

# CHARTING OUTCOMES™: DEMOGRAPHIC CHARACTERISTICS OF APPLICANTS IN THE SPECIALTIES MATCHING SERVICE® (SMS®)

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## Introduction

#### **Data Collection Procedures**

Demographic data items are administered within the NRMP's Registration, Ranking, and Results (R3) system as part of Match registration. Applicants are introduced to the items with language that makes clear the data are collected for research and reporting. Applicants are explicitly told they may refuse consent for the use of their data and may opt out of answering any or all questions. Questions provide the response options "I prefer not to answer" and "I do not know". Applicants are further informed that their demographic data will never be incorporated into the matching algorithm, never be identifiable or disaggregated for the public, and never be provided in identifiable form to programs. The NRMP's demographic data collection protocol underwent Institutional Review Board (IRB) review and was determined to be exempt from IRB oversight. For more information on how the final set of demographic items were sourced, along with the final set of items used to query applicant demographics for SMS appointment year 2025, see Appendix A.

# Structure and Content of this Report

## Data Cell Size Requirements

To preserve applicant confidentiality, a minimum cell size of 25 respondents was required for all data points included in the report. In some cases, that threshold affected which demographic characteristics could be reported (for instance, a specialty may not have the cell sizes to allow race to be reported). It also restricted which response options within a characteristic could be reported (e.g., race could be reported for a specialty but only for specific race groups like Black/African American, Asian, and White). The NRMP will collect data annually; accordingly, the ability to present data with increasing granularity will improve for all specialties over time without compromising applicant confidentiality.

## **Data Presentation**

This report expands upon last year's report, which included data for the 2023 and 2024 Specialties Matching Service appointment years, with the inclusion of demographic characteristics reported by applicants who participated in the **Specialties Matching Service for appointment year 2025**. The viewer can choose to view the data for each year individually, or cumulatively, using the **Appointment Year dropdown menu**.

Viewers will have the ability to examine applicant demographics by both **preferred subspecialty** (i.e., the subspecialty of the program ranked first on each applicant's rank order list) and **matched subspecialty** (i.e., the subspecialty an applicant matched to through the match algorithm regardless of whether that subspecialty was preferred). Individual subspecialties can be selected from the **Preferred and Matched Subspecialty dropdown menus**. These dropdown menus appear in different tabs within the Tableau report (i.e., both preferred and matched specialty menus are not available within the same tab). Because some subspecialties will not have enough data to populate any of the visualizations for at least the first few years of data collection, individuals viewing the visualizations will have the option to select individual subspecialties, or superordinate categories into which some of the smaller specialties have been rolled. To create these categories, individual subspecialties were grouped based on

their Accreditation Council for Graduate Medical Education (ACGME) specialty classification. There are a handful of cases where there are subspecialties not included in ACGME's specialty structure. In these instances, subspecialties were grouped based on which overarching specialty is assigned within the NRMP system. These specialty categories are reflected in the **Preferred and Matched Specialty Group dropdown menus**.

It is important to reiterate that preferred subspecialty reporting is based on the first-ranked subspecialty on each applicant's rank order list and does not necessarily mean that an applicant obtained a position within that preferred subspecialty. For example, applicants whose preferred subspecialty is Pediatric Hematology/Oncology but who obtain a position in Pediatric Infectious Disease will appear in the visualizations under Pediatric Hematology/Oncology, <u>not</u> Pediatric Infectious Disease. This is to better understand the patterns of applicants and their ranked subspecialty, not necessarily their outcome.

In addition to the ability to examine the demographic information by subspecialty, many visualizations include an **Applicant Type dropdown menu**, which allows the viewer to view the information by each of the five applicant types included in the report.

For a full list of visualizations and other components of this report, viewers can visit the Table of Contents screen within the interactive version of the report. Below is a list of visualization types within each category, as well as a description of each.

- Active Applicants by Preferred Subspecialty: Specialties Matching Service— Demographic characteristics by preferred subspecialty—all applicant types. Viewers wishing to view only a subset of applicant types can select the applicant types they wish to view.
- Active Applicants by Matched Subspecialty: Specialties Matching Service— Demographic characteristics by matched subspecialty—all applicant types. Viewers wishing to view only a subset of applicant types can select the applicant types they wish to view.
- Active Applicants by Preferred Subspecialty and Applicant Type: Specialties Matching Service—Demographic characteristics by preferred subspecialty and applicant type.
- Active Applicants by Matched Subspecialty and Applicant Type: Specialties Matching Service—Demographic characteristics by matched subspecialty and applicant type.
- Active Applicants Match Outcomes by Matched Subspecialty: Specialties
   Matching Service—Demographic characteristics by matched subspecialty and Match
   outcomes.
- Active Unmatched Applicants by Preferred Subspecialty: Specialties Matching Service—Demographic characteristics of unmatched applicants by preferred subspecialty.

The visualizations included at the specialty level have between one and eight demographic characteristics reported. In cases where only a subset of the available response options is

reported (due to small cell sizes), the percentages included in the visualizations are based only on applicants who endorsed the response options with sufficient cell sizes to report. For example, in the Active Applicants by Match Outcomes visualizations, some cell sizes for the "unmatched by algorithm" response option are too small to report, leading to some categories reporting 100 percent of a grouping as having been matched by the algorithm. This represents 100 percent of the data included in the visualization after the removal of the prohibitively small cells but does not represent 100 percent of the underlying data.

