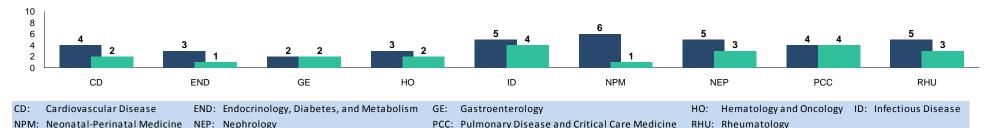
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates

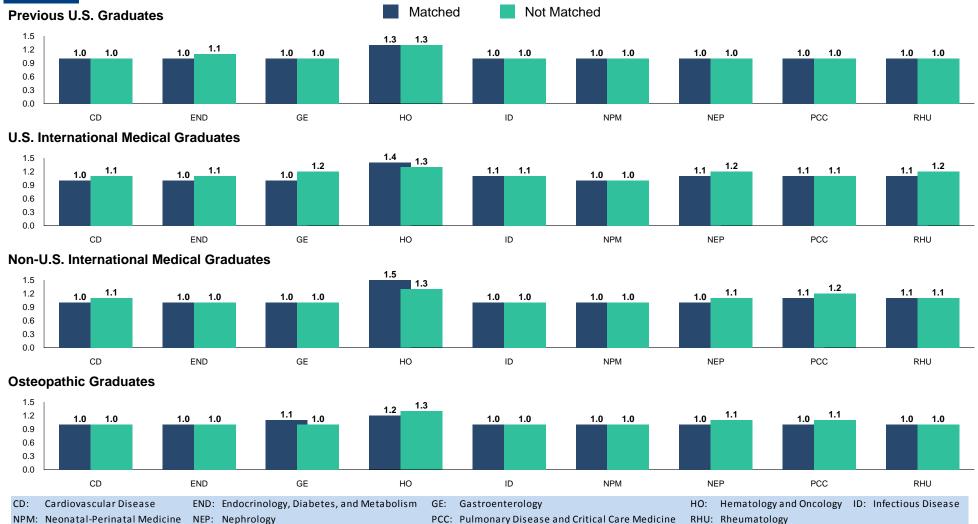


Source: NRMP Data Warehouse

In general, applicants are more likely to be successful if they rank more programs in their desired specialty. To quantify this aspect of applicant behavior, we tallied the number of programs ranked in the first-choice specialty before a program in another specialty appeared on the applicant's rank order list. Chart 4 provides the median number of contiguous ranks by preferred specialty for each applicant type who matched and did not match. In general, matched applicants had longer contiguous ranks across the applicant types. The principal message of these graphs is that applicants with longer rank order lists are more successful than those with shorter ones.



Mean Number of Different Specialties Ranked by Preferred Specialty, Applicant Type, and Match Status



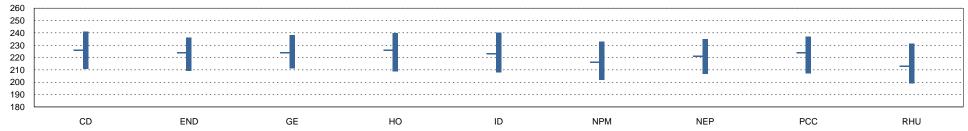
Source: NRMP Data Warehouse

Most of the fellowship applicants were only interested in one specialty. However, some Matches included more than one specialty and applicants were able to apply to multiple specialties. For example, applicants could apply to both Hematology and Hematology/Oncology in the Medical Specialties Matching Program (MSMP). Applicants could also participate in different specialty Matches in the same year. Chart 5 displays the average number of different specialties ranked by applicant type, preferred specialty, and match outcome.

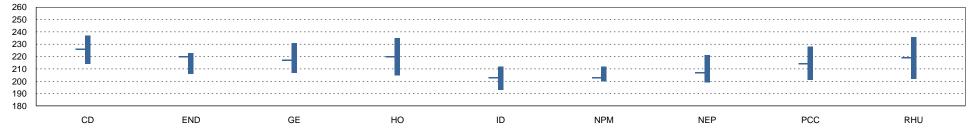


USMLE Step 1 Scores of Matched Applicants *by Preferred Specialty and Applicant Type*

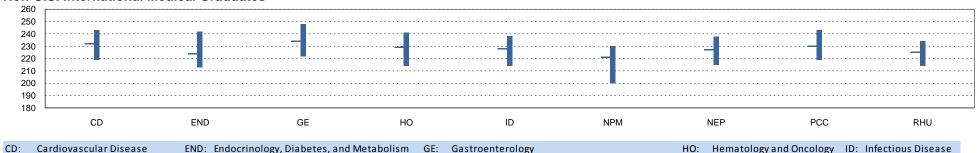
Previous U.S. Graduates



U.S. International Medical Graduates



Non-U.S. International Medical Graduates



PCC: Pulmonary Disease and Critical Care Medicine

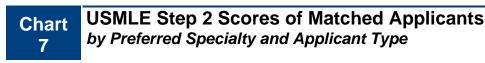
NPM: Neonatal-Perinatal Medicine NEP: Nephrology

Note: Step 1 scores are not available for the majority of Osteopathic graduates.

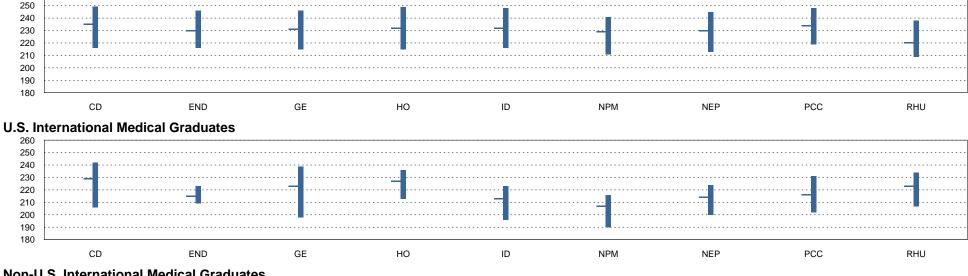
Sources: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Chart 6 displays the Step 1 scores for matched applicants by specialty. The horizontal bars are the median values for successful applicants and the vertical lines show the interquartile ranges (the range of scores for applicants excluding the top and bottom quarters of the distribution). Scores generally are higher for the more competitive specialties, but there is substantial overlap when specialties are compared. Overall, previous U.S. graduates have mean USMLE Step 1 scores of 221.7 (s.d. = 19.7) and U.S. international medical graduates have mean scores 223.6 (s.d.=18.8).

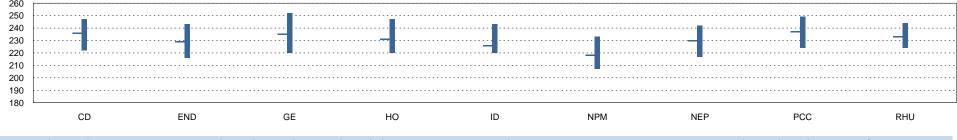
RHU: Rheumatology



Previous U.S. Graduates



Non-U.S. International Medical Graduates



Cardiovascular Disease END: Endocrinology, Diabetes, and Metabolism GE: Gastroenterology HO: Hematology and Oncology ID: Infectious Disease PCC: Pulmonary Disease and Critical Care Medicine RHU: Rheumatology NPM: Neonatal-Perinatal Medicine NEP: Nephrology

Note: Step 2 scores are not available for the majority of Osteopathic graduates.

Sources: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Chart 7 shows the Step 2 scores for matched applicants by preferred specialty. The horizontal bars are the median values for successful applicants and the vertical lines show the interquartile ranges. As was the case for the Step 1 scores, the more competitive specialties have higher average Step 2 scores. Overall, U.S. graduate applicants had mean USMLE step 2 scores of 227.6 (s.d. = 21.6) and U.S. international medical graduates and non-U.S. international medical graduates had mean scores of 214.4 (s.d. = 20) and 226.3 (s.d.=20.8) respectively.

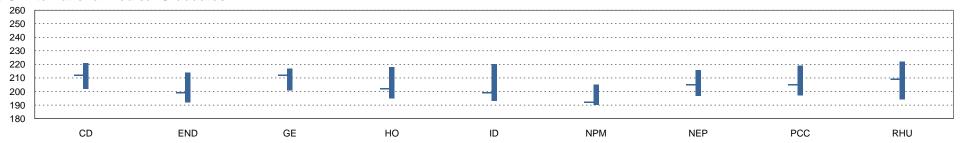


USMLE Step 3 Scores of Matched Applicants *by Preferred Specialty and Applicant Type*

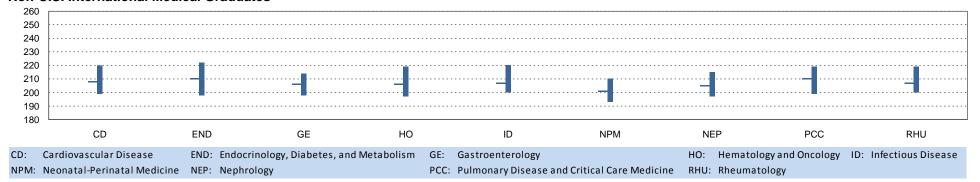
Previous U.S. Graduates



U.S. International Medical Graduates



Non-U.S. International Medical Graduates



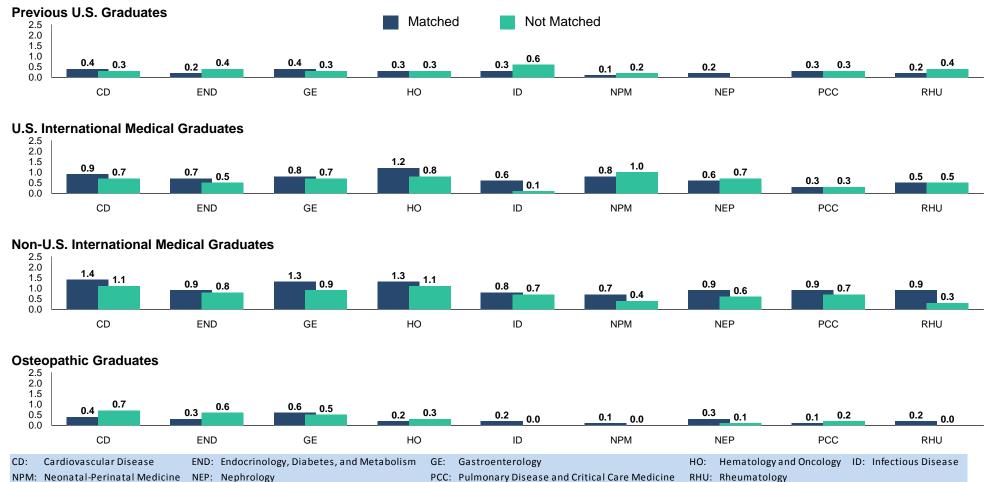
Note: Step 3 scores are not available for the majority of Osteopathic graduates.

Sources: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Chart 8 shows the Step 3 scores for matched applicants by preferred specialty. The horizontal bars are the median values for successful applicants and the vertical lines show the interquartile ranges. Overall, U.S. graduate applicants had mean USMLE step 3 scores of 216.2 (s.d. = 16) and U.S. international medical graduates and non-U.S. international medical graduates had mean scores of 204.9 (s.d. = 14) and 204.7 (s.d. = 14) respectively.



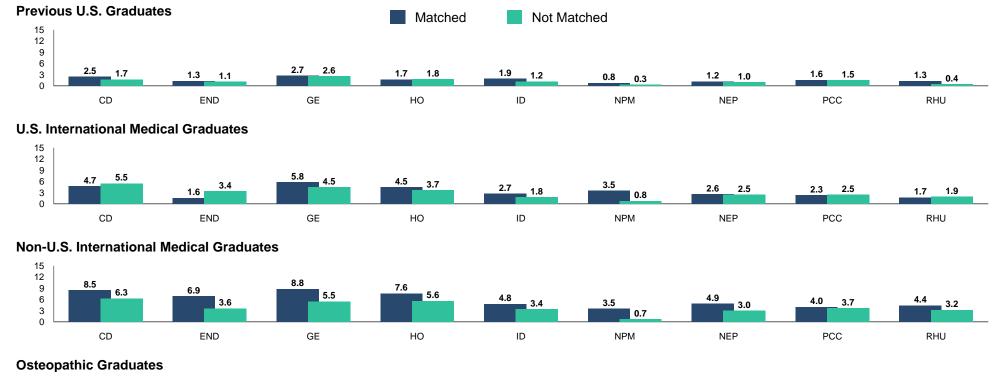
Mean Number of Research Experiences After Last Degree by Preferred Specialty, Applicant Type, and Match Status

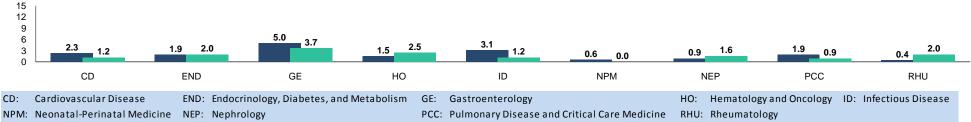


Sources: NRMP Data Warehouse and AAMC Data Warehouse

The ERAS application allows applicants to self-report their participation in research projects. These experiences are not verified nor evaluated and may vary greatly. Chart 9 shows the average number of research experiences after they received their most recent degree by applicant type, preferred specialty, and match outcome.U.S. graduates averaged 0.3 research experiences with 72.0 percent reporting at least one experience. U.S. international medical graduates and non-U.S. international medical graduates both reported, on average, more experiences (0.7 and 1.0), and larger percentages (89.3% and 88.3%) listed having any research

Mean Number of Abstracts, Presentations, and Publications After Last Degree by Preferred Specialty, Applicant Type, and Match Status



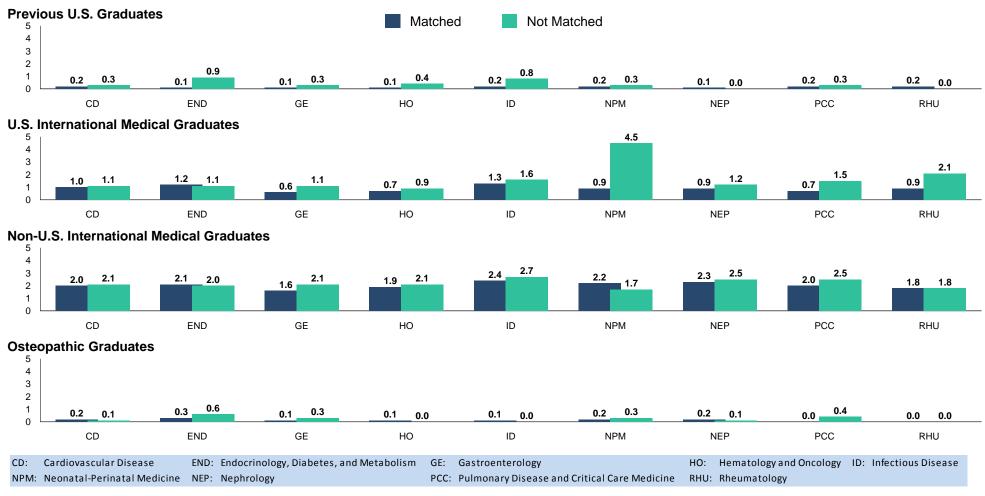


Sources: NRMP Data Warehouse and AAMC Data Warehouse

The ERAS application also permits applicants to list their publications. This information is self-reported and may include peer-reviewed articles, abstracts, poster sessions, and invited national or regional presentations. Some residency programs may independently verify and even review publications for applicants in whom they have an interest, but most probably do not. Many applicants report abstracts, presentations, or publications, sometimes dozens or even hundreds. Overall, the U.S. graduates reported an average of 2.7 publications, U.S. international medical graduates reported 3.8 and non-U.S. international medical graduates 5.5 publications. Chart 10 shows the average number of publications by applicant type, preferred specialty, and match outcome.



Mean Number of Work Experiences after Last Degree by Preferred Specialty, Applicant Type, and Match Status

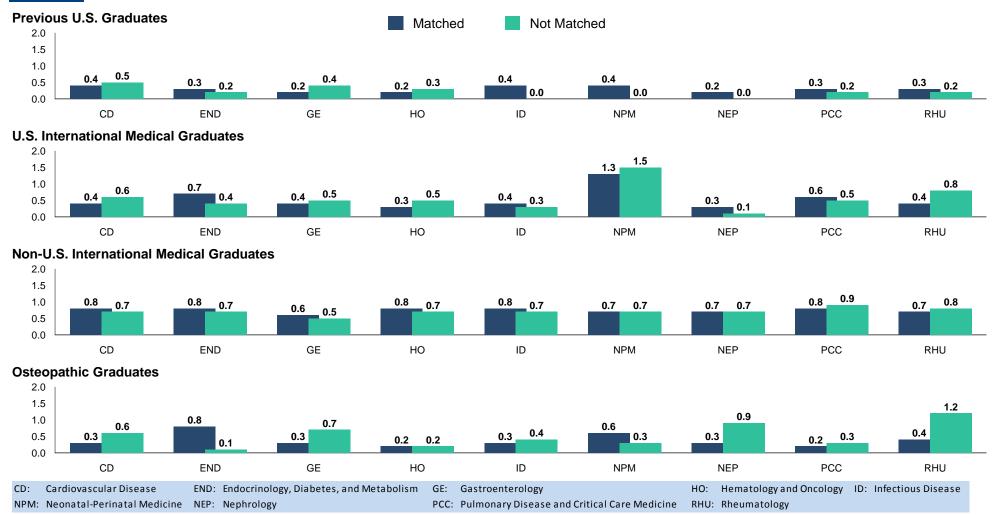


Sources: NRMP Data Warehouse and AAMC Data Warehouse

Chart 11 shows the average number of work experiences reported on the ERAS application by applicant type, preferred specialty, and match outcome. Overall, non-U.S. international medical graduates had an average of 2.1 work experiences after they obtained their last degree, highest among the applicant types. U.S. graduates had the least, 0.2.



Mean Number of Volunteer Experiences after Last Degree by Preferred Specialty, Applicant Type, and Match Status

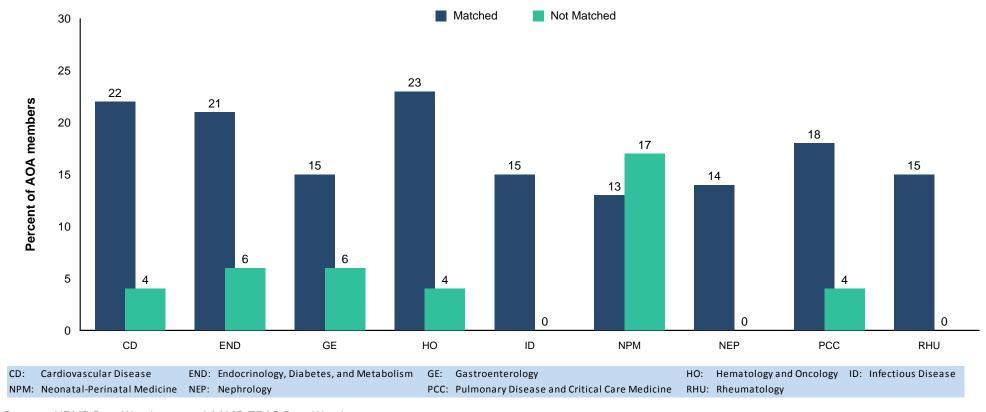


Sources: NRMP Data Warehouse and AAMC Data Warehouse

Chart 12 provides the average number of volunteer experiences after their last degree reported on the ERAS application by applicant type, preferred specialty, and match outcome. U.S. Overall, U.S. graduates had an average of 0.36 volunteer experiences, the least among the four applicant types, and non-U.S. international medical graduates had the most, 0.76.



Percentage of U.S. Graduates Who are Members of AOA by Preferred Specialty and Match Status



Sources: NRMP Data Warehouse and AAMC ERAS Data Warehouse.

Membership in Alpha Omega Alpha (AOA), the national medical honor society, is an honor reserved for students with high academic achievement. AOA membership is limited to students in medical schools that sponsor an AOA chapter. Most, but not all, allopathic schools in the U.S. and Canada participate, and there is one foreign chapter in Beirut. Among the independent applicants, only graduate U.S. physicians, Canadians, and a small number of others could legitimately claim membership. For that reason, AOA status for each specialty in Chart 13 is reported only for U.S. graduates.

Data on AOA membership are self-reported on the ERAS application. Even for U.S. graduates, however, an analysis of its relationship with success in the Match is limited by the relatively small number of applicants who are members, by the fact that some schools do not have AOA chapters. Overall, 12.3 percent of U.S. graduates included in this report claimed AOA membership on their ERAS application. Among applicants who matched to their preferred specialty, 13.8 percent reported AOA membership, compared to 4.5 percent of unmatched applicants.

Cardiovascular Disease

Table-1 Summary Statistics Cardiovascular Disease

			ious U.S. aduates	U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Meas	Measure		Unmatched (n=71)	Matched (n=62)	Unmatched (n=76)	Matched (n=201)	Unmatched (n=225)	Matched (n=28)	Unmatched (n=15)
1.	Mean number of contiguous ranks	8	4	6	2	5	2	5	2
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	226	209	224	212	231	224	n/a	n/a
4.	Mean USMLE Step 2 score	233	212	226	212	234	223	n/a	n/a
5.	Mean USMLE Step 3 score	221	209	212	203	210	203	n/a	n/a
6.	Mean number of research experiences	0	0	1	1	1	1	0	1
7.	Mean number of abstracts, presentations, and publications	3	2	5	6	9	6	2	1
8.	Mean number of work experiences	0	0	1	1	2	2	0	0
9.	Mean number of volunteer experiences	0	1	0	1	1	1	0	1
10.	Percentage who are AOA members	22	4	n/a	n/a	n/a	n/a	n/a	n/a

n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

Chart-1

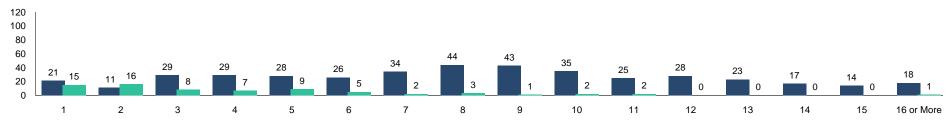
Number of Contiguous Ranks Within Preferred Specialty

Cardiovascular Disease

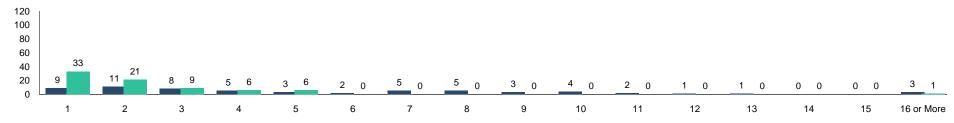




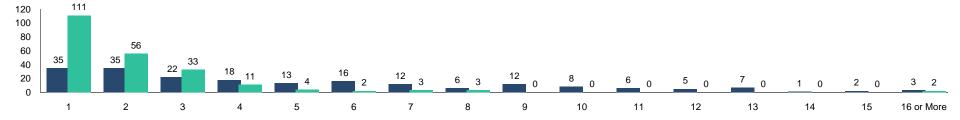
Previous U.S. Graduates



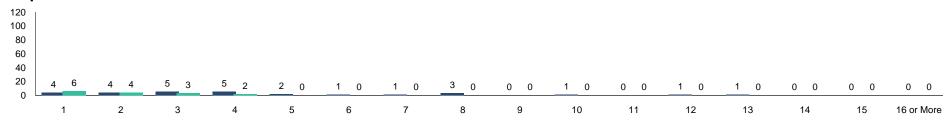
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

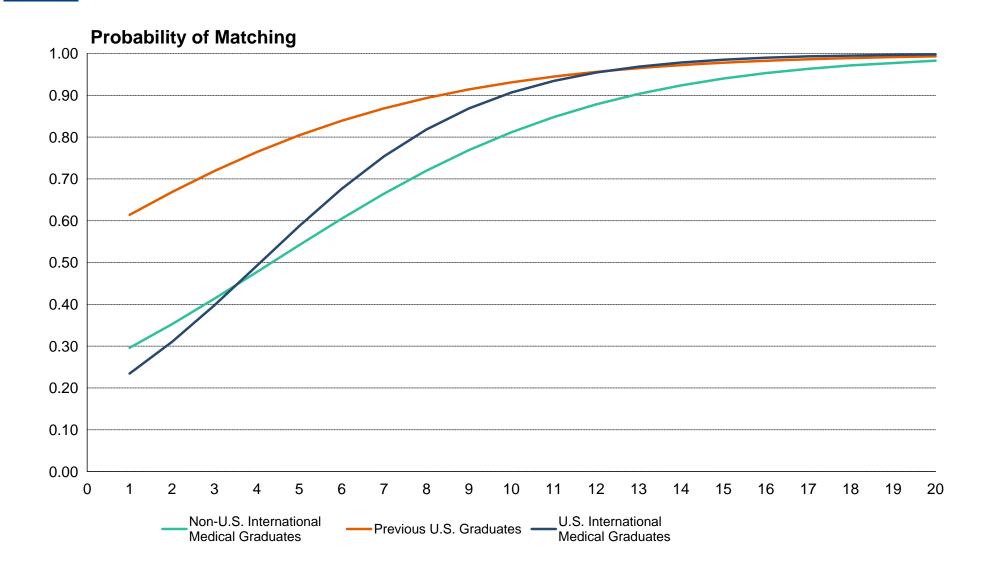


Osteopathic Graduates



Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Cardiovascular Disease



Contiguous Ranks

Chart-2 Number of Distinct Specialties Ranked Cardiovascular Disease Matched **Previous U.S. Graduates**



Not Matched

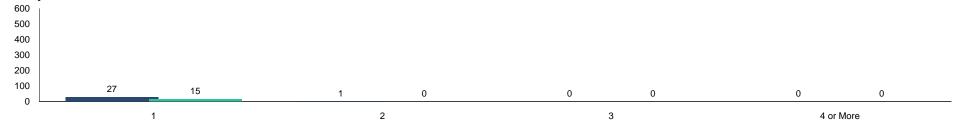
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



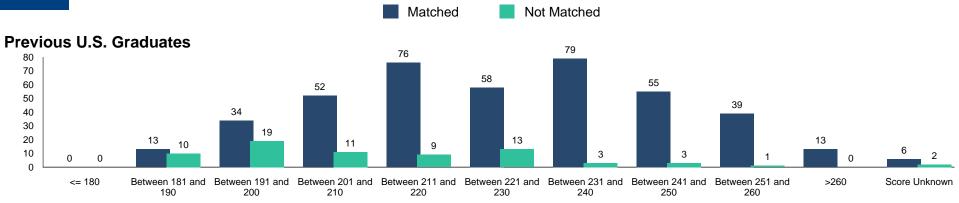
Osteopathic Graduates



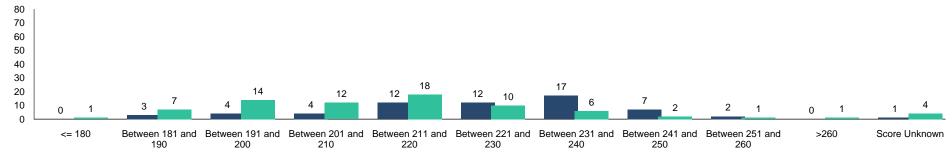
Distinct Specialties Ranked

Source: NRMP Data Warehouse

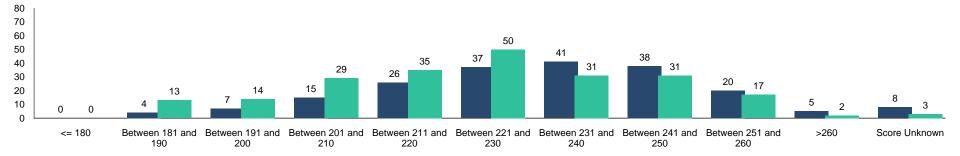
Chart-3 USMLE Step 1 Scores Cardiovascular Disease



U.S. International Medical Graduates



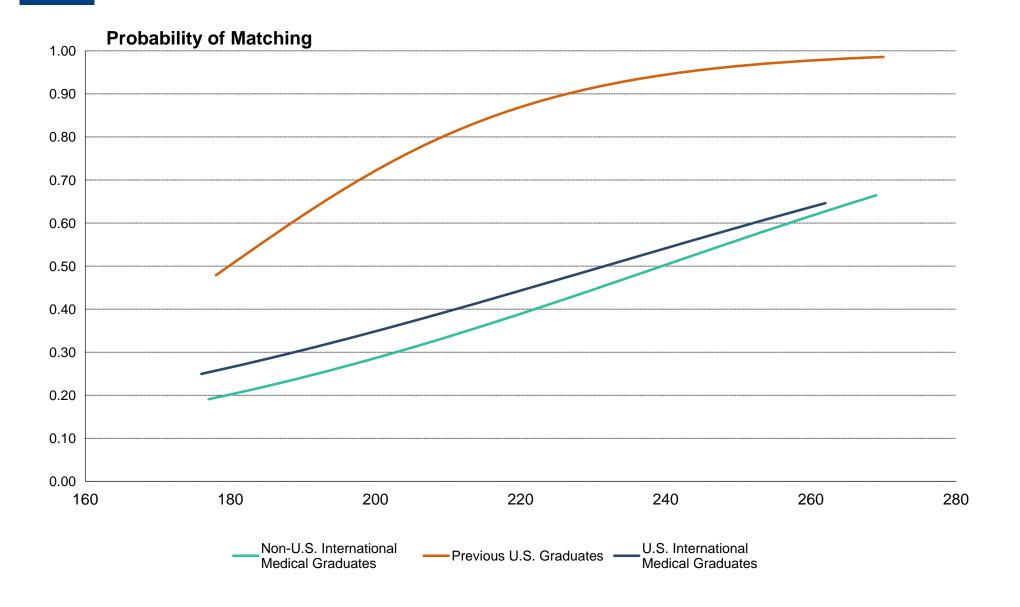
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

