

Graduate Medical Education, 2017-2018

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The American Medical Association (AMA) and the Association of American Medical Colleges (AAMC) jointly sponsor and administer the National GME Census through GME Track, an internet-based AAMC product, and together maintain a database of information on training programs accredited by the Accreditation Council for Graduate Medical Education (ACGME) and of the residents and fellows in them.

From May until December 2017, all directors of ACGME-accredited programs were asked to complete the program survey component of the Census on GME Track. Information on the educational characteristics of the training programs was added



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to FREIDA Online, the AMA Residency & Fellowship Database, a public resource on GME programs available to medical students, residents, and fellows. Beginning in late July 2017, program directors were surveyed about their active, transferred, and graduated residents and fellows for academic year 2017-2018. Program directors were provided with lists of residents and fellows from the current database and were asked to (1) confirm or modify the training status of trainees in their programs the prior year; (2) add new physicians to their program who were not already in our database; and (3) confirm, edit, or add demographic information on all trainees. This demographic information includes sex, birthdate, country of birth, citizenship status, race, and Hispanic ethnicity. Data on race and Hispanic ethnicity for residents and fellows who had provided such information through various AAMC applications (eg, the Electronic Residency Application Service) was carried forward from those applications and included in the Census.

We surveyed 10 909 active programs, of which 10 466 (95.9%) completed the program survey and 9519 (87.2%) confirmed the status of all of their active physicians-in-training, accounting for 126 910 (97.2%) active trainees. An additional 32 programs (0.3%) confirmed some but not all of their trainees (651 trainees, 0.5%), 423 confirmed that they did not have any trainees (3.9%), 513 programs (4.7%) confirmed the status of nonactive trainees (graduates and transfers) but did not have any currently active trainees, and 422 programs (3.9%) did not confirm the status of any physician training in the program (including 248 programs that apparently did not have any active trainees).

A total of 97.1% of all physicians in our database had their status confirmed (active, graduated, transferred, or withdrawn). Physicians whose status was not confirmed were “advanced” into the next year of training (n = 2984 [2.3% of active residents]) or “graduated” based on expected graduation date (n = 1051 [2.4% of graduated residents and fellows]). In total, we estimate that there were 130 545 active residents in ACGME-accredited programs during the 2017-2018 academic year. The following tables include data from these surveys.

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Table 1. ACGME-Accredited and Combined Specialty GME Programs and Resident Physicians According to Medical School of Graduation and Specialty and Subspecialty, 2012-2017

	No. (%)					
	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
No. of programs	9384	9613	9768	9957	10 343	10 909
No. of residents						
Total	115 111	117 427	118 366	120 598	124 096	130 545
PGY-1	26 018	26 649	27 122	27 949	28 658	30 050
PGY-1 residents with no prior GME	25 229	25 991	26 145	27 297	27 938	29 427
Medical school of graduation						
USMDs	74 963 (65.1)	77 118 (65.7)	78 206 (66.1)	80 084 (66.4)	81 849 (66.0)	83 821 (64.2)
IMGs	30 741 (26.7)	30 397 (25.9)	29 908 (25.3)	29 654 (24.5)	29 719 (23.9)	30 613 (23.5)
DOs	9229 (8.0)	9727 (8.3)	10 099 (8.5)	10 715 (8.9)	12 378 (10.0)	15 964 (12.2)
Canadian	178 (0.2)	174 (0.1)	153 (0.1)	145 (0.1)	150 (0.1)	147 (0.1)
Unknown/other	0	11 (<0.1)	0	0	0	0
Specialties						
Programs	4207 (44.8)	4239 (44.1)	4286 (43.9)	4349 (43.7)	4642 (44.9)	4699 (43.1)
Residents	94 990 (82.5)	96 580 (82.2)	97 587 (82.4)	99 514 (82.5)	102 833 (82.9)	107 562 (82.4)

(continued)

Table 1. ACGME-Accredited and Combined Specialty GME Programs and Resident Physicians According to Medical School of Graduation and Specialty and Subspecialty, 2012-2017 (continued)

	No. (%)					
	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Subspecialties						
Programs	5180 (55.2)	5374 (55.9)	5482 (56.1)	5608 (56.3)	5701 (55.1)	6210 (56.9)
Residents	20 121 (17.5)	20 847 (17.8)	20 779 (17.6)	21 084 (17.5)	21 263 (17.1)	22 983 (17.6)

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; DO, doctor of osteopathy; GME, graduate medical education; PGY-1, postgraduate year 1, the first year of education beyond medical school for which

prior GME is not required; IMG, international medical graduate; and USMD, US allopathic medical school graduate; .

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs, December 31, 2017

Specialty/Subspecialty	Total No. of Programs ^a	Resident Physicians, No. (%) ^b					
		Total	Female	USMD	IMG	Canadian	Osteopathic
Allergy and immunology	79	285 (0.2)	207 (72.6)	213 (74.7)	48 (16.8)	0	24 (8.4)
Anesthesiology	149	5939 (4.5)	2035 (34.3)	4389 (73.9)	756 (12.7)	2 (<0.1)	792 (13.3)
Adult cardiothoracic anesthesiology	66	170 (0.1)	50 (29.4)	126 (74.1)	20 (11.8)	1 (0.6)	23 (13.5)
Clinical informatics	1	2 (<0.1)	0	2 (100.0)	0	0	0
Critical care medicine	58	177 (0.1)	67 (37.9)	127 (71.8)	33 (18.6)	0	17 (9.6)
Obstetric anesthesiology	32	35 (<0.1)	25 (71.4)	27 (77.1)	6 (17.1)	1 (2.9)	1 (2.9)
Pediatric anesthesiology	58	202 (0.2)	104 (51.5)	150 (74.3)	26 (12.9)	3 (1.5)	23 (11.4)
Regional anesthesiology and acute pain medicine	12	35 (<0.1)	13 (37.1)	25 (71.4)	6 (17.1)	1 (2.9)	3 (8.6)
Colon and rectal surgery	58	88 (0.1)	31 (35.2)	64 (72.7)	18 (20.5)	1 (1.1)	5 (5.7)
Dermatology	126	1389 (1.1)	887 (63.9)	1249 (89.9)	49 (3.5)	0	91 (6.6)
Dermatopathology	53	59 (<0.1)	32 (54.2)	40 (67.8)	15 (25.4)	1 (1.7)	3 (5.1)
Micrographic surgery and dermatologic oncology	75	76 (0.1)	35 (46.1)	70 (92.1)	2 (2.6)	0	4 (5.3)
Emergency medicine	218	7136 (5.5)	2531 (35.5)	5234 (73.3)	356 (5.0)	3 (<0.1)	1543 (21.6)
Clinical informatics	4	4 (<0.1)	0	3 (75.0)	1 (25.0)	0	0
Emergency medical services	57	44 (<0.1)	17 (38.6)	34 (77.3)	7 (15.9)	0	3 (6.8)
Medical toxicology	26	63 (<0.1)	25 (39.7)	42 (66.7)	13 (20.6)	1 (1.6)	7 (11.1)
Pediatric emergency medicine	26	118 (0.1)	83 (70.3)	70 (59.3)	35 (29.7)	0	13 (11.0)
Sports medicine	8	16 (<0.1)	4 (25.0)	7 (43.8)	3 (18.8)	0	6 (37.5)
Undersea and hyperbaric medicine	7	7 (<0.1)	5 (71.4)	4 (57.1)	2 (28.6)	1 (14.3)	0
Family medicine	568	11 381 (8.7)	6111 (53.7)	5285 (46.4)	3268 (28.7)	5 (<0.1)	2823 (24.8)
Clinical informatics	2	8 (<0.1)	1 (12.5)	5 (62.5)	2 (25.0)	0	1 (12.5)
Geriatric medicine	45	44 (<0.1)	29 (65.9)	20 (45.5)	18 (40.9)	0	6 (13.6)
Sports medicine	132	202 (0.2)	57 (28.2)	89 (44.1)	47 (23.3)	0	66 (32.7)
Hospice and palliative medicine ^c	133	253 (0.2)	166 (65.6)	153 (60.5)	70 (27.7)	2 (0.8)	28 (11.1)
Internal medicine	497	26 228 (20.1)	10 995 (41.9)	12 974 (49.5)	9928 (37.9)	9 (<0.1)	3317 (12.6)
Adult congenital heart disease	11	14 (<0.1)	6 (42.9)	10 (71.4)	3 (21.4)	0	1 (7.1)
Advanced heart failure and transplant cardiology	72	77 (0.1)	23 (29.9)	41 (53.2)	26 (33.8)	2 (2.6)	8 (10.4)
Cardiovascular disease	216	2731 (2.1)	625 (22.9)	1429 (52.3)	1112 (40.7)	1 (<0.1)	189 (6.9)
Clinical cardiac electrophysiology	108	188 (0.1)	21 (11.2)	94 (50.0)	77 (41.0)	2 (1.1)	15 (8.0)
Clinical informatics	13	33 (<0.1)	3 (9.1)	23 (69.7)	8 (24.2)	0	2 (6.1)
Critical care medicine	35	228 (0.2)	59 (25.9)	73 (32.0)	130 (57.0)	0	25 (11.0)
Endocrinology, diabetes, and metabolism	141	666 (0.5)	465 (69.8)	283 (42.5)	342 (51.4)	0	41 (6.2)
Gastroenterology	177	1525 (1.2)	513 (33.6)	954 (62.6)	485 (31.8)	1 (<0.1)	85 (5.6)
Geriatric medicine	106	214 (0.2)	136 (63.6)	75 (35.0)	117 (54.7)	0	22 (10.3)
Hematology	2	16 (<0.1)	7 (43.8)	10 (62.5)	6 (37.5)	0	0
Hematology and medical oncology	146	1674 (1.3)	725 (43.3)	906 (54.1)	687 (41.0)	3 (0.2)	78 (4.7)
Infectious disease	145	731 (0.6)	367 (50.2)	370 (50.6)	295 (40.4)	2 (0.3)	64 (8.8)
Interventional cardiology	150	288 (0.2)	30 (10.4)	125 (43.4)	149 (51.7)	1 (0.3)	13 (4.5)
Nephrology	149	834 (0.6)	276 (33.1)	191 (22.9)	565 (67.7)	2 (0.2)	76 (9.1)
Medical oncology	6	38 (<0.1)	13 (34.2)	23 (60.5)	14 (36.8)	0	1 (2.6)
Pulmonary disease	20	70 (0.1)	21 (30.0)	6 (8.6)	61 (87.1)	0	3 (4.3)
Pulmonary disease and critical care medicine	154	1726 (1.3)	570 (33.0)	871 (50.5)	693 (40.2)	1 (<0.1)	161 (9.3)
Rheumatology	115	477 (0.4)	290 (60.8)	212 (44.4)	208 (43.6)	2 (0.4)	55 (11.5)
Transplant hepatology	51	37 (<0.1)	19 (51.4)	27 (73.0)	9 (24.3)	0	1 (2.7)

