

2023 Specialty Supplement Report on Secondary Specialty

National Commission on Certification of PAs

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Table 1a: Principal Specialty by Secondary Specialty

Principal Specialty Area Cardiology

		2019
Cardiology	22.0%	22.7%
Cardiothoracic and vascular surgery	3.2%	3.5%
Critical care medicine	4.5%	1.9%
Dermatology	0.0%	0.0%
Emergency medicine	19.1%	21.5%
Family medicine/general practice	5.5%	6.5%
Gastroenterology	0.6%	0.8%
General surgery	0.6%	0.4%
Geriatrics	0.0%	0.8%
Hospital medicine	14.9%	16.2%
Internal medicine-general	3.2%	4.6%
Neurology	0.3%	0.3%
Neurosurgery	0.3%	0.4%
Obstetrics and gynecology	0.3%	0.4%
Occupational medicine	1.0%	1.2%
Oncology	0.3%	0.4%
Orthopaedic surgery	0.3%	0.4%
Otolaryngology	0.0%	0.0%
Pain medicine	0.0%	0.4%
Pediatrics- general	0.0%	0.4%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic surgery	0.3%	0.0%
Psychiatry	1.6%	1.5%
Urology	0.0%	0.4%
All other specialties	22.0%	15.6%

Table 1b: Principal Specialty by Secondary Specialty

Principal Specialty Area

Secondary Specialty Area	2023	2019
Cardiology	3.2%	3.2%
Cardiothoracic and vascular surgery	36.8%	32.8%
Critical care medicine	7.3%	9.1%
Dermatology	0.7%	0.5%
Emergency medicine	10.8%	12.7%
Family medicine/general practice	3.4%	4.2%
Gastroenterology	0.5%	0.0%
General surgery	4.8%	7.9%
Geriatrics	0.2%	0.0%
Hospital medicine	4.1%	3.0%
Internal medicine-general	1.4%	1.8%
Neurology	0.2%	0.2%
Neurosurgery	1.4%	1.0%
Obstetrics and gynecology	0.0%	0.2%
Occupational medicine	0.2%	0.0%
Oncology	0.2%	0.5%
Orthopaedic surgery	2.5%	2.0%
Otolaryngology	0.0%	0.0%
Pain medicine	0.9%	0.8%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	0.5%	0.2%
Plastic surgery	1.6%	0.5%
Psychiatry	0.0%	0.0%
Urology	0.5%	0.3%
All other specialties	18.8%	16.1%

Table 1c: Principal Specialty by Secondary Specialty

Principal Specialty Area Critical care medicine

Secondary Specialty Area	2023	2019
Cardiology	3.5%	3.8%
Cardiothoracic and vascular surgery	2.9%	3.0%
Critical care medicine	33.8%	26.7%
Dermatology	0.6%	0.0%
Emergency medicine	16.8%	18.8%
Family medicine/general practice	4.1%	4.1%
Gastroenterology	0.2%	0.3%
General surgery	4.3%	4.9%
Geriatrics	0.8%	0.8%
Hospital medicine	10.0%	11.7%
Internal medicine-general	2.0%	2.2%
Neurology	0.4%	0.8%
Neurosurgery	2.7%	4.1%
Obstetrics and gynecology	0.2%	0.0%
Occupational medicine	1.0%	1.1%
Oncology	0.0%	0.3%
Orthopaedic surgery	1.8%	0.8%
Otolaryngology	0.0%	0.0%
Pain medicine	0.4%	0.0%
Pediatrics- general	0.0%	0.3%
Physical medicine and rehabilitation	0.2%	0.0%
Plastic surgery	0.4%	0.5%
Psychiatry	0.4%	0.8%
Urology	0.0%	0.0%
All other specialties	13.5%	15.0%

Table 1d: Principal Specialty by Secondary Specialty

Principal Specialty Area Dermatology

Secondary Specialty Area	2023	201 9
Cardiology	0.0%	0.4%
Cardiothoracic and vascular surgery	1.5%	0.4%
Critical care medicine	0.4%	0.9%
Dermatology	28.6%	34.3%
Emergency medicine	16.0%	15.9%
Family medicine/general practice	9.3%	9.1%
Gastroenterology	0.4%	0.9%
General surgery	1.1%	1.3%
Geriatrics	0.4%	0.9%
Hospital medicine	1.1%	0.0%
Internal medicine-general	3.7%	2.6%
Neurology	0.4%	0.4%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	0.7%	0.4%
Occupational medicine	1.1%	1.3%
Oncology	0.0%	0.0%
Orthopaedic surgery	1.5%	0.4%
Otolaryngology	0.4%	0.9%
Pain medicine	1.9%	0.9%
Pediatrics- general	0.4%	0.4%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	1.9%	1.7%
Psychiatry	1.5%	0.4%
Urology	0.0%	0.0%
All other specialties	28.1%	26.5%

Table 1e: Principal Specialty by Secondary Specialty

Principal Specialty Area Emergency medicine

Secondary Specialty Area	2023	2019
Cardiology	0.4%	0.5%
Cardiothoracic and vascular surgery	0.4%	0.4%
Critical care medicine	1.5%	1.0%
Dermatology	0.8%	0.7%
Emergency medicine	51.2%	51.4%
Family medicine/general practice	8.1%	9.8%
Gastroenterology	<0.1%	<0.1%
General surgery	0.8%	1.1%
Geriatrics	0.4%	0.3%
Hospital medicine	2.7%	2.8%
Internal medicine-general	1.5%	2.0%
Neurology	0.1%	0.2%
Neurosurgery	0.1%	0.2%
Obstetrics and gynecology	0.3%	0.3%
Occupational medicine	2.0%	2.4%
Oncology	0.1%	0.1%
Orthopaedic surgery	1.1%	2.0%
Otolaryngology	0.1%	0.2%
Pain medicine	0.4%	0.4%
Pediatrics- general	0.8%	0.9%
Physical medicine and rehabilitation	0.4%	0.4%
Plastic Surgery	0.3%	0.5%
Psychiatry	0.6%	0.7%
Urology	0.1%	0.1%
All other specialties	25.8%	21.6%

Table 1f: Principal Specialty by Secondary Specialty

Principal Specialty Area Family medicine/general practice

Secondary Specialty Area	202 3	2019
Cardiology	0.5%	0.4%
Cardiothoracic and vascular surgery	0.3%	0.1%
Critical care medicine	0.7%	0.7%
Dermatology	1.1%	0.8%
Emergency medicine	19.8%	24.5%
Family medicine/general practice	25.5%	25.3%
Gastroenterology	0.2%	0.2%
General surgery	0.5%	0.4%
Geriatrics	1.2%	0.9%
Hospital medicine	2.3%	2.3%
Internal medicine-general	2.7%	2.3%
Neurology	0.2%	0.2%
Neurosurgery	0.1%	0.0%
Obstetrics and gynecology	0.5%	0.4%
Occupational medicine	2.6%	3.1%
Oncology	0.2%	<0.1%
Orthopaedic surgery	1.0%	1.1%
Otolaryngology	0.2%	0.2%
Pain medicine	0.7%	0.4%
Pediatrics- general	1.8%	1.7%
Physical medicine and rehabilitation	0.4%	0.3%
Plastic Surgery	0.2%	0.1%
Psychiatry	2.0%	1.5%
Urology	0.1%	0.2%
All other specialties	35.2%	32.9%

Table 1g: Principal Specialty by Secondary Specialty

Principal Specialty Area Gastroenterology

Secondary Specialty Area	2023	2019
Cardiology	1.9%	2.0%
Cardiothoracic and vascular surgery	0.9%	2.0%
Critical care medicine	1.9%	2.0%
Dermatology	1.9%	0.0%
Emergency medicine	9.3%	11.9%
Family medicine/general practice	17.8%	15.8%
Gastroenterology	10.3%	11.9%
General surgery	3.7%	0.0%
Geriatrics	0.0%	0.0%
Hospital medicine	13.1%	11.9%
Internal medicine-general	4.7%	5.0%
Neurology	0.9%	1.0%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	1.9%	1.0%
Oncology	0.0%	0.0%
Orthopaedic surgery	0.0%	1.0%
Otolaryngology	0.0%	0.0%
Pain medicine	0.9%	0.0%
Pediatrics- general	0.0%	1.0%
Physical medicine and rehabilitation	1.9%	2.0%
Plastic Surgery	0.0%	0.0%
Psychiatry	1.9%	1.0%
Urology	0.0%	0.0%
All other specialties	27.0%	30.5%