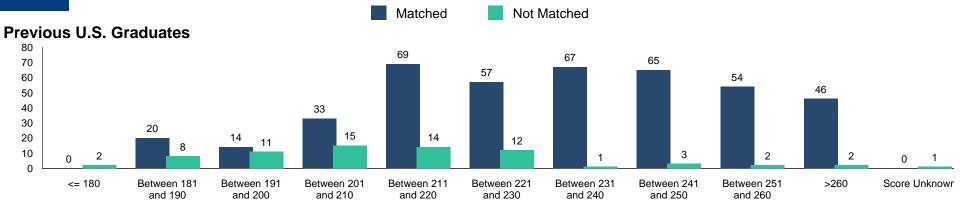
Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Cardiovascular Disease



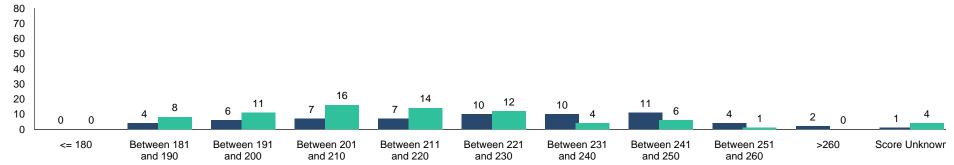
Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

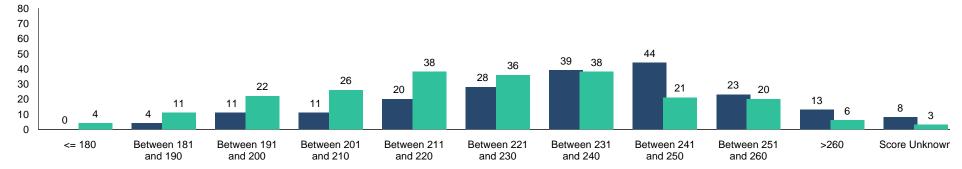
Chart-4 USMLE Step 2 Scores Cardiovascular Disease



U.S. International Medical Graduates



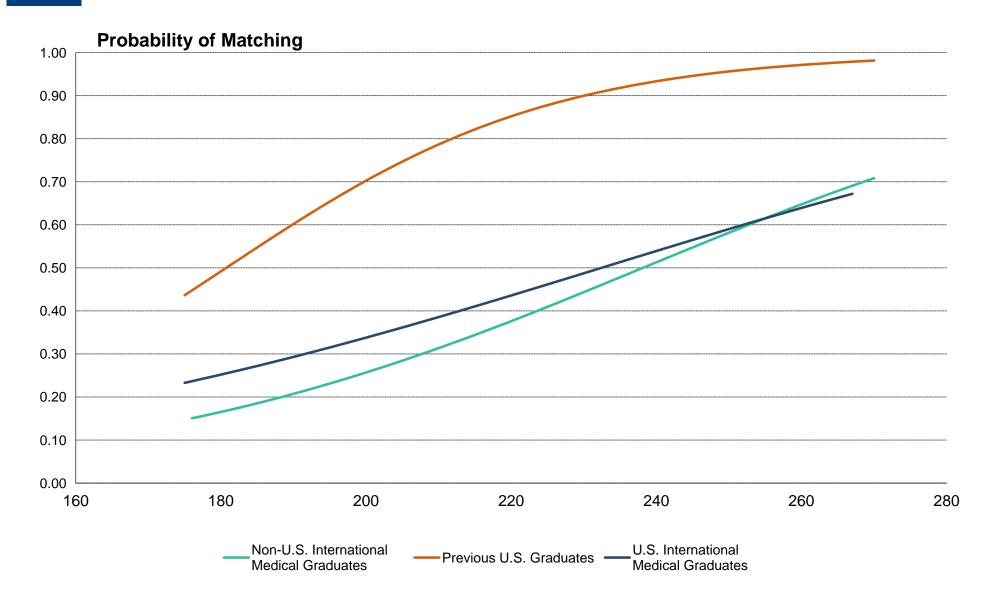
Non-U.S. International Medical Graduates



Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG

Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Cardiovascular Disease

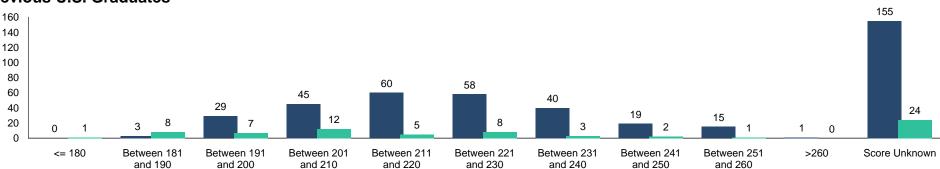


Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar

Chart-5 USMLE Step 3 Scores Cardiovascular Disease

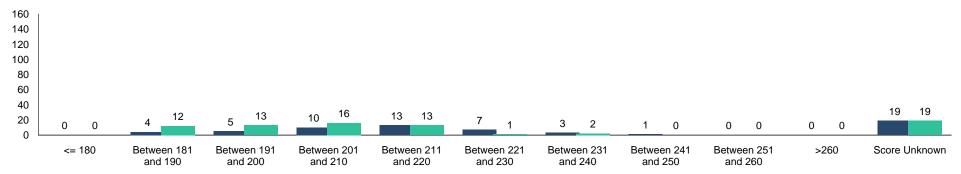
Previous U.S. Graduates



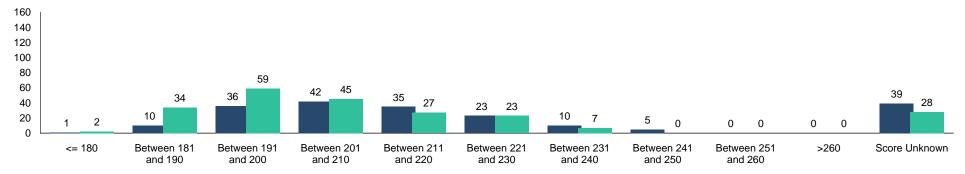
Matched

Not Matched

U.S. International Medical Graduates



Non-U.S. International Medical Graduates

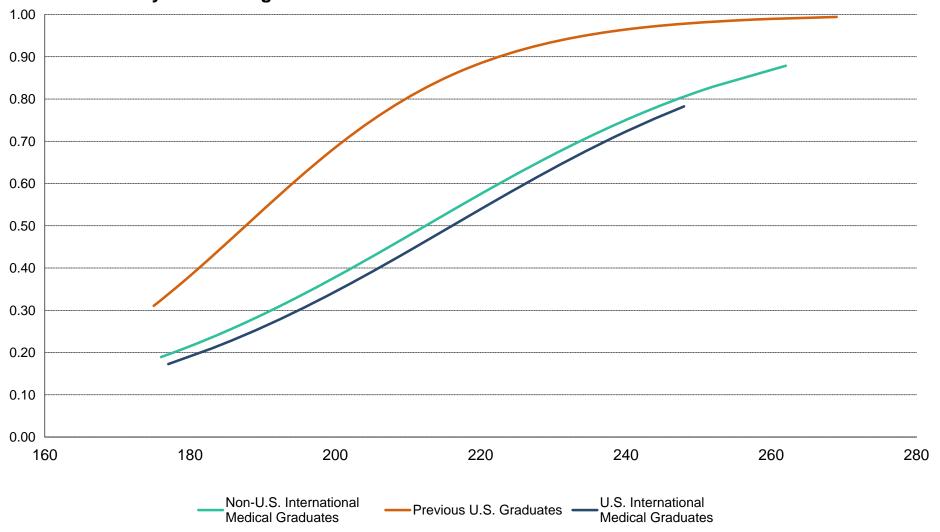


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Cardiovascular Disease



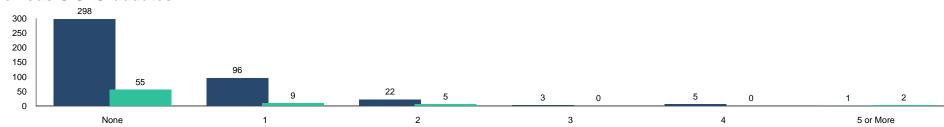


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



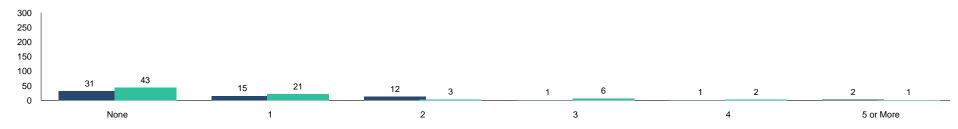




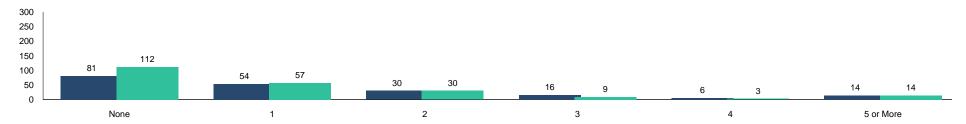
Matched

Not Matched

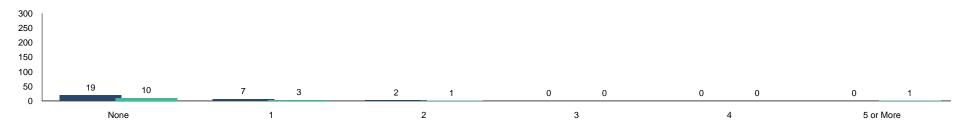
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



Research Projects

Chart-7 Number of Abstracts, Presentations, and Publications Cardiovascular Disease Matched Not Matched **Previous U.S. Graduates** None 5 or More **U.S. International Medical Graduates** None 5 or More Non-U.S. International Medical Graduates None 5 or More **Osteopathic Graduates**

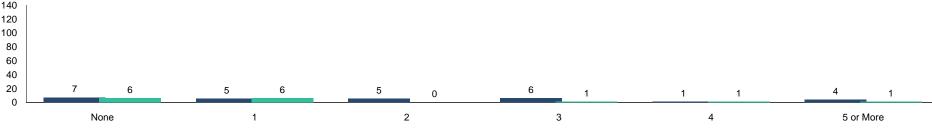
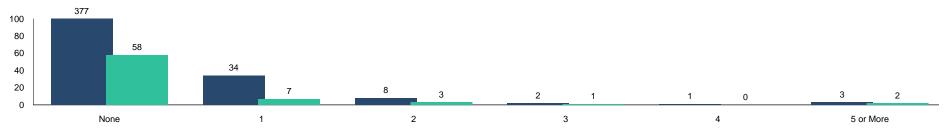


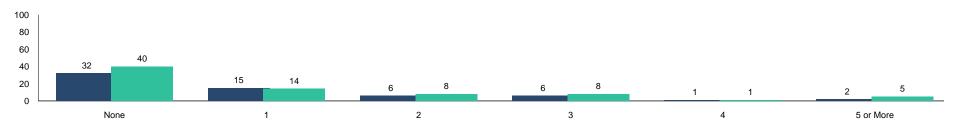
Chart-8 Number of Work Experiences Cardiovascular Disease



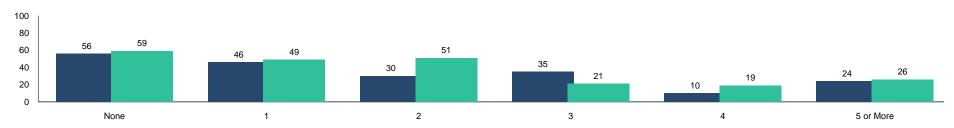
Previous U.S. Graduates



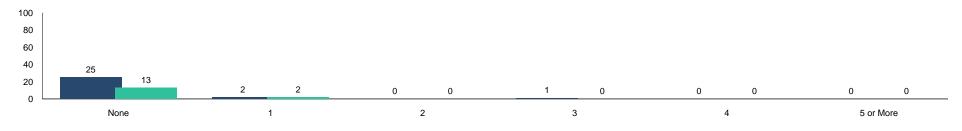
U.S. International Medical Graduates



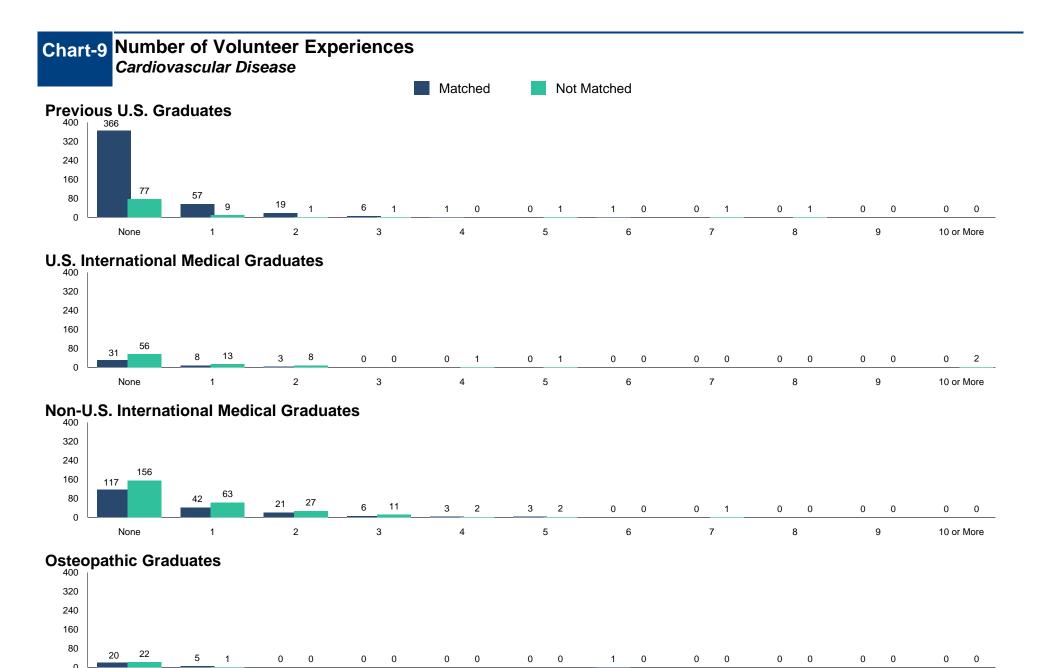
Non-U.S. International Medical Graduates



Osteopathic Graduates



Work Experiences



Volunteer Experiences

5

6

2

3

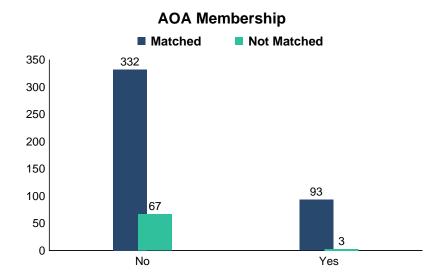
None

9

10 or More

8

Percentage of U.S. Graduates Who are Members of AOA Cardiovascular Disease



Sources: NRMP Data Warehouse and AAMC Data Warehouse



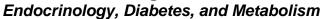
Table-1 Summary Statistics Endocrinology, Diabetes, and Metabolism

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Measure		Matched (n=102)	Unmatched (n=16)	Matched (n=21)	Unmatched (n=28)	Matched (n=79)	Unmatched (n=74)	Matched (n=11)	Unmatched (n=7)
1.	Mean number of contiguous ranks	5	3	4	2	6	2	4	2
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	222	205	215	208	226	218	n/a	n/a
4.	Mean USMLE Step 2 score	231	209	216	206	230	221	n/a	n/a
5.	Mean USMLE Step 3 score	223	204	205	198	210	202	n/a	n/a
6.	Mean number of research experiences	0	0	1	1	1	1	0	1
7.	Mean number of abstracts, presentations, and publications	1	1	2	3	7	4	2	2
8.	Mean number of work experiences	0	1	1	1	2	2	0	1
9.	Mean number of volunteer experiences	0	0	1	0	1	1	1	0
10.	Percentage who are AOA members	21	6	n/a	n/a	n/a	n/a	n/a	n/a

n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

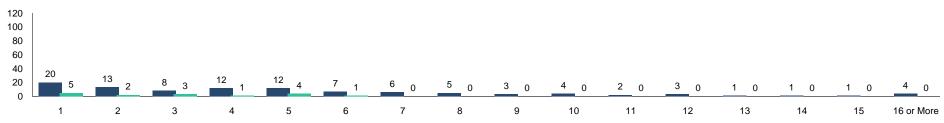
Number of Contiguous Ranks Within Preferred Specialty



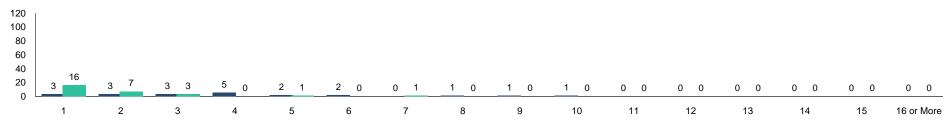




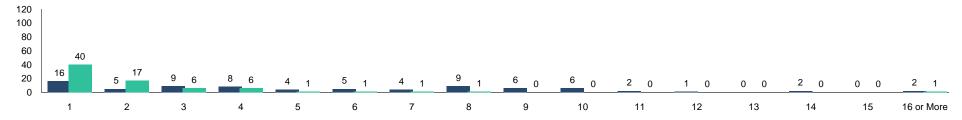
Previous U.S. Graduates



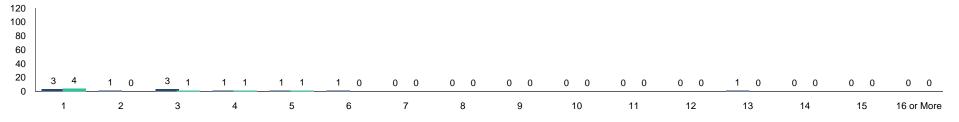
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

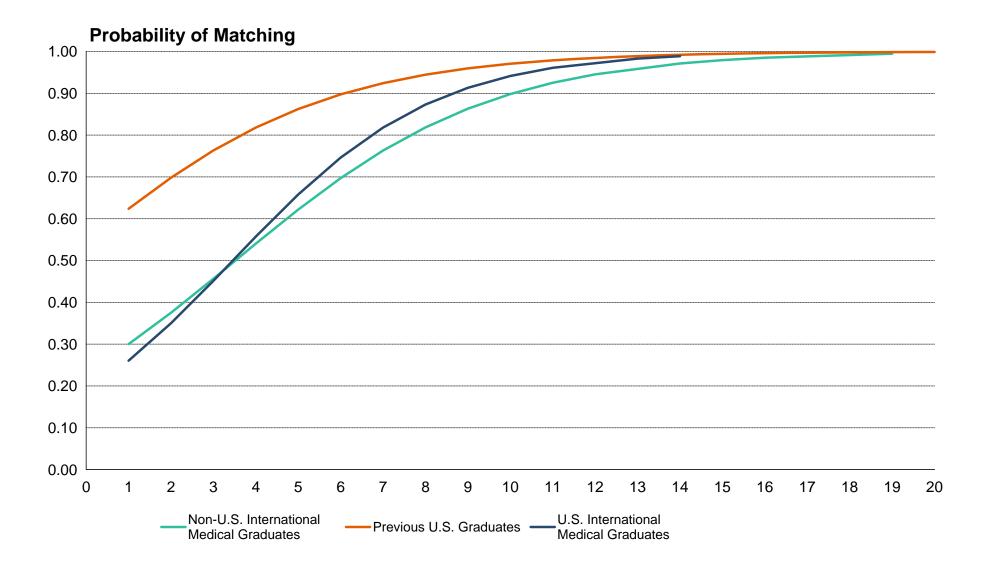


Osteopathic Graduates

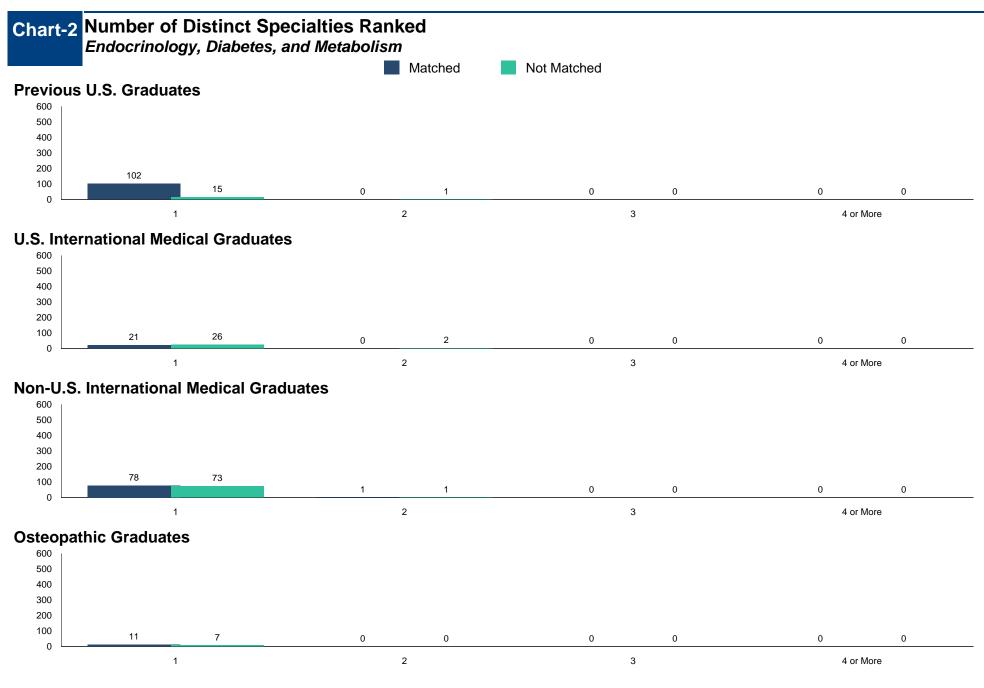


Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Endocrinology, Diabetes, and Metabolism



Contiguous Ranks

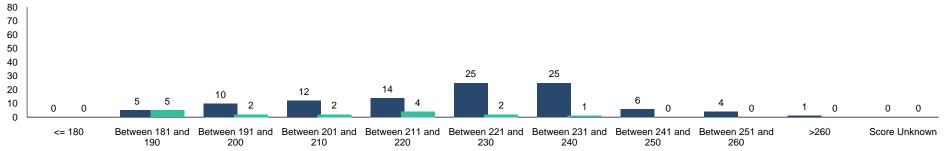


Source: NRMP Data Warehouse

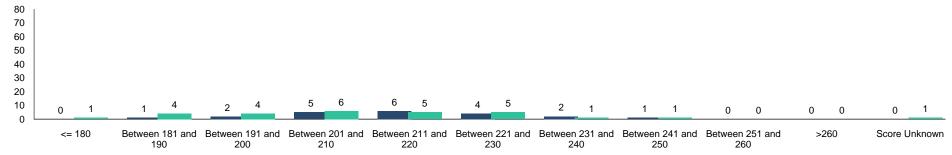
Chart-3 USMLE Step 1 Scores Endocrinology, Diabetes, and Metabolism



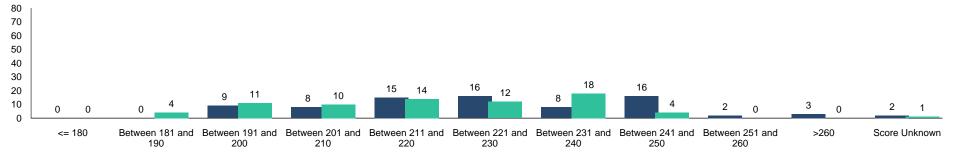
Previous U.S. Graduates



U.S. International Medical Graduates



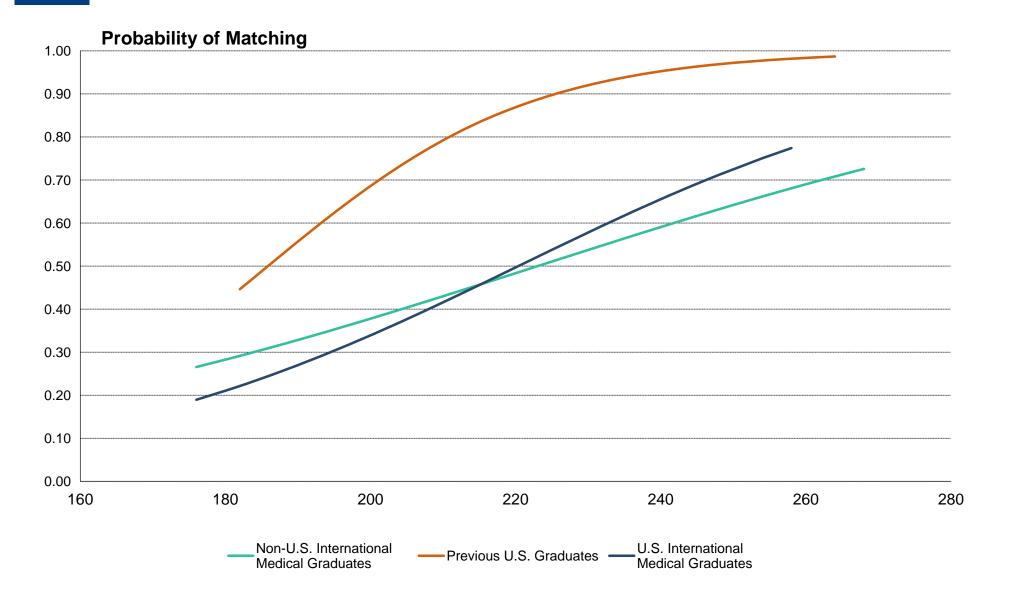
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Endocrinology, Diabetes, and Metabolism



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

Chart-4 USMLE Step 2 Scores Endocrinology, Diabetes, and Metabolism Matched Not Matched Previous U.S. Graduates 70 60 50 40 30 20 19 15 20 14 10 7 10 3 0 0 0 0 0 <= 180 Between 181 Between 191 Between 201 Between 211 Between 221 Between 231 Between 241 Between 251 >260 Score Unknown and 190 and 200 and 210 and 220 and 230 and 240 and 250 and 260 U.S. International Medical Graduates 80 70 60 50 40 30 20 10 0 0 0 0 0 1 0 <= 180 Between 181 Between 191 Between 201 Between 211 Between 221 Between 231 Between 241 Between 251 >260 Score Unknown and 190 and 200 and 210 and 230 and 240 and 250 and 220 and 260 Non-U.S. International Medical Graduates 80 70 60 50 40 30 20 15 14 14 13 12

Step 2 Scores

Between 221

and 230

12

Between 241

and 250

Between 231

and 240

Between 201

and 210

Between 191

and 200

2

Between 181

and 190

0

<= 180

10

0

11

Between 211

and 220

2

Score Unknown

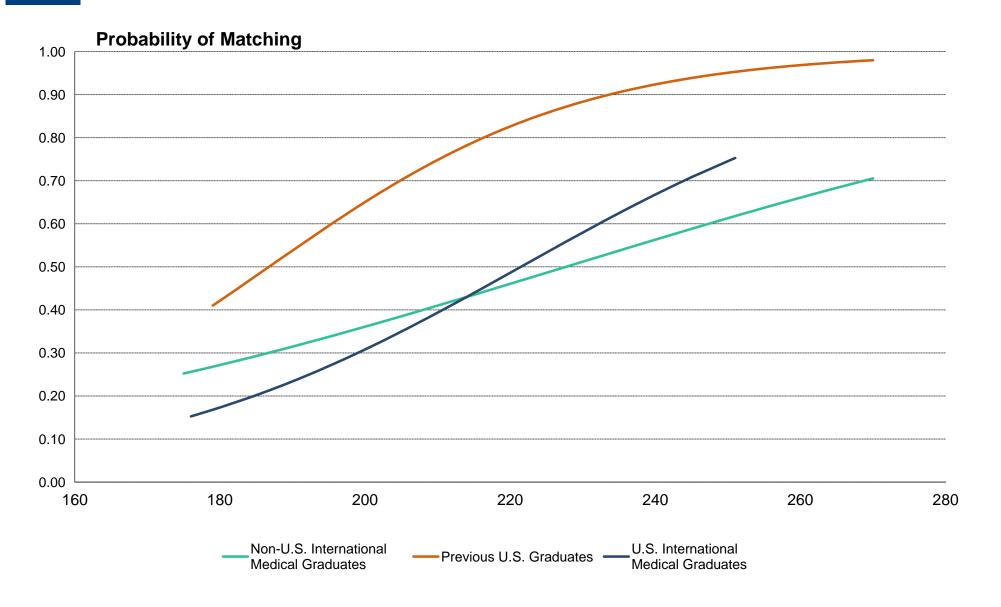
5

>260

Between 251

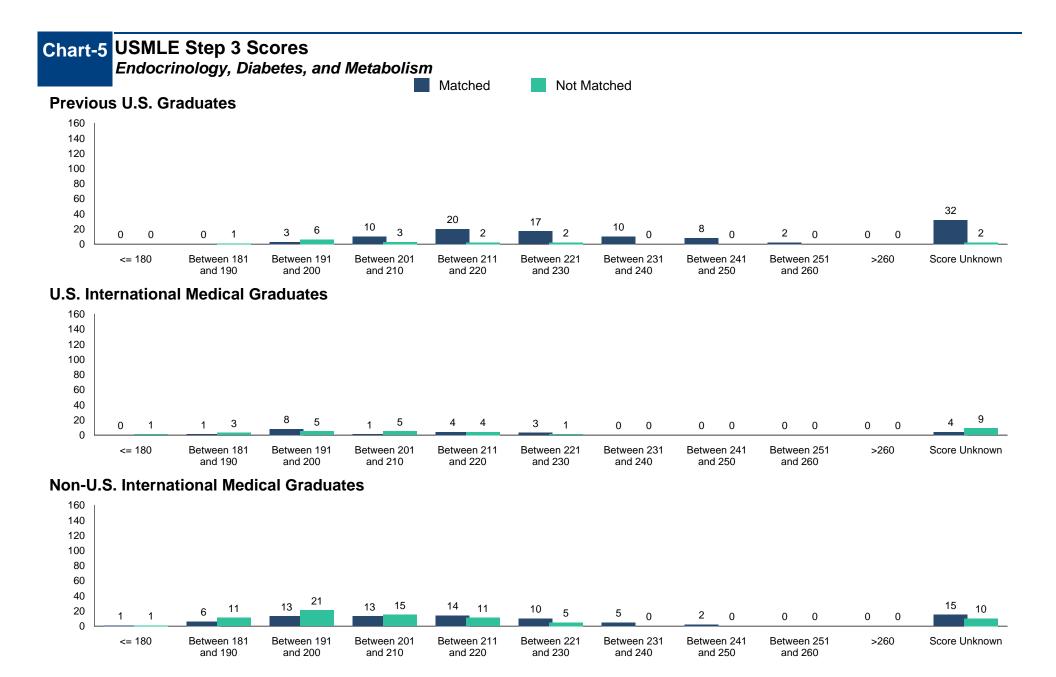
and 260

Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Endocrinology, Diabetes, and Metabolism



Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar 41

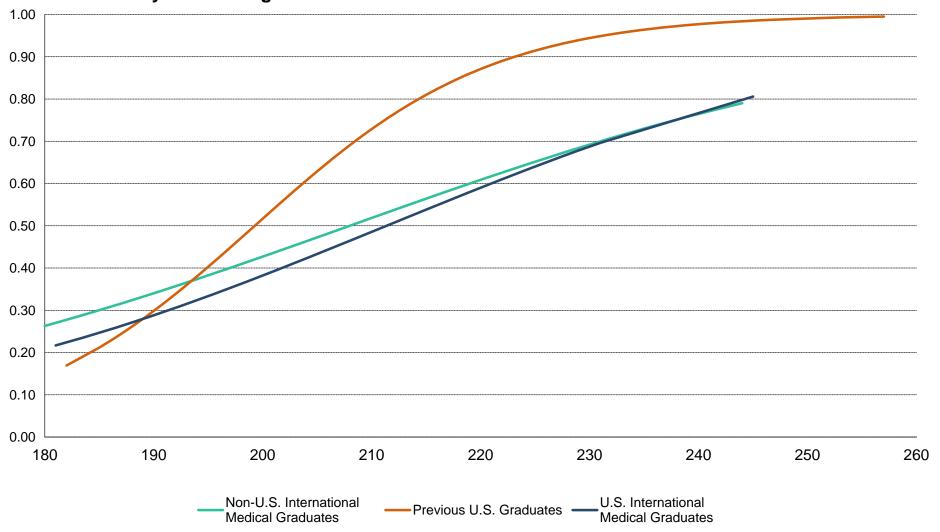


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

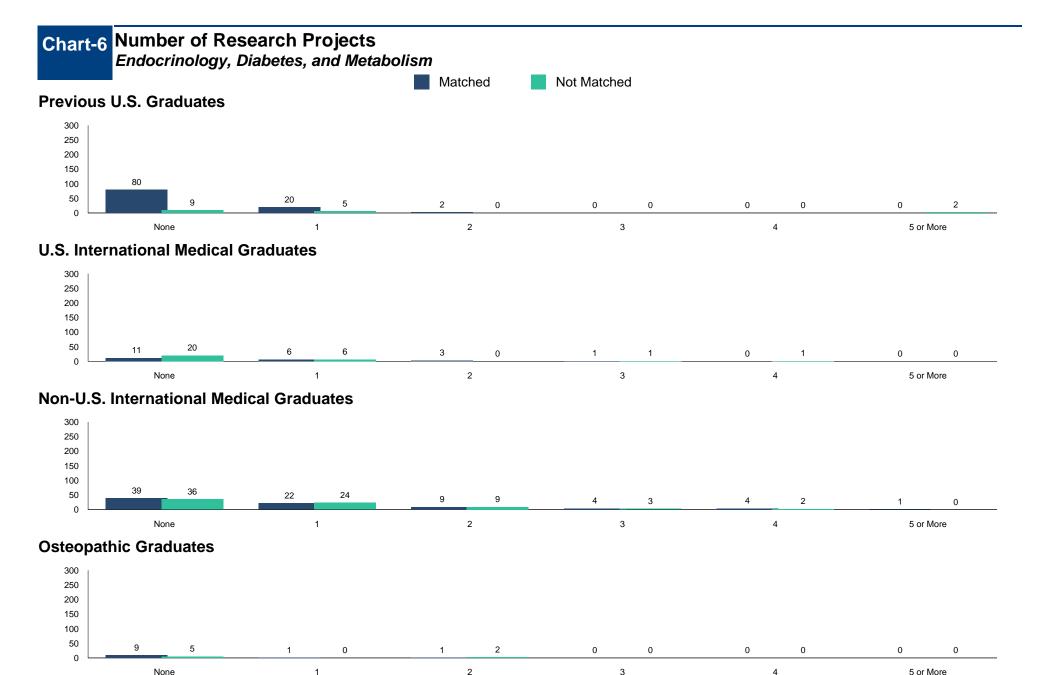
Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Endocrinology, Diabetes, and Metabolism





Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



Research Projects

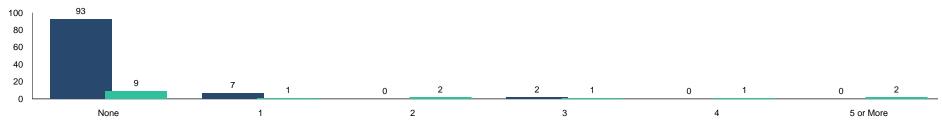
Chart-7 Number of Abstracts, Presentations, and Publications Endocrinology, Diabetes, and Metabolism Matched Not Matched **Previous U.S. Graduates** None 5 or More **U.S. International Medical Graduates** None 5 or More Non-U.S. International Medical Graduates None 5 or More **Osteopathic Graduates** 5 or More None **Publications**

Source: NRMP Data Warehouse and AAMC Data Warehouse

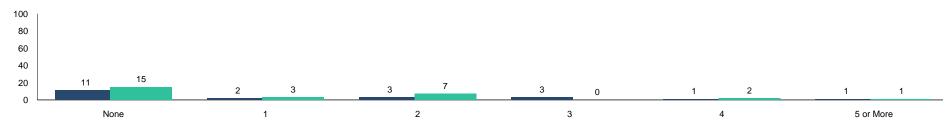
Chart-8 Number of Work Experiences Endocrinology, Diabetes, and Metabolism

Matched Not Matched

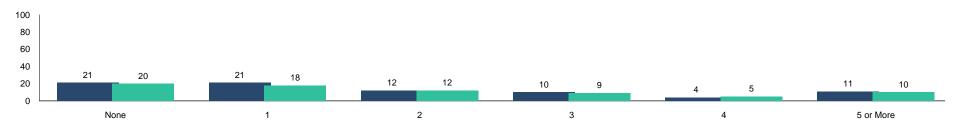
Previous U.S. Graduates



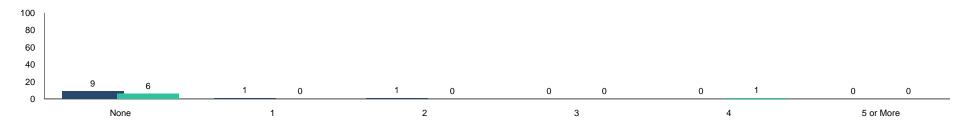
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



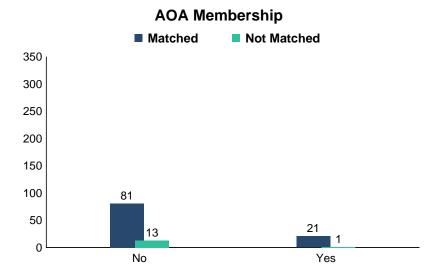
Osteopathic Graduates



Work Experiences

Chart-9 Number of Volunteer Experiences Endocrinology, Diabetes, and Metabolism Matched Not Matched **Previous U.S. Graduates** None 10 or More **U.S. International Medical Graduates** None 10 or More Non-U.S. International Medical Graduates 10 or More None **Osteopathic Graduates** None 10 or More

Percentage of U.S. Graduates Who are Members of AOA Endocrinology, Diabetes, and Metabolism



Sources: NRMP Data Warehouse and AAMC Data Warehouse

Gastroenterology

Table-1 Summary Statistics Gastroenterology

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Measure		Matched (n=251)	Unmatched (n=69)	Matched (n=26)	Unmatched (n=55)	Matched (n=68)	Unmatched (n=129)	Matched (n=16)	Unmatched (n=32)
1.	Mean number of contiguous ranks	8	4	5	2	5	2	3	3
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	223	210	219	209	232	221	n/a	n/a
4.	Mean USMLE Step 2 score	230	216	222	213	234	222	n/a	n/a
5.	Mean USMLE Step 3 score	221	210	211	201	207	201	n/a	n/a
6.	Mean number of research experiences	0	0	1	1	1	1	1	1
7.	Mean number of abstracts, presentations, and publications	3	3	6	5	9	6	5	4
8.	Mean number of work experiences	0	0	1	1	2	2	0	0
9.	Mean number of volunteer experiences	0	0	0	1	1	1	0	1
10.	Percentage who are AOA members	15	6	n/a	n/a	n/a	n/a	n/a	n/a

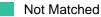
n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

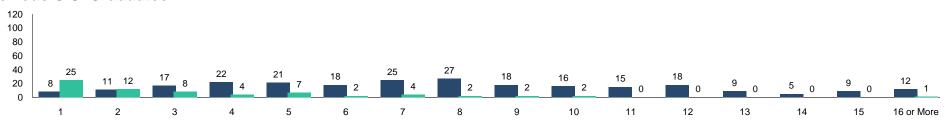
Chart-1

Number of Contiguous Ranks Within Preferred Specialty Gastroenterology

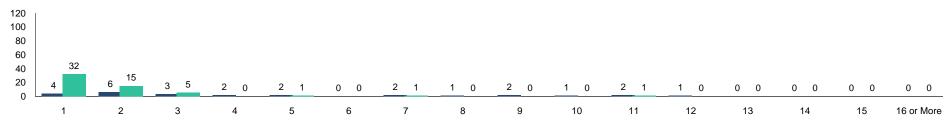




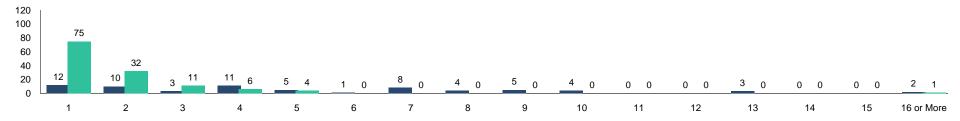
Previous U.S. Graduates



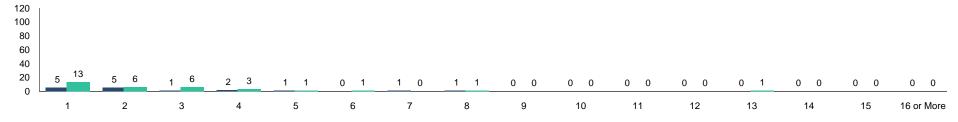
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

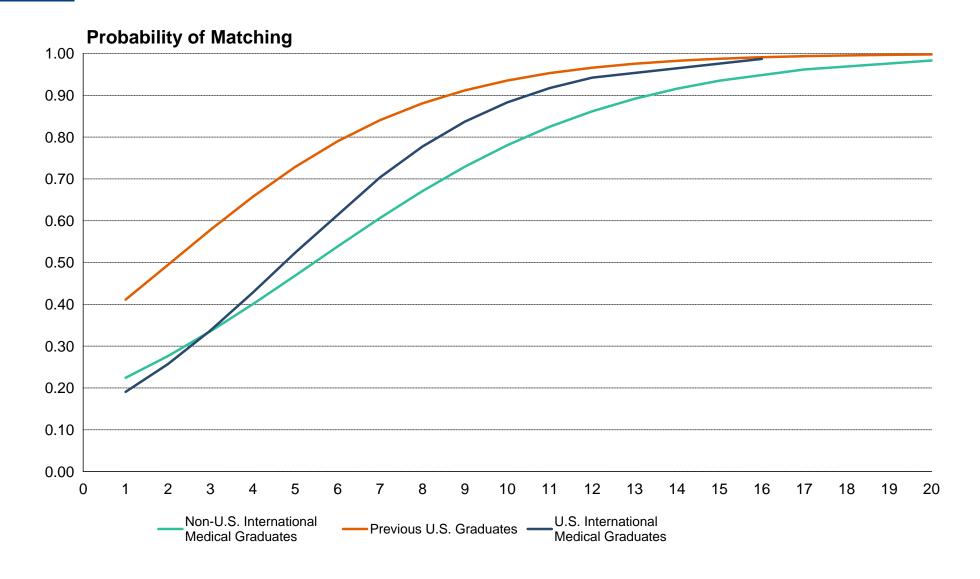


Osteopathic Graduates



Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Gastroenterology

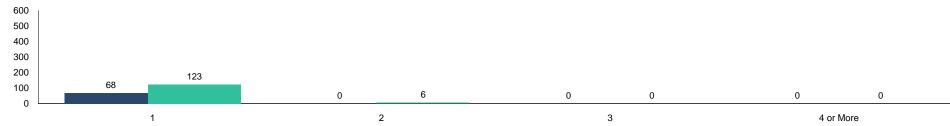


Contiguous Ranks

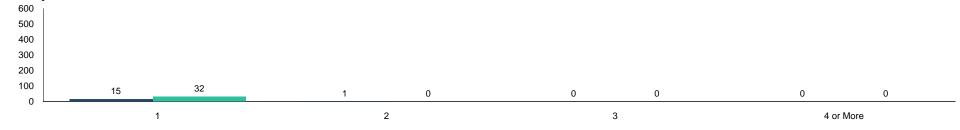
Chart-2 Number of Distinct Specialties Ranked Gastroenterology Matched Not Matched **Previous U.S. Graduates** 500 400 300 251 200 67 100 4 or More **U.S. International Medical Graduates** 600 500 400



Non-U.S. International Medical Graduates



Osteopathic Graduates



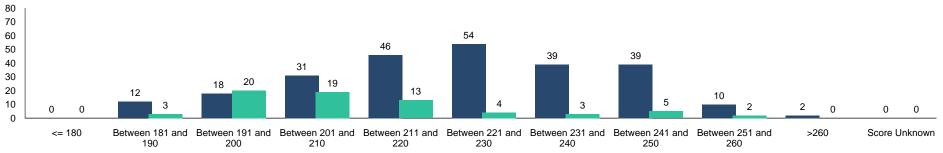
Distinct Specialties Ranked

Source: NRMP Data Warehouse

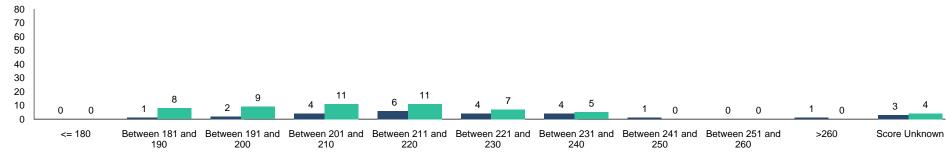
Chart-3 USMLE Step 1 Scores Gastroenterology



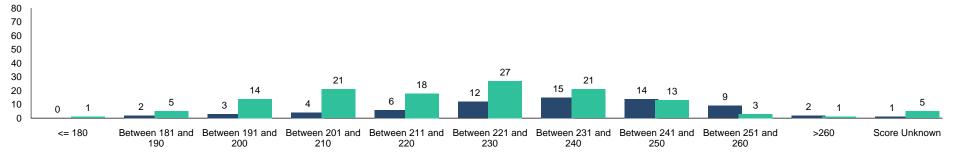
Previous U.S. Graduates



U.S. International Medical Graduates



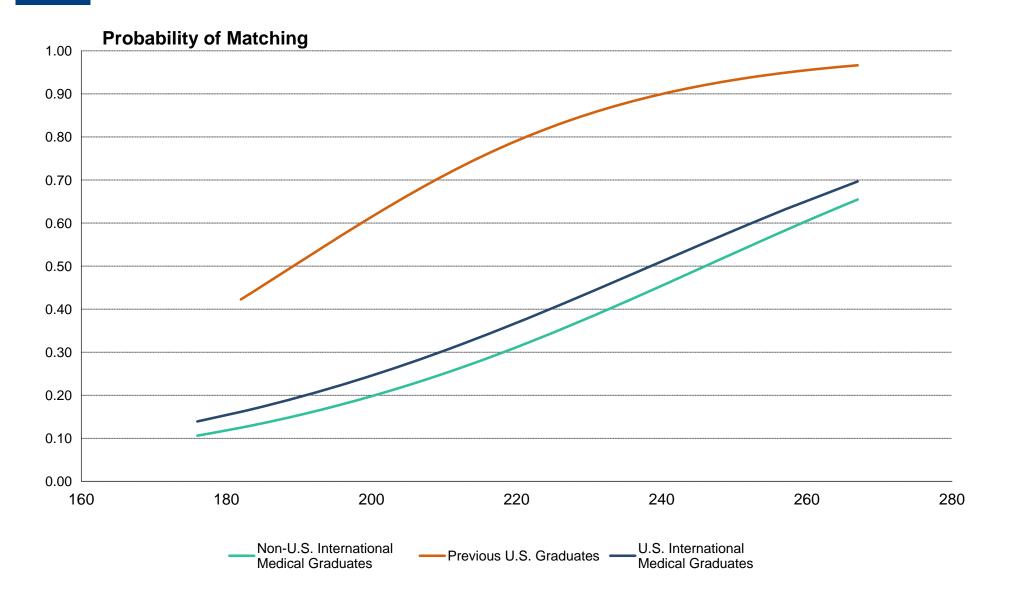
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

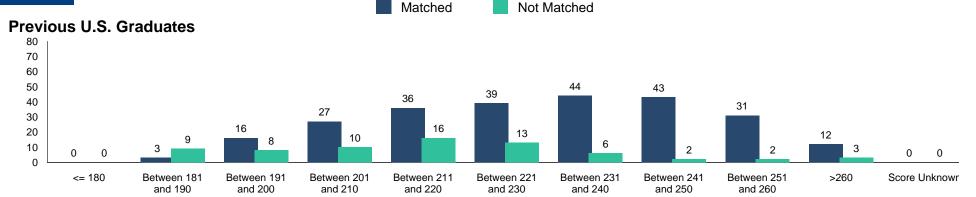
Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Gastroenterology



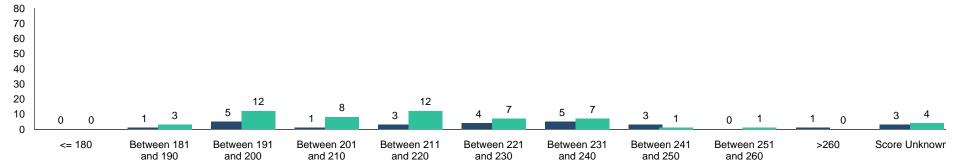
Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

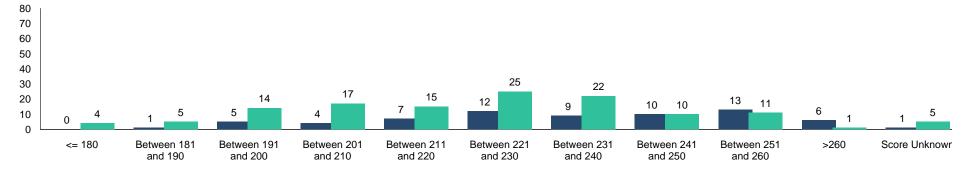
Chart-4 USMLE Step 2 Scores Gastroenterology



U.S. International Medical Graduates



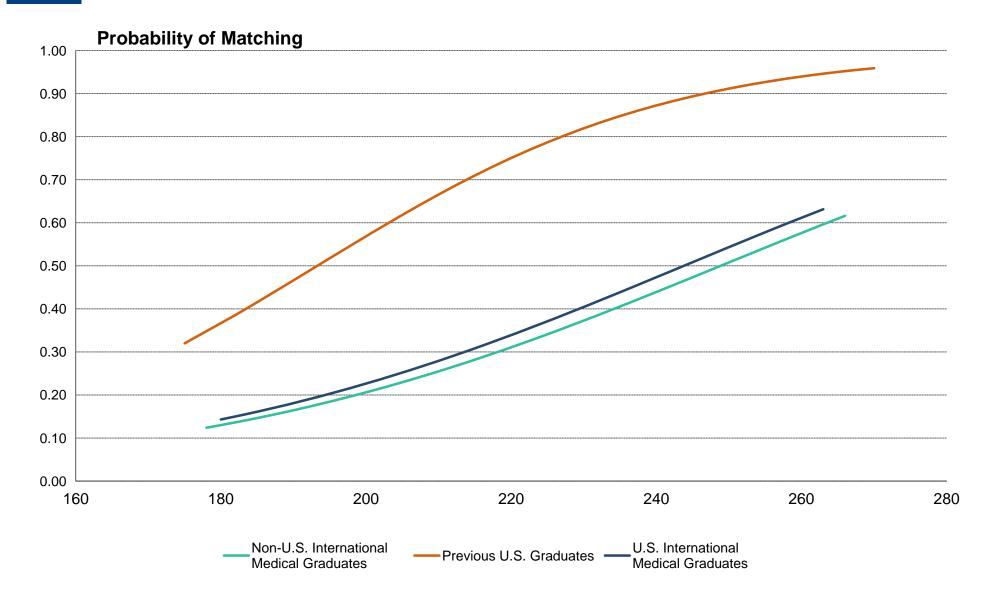
Non-U.S. International Medical Graduates



Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG

Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Gastroenterology

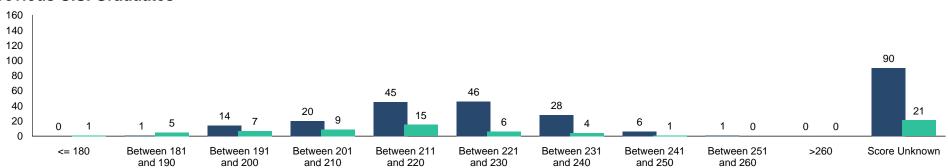


Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



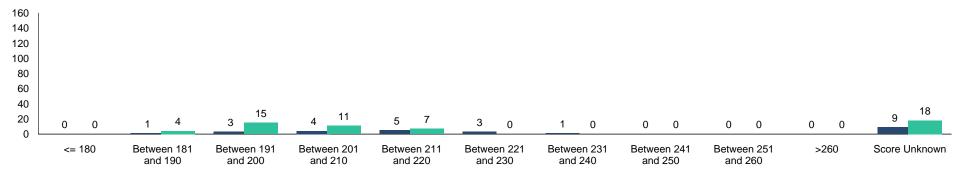
Previous U.S. Graduates



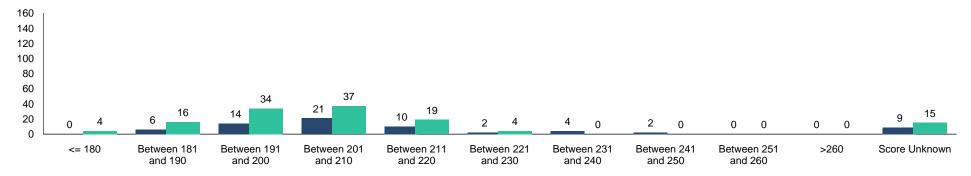
Matched

Not Matched

U.S. International Medical Graduates



Non-U.S. International Medical Graduates

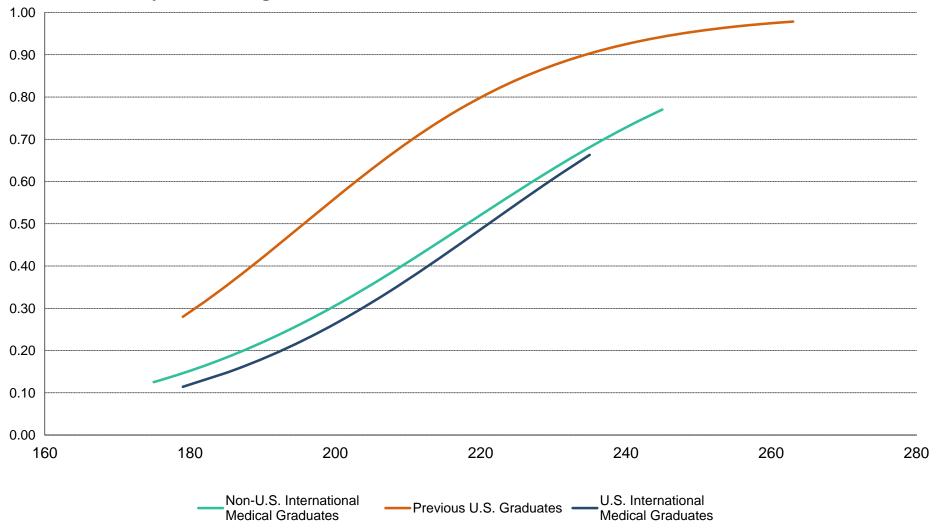


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Gastroenterology

Probability of Matching

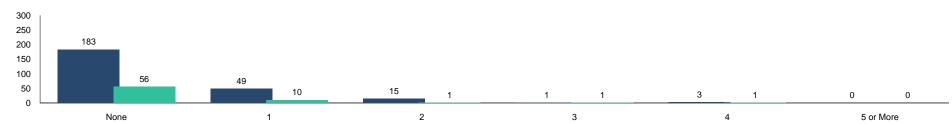


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



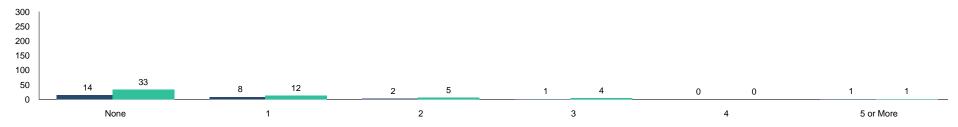
Previous U.S. Graduates



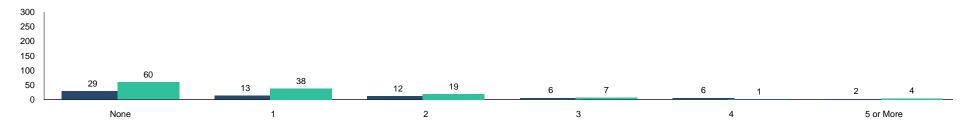
Matched

Not Matched

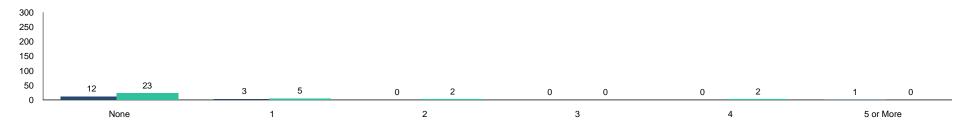
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



Research Projects

Chart-7 Number of Abstracts, Presentations, and Publications Gastroenterology Matched Not Matched Previous U.S. Graduates None 5 or More **U.S. International Medical Graduates** None 5 or More Non-U.S. International Medical Graduates None 5 or More **Osteopathic Graduates**

5 or More

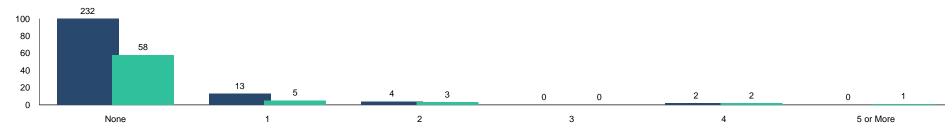
Publications

None

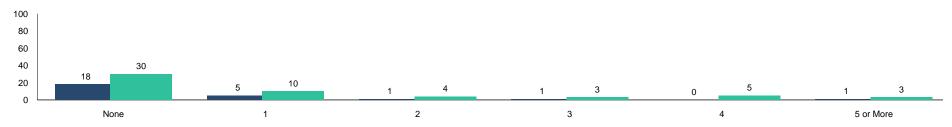
Chart-8 Number of Work Experiences Gastroenterology



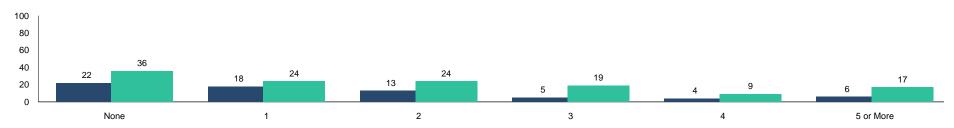
Previous U.S. Graduates



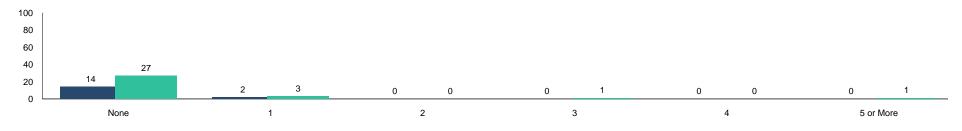
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