(continued)

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs, December 31, 2017 (continued)

	Total No. of Programs ^a	Resident Physicians, No. (%) ^b					
		Total	Female	USMD	IMG	Canadian	Osteopathic
Medical genetics and genomics	45	66 (0.1)	43 (65.2)	33 (50.0)	27 (40.9)	0	6 (9.1)
Medical biochemical genetics	16	12 (<0.1)	10 (83.3)	7 (58.3)	5 (41.7)	0	0
Molecular genetic pathology	39	52 (<0.1)	21 (40.4)	27 (51.9)	22 (42.3)	1 (1.9)	2 (3.8)
Neurological surgery	110	1420 (1.1)	253 (17.8)	1283 (90.4)	109 (7.7)	2 (0.1)	26 (1.8)
Endovascular surgical neuroradiology	2	3 (<0.1)	0	3 (100.0)	0	0	0
Neurology	146	2610 (2.0)	1163 (44.6)	1455 (55.7)	865 (33.1)	1 (<0.1)	289 (11.1)
Brain injury medicine	1	1 (<0.1)	0	0	0	0	1 (100.0)
Child neurology	73	379 (0.3)	255 (67.3)	270 (71.2)	84 (22.2)	0	25 (6.6)
Clinical neurophysiology	91	154 (0.1)	87 (56.5)	73 (47.4)	58 (37.7)	4 (2.6)	19 (12.3)
Endovascular surgical neuroradiology	1	1 (<0.1)	0	0	1 (100.0)	0	0
Epilepsy	63	100 (0.1)	56 (56.0)	53 (53.0)	40 (40.0)	2 (2.0)	5 (5.0)
Neurodevelopmental disabilities	8	27 (<0.1)	17 (63.0)	22 (81.5)	5 (18.5)	0	0
Neuromuscular medicine	47	53 (<0.1)	30 (56.6)	25 (47.2)	25 (47.2)	0	3 (5.7)
Vascular neurology	92	112 (0.1)	36 (32.1)	44 (39.3)	61 (54.5)	1 (0.9)	6 (5.4)
Nuclear medicine	41	67 (0.1)	26 (38.8)	16 (23.9)	50 (74.6)	0	1 (1.5)
Obstetrics and gynecology	273	5346 (4.1)	4426 (82.8)	4133 (77.3)	493 (9.2)	1 (<0.1)	719 (13.4)
Female pelvic medicine and reconstructive surgery	51	138 (0.1)	108 (78.3)	113 (81.9)	12 (8.7)	0	13 (9.4)
Gynecologic oncology	51	181 (0.1)	137 (75.7)	162 (89.5)	12 (6.6)	1 (0.6)	6 (3.3)
Maternal-fetal medicine	85	322 (0.2)	229 (71.1)	253 (78.6)	53 (16.5)	0	16 (5.0)
Reproductive endocrinology and infertility	47	152 (0.1)	115 (75.7)	124 (81.6)	18 (11.8)	1 (0.7)	9 (5.9)
Ophthalmology	116	1331 (1.0)	545 (40.9)	1240 (93.2)	53 (4.0)	1 (<0.1)	37 (2.8)
Ophthalmic plastic and reconstructive surgery	4	4 (<0.1)	2 (50.0)	3 (75.0)	1 (25.0)	0	0
Orthopedic surgery	170	3889 (3.0)	599 (15.4)	3615 (93.0)	73 (1.9)	0	201 (5.2)
Adult reconstructive orthopedics	22	30 (<0.1)	2 (6.7)	24 (80.0)	2 (6.7)	1 (3.3)	3 (10.0)
Foot and ankle orthopedics	6	14 (<0.1)	5 (35.7)	9 (64.3)	1 (7.1)	2 (14.3)	2 (14.3)
Hand surgery	68	135 (0.1)	20 (14.8)	126 (93.3)	2 (1.5)	3 (2.2)	4 (3.0)
Musculoskeletal oncology	11	14 (<0.1)	3 (21.4)	10 (71.4)	3 (21.4)	1 (7.1)	0
Orthopedic sports medicine	95	161 (0.1)	20 (12.4)	127 (78.9)	10 (6.2)	5 (3.1)	19 (11.8)
Orthopedic surgery of the spine	16	27 (<0.1)	2 (7.4)	19 (70.4)	5 (18.5)	0	3 (11.1)
Orthopedic trauma	9	11 (<0.1)	4 (36.4)	9 (81.8)	1 (9.1)	1 (9.1)	0
Pediatric orthopedics	25	35 (<0.1)	14 (40.0)	26 (74.3)	5 (14.3)	2 (5.7)	2 (5.7)
Osteopathic neuromusculoskeletal medicine	7	15 (<0.1)	5 (33.3)	0	0	0	15 (100.0)
Otolaryngology	113	1584 (1.2)	568 (35.9)	1516 (95.7)	29 (1.8)	0	39 (2.5)
Neurotology	20	26 (<0.1)	8 (30.8)	24 (92.3)	0	2 (7.7)	0
Pediatric otolaryngology	22	32 (<0.1)	18 (56.3)	27 (84.4)	1 (3.1)	4 (12.5)	0
Pain medicine ^d	102	300 (0.2)	68 (22.7)	211 (70.3)	44 (14.7)	2 (0.7)	43 (14.3)
Pathology-anatomic and clinical	142	2267 (1.7)	1129 (49.8)	1100 (48.5)	979 (43.2)	3 (0.1)	185 (8.2)
Blood banking/transfusion medicine	48	49 (<0.1)	24 (49.0)	27 (55.1)	19 (38.8)	0	3 (6.1)
Clinical informatics	5	9 (<0.1)	2 (22.2)	5 (55.6)	2 (22.2)	0	2 (22.2)
Chemical pathology	4	2 (<0.1)	1 (50.0)	2 (100.0)	0	0	0
Cytopathology	91	116 (0.1)	74 (63.8)	56 (48.3)	50 (43.1)	0	10 (8.6)
Forensic pathology	38	35 (<0.1)	22 (62.9)	18 (51.4)	8 (22.9)	1 (2.9)	8 (22.9)
Hematology	85	115 (0.1)	52 (45.2)	46 (40.0)	60 (52.2)	1 (0.9)	8 (7.0)
Medical microbiology	15	8 (<0.1)	5 (62.5)	6 (75.0)	0	1 (12.5)	1 (12.5)
Neuropathology	34	45 (<0.1)	18 (40.0)	26 (57.8)	14 (31.1)	0	5 (11.1)
Pediatric pathology	26	12 (<0.1)	8 (66.7)	7 (58.3)	4 (33.3)	0	1 (8.3)
Selective pathology	84	121 (0.1)	61 (50.4)	43 (35.5)	62 (51.2)	4 (3.3)	12 (9.9)

(continued)

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs, December 31, 2017 (continued)