Table 1h: Principal Specialty by Secondary Specialty

Principal Specialty Area General surgery

Secondary Specialty Area	2023	2019
Cardiology	0.0%	0.7%
Cardiothoracic and vascular surgery	1.4%	2.3%
Critical care medicine	2.6%	1.7%
Dermatology	0.6%	0.5%
Emergency medicine	15.4%	19.7%
Family medicine/general practice	5.8%	5.7%
Gastroenterology	1.2%	1.9%
General surgery	26.0%	25.1%
Geriatrics	0.2%	0.5%
Hospital medicine	3.6%	4.0%
Internal medicine-general	3.0%	1.9%
Neurology	0.0%	0.2%
Neurosurgery	1.0%	2.4%
Obstetrics and gynecology	0.4%	1.4%
Occupational medicine	1.6%	0.9%
Oncology	0.4%	0.5%
Orthopaedic surgery	4.2%	4.0%
Otolaryngology	0.2%	0.2%
Pain medicine	0.4%	0.2%
Pediatrics- general	0.0%	0.5%
Physical medicine and rehabilitation	0.4%	0.0%
Plastic Surgery	2.2%	1.2%
Psychiatry	0.4%	0.7%
Urology	0.8%	0.9%
All other specialties	28.2%	22.9%

Table 1i: Principal Specialty by Secondary Specialty

Principal Specialty Area Geriatrics

Secondary Specialty Area	20 23	2019
Cardiology	1.2%	0.0%
Cardiothoracic and vascular surgery	1.2%	1.0%
Critical care medicine	0.0%	0.0%
Dermatology	0.0%	1.0%
Emergency medicine	11.1%	17.3%
Family medicine/general practice	14.6%	17.3%
Gastroenterology	0.0%	0.0%
General surgery	2.5%	1.0%
Geriatrics	13.4%	8.2%
Hospital medicine	7.4%	9.2%
Internal medicine-general	4.9%	12.2%
Neurology	1.2%	1.0%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	1.2%	4.1%
Oncology	0.0%	0.0%
Orthopaedic surgery	1.2%	1.0%
Otolaryngology	1.2%	1.0%
Pain medicine	2.5%	1.0%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	3.7%	2.0%
Plastic Surgery	0.0%	0.0%
Psychiatry	1.2%	1.0%
Urology	0.0%	0.0%
All other specialties	31.5%	21.7%

Table 1j: Principal Specialty by Secondary Specialty

Principal Specialty Area Hospital medicine

Secondary Specialty Area	2023	2019
Cardiology	2.4%	3.3%
Cardiothoracic and vascular surgery	0.6%	0.6%
Critical care medicine	2.7%	2.6%
Dermatology	0.5%	0.4%
Emergency medicine	22.0%	25.4%
Family medicine/general practice	5.9%	7.9%
Gastroenterology	0.8%	0.5%
General surgery	1.7%	1.8%
Geriatrics	1.4%	0.9%
Hospital medicine	29.4%	24.3%
Internal medicine-general	5.5%	4.8%
Neurology	0.9%	1.1%
Neurosurgery	0.3%	0.2%
Obstetrics and gynecology	0.5%	0.7%
Occupational medicine	1.1%	1.6%
Oncology	0.6%	0.2%
Orthopaedic surgery	0.8%	0.9%
Otolaryngology	0.0%	0.0%
Pain medicine	0.3%	0.2%
Pediatrics- general	0.2%	0.5%
Physical medicine and rehabilitation	0.2%	0.9%
Plastic Surgery	0.0%	0.2%
Psychiatry	0.8%	1.2%
Urology	0.0%	0.4%
All other specialties	21.4%	19.4%

Table 1k: Principal Specialty by Secondary Specialty

Principal Specialty Area Internal medicine-general

Secondary Specialty Area	2023	2019
Cardiology	1.6%	1.9%
Cardiothoracic and vascular surgery	0.2%	0.2%
Critical care medicine	0.7%	1.0%
Dermatology	0.7%	0.2%
Emergency medicine	16.7%	17.5%
Family medicine/general practice	11.6%	13.4%
Gastroenterology	0.7%	0.7%
General surgery	0.9%	1.0%
Geriatrics	3.5%	3.1%
Hospital medicine	8.7%	8.9%
Internal medicine-general	17.8%	17.2%
Neurology	0.7%	1.4%
Neurosurgery	0.4%	0.2%
Obstetrics and gynecology	0.0%	0.2%
Occupational medicine	2.0%	1.2%
Oncology	0.2%	0.0%
Orthopaedic surgery	0.7%	0.7%
Otolaryngology	0.2%	0.2%
Pain medicine	1.1%	0.3%
Pediatrics- general	1.1%	1.0%
Physical medicine and rehabilitation	0.7%	0.9%
Plastic Surgery	0.0%	0.5%
Psychiatry	1.6%	1.9%
Urology	0.2%	0.2%
All other specialties	28.0%	26.2%

Table 11: Principal Specialty by Secondary Specialty

Principal Specialty Area Neurology

Secondary Specialty Area	2023	201 9
Cardiology	1.0%	0.0%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	2.0%	1.3%
Dermatology	1.0%	0.0%
Emergency medicine	11.2%	13.9%
Family medicine/general practice	9.2%	10.1%
Gastroenterology	0.0%	0.0%
General surgery	0.0%	0.0%
Geriatrics	0.0%	0.0%
Hospital medicine	12.2%	8.9%
Internal medicine-general	3.1%	8.9%
Neurology	22.2%	19.0%
Neurosurgery	6.1%	7.6%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	0.0%	1.3%
Oncology	1.0%	0.0%
Orthopaedic surgery	1.0%	2.5%
Otolaryngology	0.0%	1.3%
Pain medicine	0.0%	1.3%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	1.0%	0.0%
Plastic Surgery	0.0%	0.0%
Psychiatry	4.1%	2.5%
Urology	0.0%	0.0%
All other specialties	24.9%	21.4%

Table 1m: Principal Specialty by Secondary Specialty

Principal Specialty Area Neurosurgery

Secondary Specialty Area	2023	2019
Cardiology	1.1%	1.2%
Cardiothoracic and vascular surgery	0.4%	0.4%
Critical care medicine	6.1%	4.8%
Dermatology	1.1%	0.0%
Emergency medicine	11.2%	14.8%
Family medicine/general practice	6.5%	7.6%
Gastroenterology	0.7%	0.0%
General surgery	3.2%	6.0%
Geriatrics	0.0%	0.4%
Hospital medicine	4.0%	3.2%
Internal medicine-general	2.5%	2.4%
Neurology	3.6%	1.6%
Neurosurgery	30.1%	29.2%
Neurosurgery Obstetrics and gynecology	30.1% 0.0%	29.2% 0.8%
Obstetrics and gynecology	0.0%	0.8%
Obstetrics and gynecology Occupational medicine	0.0%	0.8%
Obstetrics and gynecology Occupational medicine Oncology	0.0% 1.1% 0.0%	0.8% 1.2% 0.0%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery	0.0% 1.1% 0.0% 4.7%	0.8% 1.2% 0.0% 5.2%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology	0.0% 1.1% 0.0% 4.7% 0.0%	0.8% 1.2% 0.0% 5.2% 0.0%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine	0.0% 1.1% 0.0% 4.7% 0.0% 1.4%	0.8% 1.2% 0.0% 5.2% 0.0% 0.4%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine Pediatrics- general	0.0% 1.1% 0.0% 4.7% 0.0% 1.4%	0.8% 1.2% 0.0% 5.2% 0.0% 0.4% 0.0%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine Pediatrics- general Physical medicine and rehabilitation	0.0% 1.1% 0.0% 4.7% 0.0% 1.4% 0.0% 1.1%	0.8% 1.2% 0.0% 5.2% 0.0% 0.4% 0.0% 1.2%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine Pediatrics- general Physical medicine and rehabilitation Plastic Surgery	0.0% 1.1% 0.0% 4.7% 0.0% 1.4% 0.0% 1.1% 1.1%	0.8% 1.2% 0.0% 5.2% 0.0% 0.4% 0.0% 1.2% 0.8%

