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2019 New York Residency Training Outcomes:
A Summary of Responses to the 2019 New York Resident Exit Survey

CHWS
Center *for* Health Workforce Studies

School of Public Health
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May 2022

PREFACE

This report summarizes the results of the Survey of Residents Completing Training in New York in 2019 (2019 Exit Survey) conducted by the Center for Health Workforce Studies (CHWS) in the spring and summer of 2019. This survey, administered annually with the cooperation and assistance of residency program directors and hospitals' graduate medical education (GME) administrators across the state, consists of questions covering the following general topics: residents' demographic and background characteristics, residents' post-graduation plans, characteristics of post-graduation employment (for residents with confirmed practice plans), and residents' experiences in searching for a job and their impressions of the physician job market (for residents who had searched for a job).

The primary goal of the Exit Survey is to assist the medical education community in New York in its efforts to train physicians consistent with the needs of the state and the nation. To achieve this goal, CHWS provides residency programs, teaching hospitals, and the medical education community with information about the demand for new physicians and the outcomes of residency training by specialty based on the results of the survey.

This report was prepared by Jinman Pang, and David Armstrong, with layout design by Matt Allegretti. Funding for the 2019 Exit Survey and analysis was provided by the New York State Department of Health.

Established in 1996, CHWS is an academic research center, based at the School of Public Health, University at Albany, State University of New York (SUNY). The mission of CHWS is to provide timely, accurate data and conduct policy relevant research about the health workforce. The research conducted by CHWS supports and promotes health workforce planning and policymaking at local, regional, state, and national levels. Today, CHWS is a national leader in the field of health workforce studies.

The views expressed in this report are those of CHWS and do not necessarily represent positions or policies of the School of Public Health, University at Albany, SUNY, or the New York State Department of Health.

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BACKGROUND

The Center for Health Workforce Studies (CHWS) conducts an annual survey of all physicians completing a residency or fellowship training program in New York (the Exit Survey). The goal is to provide the medical education community with useful information about the outcomes of training and the demand for new physicians. The survey instrument (Appendix B) was developed by CHWS in consultation with the state's teaching hospitals and other key stakeholders.

Each year in the spring, CHWS distributes the Exit Survey to graduate medical education (GME) administrators at teaching hospitals in New York. The survey is then forwarded to individual programs where graduating residents and fellows are asked to complete a questionnaire in the weeks prior to finishing their program. Completed questionnaires are returned to CHWS for data entry and analysis. In 2019, with the excellent participation of teaching hospitals, a total of 3,258 of the estimated 5,359 physicians finishing a residency or fellowship training program completed the Exit Survey (61% response rate). Over the 20 years the survey has been conducted (1998-2003, 2005, 2007-2019), 60,918 of 99,697 graduates have completed the survey (61% cumulative response rate).

A summary of the survey results is presented in this report. Many of the questions on the Exit Survey are designed to assess the demand for physicians in general and by specialty. While the experiences of graduates of training programs in New York may not reflect the experiences of all graduates around the country, they are illustrative of the marketplace for new physicians. By conducting the survey annually, it is possible to observe trends in the marketplace, which can be useful in projecting future demand.

KEY FINDINGS

Overall, the job market for physicians completing training in New York in 2019 was strong.

Based on the responses to several questions used to measure demand, the opportunities for New York's graduating physicians in 2019 were comparable to those in 2018.

- Ninety-five percent (95%) of respondents who had actively searched for a practice position had received at least 1 job offer at the time they completed the survey.

- Twenty-two percent (22%) of respondents reported difficulty finding a satisfactory practice position; 38% of them attributed their difficulty to a lack of jobs in desired locations.

- Only 14% of respondents indicated that they had to change plans due to limited job opportunities.

- The median starting income of respondents was $257,600, a 2% increase from 2018.

Demand for physicians in primary care specialties* was stronger than the demand for physicians in other specialties.

- Physicians in primary care specialties were less likely than physicians in other specialties to report difficulty finding a satisfactory practice position (19% vs 23%) and having to change plans due to limited opportunities (13% vs 14%).

