

#### **PREFACE**

This report provides a comprehensive overview of graduate medical education in New York State. It is designed to assist the Council on Graduate Medical Education, other state policy makers, residency programs and other interested parties better understand graduate medical education in New York State.

As in past years, the report includes basic information on the current number and distribution of residents by specialty, by location of medical education, by race/ethnicity and several other variables. The report presents trends since 1988. New this year are data on the outcomes of training in New York, including demand by specialty. These data were gathered in a survey of 1997 residency program graduates in New York State. Also new this year is a section comparing graduate medical education in New York and California. Separate reports presenting more comprehensive results from the resident survey and the New York-California comparison are in preparation and will be available in early 1998.

Several recent changes in state and federal GME policies will have a significant impact on graduate medical education in New York State. These include New York State's Health Care Reform Act, the federal Balanced Budget Act and the Medicare GME voluntary reduction demonstration in New York. The extensive data provided in this report provides a baseline to evaluate the impact of these policy changes.

This report was prepared by the Center for Health Workforce Studies. The Center operates under the auspices of the School of Public Health at the University of Albany, SUNY and Health Research Incorporated (HRI). Staff participating in the preparation of this report includes: Edward Salsberg, Mark Dionne, Paul Wing, Joe Nolan, Michael Dill, Kathy Tanner and Kristin Law. Support for the analysis of the survey of residents and the New York-California study was provided by the federal Health Services and Resources Administration. The Center received assistance on the New York-California comparison from the Center for the Health Professions at the University of California at San Francisco.

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# GRADUATE MEDICAL EDUCATION IN NEW YORK STATE 1997

**HIGHLIGHTS OF FINDINGS** 

#### SECTION 1: THE SUPPLY AND DISTRIBUTION OF RESIDENTS IN NEW YORK

#### A. Total Supply and Distribution by Specialty

- ▶ In 1996, 14,680 residents, more than 15% of the nation's total were in training in New York State. In some specialties, New York trains an even higher share of the nation's residents; this includes such specialties as psychiatry (20%), pediatric subspecialties (20%), internal medicine (19%), pediatrics (17.5%) and internal medicine subspecialties (17.2%). (Table 1-1)
- More than one quarter of all residents in New York in 1996 were in general internal medicine residency programs (27.6%) and nearly 42% were in primary care specialties (family practice, internal medicine, pediatrics and combined internal medicine and pediatrics). Historically, a majority of general internal medicine residents have gone on to subspecialize.
- The number of residents in New York State has stabilized: between 1993 and 1996 residency positions increased by only 3% (432 positions). The major increases were in family practice (195 residents) and emergency medicine (127 residents). There were decreases in 11 specialties, including anesthesiology (21%), psychiatry (6%), and internal medicine sub-specialties (2.5%). The overall moderate growth is in sharp contrast to the growth of 2300 positions between 1988 and 1993. (Table 1-2)
- ▶ The number of new entrants, PGY-1s, peaked in 1994 and decreased by nearly 7% between 1994 and 1996 indicating a reversal of the long term trend of increases in residents. (Table 1-7) This decrease would lead to a moderate decline in total residents over the next few years, even in the absence of financial incentives to downsize positions.
- York State. There are significant variations by specialty and specialty grouping; 51% of the obstetric/gynecology residents and 49% of the surgical sub-specialty residents were New York State medical schools. On the other hand, only 15% of the psychiatry, pathology and pediatric sub-specialists graduated from schools in New York. (Table 1-3) In general, there appears to be an inverse relationship between the percent from New York State schools and those from foreign schools. (Figure 1-4).

#### **B.** International Medical School Graduates

- ▶ International medical school graduates (IMGs) comprised 52% (7644) of all residents in New York State in 1996. Five specialties have two-thirds of all IMGs in the state: internal medicine (36.4%); pediatrics (10.7%); psychiatry (9.6%); anesthesiology (5.2%); and surgery (4.6%). (Table 1-4)
- ▶ In several specialties, more than two-thirds of the residents are IMGs. This includes: pediatric sub-specialties (76%); psychiatry (74%); pathology (71%); neurology (70%); internal medicine (69%); and IM sub-specialties (68%). There are a few subspecialties with 10% or fewer IMGs: dermatology, emergency medicine and several surgical sub-specialties. (Figure 1-5)
- ▶ IMG residents in New York State comprise 31% of all IMGs training in the U.S. (Table 1-5) Any national policy targeting IMGs would have a disproportionate impact on New York.
- ▶ Between 1993 and 1996, the total number of IMG residents in New York grew by 1162 an increase of nearly 18%. (Table 1-6) Since the total number of residents went up by only 432 residents, the majority of the new IMGs were replacing USMGs.
- The number of new IMGs entering training (PGY-1s) peaked in 1994 and decreased by 21% between 1994 and 1996. As a consequence, for the first time since at least 1993, the number of new USMGs entering training exceeded the number of IMG PGY-1s in 1996. (Table 1-7 and Figure 1-7) The growth in total IMG residents, despite the sharp drop in new entrants, appears to reflect an increase in sub-specialization and therein, an increase in the average duration of training for IMGs.
- ► The largest concentration of IMGs are from the Indian-subcontinent (38%). (Figure 1-8) New York continues to attract physicians from around the world.
- Nearly 47% (3564) of IMG residents in 1996 had temporary visas, an increase of more than 1000 since 1993. (Table 1-8) Physicians with temporary visas are required to return to their native country when they complete their training, unless they continue in formal training or obtain a waiver by going into practice in an underserved area.
- ▶ The distribution of residents by program continues to be bimodal with 336 programs having 90% or more IMGs and 242 having less than 10% IMGs. (Figure 1-9) Between 1993 and 1996 the number of programs with more than 90% IMGs increased from 219 to 336.

#### C. Under-Represented Minority Residents

- ► Twelve percent (12%) of New York State residents are under-represented minorities. This ranges from 21% obstetrics/gynecology to 8% in the surgical subspecialties. (Table 1-9)
- A similar percent of USMGs and IMGs are under-represented minorities, 12.6% and 11.8% respectively. However, there are substantial variations between specialties. (Table 1-10 and Figure 1-10)
- ► A majority of Black (Non-Hispanic), American Indian, and Puerto Rican residents are USMGs; however, a substantial majority of other Hispanics are IMGs (72%). (Table 1-11 and Figure 1-12)

#### D. Primary Care Training

- ► The number of family practice residents has increased sharply; between 1993 and 1996 the number of PGY-1 residents in family practice increased by 36%. Internal medicine and pediatric PGY-1 residents decreased by 10% and 3% respectively. (Table 1-12)
- ► The number of USMG PGY-1 residents in family practice and pediatrics is increasing and the number in IM appears to be stable. The number of IMG PGY-1s in primary care specialties is decreasing. (Table 1-13 and Figure 1-13)

#### E. The Distribution and Concentration of Residents

- ▶ With more than 80 residents per 100,000 population, New York State continues to have the highest ratio of any state in the nation and more than double the national average of 37 residents per 100,000. (Table 1-14)
- ▶ With nearly 127 residents per 100,000 population, New York City continues to be the center of medical education in the state. However, four of the other HSA regions of New York State are near or below the national average. (Table 1-15 and Figure 1-14)
- ► Academic health centers in the New York City region have 2.25 PGY-1 residents for each medical school graduate. This is well above the national goal of 1.1 residency positions for each graduate. Upstate academic centers have only 1.17 PGY-1s for each medical school graduate. (Table 1-16)