	Total No. of Programs ^a	Resident Physicians, No. (%) ^b					
		Total	Female	USMD	IMG	Canadian	Osteopathic
Pediatrics	207	8858 (6.8)	6367 (71.9)	6165 (69.6)	1593 (18.0)	4 (<0.1)	1096 (12.4)
Adolescent medicine	29	86 (0.1)	68 (79.1)	69 (80.2)	12 (14.0)	1 (1.2)	4 (4.7)
Child abuse pediatrics	31	37 (<0.1)	35 (94.6)	29 (78.4)	4 (10.8)	0	4 (10.8)
Clinical informatics	5	7 (<0.1)	2 (28.6)	6 (85.7)	0	0	1 (14.3)
Developmental-behavioral pediatrics	39	108 (0.1)	87 (80.6)	66 (61.1)	25 (23.1)	0	17 (15.7)
Neonatal-perinatal medicine	99	742 (0.6)	542 (73.0)	424 (57.1)	213 (28.7)	0	105 (14.2)
Pediatric cardiology	59	448 (0.3)	230 (51.3)	323 (72.1)	95 (21.2)	5 (1.1)	25 (5.6)
Pediatric critical care medicine	66	506 (0.4)	329 (65.0)	350 (69.2)	109 (21.5)	1 (0.2)	46 (9.1)
Pediatric emergency medicine	52	387 (0.3)	259 (66.9)	280 (72.4)	70 (18.1)	0	37 (9.6)
Pediatric endocrinology	71	242 (0.2)	184 (76.0)	130 (53.7)	98 (40.5)	1 (0.4)	13 (5.4)
Pediatric gastroenterology	63	297 (0.2)	199 (67.0)	181 (60.9)	84 (28.3)	0	32 (10.8)
Pediatric hematology/oncology	73	505 (0.4)	353 (69.9)	349 (69.1)	96 (19.0)	1 (0.2)	59 (11.7)
Pediatric infectious diseases	64	173 (0.1)	104 (60.1)	105 (60.7)	57 (32.9)	0	11 (6.4)
Pediatric nephrology	45	101 (0.1)	71 (70.3)	50 (49.5)	44 (43.6)	0	7 (6.9)
Pediatric pulmonology	53	155 (0.1)	95 (61.3)	81 (52.3)	57 (36.8)	0	17 (11.0)
Pediatric rheumatology	37	90 (0.1)	67 (74.4)	57 (63.3)	23 (25.6)	0	10 (11.1)
Pediatric sports medicine	17	22 (<0.1)	11 (50.0)	14 (63.6)	3 (13.6)	0	5 (22.7)
Pediatric transplant hepatology	14	13 (<0.1)	10 (76.9)	9 (69.2)	4 (30.8)	0	0
Physical medicine and rehabilitation	87	1285 (1.0)	512 (39.8)	718 (55.9)	156 (12.1)	0	411 (32.0)
Brain injury medicine	16	12 (<0.1)	9 (75.0)	6 (50.0)	2 (16.7)	1 (8.3)	3 (25.0)
Pediatric rehabilitation	20	30 (<0.1)	26 (86.7)	19 (63.3)	5 (16.7)	0	6 (20.0)
Spinal cord injury medicine	20	21 (<0.1)	12 (57.1)	12 (57.1)	4 (19.0)	0	5 (23.8)
Sports medicine	19	24 (<0.1)	8 (33.3)	16 (66.7)	2 (8.3)	1 (4.2)	5 (20.8)
Plastic surgery	59	245 (0.2)	69 (28.2)	190 (77.6)	50 (20.4)	0	5 (2.0)
Craniofacial surgery	9	5 (<0.1)	1 (20.0)	4 (80.0)	1 (20.0)	0	0
Hand surgery	16	17 (<0.1)	8 (47.1)	14 (82.4)	0	2 (11.8)	1 (5.9)
Plastic surgery-integrated ^e	76	835 (0.6)	351 (42.0)	795 (95.2)	37 (4.4)	0	3 (0.4)
Preventive medicine	76	302 (0.2)	149 (49.3)	206 (68.2)	58 (19.2)	0	38 (12.6)
Medical toxicology	1	4 (<0.1)	1 (25.0)	3 (75.0)	1 (25.0)	0	0
Undersea and hyperbaric medicine	1	2 (<0.1)	0	1 (50.0)	0	0	1 (50.0)
Psychiatry	226	5701 (4.4)	2857 (50.1)	3410 (59.8)	1459 (25.6)	3 (0.1)	829 (14.5)
Addiction psychiatry	47	69 (0.1)	27 (39.1)	37 (53.6)	29 (42.0)	0	3 (4.3)
Child and adolescent psychiatry	134	829 (0.6)	535 (64.5)	427 (51.5)	296 (35.7)	0	106 (12.8)
Forensic psychiatry	46	79 (0.1)	42 (53.2)	50 (63.3)	20 (25.3)	1 (1.3)	8 (10.1)
Geriatric psychiatry	58	53 (<0.1)	39 (73.6)	25 (47.2)	24 (45.3)	1 (1.9)	3 (5.7)
Psychosomatic medicine	58	76 (0.1)	45 (59.2)	43 (56.6)	24 (31.6)	0	9 (11.8)
Radiation oncology	92	743 (0.6)	219 (29.5)	711 (95.7)	15 (2.0)	0	17 (2.3)
Radiology-diagnostic	193	4492 (3.4)	1179 (26.2)	3334 (74.2)	677 (15.1)	2 (<0.1)	479 (10.7)
Abdominal radiology	12	34 (<0.1)	8 (23.5)	12 (35.3)	16 (47.1)	3 (8.8)	3 (8.8)
Endovascular surgical neuroradiology	3	4 (<0.1)	1 (25.0)	2 (50.0)	1 (25.0)	1 (25.0)	0
Musculoskeletal radiology	16	30 (<0.1)	8 (26.7)	24 (80.0)	4 (13.3)	1 (3.3)	4 (3.3)
Neuroradiology	85	261 (0.2)	53 (20.3)	201 (77.0)	42 (16.1)	4 (1.5)	4 (5.4)
Nuclear radiology	17	10 (<0.1)	0	7 (70.0)	3 (30.0)	0	0
Pediatric radiology	45	48 (<0.1)	14 (29.2)	34 (70.8)	9 (18.8)	0	5 (10.4)
Vascular and interventional radiology	93	269 (0.2)	39 (14.5)	217 (80.7)	31 (11.5)	1 (0.4)	20 (7.4)
Interventional radiology-integrated ^e	69	68 (0.1)	8 (11.8)	63 (92.6)	3 (4.4)	0	2 (2.9)
Sleep medicine ^f	84	124 (0.1)	61 (49.2)	43 (34.7)	64 (51.6)	0	17 (13.7)
Surgery-general	283	8811 (6.7)	3526 (40.0)	6871 (78.0)	1324 (15.0)	0	616 (7.0)
Complex general surgical oncology	25	99 (0.1)	35 (35.4)	79 (79.8)	14 (14.1)	4 (4.0)	2 (2.0)
Hand surgery	1	8 (<0.1)	3 (37.5)	4 (50.0)	1 (12.5)	0	3 (37.5)
Pediatric surgery	50	80 (0.1)	34 (42.5)	70 (87.5)	8 (10.0)	2 (2.5)	0
Surgical critical care	121	258 (0.2)	97 (37.6)	202 (78.3)	28 (10.9)	2 (0.8)	26 (10.1)
Vascular surgery	105	242 (0.2)	60 (24.8)	170 (70.2)	58 (24.0)	2 (0.8)	12 (5.0)
Vascular surgery-integrated ^e	54	292 (0.2)	101 (34.6)	249 (85.3)	30 (10.3)	0	13 (4.5)
Thoracic surgery	69	226 (0.2)	55 (24.3)	169 (74.8)	40 (17.7)	5 (2.2)	12 (5.3)
Congenital cardiac surgery	12	10 (<0.1)	1 (10.0)	10 (100.0)	0	0	0
Thoracic surgery-integrated ^e	26	203 (0.2)	49 (24.1)	181 (89.2)	16 (7.9)	0	6 (3.0)

(continued)

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs, December 31, 2017 (continued)

	Total No. of Programs ^a	Resident Physicians, No. (%) ^b					
		Total	Female	USMD	IMG	Canadian	Osteopathic
Urology	138	1317 (1.0)	337 (25.6)	1192 (90.5)	49 (3.7)	0	76 (5.8)
Female pelvic medicine and reconstructive surgery	12	33 (<0.1)	28 (84.8)	30 (90.9)	1 (3.0)	1 (3.0)	1 (3.0)
Pediatric urology	25	43 (<0.1)	24 (55.8)	41 (95.3)	2 (4.7)	0	0
Transitional year	125	1171 (0.9)	389 (33.2)	889 (75.9)	123 (10.5)	0	159 (13.6)
Combined Specialties							
Diagnostic radiology/nuclear medicine	3	5 (<0.1)	1 (20.0)	4 (80.0)	1 (20.0)	0	0
Emergency medicine/family medicine	2	20 (<0.1)	8 (40.0)	13 (65.0)	5 (25.0)	0	2 (10.0)
Family medicine/preventive medicine	3	24 (<0.1)	10 (41.7)	16 (66.7)	4 (16.7)	0	4 (16.7)
Internal medicine/anesthesiology	5	21 (<0.1)	12 (57.1)	20 (95.2)	1 (4.8)	0	0
Internal medicine/dermatology	6	34 (<0.1)	21 (61.8)	34 (100.0)	0	0	0
Internal medicine/emergency medicine	12	129 (0.1)	49 (38.0)	111 (86.0)	6 (4.7)	0	12 (9.3)
Internal medicine/emergency medicine/critical care medicine	5	13 (<0.1)	2 (15.4)	11 (84.6)	1 (7.7)	0	1 (7.7)
Internal medicine/family medicine	2	11 (<0.1)	3 (27.3)	9 (81.8)	2 (18.2)	0	0
Internal medicine/medical genetics and genomics	5	5 (<0.1)	1 (20.0)	4 (80.0)	1 (20.0)	0	0
Internal medicine/neurology	2	2 (<0.1)	1 (50.0)	1 (50.0)	0	0	1 (50.0)
Internal medicine/pediatrics	78	1475 (1.1)	852 (57.8)	1230 (83.4)	123 (8.3)	0	122 (8.3)
Internal medicine/preventive medicine	5	31 (<0.1)	13 (41.9)	19 (61.3)	12 (38.7)	0	0
Internal medicine/psychiatry	15	102 (0.1)	49 (48.0)	72 (70.6)	24 (23.5)	0	6 (5.9)
Medical genetics/maternal-fetal medicine	1	1 (<0.1)	1 (100.0)	1 (100.0)	0	0	0
Pediatrics/anesthesiology	7	42 (<0.1)	27 (64.3)	40 (95.2)	0	1 (2.4)	1 (2.4)
Pediatrics/emergency medicine	4	41 (<0.1)	22 (53.7)	29 (70.7)	10 (24.4)	0	2 (4.9)
Pediatrics/medical genetics and genomics	17	59 (<0.1)	42 (71.2)	43 (72.9)	14 (23.7)	0	2 (3.4)
Pediatrics/physical medicine and rehabilitation	3	12 (<0.1)	10 (83.3)	9 (75.0)	0	0	3 (25.0)
Pediatrics/psychiatry/child and adolescent psychiatry	9	95 (0.1)	74 (77.9)	84 (88.4)	8 (8.4)	0	3 (3.2)
Psychiatry/family medicine	5	50 (<0.1)	33 (66.0)	44 (88.0)	1 (2.0)	0	5 (10.0)
Psychiatry/neurology	5	20 (<0.1)	8 (40.0)	15 (75.0)	2 (10.0)	0	3 (15.0)
Total	10 909	130 545 (100.0)	59 242 (45.4)	8321 (64.2)	30 613 (23.5)	147 (0.1)	15 964 (12.2)

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; GME, graduate medical education; IMGs, international medical graduates; USMDs, US allopathic medical graduates.

^a Total number of US GME programs accredited by the ACGME and combined specialty programs, as of December 31, 2017, surveyed by National GME Census during 2017.

^b Includes resident physicians on duty as of December 31, 2017, reported through the 2017 National GME Census. A total of 174 programs (1.6%) did not provide updated information on residents by March 1, 2018. For these

nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated.

^c Hospice and palliative medicine is a subspecialty of anesthesiology, family medicine, internal medicine, pediatrics, psychiatry, or radiation oncology.

^d Pain medicine is a subspecialty of anesthesiology, neurology, physical medicine and rehabilitation, or psychiatry.

^e Integrated programs differ from subspecialty programs in that they include core surgical education.

^f Sleep medicine is a subspecialty of anesthesiology, family medicine, internal medicine, neurology, otolaryngology, pediatrics, or psychiatry.