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* In this report, primary care includes the following specialties: family medicine, general internal medicine, general pediatrics, and combined internal medicine and pediatrics. Non-primary care includes all other specialties.

- Physicians in primary care specialties also received more job offers than physicians in other specialties (mean of 3.92 vs 3.28).

There were important differences in the demand for individual specialties.

- Based on a variety of indicators,[†] the demand for physicians in family medicine, adult psychiatry, emergency medicine, dermatology, child and adolescent psychiatry, and general internal medicine was strongest.

- Physicians in pathology, nephrology, radiology, pediatric subspecialties, and cardiology experienced the weakest demand relative to other specialties.

While gender diversity of new physicians is comparable with the US population, the racial/ethnic diversity of new physicians has not.

- Fifty-two percent (52%) of new physicians were female, approximately the same as the US population.

- Fourteen percent (14%) of physicians completing training in New York were underrepresented minorities (URMs). In comparison, 33% of the US population are URMs.[‡]

Fifty-two percent (52%) of the physicians completing training in New York planned to enter patient care/clinical practice. Forty-one (41%) reported plans to subspecialize or pursue additional training.

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† The indicators included having difficulty finding a job, having to change plans due to limited practice opportunities, mean number of job offers, view of the regional market, view of the national job market, and trends in median starting income.

‡ URMs includes Black/African Americans, Hispanic/Latinos, and American Indians.

Almost half (49%) of new physicians planned to practice in New York after completing training.

- When respondents who had plans to leave New York were asked about the main reason for leaving, the most common reasons reported were proximity to family (31%), better jobs in desired locations (10%), and better salary offered outside New York (9%).

Few physicians reported plans to practice in underserved areas.

- Eighteen percent (18%) of respondents indicated that they would be practicing in a federally designated Health Professional Shortage Area (HPSA).

- Only 9% of the physicians completing training in New York reported plans to practice in a rural area.

RESULTS

Practice Location

Table 1 displays the practice locations of respondents with confirmed practice plans. A total of 1,517 respondents reported confirmed practice plans. Two percent (2%) of these respondents reported confirmed plans to leave the US. Physicians with plans to leave the US have been excluded from the next section of this report on expected starting incomes.

Highlights

- Forty-nine percent (49%) of respondents with confirmed plans reported plans to enter practice in New York.

  o Most of these respondents (86%) reported confirmed plans to remain in the same region they had trained in.

- In-state retention of physicians was highest in the following specialties: child and adolescent psychiatry (79%), adult psychiatry (76%), and anesthesiology (76%).

- In-state retention of physicians was lowest in the following specialties: pulmonary disease (28%), orthopedics (28%), and ophthalmology (29%).

- Respondents who graduated from both a high school and a medical school in New York were the most likely (75%) to report confirmed plans to practice in New York after completing training.

- When respondents who had plans to leave New York were asked about the main reason for leaving, the most common reasons reported were proximity to family (31%), better jobs in desired locations outside New York (10%), and better salary outside New York (9%).

- Seven percent (7%) of respondents indicated that they had never intended to practice in New York.

- Few respondents reported that the principal reason for practicing outside of New York was taxes in New York (2%), the cost of malpractice insurance in New York (<1%), or the cost of starting a practice in New York (<1%).

TABLE 1. Number of Respondents With Confirmed Practice Plans and Location of Upcoming Practice (for 2019 Respondents With Confirmed Practice Plans)