# SECTION 2: THE RESULTS OF THE SURVEY OF RESIDENTS COMPLETING TRAINING IN NEW YORK IN 1997: THE EXIT SURVEY

- A. General Plans of 1997 Graduates of Residency Programs in the New York City Region
  - ▶ Fifty-six percent (56%) of the 1736 survey respondents in the greater New York City region (New York City, Long Island and Westchester) are going into patient care or clinical practice as their main activity. Thirty-five percent are continuing their medical education; 3% are going into teaching or administration, and 6% have other plans. (Figure 2-3)
  - ▶ Forty-seven percent (47%) of respondents entering patient care with confirmed plans are staying in the region and another 4% are entering practice in another area of New York State. (Table 2-2)
  - ► Although 26% of the respondents have temporary visas (47% of IMG respondents), only 3% of all respondents entering patient care indicated plans to leave the U.S. (Figure 2-1 and Table 2-2)
  - ▶ Sixty percent (60%) of those with confirmed plans to go into patient care/clinical practice were going into group practice, 24% were going into hospital based practices (inpatient, ambulatory and emergency room). Of those going into group practice, about two-thirds were to be employees rather than partners/owners. Only 6% were going into solo practice. (Figure 2-4)
  - ▶ Ninety-one percent (91%) of those going into patient care/clinical care were accepting salaried positions. The majority of these will be eligible for incentive payments as well as their base salary. (Table 2-3)
- B. Practice Opportunities: Comparison of USMGs, IMGs and Temporary Visa IMGs
  - ► The practice opportunities for IMGs are substantially worse than for USMGs. IMGs scored more poorly on all indicators of demand/job opportunities than USMGs, even when compared within primary care and non primary care specialties. For example, 56% of the IMGs in primary care specialties reported difficulty finding a job while only 22% of the USMGs reported having a difficult time. Similarly, 38% of the IMGs in primary care had to change their plans but only 11% of the USMGs in primary care had to change plans. (Figures 2-5 and 2-6)
  - ► The practice plans for IMGs with temporary visas are different than other graduating residents. Opportunities for IMGs with temporary visas are very

- limited. Because physicians with temporary visas must continue training or go into practice in an underserved area or return to their native country, their practice opportunities are very limited. For example, 63% of temporary visa holders in primary care specialties reported difficulty finding a job and 46% had to change their plans. A high percent are continuing their residency training. For example, of those completing training in primary care, 32% of the USMGs were continuing their medical training, while 44% of those with temporary visas were continuing their training. Very few are going into practice in New York. Those with temporary visas scored poorly on all indicators of demand. (Figures 2-5, 2-6 and Tables 2-6, 2-7)
- ▶ A high percent of temporary visa holders who are entering practice are going into an underserved area, although the vast majority are outside of New York. For example, of the IMGs with temporary visas going into clinical practice in primary care, 64% are going into underserved areas out of the state and another 10% in the state. For other graduates (USMGs and other IMGs) going into patient care in primary care, 6% were going into underserved areas out of state and 11% in the state. (Table 2-7)
- ▶ A far higher percent of the IMG graduates were completing training in primary care than USMGs. Of the 902 IMG respondents, 499 (55%) were in primary care specialities whereas only 214 of the 827 (26%) USMGs. This is generally consistent with the distribution of residents in training in New York State. Of the 7644 IMGs in training in 1990, 52% were in primary care; while 31% of the 7036 USMGs in training in 1990 were in primary care.

#### C. Primary Care and Non-Primary Care Practice Opportunities for USMGs

- ► A higher percent of primary care USMGs are going to practice in underserved areas (17%) than non-primary care USMGs (8%). (Table 2-6)
- ▶ There are more practice opportunities for primary care USMGs than non-primary care USMGs. On almost all of the criteria measuring demand and job opportunities, primary care graduates appear to be more in demand then graduates in non-primary care specialties. For example, 33% of the non-primary care USMGs reported difficulty finding a practice opportunity, while only 22% of the primary care USMGs reported a problem. Similarly, 19% of the non-primary care USMGs indicated a need to change practice plans while only 11% of the primary care USMGs reported such a need. Only 2% of the non-primary care USMGs thought the regional job market was "wide open," compared to 10% for primary care USMGs. (Figures 2-5, 2-6 and Table 2-6)

Average starting salaries for non-primary care physicians still exceed primary care physicians. While compensation for family practice graduates was relatively good, (between \$115,000 and 124,999) compensation for internists was less (between \$105,000 and \$114,999) and it was even less for pediatricians (between \$95,000 and \$104,999). The overall average salaries for USMGs going into primary care was \$111,171 while the average for USMGs in non-primary care specialties was \$132,239. (Tables 2-5.2, 2-6)

#### D. Demand by Specialty

Six questions on the Exit Survey were selected as indicators of demand for physician in each specialty. The responses were ranked for the 24 largest specialties. The different indicators were weighted and a composite indicator of demand was developed. (See section II for additional information on the criteria and ranking.)

Because of the significant impact of visa status on the practice options and opportunities, demand was calculated for all respondents going into patient care or who considered going into patient care practice. A second calculation was performed with temporary visa holders excluded. The exclusion of the temporary visas did modify the ranking for some specialties.

- ▶ Overall opportunities for new physicians in the region appears to be very limited. Respondents were asked their opinion of practice opportunities in the region in which they trained (defined as within 50 miles of their training site). The response options were weighted: "Wide open"= 3; "Good number of jobs" = 1; "Somewhat restricted" = -1; and "Very tight" = -3. The overall ranking for all respondents going into or considering patient care was -1.03; when temporary visa holders are excluded the overall assessment was only slightly better, -.96. (Tables 2-8, 2-9)
- ► Based on the rankings from the survey, the greatest demand appears to be for emergency medicine, ob/gyn, urology, family practice and dermatology. (Table 2-5)
- ► The least demand appears to be for pathology, ophthalmology, infectious disease, anesthesiology, and diagnostic radiology. Tables 2-4, 2-8 and 2-9 provide the full ranking and results by specialty for all respondents and without the temporary visa holders.
- ▶ The net yield to the region in low demand specialties is very limited. In some specialties, very few of the graduates are going into practice in the region. For example, of the 31 respondents in the greater New York City region completing training in ophthalmology, only one entered practice in the region. The others continued their training or located outside of the region. It may be that the market in greater New York is saturated in these specialties. (Table 2-8)

