

Graduate Medical Education, 2019-2020

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The American Medical Association (AMA) and the Association of American Medical Colleges (AAMC) sponsor and administer the National GME Census through GME Track, an internet-based AAMC product, and jointly 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 2019, 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 is added to FREIDA, the AMA Residency & Fellowship Database, a public resource on GME programs that is available to medical students, residents and fellows. Starting in late July 2019, program directors were surveyed about their active, transferred, and graduated residents and fellows for academic year 2019-2020. 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 who were present 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. 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.



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We surveyed 11 878 active programs, of which 11 366 (95.7%) completed the program survey and 10 090 (84.9%) confirmed the status of all of their active physicians-in-training, accounting for 129 526 (92.1%) active trainees. An additional 250 programs (2.1%) confirmed some but not all of their trainees (8154 trainees, 5.8%), 493 confirmed that they did not have any trainees (4.2%), 527 programs (4.4%) confirmed the status of non-active trainees (graduates and transfers), but did not have any currently active trainees, and 518 programs (4.4%) did not confirm the status of any physician training in the program (including 323 programs that apparently did not have any active trainees). A total of 96.9% of all physicians in our database had their status confirmed (eg, active, graduated, transferred, withdrawn). Physicians whose status was not confirmed were “advanced” into the next year of training (n = 2936 [2.1% of active residents]) or “graduated” based on expected graduation date (n = 1647 [3.5% of graduated residents and fellows]). In total, we estimate that there were 140 616 active residents in ACGME-accredited programs during the 2019-2020 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, 2014-2019

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
No. of programs	9768	9957	10 343	10 909	11 490	11 878
No. of residents						
Total	118 366	120 598	124 096	130 545	136 028	140 616
PGY-1	27 122	27 949	28 658	30 050	31 843	32 624
PGY-1 residents with no prior GME	26 145	27 297	27 938	29 427	31 134	31 729
Medical school of graduation, No. (%)						
USMDs	78 206 (66.1)	80 084 (66.4)	81 849 (66.0)	83 821 (64.2)	85 289 (62.7)	86 297 (61.4)
IMGs	29 908 (25.3)	29 654 (24.5)	29 719 (23.9)	30 613 (23.5)	31 238 (23.0)	32 234 (22.9)
DOs	10 099 (8.5)	10 715 (8.9)	12 378 (10.0)	15 964 (12.2)	19 363 (14.2)	21 972 (15.6)
Canadian	153 (0.1)	145 (0.1)	150 (0.1)	147 (0.1)	138 (0.1)	113 (0.1)
Specialties, No. (%)						
Programs	4286 (43.9)	4349 (43.7)	4642 (44.9)	4699 (43.1)	4997 (43.5)	5158 (43.4)
Residents	97 587 (82.4)	99 514 (82.5)	102 833 (82.9)	107 562 (82.4)	112 191 (82.5)	116 084 (82.6)
Subspecialties, No. (%)						
Programs	5482 (56.1)	5608 (56.3)	5701 (55.1)	6210 (56.9)	6492 (56.5)	6720 (56.6)
Residents	20 779 (17.6)	21 084 (17.5)	21 263 (17.1)	22 983 (17.6)	23 837 (17.5)	24 532 (17.4)

Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; DO, doctor of osteopathy; GME, graduate medical education; IMG, international medical

graduate; PGY-1, postgraduate year 1, the first year of education beyond medical school for which prior GME is not required; USMD, US allopathic medical school graduate.

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs December 31, 2019

Specialty/subspecialty	Total No. of programs ^a	Resident physicians, ^b No (%)					
		Total	Female	USMDs	IMGs	Canadians	Osteopathic
Allergy and immunology	78	306 (0.2)	208 (68.0)	215 (70.3)	60 (19.6)	1 (0.3)	30 (9.8)
Anesthesiology	156	6273 (4.5)	2069 (33.0)	4434 (70.7)	838 (13.4)	1 (<0.1)	1000 (15.9)
Adult cardiothoracic anesthesiology	70	173 (0.1)	59 (34.1)	135 (78.0)	17 (9.8)	2 (1.2)	19 (11.0)
Clinical informatics	1	1 (<0.1)	0	1 (100.0)	0	0	0
Critical care medicine	63	169 (0.1)	70 (41.4)	123 (72.8)	30 (17.8)	0	16 (9.5)
Obstetric anesthesiology	38	37 (<0.1)	20 (54.1)	28 (75.7)	8 (21.6)	0	1 (2.7)
Pediatric anesthesiology	61	200 (0.1)	101 (50.5)	140 (70.0)	38 (19.0)	1 (0.5)	21 (10.5)
Regional anesthesiology and acute pain medicine	31	68 (<0.1)	30 (44.1)	54 (79.4)	10 (14.7)	0	4 (5.9)
Colon and rectal surgery	63	94 (0.1)	38 (40.4)	72 (76.6)	16 (17.0)	2 (2.1)	4 (4.3)
Dermatology	142	1474 (1.0)	875 (59.4)	1271 (86.2)	56 (3.8)	1 (0.1)	146 (9.9)
Dermatopathology	54	60 (<0.1)	29 (48.3)	41 (68.3)	14 (23.3)	0	5 (8.3)
Micrographic surgery and dermatologic oncology	76	76 (0.1)	38 (50.0)	65 (85.5)	2 (2.6)	1 (1.3)	8 (10.5)
Emergency medicine	253	8085 (5.7)	2903 (35.9)	5569 (68.9)	397 (4.9)	3 (<0.1)	2116 (26.2)
Clinical informatics	4	10 (<0.1)	1 (10.0)	9 (90.0)	0	0	1 (10.0)
Emergency medical services	69	68 (<0.1)	24 (35.3)	53 (77.9)	5 (7.4)	0	10 (14.7)
Medical toxicology	26	65 (<0.1)	27 (41.5)	53 (81.5)	3 (4.6)	1 (1.5)	8 (12.3)
Pediatric emergency medicine	27	129 (0.1)	88 (68.2)	75 (58.1)	38 (29.5)	0	16 (12.4)
Sports medicine	9	15 (<0.1)	4 (26.7)	8 (53.3)	5 (33.3)	0	2 (13.3)
Undersea and hyperbaric medicine	7	10 (<0.1)	1 (10.0)	7 (70.0)	2 (20.0)	0	1 (10.0)
Family medicine	679	13 231 (9.4)	7092 (53.6)	5620 (42.5)	3423 (25.9)	2 (<0.1)	4186 (31.6)
Clinical informatics	4	10 (<0.1)	2 (20.0)	8 (80.0)	2 (20.0)	0	0
Geriatric medicine	47	37 (<0.1)	29 (78.4)	12 (32.4)	17 (45.9)	0	8 (21.6)
Sports medicine	146	227 (0.2)	63 (27.8)	104 (45.8)	33 (14.5)	0	90 (39.6)
Hospice and palliative medicine ^c	156	313 (0.2)	190 (60.7)	176 (56.2)	91 (29.1)	1 (0.3)	45 (14.4)
Internal medicine	549	27 881 (19.8)	11 993 (43.0)	12 568 (45.1)	10 885 (39.0)	6 (<0.1)	4422 (15.9)
Adult congenital heart disease	23	22 (<0.1)	9 (40.9)	18 (81.8)	4 (18.2)	0	0
Advanced heart failure and transplant cardiology	76	86 (0.1)	29 (33.7)	47 (54.7)	30 (34.9)	1 (1.2)	8 (9.3)
Cardiovascular disease	245	2978 (2.1)	756 (25.4)	1549 (52.0)	1115 (37.4)	4 (0.1)	310 (10.4)
Clinical cardiac electrophysiology	109	228 (0.2)	21 (9.2)	111 (48.7)	99 (43.4)	2 (0.9)	16 (7.0)
Clinical informatics	18	36 (<0.1)	10 (27.8)	23 (63.9)	10 (27.8)	1 (2.8)	2 (5.6)
Critical care medicine	45	250 (0.2)	68 (27.2)	82 (32.8)	123 (49.2)	2 (0.8)	43 (17.2)
Endocrinology, diabetes, and metabolism	149	660 (0.5)	469 (71.1)	263 (39.8)	336 (50.9)	0	61 (9.2)
Gastroenterology	202	1734 (1.2)	591 (34.1)	1012 (58.4)	540 (31.1)	3 (0.2)	179 (10.3)
Geriatric medicine	108	225 (0.2)	147 (65.3)	68 (30.2)	133 (59.1)	0	24 (10.7)
Hematology	2	21 (<0.1)	12 (57.1)	17 (81.0)	4 (19.0)	0	0
Hematology and medical oncology	160	1784 (1.3)	796 (44.6)	1040 (58.3)	640 (35.9)	1 (0.1)	103 (5.8)
Infectious disease	151	787 (0.6)	413 (52.5)	380 (48.3)	310 (39.4)	2 (0.3)	95 (12.1)
Interventional cardiology	165	323 (0.2)	42 (13.0)	116 (35.9)	172 (53.3)	1 (0.3)	34 (10.5)
Medical oncology	7	43 (<0.1)	21 (48.8)	24 (55.8)	17 (39.5)	0	2 (4.7)
Nephrology	149	835 (0.6)	304 (36.4)	203 (24.3)	539 (64.6)	0	93 (11.1)
Pulmonary disease	21	75 (0.1)	20 (26.7)	7 (9.3)	61 (81.3)	0	7 (9.3)
Pulmonary disease and critical care medicine	179	1931 (1.4)	664 (34.4)	956 (49.5)	746 (38.6)	1 (0.1)	228 (11.8)
Rheumatology	120	499 (0.4)	308 (61.7)	269 (53.9)	165 (33.1)	1 (0.2)	64 (12.8)
Transplant hepatology	54	51 (<0.1)	24 (47.1)	37 (72.5)	13 (25.5)	1 (2.0)	0
Medical genetics and genomics	46	63 (<0.1)	36 (57.1)	35 (55.6)	24 (38.1)	0	4 (6.3)
Medical biochemical genetics	18	16 (<0.1)	9 (56.3)	11 (68.8)	4 (25.0)	0	1 (6.3)
Molecular genetic pathology	42	42 (<0.1)	18 (42.9)	20 (47.6)	18 (42.9)	1 (2.4)	3 (7.1)