Specialty	Number with Confirmed Practice Plans[a]	LOCATION OF UPCOMING PRACTICE			
		Within New York		Other State	Outside US[b]
		Same Region	Other Area		
Primary Care	**419**	**44%**	**9%**	**45%**	**1%**
Family Medicine	99	57%	8%	32%	3%
General Internal Medicine	228	37%	7%	56%	1%
General Pediatrics	85	51%	17%	31%	1%
Obstetrics/Gynecology	**95**	**37%**	**5%**	**57%**	**1%**
Medicine Subspecialties	**323**	**39%**	**6%**	**53%**	**2%**
Cardiology	51	39%	4%	57%	0%
Gastroenterology	27	41%	4%	56%	0%
Geriatrics	24	54%	8%	29%	8%
Hematology/Oncology	43	35%	0%	65%	0%
Nephrology	16	25%	19%	56%	0%
Pulmonary Disease	41	25%	3%	73%	0%
General Surgery	**13**	**31%**	**8%**	**62%**	**0%**
Surgical Subspecialties	**117**	**29%**	**4%**	**65%**	**2%**
Ophthalmology	7	29%	0%	71%	0%
Orthopedics	29	24%	3%	69%	3%
Otolaryngology	6	50%	17%	33%	0%
Urology	10	20%	10%	70%	0%
Facility Based	**152**	**50%**	**7%**	**40%**	**3%**
Anesthesiology	41	66%	10%	24%	0%
Pathology	26	44%	4%	52%	0%
Radiology	39	39%	3%	51%	8%
Psychiatry	**94**	**66%**	**7%**	**25%**	**2%**
Adult Psychiatry	33	70%	6%	24%	0%
Child and Adolescent Psych	28	71%	7%	21%	0%
Other	**304**	**41%**	**5%**	**53%**	**1%**
Dermatology	22	32%	5%	64%	0%
Emergency Medicine	98	39%	6%	55%	0%
Neurology	17	29%	6%	59%	6%
Pediatric Subspecialties	56	34%	5%	59%	2%
Physical Medicine and Rehab	14	14%	21%	64%	0%
All Specialties, 2019 (2018)	**1,517 (1,461)**	**43% (44%)**	**7% (6%)**	**49% (49%)**	**2% (1%)**

[a] This subgroup (ie, respondents with confirmed practice plans) includes respondents who indicated they were entering patient care/clinical practice and had accepted an offer for a practice position.

FIGURE 1. Percent of Respondents With Confirmed Practice Plans in New York by Location of High School, Location of Medical School, and Citizenship Status, 2019
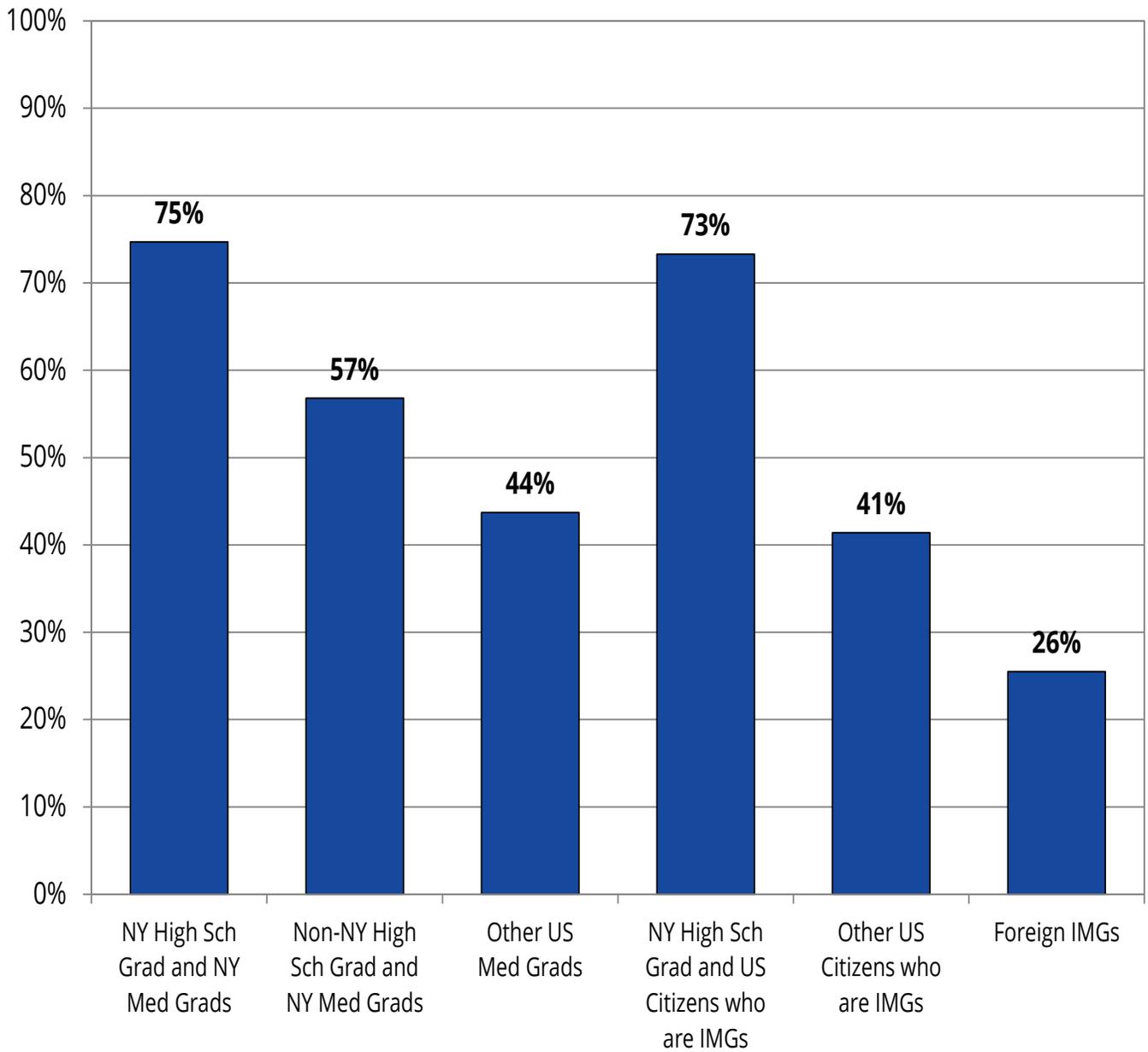
FIGURE 2. Principal Reasons for Practicing Outside New York (for 2019 Respondents With Confirmed Practice Plans)