Table 1n: Principal Specialty by Secondary Specialty

Principal Specialty Area Obstetrics and gynecology

Secondary Specialty Area	2023	201 9
Cardiology	0.0%	0.0%
Cardiothoracic and vascular surgery	0.6%	0.0%
Critical care medicine	1.2%	0.7%
Dermatology	0.6%	0.7%
Emergency medicine	12.7%	10.9%
Family medicine/general practice	7.8%	8.0%
Gastroenterology	0.0%	0.0%
General surgery	3.1%	1.5%
Geriatrics	0.6%	0.0%
Hospital medicine	3.1%	2.2%
Internal medicine-general	3.1%	3.6%
Neurology	0.6%	0.7%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	33.1%	33.6%
Occupational medicine	1.2%	0.0%
Oncology	1.2%	1.5%
Orthopaedic surgery	0.0%	0.0%
Otolaryngology	0.0%	0.0%
Pain medicine	1.2%	0.7%
Pediatrics- general	2.5%	2.2%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.0%	2.2%
Psychiatry	3.1%	2.2%
Urology	0.6%	0.0%
	27.4%	29.3%

Table 1o: Principal Specialty by Secondary Specialty

Principal Specialty Area Occupational medicine

Secondary Specialty Area	2023	2019
Cardiology	0.4%	0.5%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	0.0%	0.5%
Dermatology	1.2%	0.5%
Emergency medicine	19.7%	23.3%
Family medicine/general practice	14.9%	13.5%
Gastroenterology	0.0%	0.0%
General surgery	0.4%	0.9%
Geriatrics	0.0%	1.9%
Hospital medicine	2.4%	0.5%
Internal medicine-general	2.8%	4.7%
Neurology	0.4%	0.5%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	1.2%	0.0%
Occupational medicine	18.5%	14.9%
Oncology	0.0%	0.5%
Orthopaedic surgery	2.4%	1.9%
Otolaryngology	0.0%	0.9%
Pain medicine	0.4%	0.5%
Pediatrics- general	0.8%	0.0%
Physical medicine and rehabilitation	0.0%	0.5%
Plastic Surgery	0.0%	0.5%
Psychiatry	0.8%	0.0%
Urology	0.0%	0.0%
All other specialties	33.7%	33.5%

Table 1p: Principal Specialty by Secondary Specialty

Principal Specialty Area Oncology

Secondary Specialty Area	2023	2019
Cardiology	0.9%	0.0%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	0.0%	1.0%
Dermatology	0.0%	2.0%
Emergency medicine	16.8%	17.2%
Family medicine/general practice	9.3%	13.1%
Gastroenterology	0.0%	0.0%
General surgery	2.8%	1.0%
Geriatrics	0.0%	0.0%
Hospital medicine	12.1%	9.1%
Internal medicine-general	5.6%	4.0%
Neurology	0.0%	0.0%
Neurosurgery	0.0%	2.0%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	0.0%	1.0%
Oncology	18.7%	20.2%
Orthopaedic surgery	0.9%	0.0%
Otolaryngology	0.0%	0.0%
Pain medicine	0.9%	0.0%
Pediatrics- general	0.0%	1.0%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.0%	0.0%
Psychiatry	0.9%	1.0%
Urology	0.9%	1.0%
All other specialties	30.2%	26.4%

Table 1q: Principal Specialty by Secondary Specialty

Principal Specialty Area Orthopaedic surgery

Secondary Specialty Area	2023	2019
Cardiology	0.2%	0.2%
Cardiothoracic and vascular surgery	0.4%	0.6%
Critical care medicine	0.7%	1.3%
Dermatology	0.3%	0.5%
Emergency medicine	19.3%	24.4%
Family medicine/general practice	8.2%	9.7%
Gastroenterology	0.2%	0.3%
General surgery	4.1%	3.6%
Geriatrics	0.4%	0.3%
Hospital medicine	2.1%	2.3%
Internal medicine-general	1.3%	2.4%
Neurology	0.3%	0.1%
Neurosurgery	1.0%	1.0%
Obstetrics and gynecology	0.6%	0.3%
Occupational medicine	0.8%	1.8%
Oncology	0.1%	0.0%
Orthopaedic surgery	31.0%	27.6%
Otolaryngology	0.1%	0.2%
Pain medicine	1.6%	0.8%
Pediatrics- general	0.1%	0.0%
Physical medicine and rehabilitation	0.5%	0.8%
Plastic Surgery	1.4%	0.7%
Psychiatry	0.7%	0.5%
Urology	0.1%	0.1%
All other specialties	24.5%	20.5%

Table 1r: Principal Specialty by Secondary Specialty

Principal Specialty Area Otolaryngology

Secondary Specialty Area	2023	2019
Cardiology	0.0%	0.0%
Cardiothoracic and vascular surgery	0.0%	1.4%
Critical care medicine	1.3%	0.0%
Dermatology	0.0%	0.0%
Emergency medicine	26.9%	20.5%
Family medicine/general practice	10.3%	11.0%
Gastroenterology	1.3%	1.4%
General surgery	1.3%	4.1%
Geriatrics	0.0%	0.0%
Hospital medicine	3.8%	2.7%
Internal medicine-general	1.3%	4.1%
Neurology	0.0%	0.0%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	3.8%	2.7%
Oncology	0.0%	1.4%
Orthopaedic surgery	5.1%	5.5%
Otolaryngology	5.1%	11.0%
Pain medicine	0.0%	0.0%
Pediatrics- general	0.0%	1.4%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.0%	2.7%
Psychiatry	1.3%	0.0%
Urology	1.3%	0.0%
All other specialties	37.2%	30.1%

Table 1s: Principal Specialty by Secondary Specialty

Principal Specialty Area Pain medicine

Secondary Specialty Area	2023	2019
Cardiology	0.0%	1.7%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	0.6%	0.9%
Dermatology	0.6%	0.0%
Emergency medicine	13.5%	19.1%
Family medicine/general practice	12.3%	16.5%
Gastroenterology	0.0%	0.9%
General surgery	1.9%	0.9%
Geriatrics	0.0%	0.9%
Hospital medicine	2.5%	1.7%
Internal medicine-general	3.1%	3.5%
Neurology	0.6%	0.9%
Neurosurgery	1.3%	0.9%
Obstetrics and gynecology	0.0%	0.9%
Occupational medicine	1.9%	1.7%
Oncology	0.0%	0.0%
Orthopaedic surgery	2.5%	6.1%
Otolaryngology	0.0%	0.9%
Pain medicine	9.8%	10.4%
Pediatrics- general	0.6%	0.0%
Physical medicine and rehabilitation	3.1%	4.3%
Plastic Surgery	1.3%	0.9%
Psychiatry	2.5%	0.9%
Urology	0.0%	0.0%
All other specialties	42.9%	26.0%

Table 1t: Principal Specialty by Secondary Specialty

Principal Specialty Area Pediatrics- general

Secondary Specialty Area	2023	2019
Cardiology	0.6%	0.0%
Cardiothoracic and vascular surgery	0.6%	0.0%
Critical care medicine	0.6%	0.0%
Dermatology	1.2%	0.6%
Emergency medicine	14.3%	23.9%
Family medicine/general practice	9.5%	8.8%
Gastroenterology	0.0%	0.0%
General surgery	1.2%	0.0%
Geriatrics	0.0%	0.0%
Hospital medicine	3.0%	1.9%
Internal medicine-general	2.4%	1.3%
Neurology	0.0%	0.6%
Neurosurgery	0.0%	0.6%
Obstetrics and gynecology	0.6%	1.9%
Occupational medicine	3.0%	0.6%
Oncology	0.0%	0.0%
Orthopaedic surgery	0.0%	0.0%
Otolaryngology	0.6%	0.6%
Pain medicine	0.0%	0.6%
Pediatrics- general	23.2%	32.1%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.6%	0.0%
Psychiatry	1.2%	1.9%
Urology	0.0%	0.0%
All other specialties	37.4%	24.6%

Table 1u: Principal Specialty by Secondary Specialty

rincipal Specialty Area

Secondary Specialty Area	2023	201 9
Cardiology	0.0%	1.6%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	1.5%	0.0%
Dermatology	1.5%	0.0%
Emergency medicine	11.8%	11.3%
Family medicine/general practice	13.2%	14.5%
Gastroenterology	0.0%	0.0%
General surgery	1.5%	0.0%
Geriatrics	0.0%	0.0%
Hospital medicine	2.9%	3.2%
Internal medicine-general	1.5%	3.2%
Neurology	1.5%	1.6%
Neurosurgery	2.9%	0.0%
Obstetrics and gynecology	1.5%	1.6%
Occupational medicine	1.5%	1.6%
Oncology	0.0%	0.0%
Orthopaedic surgery	8.8%	8.1%
Otolaryngology	1.5%	0.0%
Pain medicine	5.9%	0.0%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	10.3%	14.5%
Plastic Surgery	0.0%	1.6%
Psychiatry	1.5%	1.6%
Urology	0.0%	0.0%
All other specialties	30.7%	35.6%