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in PGY-1 Positions on Duty December 31, 2017, in ACGME-Accredited Programs and in Combined Specialty Programs

Specialty/Subspecialty	Total No. of Residents ^a	No. of Residents in Program Year 1 Positions ^b	No. of Residents in PGY-1 Positions	
			With Prior US GME ^c	Without Prior US GME ^c
Allergy and immunology	285	129	0	0
Anesthesiology	5939	1355	52	1092
Adult cardiothoracic anesthesiology	170	170	0	0
Clinical informatics	2	1	0	0
Critical care medicine	177	169	0	0
Obstetric anesthesiology	35	35	0	0
Pediatric anesthesiology	202	202	0	0
Regional anesthesiology and acute pain medicine	35	35	0	0
Colon and rectal surgery	88	88	0	0

(continued)

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in PGY-1 Positions on Duty December 31, 2017, in ACGME-Accredited Programs and in Combined Specialty Programs (continued)

	Total No. of Residents ^a	No. of Residents in Program Year 1 Positions ^b	No. of Residents in PGY-1 Positions	
			With Prior US GME ^c	Without Prior US GME ^c
Dermatology	1389	435	2	7
Dermatopathology	59	55	0	0
Micrographic surgery and dermatologic oncology	76	74	0	0
Emergency medicine	7136	2270	77	2193
Clinical informatics	4	1	0	0
Emergency medical services	44	44	0	0
Medical toxicology	63	35	0	0
Pediatric emergency medicine	118	41	0	0
Sports medicine	16	15	0	0
Undersea and hyperbaric medicine	7	7	0	0
Family medicine	11 381	3833	116	3717
Clinical informatics	8	3	0	0
Geriatric medicine	44	43	0	0
Sports medicine	202	200	0	0
Hospice and palliative medicine ^d	253	244	0	0
Internal medicine	26228	10013	171	9842
Adult congenital heart disease	14	6	0	0
Advanced heart failure and transplant cardiology	77	77	0	0
Cardiovascular disease	2731	884	0	0
Clinical cardiac electrophysiology	188	127	0	0
Clinical informatics	33	16	0	0
Critical care medicine	228	130	0	0
Endocrinology, diabetes, and metabolism	666	322	0	0
Gastroenterology	1525	499	0	0
Geriatric medicine	214	201	0	0
Hematology	16	7	0	0
Hematology and medical oncology	1674	541	0	0
Infectious disease	731	357	0	0
Interventional cardiology	288	269	0	0
Nephrology	834	385	0	0
Medical oncology	38	18	0	0
Pulmonary disease	70	33	0	0
Pulmonary disease and critical care medicine	1726	566	0	0
Rheumatology	477	226	0	0
Transplant hepatology	37	37	0	0
Medical genetics and genomics	66	32	0	0
Medical biochemical genetics	12	12	0	0
Molecular genetic pathology	52	51	0	0
Neurological surgery	1420	218	10	208
Endovascular surgical neuroradiology	3	3	0	0
Neurology	2610	717	10	387
Brain injury medicine	1	1	0	0
Child neurology	379	130	0	16
Clinical neurophysiology	154	154	0	0
Endovascular surgical neuroradiology	1	1	0	0
Epilepsy	100	96	0	0
Neurodevelopmental disabilities	27	4	0	0
Neuromuscular medicine	53	51	0	0
Vascular neurology	112	110	0	0
Nuclear medicine	67	38	0	0

(continued)

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in PGY-1 Positions on Duty December 31, 2017, in ACGME-Accredited Programs and in Combined Specialty Programs (continued)

	Total No. of Residents ^a	No. of Residents in Program Year 1 Positions ^b	No. of Residents in PGY-1 Positions	
			With Prior US GME ^c	Without Prior US GME ^c
Obstetrics and gynecology	5346	1374	16	1358
Female pelvic medicine and reconstructive surgery	138	47	0	0
Gynecologic oncology	181	55	0	0
Maternal-fetal medicine	322	112	0	0
Reproductive endocrinology and infertility	152	58	0	0
Ophthalmology	1331	405	0	2
Ophthalmic plastic and reconstructive surgery	4	1	0	0
Orthopedic surgery	3889	784	27	757
Adult reconstructive orthopedics	30	30	0	0
Foot and ankle orthopedics	14	14	0	0
Hand surgery	135	134	0	0
Musculoskeletal oncology	14	13	0	0
Orthopedic sports medicine	161	159	0	0
Orthopedic surgery of the spine	27	27	0	0
Orthopedic trauma	11	11	0	0
Pediatric orthopedics	35	35	0	0
Osteopathic neuromusculoskeletal medicine	15	6	0	0
Otolaryngology	1584	322	7	315
Neurotology	26	14	0	0
Pediatric otolaryngology	32	28	0	0
Pain medicine ^e	300	299	0	0
Pathology-anatomic and clinical	2267	592	23	569
Blood banking/transfusion medicine	49	46	0	0
Clinical informatics	9	3	0	0
Chemical pathology	2	2	0	0
Cytopathology	116	114	0	0
Forensic pathology	35	35	0	0
Hematology	115	113	0	0
Medical microbiology	8	8	0	0
Neuropathology	45	19	0	0
Pediatric pathology	12	11	0	0
Selective pathology	121	121	0	0
Pediatrics	8858	2885	31	2854
Adolescent medicine	86	28	0	0
Child abuse pediatrics	37	13	0	0
Clinical informatics	7	4	0	0
Developmental-behavioral pediatrics	108	39	0	0
Neonatal-perinatal medicine	742	245	0	0
Pediatric cardiology	448	151	0	0
Pediatric critical care medicine	506	183	0	0
Pediatric emergency medicine	387	139	0	0
Pediatric endocrinology	242	81	0	0
Pediatric gastroenterology	297	96	0	0
Pediatric hematology/oncology	505	171	0	0
Pediatric infectious diseases	173	65	0	0
Pediatric nephrology	101	33	0	0
Pediatric pulmonology	155	48	0	0
Pediatric rheumatology	90	36	0	0
Pediatric sports medicine	22	20	0	0
Pediatric transplant hepatology	13	13	0	0

(continued)

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in PGY-1 Positions on Duty December 31, 2017, in ACGME-Accredited Programs and in Combined Specialty Programs (continued)

	Total No. of Residents ^a	No. of Residents in Program Year 1 Positions ^b	No. of Residents in PGY-1 Positions	
			With Prior US GME ^c	Without Prior US GME ^c
Physical medicine and rehabilitation	1285	356	4	116
Brain injury medicine	12	12	0	0
Pediatric rehabilitation	30	18	0	0
Spinal cord injury medicine	21	21	0	0
Sports medicine	24	24	0	0
Plastic surgery	245	62	0	0
Craniofacial surgery	5	5	0	0
Hand surgery	17	17	0	0
Plastic surgery-integrated ^f	835	158	4	154
Preventive medicine	302	138	0	0
Medical toxicology	4	2	0	0
Undersea and hyperbaric medicine	2	2	0	0
Psychiatry	5701	1563	27	1536
Addiction psychiatry	69	64	0	0
Child and adolescent psychiatry	829	407	0	0
Forensic psychiatry	79	78	0	0
Geriatric psychiatry	53	50	0	0
Psychosomatic medicine	76	75	0	0
Radiation oncology	743	184	0	1
Radiology-diagnostic	4492	1071	0	29
Abdominal radiology	34	34	0	0
Endovascular surgical neuroradiology	4	4	0	0
Musculoskeletal radiology	30	30	0	0
Neuroradiology	261	241	0	0
Nuclear radiology	10	9	0	0
Pediatric radiology	48	45	0	0
Vascular and interventional radiology	269	268	0	0
Interventional radiology-integrated ^f	68	45	0	6
Sleep medicine ^g	124	124	0	0
Surgery-general	8811	2508	22	2486
Complex general surgical oncology	99	45	0	0
Hand surgery	8	8	0	0
Pediatric surgery	80	42	0	0
Surgical critical care	258	244	0	0
Vascular surgery	242	119	0	0
Vascular surgery-integrated ^f	292	61	6	55
Thoracic surgery	226	97	0	0
Congenital cardiac surgery	10	10	0	0
Thoracic surgery-integrated ^f	203	35	4	31
Urology	1317	294	0	16
Female pelvic medicine and reconstructive surgery	33	15	0	0
Pediatric urology	43	21	0	0
Transitional year	1171	1170	8	1162
Combined Specialties				
Diagnostic radiology/nuclear medicine	5	2	1	1
Emergency medicine/family medicine	20	4	0	4
Family medicine/preventive medicine	24	5	0	5
Internal medicine/anesthesiology	21	5	0	5
Internal medicine/dermatology	34	6	0	6

(continued)

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in PGY-1 Positions on Duty December 31, 2017, in ACGME-Accredited Programs and in Combined Specialty Programs (continued)

	Total No. of Residents ^a	No. of Residents in Program Year 1 Positions ^b	No. of Residents in PGY-1 Positions	
			With Prior US GME ^c	Without Prior US GME ^c
Internal medicine/emergency medicine	129	26	0	26
Internal medicine/emergency medicine/critical care medicine	13	0	0	0
Internal medicine/family medicine	11	2	0	2
Internal medicine/medical genetics and genomics	5	1	0	1
Internal medicine/neurology	2	0	0	0
Internal medicine/pediatrics	1475	370	3	367
Internal medicine/preventive medicine	31	8	1	7
Internal medicine/psychiatry	102	26	1	25
Medical genetics/maternal-fetal medicine	1	0	0	0
Pediatrics/anesthesiology	42	8	0	8
Pediatrics/emergency medicine	41	10	0	10
Pediatrics/medical genetics and genomics	59	14	0	14
Pediatrics/physical medicine and rehabilitation	12	2	0	2
Pediatrics/psychiatry/child and adolescent psychiatry	95	21	0	21
Psychiatry/family medicine	50	10	0	10
Psychiatry/neurology	20	4	0	4
Total	130 545	45 358	623	29 427

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; GME, graduate medical education; PGY-1, postgraduate year 1.

^a Includes resident physicians on duty as of December 31, 2017, reported through the 2016 National GME Census. A total of 174 programs (1.6%) did not provide updated information on residents by March 1, 2018. For these nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated.

^b Program year 1 refers to the first year of training within a specific program; this may not correspond to the graduate year.

^c Postgraduate year 1 refers to positions available the first year after completing

medical school; approximately 2.1% of resident physicians in graduate year 1 positions have had some prior US GME.

^d Hospice and palliative medicine is a subspecialty of anesthesiology, family medicine, internal medicine, pediatrics, psychiatry, or radiation oncology.

^e Pain medicine is a subspecialty of anesthesiology, neurology, physical medicine and rehabilitation, or psychiatry.

^f Integrated programs differ from subspecialty programs in that they include core surgical education.

^g Sleep medicine is a subspecialty of anesthesiology, family medicine, internal medicine, neurology, otolaryngology, pediatrics, or psychiatry.