Reason	Percentage
Proximity to Family	31%
Better Jobs in Desired Location Outside NY	10%
Better Salary Offered Outside NY	9%
Overall Lack of Jobs in NY	9%
Never Intended to Practice in NY	7%
Cost of Living in NY	7%
Other Reason	6%
Better Jobs in Desired Practice Setting Outside NY	6%
Better Job for Spouse/Partner Outside NY	6%
Better Jobs Outside NY that Meet Visa Requirements	5%
Climate/Weather in NY	2%
Taxes in NY	2%
Cost of Malpractice Insurance in NY	0%
Cost of Starting a Practice in New York	0%

Expected Starting Income

Table 2 presents descriptive statistics for respondents' expected income in their first year of practice. Everyone's starting income was computed by summing their base salary and their expected additional/incentive income. The number of respondents (N) is provided, as some specialties had a relatively small number of respondents. Finally, specialties are ranked in descending order (ie, 1 is highest, 25 is lowest) by both mean and median expected starting incomes.

Highlights

- In 2019, the mean expected starting salary for new physicians was $270,062 and the median expected starting salary for new physicians was $257,600.

- Although there was some overlap in the salary distributions of primary care and non-primary care physicians, non-primary care physicians generally reported higher incomes.

- Respondents in the following specialties reported the highest starting incomes: general surgery ($365,600), orthopedics ($359,000), and anesthesiology ($358,700).

- General pediatrics had the lowest median starting income of all specialties ($157,600).

  o Other specialties with the lowest starting incomes included pediatric subspecialties ($196,600) and adult psychiatry ($213,800).