Consistent with standard practice in analyses of survey data, the response options "I do not know" and "I prefer not to answer" were combined for all demographic characteristics that included these two options. For first-generation college and first-generation medical school graduation, the two "yes" categories (i.e., yes first in my immediate family; yes first in my extended family) were also combined. Please see Appendix A for additional detail about the demographic characteristics queried and associated response options.

# Sample and Consent Rates for the Present Report

#### Sample

This section of the report highlights active applicants participating in the Specialties Matching Service (SMS) for fellowship appointment year 2025, which included 85 subspecialties and yielded a final sample size of 14,833 active applicants.

#### **Consent Rates**

Percentages of active applicants who consented to provide demographic data for research, combining over all applicant types, are shown in Table 3 by preferred subspecialty, and shown in Table 4 by matched subspecialty. Overall, 78.6 percent (N=11,655) of SMS applicants consented to provide demographic data for appointment year 2025. When looking at SMS applicants who *matched* to a subspecialty, 79.3 percent (N=9,829) consented to provide demographic data. Consent rates also varied both by subspecialty and by applicant type. Among subspecialties with at least 25 consenting active applicants, the highest consent rates were in Headache Medicine by both *preferred* subspecialty (89.4%) and by *matched* subspecialty (90.7%). The lowest consent rates by both *preferred* (67.9%) and *matched* (68.3%) subspecialty were in Neuroradiology (67.9%). Consent to provision of demographic data for research by applicant type, combining over preferred subspecialties, are shown in Table 1. The highest percentages consenting to use of data was observed among Canadian graduates (88.5%) while the lowest rate was observed among U.S. IMGs (74.9%).

## "Do Not Know" and "Prefer Not to Answer" Responses

The percentages of active applicants who consented to provide demographic data for research and indicated that they did not know or preferred not to answer one or more items was 15.7 percent by *preferred* subspecialty and 15.2 percent by *matched* subspecialty. As noted previously, these two response options were combined for the analyses. Among applicants who did not know or preferred not to answer any items, the majority gave this response to only one question, accounting for 10.4 percent of the overall sample by *preferred* subspecialty and 10.2 percent of the overall sample by *matched* specialty. As with consent to provide demographic data, do not know/prefer not to answer responses to demographic questions varied by preferred

subspecialty (Table 5) and matched subspecialty (Table 6). Among subspecialties with at least 25 consenting active applicants, the lowest rates of applicants who gave any do not know/prefer not to answer responses were in Sports Medicine (Pediatrics) by both *preferred* subspecialty (4.0%) and by *matched* subspecialty (4.0%). The highest rates of applicants endorsing these responses were in Developmental and Behavioral Pediatrics by both *preferred* subspecialty (40.7%) and by *matched* subspecialty (42.4%). The lowest percentage of applicants providing any of these responses (see Table 2) was observed among U.S. MD graduates (13.9%) while the highest was observed among US IMGs (21.6%).

Table 1. Consent Rates (%) by Applicant Type—SMS Appointment Year 2025<sup>1</sup>

Applicant Type <sup>2</sup>	Total NRMP Active Applicants <sup>3</sup> , N	Consented to provide demographic data, N (%)
U.S. MD Graduates	7,507	6,008 (80.0)
U.S. DO Graduates	2,349	1,815 (77.3)
U.S. IMGs	1,947	1,458 (74.9)
Non-U.S. IMGs	2,978	2,328 (78.2)
Canadian Graduates	52	46 (88.5)

<sup>&</sup>lt;sup>1</sup> Fellowship applicants can participate in multiple Matches. For SMS appointment year 2025, there were 18 applicants who participated in more than one Match. These individuals are included in the table above, meaning the values included in the table are not unique applicant counts. The inclusion vs. exclusion of these applicants did not notably change the consent rates.

Table 2. "Do Not Know/Prefer Not to Answer" Responses to Demographic Questions by Applicant Type—SMS Appointment Year 2025<sup>1</sup>

Applicant Type <sup>2</sup>		%³ of "Do Not Know/Prefer Not to Answer" Responses among Active Applicants⁴			
	0	1	2	3 or more	
U.S. MD Graduates	86.1	9.5	2.1	2.2	
U.S. DO Graduates	85.5	9.8	2.3	2.5	
U.S. IMGs	78.4	14.3	3.2	4.1	
Non-U.S. IMGs	82.2	11.7	2.6	3.5	
Canadian Graduates	82.6	10.9	0.0	6.5	

<sup>&</sup>lt;sup>1</sup> Fellowship applicants can participate in multiple Matches. For SMS appointment year 2025, there were 18 applicants who participated in more than one Match. These individuals are included in the table above, meaning the values included in the table are not unique applicant counts. The inclusion vs. exclusion of these applicants did not notably change the observed consent rates.

<sup>&</sup>lt;sup>2</sup> Excludes Fifth Pathway applicants due to small subgroup sizes.

<sup>&</sup>lt;sup>3</sup> Active applicants are applicants who certified a rank order list.

<sup>&</sup>lt;sup>2</sup> Excludes Fifth Pathway applicants due to small subgroup sizes.

<sup>&</sup>lt;sup>3</sup> Some percentages may not add to 100 because of rounding.

<sup>&</sup>lt;sup>4</sup> Active applicants are applicants who certified a rank order list.