Table 1v: Principal Specialty by Secondary Specialty

Principal Specialty Area Plastic surgery

Secondary Specialty Area	2023	2019
Cardiology	1.4%	1.9%
Cardiothoracic and vascular surgery	1.4%	2.8%
Critical care medicine	0.7%	0.0%
Dermatology	1.4%	0.9%
Emergency medicine	12.9%	20.8%
Family medicine/general practice	10.0%	8.5%
Gastroenterology	0.0%	0.9%
General surgery	6.4%	6.6%
Geriatrics	0.7%	0.0%
Hospital medicine	0.7%	1.9%
Internal medicine-general	1.4%	0.9%
Neurology	1.4%	0.9%
Neurosurgery	1.4%	0.0%
Obstetrics and gynecology	0.7%	0.0%
Occupational medicine	2.1%	0.9%
Oncology	0.0%	0.0%
Orthopaedic surgery	2.1%	1.9%
Otolaryngology	1.4%	0.9%
Pain medicine	1.4%	1.9%
Pediatrics- general	0.7%	0.0%
Physical medicine and rehabilitation	0.0%	0.9%
Plastic Surgery	19.3%	25.5%
Psychiatry	1.4%	1.9%
Urology	0.0%	0.0%
All other specialties	31.1%	20.0%

Table 1w: Principal Specialty by Secondary Specialty

Principal Specialty Area Psychiatry

Secondary Specialty Area	2023	2019
Cardiology	0.0%	0.4%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	1.0%	0.4%
Dermatology	0.3%	0.8%
Emergency medicine	8.1%	4.5%
Family medicine/general practice	7.6%	11.8%
Gastroenterology	0.0%	0.0%
General surgery	0.3%	0.0%
Geriatrics	0.5%	0.0%
Hospital medicine	1.5%	2.0%
Internal medicine-general	1.5%	2.8%
Neurology	0.8%	0.4%
Neurosurgery	0.3%	0.0%
Obstetrics and gynecology	0.3%	0.0%
Occupational medicine	0.8%	1.2%
Oncology	0.0%	0.4%
Orthopaedic surgery	0.3%	0.4%
Otolaryngology	0.0%	0.0%
Pain medicine	0.3%	0.4%
Pediatrics- general	1.0%	1.2%
Physical medicine and rehabilitation	0.0%	0.4%
Plastic Surgery	0.0%	0.0%
Psychiatry	46.7%	48.8%
Urology	0.5%	0.0%
All other specialties	28.2%	24.1%

Table 1x: Principal Specialty by Secondary Specialty

Principal Specialty Area Urology

Secondary Specialty Area	2023	2019
Cardiology	1.0%	0.0%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	1.0%	1.0%
Dermatology	0.0%	0.0%
Emergency medicine	17.8%	18.6%
Family medicine/general practice	9.9%	16.5%
Gastroenterology	0.0%	0.0%
General surgery	4.0%	4.1%
Geriatrics	1.0%	1.0%
Hospital medicine	2.0%	4.1%
Internal medicine-general	3.0%	2.1%
Neurology	0.0%	1.0%
Neurosurgery	1.0%	1.0%
Obstetrics and gynecology	0.0%	1.0%
Occupational medicine	3.0%	3.1%
Oncology	0.0%	0.0%
Orthopaedic surgery	1.0%	0.0%
Otolaryngology	0.0%	0.0%
Pain medicine	0.0%	1.0%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.0%	1.0%
Psychiatry	0.0%	2.1%
Urology	12.9%	11.3%
All other specialties	42.4%	31.1%

Table 1y: Principal Specialty by Secondary Specialty

Principal Specialty Area All other specialties

Secondary Specialty Area 2023 2019 Cardiology 0.7% 0.7% Cardiothoracic and vascular surgery 0.6% 1.1% Critical care medicine 1.8% 1.8% Dermatology 0.9% %6% Emergency medicine 18.3% 2%8/ Family medicine/general practice 8.8% 9.6% Gastroenterology 0.3% 0.4% General surgery 2.3% 2.5% Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Critical care medicine 1.8% 1.8% Dermatology 0.9% %6% Emergency medicine 18.3% 2%8/ Family medicine/general practice 8.8% 9.6% Gastroenterology 0.3% 0.4% General surgery 2.3% 2.5% Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Dermatology 0.9% %5% Emergency medicine 18.3% 2%8/ Family medicine/general practice 8.8% 9.6% Gastroenterology 0.3% 0.4% General surgery 2.3% 2.5% Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Emergency medicine 18.3% 2%8/ Family medicine/general practice 8.8% 9.6% Gastroenterology 0.3% 0.4% General surgery 2.3% 2.5% Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Family medicine/general practice 8.8% 9.6% Gastroenterology 0.3% 0.4% General surgery 2.3% 2.5% Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Gastroenterology 0.3% 0.4% General surgery 2.3% 2.5% Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
General surgery 2.3% 2.5% Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Geriatrics 0.6% 0.+% Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Hospital medicine 3.9% 3.5% Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Internal medicine-general 2.4% 2.6% Neurology 0.2% 0.1%
Neurology 0.2% 0.1%
Neurosurgery 0.7% 0.7%
Obstetrics and gynecology 0.8% 0.7%
Occupational medicine 2.8% 2.7%
Oncology 0.4% 0.6%
Orthopaedic surgery 2.2% 1.8%
Otolaryngology 0.2% 0.3%
Pain medicine 0.7% 1.0%
Pediatrics- general 1.4% 1.7%
Physical medicine and rehabilitation 0.3% 0.4%
Plastic Surgery 0.6% 0.3%
Psychiatry 1.5% 1.4%
Urology 0.3% 0.5%
All other specialties 47.3% 43.6%

Table 2a: Secondary Specialty by Principal Specialty

Secondary Specialty Area Cardiology

Principal Specialty Area	202 3	2019
Cardiology	37.6%	34.1%
Cardiothoracic and vascular surgery	7.8%	7.5%
Critical care medicine	9.9%	8.1%
Dermatology	0.0%	0.6%
Emergency medicine	7.2%	9.2%
Family medicine/general practice	5.5%	4.6%
Gastroenterology	1.1%	1.2%
General surgery	0.0%	1.7%
Geriatrics	0.6%	0.0%
Hospital medicine	8.3%	11.0%
Internal medicine-general	5.0%	6.4%
Neurology	0.6%	0.0%
Neurosurgery	1.7%	1.7%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	0.6%	0.6%
Oncology	0.6%	0.0%
Orthopaedic surgery	1.1%	1.2%
Otolaryngology	0.0%	0.0%
Pain medicine	0.0%	1.2%
Pediatrics- general	0.6%	0.0%
Physical medicine and rehabilitation	0.0%	0.6%
Plastic surgery	1.1%	1.2%
Psychiatry	0.0%	0.6%
Urology	0.6%	0.0%
All other specialties	10.1%	8.5%

Table 2b: Secondary Specialty by Principal Specialty

Secondary Specialty Area

Principal Specialty Area	2023	201 9
Cardiology	4.1%	4.0%
Cardiothoracic and vascular surgery	66.2%	62.6%
Critical care medicine	6.2%	4.9%
Dermatology	1.6%	0.4%
Emergency medicine	4.7%	4.4%
Family medicine/general practice	1.6%	0.9%
Gastroenterology	0.4%	0.9%
General surgery	2.9%	4.4%
Geriatrics	0.4%	0.4%
Hospital medicine	1.6%	1.3%
Internal medicine-general	0.4%	0.4%
Neurology	0.0%	0.0%
Neurosurgery	0.4%	0.4%
Obstetrics and gynecology	0.4%	0.0%
Occupational medicine	0.0%	0.0%
Oncology	0.0%	0.0%
Orthopaedic surgery	1.6%	2.7%
Otolaryngology	0.0%	0.4%
Pain medicine	0.0%	0.0%
Pediatrics- general	0.4%	0.0%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic surgery	0.8%	1.3%
Psychiatry	0.0%	0.0%
Urology	0.0%	0.0%
All other specialties	6.3%	10.6%