FIGURE 3. Expected Starting Income (in $1,000s) by Specialty Group (for 2019 Respondents With Confirmed Practice Plans)
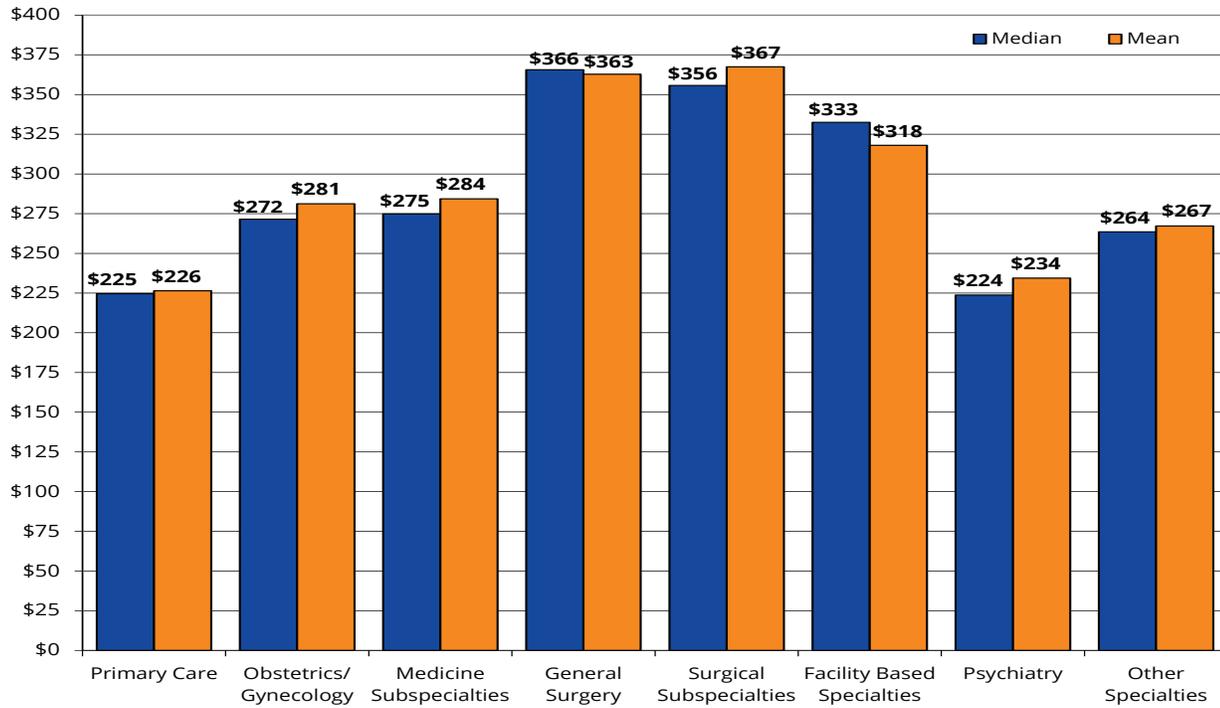