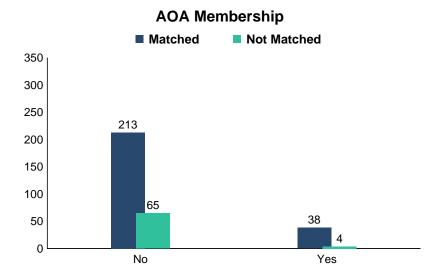
Work Experiences



Volunteer Experiences

63

Percentage of U.S. Graduates Who are Members of AOA Gastroenterology



Sources: NRMP Data Warehouse and AAMC Data Warehouse

Hematology and Oncology

Table-1 Summary Statistics Hematology and Oncology

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Measure		Matched (n=234)	Unmatched (n=47)	Matched (n=40)	Unmatched (n=56)	Matched (n=132)	Unmatched (n=135)	Matched (n=26)	Unmatched (n=15)
1.	Mean number of contiguous ranks	5	3	5	2	5	2	5	3
2.	Mean number of distinct specialties ranked	1	1	1	1	2	1	1	1
3.	Mean USMLE Step 1 score	224	214	221	211	228	224	n/a	n/a
4.	Mean USMLE Step 2 score	231	215	227	211	231	224	n/a	n/a
5.	Mean USMLE Step 3 score	222	211	206	203	207	202	n/a	n/a
6.	Mean number of research experiences	0	0	1	1	1	1	0	0
7.	Mean number of abstracts, presentations, and publications	2	2	5	4	8	6	2	3
8.	Mean number of work experiences	0	0	1	1	2	2	0	0
9.	Mean number of volunteer experiences	0	0	0	1	1	1	0	0
10.	Percentage who are AOA members	23	4	n/a	n/a	n/a	n/a	n/a	n/a

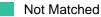
n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

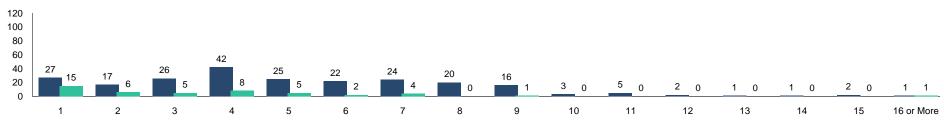
Chart-1

Number of Contiguous Ranks Within Preferred Specialty Hematology and Oncology

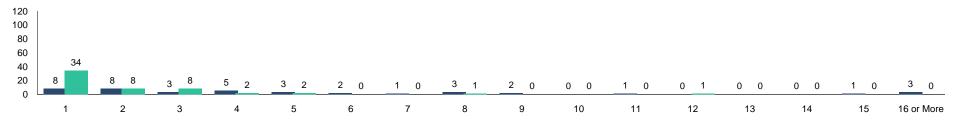




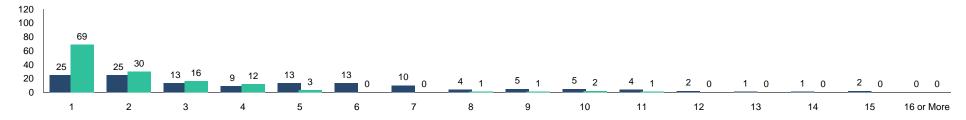
Previous U.S. Graduates



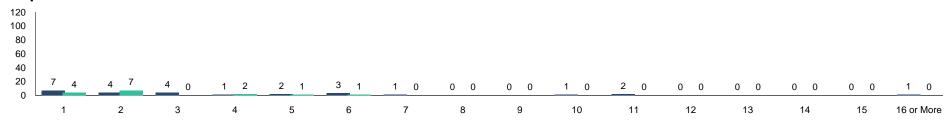
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

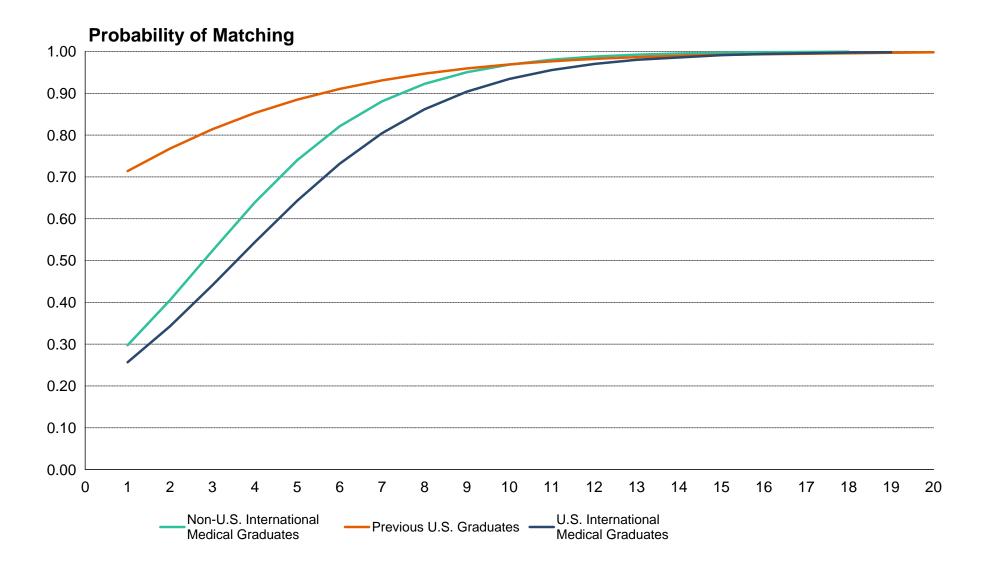


Osteopathic Graduates



Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Hematology and Oncology



Contiguous Ranks

Chart-2 Number of Distinct Specialties Ranked Hematology and Oncology Matched Not Matched Previous U.S. Graduates 4 or More **U.S. International Medical Graduates** 4 or More Non-U.S. International Medical Graduates 4 or More **Osteopathic Graduates**

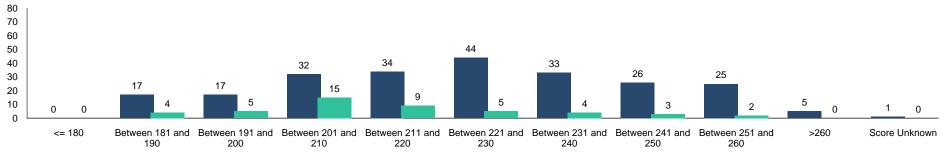
Distinct Specialties Ranked

4 or More

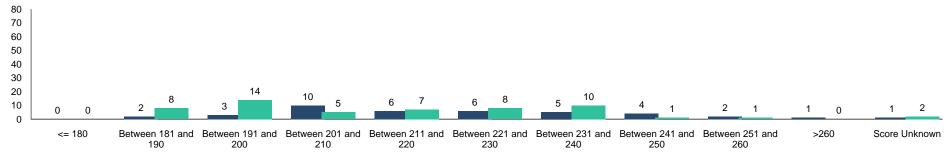
Chart-3 USMLE Step 1 Scores Hematology and Oncology



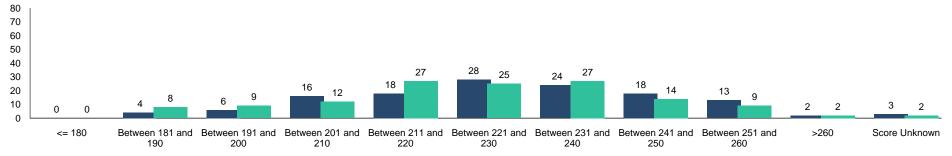
Previous U.S. Graduates



U.S. International Medical Graduates



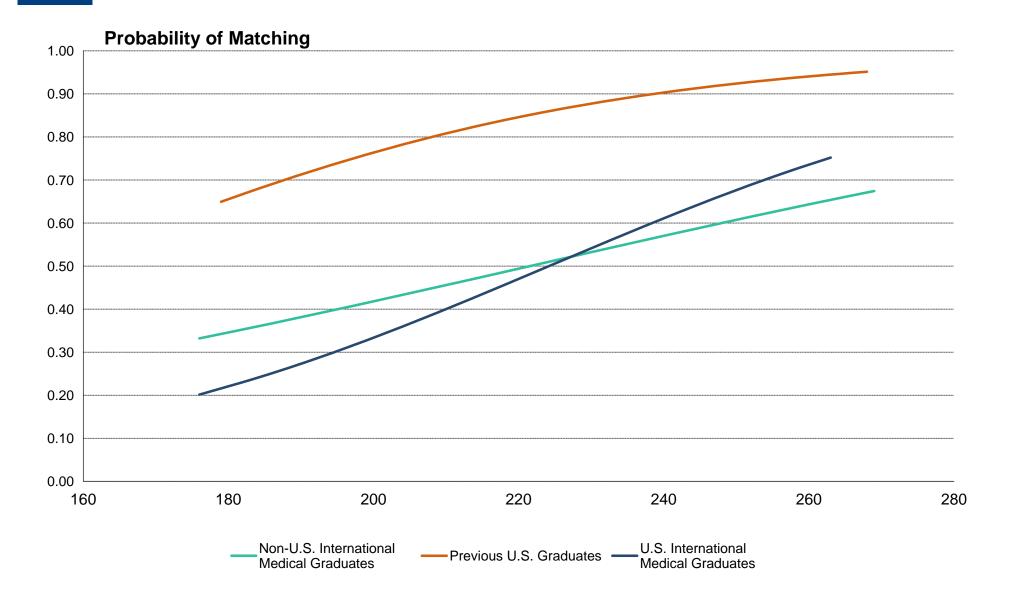
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

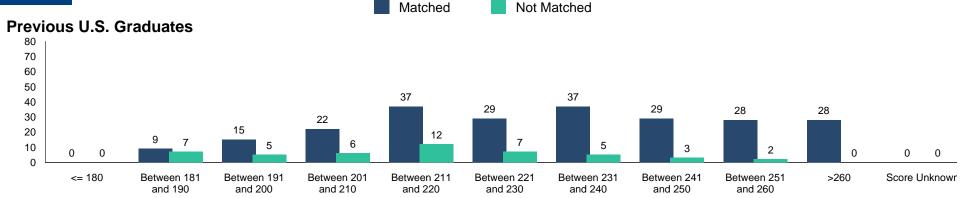
Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Hematology and Oncology



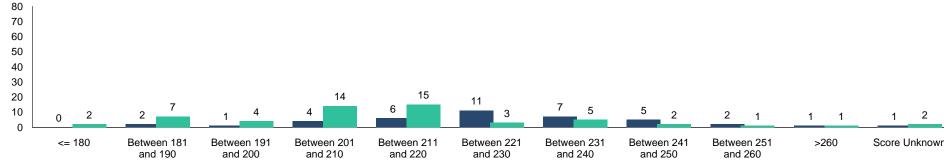
Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

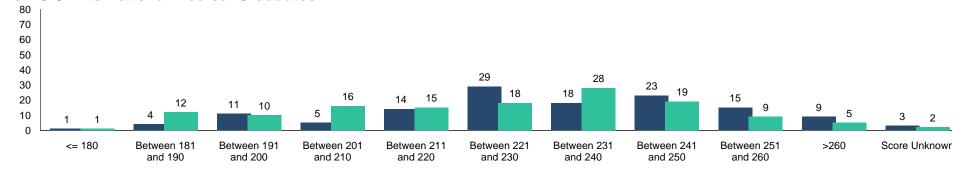
Chart-4 USMLE Step 2 Scores Hematology and Oncology



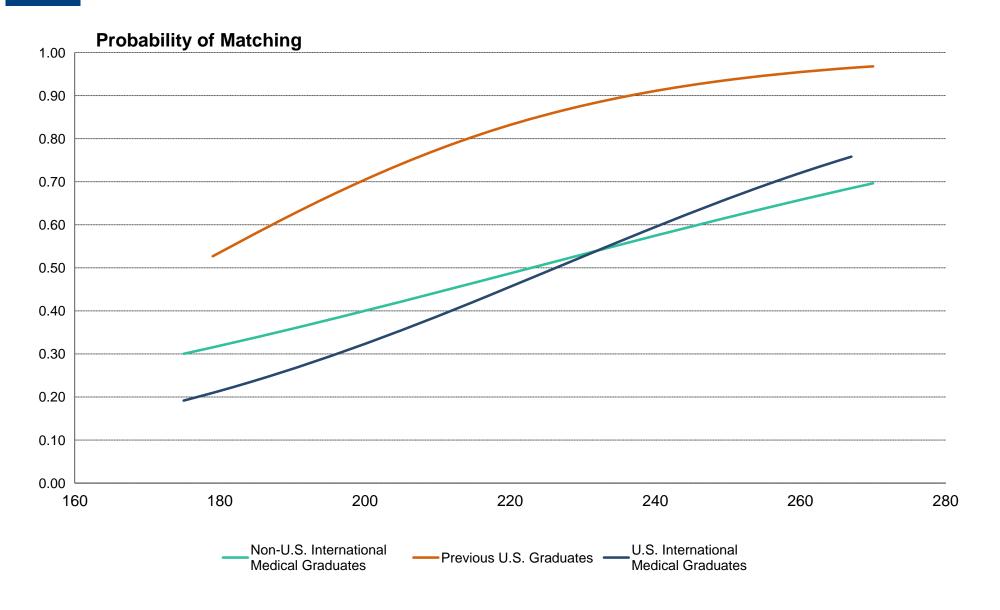
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

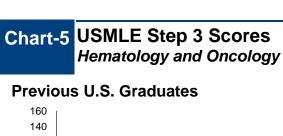


Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Hematology and Oncology

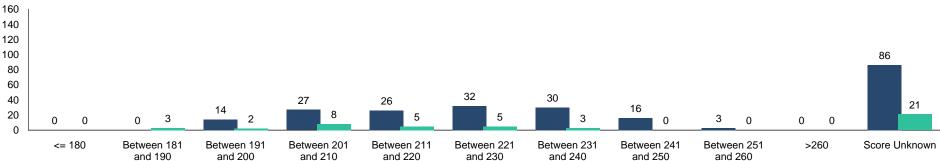


Step 2 Scores

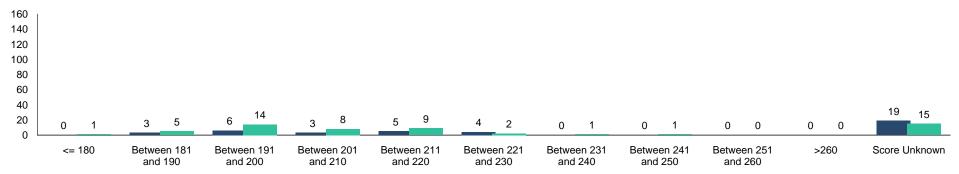
Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



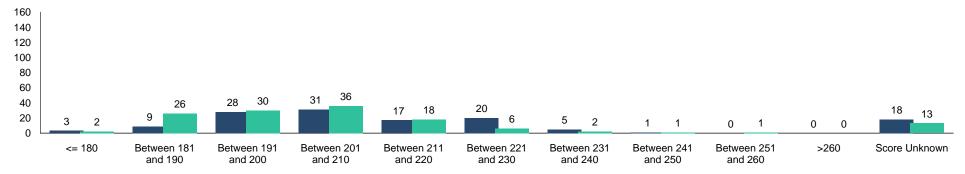




U.S. International Medical Graduates



Non-U.S. International Medical Graduates

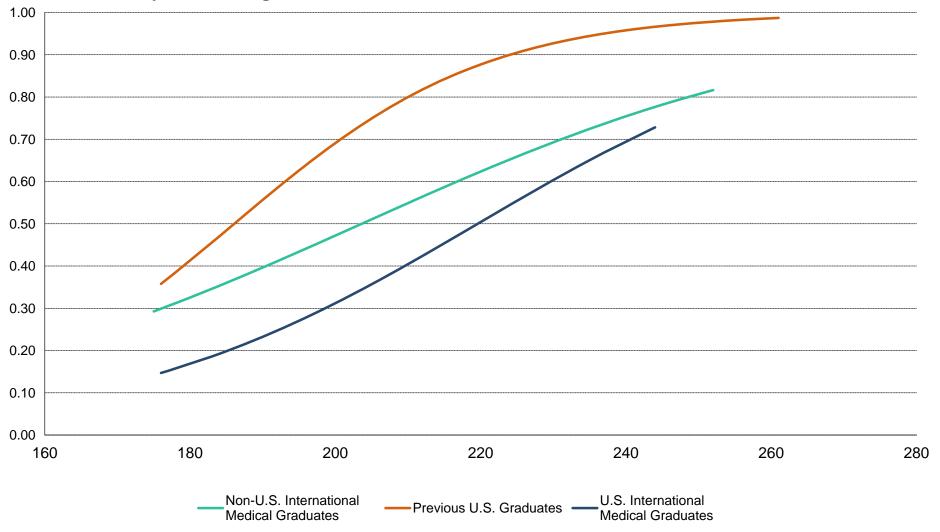


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Hematology and Oncology



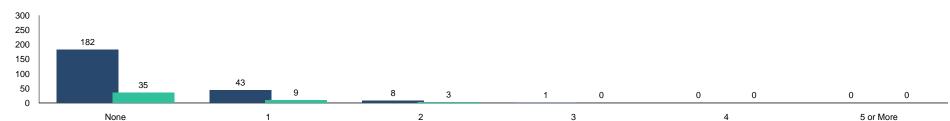


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



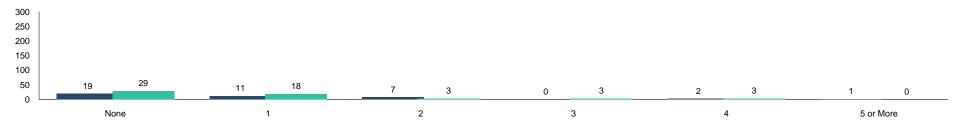




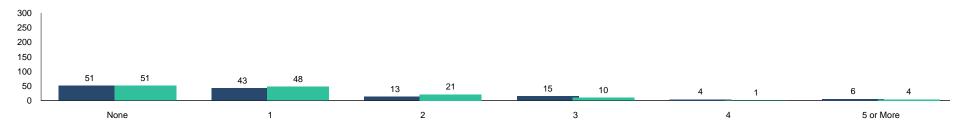
Matched

Not Matched

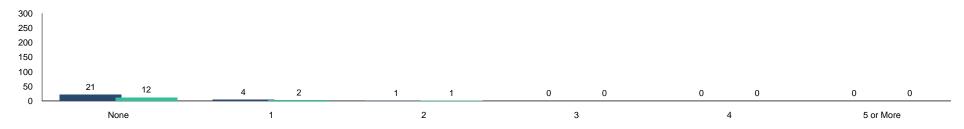
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



Research Projects

Chart-7 Number of Abstracts, Presentations, and Publications Hematology and Oncology Matched Not Matched Previous U.S. Graduates None 5 or More **U.S. International Medical Graduates** None 5 or More Non-U.S. International Medical Graduates None 5 or More **Osteopathic Graduates**

5 or More

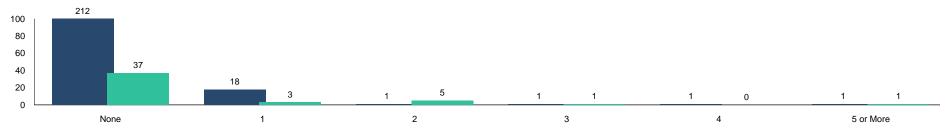
Publications

None

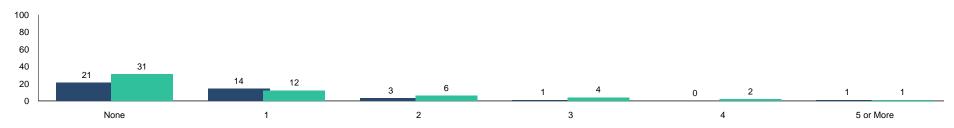
Chart-8 Number of Work Experiences Hematology and Oncology



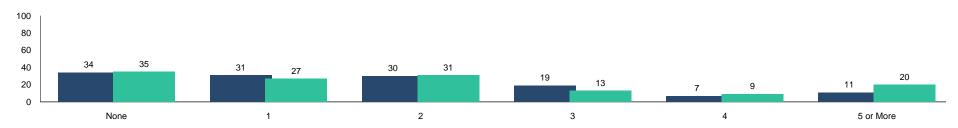
Previous U.S. Graduates



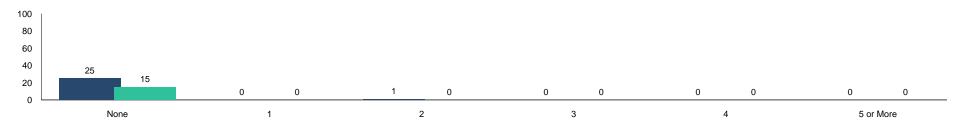
U.S. International Medical Graduates



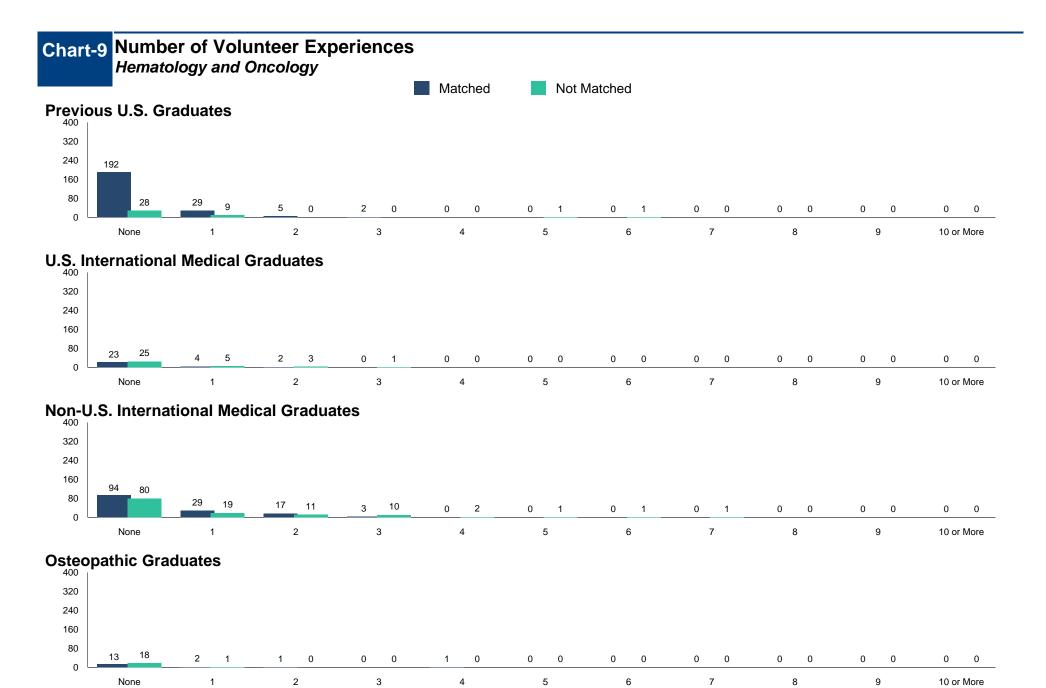
Non-U.S. International Medical Graduates



Osteopathic Graduates

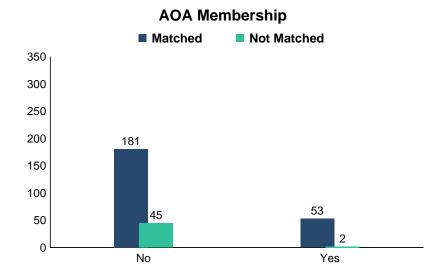


Work Experiences



Volunteer Experiences

Percentage of U.S. Graduates Who are Members of AOA Hematology and Oncology



Sources: NRMP Data Warehouse and AAMC Data Warehouse

Infectious Disease

Table-1 Summary Statistics Infectious Disease

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Measure		Matched (n=124)	Unmatched (n=5)	Matched (n=31)	Unmatched (n=16)	Matched (n=94)	Unmatched (n=13)	Matched (n=14)	Unmatched (n=5)
1.	Mean number of contiguous ranks	5	4	5	2	7	4	7	3
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	224	212	205	210	226	209	n/a	n/a
4.	Mean USMLE Step 2 score	231	220	211	207	229	216	n/a	n/a
5.	Mean USMLE Step 3 score	224	207	205	201	210	204	n/a	n/a
6.	Mean number of research experiences	0	1	1	0	1	1	0	0
7.	Mean number of abstracts, presentations, and publications	2	1	3	2	5	3	3	1
8.	Mean number of work experiences	0	1	1	2	2	3	0	0
9.	Mean number of volunteer experiences	0	0	0	0	1	1	0	0
10.	Percentage who are AOA members	15	0	n/a	n/a	n/a	n/a	n/a	n/a

n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

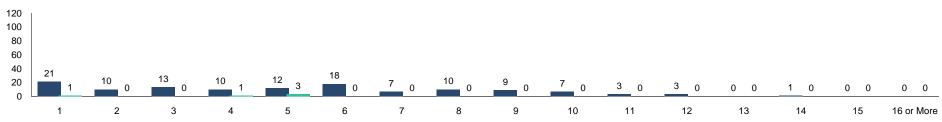
Chart-1

Number of Contiguous Ranks Within Preferred Specialty Infectious Disease

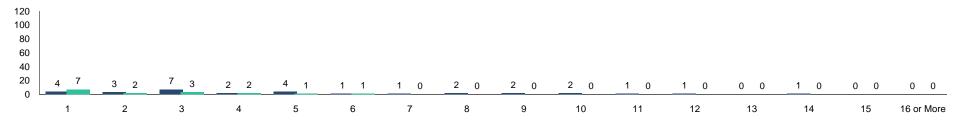




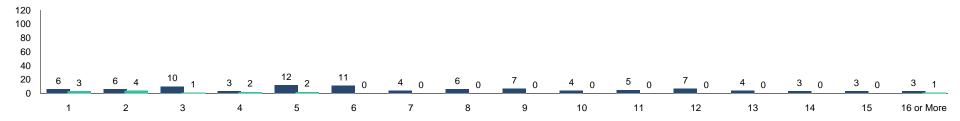
Previous U.S. Graduates



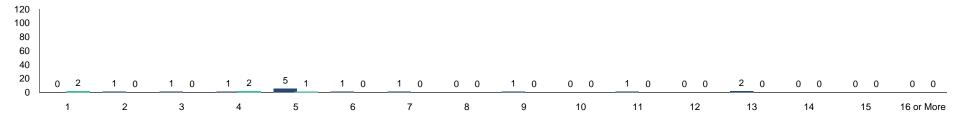
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

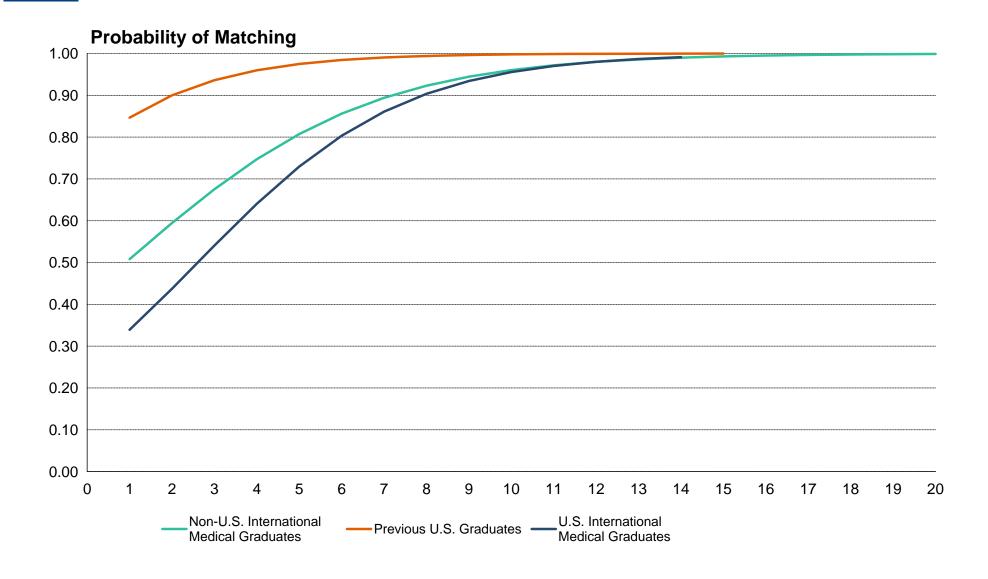


Osteopathic Graduates

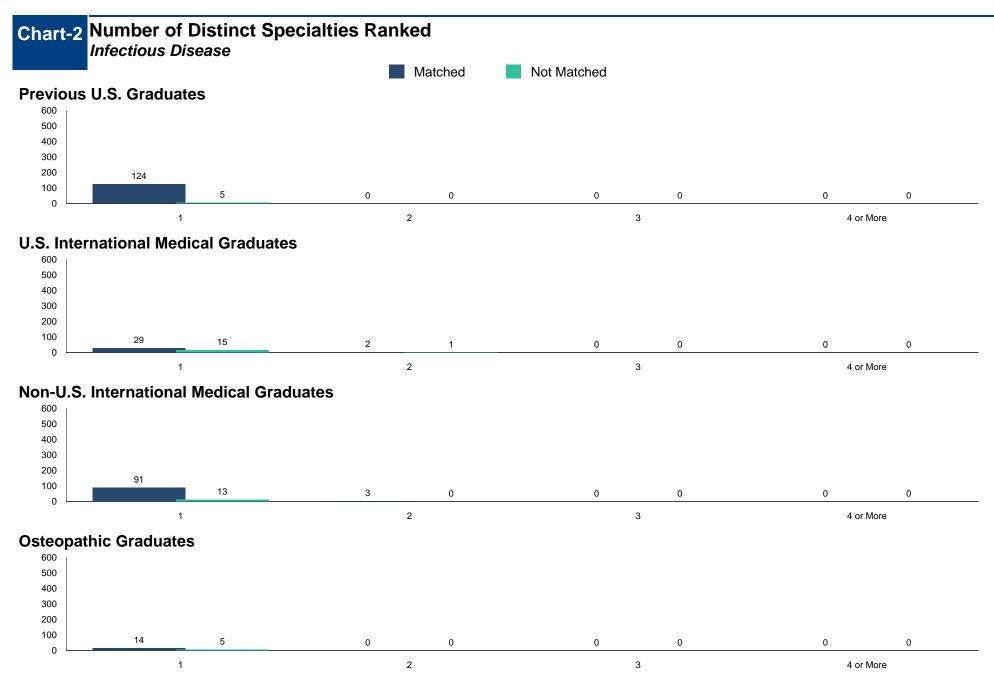


Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Infectious Disease



Contiguous Ranks

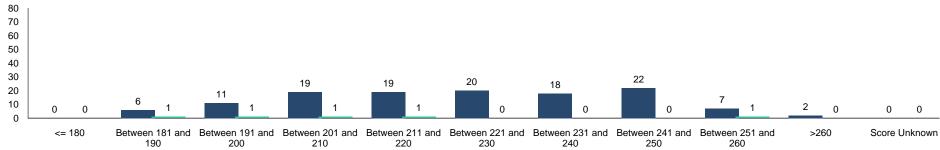


Source: NRMP Data Warehouse

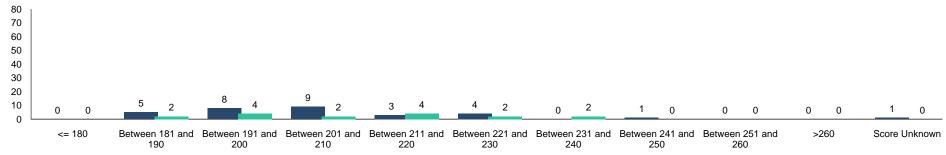
Chart-3 USMLE Step 1 Scores Infectious Disease