(continued)

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs December 31, 2019 (continued)

	Total No. of programs ^a	Resident physicians, ^b No (%)					
		Total	Female	USMDs	IMGs	Canadians	Osteopathic
Neurological surgery	117	1529 (1.1)	297 (19.4)	1356 (88.7)	103 (6.7)	3 (0.2)	67 (4.4)
Endovascular surgical neuroradiology	2	1 (<0.1)	0	1 (100.0)	0	0	0
Neurology	158	2974 (2.1)	1357 (45.6)	1637 (55.0)	936 (31.5)	2 (0.1)	399 (13.4)
Brain injury medicine	1	1 (<0.1)	1 (100.0)	1 (100.0)	0	0	0
Child neurology	74	433 (0.3)	294 (67.9)	319 (73.7)	78 (18.0)	0	36 (8.3)
Clinical neurophysiology	89	145 (0.1)	61 (42.1)	74 (51.0)	55 (37.9)	2 (1.4)	14 (9.7)
Endovascular surgical neuroradiology	2	2 (<0.1)	0	0	2 (100.0)	0	0
Epilepsy	77	122 (0.1)	59 (48.4)	62 (50.8)	45 (36.9)	1 (0.8)	14 (11.5)
Neurodevelopmental disabilities	8	24 (<0.1)	15 (62.5)	20 (83.3)	2 (8.3)	1 (4.2)	1 (4.2)
Neuromuscular medicine	50	69 (<0.1)	30 (43.5)	41 (59.4)	21 (30.4)	1 (1.4)	6 (8.7)
Vascular neurology	99	120 (0.1)	49 (40.8)	56 (46.7)	53 (44.2)	1 (0.8)	10 (8.3)
Nuclear medicine	38	75 (0.1)	30 (40.0)	19 (25.3)	53 (70.7)	0	3 (4.0)
Obstetrics and gynecology	284	5548 (3.9)	4646 (83.7)	4269 (76.9)	427 (7.7)	1 (<0.1)	851 (15.3)
Female pelvic medicine and reconstructive surgery	52	143 (0.1)	110 (76.9)	122 (85.3)	11 (7.7)	0	10 (7.0)
Gynecologic oncology	59	219 (0.2)	161 (73.5)	183 (83.6)	12 (5.5)	3 (1.4)	21 (9.6)
Maternal-fetal medicine	94	355 (0.3)	283 (79.7)	281 (79.2)	46 (13.0)	0	28 (7.9)
Reproductive endocrinology and infertility	50	149 (0.1)	117 (78.5)	124 (83.2)	16 (10.7)	0	9 (6.0)
Ophthalmology	122	1343 (1.0)	553 (41.2)	1232 (91.7)	52 (3.9)	2 (0.1)	57 (4.2)
Ophthalmic plastic and reconstructive surgery	4	3 (<0.1)	0	2 (66.7)	1 (33.3)	0	0
Orthopedic surgery	194	4242 (3.0)	677 (16.0)	3676 (86.7)	58 (1.4)	0	508 (12.0)
Adult reconstructive orthopedics	24	40 (<0.1)	4 (10.0)	30 (75.0)	5 (12.5)	1 (2.5)	4 (10.0)
Foot and ankle orthopedics	7	13 (<0.1)	5 (38.5)	11 (84.6)	2 (15.4)	0	0
Hand surgery	73	142 (0.1)	38 (26.8)	134 (94.4)	0	1 (0.7)	7 (4.9)
Musculoskeletal oncology	12	13 (<0.1)	3 (23.1)	12 (92.3)	1 (7.7)	0	0
Orthopedic sports medicine	92	165 (0.1)	21 (12.7)	132 (80.0)	13 (7.9)	4 (2.4)	16 (9.7)
Orthopedic surgery of the spine	18	26 (<0.1)	2 (7.7)	19 (73.1)	2 (7.7)	0	5 (19.2)
Orthopedic trauma	11	13 (<0.1)	1 (7.7)	8 (61.5)	3 (23.1)	2 (15.4)	0
Pediatric orthopedics	26	34 (<0.1)	11 (32.4)	23 (67.6)	5 (14.7)	2 (5.9)	4 (11.8)
Osteopathic neuromusculoskeletal medicine	22	49 (<0.1)	26 (53.1)	2 (4.1)	0	0	47 (95.9)
Otolaryngology-head and neck surgery	122	1703 (1.2)	642 (37.7)	1566 (92)	32 (1.9)	0	105 (6.2)
Neurotology	24	30 (<0.1)	6 (20.0)	28 (93.3)	2 (6.7)	0	0
Pediatric otolaryngology	29	38 (<0.1)	16 (42.1)	33 (86.8)	1 (2.6)	2 (5.3)	2 (5.3)
Pain medicine ^d	104	350 (0.2)	82 (23.4)	224 (64)	73 (20.9)	0	53 (15.1)
Pathology-anatomic and clinical	142	2273 (1.6)	1162 (51.1)	989 (43.5)	1082 (47.6)	2 (0.1)	200 (8.8)
Blood banking/transfusion medicine	51	46 (<0.1)	25 (54.3)	22 (47.8)	20 (43.5)	0	4 (8.7)
Clinical informatics	8	12 (<0.1)	2 (16.7)	5 (41.7)	7 (58.3)	0	0
Chemical pathology	4	2 (<0.1)	1 (50.0)	1 (50.0)	1 (50.0)	0	0
Cytopathology	93	115 (0.1)	65 (56.5)	37 (32.2)	71 (61.7)	0	7 (6.1)
Forensic pathology	43	43 (<0.1)	24 (55.8)	24 (55.8)	9 (20.9)	0	10 (23.3)
Hematopathology	86	121 (0.1)	58 (47.9)	57 (47.1)	53 (43.8)	0	11 (9.1)
Medical microbiology	15	8 (<0.1)	4 (50.0)	7 (87.5)	1 (12.5)	0	0
Neuropathology	36	52 (<0.1)	20 (38.5)	30 (57.7)	13 (25)	2 (3.8)	7 (13.5)
Pediatric pathology	27	22 (<0.1)	11 (50.0)	6 (27.3)	12 (54.5)	1 (4.5)	3 (13.6)
Selective pathology	90	138 (0.1)	67 (48.6)	55 (39.9)	76 (55.1)	1 (0.7)	6 (4.3)

(continued)

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs December 31, 2019 (continued)