FIGURE 4. Distribution of Starting Income Among Primary Care and Non-Primary Care Physicians (for 2019 Respondents With Confirmed Practice Plans)
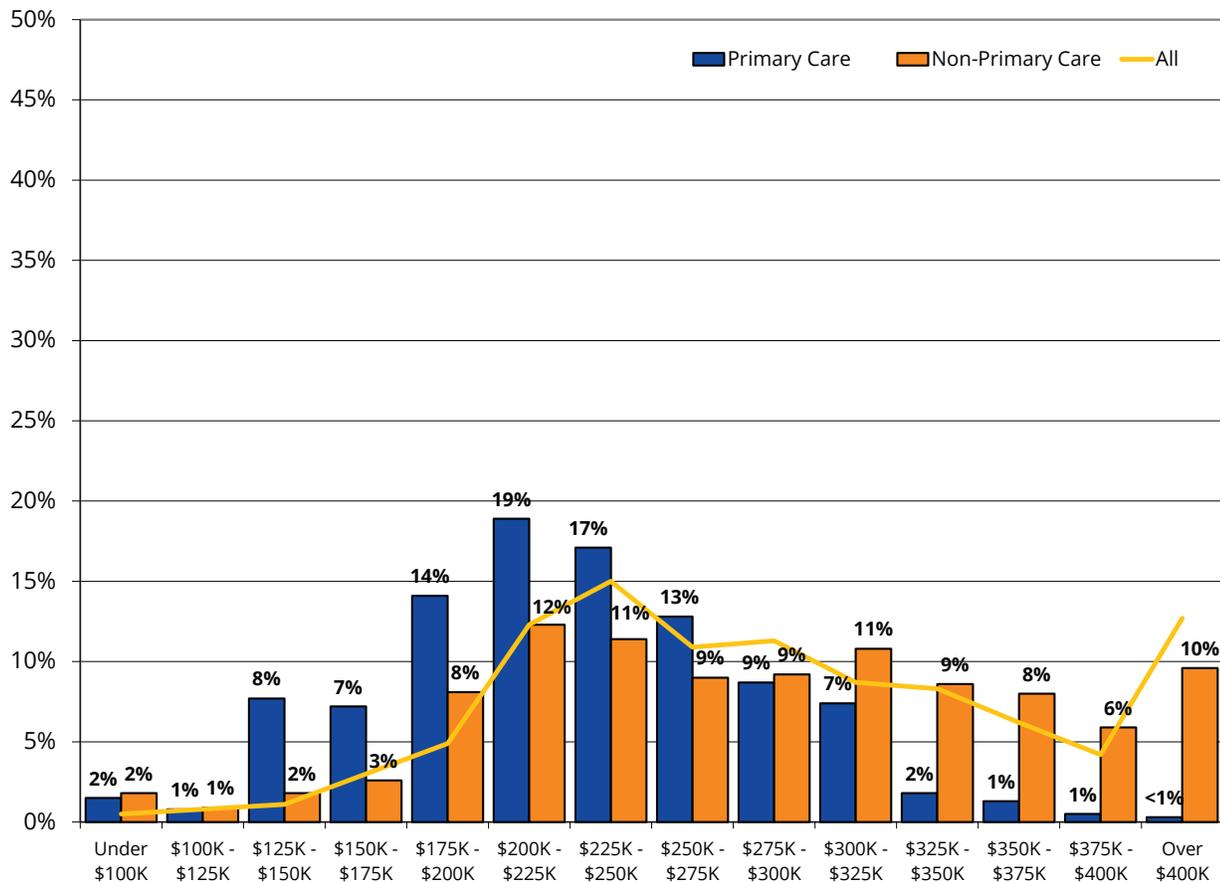
TABLE 2. Expected Starting Incom by Specialty Group (for 2019 Respondents With Confirmed Practice

Specialty	N	MEAN	RANK (of 25)	MEDIAN	RANK (of 25)
Primary Care	**391**	**$226,419**	N/A	**$224,600**	N/A
Family Medicine	92	$232,254	16	$225,950	19
General Internal Medicine	213	$247,197	15	$243,300	16
General Pediatrics	80	$166,350	25	$157,600	25
Obstetrics/Gynecology	**87**	**$281,195**	**13**	**$271,500**	**15**
Medicine Subspecialties	**275**	**$284,315**	N/A	**$274,800**	N/A
Cardiology	41	$333,120	7	$324,100	8
Gastroenterology	21	$312,267	10	$320,500	9
Geriatrics	20	$230,485	19	$222,900	21
Hematology/Oncology	38	$308,474	11	$307,800	10
Nephrology	15	$216,953	23	$227,000	17
Pulmonary Disease	32	$324,634	8	$334,700	7
General Surgery	**10**	**$362,770**	**1**	**$365,550**	**1**
Surgical Subspecialties	**92**	**$367,467**	N/A	**$355,650**	N/A
Ophthalmology	7	$230,429	20	$273,200	14
Orthopedics	18	$354,894	3	$359,000	2
Otolaryngology	6	$339,400	5	$356,450	4
Urology	9	$344,744	4	$343,000	5
Facility Based	**130**	**$317,970**	N/A	**$332,500**	N/A
Anesthesiology	38	$324,245	9	$358,650	3
Pathology	22	$231,682	17	$226,650	18
Radiology	30	$337,070	6	$340,350	6
Psychiatry	**89**	**$234,451**	N/A	**$223,700**	N/A
Adult Psychiatry	33	$231,639	18	$213,800	23
Child and Adolescent Psych	26	$226,854	22	$224,350	20
Other	**277**	**$267,282**	N/A	**$263,500**	N/A
Dermatology	20	$357,770	2	$306,750	11
Emergency Medicine	93	$306,947	12	$302,000	12
Neurology	14	$253,593	14	$280,550	13
Pediatric Subspecialties	53	$202,849	24	$196,600	24
Physical Medicine and Rehab	13	$229,954	21	$217,200	22
Total (All Specialties)	**1,351**	**$270,063**	N/A	**$257,600**	N/A