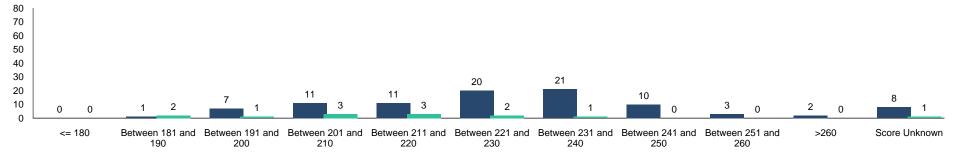
Previous U.S. Graduates



U.S. International Medical Graduates



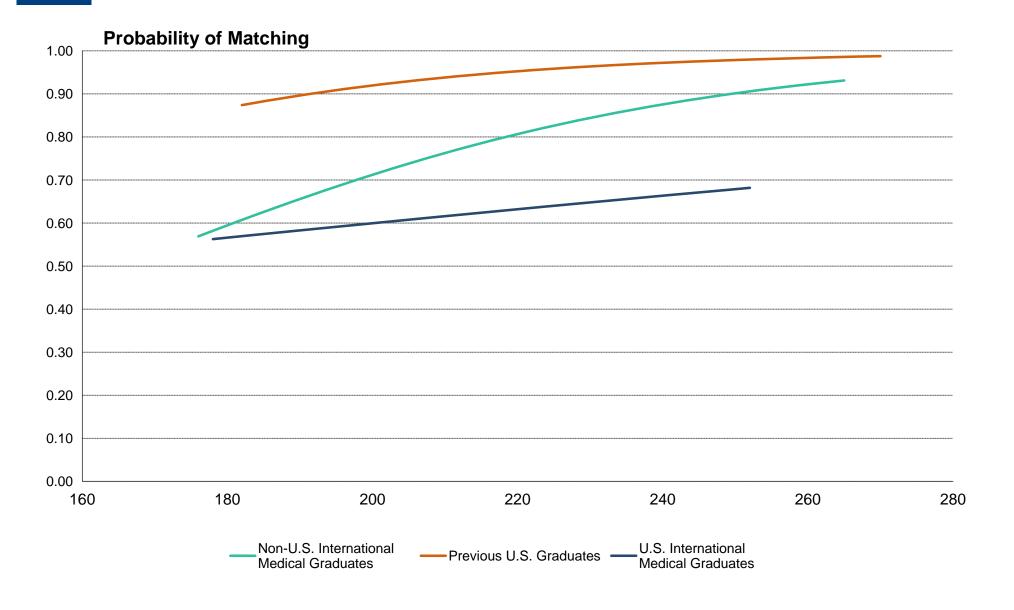
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

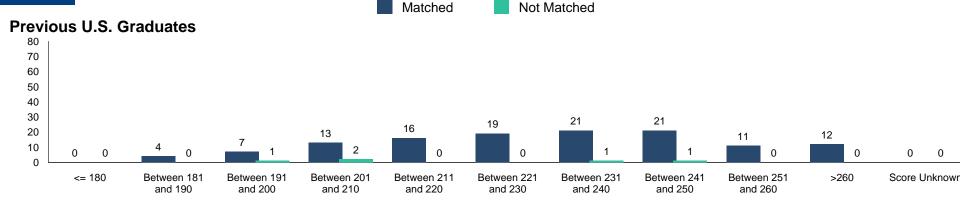
Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Infectious Disease



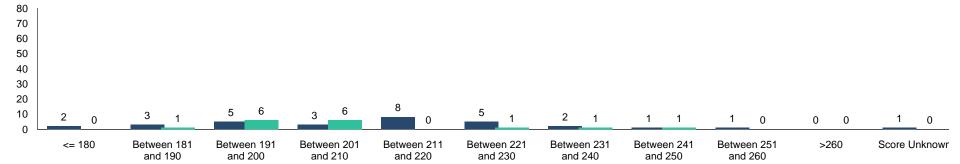
Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

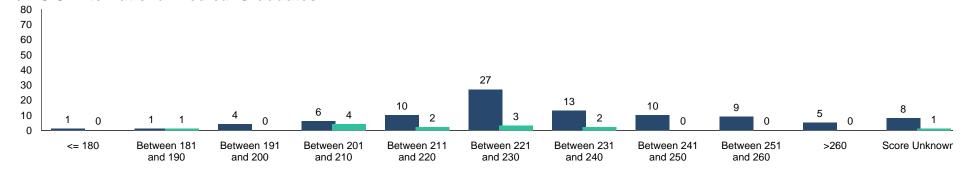
Chart-4 USMLE Step 2 Scores Infectious Disease



U.S. International Medical Graduates

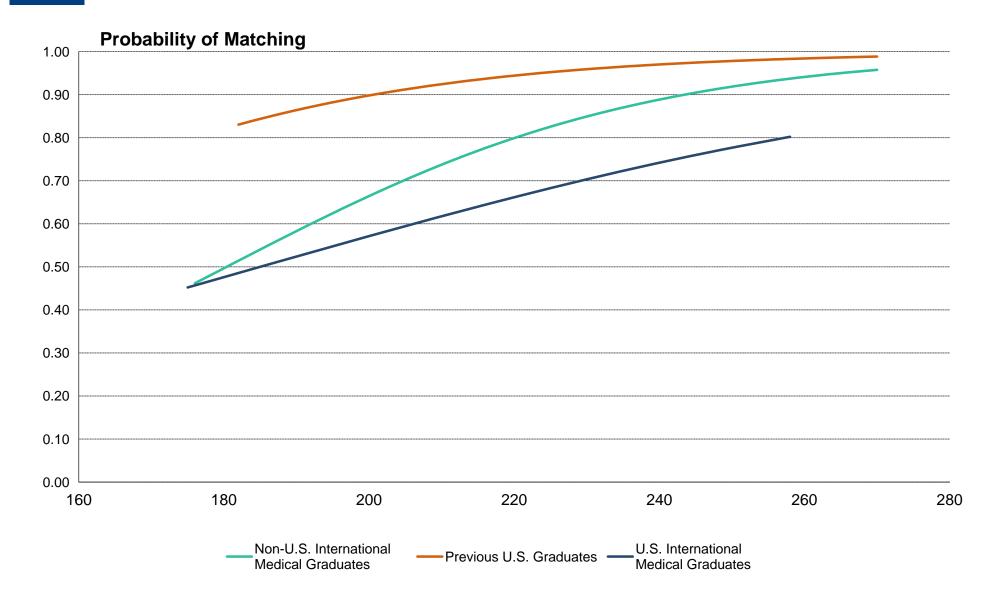


Non-U.S. International Medical Graduates



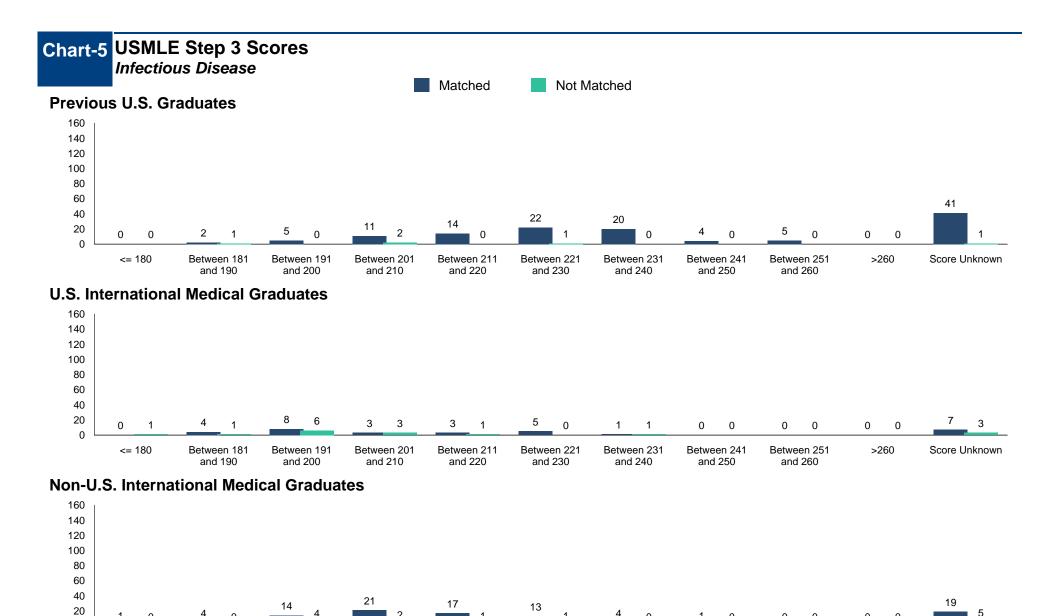
Step 2 Scores

Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Infectious Disease



Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



Step 3 Scores

Between 221

and 230

Between 211

and 220

0

Between 231

and 240

0

0

Between 251

and 260

0

0

>260

1

Between 241

and 250

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Between 191

and 200

2

Between 201

and 210

0

Between 181

and 190

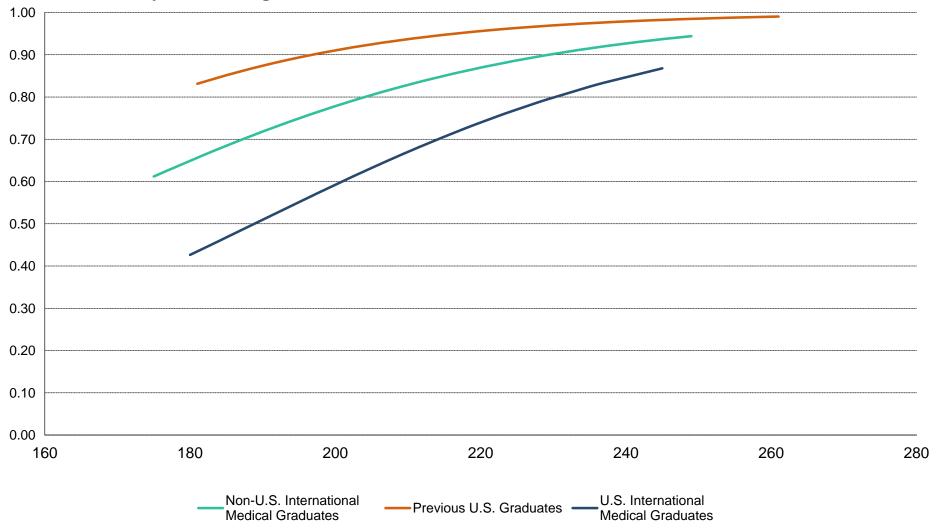
<= 180

0

Score Unknown

Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Infectious Disease



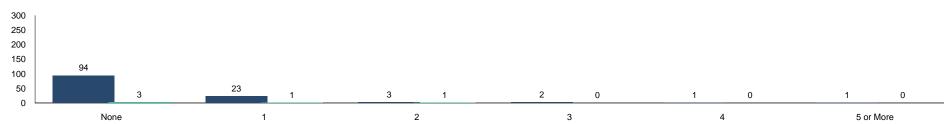


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



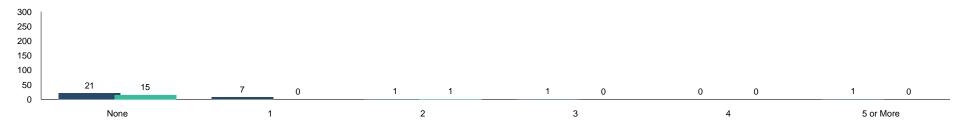




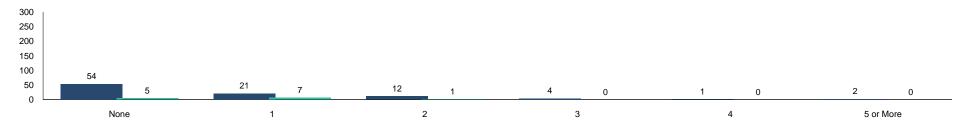
Matched

Not Matched

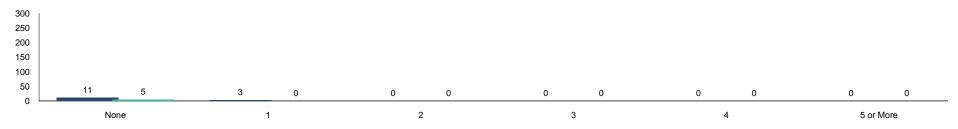
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



Research Projects

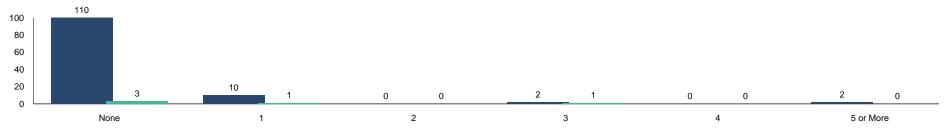
Chart-7 Number of Abstracts, Presentations, and Publications Infectious Disease Matched Not Matched Previous U.S. Graduates None 5 or More **U.S. International Medical Graduates** None 5 or More Non-U.S. International Medical Graduates None 5 or More **Osteopathic Graduates** 5 or More None **Publications**

Source: NRMP Data Warehouse and AAMC Data Warehouse

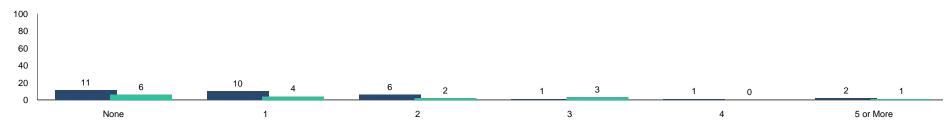
Chart-8 Number of Work Experiences *Infectious Disease*



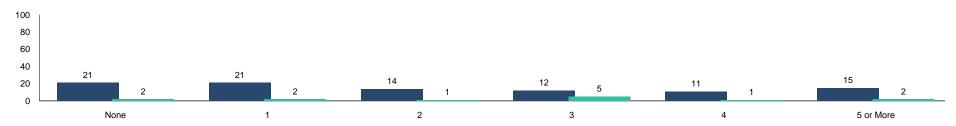
Previous U.S. Graduates



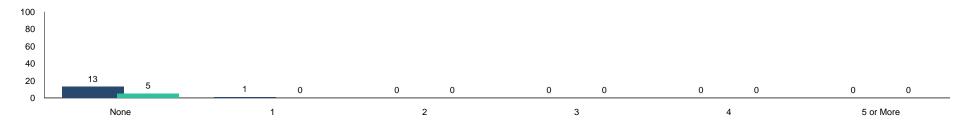
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



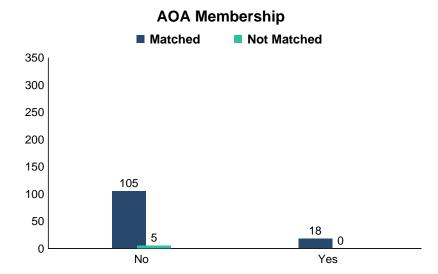
Osteopathic Graduates



Work Experiences

Chart-9 Number of Volunteer Experiences Infectious Disease Matched Not Matched **Previous U.S. Graduates** None 10 or More **U.S. International Medical Graduates** None 10 or More Non-U.S. International Medical Graduates 10 or More None **Osteopathic Graduates** None 10 or More

Percentage of U.S. Graduates Who are Members of AOA *Infectious Disease*



Sources: NRMP Data Warehouse and AAMC Data Warehouse

Neonatal-Perinatal Medicine

Table-1 Summary Statistics Neonatal-Perinatal Medicine

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Measure		Matched (n=105)	Unmatched (n=6)	Matched (n=13)	Unmatched (n=4)	Matched (n=52)	Unmatched (n=9)	Matched (n=12)	Unmatched (n=4)
1.	Mean number of contiguous ranks	4	4	5	3	8	3	6	3
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	217	212	207	199	218	210	n/a	n/a
4.	Mean USMLE Step 2 score	228	227	208	205	220	217	n/a	n/a
5.	Mean USMLE Step 3 score	218	209	197	195	202	201	n/a	n/a
6.	Mean number of research experiences	0	0	1	1	1	0	0	0
7.	Mean number of abstracts, presentations, and publications	1	0	4	1	4	1	1	0
8.	Mean number of work experiences	0	0	1	5	2	2	0	0
9.	Mean number of volunteer experiences	0	0	1	2	1	1	1	0
10.	Percentage who are AOA members	13	17	n/a	n/a	n/a	n/a	n/a	n/a

n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

Chart-1

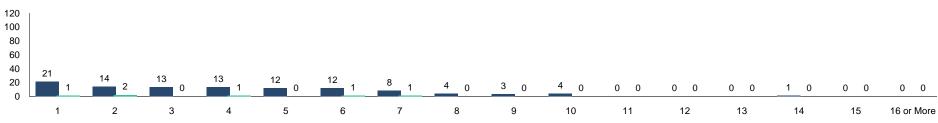
Number of Contiguous Ranks Within Preferred Specialty



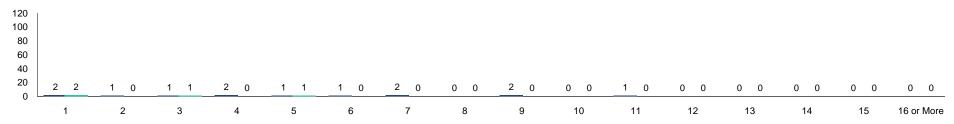




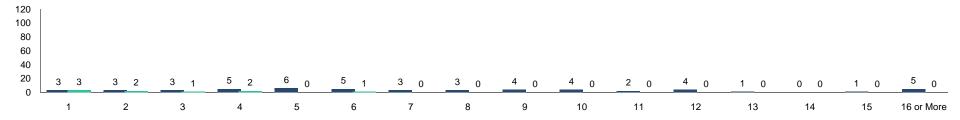
Previous U.S. Graduates



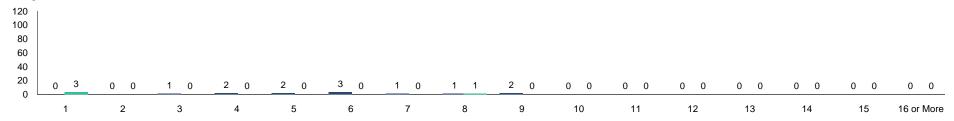
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

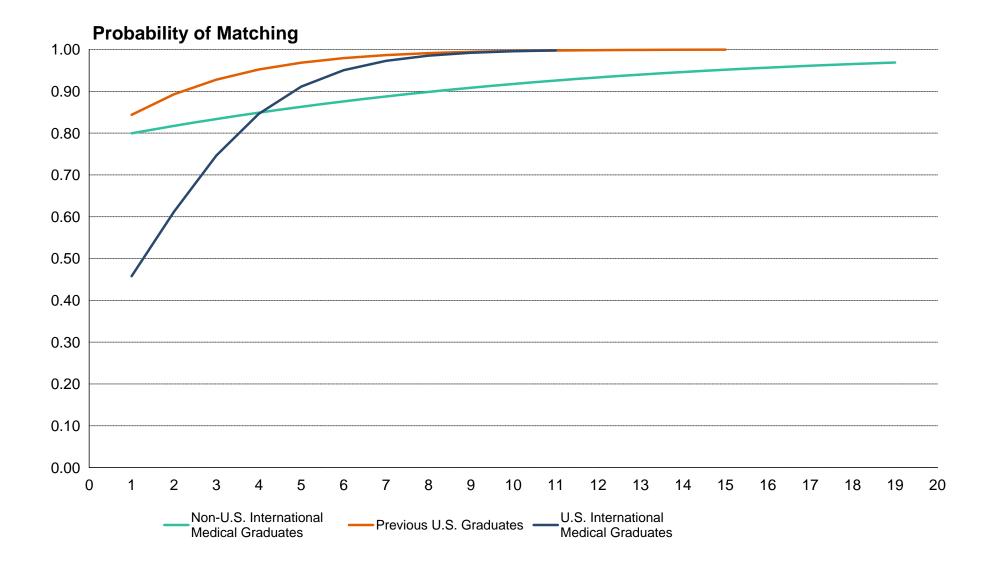


Osteopathic Graduates



Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Neonatal-Perinatal Medicine



Contiguous Ranks

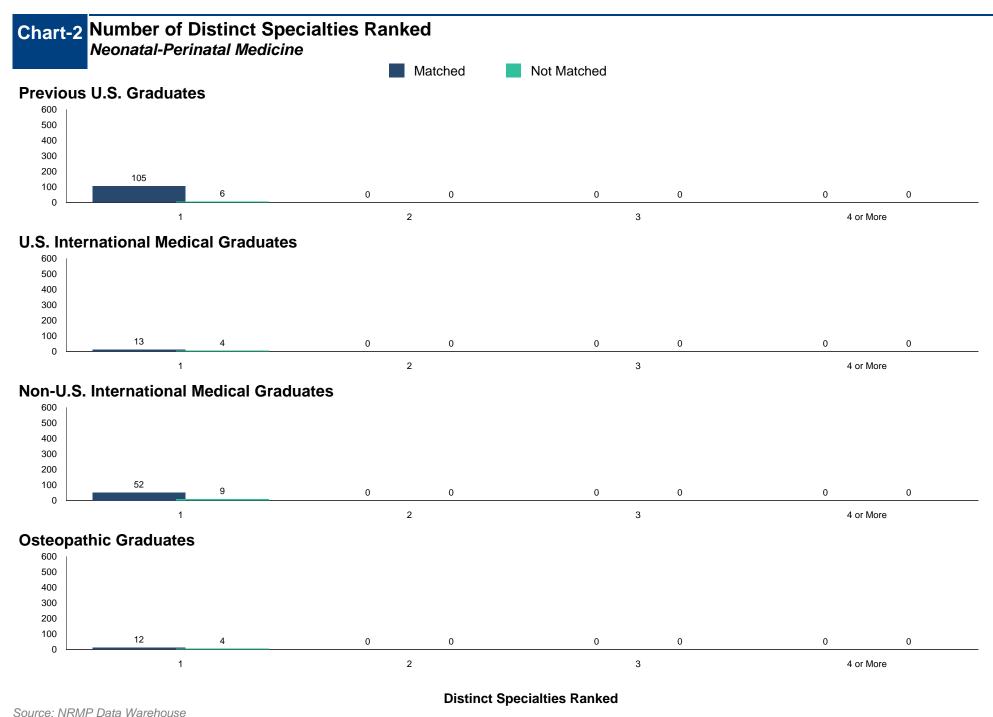
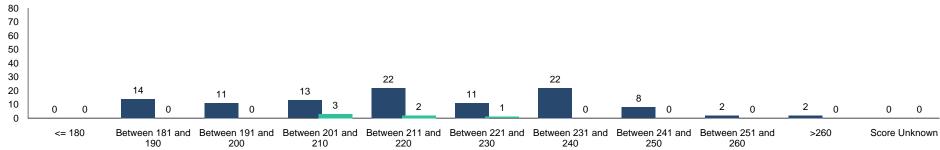


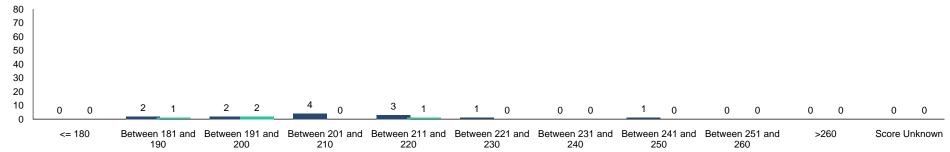
Chart-3 USMLE Step 1 Scores Neonatal-Perinatal Medicine



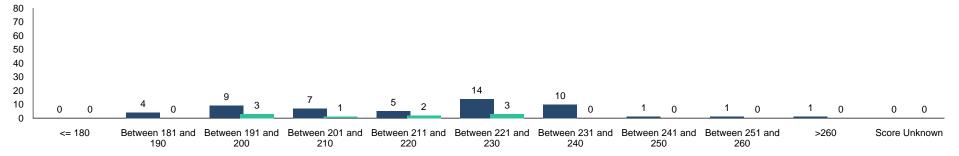
Previous U.S. Graduates



U.S. International Medical Graduates



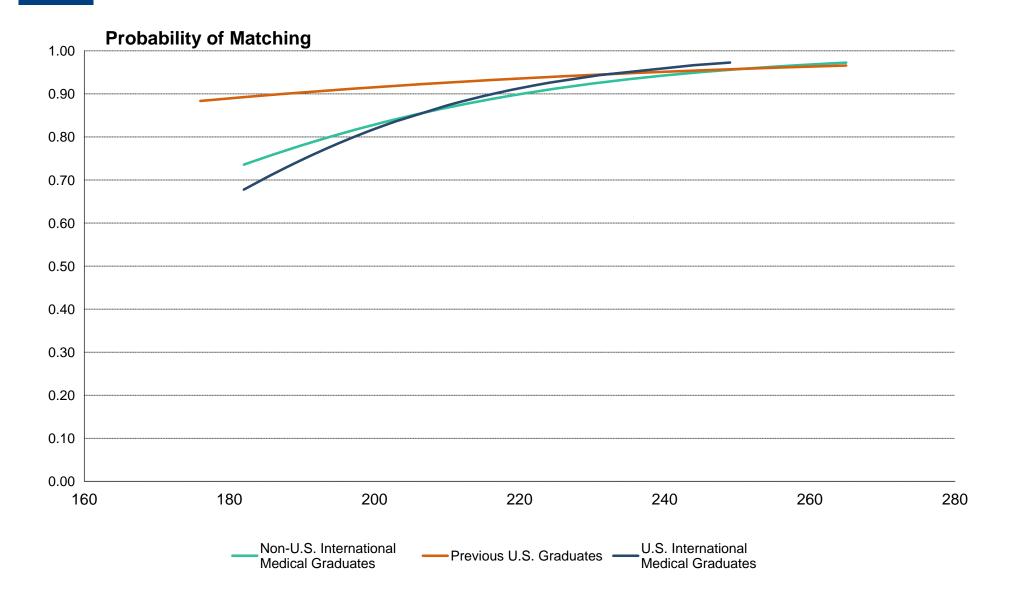
Non-U.S. International Medical Graduates



Step 1 Scores

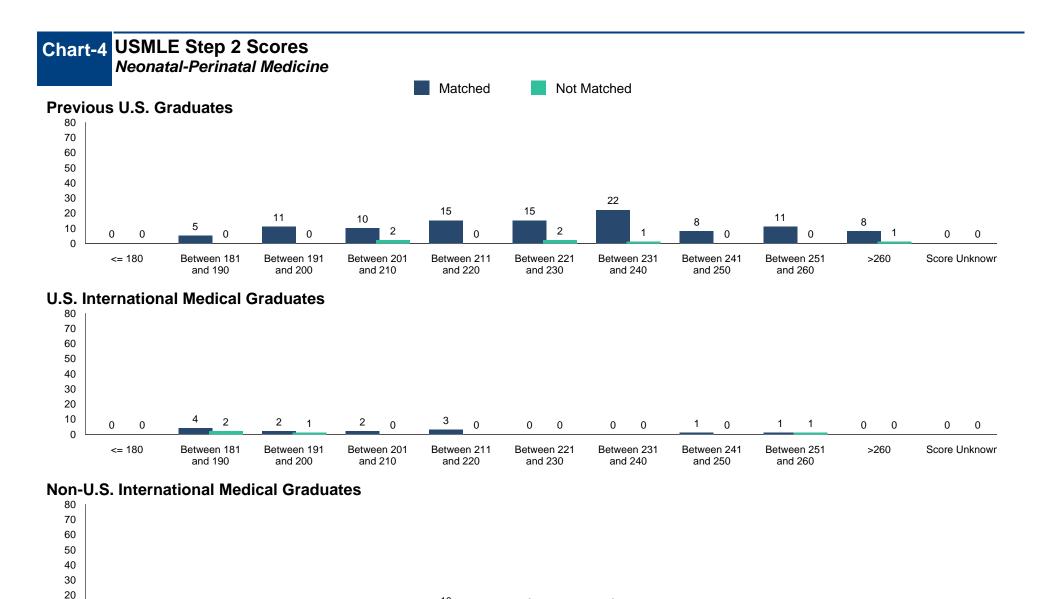
Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Neonatal-Perinatal Medicine



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.