	Total No. of programs ^a	Resident physicians, ^b No (%)					
		Total	Female	USMDs	IMGs	Canadians	Osteopathic
Pediatrics	211	9052 (6.4)	6550 (72.4)	5899 (65.2)	1827 (20.2)	2 (<0.1)	1324 (14.6)
Adolescent medicine	31	88 (0.1)	72 (81.8)	65 (73.9)	11 (12.5)	0	12 (13.6)
Child abuse pediatrics	31	47 (<0.1)	42 (89.4)	32 (68.1)	7 (14.9)	0	8 (17.0)
Clinical informatics	6	14 (<0.1)	3 (21.4)	12 (85.7)	1 (7.1)	0	1 (7.1)
Developmental-behavioral pediatrics	43	120 (0.1)	102 (85.0)	71 (59.2)	34 (28.3)	0	15 (12.5)
Neonatal-perinatal medicine	102	758 (0.5)	568 (74.9)	447 (59.0)	217 (28.6)	1 (0.1)	93 (12.3)
Pediatric cardiology	62	441 (0.3)	225 (51.0)	319 (72.3)	90 (20.4)	2 (0.5)	30 (6.8)
Pediatric critical care medicine	72	535 (0.4)	318 (59.4)	355 (66.4)	136 (25.4)	0	44 (8.2)
Pediatric emergency medicine	52	405 (0.3)	272 (67.2)	294 (72.6)	67 (16.5)	0	44 (10.9)
Pediatric endocrinology	72	232 (0.2)	196 (84.5)	127 (54.7)	84 (36.2)	0	21 (9.1)
Pediatric gastroenterology	64	311 (0.2)	204 (65.6)	198 (63.7)	83 (26.7)	0	30 (9.6)
Pediatric hematology/oncology	74	479 (0.3)	337 (70.4)	324 (67.6)	103 (21.5)	1 (0.2)	51 (10.6)
Pediatric infectious diseases	63	178 (0.1)	111 (62.4)	111 (62.4)	49 (27.5)	0	18 (10.1)
Pediatric nephrology	46	112 (0.1)	88 (78.6)	71 (63.4)	33 (29.5)	0	8 (7.1)
Pediatric pulmonology	55	169 (0.1)	102 (60.4)	83 (49.1)	66 (39.1)	0	20 (11.8)
Pediatric rheumatology	35	88 (0.1)	66 (75.0)	59 (67.0)	19 (21.6)	0	10 (11.4)
Pediatric sports medicine	17	27 (<0.1)	9 (33.3)	15 (55.6)	6 (22.2)	0	6 (22.2)
Pediatric transplant hepatology	15	9 (<0.1)	6 (66.7)	5 (55.6)	4 (44.4)	0	0
Physical medicine and rehabilitation	92	1405 (1.0)	499 (35.5)	810 (57.7)	145 (10.3)	0	450 (32.0)
Brain injury medicine	21	16 (<0.1)	9 (56.3)	7 (43.8)	4 (25.0)	0	5 (31.3)
Pediatric rehabilitation	21	38 (<0.1)	27 (71.1)	23 (60.5)	2 (5.3)	0	13 (34.2)
Spinal cord injury medicine	24	22 (<0.1)	13 (59.1)	12 (54.5)	2 (9.1)	0	8 (36.4)
Sports medicine	19	29 (<0.1)	12 (41.4)	15 (51.7)	4 (13.8)	0	10 (34.5)
Plastic surgery	54	205 (0.1)	66 (32.2)	138 (67.3)	41 (20.0)	0	26 (12.7)
Craniofacial surgery	8	5 (<0.1)	2 (40.0)	5 (100.0)	0	0	0
Hand surgery	17	15 (<0.1)	6 (40.0)	13 (86.7)	0	2 (13.3)	0
Plastic surgery-integrated ^e	81	964 (0.7)	412 (42.7)	907 (94.1)	49 (5.1)	0	8 (0.8)
Preventive medicine	72	291 (0.2)	154 (52.9)	198 (68.0)	50 (17.2)	2 (0.7)	41 (14.1)
Medical toxicology	1	4 (<0.1)	2 (50.0)	4 (100.0)	0	0	0
Undersea and hyperbaric medicine	1	1 (<0.1)	0	1 (100.0)	0	0	0
Psychiatry	257	6337 (4.5)	3099 (48.9)	3956 (62.4)	1306 (20.6)	2 (<0.1)	1073 (16.9)
Addiction medicine	59	68 (<0.1)	35 (51.5)	45 (66.2)	9 (13.2)	0	14 (20.6)
Addiction psychiatry	50	77 (0.1)	32 (41.6)	40 (51.9)	34 (44.2)	0	3 (3.9)
Child and adolescent psychiatry	139	848 (0.6)	486 (57.3)	457 (53.9)	246 (29)	2 (0.2)	143 (16.9)
Consultation-liaison psychiatry	61	87 (0.1)	48 (55.2)	59 (67.8)	24 (27.6)	1 (1.1)	3 (3.4)
Forensic psychiatry	48	56 (<0.1)	33 (58.9)	37 (66.1)	16 (28.6)	0	3 (5.4)
Geriatric psychiatry	60	42 (<0.1)	29 (69.0)	11 (26.2)	24 (57.1)	0	7 (16.7)
Radiation oncology	91	738 (0.5)	223 (30.2)	710 (96.2)	16 (2.2)	0	12 (1.6)
Radiology-diagnostic	193	4286 (3.0)	1154 (26.9)	3097 (72.3)	661 (15.4)	1 (<0.1)	527 (12.3)
Abdominal radiology	13	42 (<0.1)	16 (38.1)	15 (35.7)	22 (52.4)	2 (4.8)	3 (7.1)
Endovascular surgical neuroradiology	3	5 (<0.1)	1 (20.0)	4 (80.0)	1 (20.0)	0	0
Musculoskeletal radiology	17	30 (<0.1)	5 (16.7)	25 (83.3)	4 (13.3)	0	1 (3.3)
Neuroradiology	87	243 (0.2)	46 (18.9)	181 (74.5)	41 (16.9)	5 (2.1)	16 (6.6)
Nuclear radiology	17	11 (<0.1)	5 (45.5)	3 (27.3)	7 (63.6)	0	1 (9.1)
Pediatric radiology	47	47 (<0.1)	16 (34)	22 (46.8)	19 (40.4)	0	6 (12.8)
Vascular and interventional radiology	92	186 (0.1)	25 (13.4)	138 (74.2)	31 (16.7)	0	17 (9.1)
Interventional radiology-independent	4	4 (<0.1)	0	4 (100.0)	0	0	0
Interventional radiology-integrated ^e	85	393 (0.3)	79 (20.1)	347 (88.3)	18 (4.6)	0	28 (7.1)
Sleep medicine ^f	85	170 (0.1)	85 (50.0)	60 (35.3)	89 (52.4)	1 (0.6)	20 (11.8)

(continued)

Table 2. Resident Physicians on Duty in ACGME-Accredited and in Combined Specialty GME Programs December 31, 2019 (continued)

	Total No. of programs ^a	Resident physicians, ^b No (%)					
		Total	Female	USMDs	IMGs	Canadians	Osteopathic
Surgery-general	330	9374 (6.7)	4039 (43.1)	6950 (74.1)	1350 (14.4)	4 (<0.1)	1070 (11.4)
Complex general surgical oncology	28	110 (0.1)	40 (36.4)	85 (77.3)	22 (20.0)	1 (0.9)	2 (1.8)
Hand surgery	1	8 (<0.1)	3 (37.5)	5 (62.5)	1 (12.5)	0	2 (25.0)
Pediatric surgery	50	81 (0.1)	44 (54.3)	76 (93.8)	3 (3.7)	0	2 (2.5)
Surgical critical care	137	258 (0.2)	96 (37.2)	190 (73.6)	32 (12.4)	0	36 (14.0)
Vascular surgery	112	236 (0.2)	69 (29.2)	161 (68.2)	49 (20.8)	2 (0.8)	24 (10.2)
Vascular surgery-integrated ^e	61	335 (0.2)	120 (35.8)	290 (86.6)	32 (9.6)	0	13 (3.9)
Thoracic surgery	72	232 (0.2)	53 (22.8)	168 (72.4)	53 (22.8)	1 (0.4)	10 (4.3)
Congenital cardiac surgery	12	9 (<0.1)	3 (33.3)	7 (77.8)	2 (22.2)	0	0
Thoracic surgery-integrated ^e	27	221 (0.2)	64 (29.0)	199 (90.0)	16 (7.2)	0	6 (2.7)
Urology	144	1681 (1.2)	464 (27.6)	1510 (89.8)	72 (4.3)	0	99 (5.9)
Female pelvic medicine and reconstructive surgery	15	34 (<0.1)	25 (73.5)	31 (91.2)	2 (5.9)	0	1 (2.9)
Pediatric urology	26	35 (<0.1)	19 (54.3)	30 (85.7)	2 (5.7)	0	3 (8.6)
Transitional year	160	1360 (1.0)	501 (36.8)	867 (63.8)	153 (11.3)	0	340 (25.0)
Combined specialties							
Diagnostic radiology/nuclear medicine	3	11 (<0.1)	3 (27.3)	8 (72.7)	3 (27.3)	0	0
Emergency medicine/anesthesiology	1	4 (<0.1)	1 (25.0)	3 (75)	1 (25.0)	0	0
Emergency medicine/family medicine	3	32 (<0.1)	15 (46.9)	9 (28.1)	6 (18.8)	0	17 (53.1)
Family medicine/osteopathic neuromusculo-skeletal medicine	1	12 (<0.1)	4 (33.3)	0	0	0	12 (100.0)
Family medicine/preventive medicine	3	16 (<0.1)	8 (50.0)	13 (81.3)	1 (6.3)	0	2 (12.5)
Internal medicine/anesthesiology	5	25 (<0.1)	12 (48.0)	23 (92.0)	1 (4.0)	0	1 (4.0)
Internal medicine/dermatology	5	31 (<0.1)	19 (61.3)	31 (100.0)	0	0	0
Internal medicine/emergency medicine	13	150 (0.1)	52 (34.7)	108 (72.0)	6 (4.0)	0	36 (24.0)
Internal medicine/emergency medicine/critical care medicine	6	8 (<0.1)	2 (25.0)	7 (87.5)	1 (12.5)	0	0
Internal medicine/family medicine	1	5 (<0.1)	1 (20.0)	5 (100.0)	0	0	0
Internal medicine/medical genetics and genomics	6	5 (<0.1)	1 (20.0)	4 (80.0)	1 (20.0)	0	0
Internal medicine/pediatrics	79	1495 (1.1)	879 (58.8)	1246 (83.3)	121 (8.1)	1 (0.1)	127 (8.5)
Internal medicine/preventive medicine	5	27 (<0.1)	16 (59.3)	17 (63.0)	10 (37.0)	0	0
Internal medicine/psychiatry	16	121 (0.1)	56 (46.3)	87 (71.9)	23 (19.0)	0	11 (9.1)
Medical genetics and genomics/maternal-fetal medicine	2	0	0	0	0	0	0
Reproductive endocrinology and infertility/medical genetics and genomics	1	1 (<0.1)	1 (100.0)	1 (100.0)	0	0	0
Pediatrics/anesthesiology	7	36 (<0.1)	24 (66.7)	32 (88.9)	1 (2.8)	2 (5.6)	1 (2.8)
Pediatrics/emergency medicine	4	40 (<0.1)	23 (57.5)	30 (75.0)	5 (12.5)	0	5 (12.5)
Pediatrics/medical genetics and genomics	19	60 (<0.1)	38 (63.3)	45 (75.0)	8 (13.3)	0	7 (11.7)
Pediatrics/physical medicine and rehabilitation	3	13 (<0.1)	11 (84.6)	10 (76.9)	0	0	3 (23.1)
Pediatrics/psychiatry/child and adolescent psychiatry	9	97 (0.1)	77 (79.4)	89 (91.8)	4 (4.1)	0	4 (4.1)
Psychiatry/family medicine	6	54 (<0.1)	34 (63.0)	51 (94.4)	1 (1.9)	0	2 (3.7)
Psychiatry/neurology	4	23 (<0.1)	8 (34.8)	19 (82.6)	2 (8.7)	0	2 (8.7)
Total	11 878	140 616 (100.0)	64 472 (45.8)	86 297 (61.4)	32 234 (22.9)	113 (<0.1)	21 972 (15.6)

Abbreviations: 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, 2019, surveyed by National GME Census during 2019.