Assessment of Relative Demand by Specialty

To measure the demand for new physicians, a composite score was computed by taking the median of the ranks on each of the demand indicators (ie, where each specialty stood relative to all 25 specialties) for each specialty with the observations from the most recent 4 years of the survey (2016-2019). Observations from more recent years of the survey received a greater weight than observations from previous years. That is, when calculating the demand score for 2019, data from 2019 were weighted by a factor of 0.40, data from 2018 were weighted by a factor of 0.30, data from 2017 were weighted by a factor of 0.20, and data from 2016 were weighted by a factor of 0.10.

The following variables were used as indicators of demand in the calculations described above:

- Percentage of respondents having difficulty finding a satisfactory practice position

- Percentage of respondents having to change plans due to limited practice opportunities

- Mean number of job offers received by respondents

- Respondents' views of the regional job market in their specialty

- Respondents' views of the national job market in their specialty

- Trends in median starting income

Each of these indicators is an imperfect measure of demand. However, combined, they provide a composite picture of relative demand by specialty. There is a high degree of correlation between the "percent of respondents having difficulty" indicator and the "percent of re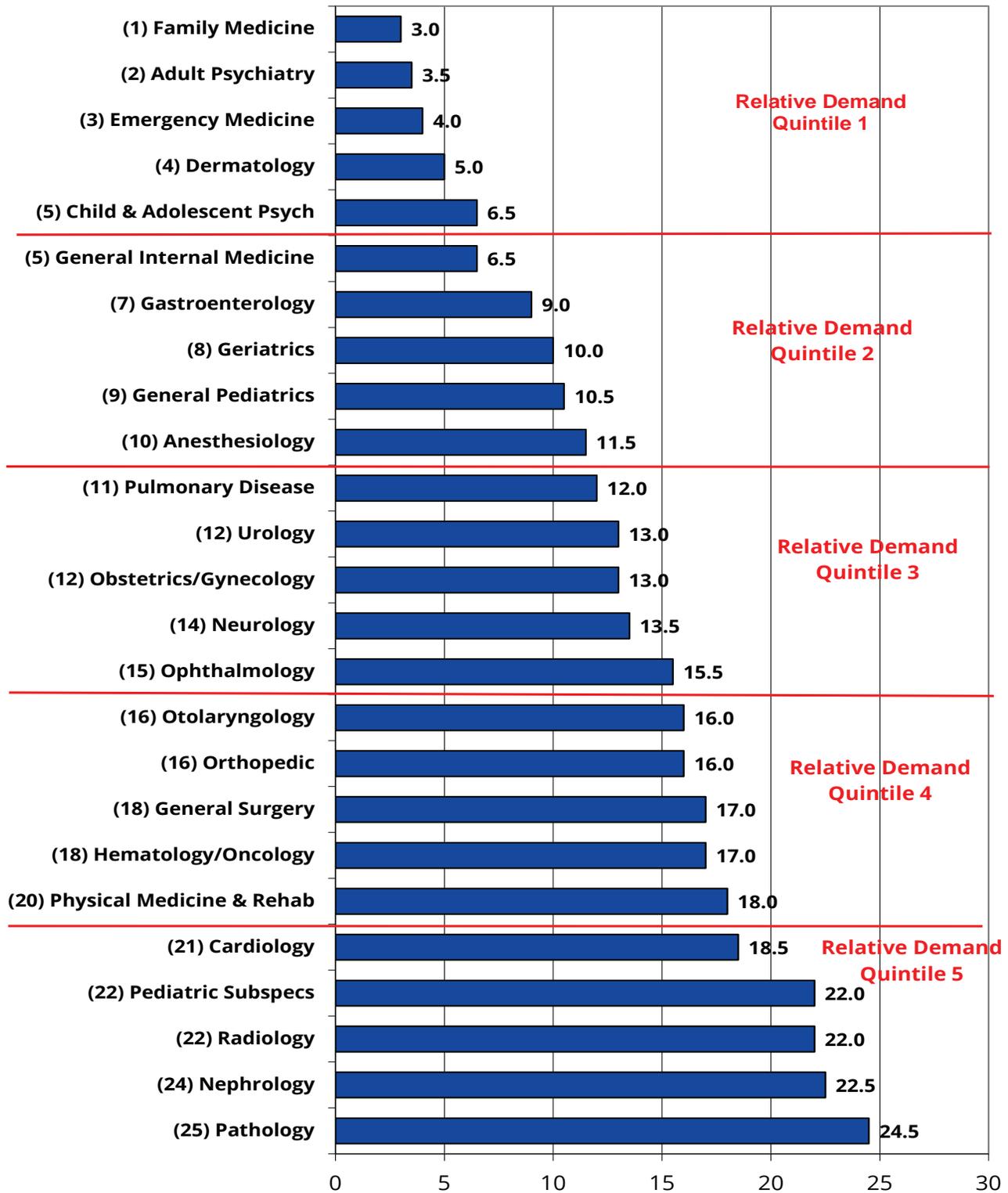spondents having to change plans" in-dicator (ie, a respondent reporting difficulty was also likely to report having to change plans). There was also a high degree of correlation between respondents' assessments of the regional and national job market in their specialty. Due to the correlations between these 2 sets of indicators, the "job offers" and "trends in starting income" indicators were weighed more heavily in the computation of the composite measure of new physician demand.