Table 2c: Secondary Specialty by Principal Specialty

Secondary Specialty Area Critical care medicine

Principal Specialty Area	2023	2019
Cardiology	3.5%	1.9%
Cardiothoracic and vascular surgery	7.9%	12.7%
Critical care medicine	43.1%	34.6%
Dermatology	0.2%	0.7%
Emergency medicine	11.4%	10.6%
Family medicine/general practice	3.5%	4.9%
Gastroenterology	0.5%	0.7%
General surgery	3.2%	2.5%
Geriatrics	0.0%	0.0%
Hospital medicine	4.2%	5.3%
Internal medicine-general	1.0%	2.1%
Neurology	0.5%	0.4%
Neurosurgery	4.2%	4.2%
Obstetrics and gynecology	0.5%	0.4%
Occupational medicine	0.0%	0.4%
Oncology	0.0%	0.4%
Orthopaedic surgery	1.7%	4.6%
Otolaryngology	0.2%	0.0%
Pain medicine	0.2%	0.4%
Pediatrics- general	0.2%	0.0%
Physical medicine and rehabilitation	0.2%	0.0%
Plastic surgery	0.2%	0.0%
Psychiatry	1.0%	0.4%
Urology	0.2%	0.4%
All other specialties	12.4%	12.4%

Table 2d: Secondary Specialty by Principal Specialty

Secondary Specialty Area Dermatology

Principal Specialty Area	2023	2019
Cardiology	0.0%	0.0%
Cardiothoracic and vascular surgery	1.6%	1.3%
Critical care medicine	1.6%	0.0%
Dermatology	41.6%	52.6%
Emergency medicine	13.5%	14.5%
Family medicine/general practice	11.9%	10.5%
Gastroenterology	1.1%	0.0%
General surgery	1.6%	1.3%
Geriatrics	0.0%	0.7%
Hospital medicine	1.6%	1.3%
Internal medicine-general	2.2%	0.7%
Neurology	0.5%	0.0%
Neurosurgery	1.6%	0.0%
Obstetrics and gynecology	0.5%	0.7%
Occupational medicine	1.6%	0.7%
Oncology	0.0%	1.3%
Orthopaedic surgery	1.6%	3.3%
Otolaryngology	0.0%	0.0%
Pain medicine	0.5%	0.0%
Pediatrics- general	1.1%	0.7%
Physical medicine and rehabilitation	0.5%	0.0%
Plastic Surgery	1.1%	0.7%
Psychiatry	0.5%	1.3%
Urology	0.0%	0.0%
All other specialties	13.8%	8.4%

Table 2e: Secondary Specialty by Principal Specialty

Secondary Specialty Area Emergency medicine

Principal Specialty Area	2023	2019
Cardiology	1.7%	1.6%
Cardiothoracic and vascular surgery	1.4%	1.4%
Critical care medicine	2.4%	1.9%
Dermatology	1.2%	1.0%
Emergency medicine	45.2%	43.5%
Family medicine/general practice	11.3%	14.4%
Gastroenterology	0.3%	0.3%
General surgery	2.2%	2.3%
Geriatrics	0.3%	0.5%
Hospital medicine	4.0%	4.0%
Internal medicine-general	2.6%	2.8%
Neurology	0.3%	0.3%
Neurosurgery	0.9%	1.0%
Obstetrics and gynecology	0.6%	0.4%
Occupational medicine	1.4%	1.4%
Oncology	0.5%	0.5%
Orthopaedic surgery	5.7%	6.7%
Otolaryngology	0.6%	0.4%
Pain medicine	0.6%	0.6%
Pediatrics- general	0.7%	1.1%
Physical medicine and rehabilitation	0.2%	0.2%
Plastic Surgery	0.5%	0.6%
Psychiatry	0.9%	0.3%
Urology	0.5%	0.5%
All other specialties	14.0%	12.3%

Table 2f: Secondary Specialty by Principal Specialty

Secondary Specialty Area Family medicine/general practice

Principal Specialty Area	2023	2019
Cardiology	1.1%	1.1%
Cardiothoracic and vascular surgery	1.0%	1.1%
Critical care medicine	1.4%	1.0%
Dermatology	1.6%	1.4%
Emergency medicine	16.5%	19.0%
Family medicine/general practice	33.5%	34.2%
Gastroenterology	1.3%	1.0%
General surgery	1.9%	1.5%
Geriatrics	0.8%	1.1%
Hospital medicine	2.4%	2.9%
Internal medicine-general	4.2%	5.0%
Neurology	0.6%	0.5%
Neurosurgery	1.2%	1.2%
Obstetrics and gynecology	0.9%	0.7%
Occupational medicine	2.4%	1.9%
Oncology	0.7%	0.8%
Orthopaedic surgery	5.6%	6.1%
Otolaryngology	0.5%	0.5%
Pain medicine	1.3%	1.2%
Pediatrics- general	1.1%	0.9%
Physical medicine and rehabilitation	0.6%	0.6%
Plastic Surgery	0.9%	0.6%
Psychiatry	2.0%	1.9%
Urology	0.7%	1.0%
All other specialties	15.8%	12.8%

Table 2g: Secondary Specialty by Principal Specialty

Secondary Specialty Area Gastroenterology

Principal Specialty Area	2023	2019
Cardiology	4.2%	3.8%
Cardiothoracic and vascular surgery	4.2%	0.0%
Critical care medicine	2.1%	1.9%
Dermatology	2.1%	3.8%
Emergency medicine	2.1%	1.9%
Family medicine/general practice	6.3%	7.7%
Gastroenterology	22.9%	23.1%
General surgery	12.5%	15.4%
Geriatrics	0.0%	0.0%
Hospital medicine	10.4%	5.8%
Internal medicine-general	8.3%	7.7%
Neurology	0.0%	0.0%
Neurosurgery	4.2%	0.0%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	0.0%	0.0%
Oncology	0.0%	0.0%
Orthopaedic surgery	4.2%	5.8%
Otolaryngology	2.1%	1.9%
Pain medicine	0.0%	1.9%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.0%	1.9%
Psychiatry	0.0%	0.0%
Urology	0.0%	0.0%
All other specialties	14.4%	17.5%

Table 2h: Secondary Specialty by Principal Specialty

Secondary Specialty Area General surgery

Principal Specialty Area	202 3	2019
Cardiology	0.5%	0.3%
Cardiothoracic and vascular surgery	5.6%	9.1%
Critical care medicine	5.8%	5.3%
Dermatology	0.8%	0.9%
Emergency medicine	6.3%	9.7%
Family medicine/general practice	2.6%	2.7%
Gastroenterology	1.1%	0.0%
General surgery	34.6%	31.3%
Geriatrics	0.5%	0.3%
Hospital medicine	2.9%	2.9%
Internal medicine-general	1.3%	1.8%
Neurology	0.0%	0.0%
Neurosurgery	2.4%	4.4%
Obstetrics and gynecology	1.3%	0.6%
Occupational medicine	0.3%	0.6%
Oncology	0.8%	0.3%
Orthopaedic surgery	11.3%	10.3%
Otolaryngology	0.3%	0.9%
Pain medicine	0.8%	0.3%
Pediatrics- general	0.5%	0.0%
Physical medicine and rehabilitation	0.3%	0.0%
Plastic Surgery	2.4%	2.1%
Psychiatry	0.3%	0.0%
Urology	1.1%	1.1%
All other specialties	16.2%	15.1%

Table 2i: Secondary Specialty by Principal Specialty

Secondary Specialty Area Geriatrics

Principal Specialty Area	2023	2019
Cardiology	0.0%	2.2%
Cardiothoracic and vascular surgery	0.9%	0.0%
Critical care medicine	3.7%	3.3%
Dermatology	0.9%	2.2%
Emergency medicine	11.2%	10.0%
Family medicine/general practice	21.5%	21.1%
Gastroenterology	0.0%	0.0%
General surgery	0.9%	2.2%
Geriatrics	10.3%	8.9%
Hospital medicine	8.4%	5.6%
Internal medicine-general	17.8%	20.0%
Neurology	0.0%	0.0%
Neurosurgery	0.0%	1.1%
Obstetrics and gynecology	0.9%	0.0%
Occupational medicine	0.0%	4.4%
Oncology	0.0%	0.0%
Orthopaedic surgery	3.7%	3.3%
Otolaryngology	0.0%	0.0%
Pain medicine	0.0%	1.1%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.9%	0.0%
Psychiatry	1.9%	0.0%
Urology	0.9%	1.1%
All other specialties	16.1%	13.5%