^b Includes resident physicians on duty as of December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. 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 Postgraduate Year 1 (PGY-1) Positions on Duty December 31, 2019, 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	No. of residents in PGY-1 positions without prior US GME ^c
Allergy and immunology	306	141	0	0
Anesthesiology	6273	1552	83	1208
Adult cardiothoracic anesthesiology	173	173	0	0
Clinical Informatics	1	1	0	0
Critical care medicine	169	158	0	0
Obstetric anesthesiology	37	37	0	0
Pediatric anesthesiology	200	199	0	0
Regional anesthesiology and acute pain medicine	68	68	0	0
Colon and rectal surgery	94	94	0	0
Dermatology	1474	485	5	6
Dermatopathology	60	58	0	0
Micrographic surgery and dermatologic oncology	76	75	0	0
Emergency medicine	8085	2513	94	2419
Clinical informatics	10	6	0	0
Emergency medical services	68	67	0	0
Medical toxicology	65	31	0	0
Pediatric emergency medicine	129	43	0	0
Sports medicine	15	15	0	0
Undersea and hyperbaric medicine	10	10	0	0
Family medicine	13 231	4442	118	4324
Clinical informatics	10	4	0	0
Geriatric medicine	37	37	0	0
Sports medicine	227	226	0	0
Hospice and palliative medicine ^d	313	307	0	0
Internal medicine	27 881	10 404	236	10 168
Adult congenital heart disease	22	8	0	0
Advanced heart failure and transplant cardiology	86	86	0	0
Cardiovascular disease	2978	975	0	0
Clinical cardiac electrophysiology	228	113	0	0
Clinical informatics	36	15	0	0
Critical care medicine	250	143	0	0
Endocrinology, diabetes, and metabolism	660	314	0	0
Gastroenterology	1734	595	0	0
Geriatric medicine	225	217	0	0
Hematology	21	9	0	0
Hematology and medical oncology	1784	575	0	0
Infectious disease	787	371	0	0
Interventional cardiology	323	313	0	0
Medical oncology	43	19	0	0
Nephrology	835	415	0	0
Pulmonary disease	75	36	0	0
Pulmonary disease and critical care medicine	1931	661	0	0
Rheumatology	499	235	0	0
Transplant hepatology	51	51	0	0

(continued)

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in Postgraduate Year 1 (PGY-1) Positions on Duty December 31, 2019, 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	No. of residents in PGY-1 positions without prior US GME ^c
Medical genetics and genomics	63	37	0	0
Medical biochemical genetics	16	16	0	0
Molecular genetic pathology	42	41	0	0
Neurological surgery	1529	226	2	224
Endovascular surgical neuroradiology	1	1	0	0
Neurology	2974	820	16	506
Brain injury medicine	1	1	0	0
Child neurology	433	147	0	18
Clinical neurophysiology	145	145	0	0
Endovascular surgical neuroradiology	2	2	0	0
Epilepsy	122	121	0	0
Neurodevelopmental disabilities	24	7	0	0
Neuromuscular medicine	69	67	0	0
Vascular neurology	120	117	0	0
Nuclear medicine	75	41	0	0
Obstetrics and gynecology	5548	1409	29	1381
Female pelvic medicine and reconstructive surgery	143	48	0	0
Gynecologic oncology	219	69	0	0
Maternal-fetal medicine	355	121	0	0
Reproductive endocrinology and infertility	149	47	0	0
Ophthalmology	1343	426	0	1
Ophthalmic plastic and reconstructive surgery	3	0	0	0
Orthopedic surgery	4242	836	20	816
Adult reconstructive orthopedics	40	40	0	0
Foot and ankle orthopedics	13	13	0	0
Hand surgery	142	136	0	0
Musculoskeletal oncology	13	13	0	0
Orthopedic sports medicine	165	165	0	0
Orthopedic surgery of the spine	26	26	0	0
Orthopedic trauma	13	12	0	0
Pediatric orthopedics	34	34	0	0
Osteopathic neuromusculoskeletal medicine	49	17	2	3
Otolaryngology-head and neck surgery	1703	326	3	323
Neurotology	30	17	0	0
Pediatric otolaryngology	38	32	0	0
Pain medicine ^e	350	343	0	0
Pathology-anatomic and clinical	2273	591	27	564
Blood banking/transfusion medicine	46	45	0	0
Clinical informatics	12	9	0	0
Chemical pathology	2	2	0	0
Cytopathology	115	115	0	0
Forensic pathology	43	43	0	0
Hematopathology	121	118	0	0
Medical microbiology	8	8	0	0
Neuropathology	52	27	0	0
Pediatric pathology	22	22	0	0
Selective pathology	138	134	0	0

(continued)

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in Postgraduate Year 1 (PGY-1) Positions on Duty December 31, 2019, 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	No. of residents in PGY-1 positions without prior US GME ^c
Pediatrics	9052	3021	48	2973
Adolescent medicine	88	32	0	0
Child abuse pediatrics	47	15	0	0
Clinical informatics	14	6	0	0
Developmental-behavioral pediatrics	120	42	0	0
Neonatal-perinatal medicine	758	249	0	0
Pediatric cardiology	441	148	0	0
Pediatric critical care medicine	535	191	0	0
Pediatric emergency medicine	405	140	0	0
Pediatric endocrinology	232	76	0	0
Pediatric gastroenterology	311	100	0	0
Pediatric hematology/oncology	479	158	0	0
Pediatric infectious diseases	178	58	0	0
Pediatric nephrology	112	32	0	0
Pediatric pulmonology	169	61	0	0
Pediatric rheumatology	88	26	0	0
Pediatric sports medicine	27	27	0	0
Pediatric transplant hepatology	9	9	0	0
Physical medicine and rehabilitation	1405	406	30	114
Brain injury medicine	16	16	0	0
Pediatric rehabilitation	38	18	0	0
Spinal cord injury medicine	22	22	0	0
Sports medicine	29	28	0	0
Plastic surgery	205	66	0	0
Craniofacial surgery	5	5	0	0
Hand surgery	15	15	0	0
Plastic surgery-integrated ^f	964	165	7	158
Preventive medicine	291	142	0	0
Medical toxicology	4	2	0	0
Undersea and hyperbaric medicine	1	1	0	0
Psychiatry	6337	1750	49	1701
Addiction medicine	68	66	0	0
Addiction psychiatry	77	74	0	0
Child and adolescent psychiatry	848	434	0	0
Consultation-liaison psychiatry	87	85	0	9
Forensic psychiatry	56	56	0	0
Geriatric psychiatry	42	39	0	0
Radiation oncology	738	174	0	0
Radiology-diagnostic	4286	1050	5	19
Abdominal radiology	42	42	0	0
Endovascular surgical neuroradiology	5	4	0	0
Musculoskeletal radiology	30	30	0	0
Neuroradiology	243	234	0	0
Nuclear radiology	11	11	0	0
Pediatric radiology	47	44	0	0
Vascular and interventional radiology	186	178	0	0
Interventional radiology-independent	4	1	0	0
Interventional radiology-integrated ^f	393	139	0	1

(continued)

Table 3. Total Number of Resident Physicians in Program Year 1 Positions and in Postgraduate Year 1 (PGY-1) Positions on Duty December 31, 2019, 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	No. of residents in PGY-1 positions without prior US GME ^c
Sleep medicine ^d	170	168	0	0
Surgery-general	9374	2550	61	2489
Complex general surgical oncology	110	55	0	0
Hand surgery	8	8	0	0
Pediatric surgery	81	42	0	0
Surgical critical care	258	248	0	0
Vascular surgery	236	115	0	0
Vascular surgery-integrated ^f	335	68	2	66
Thoracic surgery	232	94	0	0
Congenital cardiac surgery	9	9	0	0
Thoracic surgery-integrated ^f	221	35	1	34
Urology	1681	383	47	329
Female pelvic medicine and reconstructive surgery	34	11	0	0
Pediatric urology	35	20	0	1
Transitional year	1360	1359	5	1354
Combined specialties				
Diagnostic radiology/nuclear medicine	11	3	3	0
Emergency medicine/anesthesiology	4	1	0	1
Emergency medicine/family medicine	32	4	0	4
Family medicine/osteopathic neuromusculoskeletal medicine	12	2	0	2
Family medicine/preventive medicine	16	3	0	3
Internal medicine/anesthesiology	25	2	0	2
Internal medicine/dermatology	31	5	0	5
Internal medicine/emergency medicine	150	29	0	29
Internal medicine/emergency medicine/critical care medicine	8	0	0	0
Internal medicine/family medicine	5	0	0	0
Internal medicine/medical genetics and genomics	5	1	0	1
Internal medicine/pediatrics	1495	376	2	374
Internal medicine/preventive medicine	27	6	0	6
Internal medicine/psychiatry	121	24	0	24
Reproductive endocrinology and infertility/medical genetics and genomics	1	1	0	0
Pediatrics/anesthesiology	36	8	0	8
Pediatrics/emergency medicine	40	8	0	8
Pediatrics/medical genetics and genomics	60	14	0	14
Pediatrics/physical medicine and rehabilitation	13	3	0	3
Pediatrics/psychiatry/child and adolescent psychiatry	97	21	0	21
Psychiatry/family medicine	54	12	0	12
Psychiatry/neurology	23	3	0	3
Total	140 616	48 709	895	31 729

^a Includes resident physicians on duty as of December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. 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 2.7% of resident physicians in graduate year 1 positions have had some prior US graduate medical education (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, 2019, by Number per 100 000 and by Region and State