Step 2 Scores

Between 211

and 220

Between 221

and 230

Between 231

and 240

Between 201

and 210

10

0

0

<= 180

0

Between 181

and 190

Between 191

and 200

0

0

Score Unknown

0

2

Between 241

and 250

Between 251

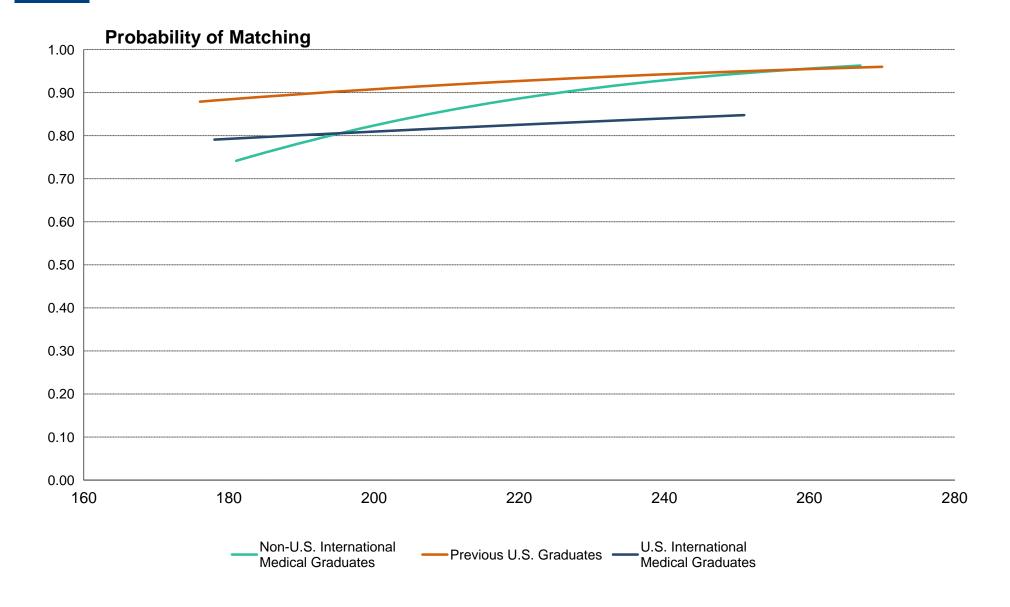
and 260

0

1

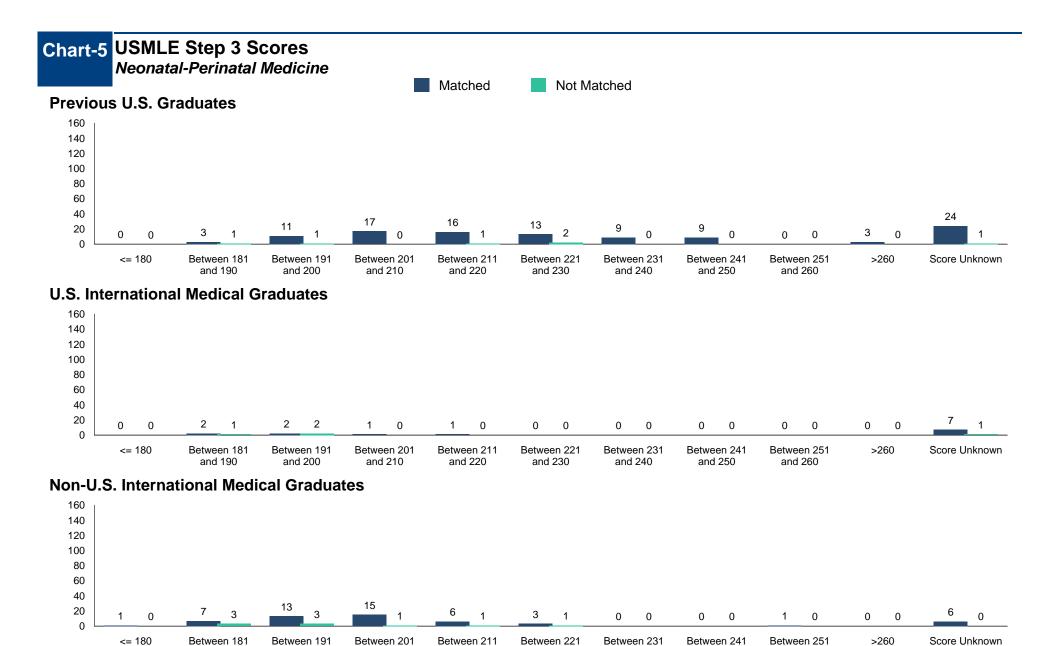
>260

Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Neonatal-Perinatal Medicine



Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



Step 3 Scores

and 230

and 240

and 250

and 260

and 220

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

and 210

and 200

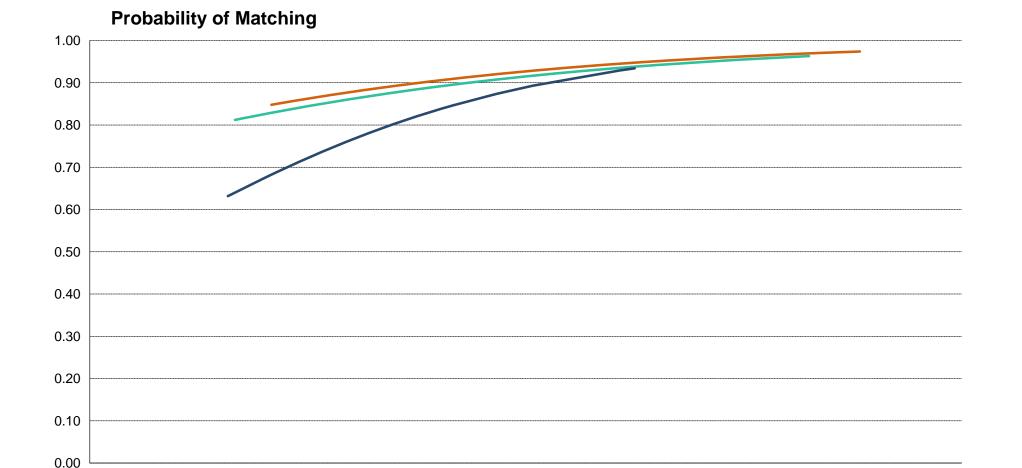
and 190

Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Neonatal-Perinatal Medicine

200

Non-U.S. International

Medical Graduates



Step 3 Scores

220

Previous U.S. Graduates

240

U.S. International

Medical Graduates

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar

180

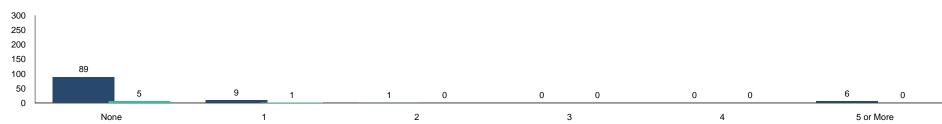
160

280

260



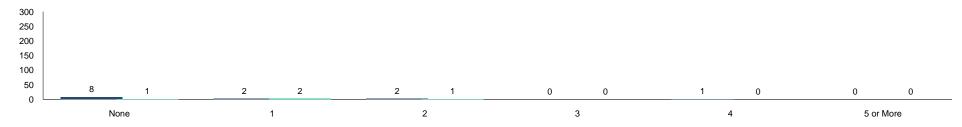




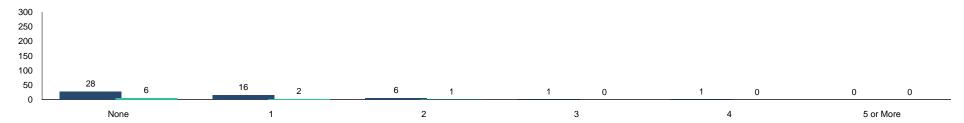
Matched

Not Matched

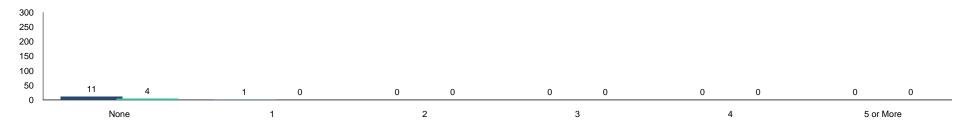
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



Research Projects

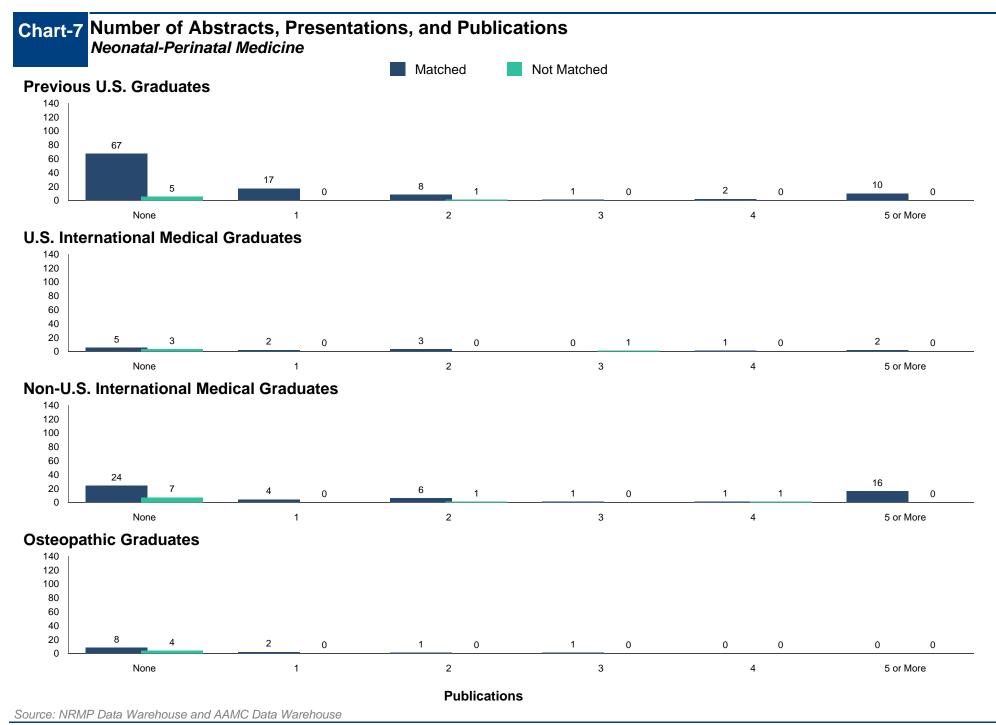
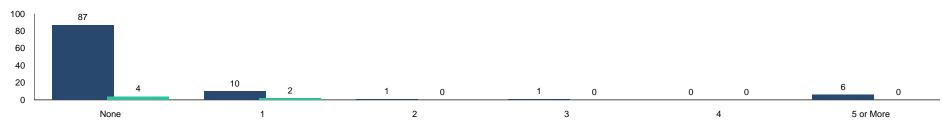


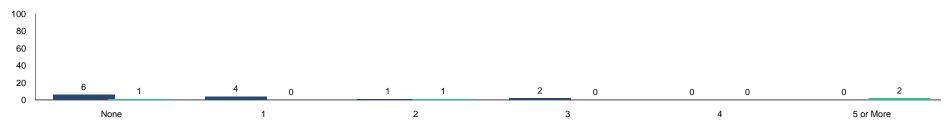
Chart-8 Number of Work Experiences Neonatal-Perinatal Medicine



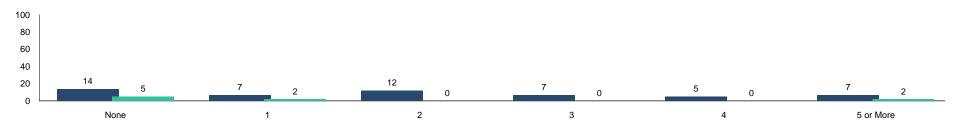
Previous U.S. Graduates



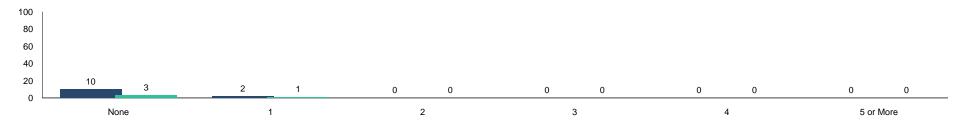
U.S. International Medical Graduates



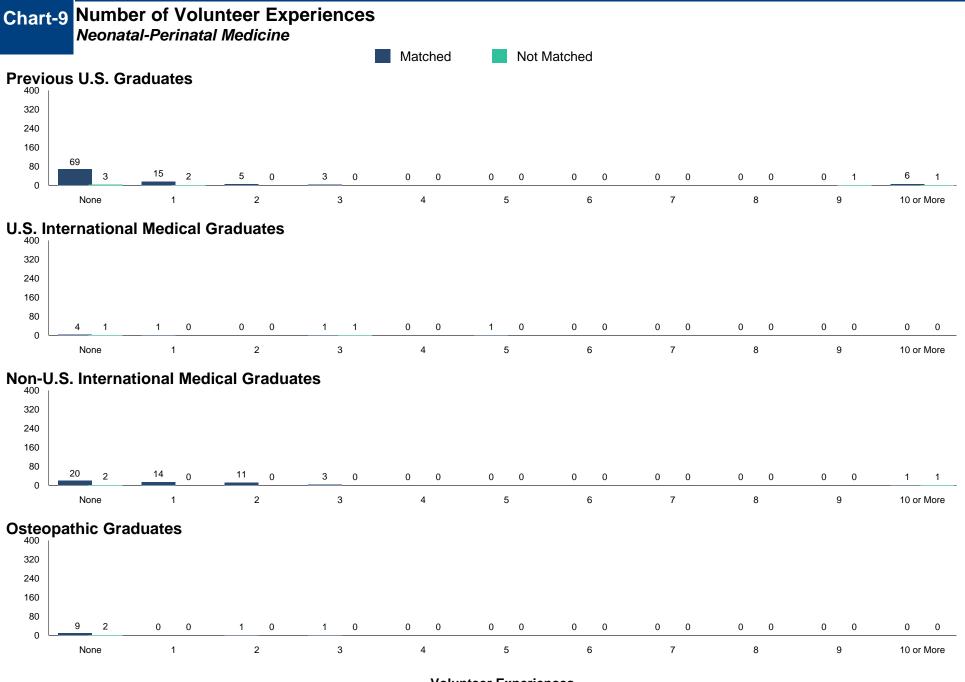
Non-U.S. International Medical Graduates



Osteopathic Graduates

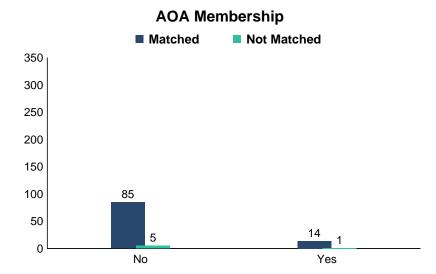


Work Experiences



111

Percentage of U.S. Graduates Who are Members of AOA Neonatal-Perinatal Medicine



Sources: NRMP Data Warehouse and AAMC Data Warehouse

Nephrology

Table-1 Summary Statistics Nephrology

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Meas	Measure		Unmatched (n=2)	Matched (n=42)	Unmatched (n=35)	Matched (n=189)	Unmatched (n=96)	Matched (n=15)	Unmatched (n=8)
1.	Mean number of contiguous ranks	5	n/a	6	4	7	3	5	5
2.	Mean number of distinct specialties ranked	1	n/a	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	221	n/a	211	204	226	220	n/a	n/a
4.	Mean USMLE Step 2 score	228	n/a	213	204	230	220	n/a	n/a
5.	Mean USMLE Step 3 score	219	n/a	207	197	207	200	n/a	n/a
6.	Mean number of research experiences	0	n/a	1	1	1	1	0	0
7.	Mean number of abstracts, presentations, and publications	1	n/a	3	3	5	3	1	2
8.	Mean number of work experiences	0	n/a	1	1	2	3	0	0
9.	Mean number of volunteer experiences	0	n/a	0	0	1	1	0	1
10.	Percentage who are AOA members	14	n/a	n/a	n/a	n/a	n/a	n/a	n/a

n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

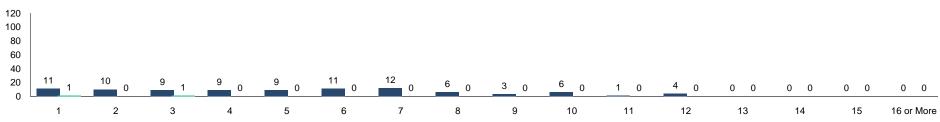
Chart-1

Number of Contiguous Ranks Within Preferred Specialty Nephrology

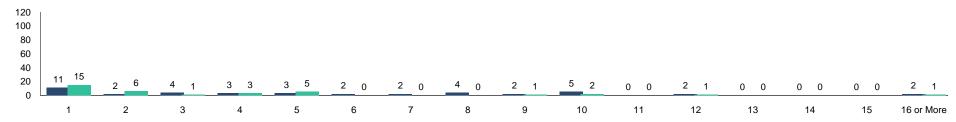




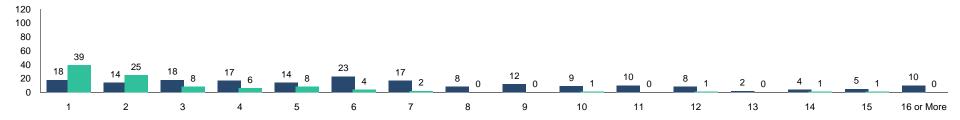
Previous U.S. Graduates



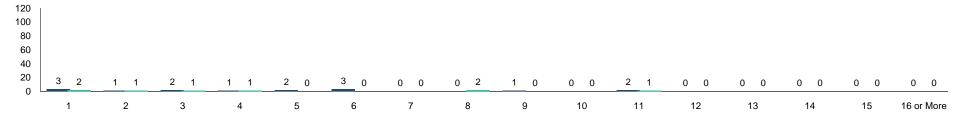
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

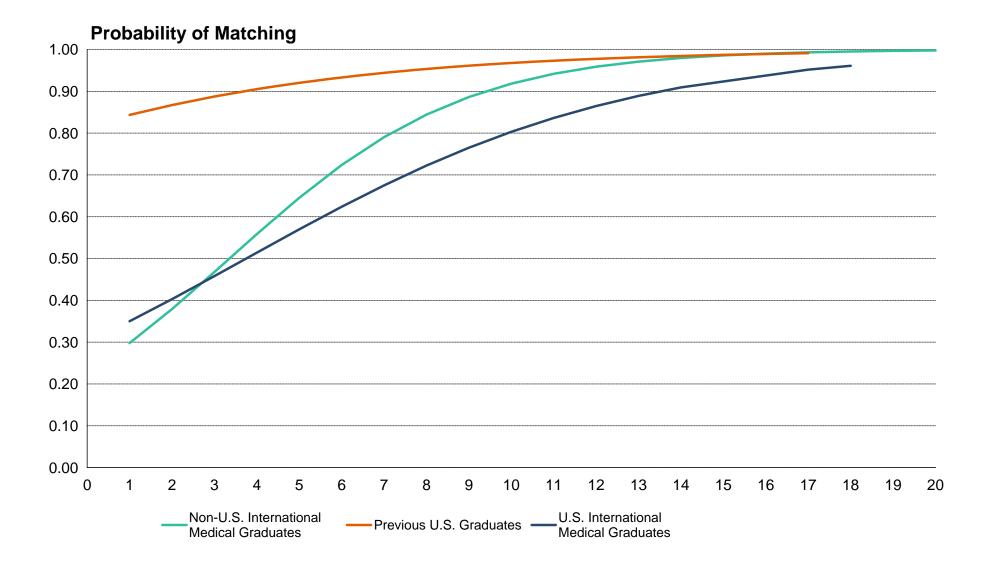


Osteopathic Graduates



Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Nephrology



Contiguous Ranks

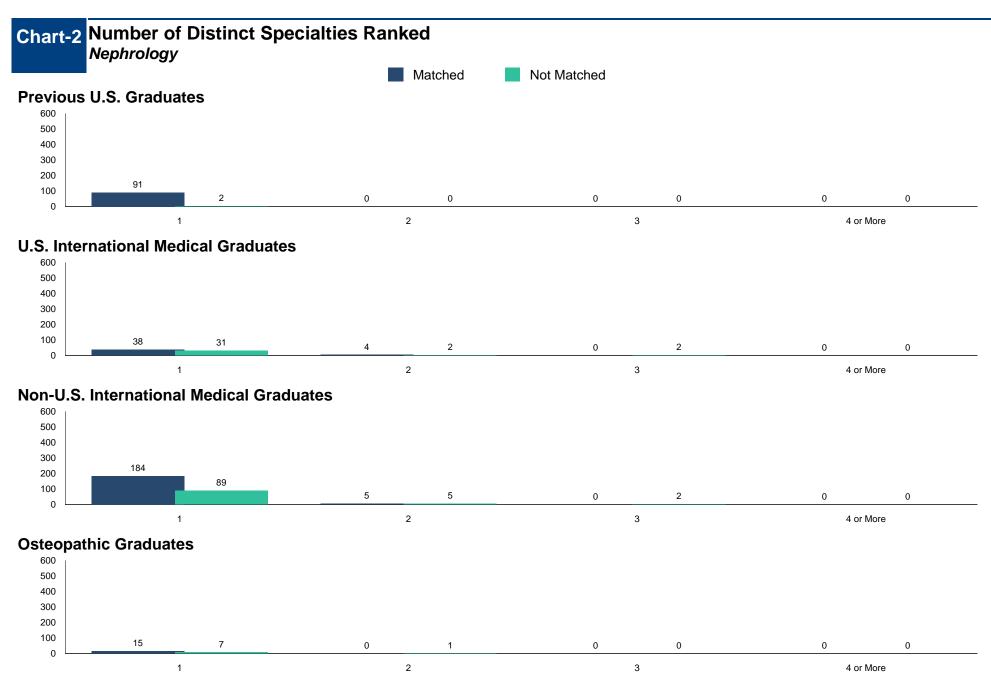
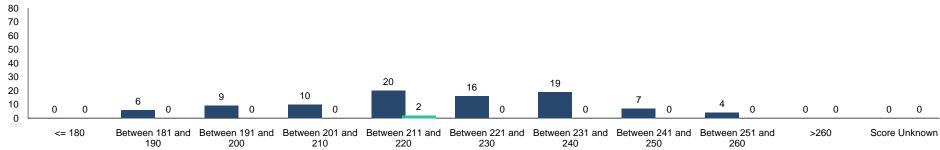


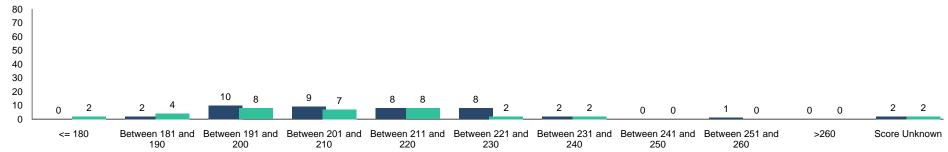
Chart-3 USMLE Step 1 Scores Nephrology



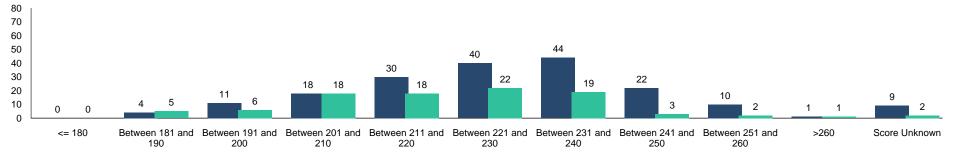
Previous U.S. Graduates



U.S. International Medical Graduates



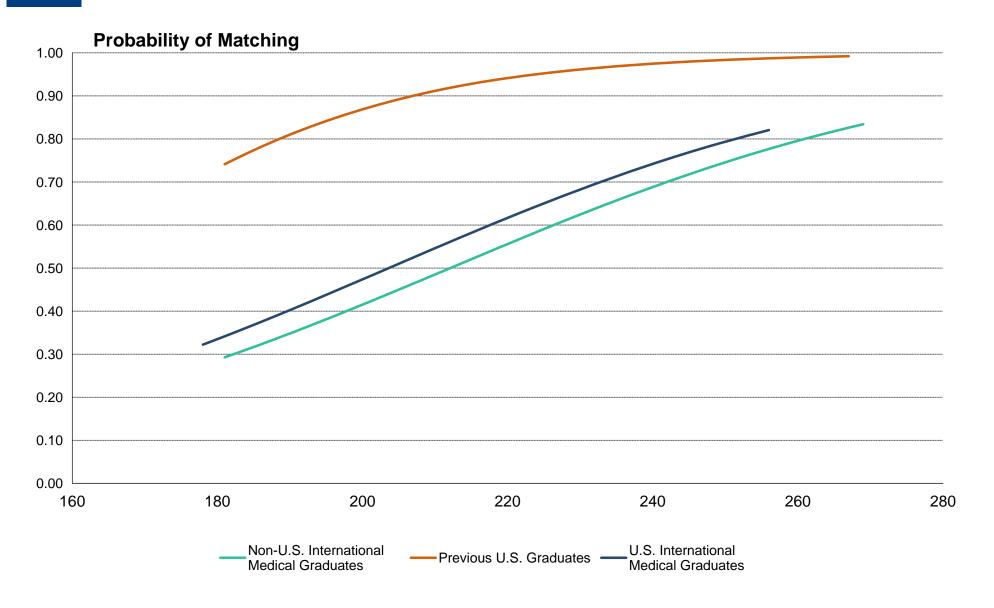
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

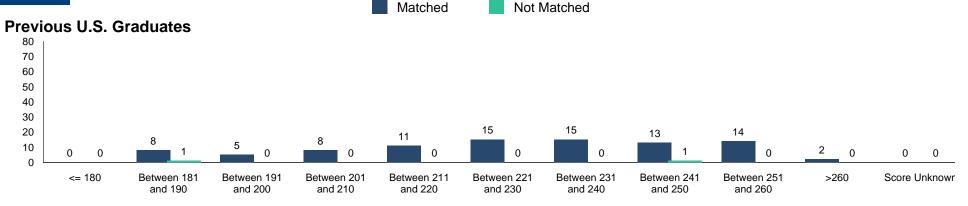
Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Nephrology



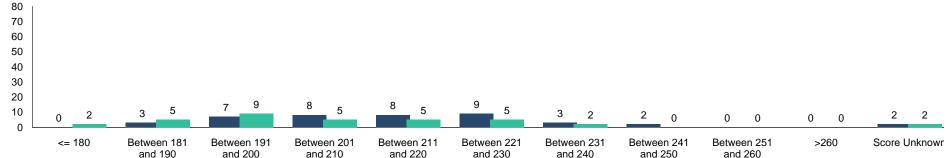
Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

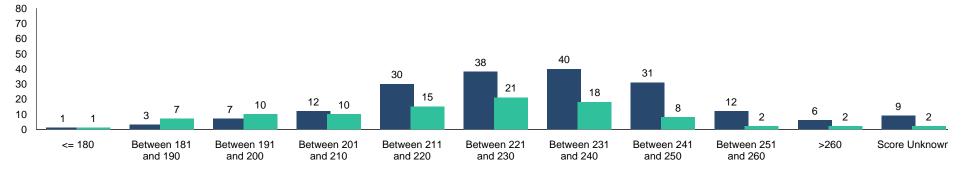
Chart-4 USMLE Step 2 Scores Nephrology



U.S. International Medical Graduates



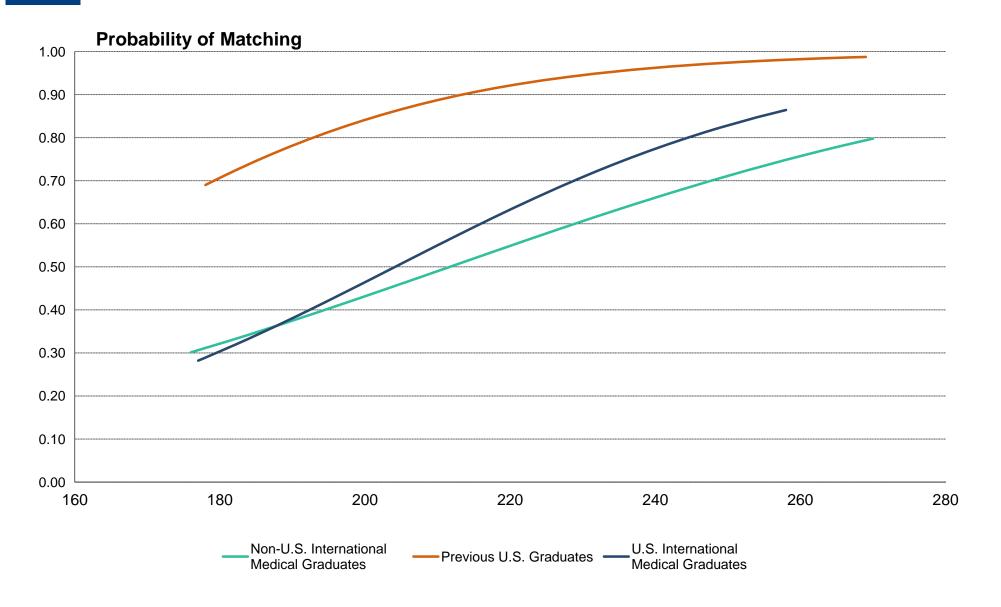
Non-U.S. International Medical Graduates