Table 2j: Secondary Specialty by Principal Specialty

Secondary Specialty Area Hospital medicine

Principal Specialty Area	2023	2019
Cardiology	6.4%	7.0%
Cardiothoracic and vascular surgery	2.5%	2.0%
Critical care medicine	7.1%	7.2%
Dermatology	0.4%	0.0%
Emergency medicine	11.5%	14.2%
Family medicine/general practice	6.4%	8.0%
Gastroenterology	2.0%	2.0%
General surgery	2.5%	2.8%
Geriatrics	0.8%	1.5%
Hospital medicine	26.1%	23.1%
Internal medicine-general	6.7%	8.5%
Neurology	1.7%	1.2%
Neurosurgery	1.5%	1.3%
Obstetrics and gynecology	0.7%	0.5%
Occupational medicine	0.8%	0.2%
Oncology	1.8%	1.5%
Orthopaedic surgery	3.1%	3.7%
Otolaryngology	0.4%	0.3%
Pain medicine	0.6%	0.3%
Pediatrics- general	0.7%	0.5%
Physical medicine and rehabilitation	0.3%	0.3%
Plastic Surgery	0.1%	0.3%
Psychiatry	0.8%	0.8%
Urology	0.3%	0.7%
All other specialties	14.8%	12.1%

Table 2k: Secondary Specialty by Principal Specialty

Secondary Specialty Area Internal medicine-general

Principal Specialty Area	2023	2019
Cardiology	2.4%	2.8%
Cardiothoracic and vascular surgery	1.4%	1.6%
Critical care medicine	2.4%	1.9%
Dermatology	2.4%	1.4%
Emergency medicine	10.7%	14.2%
Family medicine/general practice	12.8%	11.6%
Gastroenterology	1.2%	1.2%
General surgery	3.6%	1.9%
Geriatrics	1.0%	2.8%
Hospital medicine	8.3%	6.4%
Internal medicine-general	23.3%	23.4%
Neurology	0.7%	1.7%
Neurosurgery	1.7%	1.4%
Obstetrics and gynecology	1.2%	1.2%
Occupational medicine	1.7%	2.4%
Oncology	1.4%	0.9%
Orthopaedic surgery	3.1%	5.4%
Otolaryngology	0.2%	0.7%
Pain medicine	1.2%	0.9%
Pediatrics- general	1.0%	0.5%
Physical medicine and rehabilitation	0.2%	0.5%
Plastic Surgery	0.5%	0.2%
Psychiatry	1.4%	1.7%
Urology	0.7%	0.5%
All other specialties	15.5%	12.8%

Table 21: Secondary Specialty by Principal Specialty

Secondary Specialty Area Neurology

Principal Specialty Area	2023	2019
Cardiology	1.4%	0.0%
Cardiothoracic and vascular surgery	1.4%	1.6%
Critical care medicine	2.7%	4.7%
Dermatology	1.4%	1.6%
Emergency medicine	5.5%	10.9%
Family medicine/general practice	4.1%	6.3%
Gastroenterology	1.4%	1.6%
General surgery	0.0%	1.6%
Geriatrics	1.4%	1.6%
Hospital medicine	8.2%	9.4%
Internal medicine-general	5.5%	12.5%
Neurology	30.1%	23.4%
Neurosurgery	13.7%	6.3%
Obstetrics and gynecology	1.4%	1.6%
Occupational medicine	1.4%	1.6%
Oncology	0.0%	0.0%
Orthopaedic surgery	4.1%	1.6%
Otolaryngology	0.0%	0.0%
Pain medicine	1.4%	1.6%
Pediatrics- general	0.0%	1.6%
Physical medicine and rehabilitation	1.4%	1.6%
Plastic Surgery	2.7%	1.6%
Psychiatry	4.1%	1.6%
Urology	0.0%	1.6%
All other specialties	6.7%	4.1%

Table 2m: Secondary Specialty by Principal Specialty

Secondary Specialty Area Neurosurgery

Principal Specialty Area	2023	2019
Cardiology	0.6%	0.7%
Cardiothoracic and vascular surgery	3.8%	2.8%
Critical care medicine	8.8%	10.3%
Dermatology	0.0%	0.0%
Emergency medicine	1.9%	4.1%
Family medicine/general practice	0.6%	0.0%
Gastroenterology	0.0%	0.0%
General surgery	3.1%	6.8%
Geriatrics	0.0%	0.0%
Hospital medicine	1.3%	0.7%
Internal medicine-general	1.3%	0.7%
Neurology	3.8%	4.1%
Neurosurgery	52.5%	50.0%
Neurosurgery Obstetrics and gynecology	52.5% 0.0%	50.0% 0.0%
Obstetrics and gynecology	0.0%	0.0%
Obstetrics and gynecology Occupational medicine	0.0%	0.0%
Obstetrics and gynecology Occupational medicine Oncology	0.0% 0.0% 0.0%	0.0% 0.0% 1.4%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery	0.0% 0.0% 0.0% 6.3%	0.0% 0.0% 1.4% 6.8%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology	0.0% 0.0% 0.0% 6.3% 0.0%	0.0% 0.0% 1.4% 6.8% 0.0%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine	0.0% 0.0% 0.0% 6.3% 0.0%	0.0% 0.0% 1.4% 6.8% 0.0% 0.7%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine Pediatrics- general	0.0% 0.0% 0.0% 6.3% 0.0% 1.3%	0.0% 0.0% 1.4% 6.8% 0.0% 0.7% 0.7%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine Pediatrics- general Physical medicine and rehabilitation	0.0% 0.0% 0.0% 6.3% 0.0% 1.3% 0.0%	0.0% 0.0% 1.4% 6.8% 0.0% 0.7% 0.7% 0.0%
Obstetrics and gynecology Occupational medicine Oncology Orthopaedic surgery Otolaryngology Pain medicine Pediatrics- general Physical medicine and rehabilitation Plastic Surgery	0.0% 0.0% 0.0% 6.3% 0.0% 1.3% 0.0% 1.3%	0.0% 0.0% 1.4% 6.8% 0.0% 0.7% 0.7% 0.0%

Table 2n: Secondary Specialty by Principal Specialty

Secondary Specialty Area Obstetrics and gynecology

Principal Specialty Area	202 3	201 9
Cardiology	0.9%	1.0%
Cardiothoracic and vascular surgery	0.0%	1.0%
Critical care medicine	0.9%	0.0%
Dermatology	1.7%	1.0%
Emergency medicine	6.8%	7.9%
Family medicine/general practice	7.7%	7.9%
Gastroenterology	0.0%	0.0%
General surgery	1.7%	5.9%
Geriatrics	0.0%	0.0%
Hospital medicine	2.6%	4.0%
Internal medicine-general	0.0%	1.0%
Neurology	0.0%	0.0%
Neurosurgery	0.0%	2.0%
Obstetrics and gynecology	47.0%	45.5%
Occupational medicine	2.6%	0.0%
Oncology	0.0%	0.0%
Orthopaedic surgery	5.1%	3.0%
Otolaryngology	0.0%	0.0%
Pain medicine	0.0%	1.0%
Pediatrics- general	0.9%	3.0%
Physical medicine and rehabilitation	0.9%	1.0%
Plastic Surgery	0.9%	0.0%
Psychiatry	0.9%	0.0%
Urology	0.0%	1.0%

Table 2o: Secondary Specialty by Principal Specialty

Secondary Specialty Area Occupational medicine

Principal Specialty Area	2023	2019
Cardiology	1.0%	1.0%
Cardiothoracic and vascular surgery	0.3%	0.0%
Critical care medicine	1.6%	1.4%
Dermatology	1.0%	1.0%
Emergency medicine	20.3%	24.0%
Family medicine/general practice	16.5%	22.3%
Gastroenterology	0.6%	0.3%
General surgery	2.6%	1.4%
Geriatrics	0.3%	1.4%
Hospital medicine	2.3%	3.0%
Internal medicine-general	3.5%	2.4%
Neurology	0.0%	0.3%
Neurosurgery	1.0%	1.0%
Obstetrics and gynecology	0.6%	0.0%
Occupational medicine	14.8%	10.8%
Oncology	0.0%	0.3%
Orthopaedic surgery	2.6%	6.1%
Otolaryngology	1.0%	0.7%
Pain medicine	1.0%	0.7%
Pediatrics- general	1.6%	0.3%
Physical medicine and rehabilitation	0.3%	0.3%
Plastic Surgery	1.0%	0.3%
Psychiatry	1.0%	1.0%
Urology	1.0%	1.0%
All other specialties	24.1%	19.0%