# SECTION 3: A COMPARISON OF RESIDENCY TRAINING IN NEW YORK AND CALIFORNIA IN 1995: SELECTED FINDINGS

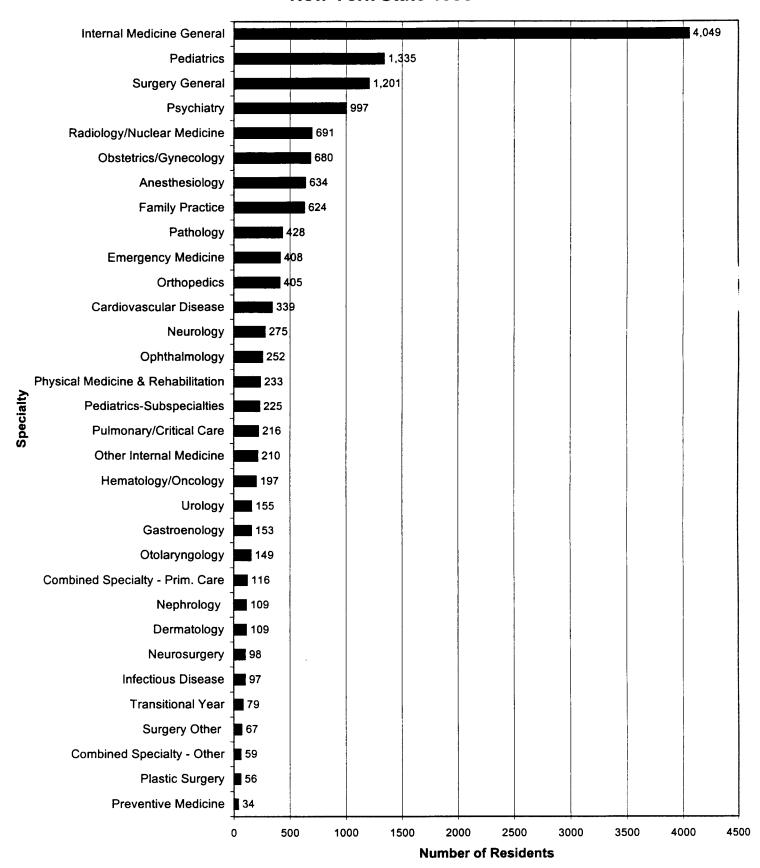
- New York trains three times as many residents per capita as California. New York, with a population of 18.5 million in 1995, had 14,937 physicians in training; California, with a population of 32.4 million had 8678 physicians in training. This is equal to 80.8 residents per 100,000 population in New York versus 26.8 in California. New York also has nearly three times as many medical students per capita as California. (Tables 3-1 and 3-2)
- The distribution by specialty grouping is similar in the two states with New York generally having three times as many residents per capita as California. However, within primary care, New York has more internal medicine residents (4.5 times as many per capita than California) and fewer family practitioners. Family practice is the only specialty for which California exceeds New York in the number of residents. However, on a per capita basis, even for family practice New York is slightly higher then California. (Tables 3-3, 3-4 and Figure 3-1)
- ► In 1995, New York had 7,461 IMGs and California had only 1,067. California had a slightly higher number of USMGs (7,476 in New York and 7,572 in California). Thus, the difference in the number of residents between the two states is the result of the higher number of IMGs in New York. (Figure 3-2) In New York there are 40.4 IMGs per 100,000 population compared to just 3.2 in California.
- ▶ IMGs are a far higher percentage of residents is certain specialty groupings in New York compared to California. For example, for primary care specialties in New York, IMGs comprise 65% of the residents, while they are only 12% of California's primary care residents. For facility based specialties, IMGs represent 42% of the residents in New York but only 11 percent in California. (Table 3-5)
- For most specialty groupings, the number of USMGs is similar in the two states, but New York has far more IMGs in each specialty grouping. However, for primary care California has a higher number of USMGs than New York. (Figure 3-3)
- The greater number of IMG residents in New York is driven by the high number of IMGs with temporary visas in New York compared to California: 3702 to 243. Even without adjusting for California's larger population, New York has 15 times as many IMGs with temporary visas as California. IMGs with temporary visas were 50% of the IMGs in New York and only 23% of California's much smaller base. (Table 3-6)

- Most of the practicing physicians in New York and California trained within their own state; however, New York trains a higher percentage of its practicing physicians than California (78% to 62%). California retains a higher percentage of the physicians trained in California than New York (71% compared to 51%). This may reflect the role of New York as a major trainer of physicians (it keeps a lot and exports a lot), the attractiveness of California to physicians trained in and out of state, and the far smaller base of training in California. (Tables 3-7 and 3-8) The lower retention in New York State may be related in part to the proximity of New York City to other states.
- ▶ Of California's practicing physicians, 8404 (14%) trained in New York; while only 1315 (3%) of New York's practicing physicians trained in California. The vast majority of California physicians trained in New York are in non-primary care specialties. This further confirms New York's role as a major national producer of physicians for the nation. (Table 3-9)
- One factor that may contribute to the higher number of residents in New York is the significantly higher use of hospital beds compared to California. In 1995, in New York, the average daily census in hospitals per 100,000 population was 415; in California it was only 179. (Table 3-10) The number of medical residents per occupied hospital bed was only 27% higher in New York.

TABLE 1-1
Residents by Specialty New York State and U.S., 1996

Specialty	Number of Residents in NYS	% of NYS Residents by Specialty	Number of Residents in US	Total NYS Residents / Total US, %
Primary Care	20.4	4.00/	40.404	0.00/
Family Practice	624	4.3%	10,104	6.2%
Internal Medicine	4,049	27.6%	21,298	19.0%
Pediatrics	1,335	9.1%	7,618	17.5%
Combined Specialties-Primary Care	116	0.8% <b>41.7%</b>	1,316 <b>40,336</b>	8.8% <b>15.2%</b>
Total Primary Care	6,124	41.7%	40,336	15.2%
Obstetrics/Gynecology	680	4.6%	4,941	13.8%
Internal Medicine Subspecialties				
Cardiology	339	2.3%	2,244	15.1%
Gastroenterology	153	1.0%	917	16.7%
Hematology/Oncology	197	1.3%	1,068	18.4%
Infectious Diseases	97	0.7%	548	17.7%
Nephrology	109	0.7%	609	17.9%
Pulmonary/Critical Care	216	1.5%	1,113	19.4%
Other	210	1.4%	1,201	17.5%
Total Medicine Subspecialties	1,321	9.0%	7,700	17.2%
General Surgery	1,201	8.2%	7,921	15.2%
Surgical Subspecialties				
Neurological Surgery	98	0.7%	854	11.5%
Ophthalmology	252	1.7%	1,532	16.4%
Orthopedics	405	2.8%	3,033	13.4%
Otolaryngology	149	1.0%	1,197	12.4%
Plastic Surgery	56	0.4%	481	11.6%
Urology	155	1.1%	1,108	14.0%
Other	67	0.5%	672	10.0%
Total Surgical Subspecialties	1,182	8.1%	8,877	13.3%
Facility Based Specialties				
Anesthesiology	634	4.3%	4,323	14.7%
Pathology	428	2.9%	2,997	14.3%
Radiology  Total Facility Based Specialties	691 <b>1,753</b>	4.7% 11.9%	4,873 <b>12,193</b>	14.2% 14.4%
Psychiatry	997	6.8%	4,917	20.3%
	001	J. <b>J</b> /	7,011	_0.070
Other Specialties		<u>.</u>		
Dermatology	109	0.7%	905	12.0%
Emergency Medicine	408	2.8%	3,034	13.4%
Neurology	275	1.9%	1,704	16.1%
Pediatrics-Subspecialties	225	1.5%	1,530	14.7%
Physical Med & Rehab	233	1.6%	1,151	20.2%
Preventive Medicine	34	0.2%	381	8.9%
Transition Year	79 50	0.5%	1,334	5.9%
Combined Specialties-Other	59	0.4%	355	16.6%
Total Other Specialties	1,422	9.7%	10,394	13.7%
TOTAL	14,680	100%	97,279	15.1%