Step 2 Scores

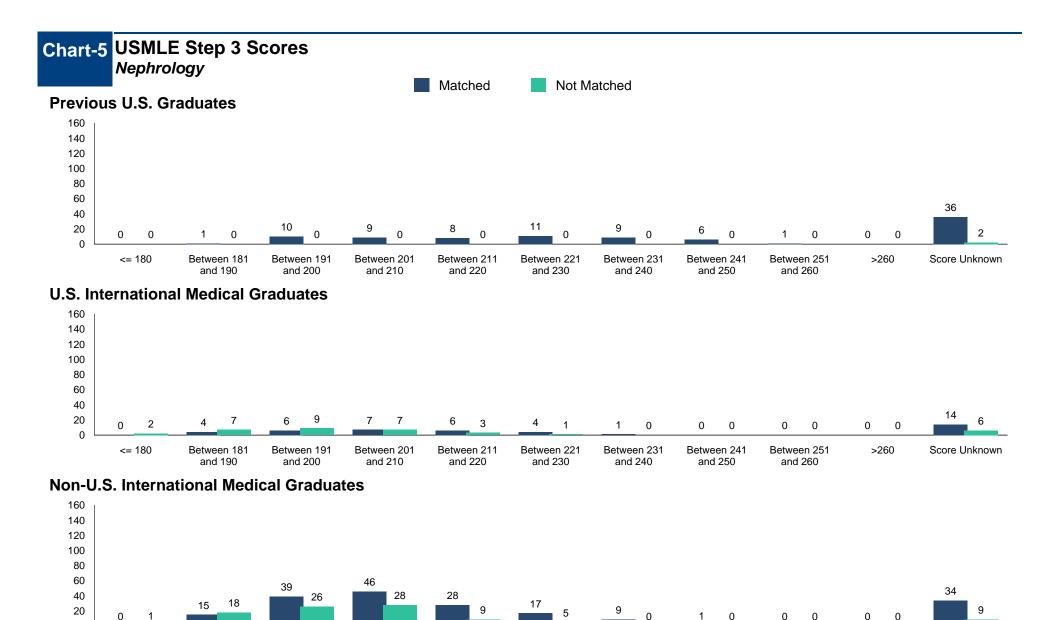
Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Nephrology



Step 2 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



Step 3 Scores

Between 221

and 230

Between 231

and 240

Between 241

and 250

Between 251

and 260

Between 211

and 220

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Between 201

and 210

Between 191

and 200

<= 180

Between 181

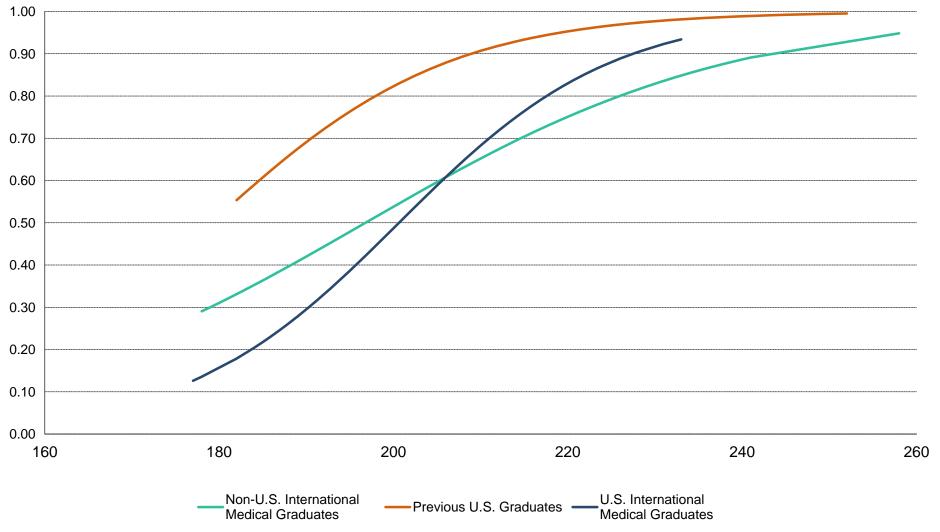
and 190

>260

Score Unknown

Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Nephrology

Probability of Matching

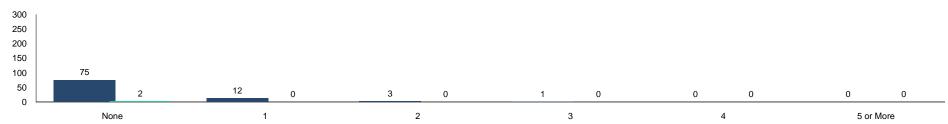


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar



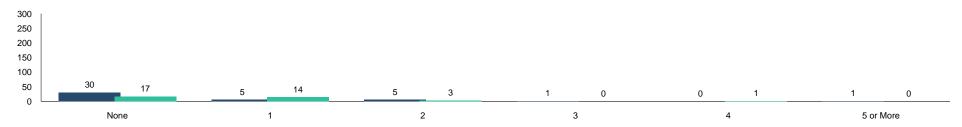
Previous U.S. Graduates



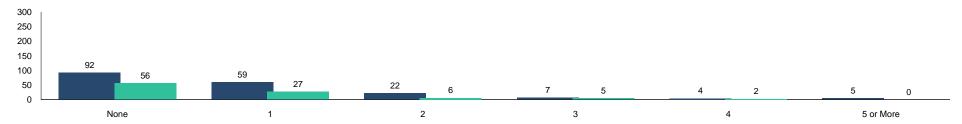
Matched

Not Matched

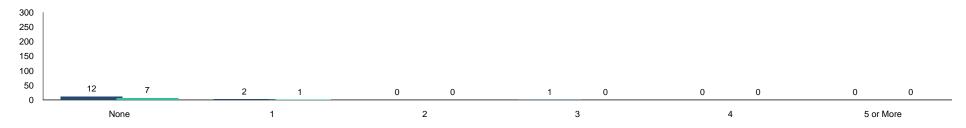
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



Research Projects

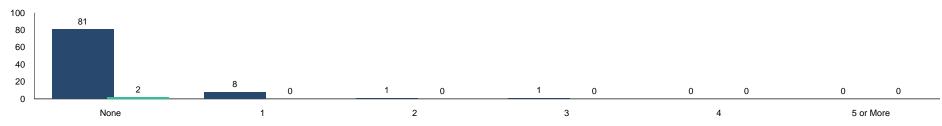
Chart-7 Number of Abstracts, Presentations, and Publications Nephrology Matched Not Matched **Previous U.S. Graduates** None 5 or More **U.S. International Medical Graduates** None 5 or More Non-U.S. International Medical Graduates None 5 or More **Osteopathic Graduates** 5 or More None

Publications

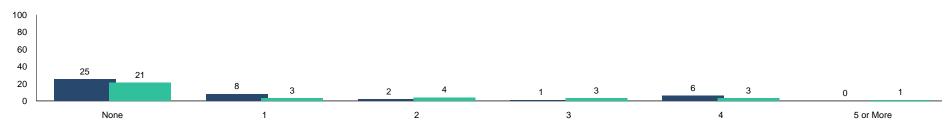
Chart-8 Number of Work Experiences Nephrology



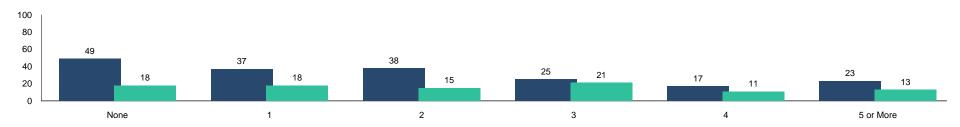
Previous U.S. Graduates



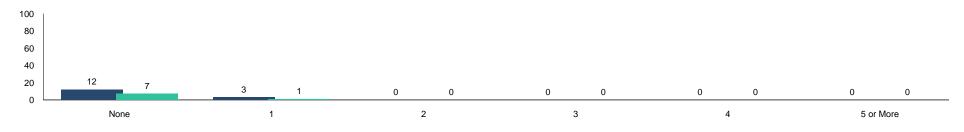
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates

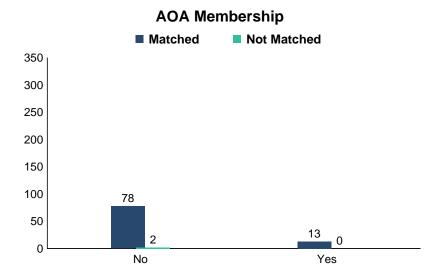


Work Experiences

Chart-9 Number of Volunteer Experiences Nephrology Matched Not Matched **Previous U.S. Graduates** None 10 or More **U.S. International Medical Graduates** None 10 or More Non-U.S. International Medical Graduates 10 or More None **Osteopathic Graduates** None 10 or More

Volunteer Experiences

Percentage of U.S. Graduates Who are Members of AOA Nephrology



Sources: NRMP Data Warehouse and AAMC Data Warehouse



Table-1 Summary Statistics Pulmonary Disease and Critical Care Medicine

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Measure		Matched (n=190)	Unmatched (n=24)	Matched (n=54)	Unmatched (n=40)	Matched (n=123)	Unmatched (n=91)	Matched (n=27)	Unmatched (n=17)
1.	Mean number of contiguous ranks	5	3	5	3	7	2	4	4
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	223	210	216	208	231	221	n/a	210
4.	Mean USMLE Step 2 score	233	213	218	210	235	225	n/a	199
5.	Mean USMLE Step 3 score	222	208	209	202	210	202	n/a	203
6.	Mean number of research experiences	0	0	0	0	1	1	0	0
7.	Mean number of abstracts, presentations, and publications	2	2	2	3	4	4	2	1
8.	Mean number of work experiences	0	0	1	2	2	3	0	0
9.	Mean number of volunteer experiences	0	0	1	1	1	1	0	0
10.	Percentage who are AOA members	18	4	n/a	n/a	n/a	n/a	n/a	n/a

n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

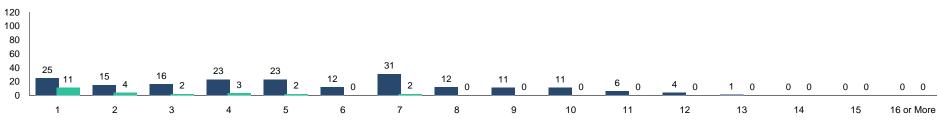
Number of Contiguous Ranks Within Preferred Specialty

Pulmonary Disease and Critical Care Medicine

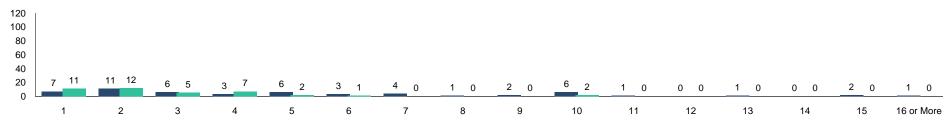




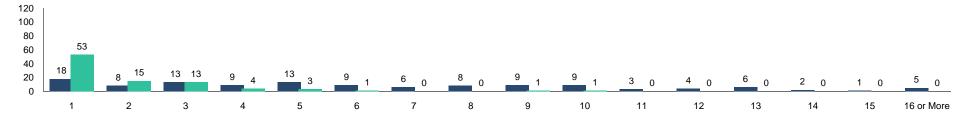
Previous U.S. Graduates



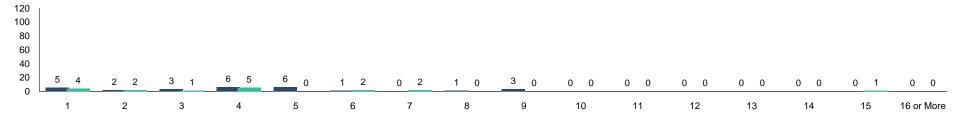
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

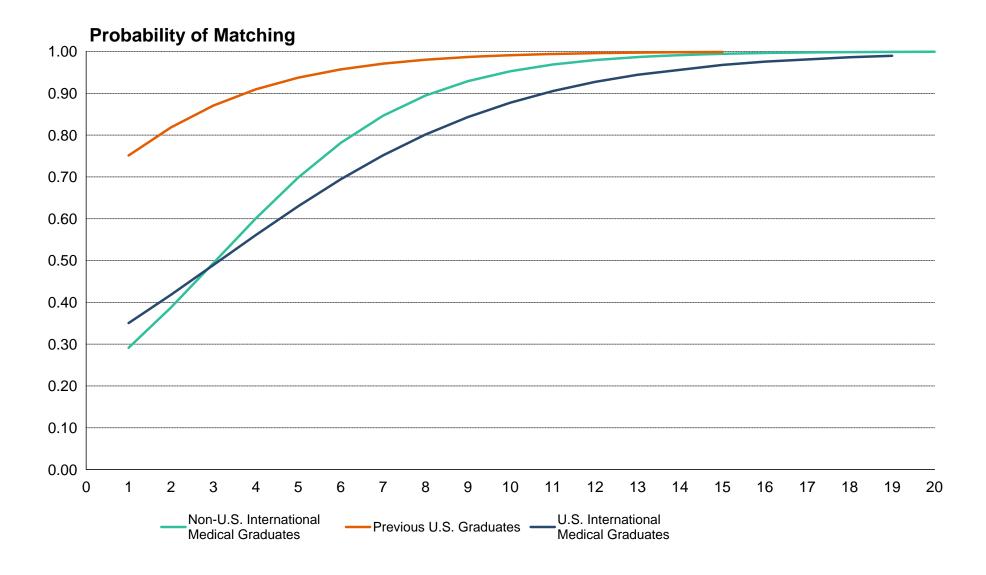


Osteopathic Graduates



Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Pulmonary Disease and Critical Care Medicine



Contiguous Ranks

Chart-2 Number of Distinct Specialties Ranked Pulmonary Disease and Critical Care Medicine Matched Not Matched Previous U.S. Graduates 4 or More U.S. International Medical Graduates 4 or More Non-U.S. International Medical Graduates 4 or More **Osteopathic Graduates**

Distinct Specialties Ranked

Source: NRMP Data Warehouse

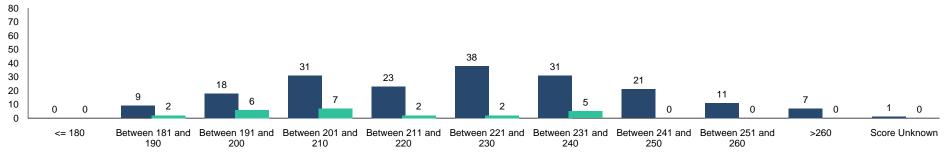
4 or More

Chart-3 USMLE Step 1 Scores Pulmonary Disease and Critical Care

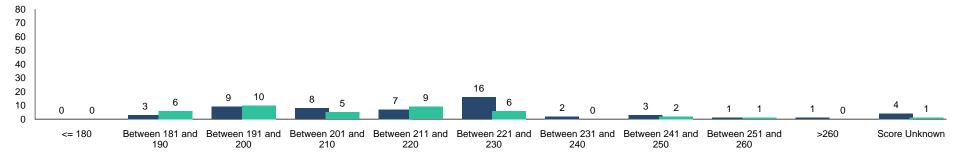
Pulmonary Disease and Critical Care Medicine



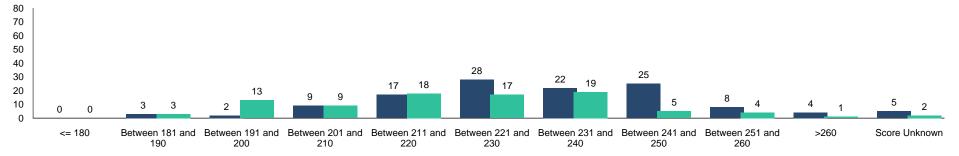
Previous U.S. Graduates



U.S. International Medical Graduates



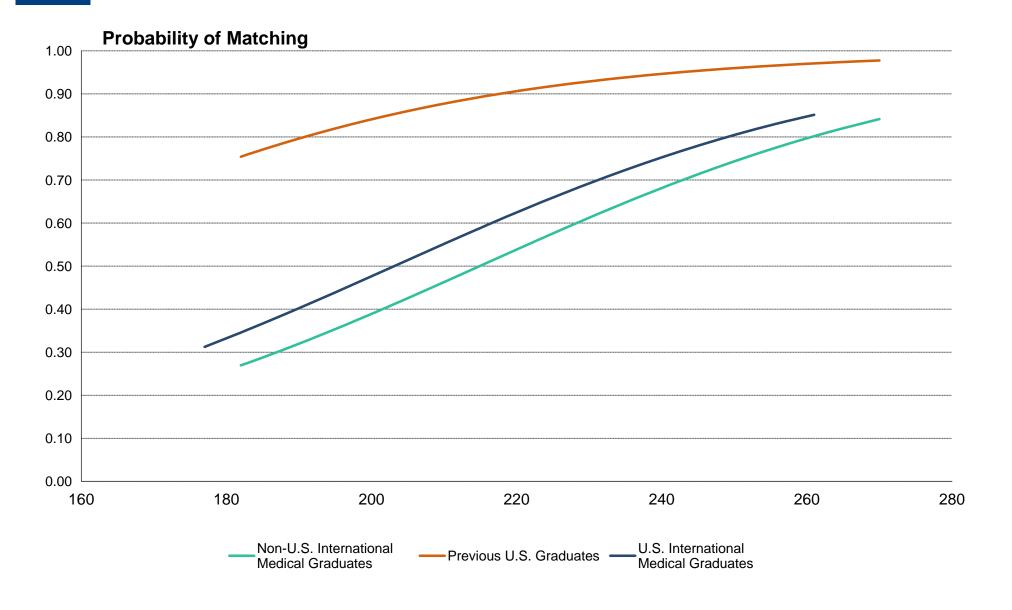
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

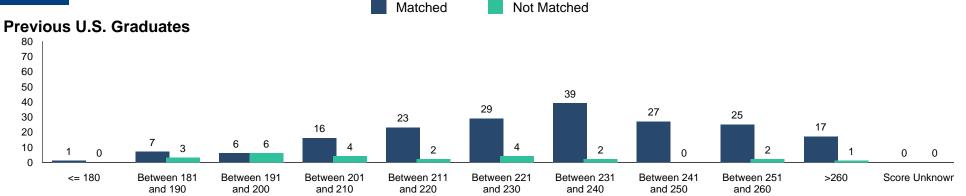
Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Pulmonary Disease and Critical Care Medicine



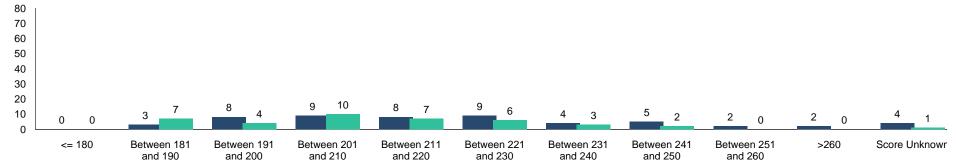
Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

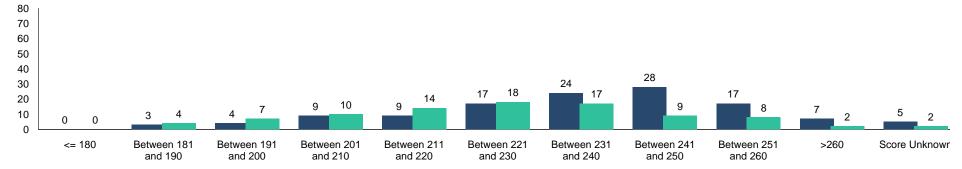
Chart-4 USMLE Step 2 Scores Pulmonary Disease and Critical Care Medicine



U.S. International Medical Graduates

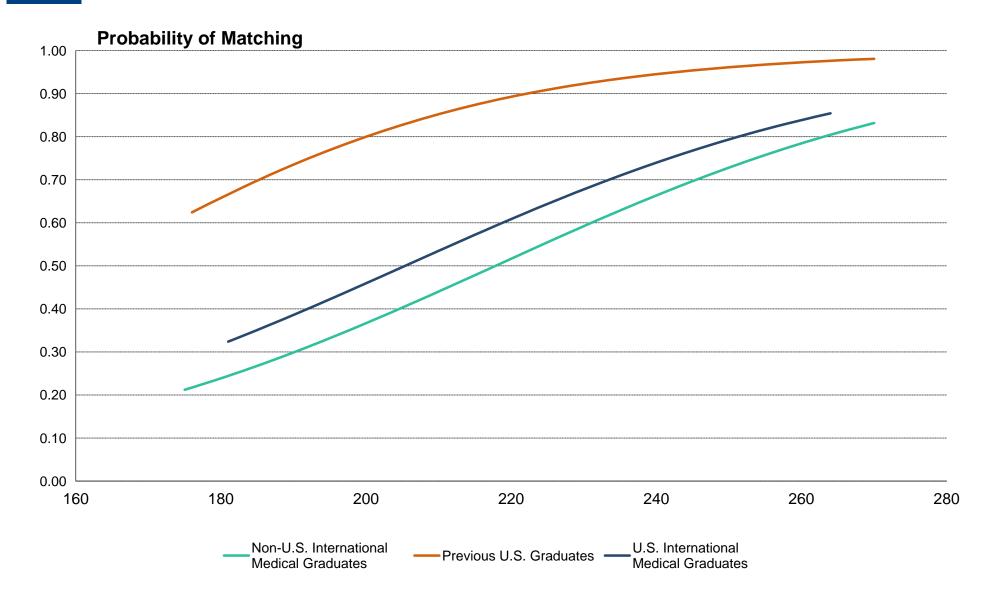


Non-U.S. International Medical Graduates



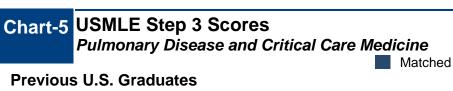
Step 2 Scores

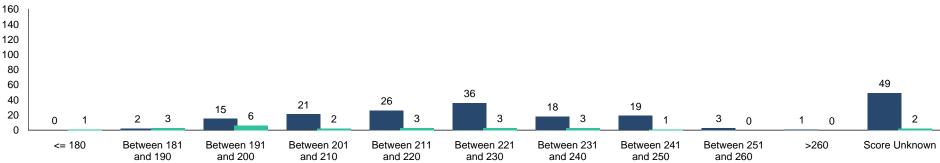
Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Pulmonary Disease and Critical Care Medicine



Step 2 Scores

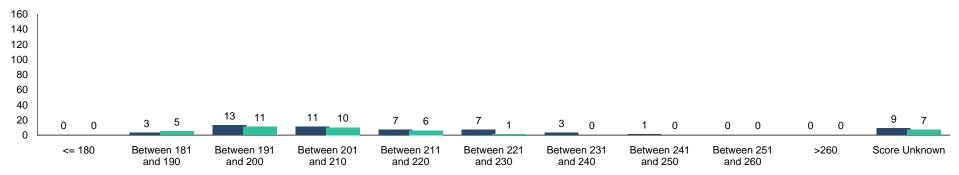
Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar 137



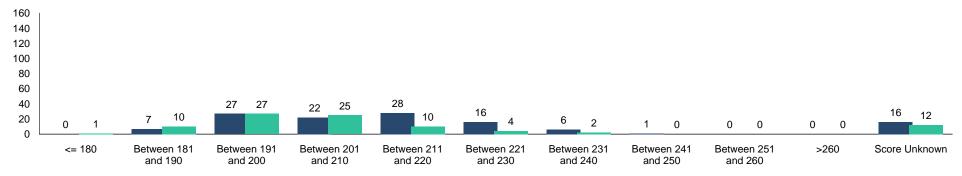


Not Matched

U.S. International Medical Graduates



Non-U.S. International Medical Graduates

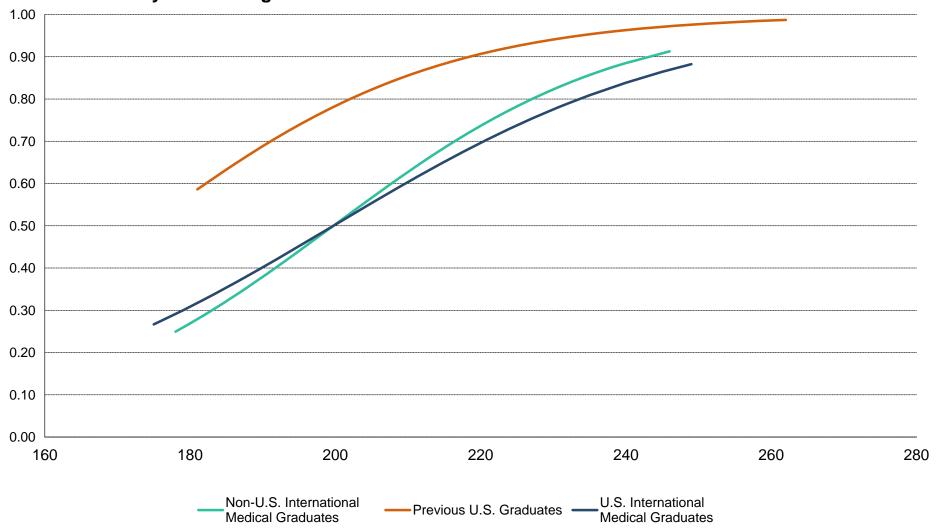


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Pulmonary Disease and Critical Care Medicine



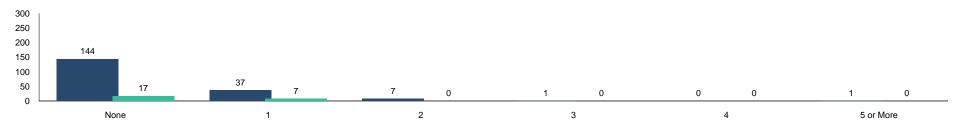


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar

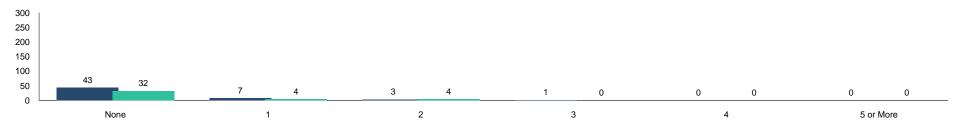


Previous U.S. Graduates

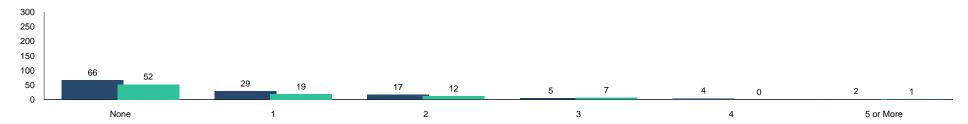


Not Matched

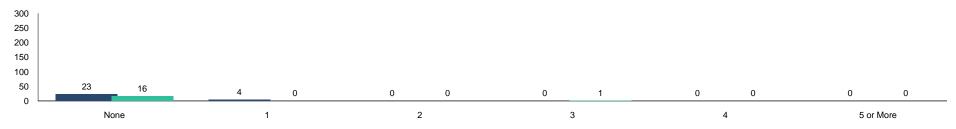
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

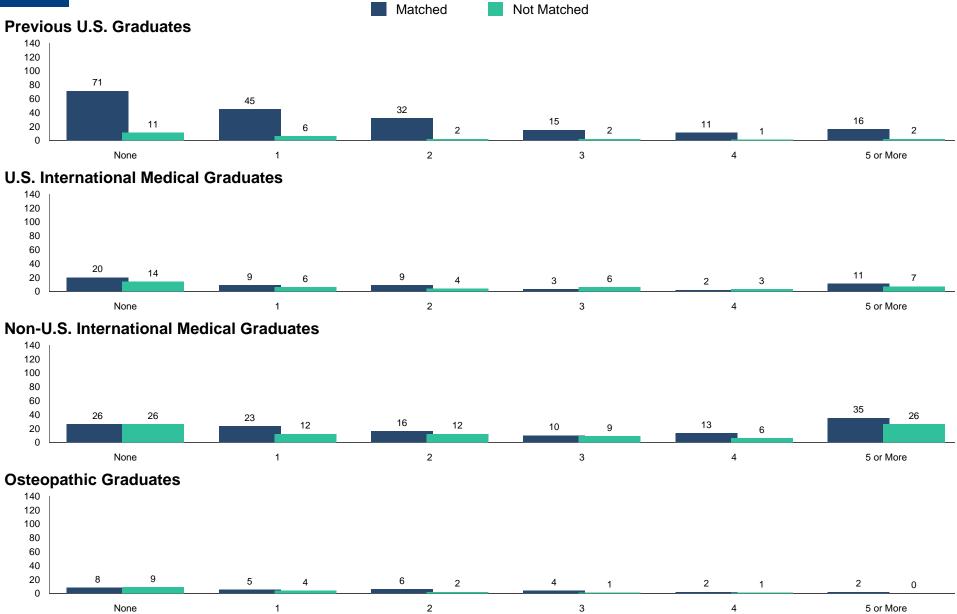


Osteopathic Graduates



Research Projects

Chart-7 Number of Abstracts, Presentations, and Publications Pulmonary Disease and Critical Care Medicine

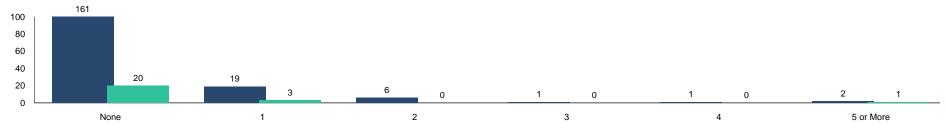


Publications

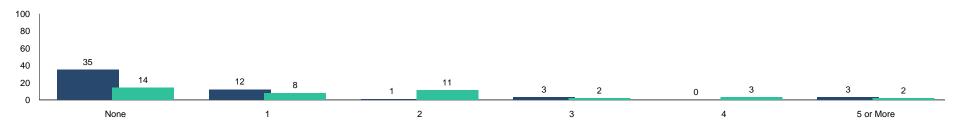
Chart-8 Number of Work Experiences Pulmonary Disease and Critical Care Medicine