Table 3. Consent Rates by Preferred Subspecialty—SMS Appointment Year 2025<sup>1</sup>

Preferred Subspecialty <sup>2</sup>	Number of Active Applicants <sup>3</sup>	Number Consenting to Provide Demographic Data for Research	Consent Rate (%)
Academic General Pediatrics	-	-	-
Addiction Medicine	166	124	74.7
Addiction Psychiatry	63	46	73.0
Adolescent Medicine	_	-	_
Adult Congenital Heart Disease	25	17	68.0
Advanced Heart Failure & Transplant Cardiology	64	54	84.4
Allergy and Immunology	239	178	74.5
Brain Injury Medicine (Physical Medicine &	200	22	04.6
Rehabilitation)	26	22	84.6
Breast Imaging	173	121	69.9
Cancer Rehabilitation	-	4 405	-
Cardiovascular Disease	1,899	1,465	77.2
Child Abuse	-	-	- 74.0
Child and Adolescent Psychiatry	333	249	74.8
Clinical Cardiac Electrophysiology	177	139	78.5
Clinical Neurophysiology	90	70	77.8
Clinical Ultrasound	147	126	85.7
Colon and Rectal Surgery	175	137	78.3
Complex Family Planning	33	29	87.9
Consultation-Liaison Psychiatry	97	75	77.3
Critical Care Medicine (Internal Medicine)	218	167	76.6
Developmental and Behavioral Pediatrics	31	27	87.1
Emergency Medical Services	113	92	81.4
Emergency Radiology	-	-	-
Endocrinology, Diabetes, Metabolism	454	348	76.7
Epilepsy Female Pelvic Medicine and Reconstructive Surgery (OB/GYN)	119 66	96 53	80.7 80.3
Female Pelvic Medicine and Reconstructive Surgery (Urology)	26	20	76.9
Forensic Pathology	37	29	78.4
Gastroenterology	1,114	841	75.5
Geriatric Medicine (Family Medicine)	-	-	-
Geriatric Medicine (Internal Medicine)	150	124	82.7
Global Emergency Medicine	30	25	83.3
Gynecologic Oncology	89	79	88.8

Preferred Subspecialty <sup>2</sup>	Number of Active Applicants <sup>3</sup>	Number Consenting to Provide Demographic Data for Research	Consent Rate (%)
Hand Surgery (General Surgery)	-	-	-
Hand Surgery (Orthopaedic Surgery)	165	142	86.1
Hand Surgery (Plastic Surgery)	-	-	-
Headache Medicine	66	59	89.4
Hematology and Oncology	1,051	841	80.0
Hospice and Palliative Medicine	382	305	79.8
Infectious Disease	325	264	81.2
Interventional Cardiology	289	217	75.1
Interventional Pulmonology	51	39	76.5
Interventional Radiology	96	70	72.9
Laryngology	-	-	-
Maternal-Fetal Medicine	150	126	84.0
Medical Genetics	-	-	-
Medical Toxicology (Emergency Medicine)	56	47	83.9
Minimally Invasive Gynecologic Surgery	68	58	85.3
Musculoskeletal Radiology	158	122	77.2
Neonatal-Perinatal Medicine	292	231	79.1
Nephrology	367	293	79.8
Neuroradiology	299	203	67.9
Oncology	-	-	-
Pain Medicine	341	266	78.0
Pediatric Cardiology	180	153	85.0
Pediatric Critical Care Medicine	240	197	82.1
Pediatric Emergency Medicine (Emergency Medicine)	27	21	77.8
Pediatric Emergency Medicine (Pediatrics)	178	142	79.8
Pediatric Endocrinology	59	46	78.0
Pediatric Gastroenterology	103	78	75.7
Pediatric Hematology/Oncology	152	126	82.9
Pediatric Hospital Medicine	132	112	84.9
Pediatric Infectious Diseases	47	41	87.2
Pediatric Nephrology	29	25	86.2
Pediatric Pulmonology	50	42	84.0
Pediatric Rehabilitation Medicine	-	-	-
Pediatric Rheumatology	30	26	86.7
Pediatric Surgery	68	58	85.3
Pediatric Transplant Hepatology	-	-	-

Preferred Subspecialty <sup>2</sup>	Number of Active Applicants <sup>3</sup>	Number Consenting to Provide Demographic Data for Research	Consent Rate (%)
Pediatric and Adolescent Gynecology	-	-	-
Pulmonary Disease	-	-	-
Pulmonary Disease and Critical Care Medicine	989	784	79.3
Reproductive Endocrinology	68	59	86.8
Rheumatology	365	286	78.4
Sleep Medicine	227	168	74.0
Spinal Cord Injury Medicine	-	-	-
Sports Medicine (Emergency Medicine)	-	-	-
Sports Medicine (Family Medicine)	394	312	79.2
Sports Medicine (Pediatrics)	29	25	86.2
Sports Medicine (Physical Medicine and Rehabilitation)	46	36	78.3
Surgical Critical Care	311	257	82.6
Surgical Oncology	105	83	79.1
Thoracic Surgery	155	125	80.7
Vascular Neurology	187	147	78.6
Vascular Surgery	128	101	78.9
TOTAL	14,833	11,655	78.6

<sup>&</sup>lt;sup>1</sup> Fellowship applicants can participate in multiple Matches. For SMS appointment year 2025, there were 18 applicants who participated in more than one Match. These individuals are included in the table above, meaning the values included in the table are not unique applicant counts. The inclusion vs. exclusion of these applicants did not notably change the observed consent rates.

<sup>&</sup>lt;sup>2</sup> Subspecialties that did not meet the minimum cell size for reporting of data are included as rows in the table with no data reported, denoted by "-".

<sup>&</sup>lt;sup>3</sup> Active applicants are applicants who certified a rank order list.