Figure 1-1
Ranking of Specialties by Number of Residents,
New York State 1996



Source: AMA Medical Education and Research Information Database, 1996
10 Excludes Osteopathic and Dental Programs

Figure 1-2
Trends in Primary Care and total Residency Positions,
New York State 1988-1996

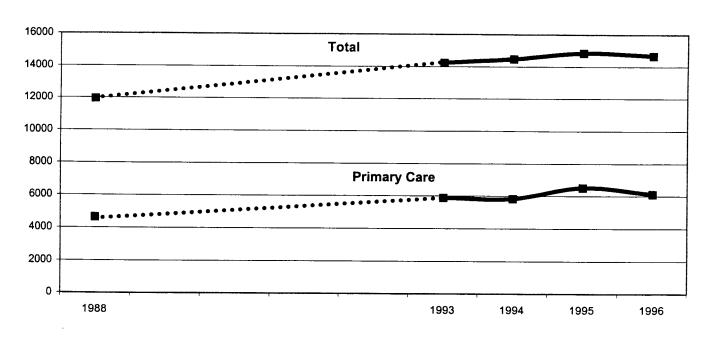
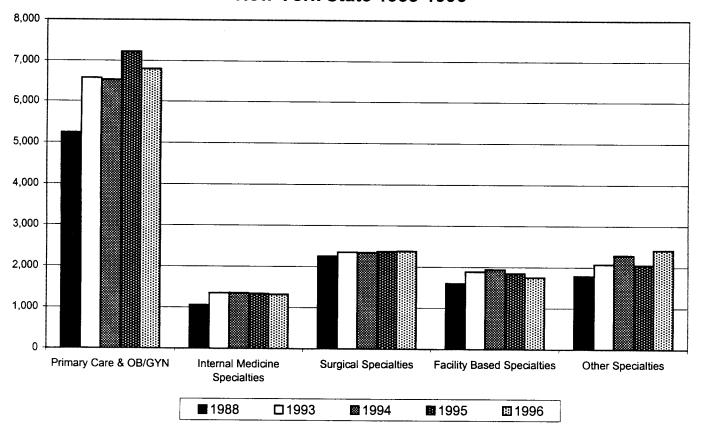


Figure 1-3
Number of Residents by Specialty Grouping,
New York State 1988-1996



Source: AMA Medical Education Research and Information Database, 1996
11 Excludes Osteopathic and Dental Programs

TABLE 1-2 Number of Residents by Specialty Over Time New York State, 1988, 1993, 1994, 1995 and 1996