Table 4. Programs and Resident Physicians on Duty December 31, 2017, by Number per 100 000 and by Region and State

Region and State	No. of Resident Physicians per 100 000 ^a	2017 State Population, in 1000s ^b	No. (%)	
			Programs ^c	Resident Physicians ^d
New England, subtotal	67	14 810	836 (7.7)	9973 (7.6)
Connecticut	66	3588	190 (1.7)	2371 (1.8)
Maine	25	1336	28 (0.3)	336 (0.3)
Massachusetts	83	6860	452 (4.1)	5687 (4.4)
New Hampshire	30	1343	50 (0.5)	407 (0.3)
Rhode Island	81	1060	76 (0.7)	858 (0.7)
Vermont	50	624	40 (0.4)	314 (0.2)
Middle Atlantic, subtotal	69	41 661	2181 (20.0)	28 561 (21.9)
New Jersey	34	9006	235 (2.2)	3095 (2.4)
New York	85	19 849	1234 (11.3)	16 869 (12.9)
Pennsylvania	67	12 806	712 (6.5)	8597 (6.6)
East North Central, subtotal	53	42 500	1880 (17.2)	22 460 (17.2)
Illinois	49	12 802	490 (4.5)	6261 (4.8)
Indiana	22	6667	117 (1.1)	1448 (1.1)
Michigan	64	9962	508 (4.7)	6404 (4.9)
Ohio	55	11 659	569 (5.2)	6458 (4.9)
Wisconsin	33	5795	196 (1.8)	1889 (1.4)

(continued)

Table 4. Programs and Resident Physicians on Duty December 31, 2017, by Number per 100 000 and by Region and State (continued)

Region and State	No. of Resident Physicians per 100 000 ^a	2017 State Population, in 1000s ^b	No. (%)	
			Programs ^c	Resident Physicians ^d
West North Central, subtotal	39	21 294	752 (6.9)	8201 (6.3)
Iowa	31	3146	99 (0.9)	960 (0.7)
Kansas	29	2913	68 (0.6)	841 (0.6)
Minnesota	41	5577	222 (2.0)	2307 (1.7)
Missouri	49	6114	265 (2.4)	3008 (2.3)
Nebraska	41	1920	71 (0.6)	788 (0.6)
North Dakota	19	755	14 (0.1)	145 (0.1)
South Dakota	17	870	13 (0.1)	152 (0.1)
South Atlantic, subtotal	33	64 706	1872 (17.2)	21 414 (16.4)
Delaware	28	962	28 (0.3)	274 (0.2)
District of Columbia	276	694	180 (1.6)	1917 (1.5)
Florida	26	20 984	462 (4.2)	5521 (4.2)
Georgia	25	10 429	214 (2.0)	2582 (2.0)
Maryland	47	6052	229 (2.1)	2867 (2.2)
North Carolina	34	10 273	321 (2.9)	3522 (2.7)
South Carolina	28	5024	124 (1.1)	1430 (1.1)
Virginia	29	8470	244 (2.2)	2489 (1.9)
West Virginia	45	1816	70 (0.6)	812 (0.6)
East South Central, subtotal	32	19 029	546 (5.0)	6036 (4.6)
Alabama	29	4875	128 (1.1)	1413 (1.1)
Kentucky	29	4454	132 (1.2)	1298 (1.0)
Mississippi	24	2984	70 (0.6)	712 (0.6)
Tennessee	39	6716	216 (2.0)	2613 (2.0)
West South Central, subtotal	31	39 924	1025 (9.4)	12 332 (9.4)
Arkansas	28	3004	71 (0.6)	849 (0.6)
Louisiana	45	4684	174 (1.6)	2086 (1.6)
Oklahoma	25	3931	92 (0.8)	980 (0.8)
Texas	30	28 305	688 (6.3)	8417 (6.4)
Mountain, subtotal	23	24 158	487 (4.5)	5525 (4.2)
Arizona	25	7016	157 (1.4)	1780 (1.4)
Colorado	27	5607	132 (1.2)	1516 (1.2)
Idaho	6	1717	9 (0.1)	107 (0.1)
Montana	8	1050	4 (<0.1)	85 (0.1)
Nevada	19	2998	35 (0.3)	570 (0.4)
New Mexico	29	2088	61 (0.6)	601 (0.5)
Utah	27	3102	86 (0.8)	825 (0.6)
Wyoming	7	579	3 (<0.1)	41 (<0.1)
Pacific, subtotal	29	53 253	1258 (11.5)	15 251 (11.7)
Alaska	5	740	2 (<0.1)	37 (<0.1)
California	30	39 537	968 (8.9)	11 705 (9.0)
Hawaii	31	1428	32 (0.3)	446 (0.3)
Oregon	24	4143	90 (0.8)	1007 (0.8)
Washington	28	7406	166 (1.5)	2056 (1.6)
Puerto Rico	24	3337	72 (0.7)	792 (0.6)
Total	39.7	329 056	10 909 (100.0)	130 545 (100.0)

^a Aggregate number of resident physicians per 100 000 population.

^b 2017 State population is from Table 1 in the "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2017 (NST-EST2017-01)". Source: US Census Bureau, Population Division. Release date: December 2017 (<https://www.census.gov/data/tables/2017/demo/popest/nation-total.html>). Total population numbers include the District of Columbia and Puerto Rico.

^c Total number of US GME programs accredited by the ACGME and combined

specialty programs, as of December 31, 2017, surveyed by the National GME Census during 2017.

^d Includes resident physicians on duty as of December 31, 2017, reported through the 2017 National GME Census. A total of 174 programs (1.6%) did not provide updated information on residents by March 1, 2018. For these nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated.

Table 5. Citizenship Status of International Medical Graduates With No Prior US Graduate Medical Education (GME) in the First Year of GME on Duty December 31, 2017^a

Specialty/Subspecialty	US Citizen	US Permanent Resident	Non-US Citizen	Unknown Citizenship/ Foreign Born	Total
Anesthesiology	56	12	35	19	122
Dermatology	1	0	0	0	1
Emergency medicine	69	6	11	2	88
Family medicine	664	117	176	68	1025
Internal medicine	1061	438	934	903	3336
Neurological surgery	3	2	10	1	16
Neurology	41	18	58	22	139
Obstetrics and gynecology	63	8	22	12	105
Orthopedic surgery	7	3	1	0	11
Otolaryngology	1	0	0	0	1
Pathology-anatomic and clinical	59	83	103	41	286
Pediatrics	203	49	139	76	467
Physical medicine and rehabilitation	6	0	5	0	11
Plastic surgery-integrated ^b	1	0	0	1	2
Psychiatry	177	46	81	31	335
Radiology-diagnostic	1	0	0	0	1
Surgery-general	148	25	118	77	368
Vascular surgery-integrated ^b	2	1	3	0	6
Thoracic surgery-integrated ^b	1	0	0	0	1
Transitional year	65	16	21	18	120
Combined Specialties					
Emergency medicine/family medicine	1	0	0	0	1
Internal medicine/emergency medicine	1	0	0	0	1
Internal medicine/pediatrics	28	2	5	5	40
Internal medicine/preventive medicine	0	0	0	2	2
Internal medicine/psychiatry	2	0	2	2	6
Pediatrics/emergency medicine	2	0	0	1	3
Pediatrics/medical genetics and genomics	1	1	3	0	5
Pediatrics/psychiatry/child and adolescent psychiatry	1	0	0	0	1
Psychiatry/family medicine	0	0	1	0	1
Total, No. (%)	2665 (41.0)	827 (12.7)	1728 (26.6)	1281 (19.7)	6501 (100.0)

^a Includes only international medical graduate resident physicians (IMGs) entering US GME for the first time; graduates of Canadian medical schools are not considered IMGs.

^b Integrated programs differ from subspecialty programs in that they include core surgical education.

Table 6. Race and Hispanic Ethnic Origin of Resident Physicians on Duty December 31, 2017, by Type of Medical School From Which They Graduated^a

Race ^b	No. (%)			Total
	US and Canadian Allopathic School	US Osteopathic School	Non-US School	
Black	4902 (67.9)	317 (4.4)	1998 (27.7)	7217
American Indian/Alaskan Native	136 (78.6)	17 (9.8)	20 (11.6)	173
White	52 656 (72.2)	10 510 (14.4)	9715 (13.3)	72 881
Asian	18 323 (52.9)	2882 (8.3)	13 406 (38.7)	34 611
Native Hawaiian/Pacific Islander	63 (51.6)	23 (18.9)	36 (29.5)	122
Multiracial	2664 (69.1)	370 (9.6)	819 (21.3)	3853
Other/unknown	5224 (44.7)	1845 (15.8)	4619 (39.5)	11 688
Ethnic origin ^b				
Hispanic	6376 (62.6)	520 (5.1)	3284 (32.3)	10 180
Non-Hispanic	77 592 (64.5)	15 444 (12.8)	27 329 (22.7)	120 365
Total^c	83 968 (64.3)	15 964 (12.2)	30 613 (23.5)	130 545

^a Includes resident physicians on duty as of December 31, 2017, reported through the 2017 National GME Census. A total of 174 programs (1.6%) did not provide updated information on residents by March 1, 2018. For these nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated.

^b The 2017 National GME Census imported self-designated race/ethnicity from

Association of American Medical Colleges databases where available. "Multiracial" refers to residents who have self-identified as more than one race. A person of Hispanic ethnicity may be of any race.

^c These total data apply to each subsection separately (ie, total for race and total for ethnic origin).

Table 7. Citizenship/Visa Status of All Resident Physicians and International Medical Graduates (IMGs) on Duty in ACGME-Accredited and in Combined Specialty Programs December 31, 2017

Citizenship/Visa Status	Resident Physicians, No. (%) ^a	
	Total	IMGs ^b
Native US citizen	93 325 (71.5)	7993 (26.1)
Naturalized US citizen	10 470 (8.0)	3856 (12.6)
Permanent resident	7606 (5.8)	4765 (15.6)
B-1, B-2 temporary visitor	21 (<0.1)	20 (<0.1)
F-1 student	268 (0.2)	0
H-1, H-1B, H-2, H-3 temporary worker	2532 (1.9)	2252 (7.4)
J-1, J-2 exchange visitor	7511 (5.8)	7316 (23.9)
Refugee/asylee/displaced person	84 (<0.1)	77 (0.3)
Other	393 (0.3)	290 (0.9)
Unknown citizenship/foreign born	8223 (6.3)	4044 (13.2)
Unknown citizenship/unknown birth country	112 (<0.1)	0
Total	130545 (100.0)	30613 (100.0)

Abbreviation: IMGs, international medical graduates.

^a Includes resident physicians on duty as of December 31, 2017, reported through the 2017 National GME Census. A total of 174 programs (1.6%) did not provide updated information on residents by March 1, 2018. For these

nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated.

^b Does not include graduates of Canadian medical schools.