Table 4. Consent Rates by Matched Subspecialty—SMS Appointment Year 2025<sup>1</sup>

Matched Subspecialty <sup>2</sup>	Number of Active Applicants <sup>3</sup>	Number Consenting to Provide Demographic Data for Research	Consent Rate (%)
Academic General Pediatrics	-	-	-
Addiction Medicine	156	119	76.3
Addiction Psychiatry	61	44	72.1
Adolescent Medicine	-	-	-
Adult Congenital Heart Disease	-	-	-
Advanced Heart Failure & Transplant Cardiology	61	52	85.3
Allergy and Immunology	165	127	77.0
Brain Injury Medicine (Physical Medicine &	0.5	00	00.0
Rehabilitation)	25	22	88.0
Breast Imaging	162	113	69.8
Cancer Rehabilitation	-	-	- 70.0
Cardiovascular Disease	1,260	986	78.3
Child Abuse	-	-	
Child and Adolescent Psychiatry	318	237	74.5
Clinical Cardiac Electrophysiology	149	120	80.5
Clinical Neurophysiology	76	56	73.7
Clinical Ultrasound	142	123	86.7
Colon and Rectal Surgery	117	96	82.1
Complex Family Planning	33	29	87.9
Consultation-Liaison Psychiatry	95	74	77.9
Critical Care Medicine (Internal Medicine)	193	150	77.7
Developmental and Behavioral Pediatrics	30	26	86.7
Emergency Medical Services	98	79	80.6
Emergency Radiology	-	-	-
Endocrinology, Diabetes, Metabolism	380	289	76.1
Epilepsy	125	102	81.6
Female Pelvic Medicine and Reconstructive Surgery (OB/GYN)	56	45	80.4
Female Pelvic Medicine and Reconstructive Surgery (Urology)	-	-	-
Forensic Pathology	35	27	77.1
Gastroenterology	724	566	78.2
Geriatric Medicine (Family Medicine)	-	-	-
Geriatric Medicine (Internal Medicine)	150	125	83.3
Global Emergency Medicine	-	-	-
Gynecologic Oncology	86	76	88.4

Matched Subspecialty <sup>2</sup>	Number of Active Applicants <sup>3</sup>	Number Consenting to Provide Demographic Data for Research	Consent Rate (%)
Hand Surgery (General Surgery)	-	-	-
Hand Surgery (Orthopaedic Surgery)	150	131	87.3
Hand Surgery (Plastic Surgery)	-	-	-
Headache Medicine	54	49	90.7
Hematology and Oncology	771	638	82.8
Hospice and Palliative Medicine	371	298	80.3
Infectious Disease	316	257	81.3
Interventional Cardiology	272	205	75.4
Interventional Pulmonology	43	34	79.1
Interventional Radiology	93	69	74.2
Laryngology	-	-	-
Maternal-Fetal Medicine	138	117	84.8
Medical Genetics	-	-	-
Medical Toxicology (Emergency Medicine)	50	42	84.0
Minimally Invasive Gynecologic Surgery	47	40	85.1
Musculoskeletal Radiology	156	120	76.9
Neonatal-Perinatal Medicine	277	216	78.0
Nephrology	362	289	79.8
Neuroradiology	287	196	68.3
Oncology	-	-	-
Pain Medicine	320	249	77.8
Pediatric Cardiology	172	146	84.9
Pediatric Critical Care Medicine	222	184	82.9
Pediatric Emergency Medicine (Emergency Medicine)	38	31	81.6
Pediatric Emergency Medicine (Pediatrics)	163	127	77.9
Pediatric Endocrinology	62	49	79.0
Pediatric Gastroenterology	99	76	76.8
Pediatric Hematology/Oncology	152	124	81.6
Pediatric Hospital Medicine	120	103	85.8
Pediatric Infectious Diseases	43	37	86.1
Pediatric Nephrology	29	25	86.2
Pediatric Pulmonology	46	39	84.8
Pediatric Rehabilitation Medicine	-	-	-
Pediatric Rheumatology	27	22	81.5
Pediatric Surgery	49	40	81.6
Pediatric Transplant Hepatology	-	-	-

Matched Subspecialty <sup>2</sup>	Number of Active Applicants <sup>3</sup>	Number Consenting to Provide Demographic Data for Research	Consent Rate (%)
Pediatric and Adolescent Gynecology	-	-	-
Pulmonary Disease	-	-	-
Pulmonary Disease and Critical Care Medicine	794	632	79.6
Reproductive Endocrinology	56	50	89.3
Rheumatology	284	227	79.9
Sleep Medicine	207	151	73.0
Spinal Cord Injury Medicine	-	-	-
Sports Medicine (Emergency Medicine)	-	-	-
Sports Medicine (Family Medicine)	302	236	78.2
Sports Medicine (Pediatrics)	29	25	86.2
Sports Medicine (Physical Medicine & Rehabilitation)	40	31	77.5
Surgical Critical Care	297	245	82.5
Surgical Oncology	76	60	79.0
Thoracic Surgery	92	78	84.8
Vascular Neurology	184	145	78.8
Vascular Surgery	125	99	79.2
TOTAL	12,390	9,829	79.3

<sup>&</sup>lt;sup>1</sup> Fellowship applicants can participate in multiple Matches. For SMS appointment year 2025, there were 18 applicants who participated in more than one Match. These individuals are included in the table above, meaning the values included in the table are not unique applicant counts. The inclusion vs. exclusion of these applicants did not notably change the observed consent rates.

<sup>&</sup>lt;sup>2</sup> Subspecialties that did not meet the minimum cell size for reporting of data are included as rows in the table with no data reported, denoted by "-".

<sup>&</sup>lt;sup>3</sup> Active applicants are applicants who certified a rank order list.