Specialty         Residents         Residents         Residents         Residents         Residents         Quality           Primary Care         3505         429         465         551         624         45.5%           General Internal Medicine         3,125         3,893         4,048         4,240         4,049         4.0%           Pediatrics         1,026         1,309         1,274         1,347         1,335         2,0%           Combined Specialties         0         47         49         103         116         146,8%           Total Primary Care         4,507         5,678         5,836         6,241         6,124         7,9%           Obstetrics/Gynecology         237         336         361         343         333         0.9           Cardiology         237         336         361         343         333         0.9           Castroenterology         178         142         138         170         153         7,7%           Hematology/Oncology         190         209         216         203         197         >5.7%           Infectious Diseases         86         113         110         104         193         124		1988	1993	1994	1995	1996	% Change
Family Practice   356   429   455   551   624   45.5%   General Internal Medicine   3,125   3,893   4,048   4,240   4,049   4,049   Pediatrics   1,026   1,309   1,274   1,347   1,335   2,0%   Combined Specialties   0   47   49   103   116   146,8%   Total Primary Care   4,507   5,678   5,836   6,241   6,124   7,9%   Total Primary Care   4,507   5,678   5,836   6,241   6,124   7,9%   Total Primary Care   4,507   688   700   710   680   -1,3%   Total Primary Care   640   689   700   710   680   -1,3%   Total Primary Care   640   689   700   710   680   -1,3%   Total Primary Care   640   689   700   710   680   -1,3%   Total Primary Care   640   689   700   710   680   -1,3%   Total Medicine Subspecialties   640	Specialty						_
Family Practice   356   429   465   551   624   45.5%   General Internal Medicine   3,125   3,893   4,048   4,240   4,049   4,099   Pediatrics   1,026   1,309   1,274   1,347   1,335   2,0%   Combined Specialties   0   47   49   103   116   146,8%   Total Primary Care   4,507   5,678   5,836   6,241   6,124   7,9%   Total Primary Care   4,507   5,678   5,836   6,241   6,124   7,9%   Total Primary Care   4,507   689   700   710   680   -1.3%   Total Primary Care   4,507   689   700   710   680   -1.3%   Total Primary Care   7,9%   1,9							
General Internal Medicine	Primary Care						
Pediatrics	Family Practice		. — -	465			45.5%
Total Primary Care	General Internal Medicine		3,893	4,048	4,240	4,049	4.0%
Total Primary Care		1,026			•		
Internal Medicine Subspecialties	The state of the s						
Cardiology	Total Primary Care	4,507	5,678	5,836	6,241	6,124	7.9%
Cardiology         237         336         361         343         339         0.9%           Gastroenterology         178         142         138         170         153         7.7%           Hematology/Oncology         190         209         216         203         197         -5.7%           Infectious Diseases         88         113         110         104         97         -14.2%           Nephrology         96         120         115         108         109         -9.2%           Pulmonary/Critical Care         121         235         237         231         216         -8.1%           Other         149         198         179         182         210         6.1%           Total Medicine Subspecialties         1,059         1,353         1,356         1,341         1,321         -2.4%           General Surgery         1,263         1,232         1,246         1,214         1,201         -2.5%           Surgical Subspecialties         8         8         8         8         95         98         14.0%           Opthamology         241         243         219         254         252         3.7%           Ort	Obstetrics/Gynecology	604	689	700	710	680	-1.3%
Gastroenierology	Internal Medicine Subspecialties						
Hematology/Oncology	Cardiology	237	336	361	343	339	0.9%
Infectious Diseases	Gastroenterology	178	142	138	170	153	7.7%
Neurology	Hematology/Oncology	190	209	216	203	197	-5.7%
Pulmonary/Critical Care	Infectious Diseases	88	113	110	104	97	-14.2%
Pulmonary/Critical Care   121   235   237   231   216   -8.1%   Other   149   198   179   182   210   6.1%   Total Medicine Subspecialties   1,059   1,353   1,356   1,341   1,321   -2.4%   General Surgery   1,263   1,232   1,246   1,214   1,201   -2.5%   Surgical Subspecialties   Neurosurgery   68   86   86   95   98   14.0%   Othamology   241   243   219   254   252   3.7%   Orthopedics   333   392   389   403   405   3.3%   Otolaryngology   128   141   140   141   149   5.7%   Plastic Surgery   47   63   59   58   56   -11.1%   Other   44   53   63   64   67   26.4%   Total Surgical Subspecialties   995   1,123   1,102   1,162   1,182   5.3%	Nephrology	96	120	115	108	109	-9.2%
Total Medicine Subspecialties         1,059         1,353         1,356         1,341         1,321         -2.4%           General Surgery         1,263         1,232         1,246         1,214         1,201         -2.5%           Surgical Subspecialties         86         86         86         95         98         14.0%           Opthamology         241         243         219         254         252         3.7%           Orthopedics         333         392         389         403         405         3.3%           Otolaryngology         128         141         140         141         149         5.7%           Plastic Surgery         47         63         59         58         56         -11.1%           Urology         134         145         146         147         155         6.9%           Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         985         1,123         1,102         1,162         1,182         5.3%           Facilit	Pulmonary/Critical Care	121	235	237	231	216	-8.1%
Total Medicine Subspecialties         1,059         1,353         1,356         1,341         1,321         -2.4%           General Surgery         1,263         1,232         1,246         1,214         1,201         -2.5%           Surgical Subspecialties         86         86         86         95         98         14.0%           Opthamology         241         243         219         254         252         3.7%           Orthopedics         333         392         389         403         405         3.3%           Otolaryngology         128         141         140         141         149         5.7%           Plastic Surgery         47         63         59         58         56         -11.1%           Urology         134         145         146         147         155         6.9%           Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         985         1,123         1,102         1,162         1,182         5.3%           Facilit		149	198	179	182	210	
Surgical Subspecialties   Neurosurgery   68   86   86   86   95   98   14.0%   Opthamology   241   243   219   254   252   3.7%   Orthopedics   333   392   389   403   405   3.3%   Otolaryngology   128   141   140   141   149   5.7%   Plastic Surgery   47   63   59   58   56   -11.1%   Urology   134   145   146   147   155   6.9%   Other   44   53   63   64   67   26.4%   Total Surgical Subspecialties   995   1,123   1,102   1,162   1,182   5.3%   Facility Based Specialties   Anesthesiology   678   804   837   726   634   -21.1%   Pathology   362   396   397   427   428   8.1%   Radiology   563   691   710   698   691   0.0%   Total Facility Based Specialties   1,603   1,891   1,944   1,851   1,753   -7.3%   Psychiatry   1,097   1,060   1,065   1,048   997   -5.9%   Other Specialties   Dermatology   87   117   113   102   109   -6.8%   Pemergency Medicine   67   281   296   363   408   45.2%   Neurology   244   279   255   269   275   -1.4%   Pediatrics-Subspecialties   131   191   204   219   225   17.8%   Physical Med & Rehab   204   224   236   241   233   4.0%   Preventive Medicine   32   24   26   32   34   41.7%   Transition Year   56   88   65   0   79   -10.2%	Total Medicine Subspecialties	1,059	1,353	1,356	1,341	1,321	-2.4%
Neurosurgery         68 Opthamology         86 Series         86 Series         86 Series         95 Series         98 Series         14.0% Opthamology           Orthopedics         333 Series         333 Series         241 Series         243 Series         219 Series         254 Series         252 Series         3.7% Series           Ottolaryngology         128 Series         141 Series         140 Series         141 Series	General Surgery	1,263	1,232	1,246	1,214	1,201	-2.5%
Neurosurgery         68 Opthamology         86 Series         86 Series         86 Series         95 Series         98 Series         14.0% Opthamology           Orthopedics         333 Series         333 Series         241 Series         243 Series         219 Series         254 Series         252 Series         3.7% Series           Ottolaryngology         128 Series         141 Series         140 Series         141 Series	Surgical Subspecialties						
Opthamology         241         243         219         254         252         3.7%           Orthopedics         333         392         389         403         405         3.3%           Otolaryngology         128         141         140         141         149         5.7%           Plastic Surgery         47         63         59         58         56         -11.1%           Urology         134         145         146         147         155         6.9%           Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         995         1,23         1,102         1,162         1,182         5.3%           Facility Based Specialties         678         804         837         726         634         -21.1%           Psychiatry         362         396         397         427         428         8.1%           Radiology         563         691         710         698         691         0.0%           Total Facility Based Specialties	- ·	68	86	86	95	98	14.0%
Orthopedics         333         392         389         403         405         3.3%           Otolaryngology         128         141         140         141         149         5.7%           Plastic Surgery         47         63         59         58         56         -11.1%           Urology         134         145         146         147         155         6.9%           Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         804         837         726         634         -21.1%           Pathology         362         396         397         427         428         8.1%           Radiology         563         691         710         698         691         0.0%           Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         50	- ·	2000					
Otolaryngology         128         141         140         141         149         5.7%           Plastic Surgery         47         63         59         58         56         -11.1%           Urology         134         145         146         147         155         6.9%           Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         804         837         726         634         -21.1%           Pathology         362         396         397         427         428         8.1%           Radiology         563         691         710         698         691         0.0%           Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         5         117         113         102         109         -6.8%           Emergency Medicine         67	· • • • • • • • • • • • • • • • • • • •	222		389	403	405	