Region and state	No. of resident physicians per 100 000 ^a	2019 State population in 1000s ^b	No. (%)	
			Programs ^c	Resident physicians ^d
New England, subtotal	69	14 845	871 (7.3)	10 233 (7.3)
Connecticut	69	3565	200 (1.7)	2477 (1.8)
Maine	24	1344	33 (0.3)	319 (0.2)
Massachusetts	85	6893	471 (4.0)	5834 (4.2)
New Hampshire	31	1360	53 (0.4)	416 (0.3)
Rhode Island	81	1059	74 (0.6)	861 (0.6)
Vermont	52	624	40 (0.3)	326 (0.2)
Middle Atlantic, subtotal	75	41 138	2374 (20.0)	30 651 (21.8)
New Jersey	40	8882	290 (2.4)	3511 (2.5)
New York	93	19 454	1323 (11.1)	18 018 (12.8)
Pennsylvania	71	12 802	761 (6.4)	9122 (6.5)
East North Central, subtotal	52	46 902	2054 (17.3)	24 378 (17.3)
Illinois	51	12 672	528 (4.4)	6516 (4.6)
Indiana	23	6732	125 (1.0)	1569 (1.1)
Michigan	72	9987	568 (4.8)	7188 (5.1)
Ohio	60	11 689	626 (5.3)	7040 (5.0)
Wisconsin	35	5822	207 (1.7)	2065 (1.5)
West North Central, subtotal	39	21 427	815 (6.9)	8441 (6.0)
Iowa	29	3155	106 (0.9)	927 (0.7)
Kansas	30	2913	74 (0.6)	866 (0.6)
Minnesota	42	5640	235 (2.0)	2390 (1.7)
Missouri	51	6137	287 (2.4)	3102 (2.2)
Nebraska	43	1934	86 (0.7)	833 (0.6)
North Dakota	22	762	14 (0.1)	167 (0.1)
South Dakota	18	885	13 (0.1)	156 (0.1)
South Atlantic, subtotal	36	65 785	2089 (17.6)	23 751 (16.9)
Delaware	30	974	29 (0.2)	288 (0.2)
District of Columbia	270	706	178 (1.5)	1904 (1.4)
Florida	31	21 478	577 (4.9)	6759 (4.8)
Georgia	26	10 617	230 (1.9)	2799 (2.0)
Maryland	48	6046	238 (2.0)	2873 (2.0)
North Carolina	37	10 488	344 (2.9)	3832 (2.7)
South Carolina	30	5149	143 (1.2)	1565 (1.1)
Virginia	32	8536	261 (2.2)	2741 (2.0)
West Virginia	55	1792	89 (0.8)	990 (0.7)
East South Central, subtotal	34	19 176	583 (4.9)	6443 (4.6)
Alabama	31	4903	135 (1.1)	1539 (1.1)
Kentucky	33	4468	148 (1.2)	1485 (1.1)
Mississippi	27	2976	76 (0.6)	803 (0.6)
Tennessee	38	6829	224 (1.9)	2616 (1.9)
West South Central, subtotal	33	40 619	1107 (9.3)	13 466 (9.6)
Arkansas	32	3018	79 (0.7)	955 (0.7)
Louisiana	49	4649	186 (1.6)	2256 (1.6)
Oklahoma	30	3957	101 (0.8)	1188 (0.8)
Texas	31	28 996	741 (6.2)	9067 (6.4)

(continued)

Table 4. Programs and Resident Physicians on Duty December 31, 2019, by Number per 100 000 and by Region and State (continued)

Region and state	No. of resident physicians per 100 000 ^a	2019 State population in 1000s ^b	No. (%)	
			Programs ^c	Resident physicians ^d
Mountain, subtotal	25	24 855	557 (4.7)	6111 (4.3)
Arizona	27	7279	184 (1.6)	1989 (1.4)
Colorado	29	5759	144 (1.2)	1646 (1.2)
Idaho	9	1787	12 (0.1)	158 (0.1)
Montana	8	1069	4 (<0.1)	84 (<0.1)
Nevada	24	3080	51 (0.4)	739 (0.5)
New Mexico	29	2097	68 (0.6)	616 (0.4)
Utah	26	3206	90 (0.8)	835 (0.6)
Wyoming	8	579	4 (<0.1)	44 (<0.1)
Pacific, subtotal	30	53 492	1354 (11.4)	16 303 (11.6)
Alaska	5	732	2 (<0.1)	38 (<0.1)
California	32	39 512	1043 (8.8)	12 599 (9.0)
Hawaii	30	1416	32 (0.3)	424 (0.3)
Oregon	25	4218	100 (0.8)	1072 (0.8)
Washington	28	7615	177 (1.5)	2170 (1.5)
Puerto Rico	26	3194	74 (0.6)	839 (0.6)
Total	42.4	331 433	11 878 (100.0)	140 616 (100.0)

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

^b 2019 State population is from "Table 1. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019 (NST-EST2019-01)" Source: US Census Bureau, Population Division, December 2019 (<https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-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, 2019, surveyed by the National GME Census during 2019.

^d Includes resident physicians on duty as of December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. 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, 2019^a

Specialty/subspecialty	No. of graduates				Total
	US citizen	US permanent resident	Non-US citizen	Unknown citizenship/foreign born	
Anesthesiology	53	9	35	17	114
Emergency medicine	98	9	13	7	127
Family medicine	725	116	200	120	1161
Internal medicine	1224	441	1078	852	3595
Neurology	47	19	85	29	180
Obstetrics and gynecology	37	7	28	8	80
Otolaryngology-head and neck surgery	0	1	2	0	3
Pathology-anatomic and clinical	63	43	125	49	280
Pediatrics	222	54	185	157	618
Physical medicine and rehabilitation	8	2	2	1	13
Plastic surgery-integrated ^b	2	0	1	0	3
Psychiatry	150	37	71	41	299
Radiology-diagnostic	1	1	0	0	2
Surgery-general	165	49	147	60	421
Vascular surgery-integrated ^b	2	0	3	1	6
Thoracic surgery-integrated ^b	0	1	1	0	2
Urology	5	0	2	1	8
Transitional year	91	17	20	22	150
Combined specialties					
Emergency medicine/anesthesiology	0	0	1	0	1
Emergency medicine/family medicine	1	0	0	1	2
Internal medicine/emergency medicine	2	0	0	0	2
Internal medicine/pediatrics	15	2	11	1	29
Internal medicine/preventive medicine	0	0	1	3	4
Total, No. (%)	2911 (41.0)	808 (11.4)	2011 (28.3)	1370 (19.3)	7100 (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 international medical graduates.

^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, 2019, by Type of Medical School From Which They Graduated^a

Race ^b	No. (%)			
	US and Canadian allopathic	US osteopathic	Non-US	Total
Black	5193 (64.8)	533 (6.7)	2283 (28.5)	8009
American Indian/Alaska Native	152 (80.0)	19 (10.0)	19 (10.0)	190
White	52 660 (68.4)	14 329 (18.6)	9975 (13.0)	76 964
Asian	19 387 (51.7)	4423 (11.8)	13 667 (36.5)	37 477
Native Hawaiian/Pacific Islander	56 (55.4)	18 (17.8)	27 (26.7)	101
Multiracial	3107 (65.5)	656 (13.8)	977 (20.6)	4740
Other/unknown	5855 (44.6)	1994 (15.2)	5286 (40.2)	13 135
Ethnic origin^b				
Hispanic	7177 (60.5)	846 (7.1)	3837 (32.4)	11 860
Non-Hispanic	79 233 (61.5)	21 126 (16.4)	28 397 (22.1)	128 756
Total^c	86 410 (61.5)	21 972 (15.6)	32 234 (22.9)	140 616

^a Includes resident physicians on duty as of December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. 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 2019 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 1 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, 2019

Citizenship/visa status	Resident physicians, No. (%) ^a	
	Total	IMGs ^b
Native US citizen	100 149 (71.2)	8599 (26.7)
Naturalized US citizen	11 729 (8.3)	3967 (12.3)
Permanent resident	7547 (5.4)	4743 (14.7)
B-1, B-2 temporary visitor	8 (<0.1)	8 (<0.1)
F-1 student	444 (0.3)	11 (<0.1)
H-1, H-1B, H-2, H-3 temporary worker	2376 (1.7)	2090 (6.5)
J-1, J-2 exchange visitor	8336 (5.9)	8131 (25.2)
Refugee/asylee/displaced person	117 (0.1)	113 (0.4)
Other	514 (0.4)	380 (1.2)
Unknown citizenship/foreign born	9223 (6.6)	4185 (13.0)
Unknown citizenship/unknown birth country	173 (0.1)	7 (<0.1)
Total	140 616 (71.2)	8599 (26.7)

^a Includes resident physicians on duty as of December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. 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. Racial and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2019, by Specialty