Table 2p: Secondary Specialty by Principal Specialty

Secondary Specialty Area Oncology

Principal Specialty Area	2023	2019
Cardiology	2.0%	2.1%
Cardiothoracic and vascular surgery	2.0%	4.2%
Critical care medicine	0.0%	2.1%
Dermatology	0.0%	0.0%
Emergency medicine	4.1%	4.3%
Family medicine/general practice	6.1%	2.1%
Gastroenterology	0.0%	0.0%
General surgery	4.1%	4.3%
Geriatrics	0.0%	0.0%
Hospital medicine	8.2%	2.1%
Internal medicine-general	2.0%	0.0%
Neurology	2.0%	0.0%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	4.1%	4.3%
Occupational medicine	0.0%	2.1%
Oncology	40.8%	42.6%
Orthopaedic surgery	2.0%	0.0%
Otolaryngology	0.0%	2.1%
Pain medicine	0.0%	0.0%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.0%	0.0%
Psychiatry	0.0%	2.1%
Urology	0.0%	0.0%
All other specialties	22.6%	25.6%

Table 2q: Secondary Specialty by Principal Specialty

Secondary Specialty Area Orthopaedic surgery

Principal Specialty Area	2023	2019
Cardiology	0.2%	0.2%
Cardiothoracic and vascular surgery	2.1%	1.7%
Critical care medicine	1.7%	0.6%
Dermatology	0.8%	0.2%
Emergency medicine	6.6%	13.0%
Family medicine/general practice	3.8%	5.1%
Gastroenterology	0.0%	0.2%
General surgery	3.9%	3.6%
Geriatrics	0.2%	0.2%
Hospital medicine	0.9%	1.1%
Internal medicine-general	0.8%	0.9%
Neurology	0.2%	0.4%
Neurosurgery	2.4%	2.8%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	1.1%	0.9%
Oncology	0.2%	0.0%
Orthopaedic surgery	60.5%	57.4%
Otolaryngology	0.8%	0.9%
Pain medicine	0.8%	1.5%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	1.1%	1.1%
Plastic Surgery	0.6%	0.4%
Psychiatry	0.2%	0.2%
Urology	0.2%	0.0%
All other specialties	10.9%	7.6%

Table 2r: Secondary Specialty by Principal Specialty

Secondary Specialty Area Otolaryngology

Prinicpal Specialty Area	2023	2019
Cardiology	0.0%	0.0%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	0.0%	0.0%
Dermatology	3.8%	5.6%
Emergency medicine	15.4%	13.9%
Family medicine/general practice	11.5%	11.1%
Gastroenterology	0.0%	0.0%
General surgery	3.8%	2.8%
Geriatrics	3.8%	2.8%
Hospital medicine	0.0%	0.0%
Internal medicine-general	3.8%	2.8%
Neurology	0.0%	2.8%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	0.0%	5.6%
Oncology	0.0%	0.0%
Orthopaedic surgery	3.8%	5.6%
Otolaryngology	15.4%	22.2%
Pain medicine	0.0%	2.8%
Pediatrics- general	3.8%	2.8%
Physical medicine and rehabilitation	3.8%	0.0%
Plastic Surgery	7.7%	2.8%
Psychiatry	0.0%	0.0%
Urology	0.0%	0.0%
All other specialties	23.4%	16.4%

Table 2s: Secondary Specialty by Principal Specialty

Secondary Specialty Area Pain medicine

Principal Specialty Area	2023	2019
Cardiology	0.0%	1.2%
Cardiothoracic and vascular surgery	3.5%	3.6%
Critical care medicine	1.7%	0.0%
Dermatology	4.3%	2.4%
Emergency medicine	9.5%	15.9%
Family medicine/general practice	12.1%	11.0%
Gastroenterology	0.9%	0.0%
General surgery	1.7%	1.2%
Geriatrics	1.7%	1.2%
Hospital medicine	1.7%	1.2%
Internal medicine-general	5.2%	2.4%
Neurology	0.0%	1.2%
Neurosurgery	3.5%	1.2%
Obstetrics and gynecology	1.7%	1.2%
Occupational medicine	0.9%	1.2%
Oncology	0.9%	0.0%
Orthopaedic surgery	14.7%	9.8%
Otolaryngology	0.0%	0.0%
Pain medicine	13.8%	14.6%
Pediatrics- general	0.0%	1.2%
Physical medicine and rehabilitation	3.4%	0.0%
Plastic Surgery	1.7%	2.4%
Psychiatry	0.9%	1.2%
Urology	0.9%	1.2%
All other specialties	15.3%	24.7%

Table 2t: Secondary Specialty by Principal Specialty

Secondary Specialty Area Pediatrics- general

Principal Specialty Area	2023	2019
Cardiology	0.0%	0.6%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	0.0%	0.6%
Dermatology	0.6%	0.6%
Emergency medicine	15.1%	16.3%
Family medicine/general practice	22.8%	20.3%
Gastroenterology	0.0%	0.6%
General surgery	0.0%	1.2%
Geriatrics	0.0%	0.0%
Hospital medicine	0.6%	1.7%
Internal medicine-general	3.8%	3.5%
Neurology	0.0%	0.0%
Neurosurgery	0.0%	0.0%
Obstetrics and gynecology	2.5%	1.7%
Occupational medicine	1.3%	0.0%
Oncology	0.0%	0.6%
Orthopaedic surgery	0.6%	0.0%
Otolaryngology	0.0%	0.6%
Pain medicine	0.6%	0.0%
Pediatrics- general	24.7%	29.7%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.6%	0.0%
Psychiatry	2.5%	1.7%
Urology	0.0%	0.0%
All other specialties	24.3%	20.3%

Table 2u: Secondary Specialty by Principal Specialty

Secondary Specialty Area

Principal Specialty Area	2023	201 9
Cardiology	0.0%	0.0%
Cardiothoracic and vascular surgery	3.2%	1.4%
Critical care medicine	1.6%	0.0%
Dermatology	0.0%	0.0%
Emergency medicine	19.0%	17.1%
Family medicine/general practice	11.1%	10.0%
Gastroenterology	3.2%	2.9%
General surgery	3.2%	0.0%
Geriatrics	4.8%	2.9%
Hospital medicine	1.6%	7.1%
Internal medicine-general	6.3%	7.1%
Neurology	1.6%	0.0%
Neurosurgery	4.8%	4.3%
Obstetrics and gynecology	0.0%	0.0%
Occupational medicine	0.0%	1.4%
Oncology	0.0%	0.0%
Orthopaedic surgery	7.9%	11.4%
Otolaryngology	0.0%	0.0%
Pain medicine	7.9%	7.1%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	11.1%	12.9%
Plastic Surgery	0.0%	1.4%
Psychiatry	0.0%	1.4%
Urology	0.0%	0.0%
All other specialties	12.7%	11.6%

Table 2v: Secondary Specialty by Principal Specialty

Secondary Specialty Area Plastic surgery

Principal Specialty Area	202 3	2019
Cardiology	1.0%	0.0%
Cardiothoracic and vascular surgery	6.8%	2.4%
Critical care medicine	1.9%	2.4%
Dermatology	4.9%	4.8%
Emergency medicine	9.7%	16.7%
Family medicine/general practice	2.9%	2.4%
Gastroenterology	0.0%	0.0%
General surgery	10.7%	6.0%
Geriatrics	0.0%	0.0%
Hospital medicine	0.0%	1.2%
Internal medicine-general	0.0%	3.6%
Neurology	0.0%	0.0%
Neurosurgery	2.9%	2.4%
Obstetrics and gynecology	0.0%	3.6%
Occupational medicine	0.0%	1.2%
Oncology	0.0%	0.0%
Orthopaedic surgery	14.6%	8.3%
Otolaryngology	0.0%	2.4%
Pain medicine	1.9%	1.2%
Pediatrics- general	1.0%	0.0%
Physical medicine and rehabilitation	0.0%	1.2%
Plastic Surgery	26.2%	32.1%
Psychiatry	0.0%	0.0%
Urology	0.0%	1.2%
All other specialties	15.5%	6.9%