Urology Other         134         145         146         147         155         6.9% Other           Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         804         837         726         634         -21.1%           Pathology Pathology Pathology Radiology         362         396         397         427         428         8.1%           Readiology         563         691         710         698         691         0.0%           Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         57         117         113         102         109         -6.8%           Emergency Medicine         67         281         296         363         408         45.2%           Neurology         244         279         255         269         275         -1.4% <td< td=""><td>·</td><td>128</td><td></td><td></td><td>141</td><td>149</td><td></td></td<>	·	128			141	149	
Urology Other         134         145         146         147         155         6.9% Other           Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         804         837         726         634         -21.1%           Pathology Pathology Pathology Radiology         362         396         397         427         428         8.1%           Readiology         563         691         710         698         691         0.0%           Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         57         117         113         102         109         -6.8%           Emergency Medicine         67         281         296         363         408         45.2%           Neurology         244         279         255         269         275         -1.4% <td< td=""><td></td><td>47</td><td>63</td><td>59</td><td>58</td><td>56</td><td></td></td<>		47	63	59	58	56	
Other         44         53         63         64         67         26.4%           Total Surgical Subspecialties         995         1,123         1,102         1,162         1,182         5.3%           Facility Based Specialties         804         837         726         634         -21.1%           Pathology         362         396         397         427         428         8.1%           Radiology         563         691         710         698         691         0.0%           Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         57         281         296         363         408         45.2%           Neurology         87         117         113         102         109         -6.8%           Pediatrics-Subspecialties         67         281         296         363         408         45.2%           Physical Med & Rehab         204         224         236         241         233         4.0%           Preventive Medicine <td>Urology</td> <td>134</td> <td>145</td> <td>146</td> <td>147</td> <td>155</td> <td>6.9%</td>	Urology	134	145	146	147	155	6.9%
Facility Based Specialties Anesthesiology 678 804 837 726 634 -21.1% Pathology 362 396 397 427 428 8.1% Radiology 563 691 710 698 691 0.0%  Total Facility Based Specialties 1,603 1,891 1,944 1,851 1,753 -7.3%  Psychiatry 1,097 1,060 1,065 1,048 997 -5.9%  Other Specialties  Dermatology 87 117 113 102 109 -6.8% Emergency Medicine 67 281 296 363 408 45.2% Neurology 244 279 255 269 275 -1.4% Pediatrics-Subspecialties 131 191 204 219 225 17.8% Physical Med & Rehab 204 224 236 241 233 4.0% Preventive Medicine 32 24 26 32 34 41.7% Transition Year 56 88 65 0 79 -10.2%			53	63	64	67	26.4%
Anesthesiology 678 804 837 726 634 -21.1% Pathology 362 396 397 427 428 8.1% Radiology 563 691 710 698 691 0.0% Total Facility Based Specialties 1,603 1,891 1,944 1,851 1,753 -7.3% Psychiatry 1,097 1,060 1,065 1,048 997 -5.9% Other Specialties Dermatology 87 117 113 102 109 -6.8% Emergency Medicine 67 281 296 363 408 45.2% Neurology 244 279 255 269 275 -1.4% Pediatrics-Subspecialties 131 191 204 219 225 17.8% Physical Med & Rehab 204 224 236 241 233 4.0% Preventive Medicine 32 24 26 32 34 41.7% Transition Year 56 88 65 0 79 -10.2%	Total Surgical Subspecialties	995	1,123	1,102	1,162	1,182	5.3%
Anesthesiology 678 804 837 726 634 -21.1% Pathology 362 396 397 427 428 8.1% Radiology 563 691 710 698 691 0.0% Total Facility Based Specialties 1,603 1,891 1,944 1,851 1,753 -7.3% Psychiatry 1,097 1,060 1,065 1,048 997 -5.9% Other Specialties Dermatology 87 117 113 102 109 -6.8% Emergency Medicine 67 281 296 363 408 45.2% Neurology 244 279 255 269 275 -1.4% Pediatrics-Subspecialties 131 191 204 219 225 17.8% Physical Med & Rehab 204 224 236 241 233 4.0% Preventive Medicine 32 24 26 32 34 41.7% Transition Year 56 88 65 0 79 -10.2%	Facility Based Specialties						
Pathology         362         396         397         427         428         8.1%           Radiology         563         691         710         698         691         0.0%           Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         50         117         113         102         109         -6.8%           Dermatology         87         281         296         363         408         45.2%           Neurology         244         279         255         269         275         -1.4%           Pediatrics-Subspecialties         131         191         204         219         225         17.8%           Physical Med & Rehab         204         224         236         241         233         4.0%           Preventive Medicine         32         24         26         32         34         41.7%           Transition Year         56         88         65         0         79         -10.2%	·	678	804	837	726	634	-21.1%
Radiology         563         691         710         698         691         0.0%           Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         56         87         117         113         102         109         -6.8%           Emergency Medicine         67         281         296         363         408         45.2%           Neurology         244         279         255         269         275         -1.4%           Pediatrics-Subspecialties         131         191         204         219         225         17.8%           Physical Med & Rehab         204         224         236         241         233         4.0%           Preventive Medicine         32         24         26         32         34         41.7%           Transition Year         56         88         65         0         79         -10.2%		362					
Total Facility Based Specialties         1,603         1,891         1,944         1,851         1,753         -7.3%           Psychiatry         1,097         1,060         1,065         1,048         997         -5.9%           Other Specialties         50         117         113         102         109         -6.8%           Dermatology         87         117         113         102         109         -6.8%           Emergency Medicine         67         281         296         363         408         45.2%           Neurology         244         279         255         269         275         -1.4%           Pediatrics-Subspecialties         131         191         204         219         225         17.8%           Physical Med & Rehab         204         224         236         241         233         4.0%           Preventive Medicine         32         24         26         32         34         41.7%           Transition Year         56         88         65         0         79         -10.2%							
Other Specialties         Dermatology       87       117       113       102       109       -6.8%         Emergency Medicine       67       281       296       363       408       45.2%         Neurology       244       279       255       269       275       -1.4%         Pediatrics-Subspecialties       131       191       204       219       225       17.8%         Physical Med & Rehab       204       224       236       241       233       4.0%         Preventive Medicine       32       24       26       32       34       41.7%         Transition Year       56       88       65       0       79       -10.2%							
Dermatology       87       117       113       102       109       -6.8%         Emergency Medicine       67       281       296       363       408       45.2%         Neurology       244       279       255       269       275       -1.4%         Pediatrics-Subspecialties       131       191       204       219       225       17.8%         Physical Med & Rehab       204       224       236       241       233       4.0%         Preventive Medicine       32       24       26       32       34       41.7%         Transition Year       56       88       65       0       79       -10.2%	Psychiatry	1,097	1,060	1,065	1,048	997	-5.9%
Dermatology       87       117       113       102       109       -6.8%         Emergency Medicine       67       281       296       363       408       45.2%         Neurology       244       279       255       269       275       -1.4%         Pediatrics-Subspecialties       131       191       204       219       225       17.8%         Physical Med & Rehab       204       224       236       241       233       4.0%         Preventive Medicine       32       24       26       32       34       41.7%         Transition Year       56       88       65       0       79       -10.2%	Other Specialties						
Emergency Medicine       67       281       296       363       408       45.2%         Neurology       244       279       255       269       275       -1.4%         Pediatrics-Subspecialties       131       191       204       219       225       17.8%         Physical Med & Rehab       204       224       236       241       233       4.0%         Preventive Medicine       32       24       26       32       34       41.7%         Transition Year       56       88       65       0       79       -10.2%		27	117	112	102	100	-E 20/
Neurology       244       279       255       269       275       -1.4%         Pediatrics-Subspecialties       131       191       204       219       225       17.8%         Physical Med & Rehab       204       224       236       241       233       4.0%         Preventive Medicine       32       24       26       32       34       41.7%         Transition Year       56       88       65       0       79       -10.2%		<b>200</b> 34					
Pediatrics-Subspecialties       131       191       204       219       225       17.8%         Physical Med & Rehab       204       224       236       241       233       4.0%         Preventive Medicine       32       24       26       32       34       41.7%         Transition Year       56       88       65       0       79       -10.2%		2984					
Physical Med & Rehab       204       224       236       241       233       4.0%         Preventive Medicine       32       24       26       32       34       41.7%         Transition Year       56       88       65       0       79       -10.2%	<del>-</del> -	### CO.					
Preventive Medicine         32         24         26         32         34         41.7%           Transition Year         56         88         65         0         79         -10.2%	•	and the second s					
Transition Year 56 88 65 0 79 -10.2%		\$68.6F					
		\$600°C					
	Combined Specialties-Other	0	18	34	55	79 59	-10.2% 227.8%
Total Other Specialties 821 1,222 1,229 1,281 1,422 16.4%		7.77					
TOTAL 11,949 14,248 14,478 14,848 14,680 3.0%		- inun					