Specialty/subspecialty	No. of resident physicians ^{a,b}								Total
	Black	American Indian/Alaska Native	White	Asian	Native Hawaiian/Pacific Islander	Multi-racial	Other/unknown	Hispanic origin	
Allergy and immunology	8	0	159	105	0	12	22	26	306
Anesthesiology	369	11	3693	1550	5	239	406	492	6273
Adult cardiothoracic anesthesiology	4	0	121	39	0	6	3	10	173
Clinical informatics	0	0	1	0	0	0	0	0	1
Critical care medicine	9	0	103	32	0	10	15	17	169
Obstetric anesthesiology	3	0	19	12	0	2	1	3	37
Pediatric anesthesiology	12	0	114	53	0	7	14	14	200
Regional anesthesiology and acute pain medicine	2	0	39	21	0	2	4	9	68
Colon and rectal surgery	5	0	60	24	0	2	3	6	94
Dermatology	67	1	936	314	0	68	88	93	1474
Dermatopathology	2	0	37	12	1	3	5	3	60
Micrographic surgery and dermatologic oncology	0	0	60	13	0	2	1	3	76
Emergency medicine	385	14	5654	1191	3	284	554	620	8085
Clinical informatics	0	0	8	2	0	0	0	0	10
Emergency medical services	2	0	55	7	1	0	3	3	68
Medical toxicology	2	0	52	7	0	4	0	4	65
Pediatric emergency medicine	8	0	71	34	0	4	12	18	129
Sports medicine	1	0	8	3	0	1	2	1	15
Undersea and hyperbaric medicine	2	0	4	1	0	1	2	0	10
Family medicine	1038	38	7339	3073	18	461	1264	1208	13 231
Clinical informatics	0	0	3	2	0	3	2	0	10
Geriatric medicine	0	0	17	16	0	1	3	1	37
Sports medicine	14	0	162	30	1	4	16	18	227
Hospice and palliative medicine ^c	10	0	182	70	0	5	46	24	313
Internal medicine	1737	29	11 588	10 267	18	731	3511	2443	27 881
Adult congenital heart disease	0	0	13	4	0	4	1	1	22
Advanced heart failure and transplant cardiology	2	0	30	46	0	2	6	5	86
Cardiovascular disease	160	2	1344	1105	2	119	246	184	2978
Clinical cardiac electrophysiology	13	0	98	95	0	9	13	9	228
Clinical informatics	4	0	13	14	0	1	4	1	36
Critical care medicine	12	0	122	80	0	5	31	17	250
Endocrinology, diabetes, and metabolism	26	0	245	299	1	22	67	73	660
Gastroenterology	84	2	725	727	1	52	143	100	1734
Geriatric medicine	16	0	85	95	0	5	24	19	225
Hematology	1	0	5	9	0	3	3	1	21
Hematology and medical oncology	70	0	833	716	0	51	114	118	1784
Infectious disease	48	1	390	232	0	30	86	85	787
Interventional cardiology	13	0	152	120	0	15	23	25	323
Medical oncology	1	0	10	26	0	1	5	2	43
Nephrology	50	0	281	379	1	30	94	85	835
Pulmonary disease	5	0	24	39	0	1	6	17	75
Pulmonary disease and critical care medicine	68	1	1015	655	4	74	114	125	1931
Rheumatology	19	0	246	168	0	16	50	36	499
Transplant hepatology	2	0	18	26	0	2	3	2	51
Medical genetics and genomics	0	0	34	16	0	1	12	9	63
Medical biochemical genetics	1	0	14	0	0	0	1	2	16
Molecular genetic pathology	0	0	19	17	0	2	4	1	42

(continued)

Table 8. Racial and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2019, by Specialty (continued)

	No. of resident physicians ^{a,b}								
	Black	American Indian/Alaska Native	White	Asian	Native Hawaiian/Pacific Islander	Multi-racial	Other/unknown	Hispanic origin	Total
Neurological surgery	75	2	956	353	0	56	87	120	1529
Endovascular surgical neuroradiology	0	0	1	0	0	0	0	0	1
Neurology	139	3	1466	929	1	93	343	283	2974
Brain injury medicine	0	0	1	0	0	0	0	0	1
Child neurology	14	2	257	106	0	16	38	46	433
Clinical neurophysiology	5	1	69	54	0	6	10	7	145
Endovascular surgical neuroradiology	0	0	0	2	0	0	0	0	2
Epilepsy	5	0	58	45	0	5	9	5	122
Neurodevelopmental disabilities	1	0	16	4	0	2	1	2	24
Neuromuscular medicine	2	0	36	25	0	2	4	6	69
Vascular neurology	9	0	52	44	0	6	9	9	120
Nuclear medicine	7	0	32	26	0	1	9	9	75
Obstetrics and gynecology	456	12	3520	878	3	205	474	546	5548
Female pelvic medicine and reconstructive surgery	9	0	88	33	0	3	10	21	143
Gynecologic oncology	12	0	164	26	0	6	11	21	219
Maternal-fetal medicine	37	0	239	45	1	14	19	39	355
Reproductive endocrinology and infertility	10	0	98	27	0	4	10	6	149
Ophthalmology	23	1	742	416	0	67	94	78	1343
Ophthalmic plastic and reconstructive surgery	0	0	3	0	0	0	0	0	3
Orthopedic surgery	166	5	3089	550	6	118	308	250	4242
Adult reconstructive orthopedics	0	1	33	3	0	1	2	4	40
Foot and ankle orthopedics	1	0	9	3	0	0	0	1	13
Hand surgery	3	0	112	20	0	2	5	5	142
Musculoskeletal oncology	0	0	10	1	0	0	2	0	13
Orthopedic sports medicine	6	0	121	19	0	5	14	11	165
Orthopedic surgery of the spine	1	0	16	6	0	2	1	1	26
Orthopedic trauma	1	0	10	1	0	1	0	0	13
Pediatric orthopedics	0	0	23	3	0	3	5	3	34
Osteopathic neuromusculoskeletal medicine	0	0	28	3	0	5	13	0	49
Otolaryngology-head and neck surgery	41	1	1088	394	1	62	116	115	1703
Neurotology	0	0	18	10	0	2	0	2	30
Pediatric otolaryngology	2	0	28	5	0	1	2	2	38
Pain medicine ^d	24	0	167	112	0	17	30	22	350
Pathology-anatomic and clinical	112	1	1166	652	3	84	255	198	2273
Blood banking/transfusion medicine	2	0	21	10	0	4	9	4	46
Clinical informatics	0	0	8	3	0	0	1	2	12
Chemical pathology	0	0	1	1	0	0	0	0	2
Cytopathology	3	0	51	47	1	2	11	11	115
Forensic pathology	3	0	34	4	0	0	2	0	43
Hematopathology	4	0	66	36	0	4	11	8	121
Medical microbiology	0	0	7	0	0	1	0	1	8
Neuropathology	0	0	40	10	0	0	2	4	52
Pediatric pathology	0	0	17	2	0	1	2	3	22
Selective pathology	3	0	67	50	0	7	11	10	138

(continued)

Table 8. Racial and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2019, by Specialty (continued)

	No. of resident physicians ^{a,b}								
	Black	American Indian/Alaska Native	White	Asian	Native Hawaiian/Pacific Islander	Multi-racial	Other/unknown	Hispanic origin	Total
Pediatrics	599	16	5102	2052	6	278	999	963	9052
Adolescent medicine	16	0	48	12	0	5	7	9	88
Child abuse pediatrics	2	0	32	6	0	2	5	6	47
Clinical informatics	0	0	8	4	0	1	1	0	14
Developmental-behavioral pediatrics	9	0	67	21	0	9	14	16	120
Neonatal-perinatal medicine	48	0	432	198	0	21	59	75	758
Pediatric cardiology	16	0	273	108	1	13	30	38	441
Pediatric critical care medicine	15	0	332	122	0	22	44	54	535
Pediatric emergency medicine	27	0	261	82	0	11	24	29	405
Pediatric endocrinology	14	0	116	72	0	2	28	33	232
Pediatric gastroenterology	14	0	165	104	0	5	23	31	311
Pediatric hematology/oncology	14	1	322	107	0	8	27	36	479
Pediatric infectious diseases	5	0	116	31	0	6	20	15	178
Pediatric nephrology	8	0	56	37	0	1	10	8	112
Pediatric pulmonology	6	0	106	35	0	7	15	22	169
Pediatric rheumatology	3	0	57	14	0	3	11	9	88
Pediatric sports medicine	4	0	17	6	0	0	0	0	27
Pediatric transplant hepatology	0	0	4	2	0	2	1	1	9
Physical medicine and rehabilitation	58	1	803	374	0	52	117	103	1405
Brain injury medicine	0	0	5	9	0	0	2	1	16
Pediatric rehabilitation	4	0	27	6	0	0	1	3	38
Spinal cord injury medicine	1	0	12	4	0	3	2	1	22
Sports medicine	2	0	14	10	0	1	2	2	29
Plastic surgery	11	1	118	36	0	12	27	20	205
Craniofacial surgery	0	0	2	1	1	0	1	0	5
Hand surgery	1	0	8	4	0	0	2	2	15
Plastic surgery-integrated ^e	24	1	632	213	0	43	51	64	964
Preventive medicine	45	1	145	60	0	11	29	15	291
Medical toxicology	0	0	2	2	0	0	0	1	4
Undersea and hyperbaric medicine	0	0	1	0	0	0	0	0	1
Psychiatry	435	10	3377	1631	5	258	621	625	6337
Addiction medicine	3	0	46	8	0	1	10	10	68
Addiction psychiatry	8	0	37	19	0	6	7	10	77
Child and adolescent psychiatry	64	0	410	274	0	37	63	71	848
Consultation-liaison psychiatry	3	0	36	11	0	1	5	4	56
Forensic psychiatry	4	0	15	16	0	2	5	4	42
Geriatric psychiatry	4	0	52	16	0	3	12	11	87
Radiation oncology	25	1	435	221	0	22	34	32	738
Radiology-diagnostic	182	3	2447	1184	5	186	279	306	4286
Abdominal radiology	3	0	15	15	0	1	8	3	42
Endovascular surgical neuroradiology	0	0	2	3	0	0	0	0	5
Musculoskeletal radiology	0	0	19	9	0	1	1	1	30
Neuroradiology	10	0	144	63	2	6	18	10	243
Nuclear radiology	0	0	6	3	0	1	1	1	11
Pediatric radiology	1	0	27	9	0	2	8	5	47
Vascular and interventional radiology	9	0	109	52	0	11	5	15	186
Interventional radiology-independent	0	0	4	0	0	0	0	1	4
Interventional radiology-integrated ^e	9	0	247	102	0	10	25	24	393
Sleep medicine ^f	6	0	69	73	0	6	16	14	170