Matched Not Matched

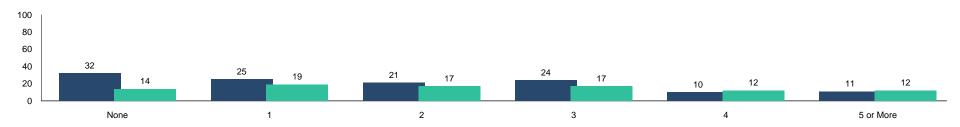
Previous U.S. Graduates



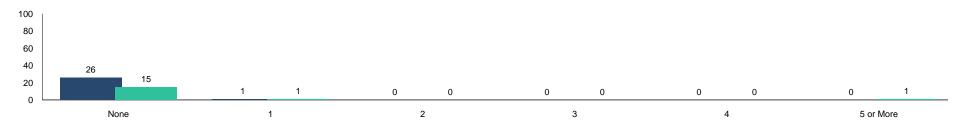
U.S. International Medical Graduates



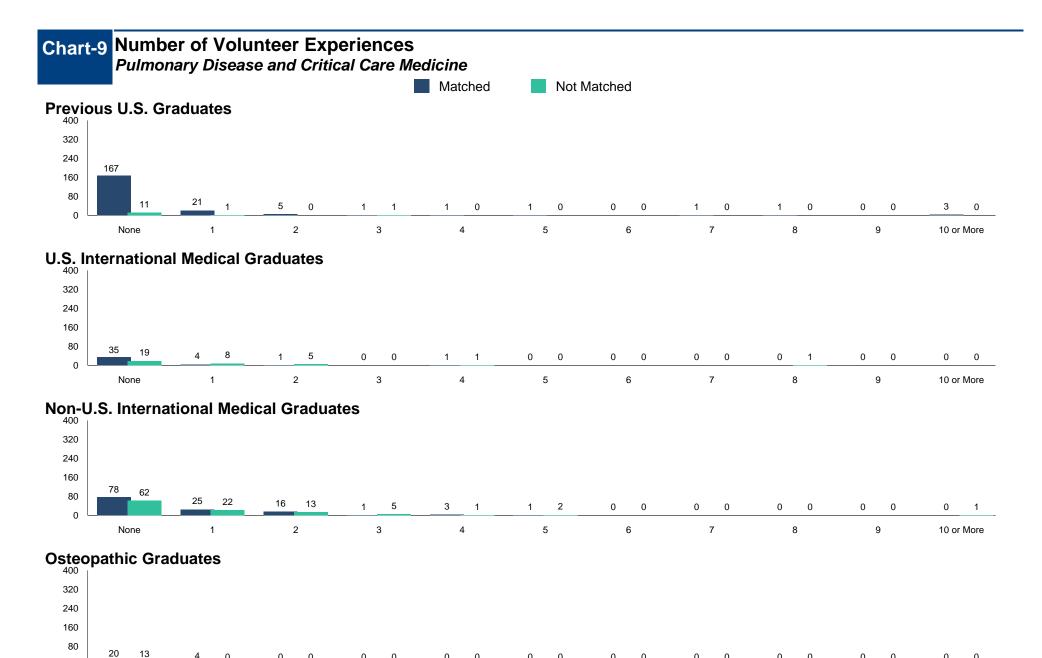
Non-U.S. International Medical Graduates



Osteopathic Graduates



Work Experiences

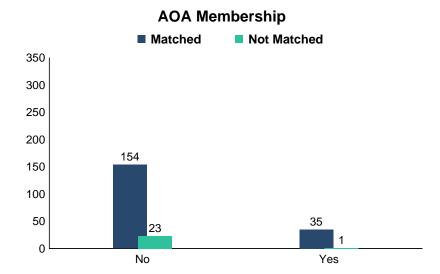


Volunteer Experiences

None

10 or More

Percentage of U.S. Graduates Who are Members of AOA Pulmonary Disease and Critical Care Medicine



Sources: NRMP Data Warehouse and AAMC Data Warehouse

Rheumatology

Table-1 Summary Statistics Rheumatology

		Previous U.S. Graduates		U.S.International Medical Graduates		Non-U.S. International Medical Graduates		Osteopathic Graduates	
Measure		Matched (n=79)	Unmatched (n=9)	Matched (n=19)	Unmatched (n=12)	Matched (n=53)	Unmatched (n=22)	Matched (n=9)	Unmatched (n=11)
1.	Mean number of contiguous ranks	6	3	7	2	6	3	5	3
2.	Mean number of distinct specialties ranked	1	1	1	1	1	1	1	1
3.	Mean USMLE Step 1 score	215	202	220	213	225	215	n/a	n/a
4.	Mean USMLE Step 2 score	224	209	223	213	234	219	n/a	n/a
5.	Mean USMLE Step 3 score	214	202	212	202	210	201	n/a	n/a
6.	Mean number of research experiences	0	0	1	1	1	0	0	0
7.	Mean number of abstracts, presentations, and publications	1	0	2	2	4	3	0	2
8.	Mean number of work experiences	0	0	1	2	2	2	0	0
9.	Mean number of volunteer experiences	0	0	0	1	1	1	0	1
10.	Percentage who are AOA members	15	0	n/a	n/a	n/a	n/a	n/a	n/a

n/a: The measure either does not apply to, applies to only a small percentage of, or no reliable data were available for this type of applicants. Note: USMLE Step scores are not available for most osteopathic medical school graduates.

Sources: Measures 1, 2, and match outcome are from the NRMP Data Warehouse; measures 3, 4, and 5 are from the AAMC Data Warehouse and from the ECFMG, both by permission of the NBME and ECFMG; and measures 6-10 are from the AAMC Data Warehouse.

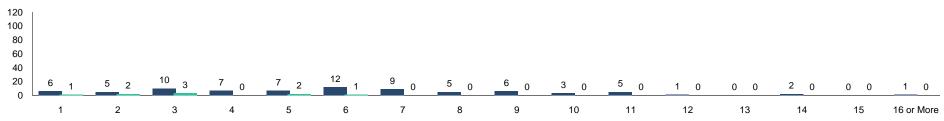


Number of Contiguous Ranks Within Preferred Specialty Rheumatology

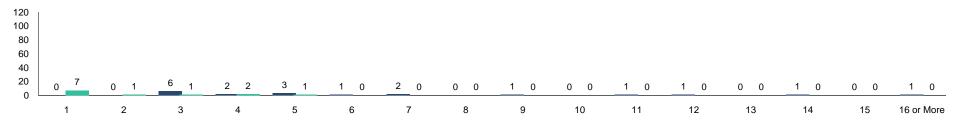




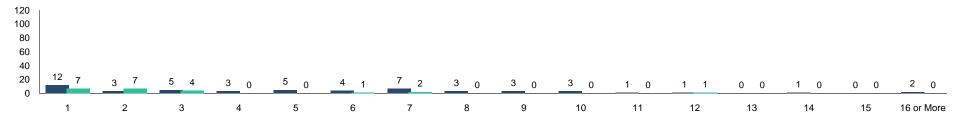
Previous U.S. Graduates



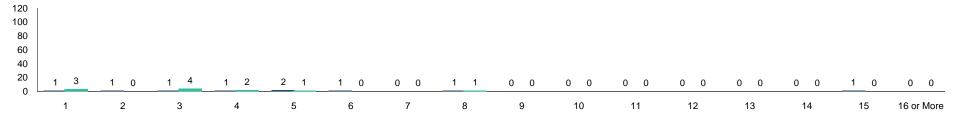
U.S. International Medical Graduates



Non-U.S. International Medical Graduates

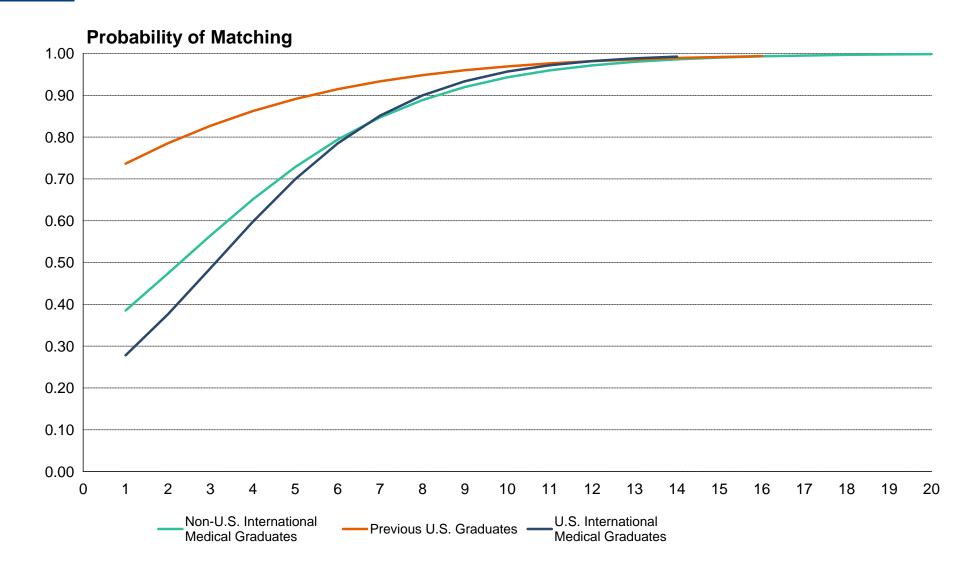


Osteopathic Graduates



Contiguous Ranks

Graph-1 Probability of Matching to Preferred Specialty by Number of Contiguous Ranks Rheumatology



Contiguous Ranks

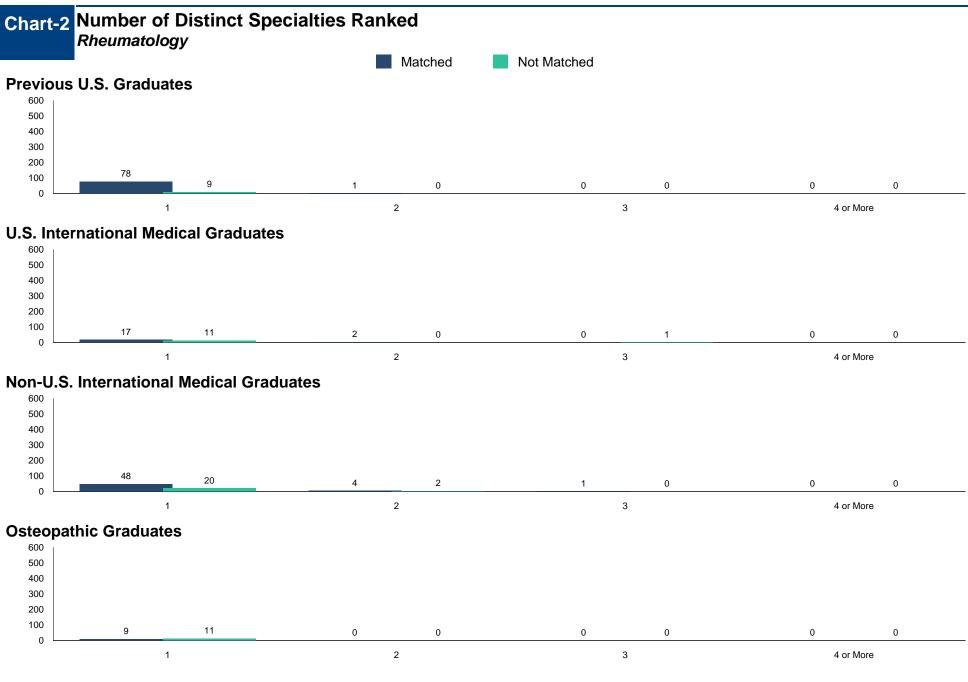
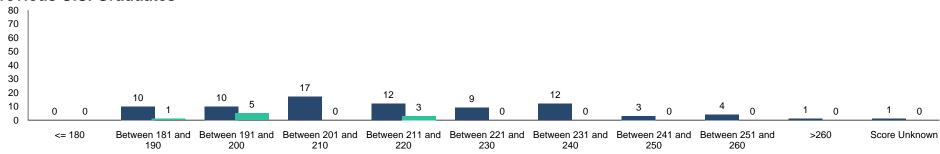


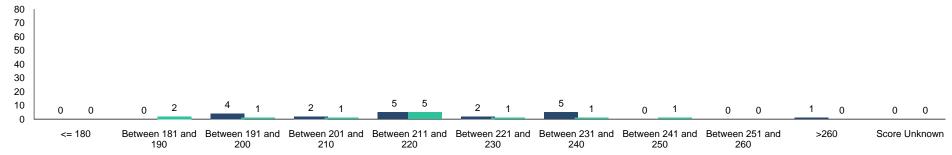
Chart-3 USMLE Step 1 Scores Rheumatology



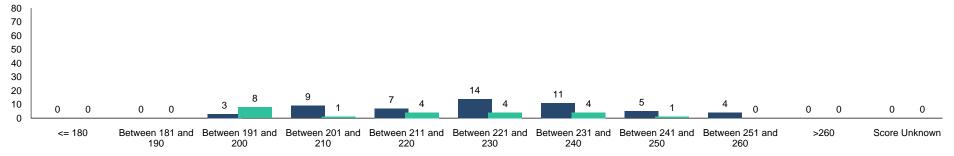
Previous U.S. Graduates



U.S. International Medical Graduates



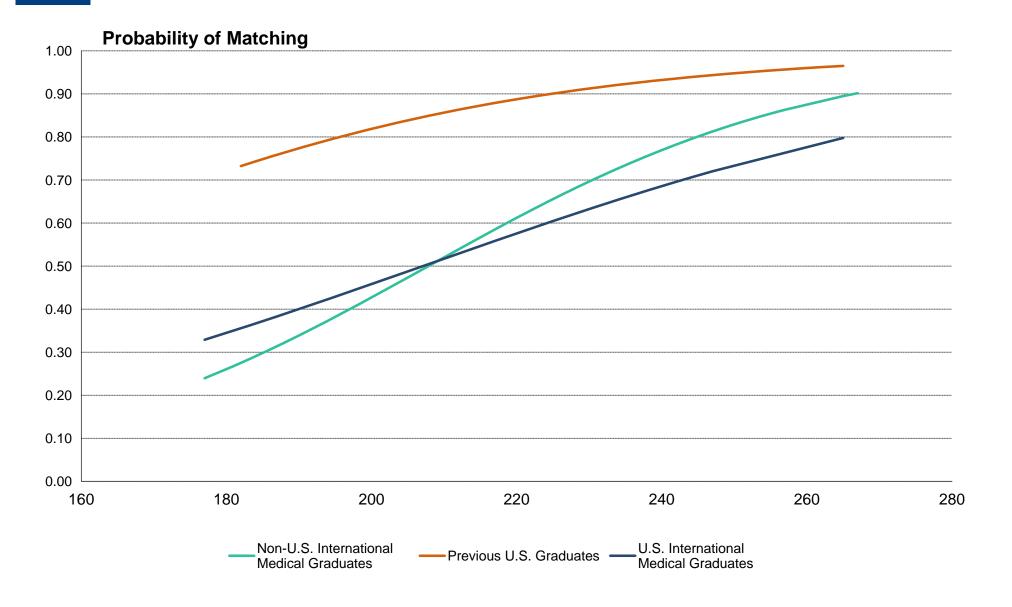
Non-U.S. International Medical Graduates



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

Graph-2 Probability of Matching to Preferred Specialty by USMLE Step 1 Score Rheumatology



Step 1 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicants.

Chart-4 USMLE Step 2 Scores Rheumatology Matched Not Matched Previous U.S. Graduates 70 60 50 40 30 16 15 20 13 11 10 3 2 0 0 0 <= 180 Between 181 Between 191 Between 201 Between 211 Between 221 Between 231 Between 241 Between 251 >260 Score Unknown and 190 and 200 and 210 and 220 and 230 and 240 and 250 and 260 U.S. International Medical Graduates 80 70 60 50 40 30 20 10 3 2 3 2 2 2 2 1 1 1 0 0 0 0 0 0 <= 180 Between 181 Between 191 Between 201 Between 211 Between 221 Between 231 Between 241 Between 251 >260 Score Unknown and 190 and 200 and 210 and 230 and 240 and 250 and 260 and 220 Non-U.S. International Medical Graduates 80 70 60 50 40 30 20 13 12 10 5 2 2 0 0 0 0

Step 2 Scores

152

Between 211

and 220

Between 221

and 230

Between 201

and 210

<= 180

Between 181

and 190

Between 191

and 200

Between 241

and 250

Between 231

and 240

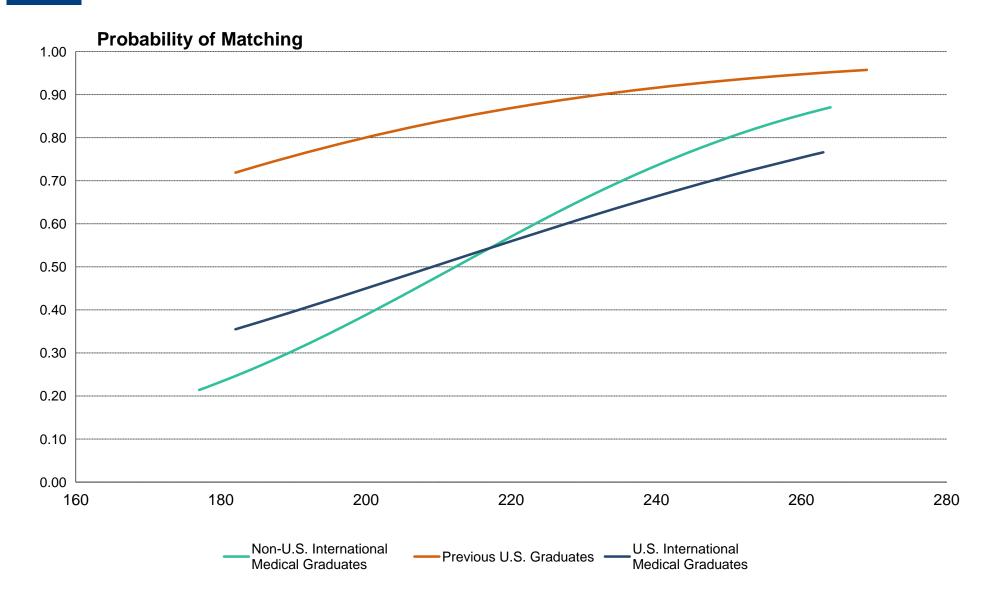
>260

Score Unknown

Between 251

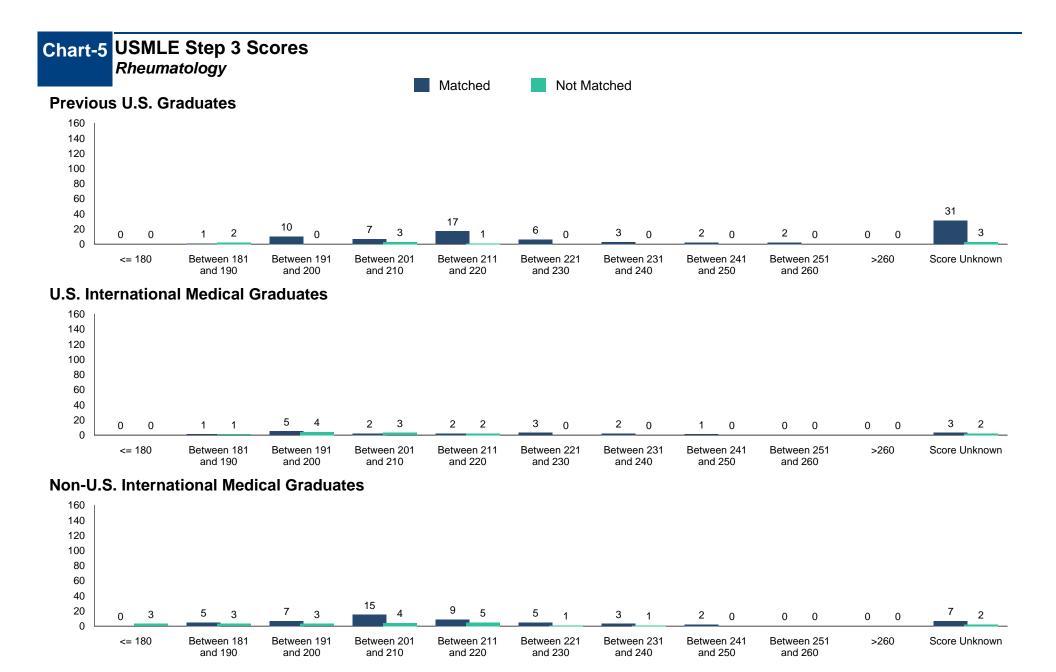
and 260

Graph-3 Probability of Matching to Preferred Specialty by USMLE Step 2 Score Rheumatology



Step 2 Scores

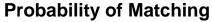
Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar

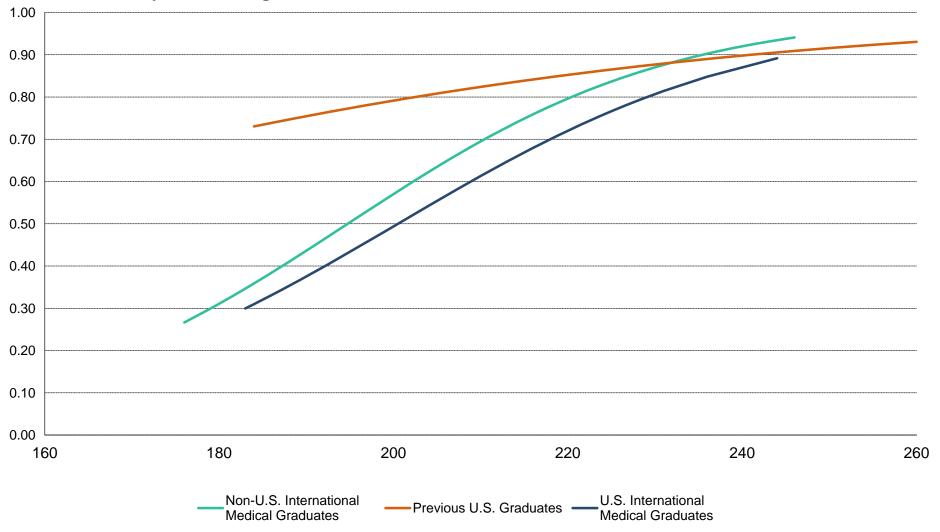


Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG.

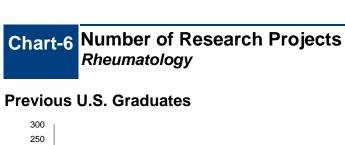
Graph-4 Probability of Matching to Preferred Specialty by USMLE Step 3 Score Rheumatology





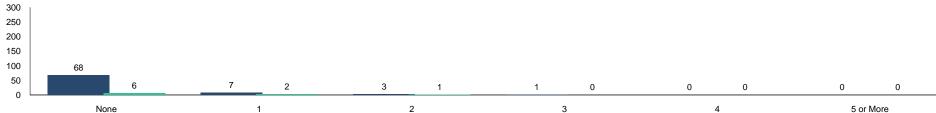
Step 3 Scores

Source: NRMP Data Warehouse and AAMC Data Warehouse. USMLE scores by permission of the NBME and ECFMG. Note: Probabilities calculated based on 2009-2011 applicar

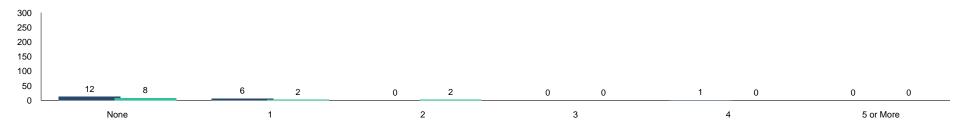




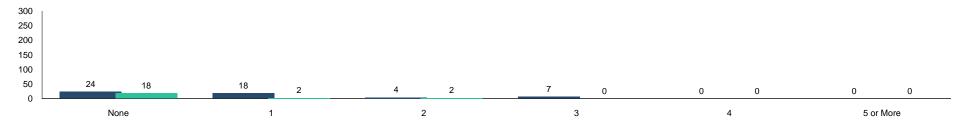




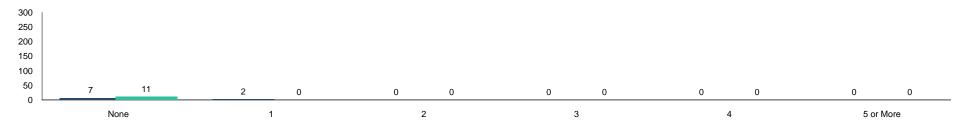
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



Osteopathic Graduates



Research Projects

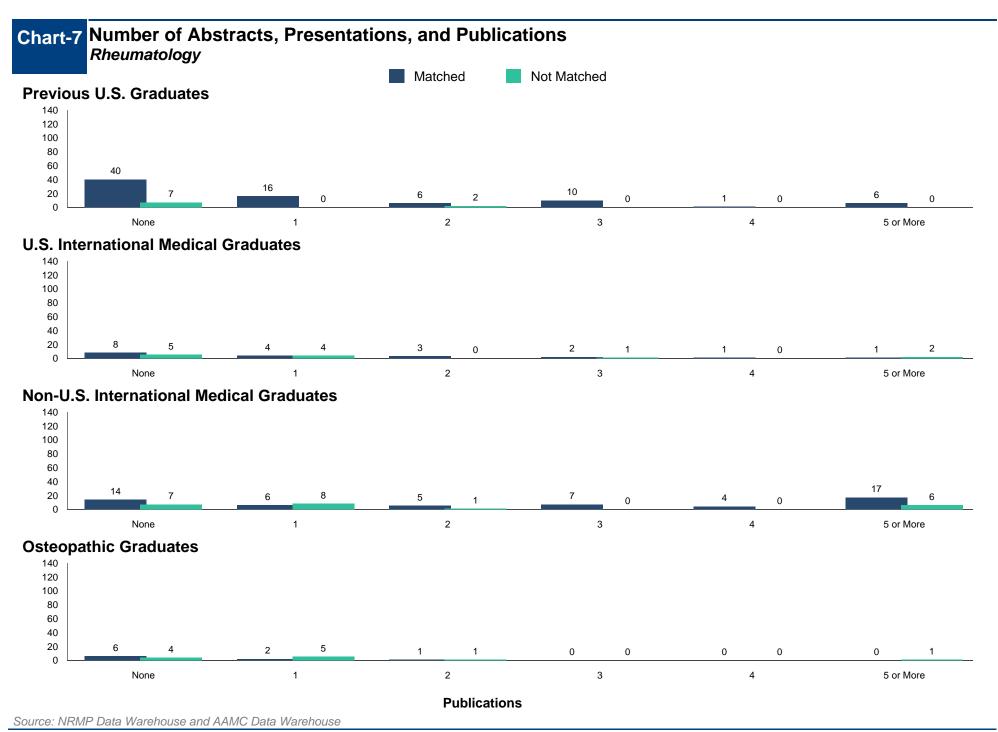
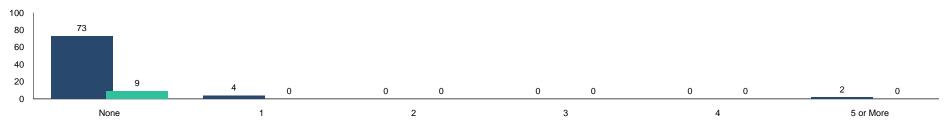


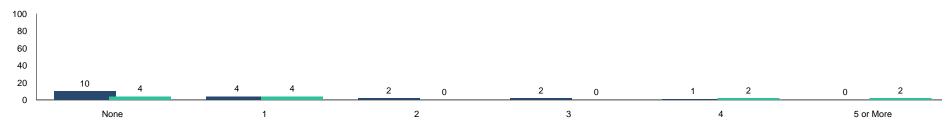
Chart-8 Number of Work Experiences *Rheumatology*



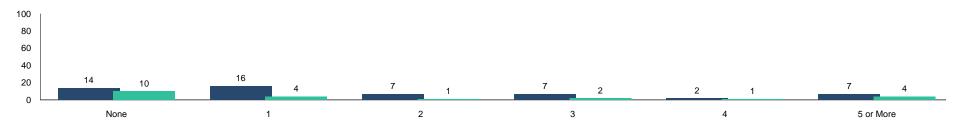
Previous U.S. Graduates



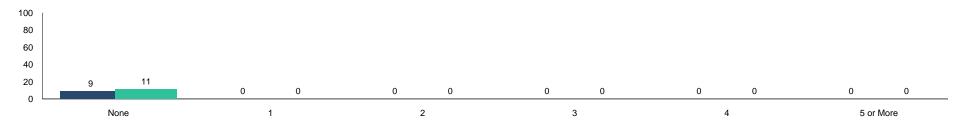
U.S. International Medical Graduates



Non-U.S. International Medical Graduates



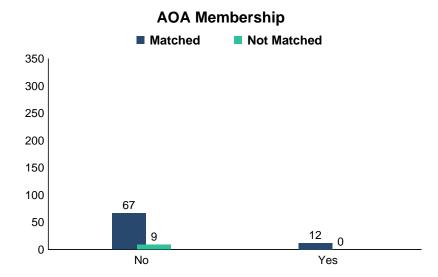
Osteopathic Graduates



Work Experiences

Chart-9 Number of Volunteer Experiences Rheumatology Matched Not Matched **Previous U.S. Graduates** None 10 or More **U.S. International Medical Graduates** None 10 or More Non-U.S. International Medical Graduates 10 or More None **Osteopathic Graduates** None 10 or More

Percentage of U.S. Graduates Who are Members of AOA Rheumatology



Sources: NRMP Data Warehouse and AAMC Data Warehouse