Source: AMA Medical Education Research and Information Database, 1996
Excludes Osteopathic and Dental Programs
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# Figure 1-4 Location of Medical School by Specialty Grouping, New York State1996

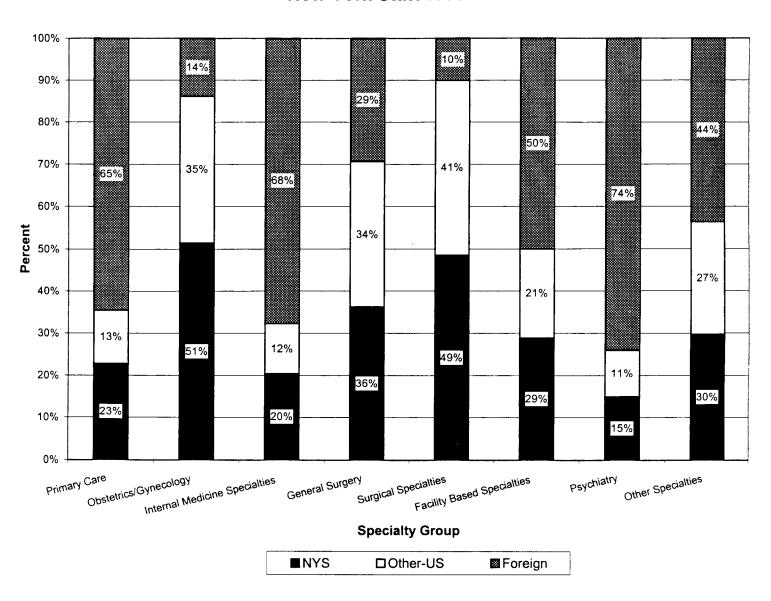


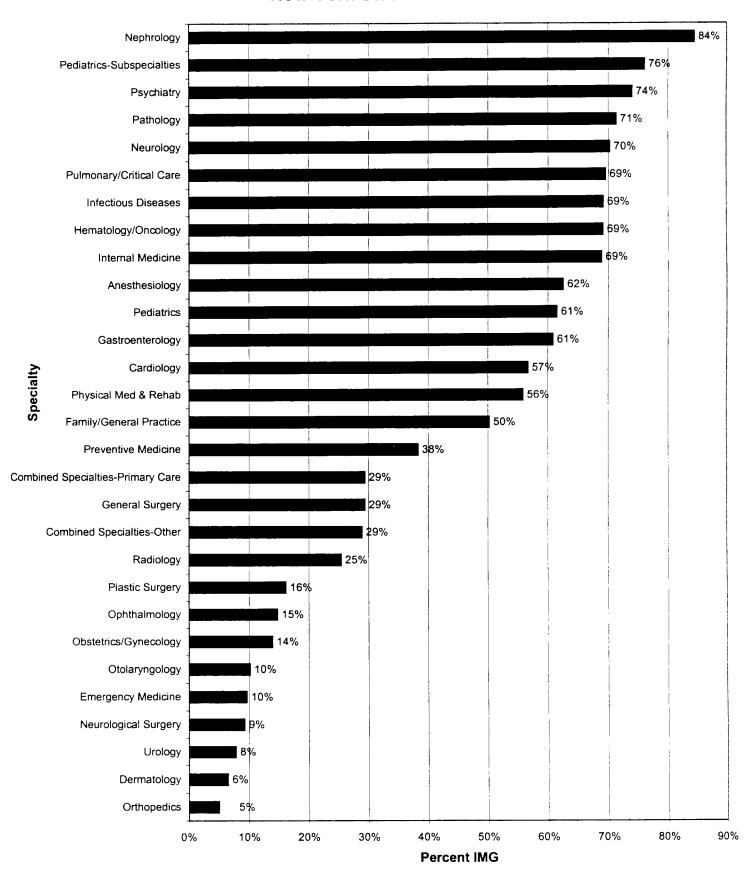
TABLE 1-3
Location of Medical School by Specialty,
New York State Residents 1996

	NYS Medical	0/ NIVE	Other US Medical	8/ O4h an US	Foreign Medical	9/ Faraian
Specialty	School	% NYS	School	% Other US	School	% Foreign
Primary Care						
Family Practice	177	28%	134	21%	313	50%
Internal Medicine	835	21%	428	11%	2,786	69%
Pediatrics	337	25%	178	13%	820	61%
Combined Specialties-Primary Care	50	43%	32	28%	34	29%
Total Primary Care	1,399	23%	772	13%	3,953	65%
Obstetrics/Gynecology	350	51%	236	35%	94	48%
Internal Medicine Subspecialties						
Cardiology	102	30%	45	13%	192	
Gastroenterology	45	29%	15	10%	93	61%
Hematology/Oncology	29	15%	32	16%	136	
Infectious Diseases	12	12%	18	19%	67	
Nephrology	9	8%	8	7%	92	
Pulmonary/Critical Care	44	20%	22	10%	150	
Other	29	14%	17	8%	164	78%
Total Medicine Subspecialties	270	20%	157	12%	894	68%
General Surgery	435	36%	414	34%	352	29%
Surgery Subspecialties						
Neurological Surgery	46	47%	. 43	44%	9	9%
Ophthalmology	112	44%	103	41%	37	15%
Orthopedics	203	50%	182	45%	20	5%
Otolaryngology	75	50%	59	40%	15	10%
Plastic Surgery	20	36%	27	48%	9	16%
Urology	92	59%	51	33%	12	8%
Other	26	39%	25	37%	16	24%
Total Surgery Subspecialties	574	49%	490	41%	118	10%
Facility Based Specialties						
Anesthesiology	139	22%	99	16%	396	62%
Pathology	63	15%	60	14%	305	71%
Radiology	305	44%	211	31%	175	25%
Total Facility Based Specialties	507	29%	370	21%	876	50%
Psychiatry	149	15%	111	11%	737	74%
Other Specialties						
Dermatology	51	47%	51	47%	7	
Emergency Medicine	171	42%	198	49%	39	
Neurology	50	18%	32	12%	193	
Pediatrics-Subspecialties	34	15%	20	9%	171	76%
Physical Med & Rehab	70	30%	33	14%	130	
Preventive Medicine	7	21%	14	41%	13	
Transition Year	19	24%	10	13%	50	
Combined Specialties-Other	21	36%	21	36%	17	
Total Other Specialties	423	30%	379	27%	620	
TOTAL	4,107	28%	2,929	20%	7,644	52%

University at Albany 12/1/97

Source: AMA Medical Education Research and Information Database, 1996
14 Excludes Osteopathic and Dental Programs

Figure 1-5
Ranking of Specialties by Percent IMG in Training,
New York State 1996



Source: AMA Medical Education Research and Information Database, 1996
15 Excludes Osteopathic and Dental Programs

# TABLE 1-4 IMG Residents by Specialty in New York State, 1996

Specialty	No. of IMG residents in NYS	% of IMGs in NYS	Total NYS IMG Residents/Total NYS Residents, %
Primary Care			
Family Practice	313	4.1%	50.2%
Internal Medicine	2,786	36.4%	68.8%
Pediatrics	820	10.7%	61.4%
Combined Specialties-Primary Care	34	0.4%	29.3%
Total Primary Care	3,953	51.7%	64.5%
Obstetrics/Gynecology	94	1.2%	13.8%
Internal Medicine Subspecialties			
Cardiology	192	2.5%	56.6%
Gastroenterology	93	1.2%	60.8%
Hematology/Oncology	136	1.8%	69.0%
Infectious Diseases	67	0.9%	69.1%
Nephrology	92	1.2%	84.4%
Pulmonary/Critical Care	150	2.0%	69.4%
Other	164	2.1%	78.1%
Total Medicine Subspecialties	894	11.7%	67.7%
General Surgery	352	4.6%	29.3%
Surgical Subspecialties			
Neurological Surgery	9	0.1%	9.2%
Ophthalmology	37	0.5%	14.7%
Orthopedics	20	0.3%	4.9%
Otolaryngology	15	0.2%	10.1%
Plastic Surgery	9	0.1%	16.1%
Urology	12	0.2%	7.7%
Other	16	0.2%	23.9%
Total Surgical Subspecialties	118	1.5%	10.0%
Facility Based Specialties	,		
Anesthesiology	396	5.2%	62.5%
Pathology	305	4.0%	71.3%
Radiology  Total Facility Based Specialties	175 <b>876</b>	2.3% <b>11.5%</b>	25.3% <b>50.0%</b>
Psychiatry	737	9.6%	73.9%
•		3.070	. 0.0 /0
Other Specialties	_		
Dermatology	7	0.1%	6.4%
Emergency Medicine	39	0.5%	9.6%
Neurology	193	2.5%	70.2%
Pediatrics-Subspecialties	171	2.2%	76.0%
Physical Med & Rehab	130	1.7%	55.8%
Preventive Medicine	13 50	0.2% 0.7%	38.2%
Transition Year Combined Specialties-Other	50 17	0.7%	0.0% 28.8%
Total Other Specialties	620	8.1%	43.6%
TOTAL	7,644	100.0%	52.1%