Note that the composite measure does not reflect absolute demand for new physicians (ie, to determine the appropriate number of physicians necessary to serve a given population). Instead, it reflects the demand for each specialty relative to other specialties. Figure 5 is a plot of the composite relative demand score for each specialty.

Highlights

- In 2019, family medicine (average rank of 3.0 out of 25), adult psychiatry (3.5), emergency medicine (4.0), dermatology (5.0), child and adolescent psychiatry (6.5), and general internal medicine (6.5) experienced strongest demand.

- The job market for pathology (24.5), nephrology (22.5), radiology (22.0), pediatric subspecialties (22.0), and cardiology (18.5) was weak relative to other specialties.

FIGURE 5. Current Relative Demand by Specialty and Median Rank on Demand-Related Variables (of 2019 Respondents Who Have Searched for a Job, IMGs on Temporary Visas Excluded)

Specialty	Median Rank
(1) Family Medicine	3.0
(2) Adult Psychiatry	3.5
(3) Emergency Medicine	4.0
(4) Dermatology	5.0
(5) Child & Adolescent Psych	6.5
(5) General Internal Medicine	6.5
(7) Gastroenterology	9.0
(8) Geriatrics	10.0
(9) General Pediatrics	10.5
(10) Anesthesiology	11.5
(11) Pulmonary Disease	12.0
(12) Urology	13.0
(12) Obstetrics/Gynecology	13.0
(14) Neurology	13.5
(15) Ophthalmology	15.5
(16) Otolaryngology	16.0
(16) Orthopedic	16.0
(18) General Surgery	17.0
(18) Hematology/Oncology	17.0
(20) Physical Medicine & Rehab	18.0
(21) Cardiology	18.5
(22) Pediatric Subspecs	22.0
(22) Radiology	22.0
(24) Nephrology	22.5
(25) Pathology	24.5

Relative Demand Quintile 1
Relative Demand Quintile 2
Relative Demand Quintile 3
Relative Demand Quintile 4
Relative Demand Quintile 5

About the Authors

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Jinman Pang conducts data analysis, updates federal data sources, and conducts literature reviews, among other tasks as needed. Ms. Pang specializes in health econometrics, applied microeconomics, data analysis, modeling, and forecasting. She is currently a PhD candidate with the Economics Department at the University at Albany.

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Working for CHWS since 2003, Dr. Armstrong has an extensive background in conducting health workforce studies and has produced multiple reports on the health care workforce in New York and the US. He manages CHWS' annual New York Resident Exit Survey, which collects information about residents' demographic characteristics and post-graduation plans. Dr. Armstrong also is the director of the Health Workforce Technical Assistance Center, which provides assistance to individuals, organizations, and states engaged in health workforce planning.