(continued)

Table 8. Racial and Ethnic Origin of Resident Physicians in ACGME-Accredited and in Combined Specialty Graduate Medical Education (GME) Programs on Duty December 31, 2019, by Specialty (continued)

	No. of resident physicians ^{a,b}								
	Black	American Indian/Alaska Native	White	Asian	Native Hawaiian/Pacific Islander	Multi-racial	Other/unknown	Hispanic origin	Total
Surgery-general	504	14	5814	1797	5	343	897	870	9374
Complex general surgical oncology	2	0	83	19	0	3	3	5	110
Hand surgery	0	0	5	1	0	0	2	0	8
Pediatric surgery	5	0	56	12	0	3	5	8	81
Surgical critical care	16	0	181	41	1	7	12	22	258
Vascular surgery	9	0	148	60	0	12	7	15	236
Vascular surgery-integrated ^e	17	2	184	92	0	11	29	22	335
Thoracic surgery	11	0	153	57	0	5	6	17	232
Congenital cardiac surgery	1	0	4	2	0	1	1	0	9
Thoracic surgery-integrated ^e	6	0	145	51	0	7	12	18	221
Urology	64	4	1065	379	1	61	107	116	1681
Female pelvic medicine and reconstructive surgery	4	0	23	3	0	2	2	3	34
Pediatric urology	0	0	22	10	0	1	2	1	35
Transitional year	66	4	668	341	1	26	254	122	1360
Combined specialties									
Diagnostic radiology/nuclear medicine	0	0	4	3	0	2	2	1	11
Emergency medicine/anesthesiology	0	0	3	0	0	0	1	2	4
Emergency medicine/family medicine	2	0	20	6	0	0	4	4	32
Family medicine/osteopathic neuromusculoskeletal medicine	0	0	9	1	0	0	2	2	12
Family medicine/preventive medicine	1	0	11	4	0	0	0	0	16
Internal medicine/anesthesiology	0	0	13	8	0	2	2	3	25
Internal medicine/dermatology	0	0	23	7	0	0	1	1	31
Internal medicine/emergency medicine	7	0	91	29	0	7	16	5	150
Internal medicine/emergency medicine/critical care medicine	0	0	7	1	0	0	0	0	8
Internal medicine/family medicine	0	0	4	0	0	1	0	0	5
Internal medicine/medical genetics and genomics	0	0	3	2	0	0	0	1	5
Internal medicine/pediatrics	99	2	933	313	1	50	97	99	1495
Internal medicine/preventive medicine	4	0	7	12	0	1	3	2	27
Internal medicine/psychiatry	11	0	64	26	0	3	17	10	121
Reproductive endocrinology and infertility/medical genetics and genomics	0	0	0	1	0	0	0	0	1
Pediatrics/anesthesiology	3	0	25	4	0	2	2	1	36
Pediatrics/emergency medicine	0	1	29	5	0	0	5	6	40
Pediatrics/medical genetics and genomics	1	0	45	10	0	1	3	1	60
Pediatrics/physical medicine and rehabilitation	0	0	9	2	0	1	1	1	13
Pediatrics/psychiatry/child and adolescent psychiatry	8	0	64	13	0	5	7	6	97
Psychiatry/family medicine	5	0	25	15	0	4	5	3	54
Psychiatry/neurology	0	0	15	5	0	2	1	1	23
Total	8009	190	76 964	37 477	101	4740	13135	11 860	140 616

^a Includes resident physicians on duty as of December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. 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 2019 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 1 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 2018-2019^a

Specialty/subspecialty	No. completing a program	No. completing a preliminary year
Allergy and immunology	142	0
Anesthesiology	1634	0
Adult cardiothoracic anesthesiology	189	0
Clinical informatics	1	0
Critical care medicine	170	0
Obstetric anesthesiology	40	0
Pediatric anesthesiology	169	0
Regional anesthesiology and acute pain medicine	61	0
Colon and rectal surgery	91	0
Dermatology	487	0
Dermatopathology	61	0
Micrographic surgery and dermatologic oncology	64	0
Emergency medicine	2267	0
Clinical informatics	1	0
Emergency medical services	59	0
Medical toxicology	33	0
Pediatric emergency medicine	40	0
Sports medicine	16	0
Undersea and hyperbaric medicine	6	0
Family medicine	3990	3
Clinical informatics	6	0
Geriatric medicine	45	0
Sports medicine	205	0
Hospice and palliative medicine ^b	296	0
Internal medicine	8246	1934
Adult congenital heart disease	7	0
Advanced heart failure and transplant cardiology	98	0
Cardiovascular disease	948	0
Clinical cardiac electrophysiology	134	0
Clinical informatics	14	0
Critical care medicine	138	0
Endocrinology, diabetes, and metabolism	330	0
Gastroenterology	535	0
Geriatric medicine	207	0
Hematology	8	0
Hematology and medical oncology	556	0
Infectious disease	353	0
Interventional cardiology	312	0
Medical oncology	13	0
Nephrology	390	0
Pulmonary disease	32	0
Pulmonary disease and critical care medicine	585	0
Rheumatology	245	0
Transplant hepatology	44	0
Medical genetics and genomics	39	0
Medical biochemical genetics	15	0
Molecular genetic pathology	57	0

(continued)

Table 9. Resident Physicians Who Completed a Graduate Medical Education (GME) Program or Preliminary Year During 2018-2019^a (continued)

Specialty/subspecialty	No. completing a program	No. completing a preliminary year
Neurological surgery	163	0
Endovascular surgical neuroradiology	2	0
Neurology	743	0
Brain injury medicine	1	0
Child neurology	116	0
Clinical neurophysiology	159	0
Endovascular surgical neuroradiology	1	0
Epilepsy	110	0
Neurodevelopmental disabilities	8	0
Neuromuscular medicine	67	0
Vascular neurology	112	0
Nuclear medicine	34	1
Obstetrics and gynecology	1338	0
Female pelvic medicine and reconstructive surgery	44	0
Gynecologic oncology	59	0
Maternal-fetal medicine	111	0
Reproductive endocrinology and infertility	53	0
Ophthalmology	462	0
Ophthalmic plastic and reconstructive surgery	2	0
Orthopedic surgery	777	0
Adult reconstructive orthopedics	39	0
Foot and ankle orthopedics	12	0
Hand surgery	131	0
Musculoskeletal oncology	12	0
Orthopedic sports medicine	181	0
Orthopedic surgery of the spine	25	0
Orthopedic trauma	19	0
Pediatric orthopedics	32	0
Osteopathic neuromusculoskeletal medicine	18	0
Otolaryngology-head and neck surgery	322	0
Neurotology	17	0
Pediatric otolaryngology	28	0
Pain medicine ^c	325	0
Pathology-anatomic and clinical	577	0
Blood banking/transfusion medicine	51	0
Clinical informatics	3	0
Chemical pathology	1	0
Cytopathology	122	0
Forensic pathology	34	0
Hematopathology	124	0
Medical microbiology	11	0
Neuropathology	22	0
Pediatric pathology	22	0
Selective pathology	162	0

(continued)

Table 9. Resident Physicians Who Completed a Graduate Medical Education (GME) Program or Preliminary Year During 2018-2019^a (continued)

	No. completing a program	No. completing a preliminary year
Pediatrics	2945	90
Adolescent medicine	29	0
Child abuse pediatrics	7	0
Clinical informatics	5	0
Developmental-behavioral pediatrics	28	0
Neonatal-perinatal medicine	250	0
Pediatric cardiology	152	0
Pediatric critical care medicine	165	0
Pediatric emergency medicine	139	0
Pediatric endocrinology	80	0
Pediatric gastroenterology	100	0
Pediatric hematology/oncology	162	0
Pediatric infectious diseases	52	0
Pediatric nephrology	32	0
Pediatric pulmonology	54	0
Pediatric rheumatology	30	0
Pediatric sports medicine	25	0
Pediatric transplant hepatology	9	0
Physical medicine and rehabilitation	409	0
Brain injury medicine	12	0
Pediatric rehabilitation	18	0
Spinal cord injury medicine	20	0
Sports medicine	20	0
Plastic surgery	82	0
Craniofacial surgery	7	0
Hand surgery	18	0
Plastic surgery-integrated ^d	121	0
Preventive medicine	154	0
Medical toxicology	2	0
Undersea and hyperbaric medicine	2	0
Psychiatry	1204	1
Addiction medicine	27	0
Addiction psychiatry	66	0
Child and adolescent psychiatry	420	0
Consultation-liaison psychiatry	67	0
Forensic psychiatry	46	0
Geriatric psychiatry	65	0
Radiation oncology	189	0
Radiology-diagnostic	1132	0
Abdominal radiology	40	0
Endovascular surgical neuroradiology	5	0
Musculoskeletal radiology	32	0
Neuroradiology	230	7
Nuclear radiology	10	0
Pediatric radiology	50	0
Vascular and interventional radiology	239	0
Interventional radiology-integrated ^d	15	0
Sleep medicine ^e	147	0

(continued)

Table 9. Resident Physicians Who Completed a Graduate Medical Education (GME) Program or Preliminary Year During 2018-2019^a (continued)