Table 5. "Do Not Know/Prefer Not to Answer" Responses to Demographic Questions by Preferred Subspecialty—SMS Appointment Year 2025<sup>1</sup>

Preferred Subspecialty <sup>2</sup>	% <sup>3</sup> of "Do Not Know/Prefer Not to Answe Responses among Active Applicants <sup>4</sup>			
	0	1	2	3 or more
Academic General Pediatrics	-	-	•	-
Addiction Medicine	79.0	10.5	8.9	1.6
Addiction Psychiatry	82.6	13.0	4.4	0.0
Adolescent Medicine	-	-	-	-
Adult Congenital Heart Disease	-	-	-	_
Advanced Heart Failure & Transplant Cardiology	87.0	9.3	3.7	0.0
Allergy and Immunology	80.9	14.0	2.3	2.8
Brain Injury Medicine (Physical Medicine & Rehabilitation)	-	-	-	-
Breast Imaging	78.5	13.2	4.1	4.1
Cancer Rehabilitation	-	-	-	-
Cardiovascular Disease	86.5	8.8	2.3	2.4
Child Abuse	-	-	-	-
Child and Adolescent Psychiatry	77.5	17.3	2.8	2.4
Clinical Cardiac Electrophysiology	81.3	9.4	2.2	7.2
Clinical Neurophysiology	85.7	10.0	2.9	1.4
Clinical Ultrasound	84.9	12.7	1.6	0.8
Colon and Rectal Surgery	82.5	11.0	4.4	2.2
Complex Family Planning	82.8	13.8	0.0	3.5
Consultation-Liaison Psychiatry	80.0	12.0	4.0	4.0
Critical Care Medicine (Internal Medicine)	80.8	15.0	1.2	3.0
Developmental and Behavioral Pediatrics	59.3	37.0	3.7	0.0
Emergency Medical Services	78.3	16.3	3.3	2.2
Emergency Radiology	-	-	-	-
Endocrinology, Diabetes, Metabolism	81.9	12.1	3.2	2.9
Epilepsy	79.2	12.5	3.1	5.2
Female Pelvic Medicine and Reconstructive Surgery (OB/GYN)	86.8	9.4	0.0	3.8
Female Pelvic Medicine and Reconstructive Surgery (Urology)	-	-	-	-
Forensic Pathology	82.8	10.3	0.0	6.9
Gastroenterology	84.7	10.1	2.4	2.9
Geriatric Medicine (Family Medicine)	-	-	-	-
Geriatric Medicine (Internal Medicine)	84.7	12.1	1.6	1.6
Global Emergency Medicine	92.0	8.0	0.0	0.0
Gynecologic Oncology	83.5	13.9	1.3	1.3
Hand Surgery (General Surgery)	-	-	-	-

Preferred Subspecialty <sup>2</sup>	%³ of "Do Not Know/Prefer Not to Answer" Responses among Active Applicants⁴			
	0	1	2	3 or more
Hand Surgery (Orthopaedic Surgery)	90.1	5.6	1.4	2.8
Hand Surgery (Plastic Surgery)	-	-	-	-
Headache Medicine	83.1	10.2	1.7	5.1
Hematology and Oncology	84.2	9.6	2.6	3.6
Hospice and Palliative Medicine	83.9	10.2	2.0	3.9
Infectious Disease	81.4	14.0	2.3	2.3
Interventional Cardiology	84.3	11.1	0.5	4.2
Interventional Pulmonology	82.1	12.8	2.6	2.6
Interventional Radiology	82.9	10.0	2.9	4.3
Laryngology	-	-	-	-
Maternal-Fetal Medicine	91.3	6.4	2.4	0.0
Medical Genetics	-	-	-	-
Medical Toxicology (Emergency Medicine)	83.0	10.6	6.4	0.0
Minimally Invasive Gynecologic Surgery	87.9	6.9	3.5	1.7
Musculoskeletal Radiology	82.8	9.8	2.5	4.9
Neonatal-Perinatal Medicine	85.7	10.4	1.3	2.6
Nephrology	84.0	11.3	2.7	2.1
Neuroradiology	82.3	10.8	3.0	3.9
Oncology	-	-	-	-
Pain Medicine	84.6	12.4	0.8	2.3
Pediatric Cardiology	89.5	7.2	2.0	1.3
Pediatric Critical Care Medicine	84.3	10.7	3.1	2.0
Pediatric Emergency Medicine (Emergency Medicine)	-	-	-	-
Pediatric Emergency Medicine (Pediatrics)	85.9	10.6	1.4	2.1
Pediatric Endocrinology	89.1	6.5	4.4	0.0
Pediatric Gastroenterology	84.6	14.1	1.3	0.0
Pediatric Hematology/Oncology	86.5	12.7	0.8	0.0
Pediatric Hospital Medicine	91.1	8.0	0.9	0.0
Pediatric Infectious Diseases	85.4	12.2	0.0	2.4
Pediatric Nephrology	100.0	0.0	0.0	0.0
Pediatric Pulmonology	81.0	16.7	0.0	2.4
Pediatric Rehabilitation Medicine	-	-	-	-
Pediatric Rheumatology	80.8	11.5	7.7	0.0
Pediatric Surgery	87.9	1.7	3.5	6.9
Pediatric Transplant Hepatology	-	-	-	-
Pediatric and Adolescent Gynecology	-	-	-	-
Pulmonary Disease	-	-	-	-
Pulmonary Disease and Critical Care Medicine	84.2	9.8	2.6	3.4