Table 8. Race and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2017, by Specialty

Specialty/Subspecialty	No. of Resident Physicians ^{a,b}								Total
	Black	American Indian/Alaskan Native	White	Asian	Native Hawaiian/Pacific Islander	Multi-racial	Other/Unknown	Hispanic Origin	
Allergy and immunology	11	2	136	112	2	9	13	17	285
Anesthesiology	371	9	3593	1432	8	179	347	419	5939
Adult cardiothoracic anesthesiology	7	0	120	32	0	6	5	12	170
Clinical informatics	0	0	2	0	0	0	0	0	2
Critical care medicine	3	0	115	40	0	5	14	8	177
Obstetric anesthesiology	1	0	21	7	0	1	5	4	35
Pediatric anesthesiology	9	0	128	43	2	1	19	9	202
Regional anesthesiology and acute pain medicine	2	0	14	10	0	3	6	1	35
Colon and rectal surgery	3	0	58	20	0	1	6	7	88
Dermatology	51	1	949	273	0	37	78	68	1389
Dermatopathology	5	0	37	11	0	2	4	1	59
Micrographic surgery and dermatologic oncology	0	0	56	13	0	2	5	5	76
Emergency medicine	316	6	4992	1015	6	223	578	546	7136
Clinical informatics	0	0	4	0	0	0	0	0	4
Emergency medical services	3	0	34	1	0	2	4	2	44
Medical toxicology	1	0	48	8	0	2	4	4	63
Pediatric emergency medicine	14	0	60	28	0	4	12	11	118
Sports medicine	0	0	10	2	0	0	4	0	16
Undersea and hyperbaric medicine	0	0	5	2	0	0	0	0	7
Family medicine	874	34	6505	2572	20	356	1020	1023	11 381
Clinical informatics	1	0	3	2	0	1	1	0	8
Geriatric medicine	3	0	22	10	0	2	7	6	44
Sports medicine	10	0	153	20	0	5	14	10	202
Hospice and palliative medicine ^c	15	0	150	51	3	3	31	15	253
Internal medicine	1522	17	11 214	9615	31	641	3188	2029	26 228
Adult congenital heart disease	0	0	11	2	0	0	1	3	14
Advanced heart failure and transplant cardiology	3	0	34	33	0	1	6	7	77
Cardiovascular disease	137	1	1242	1062	2	88	199	176	2731
Clinical cardiac electrophysiology	4	0	102	55	0	4	23	21	188
Clinical informatics	1	0	16	12	0	2	2	2	33
Critical care medicine	9	0	113	91	0	8	7	15	228
Endocrinology, diabetes, and metabolism	34	2	265	285	0	17	63	79	666
Gastroenterology	82	1	695	620	0	41	86	101	1525
Geriatric medicine	13	0	85	83	1	4	28	17	214
Hematology	0	0	4	10	0	1	1	0	16
Hematology and medical oncology	64	0	762	729	0	47	72	90	1674
Infectious disease	48	1	391	217	1	22	51	83	731
Interventional cardiology	12	0	124	119	0	9	24	12	288
Nephrology	68	0	256	399	1	30	80	62	834
Medical oncology	0	0	16	21	0	1	0	0	38
Pulmonary disease	3	0	19	37	0	0	11	6	70
Pulmonary disease and critical care medicine	70	1	917	593	0	38	107	107	1726
Rheumatology	23	0	226	190	0	10	28	34	477
Transplant hepatology	2	0	17	14	0	0	4	1	37

(continued)

Table 8. Race and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2017, by Specialty (continued)

	No. of Resident Physicians ^{a,b}								
	Black	American Indian/ Alaskan Native	White	Asian	Native Hawaiian/ Pacific Islander	Multi-racial	Other/ Unknown	Hispanic Origin	Total
Medical genetics and genomics	5	0	37	15	0	3	6	4	66
Medical biochemical genetics	0	0	8	4	0	0	0	1	12
Molecular genetic pathology	0	0	29	19	0	0	4	2	52
Neurological surgery	73	2	892	323	0	49	81	95	1420
Endovascular surgical neuroradiology	0	0	2	1	0	0	0	0	3
Neurology	113	4	1340	845	1	80	227	209	2610
Brain injury medicine	0	0	1	0	0	0	0	0	1
Child neurology	18	1	223	104	0	15	17	42	378
Clinical neurophysiology	11	0	78	48	0	0	17	19	154
Endovascular surgical neuroradiology	0	0	1	0	0	0	0	0	1
Epilepsy	2	0	42	38	1	1	16	4	100
Neurodevelopmental disabilities	0	0	22	3	0	1	2	2	28
Neuromuscular medicine	1	0	30	18	0	1	3	7	53
Vascular neurology	4	0	44	55	0	2	7	6	112
Nuclear medicine	5	0	21	29	0	5	7	6	67
Obstetrics and gynecology	461	10	3437	797	3	173	465	542	5346
Female pelvic medicine and reconstructive surgery	14	0	79	33	0	3	9	11	138
Gynecologic oncology	6	0	112	20	0	5	38	12	181
Maternal-fetal medicine	22	1	193	38	0	6	62	23	322
Reproductive endocrinology and infertility	10	1	83	18	0	3	37	4	152
Ophthalmology	35	0	779	393	2	48	74	78	1331
Ophthalmic plastic and reconstructive surgery	0	0	4	0	0	0	0	0	4
Orthopedic surgery	157	5	2848	519	2	106	252	216	3889
Adult reconstructive orthopedics	1	0	25	3	0	0	1	0	30
Foot and ankle orthopedics	1	0	10	1	0	0	2	0	14
Hand surgery	3	0	108	13	0	2	9	10	135
Musculoskeletal oncology	0	0	9	3	0	0	2	2	14
Orthopedic sports medicine	4	0	111	25	0	2	19	5	161
Orthopedic surgery of the spine	2	0	19	4	0	0	2	1	27
Orthopedic trauma	0	0	7	2	0	2	0	0	11
Pediatric orthopedics	2	0	22	6	0	2	3	1	35
Osteopathic neuromusculoskeletal medicine	0	0	6	2	0	0	7	1	15
Otolaryngology	37	4	1049	380	3	50	61	98	1584
Neurotology	0	0	19	5	0	1	1	2	26
Pediatric otolaryngology	0	0	20	6	0	1	5	1	32
Pain medicine ^d	8	1	164	99	0	10	18	13	300
Pathology-anatomic and clinical	103	2	1240	648	0	83	191	182	2267
Blood banking/transfusion medicine	4	0	25	18	0	0	2	2	49
Clinical informatics	1	0	4	3	0	0	1	2	9
Chemical pathology	0	0	1	1	0	0	0	0	2
Cytopathology	3	0	62	31	0	3	17	8	116
Forensic pathology	1	0	28	3	0	1	2	1	35
Hematology	2	0	55	43	1	2	12	6	115
Medical microbiology	1	0	4	2	0	0	1	1	8
Neuropathology	0	0	36	8	0	0	1	4	45
Pediatric pathology	1	0	8	2	0	0	1	3	12
Selective pathology	0	0	70	41	0	1	9	12	121

(continued)

Table 8. Race and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2017, by Specialty (continued)

	No. of Resident Physicians ^{a,b}								Total
	Black	American Indian/ Alaskan Native	White	Asian	Native Hawaiian/ Pacific Islander	Multi- racial	Other/ Unknown	Hispanic Origin	
Pediatrics	511	20	5263	1949	5	271	839	881	8858
Adolescent medicine	17	0	55	7	0	4	3	10	86
Child abuse pediatrics	3	0	28	3	0	2	1	3	37
Clinical informatics	0	0	6	1	0	0	0	0	7
Developmental-behavioral pediatrics	6	0	71	14	0	8	9	13	108
Neonatal-perinatal medicine	48	0	426	215	1	22	30	52	742
Pediatric cardiology	19	0	284	117	0	11	17	22	448
Pediatric critical care medicine	12	2	353	101	1	12	25	41	506
Pediatric emergency medicine	23	0	260	80	1	8	15	21	387
Pediatric endocrinology	16	0	131	68	0	8	19	30	242
Pediatric gastroenterology	13	0	170	86	0	6	22	29	297
Pediatric hematology/oncology	14	0	348	115	0	8	20	32	505
Pediatric infectious diseases	5	0	125	30	0	2	11	17	173
Pediatric nephrology	9	0	48	35	0	0	9	7	101
Pediatric pulmonology	4	0	99	33	0	2	17	25	155
Pediatric rheumatology	5	0	56	20	0	2	7	6	90
Pediatric sports medicine	1	0	21	0	0	0	0	1	22
Pediatric transplant hepatology	0	0	8	3	0	1	1	1	13
Physical medicine and rehabilitation	77	3	744	345	1	48	67	96	1285
Brain injury medicine	1	0	5	5	0	0	1	0	12
Pediatric rehabilitation	1	0	20	8	0	0	1	2	30
Spinal cord injury medicine	1	0	11	6	0	0	3	2	21
Sports medicine	0	0	18	3	0	3	0	2	24
Plastic surgery	17	0	168	37	0	11	13	29	246
Craniofacial surgery	0	0	5	0	0	0	0	0	5
Hand surgery	0	0	11	4	0	0	2	1	17
Plastic surgery-integrated ^e	20	2	572	168	0	40	32	51	834
Preventive medicine	50	0	132	74	0	14	32	26	302
Medical toxicology	0	0	3	1	0	0	0	0	4
Undersea and hyperbaric medicine	1	0	1	0	0	0	0	0	2
Psychiatry	408	7	3058	1522	3	208	495	517	5701
Addiction psychiatry	4	0	36	18	0	3	8	8	69
Child and adolescent psychiatry	78	2	383	282	2	34	48	80	829
Forensic psychiatry	6	0	54	15	0	0	4	6	79
Geriatric psychiatry	4	1	19	18	1	0	10	5	53
Psychosomatic medicine	4	0	39	22	0	1	10	10	76
Radiation oncology	23	0	440	234	1	19	26	35	743
Radiology-diagnostic	163	3	2702	1219	7	175	223	272	4492
Abdominal radiology	2	0	13	16	0	1	2	0	34
Endovascular surgical neuroradiology	1	0	1	2	0	0	0	0	4
Musculoskeletal radiology	3	0	14	13	0	0	0	0	30
Neuroradiology	7	0	161	70	0	4	19	9	261
Nuclear radiology	0	0	8	0	0	0	2	0	10
Pediatric radiology	1	0	31	13	0	0	3	2	48
Vascular and interventional radiology	12	0	153	79	0	9	16	14	269
Interventional radiology-integrated ^e	0	0	41	18	0	3	6	2	68
Sleep medicine ^f	7	0	49	47	0	4	17	10	124

(continued)

Table 8. Race and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2017, by Specialty (continued)