Table 2w: Secondary Specialty by Principal Specialty

Secondary Specialty Area Psychiatry

Principal Specialty Area	2023	2019
Cardiology	1.4%	1.6%
Cardiothoracic and vascular surgery	0.0%	0.0%
Critical care medicine	0.6%	1.2%
Dermatology	1.2%	0.4%
Emergency medicine	5.2%	8.3%
Family medicine/general practice	11.6%	12.2%
Gastroenterology	0.6%	0.4%
General surgery	0.6%	1.2%
Geriatrics	0.3%	0.4%
Hospital medicine	1.4%	2.8%
Internal medicine-general	2.6%	4.3%
Neurology	1.2%	0.8%
Neurosurgery	0.6%	0.8%
Obstetrics and gynecology	1.4%	1.2%
Occupational medicine	0.6%	0.0%
Oncology	0.3%	0.4%
Orthopaedic surgery	2.0%	2.0%
Otolaryngology	0.3%	0.0%
Pain medicine	1.2%	0.4%
Pediatrics- general	0.6%	1.2%
Physical medicine and rehabilitation	0.3%	0.4%
Plastic Surgery	0.6%	0.8%
Psychiatry	53.5%	47.2%
Urology	0.0%	0.8%
All other specialties	11.9%	11.2%

Table 2x: Secondary Specialty by Principal Specialty

Secondary Specialty Area Urology

Principal Specialty Area	2023	201 9
Cardiology	0.0%	2.6%
Cardiothoracic and vascular surgery	4.8%	2.6%
Critical care medicine	0.0%	0.0%
Dermatology	0.0%	0.0%
Emergency medicine	9.5%	5.3%
Family medicine/general practice	4.8%	10.5%
Gastroenterology	0.0%	0.0%
General surgery	9.5%	10.5%
Geriatrics	0.0%	0.0%
Hospital medicine	0.0%	5.3%
Internal medicine-general	2.4%	2.6%
Neurology	0.0%	0.0%
Neurosurgery	2.4%	0.0%
Obstetrics and gynecology	2.4%	0.0%
Occupational medicine	0.0%	0.0%
Oncology	2.4%	2.6%
Orthopaedic surgery	2.4%	2.6%
Otolaryngology	2.4%	0.0%
Pain medicine	0.0%	0.0%
Pediatrics- general	0.0%	0.0%
Physical medicine and rehabilitation	0.0%	0.0%
Plastic Surgery	0.0%	0.0%
Psychiatry	4.8%	0.0%
Urology	31.0%	28.9%
All other specialties	21.2%	26.5%

Table 2y: Secondary Specialty by Principal Specialty

Secondary Specialty Area All other specialties

Principal Specialty Area	2023	2019
Cardiology	1.5%	1.2%
Cardiothoracic and vascular surgery	1.8%	1.7%
Critical care medicine	1.5%	1.6%
Dermatology	1.7%	1.8%
Emergency medicine	17.9%	18.5%
Family medicine/general practice	16.0%	19.9%
Gastroenterology	0.7%	0.9%
General surgery	3.2%	2.8%
Geriatrics	0.6%	0.6%
Hospital medicine	3.0%	3.2%
Internal medicine-general	3.5%	4.3%
Neurology	0.5%	0.5%
Neurosurgery	1.2%	1.3%
Obstetrics and gynecology	0.8%	1.1%
Occupational medicine	1.9%	2.1%
Oncology	0.7%	0.7%
Orthopaedic surgery	5.8%	5.7%
Otolaryngology	0.7%	0.6%
Pain medicine	1.5%	0.9%
Pediatrics- general	1.4%	1.1%
Physical medicine and rehabilitation	0.5%	0.6%
Plastic Surgery	1.0%	0.6%
Psychiatry	2.5%	1.7%
Urology	1.0%	0.9%
All other specialties	29.1%	25.7%

Table 3: Across all principal specialties, hours spent in secondary specialty

Principal Specialty Area	Median Hours Spent in a Secondary Position- 202 3	Median Hours Spent in a Secondary Position- 2019	Mean Hours Spent in a Secondary Position- 202 3	Mean Hours Spent in a Secondary Position- 201 9
Cardiology	10	9	10	10
Cardiothoracic and vascular surgery	10	10	11	11
Critical care medicine	10	11	12	12
Dermatology	8	8	10	10
Emergency medicine	10	10	12	12
Family medicine/general practice	8	8	11	11
Gastroenterology	8	10	9	10
General surgery	10	10	11	11
Geriatrics	10	10	12	11
Hospital medicine	10	10	12	12
Internal medicine-general	10	10	12	12
Neurology	10	10	11	11
Neurosurgery	10	10	12	12
Obstetrics and gynecology	10	8	11	11
Occupational medicine	8	8	10	10
Oncology	8	8	8	9
Orthopaedic surgery	8	8	10	10
Otolaryngology	8	8	9	10
Pain medicine	8	8	10	10
Pediatrics- general	8	8	10	10
Physical medicine and rehabilitation	8	8	10	9
Plastic surgery	8	8	9	9
Psychiatry	8	10	11	12
Urology	10	8	11	11
All other specialties	8	9	10	10

Table 4: Across all secondary specialties, hours spent in the secondary position

Secondary Specialty Area	Median Hours Spent in a Secondary Position- 2023	Median Hours Spent in a Secondary Position- 2019	Mean Hours Spent in a Secondary Position- 2023	Mean Hours Spent in a Secondary Position- 2019
Cardiology	10	10	11	11
Cardiothoracic and vascular surgery	10	10	11	12
Critical care medicine	12	12	13	12
Dermatology	9	8	11	11
Emergency medicine	10	10	11	11
Family medicine/general practice	8	8	11	11
Gastroenterology	10	10	12	12
General surgery	10	10	10	11
Geriatrics	10	10	12	13
Hospital medicine	10	10	12	12
Internal medicine-general	10	10	12	12
Neurology	12	12	13	13
Neurosurgery	12	10	13	13
Obstetrics and gynecology	10	8	12	11
Occupational medicine	8	8	11	10
Oncology	10	8	11	11
Orthopaedic surgery	8	8	10	10
Otolaryngology	10	9	12	11
Pain medicine	10	10	13	13
Pediatrics- general	8	8	11	10
Physical medicine and rehabilitation	9	10	11	12
Plastic surgery	8	8	11	11
Psychiatry	10	10	12	13
Urology	11	10	15	14
All other specialties	8	8	10	10

Table 5: Reasons PAs have a Secondary Clinical Position

Principal Specialty	Enjoy working in a variety of clinical settings	To gain experience in a different aspect of clinical care	To supplement the earnings from my principal clincal PA position	Was not offered full-time work in my principal position	Other*
Cardiology	24.6%	21.4%	46.3%	1.0%	6.8%
Cardiothoracic and vascular surgery	21.0%	16.7%	52.5%	1.1%	8.7%
Critical care medicine	21.2%	21.6%	51.8%	0.4%	5.0%
Dermatology	30.6%	20.5%	36.6%	3.4%	9.0%
Emergency medicine	27.1%	14.6%	49.1%	1.4%	7.9%
Family medicine/general practice	25.5%	16.2%	45.6%	2.3%	10.4%
Gastroenterology	22.4%	22.4%	44.9%	3.7%	6.5%
General surgery	22.5%	22.3%	47.8%	0.6%	6.8%
Geriatrics	29.3%	15.9%	48.8%	2.4%	3.7%
Hospital medicine	22.7%	20.8%	48.2%	1.3%	7.1%
Internal medicine-general	27.8%	19.3%	43.3%	2.2%	7.5%
Neurology	17.2%	27.3%	44.4%	3.0%	8.1%
Neurosurgery	21.6%	20.1%	50.7%	0.4%	7.2%
Obstetrics and gynecology	27.4%	22.0%	42.1%	4.3%	4.3%
Occupational medicine	32.8%	10.4%	40.4%	2.8%	13.6%
Oncology	23.4%	23.1%	48.1%	0.0%	5.6%
Orthopaedic surgery	19.0%	17.8%	52.2%	0.8%	10.3%
Otolaryngology	29.5%	17.8%	41.0%	1.3%	6.4%
Pain medicine	27.0%	18.9%	42.8%	5.0%	6.3%
Pediatrics- general	28.0%	19.0%	41.1%	3.0%	8.9%
Physical medicine and rehabilitation	22.1%	11.8%	48.5%	4.4%	13.2%
Plastic surgery	27.9%	22.1%	44.3%	2.1%	3.6%
Psychiatry	29.4%	17.3%	44.4%	1.8%	7.1%
Urology	17.8%	13.9%	55.4%	1.0%	11.9%
All other specialties	24.9%	18.7%	44.5%	2.4%	9.4%

^{*}Most common other responses: national guard or reserve duty, other military appointment, maintain clinical skills, can work via telemedicine, help fill gaps in coverage, increase benefits (ie. Insurance, retirement), and flexibility.