Preferred Subspecialty <sup>2</sup>	%³ of "Do Not Know/Prefer Not to Answer" Responses among Active Applicants⁴			
	0	1	2	3 or more
Reproductive Endocrinology	89.8	6.8	3.4	0.0
Rheumatology	82.9	9.8	2.5	4.9
Sleep Medicine	80.4	10.7	3.6	5.4
Spinal Cord Injury Medicine	-	-	-	-
Sports Medicine (Emergency Medicine)	-	-	-	-
Sports Medicine (Family Medicine)	84.6	9.9	2.6	2.9
Sports Medicine (Pediatrics)	96.0	0.0	4.0	0.0
Sports Medicine (Physical Medicine & Rehabilitation)	91.7	5.6	2.8	0.0
Surgical Critical Care	84.8	11.3	2.3	1.6
Surgical Oncology	89.2	8.4	1.2	1.2
Thoracic Surgery	87.2	10.4	0.8	1.6
Vascular Neurology	83.7	13.6	0.7	2.0
Vascular Surgery	87.1	7.9	0.0	5.0
TOTAL	84.3	10.6	2.4	2.8

<sup>&</sup>lt;sup>1</sup> Fellowship applicants can participate in multiple Matches. For SMS appointment year 2025, there were 18 applicants who participated in more than one Match. These individuals are included in the table above, meaning the values included in the table are not unique applicant counts. The inclusion vs. exclusion of these applicants did not notably change the observed consent rates.

<sup>&</sup>lt;sup>2</sup> Subspecialties that did not meet the minimum cell size for reporting of data are included as rows in the table with no data reported, denoted by "-".

<sup>&</sup>lt;sup>3</sup> Some percentages may not add to 100 because of rounding.

<sup>&</sup>lt;sup>4</sup> Active applicants are applicants who certified a rank order list.

Table 6. "Do Not Know/Prefer Not to Answer" Responses to Demographic Questions by Matched Subspecialty—SMS Appointment Year 2025<sup>1</sup>

Matched Subspecialty <sup>2</sup>	% <sup>3</sup> of "Do Not Know/Prefer Not to Answer" Responses among Active Applicants <sup>4</sup>			
, ,	0	1	2	3 or more
Academic General Pediatrics	-	-	-	-
Addiction Medicine	79.8	10.1	8.4	1.7
Addiction Psychiatry	84.1	11.4	4.6	0.0
Adolescent Medicine	-	-	-	-
Adult Congenital Heart Disease	-	-	-	-
Advanced Heart Failure & Transplant Cardiology	88.5	9.6	1.9	0.0
Allergy and Immunology	80.3	12.6	3.2	3.9
Brain Injury Medicine (Physical Medicine & Rehabilitation)	-	-	-	-
Breast Imaging	77.9	14.2	3.5	4.4
Cancer Rehabilitation	-	-	-	-
Cardiovascular Disease	87.3	8.4	2.0	2.2
Child Abuse	-	-	-	-
Child and Adolescent Psychiatry	78.1	16.5	3.0	2.5
Clinical Cardiac Electrophysiology	81.7	9.2	2.5	6.7
Clinical Neurophysiology	85.7	10.7	0.0	3.6
Clinical Ultrasound	85.4	12.2	1.6	0.8
Colon and Rectal Surgery	85.4	10.4	3.1	1.0
Complex Family Planning	82.8	13.8	0.0	3.5
Consultation-Liaison Psychiatry	79.7	12.2	4.1	4.1
Critical Care Medicine (Internal Medicine)	83.3	12.7	1.3	2.7
Developmental and Behavioral Pediatrics	57.7	38.5	3.9	0.0
Emergency Medical Services	77.2	16.5	3.8	2.5
Emergency Radiology	-	-	-	-
Endocrinology, Diabetes, Metabolism	81.3	12.5	3.1	3.1
Epilepsy	80.4	11.8	3.9	3.9
Female Pelvic Medicine and Reconstructive Surgery (OB/GYN)	88.9	6.7	2.2	2.2
Female Pelvic Medicine and Reconstructive Surgery (Urology)	-	-	-	-
Forensic Pathology	81.5	11.1	0.0	7.4
Gastroenterology	87.6	8.5	0.9	3.0
Geriatric Medicine (Family Medicine)	-	-	-	-
Geriatric Medicine (Internal Medicine)	80.8	14.4	2.4	2.4
Global Emergency Medicine	-	-	-	-
Gynecologic Oncology	84.2	13.2	1.3	1.3
Hand Surgery (General Surgery)	-	-	-	-