	No. of Resident Physicians ^{a,b}								
	Black	American Indian/Alaskan Native	White	Asian	Native Hawaiian/Pacific Islander	Multi-racial	Other/Unknown	Hispanic Origin	Total
Surgery-general	447	18	5641	1716	8	248	733	748	8811
Complex general surgical oncology	3	0	63	24	0	4	5	9	99
Hand surgery	0	0	6	1	0	0	1	0	8
Pediatric surgery	2	0	58	11	0	7	2	3	80
Surgical critical care	12	0	175	27	0	7	37	25	258
Vascular surgery	15	0	141	62	0	8	16	18	242
Vascular surgery-integrated ^e	17	1	165	80	0	13	16	16	292
Thoracic surgery	10	0	154	47	0	7	8	20	226
Congenital cardiac surgery	1	0	4	3	0	1	1	0	10
Thoracic surgery-integrated ^e	5	0	140	39	0	9	10	17	203
Urology	41	3	885	295	0	35	58	69	1317
Female pelvic medicine and reconstructive surgery	4	0	22	5	0	1	1	2	33
Pediatric urology	0	0	29	11	0	1	2	3	43
Transitional year	41	1	639	243	1	29	217	93	1171
Combined Specialties									
Diagnostic radiology/nuclear medicine	0	0	3	1	0	1	0	1	5
Emergency medicine/family medicine	3	0	11	5	0	0	1	1	20
Family medicine/preventive medicine	2	0	16	5	0	1	0	1	24
Internal medicine/anesthesiology	0	0	8	10	0	2	1	2	21
Internal medicine/dermatology	1	0	25	8	0	0	0	0	34
Internal medicine/emergency medicine	10	0	83	22	0	7	7	8	129
Internal medicine/emergency medicine/critical care medicine	1	0	9	3	0	0	0	0	13
Internal medicine/family medicine	1	0	6	3	0	1	0	0	11
Internal medicine/medical genetics and genomics	0	0	3	1	0	0	1	1	5
Internal medicine/neurology	0	0	2	0	0	0	0	0	2
Internal medicine/pediatrics	93	3	963	293	0	41	82	97	1475
Internal medicine/preventive medicine	5	0	8	14	0	1	3	1	31
Internal medicine/psychiatry	8	0	57	24	0	3	10	6	102
Medical genetics/maternal-fetal medicine	0	0	0	1	0	0	0	0	1
Pediatrics/anesthesiology	6	0	26	5	0	1	4	1	42
Pediatrics/emergency medicine	0	1	31	5	0	1	3	4	41
Pediatrics/medical genetics and genomics	0	0	42	11	0	2	4	5	59
Pediatrics/physical medicine and rehabilitation	1	0	8	1	0	1	1	0	12
Pediatrics/psychiatry/child and adolescent psychiatry	5	0	64	18	0	5	3	5	95
Psychiatry/family medicine	2	0	31	13	0	2	2	3	50
Psychiatry/neurology	0	0	14	4	0	2	0	0	20
Total, No. (%)	7239 (5.5)	173 (0.1)	73 307 (56.2)	34 687 (26.6)	122 (0.1)	3854 (3.0)	11 163 (8.6)	10 180 (7.8)	130 545

^a Includes resident physicians on duty as of December 31, 2017, reported through the 2017 National GME Census. A total of 174 programs (1.6%) did not provide updated information on residents by March 1, 2018. For these nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated.

^b The 2017 National GME Census imported self-designated race/ethnicity from Association of American Medical Colleges databases where available. "Multiracial" refers to residents who have self-identified as more than one race. A person of Hispanic ethnicity may be of any race.

^c Hospice and palliative medicine is a subspecialty of anesthesiology, family medicine, internal medicine, pediatrics, psychiatry, or radiation oncology.

^d Pain medicine is a subspecialty of anesthesiology, neurology, physical medicine and rehabilitation, or psychiatry.

^e Integrated programs differ from subspecialty programs in that they include core surgical education.

^f Sleep medicine is a subspecialty of anesthesiology, family medicine, internal medicine, neurology, otolaryngology, pediatrics, or psychiatry.

Table 9. Resident Physicians Who Completed a Graduate Medical Education (GME) Program or Preliminary Year During 2016-2017^a

Specialty/Subspecialty	No. Completing a Program	No. Completing a Preliminary Year
Allergy and immunology	127	0
Anesthesiology	1587	0
Adult cardiothoracic anesthesiology	193	0
Critical care medicine	171	0
Obstetric anesthesiology	32	0
Pediatric anesthesiology	205	0
Regional anesthesiology and acute pain medicine	2	0
Colon and rectal surgery	83	0
Dermatology	436	0
Dermatopathology	67	0
Micrographic surgery and dermatologic oncology	72	0
Emergency medicine	1901	0
Clinical informatics	2	0
Emergency medical services	56	0
Medical toxicology	32	0
Pediatric emergency medicine	36	0
Sports medicine	13	0
Undersea and hyperbaric medicine	10	0
Family medicine	3482	2
Clinical informatics	2	0
Geriatric medicine	42	0
Sports medicine	188	0
Hospice and palliative medicine ^b	278	0
Internal medicine	7563	1976
Adult congenital heart disease	3	0
Advanced heart failure and transplant cardiology	89	0
Cardiovascular disease	873	0
Clinical cardiac electrophysiology	121	0
Clinical informatics	4	0
Critical care medicine	116	0
Endocrinology, diabetes, and metabolism	299	0
Gastroenterology	497	0
Geriatric medicine	232	0
Hematology	7	0
Hematology and medical oncology	550	0
Infectious disease	352	0
Interventional cardiology	286	0
Nephrology	409	0
Medical oncology	31	0
Pulmonary disease	32	0
Pulmonary disease and critical care medicine	539	0
Rheumatology	214	0
Transplant hepatology	39	0
Medical genetics and genomics	36	0
Medical biochemical genetics	10	0
Molecular genetic pathology	50	0

(continued)

Table 9. Resident Physicians Who Completed a Graduate Medical Education (GME) Program or Preliminary Year During 2016-2017^a (continued)

Specialty/Subspecialty	No. Completing a Program	No. Completing a Preliminary Year
Neurological surgery	186	0
Endovascular surgical neuroradiology	1	0
Neurology	658	0
Child neurology	117	0
Clinical neurophysiology	161	0
Endovascular surgical neuroradiology	2	0
Epilepsy	66	0
Neurodevelopmental disabilities	4	0
Neuromuscular medicine	53	0
Vascular neurology	117	0
Nuclear medicine	37	0
Obstetrics and gynecology	1276	4
Female pelvic medicine and reconstructive surgery	44	0
Gynecologic oncology	21	0
Maternal-fetal medicine	15	0
Reproductive endocrinology and infertility	7	0
Ophthalmology	465	0
Ophthalmic plastic and reconstructive surgery	3	0
Orthopedic surgery	702	0
Adult reconstructive orthopedics	40	0
Foot and ankle orthopedics	15	0
Hand surgery	129	0
Musculoskeletal oncology	14	0
Orthopedic sports medicine	166	0
Orthopedic surgery of the spine	29	0
Orthopedic trauma	13	0
Pediatric orthopedics	32	0
Otolaryngology	285	0
Neurotology	14	0
Pediatric otolaryngology	30	0
Pain medicine ^c	316	0
Pathology-anatomic and clinical	599	0
Blood banking/transfusion medicine	51	0
Clinical informatics	3	0
Chemical pathology	1	0
Cytopathology	131	0
Forensic pathology	39	0
Hematology	124	0
Medical microbiology	13	0
Neuropathology	30	0
Pediatric pathology	23	0
Selective pathology	143	0

(continued)

Table 9. Resident Physicians Who Completed a Graduate Medical Education (GME) Program or Preliminary Year During 2016-2017^a (continued)

	No. Completing a Program	No. Completing a Preliminary Year
Pediatrics	2848	112
Adolescent medicine	28	0
Child abuse pediatrics	13	0
Clinical informatics	2	0
Developmental-behavioral pediatrics	25	0
Neonatal-perinatal medicine	233	0
Pediatric cardiology	137	0
Pediatric critical care medicine	167	0
Pediatric emergency medicine	130	0
Pediatric endocrinology	78	0
Pediatric gastroenterology	86	0
Pediatric hematology/oncology	152	0
Pediatric infectious diseases	63	0
Pediatric nephrology	37	0
Pediatric pulmonology	50	0
Pediatric rheumatology	30	0
Pediatric sports medicine	22	0
Pediatric transplant hepatology	8	0
Physical medicine and rehabilitation	392	0
Brain injury medicine	5	0
Pediatric rehabilitation	13	0
Spinal cord injury medicine	15	0
Sports medicine	18	0
Plastic surgery	126	0
Craniofacial surgery	8	0
Hand surgery	21	0
Plastic surgery-integrated ^d	80	0
Preventive medicine	146	0
Medical toxicology	3	0
Undersea and hyperbaric medicine	3	0
Psychiatry	1104	0
Addiction psychiatry	64	0
Child and adolescent psychiatry	390	0
Forensic psychiatry	50	0
Geriatric psychiatry	48	0
Psychosomatic medicine	64	0
Radiation oncology	174	0
Radiology-diagnostic	1107	0
Abdominal radiology	38	0
Endovascular surgical neuroradiology	7	0
Musculoskeletal radiology	24	0
Neuroradiology	231	0
Nuclear radiology	11	0
Pediatric radiology	57	0
Vascular and interventional radiology	245	0
Sleep medicine ^e	145	0

(continued)

Table 9. Resident Physicians Who Completed a Graduate Medical Education (GME) Program or Preliminary Year During 2016-2017^a (continued)

	No. Completing a Program	No. Completing a Preliminary Year
Surgery-general	1208	1002
Complex general surgical oncology	52	0
Hand surgery	8	0
Pediatric surgery	45	0
Surgical critical care	239	0
Vascular surgery	116	0
Vascular surgery-integrated ^d	41	0
Thoracic surgery	98	0
Congenital cardiac surgery	5	0
Thoracic surgery-integrated ^d	11	0
Urology	307	0
Female pelvic medicine and reconstructive surgery	15	0
Pediatric urology	21	0
Transitional year	0	994
Combined Specialties		
Emergency medicine/family medicine	4	0
Family medicine/preventive medicine	3	0
Internal medicine/anesthesiology	1	0
Internal medicine/dermatology	8	0
Internal medicine/emergency medicine	19	0
Internal medicine/emergency medicine/critical care medicine	6	0
Internal medicine/family medicine	3	0
Internal medicine/neurology	1	0
Internal medicine/pediatrics	359	0
Internal medicine/preventive medicine	7	0
Internal medicine/psychiatry	18	0
Pediatrics/anesthesiology	6	0
Pediatrics/emergency medicine	6	0
Pediatrics/medical genetics and genomics	7	0
Pediatrics/physical medicine and rehabilitation	2	0
Pediatrics/psychiatry/child and adolescent psychiatry	15	0
Psychiatry/family medicine	9	0
Psychiatry/neurology	5	0
Total	38 887	4090

^a Includes resident physicians reported as completing a program between January 1 and December 31, 2017, reported through the 2017 National GME Census. A total of 174 programs (1.6%) did not provide updated information on residents by March 1, 2018. For these nonresponding programs, resident physicians reported from the last received survey were moved into their next year in the program or graduated.