	No. completing a program	No. completing a preliminary year
Surgery-general	1314	1031
Complex general surgical oncology	53	0
Hand surgery	8	0
Pediatric surgery	43	0
Surgical critical care	261	0
Vascular surgery	120	0
Vascular surgery-integrated ^d	54	0
Thoracic surgery	97	0
Congenital cardiac surgery	6	0
Thoracic surgery-integrated ^d	25	0
Urology	318	0
Female pelvic medicine and reconstructive surgery	16	0
Pediatric urology	21	0
Transitional year	0	1348
Combined specialties		
Diagnostic radiology/nuclear medicine	1	0
Emergency medicine/family medicine	8	0
Family medicine/osteopathic neuromusculoskeletal medicine	2	0
Family medicine/preventive medicine	6	0
Internal medicine/anesthesiology	5	0
Internal medicine/dermatology	6	0
Internal medicine/emergency medicine	24	0
Internal medicine/emergency medicine/critical care medicine	4	0
Internal medicine/family medicine	3	0
Internal medicine/medical genetics and genomics	1	0
Internal medicine/neurology	1	0
Internal medicine/pediatrics	372	0
Internal medicine/preventive medicine	6	0
Internal medicine/psychiatry	16	0
Pediatrics/anesthesiology	7	0
Pediatrics/emergency medicine	8	0
Pediatrics/medical genetics and genomics	15	0
Pediatrics/physical medicine and rehabilitation	3	0
Pediatrics/psychiatry/child and adolescent psychiatry	17	0
Psychiatry/family medicine	8	0
Psychiatry/neurology	3	0
Total	41 996	4415

^a Includes resident physicians reported as completing a program between January 1 and December 31, 2019, reported through the 2019 National GME Census. A total of 195 programs (1.6%) did not provide updated information on residents by March 1, 2020. 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 (2020-2021) 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	320	153	0
Anesthesiology	6989	1681	1384
Adult cardiothoracic anesthesiology	235	235	0
Clinical informatics	2	1	0
Critical care medicine	247	247	0
Obstetric anesthesiology	61	61	0
Pediatric anesthesiology	248	248	0
Regional anesthesiology and acute pain medicine	83	83	0
Colon and rectal surgery	106	106	0
Dermatology	1644	528	9
Dermatopathology	87	85	0
Micrographic surgery and dermatologic oncology	92	91	0
Emergency medicine	8838	2747	2747
Clinical informatics	18	9	0
Emergency medical services	122	119	0
Medical toxicology	96	49	0
Pediatric emergency medicine	152	52	0
Sports medicine	19	19	0
Undersea and hyperbaric medicine	15	15	0
Family medicine	14 793	4931	4931
Clinical informatics	15	8	0
Geriatric medicine	100	100	0
Sports medicine	273	271	0
Hospice and palliative medicine ^c	434	434	0
Internal medicine	30 303	11 543	11 543
Adult congenital heart disease	42	26	0
Advanced heart failure and transplant cardiology	134	134	0
Cardiovascular disease	3253	1085	0
Clinical cardiac electrophysiology	347	200	0
Clinical informatics	69	36	0
Critical care medicine	289	165	0
Endocrinology, diabetes, and metabolism	728	351	0
Gastroenterology	1877	621	0
Geriatric medicine	406	403	0
Hematology	20	10	0
Hematology and medical oncology	1913	652	0
Infectious disease	879	431	0
Interventional cardiology	386	368	0
Medical oncology	41	20	0
Nephrology	958	487	0
Pulmonary disease	78	40	0
Pulmonary disease and critical care medicine	2051	684	0
Rheumatology	533	262	0
Transplant hepatology	85	85	0

(continued)

Table 10. Total Program Size and Number of First-Year Positions Available in ACME-Accredited and in Combined Specialty Programs for the Next Academic Year (2020-2021) 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
Medical genetics and genomics	158	76	0
Medical biochemical genetics	24	24	0
Molecular genetic pathology	67	67	0
Neurological surgery	1605	236	236
Endovascular surgical neuroradiology	3	3	0
Neurology	3287	909	566
Brain injury medicine	1	1	0
Child neurology	488	164	0
Clinical neurophysiology	254	254	0
Endovascular surgical neuroradiology	2	2	0
Epilepsy	185	183	0
Neurodevelopmental disabilities	38	11	0
Neuromuscular medicine	101	99	0
Vascular neurology	198	198	0
Nuclear medicine	138	65	0
Obstetrics and gynecology	5964	1513	1513
Female pelvic medicine and reconstructive surgery	156	53	0
Gynecologic oncology	234	76	0
Maternal-fetal medicine	399	133	0
Reproductive endocrinology and infertility	177	59	0
Ophthalmology	1519	507	0
Ophthalmic plastic and reconstructive surgery	4	4	0
Orthopedic surgery	4420	887	887
Adult reconstructive orthopedics	52	52	0
Foot and ankle orthopedics	16	16	0
Hand surgery	165	165	0
Musculoskeletal oncology	17	17	0
Orthopedic sports medicine	233	233	0
Orthopedic surgery of the spine	33	33	0
Orthopedic trauma	19	19	0
Pediatric orthopedics	43	43	0
Osteopathic neuromusculoskeletal medicine	122	42	8
Otolaryngology-head and neck Surgery	1745	351	351
Neurotology	40	21	0
Pediatric otolaryngology	46	41	0
Pain medicine ^d	405	405	0
Pathology-anatomic and clinical	2445	625	625
Blood banking/transfusion medicine	77	74	0
Clinical informatics	25	13	0
Chemical pathology	4	4	0
Cytopathology	154	154	0
Forensic pathology	85	85	0
Hematopathology	159	154	0
Medical microbiology	20	20	0
Neuropathology	82	44	0
Pediatric pathology	36	36	0
Selective pathology	197	197	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 (2020-2021) 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	9554	3243	3243
Adolescent medicine	122	42	0
Child abuse pediatrics	85	30	0
Clinical informatics	23	12	0
Developmental-behavioral pediatrics	162	58	0
Neonatal-perinatal medicine	834	279	0
Pediatric cardiology	484	162	0
Pediatric critical care medicine	609	204	0
Pediatric emergency medicine	427	146	0
Pediatric endocrinology	330	115	0
Pediatric gastroenterology	332	109	0
Pediatric hematology/oncology	540	178	0
Pediatric hospital medicine		0	0
Pediatric infectious diseases	249	89	0
Pediatric nephrology	200	68	0
Pediatric pulmonology	241	82	0
Pediatric rheumatology	151	50	0
Pediatric sports medicine	30	30	0
Pediatric transplant hepatology	15	15	0
Physical medicine and rehabilitation	1537	433	139
Brain injury medicine	22	22	0
Pediatric rehabilitation	44	24	0
Spinal cord injury medicine	33	33	0
Sports medicine	31	31	0
Plastic surgery	274	89	0
Craniofacial surgery	9	9	0
Hand surgery	23	23	0
Plastic surgery-integrated ^e	1050	178	178
Preventive medicine	611	306	0
Medical toxicology	4	2	0
Undersea and hyperbaric medicine	4	4	0
Psychiatry	7477	1907	1907
Addiction medicine	128	127	0
Addiction psychiatry	124	121	0
Child and adolescent psychiatry	1038	524	0
Consultation-liaison psychiatry	134	134	0
Forensic psychiatry	117	117	0
Geriatric psychiatry	136	135	0
Radiation oncology	800	206	0
Radiology-diagnostic	4831	1183	10
Abdominal radiology	48	48	0
Endovascular surgical neuroradiology	6	6	0
Musculoskeletal radiology	45	45	0
Neuroradiology	338	330	0
Nuclear radiology	29	29	0
Pediatric radiology	119	119	0
Vascular and interventional radiology	222	222	0
Interventional radiology-independent	13	8	0
Interventional radiology-integrated ^e	784	157	0
Sleep medicine ^f	203	203	0
Surgery-general	9699	2903	2903
Complex general surgical oncology	120	60	0
Hand surgery	8	8	0
Pediatric surgery	88	48	0
Surgical critical care	336	321	0
Vascular surgery	295	149	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 (2020-2021) 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	356	72	72
Thoracic surgery	276	119	0
Congenital cardiac surgery	12	12	0
Thoracic surgery-integrated ^e	231	39	39
Urology	1765	361	345
Female pelvic medicine and reconstructive surgery	44	13	0
Pediatric urology	47	26	0
Transitional year	1705	1705	1705
Combined specialties			
Diagnostic radiology/nuclear medicine	10	2	2
Emergency medicine/anesthesiology	12	2	2
Emergency medicine/family medicine	35	7	7
Family medicine/osteopathic neuromusculoskeletal medicine	13	2	2
Family medicine/preventive medicine	5	1	1
Internal medicine/anesthesiology	36	7	7
Internal medicine/dermatology	33	7	7
Internal medicine/emergency medicine	154	29	29
Internal medicine/emergency medicine/critical care medicine	18	0	0
Internal medicine/family medicine	8	2	2
Internal medicine/medical genetics and genomics	21	6	6
Internal medicine/pediatrics	1556	389	389
Internal medicine/preventive medicine	31	8	8
Internal medicine/psychiatry	130	28	28
Medical genetics and genomics/maternal-fetal medicine	3	2	0
Reproductive endocrinology and infertility/medical genetics and genomics	2	1	0
Pediatrics/anesthesiology	49	10	10
Pediatrics/emergency medicine	45	9	9
Pediatrics/medical genetics and genomics	92	25	25
Pediatrics/physical medicine and rehabilitation	13	3	3
Pediatrics/psychiatry/child and adolescent psychiatry	102	21	21
Psychiatry/family medicine	60	12	12
Psychiatry/neurology	31	5	5
Total	157 086	56 345	35 916

^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.