Matched Subspecialty <sup>2</sup>	%³ of "Do Not Know/Prefer Not to Answer" Responses among Active Applicants⁴			
	0	1	2	3 or more
Hand Surgery (Orthopaedic Surgery)	90.1	6.1	0.8	3.1
Hand Surgery (Plastic Surgery)	-	-	-	-
Headache Medicine	83.7	10.2	2.0	4.1
Hematology and Oncology	85.3	9.6	2.0	3.1
Hospice and Palliative Medicine	84.9	9.7	2.0	3.4
Infectious Disease	82.5	14.0	1.6	2.0
Interventional Cardiology	84.9	10.7	0.5	3.9
Interventional Pulmonology	79.4	14.7	2.9	2.9
Interventional Radiology	82.6	10.1	2.9	4.4
Laryngology	-	-	-	-
Maternal-Fetal Medicine	92.3	6.0	1.7	0.0
Medical Genetics	-	-	-	-
Medical Toxicology (Emergency Medicine)	83.3	11.9	4.8	0.0
Minimally Invasive Gynecologic Surgery	90.0	5.0	2.5	2.5
Musculoskeletal Radiology	83.3	10.0	2.5	4.2
Neonatal-Perinatal Medicine	86.1	10.2	0.9	2.8
Nephrology	85.1	11.1	2.4	1.4
Neuroradiology	81.6	11.2	3.1	4.1
Oncology	-	-	-	-
Pain Medicine	85.1	11.7	0.8	2.4
Pediatric Cardiology	90.4	7.5	0.7	1.4
Pediatric Critical Care Medicine	84.2	10.3	3.3	2.2
Pediatric Emergency Medicine (Emergency Medicine)	83.9	16.1	0.0	0.0
Pediatric Emergency Medicine (Pediatrics)	85.0	10.2	1.6	3.2
Pediatric Endocrinology	87.8	6.1	4.1	2.0
Pediatric Gastroenterology	84.2	14.5	1.3	0.0
Pediatric Hematology/Oncology	87.1	12.1	0.8	0.0
Pediatric Hospital Medicine	92.2	6.8	1.0	0.0
Pediatric Infectious Diseases	83.8	13.5	0.0	2.7
Pediatric Nephrology	100.0	0.0	0.0	0.0
Pediatric Pulmonology	82.1	18.0	0.0	0.0
Pediatric Rehabilitation Medicine	-	ı	-	-
Pediatric Rheumatology	-		-	-
Pediatric Surgery	82.5	2.5	5.0	10.0
Pediatric Transplant Hepatology	-	-	-	-
Pediatric and Adolescent Gynecology	-		-	-
Pulmonary Disease	-	-	-	-
Pulmonary Disease and Critical Care Medicine	85.3	8.7	3.0	3.0

Matched Subspecialty <sup>2</sup>	%³ of "Do Not Know/Prefer Not to Answer" Responses among Active Applicants⁴			
• •	0	1	2	3 or more
Reproductive Endocrinology	88.0	8.0	4.0	0.0
Rheumatology	84.1	9.7	2.2	4.0
Sleep Medicine	81.5	11.3	2.0	5.3
Spinal Cord Injury Medicine	-	-	-	-
Sports Medicine (Emergency Medicine)	-	-	-	-
Sports Medicine (Family Medicine)	85.6	9.8	3.0	1.7
Sports Medicine (Pediatrics)	96.0	0.0	0.0	4.0
Sports Medicine (Physical Medicine & Rehabilitation)	87.1	12.9	0.0	0.0
Surgical Critical Care	84.9	11.0	2.5	1.6
Surgical Oncology	93.3	5.0	1.7	0.0
Thoracic Surgery	89.7	10.3	0.0	0.0
Vascular Neurology	83.5	13.8	0.7	2.1
Vascular Surgery	86.9	8.1	0.0	5.1
TOTAL	84.9	10.4	2.1	2.6

<sup>&</sup>lt;sup>1</sup> Fellowship applicants can participate in multiple Matches. For SMS appointment year 2025, there were 18 applicants who participated in more than one Match. These individuals are included in the table above, meaning the values included in the table are not unique applicant counts. The inclusion vs. exclusion of these applicants did not notably change the observed consent rates.

<sup>&</sup>lt;sup>2</sup> Subspecialties that did not meet the minimum cell size for reporting of data are included as rows in the table with no data reported, denoted by "-".

<sup>&</sup>lt;sup>3</sup> Some percentages may not add to 100 because of rounding.

<sup>&</sup>lt;sup>4</sup> Active applicants are applicants who certified a rank order list.

## Appendix A

In January 2021, the NRMP Board of Directors voted to approve the collection of primary source, self-reported demographic data from Specialties Matching Service applicants commencing with Fellowship Matches opening after January 1, 2022. The decision was based on months-long study, including solicitation of feedback from the undergraduate and graduate medical education communities and leaders of national learner organizations. Key considerations in favor of collecting demographic information from applicants included the ability to better understand and report on the composition of residency applicant populations, inform efforts to address the breadth of applicant attributes seeking fellowship training and to increase the transparency and understanding of the decisions made by applicants during the matching process.

## Identification of Content Domains and Sourcing of Items

A working group consisting of NRMP Board members was convened to identify content domains and items within those content domains for querying applicant demographics. The final set of content domains included sex assigned at birth, sexual orientation, current gender identity, race and ethnicity, urbanicity of childhood rearing environment, first-generation graduation from college, first-generation graduation from medical school, disability status, and accommodations requested and received during residency.

To the extent possible, the work group preferred that the domains include items from existing medical education and national questionnaires and align with the demographic data collection efforts of other medical education organizations. Toward that end, the NRMP conducted examinations of questionnaires administered by entities overseeing medical education (e.g., the Association of American Medical Colleges) and physician licensing (e.g., the Federation of State Medical Boards), as well as existing national health-related surveys of the general population. The work group also directed staff to review relevant literature to locate potentially suitable measures.

When items of interest could not be identified in existing surveys, special-purpose items were crafted by the work group. Those included questions addressing childhood urbanicity and first-generation college and medical graduation. Since the inception of NRMP's demographic assessment items, several items have been added to this assessment.

The next few pages list of the demographic items that were queried of applicants participating in the Specialties Matching Service for fellowship appointment year 2025. Due to small cell sizes, not all demographic items could be presented in the report. In future years, as sample size accrues, additional variables and response options will be reported for more specialties and at greater levels of granularity.