^b Hospice and palliative medicine is a subspecialty of anesthesiology, family medicine, internal medicine, pediatrics, psychiatry, or radiation oncology.

^c Pain medicine is a subspecialty of anesthesiology, neurology, physical medicine and rehabilitation, or psychiatry.

^d Integrated programs differ from subspecialty programs in that they include core surgical education.

^e Sleep medicine is a subspecialty of anesthesiology, family medicine, internal medicine, neurology, otolaryngology, pediatrics, or psychiatry.

Table 10. Total Program Size and Number of First-Year Positions Available in ACGME-Accredited and in Combined Specialty Programs for the Next Academic Year (2018-2019) as Projected by Program Directors

Specialty/Subspecialty	Total Program Size	Total No. of Program Year 1 Positions ^a	Total No. of PGY-1 Positions ^b
Allergy and immunology	339	153	0
Anesthesiology	6661	1574	1311
Adult cardiothoracic anesthesiology	213	213	0
Clinical Informatics	2	1	0
Critical care medicine	226	226	0
Obstetric anesthesiology	54	54	0
Pediatric anesthesiology	239	239	0
Regional anesthesiology and acute pain medicine	45	45	0
Colon and rectal surgery	102	102	0
Dermatology	1466	485	17
Dermatopathology	85	83	0
Micrographic surgery and dermatologic oncology	86	85	0
Emergency medicine	7875	2442	2442
Clinical informatics	16	9	0
Emergency medical services	101	98	0
Medical toxicology	96	48	0
Pediatric emergency medicine	145	50	0
Sports medicine	16	16	0
Undersea and hyperbaric medicine	14	14	0
Family medicine	12 585	4195	4195
Clinical informatics	10	5	0
Geriatric medicine	93	93	0
Sports medicine	237	237	0
Hospice and palliative medicine ^c	357	357	0
Internal medicine	28 025	10 757	10 757
Adult congenital heart disease	23	13	0
Advanced heart failure and transplant cardiology	124	124	0
Cardiovascular disease	2945	980	0
Clinical cardiac electrophysiology	314	212	0
Clinical informatics	54	26	0
Critical care medicine	231	131	0
Endocrinology, diabetes, and metabolism	691	331	0
Gastroenterology	1676	559	0
Geriatric medicine	396	393	0
Hematology	19	10	0
Hematology and medical oncology	1775	593	0
Infectious disease	851	413	0
Interventional cardiology	355	335	0
Nephrology	964	484	0
Medical oncology	40	18	0
Pulmonary disease	83	42	0
Pulmonary disease and critical care medicine	1791	612	0
Rheumatology	499	243	0
Transplant hepatology	81	81	0
Medical genetics and genomics	161	74	0
Medical biochemical genetics	20	20	0
Molecular genetic pathology	59	59	0

(continued)

Table 10. Total Program Size and Number of First-Year Positions Available in ACGME-Accredited and in Combined Specialty Programs for the Next Academic Year (2018-2019) as Projected by Program Directors (continued)

Specialty/Subspecialty	Total Program Size	Total No. of Program Year 1 Positions ^a	Total No. of PGY-1 Positions ^b
Neurological surgery	1489	225	225
Endovascular surgical neuroradiology	3	3	0
Neurology	2849	804	461
Brain injury medicine	1	1	0
Child neurology	430	147	0
Clinical neurophysiology	262	262	0
Endovascular surgical neuroradiology	1	1	0
Epilepsy	149	147	0
Neurodevelopmental disabilities	38	11	0
Neuromuscular medicine	92	90	0
Vascular neurology	177	177	0
Nuclear medicine	145	65	0
Obstetrics and gynecology	5664	1437	1437
Female pelvic medicine and reconstructive surgery	155	52	0
Gynecologic oncology	208	66	0
Maternal-fetal medicine	358	120	0
Reproductive endocrinology and infertility	168	57	0
Ophthalmology	1471	492	0
Ophthalmic plastic and reconstructive surgery	5	2	0
Orthopedic surgery	3999	803	803
Adult reconstructive orthopedics	50	50	0
Foot and ankle orthopedics	15	15	0
Hand surgery	154	154	0
Musculoskeletal oncology	17	17	0
Orthopedic sports medicine	245	245	0
Orthopedic surgery of the spine	35	35	0
Orthopedic trauma	17	17	0
Pediatric orthopedics	45	45	0
Osteopathic neuromusculoskeletal medicine	43	19	0
Otolaryngology	1611	327	327
Neurotology	32	19	0
Pediatric otolaryngology	37	34	0
Pain medicine ^d	383	383	0
Pathology-anatomic and clinical	2421	615	615
Blood banking/transfusion medicine	73	70	0
Clinical informatics	19	10	0
Chemical pathology	4	4	0
Cytopathology	152	152	0
Forensic pathology	72	72	0
Hematology	156	149	0
Medical microbiology	21	21	0
Neuropathology	77	41	0
Pediatric pathology	35	35	0
Selective pathology	184	184	0

(continued)

Table 10. Total Program Size and Number of First-Year Positions Available in ACGME-Accredited and in Combined Specialty Programs for the Next Academic Year (2018-2019) as Projected by Program Directors (continued)

	Total Program Size	Total No. of Program Year 1 Positions ^a	Total No. of PGY-1 Positions ^b
Pediatrics	9314	3151	3151
Adolescent medicine	112	40	0
Child abuse pediatrics	81	31	0
Clinical informatics	16	8	0
Developmental-behavioral pediatrics	140	52	0
Neonatal-perinatal medicine	807	269	0
Pediatric cardiology	454	151	0
Pediatric critical care medicine	552	188	0
Pediatric emergency medicine	408	134	0
Pediatric endocrinology	316	110	0
Pediatric gastroenterology	323	110	0
Pediatric hematology/oncology	526	175	0
Pediatric infectious diseases	247	85	0
Pediatric nephrology	181	62	0
Pediatric pulmonology	215	73	0
Pediatric rheumatology	140	49	0
Pediatric sports medicine	28	28	0
Pediatric transplant hepatology	14	14	0
Physical medicine and rehabilitation	1453	398	139
Brain injury medicine	17	17	0
Pediatric rehabilitation	42	22	0
Spinal cord injury medicine	28	28	0
Sports medicine	28	28	0
Plastic surgery	277	88	0
Craniofacial surgery	9	9	0
Hand surgery	23	23	0
Plastic surgery-integrated ^e	964	161	161
Preventive medicine	606	302	0
Medical toxicology	4	2	0
Undersea and hyperbaric medicine	4	4	0
Psychiatry	6532	1653	1653
Addiction psychiatry	113	111	0
Child and adolescent psychiatry	982	494	0
Forensic psychiatry	109	109	0
Geriatric psychiatry	124	123	0
Psychosomatic medicine	124	124	0
Radiation oncology	796	196	0
Radiology-diagnostic	4887	1197	0
Abdominal radiology	46	46	0
Endovascular surgical neuroradiology	7	7	0
Musculoskeletal radiology	44	44	0
Neuroradiology	323	312	0
Nuclear radiology	28	28	0
Pediatric radiology	113	113	0
Vascular and interventional radiology	295	295	0
Interventional radiology-integrated ^e	675	135	0
Sleep medicine ^f	197	194	0
Surgery-general	8694	2717	2717
Complex general surgical oncology	112	56	0
Hand surgery	8	8	0
Pediatric surgery	89	53	0
Surgical critical care	306	291	0
Vascular surgery	273	138	0

(continued)

Table 10. Total Program Size and Number of First-Year Positions Available in ACGME-Accredited and in Combined Specialty Programs for the Next Academic Year (2018-2019) as Projected by Program Directors (continued)

	Total Program Size	Total No. of Program Year 1 Positions ^a	Total No. of PGY-1 Positions ^b
Vascular surgery-integrated ^e	313	63	63
Thoracic surgery	258	110	0
Congenital cardiac surgery	11	11	0
Thoracic surgery-integrated ^e	222	37	37
Urology	1401	337	0
Female pelvic medicine and reconstructive surgery	38	11	0
Pediatric urology	47	26	0
Transitional year	1324	1324	1324
Combined Specialties			
Diagnostic radiology/nuclear medicine	11	2	2
Emergency medicine/family medicine	20	4	4
Family medicine/preventive medicine	21	6	6
Internal medicine/anesthesiology	35	7	7
Internal medicine/dermatology	34	6	6
Internal medicine/emergency medicine	137	26	26
Internal medicine/emergency medicine/critical care medicine	16	0	0
Internal medicine/family medicine	8	2	2
Internal medicine/medical genetics and genomics	13	4	4
Internal medicine/pediatrics	1517	382	382
Internal medicine/preventive medicine	37	10	10
Internal medicine/psychiatry	121	26	26
Medical genetics/maternal-fetal medicine	0	0	0
Pediatrics/anesthesiology	42	10	10
Pediatrics/emergency medicine	45	9	9
Pediatrics/medical genetics and genomics	79	20	20
Pediatrics/physical medicine and rehabilitation	13	3	3
Pediatrics/psychiatry/child and adolescent psychiatry	101	21	21
Psychiatry/family medicine	51	10	10
Psychiatry/neurology	27	6	6
Total	143 950	51 738	32 389

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; GME, graduate medical education; PGY-1, postgraduate year 1.

^a Program year 1 refers to the first year of training within a specific program; this may not correspond to the graduate year.

^b Postgraduate year 1 (PGY-1) refers to positions available the first year after completing medical school. Although residents in PGY-1 positions are not required to have prior GME, some residents who fill these positions have had prior training.

^c Hospice and palliative medicine is a subspecialty of anesthesiology, family medicine, internal medicine, pediatrics, psychiatry, or radiation oncology.

^d Pain medicine is a subspecialty of anesthesiology, neurology, physical medicine and rehabilitation, or psychiatry.

^e Integrated programs differ from subspecialty programs in that they include core surgical education.

^f Sleep medicine is a subspecialty of anesthesiology, family medicine, internal medicine, neurology, otolaryngology, pediatrics, or psychiatry.