Items	Source(s)
Are you of Hispanic, Latino, or Spanish origin or descent?	Adapted from Substance Abuse and Mental Health Services
□ Yes	Administration National Survey on
□ No	Drug Use and Health
☐ Don't know/decline to answer	
(If of Hispanic, Latino, or Spanish origin or descent:)	
Which of these Hispanic, Latino, or Spanish groups best describes you? ( <i>More than one category may be selected.</i> )	
$\square$ Mexican, Mexican American, Mexicano, or Chicano	
□ Puerto Rican	
☐ Central or South American	
☐ Cuban or Cuban American	
□ Dominican (from Dominican Republic)	
☐ Spanish (from Spain)	
□ Other (specify)	
☐ I do not know	
☐ I prefer not to answer	
Which of these groups describes you? (More than one category may be selected.) <sup>a</sup>	
☐ White	
☐ Black or African American	
☐ American Indian or Alaska Native (American Indian includes North American, Central American, and South American Indians)	
☐ Native Hawaiian	
☐ Guamanian or Chamorro	
□ Samoan	
☐ Other Pacific Islander	

☐ Asian (including: Asian Indian, Pakistani, Bangladeshi, Sri Lankan, Chinese, Filipino, Indonesian, Japanese, Korean, Cambodian, Laotian, Taiwanese, and Vietnamese)
□ Other (specify)
☐ I do not know
☐ I prefer not to answer
(If identified as Black/African American:)
Which of these groups best describes you?
□ African
☐ African American
□ Afro-Caribbean
□ Other Black (please specify)
☐ I do not know
☐ I prefer not to answer
(If identified as Asian:)
Please tell me which of these Asian groups describes you?
☐ Asian Indian
□ Pakistani
□ Bangladeshi
□ Sri Lankan
□ Chinese
□ Filipino
□ Indonesian
□ Japanese
□ Korean
□ Cambodian
□ Laotian
□ Taiwanese
□ Vietnamese
□ Other (specify)

☐ I do not know	
☐ I prefer not to answer	
(If identified as other racial group 2 questions previously)	
Please tell me which other racial group describes you	
☐ I do not know	
☐ I prefer not to answer	
How would you characterize the area in which you grew up?	Developed by Work Group
□ Rural	
□ Suburban	
□ Urban	
☐ I do not know	
☐ I prefer not to answer	
Are you the first member of your family to graduate from college?	Developed by Work Group
☐ Yes, immediate family	
☐ Yes, extended family	
□ No	
☐ I do not know	
☐ I prefer not to answer	
Are you the first member of your family to graduate from medical school?	Developed by Work Group
☐ Yes, immediate family	
☐ Yes, extended family	
□ No	
☐ I do not know	
☐ I prefer not to answer	
What sex were you assigned at birth?	Association of American Medical
□ Male	Colleges (AAMC) Matriculating Student Questionnaire (MSQ) and
□ Female	Year 2 Questionnaire (Y2Q), 2020

☐ I prefer not to answer	
What is your current gender identity? Select all that apply:	AAMC MSQ and Y2Q, 2020
□ Male	
□ Female	
☐ Trans male/Trans man	
☐ Trans female/Trans woman	
☐ Genderqueer/gender nonconforming	
□ Different identity (please state)	
☐ I prefer not to answer	
How do you self-identify?	Adapted from AAMC Y2Q and
☐ Bisexual	MSQ, 2020
☐ Gay or lesbian	
☐ Heterosexual or straight	
☐ I do not know	
☐ I prefer not to answer	
If one of the above three identities did not best describe you, then with what identity do you feel more comfortable?	
I self-identify as:	
☐ I prefer not to answer	
Are you a person with a disability (e.g., ADHD, learning, psychological, chronic health, mobility, hearing, vision, etc.)?	AAMC Y2Q, 2020
□ Yes	
□ No	
☐ I do not know	
☐ I prefer not to answer	

(If responded affirmatively to the above:)	AAMC Y2Q, 2020
Which of the following best describes your disability? If you have more than one type, select all that apply. (Optional: please add a brief description where provided.)	
☐ Attention deficit/hyperactivity disorder	
☐ Chronic health disability	
☐ Deaf or hard of hearing	
☐ Learning disability	
☐ Mobility disability	
☐ Psychological disability	
☐ Visual disability	
□ Other	
☐ I do not know	
☐ I prefer not to answer	
(If responded "yes" to disability question:)	AAMC Y2Q, 2020
Did you request accommodations from your residency program?	
□ Yes	
□ No	
☐ I do not know	
☐ I prefer not to answer	
(If responded "yes" to whether requested accommodations:)	AAMC Y2Q, 2020
Has your residency program provided accommodations for your disability?	
□ Yes	
□ No	
☐ I do not know	
☐ I prefer not to answer	

(If accommodation not provided:) Which of the following best describes why your residency program did not or has not provided accommodations?	AAMC Y2Q, 2020
$\square$ My request for accommodations was denied	
$\hfill \square$ My request for accommodations is under review	
☐ I do not know	
☐ I prefer not to answer	
(If responded "no" to whether requested accommodations:) Which of the following best describes why you did not request accommodations from your residency program?	AAMC Y2Q, 2020
$\hfill\Box$ I have not requested accommodations because I feel I do not need accommodations	
$\hfill \square$ I have not requested accommodations for other reasons	
(Please specify:)	
☐ I do not know	
☐ I prefer not to answer	

In the categorization used for this report, applicants were assigned to categories using the following order of precedence: Native American/Alaska Native, Pacific Islander, Asian, Black/African American, White, and Other.

<sup>&</sup>lt;sup>a</sup> Applicant-reported race is reported here with each applicant classified in a single category based on a modification of the Census Bureau algorithm as implemented in the 2010 Census. In the future the NRMP Research Team plans to explore other approaches that may have greater utility for classification. Going forward the NRMP Research Team will also examine the subgroup compositions of the race identity categories and develop additional codes for them as needed.