Center for Health Workforce Studies School of Public Health University at Albany 12/1/97

TABLE 1-5
IMG Residents by Specialty in New York State as a Percent of U.S., 1996

Primary Care	On a state.	No. of IMG Residents	Total NYS IMG Residents/Total
Family Practice   1,483   21,1%     Internal Medicine   8,707   32,0%     Pediatrics   2,184   37,5%     Combined Specialties-Primary Care   166   20,5%     Total Primary Care   12,540   31,5%     Obstetrics/Gynecology   294   32,0%     Internal Medicine Subspecialties     Cardiology   822   23,4%     Gastroenterology   321   29,0%     Hematology/Oncology   459   29,6%     Infectious Diseases   211   31,8%     Nephrology   358   25,7%     Pulmonary/Critical Care   505   29,7%     Other   602   27,2%     Total Medicine Subspecialties   3,278   27,3%     General Surgery   896   39,3%     Surgical Subspecialties   Neurological Surgery   65   13,8%     Ophthalmology   109   33,9%     Orthopedics   70   28,6%     Otolaryngology   32   46,9%     Plastic Surgery   34   26,5%     Urology   58   20,7%     Other   99   16,22%     Total Surgical Subspecialties   467   25,3%     Facility Based Specialties   Anesthesiology   1,047   29,1%     Radiology   1,047   29,1%     Radiology   382   45,8%     Total Facility Based Specialties   2,775   31,6%     Psychiatry   2,212   33,3%     Other Specialties   660   25,9%     Pediatrics-Subspecialties   680   25,9%     Pediatrics-Subspecialties   680   25,9%     Physical Med & Rehab   268   48,5%     Preventive Medicine   54   24,1%     Transition Year   399   12,5%     Combined Specialties   2,241   27,7%     Total Other Specialties	Specialty	in US	US IMG Residents, %
Family Practice   1,483   21,1%     Internal Medicine   8,707   32,0%     Pediatrics   2,184   37,5%     Combined Specialties-Primary Care   166   20,5%     Total Primary Care   12,540   31,5%     Obstetrics/Gynecology   294   32,0%     Internal Medicine Subspecialties     Cardiology   822   23,4%     Gastroenterology   321   29,0%     Hematology/Oncology   459   29,6%     Infectious Diseases   211   31,8%     Nephrology   358   25,7%     Pulmonary/Critical Care   505   29,7%     Other   602   27,2%     Total Medicine Subspecialties   3,278   27,3%     General Surgery   896   39,3%     Surgical Subspecialties   Neurological Surgery   65   13,8%     Ophthalmology   109   33,9%     Orthopedics   70   28,6%     Otolaryngology   32   46,9%     Plastic Surgery   34   26,5%     Urology   58   20,7%     Other   99   16,22%     Total Surgical Subspecialties   467   25,3%     Facility Based Specialties   Anesthesiology   1,047   29,1%     Radiology   1,047   29,1%     Radiology   382   45,8%     Total Facility Based Specialties   2,775   31,6%     Psychiatry   2,212   33,3%     Other Specialties   660   25,9%     Pediatrics-Subspecialties   680   25,9%     Pediatrics-Subspecialties   680   25,9%     Physical Med & Rehab   268   48,5%     Preventive Medicine   54   24,1%     Transition Year   399   12,5%     Combined Specialties   2,241   27,7%     Total Other Specialties	Primary Care		
Internal Medicine		1,483	21.1%
Combined Specialties-Primary Care         166         20.5%           Total Primary Care         12,540         31.5%           Obstetrics/Gynecology         294         32.0%           Internal Medicine Subspecialties         2         23.4%           Cardiology         822         23.4%           Gastroenterology         321         29.0%           Hematology/Oncology         459         29.6%           Infectious Diseases         211         31.8%           Nephrology         358         25.7%           Pulmonary/Critical Care         505         29.7%           Other         602         27.2%           Total Medicine Subspecialties         3,278         27.3%           General Surgery         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         65         13.8%           Ophthalmology         109         33.39%           Ophthalmology         109         33.39%           Othology         32         46.9%           Plastic Surgery         34         26.5%           Other         99         16.2%           Total Surgical Subspecialties         467 </td <td>•</td> <td>8,707</td> <td>32.0%</td>	•	8,707	32.0%
Total Primary Care         12,540         31.5%           Obstetrics/Gynecology         294         32.0%           Internal Medicine Subspecialties         2         23.4%           Cardiology         321         29.0%           Hematology/Oncology         459         29.6%           Infectious Diseases         211         31.8%           Nephrology         358         25.7%           Other         505         29.7%           Other         602         27.2%           Total Medicine Subspecialties         3,278         27.3%           General Surgery         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         70         28.6%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otoaryngology         32         46.9%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         467         25.3%           Facility Based Specialties         2,775	Pediatrics	2,184	37.5%
Internal Medicine Subspecialties	Combined Specialties-Primary Care	166	20.5%
Internal Medicine Subspecialties	Total Primary Care	12,540	31.5%
Cardiology         822         23.4%           Gastroenterology         321         29.0%           Hematology/Oncology         459         29.6%           Infectious Diseases         211         31.8%           Nephrology         358         25.7%           Pulmonary/Critical Care         505         29.7%           Other         602         27.2%           Total Medicine Subspecialties         3,278         27.3%           General Surgery         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         70         28.6%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         467         25.3%           Pathology         1,047         29.1%	Obstetrics/Gynecology	294	32.0%
Cardiology         822         23.4%           Gastroenterology         321         29.0%           Hematology/Oncology         459         29.6%           Infectious Diseases         211         31.8%           Nephrology         358         25.7%           Pulmonary/Critical Care         505         29.7%           Other         602         27.2%           Total Medicine Subspecialties         3,278         27.3%           General Surgery         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         70         28.6%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         467         25.3%           Pathology         1,047         29.1%	Internal Medicine Subspecialties		
Gastroenterology         321         29.0%           Hematology/Oncology         459         29.6%           Infectious Diseases         211         31.8%           Nephrology         358         25.7%           Pulmonary/Critical Care         505         29.7%           Other         602         27.2%           Total Medicine Subspecialties         3,278         27.3%           General Surgery         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         896         39.3%           Surgical Subspecialties         70         28.6%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otharyngology         32         46.9%           Otlaryngology         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         467         25.3%           Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%<		822	23.4%
Hematology/Oncology			29.0%
Infectious Diseases		459	29.6%
Nephrology	· · · · · · · · · · · · · · · · · · ·	211	31.8%
Pulmonary/Critical Care Other         505 (602)         29.7% (27.2%)           Total Medicine Subspecialties         3,278         27.3%           General Surgery         896         39.3%           Surgical Subspecialties         Neurological Surgery         65         13.8% (27.2%)           Ophthalmology         109         33.9% (27.2%)         33			
Other         602         27.2%           Total Medicine Subspecialties         3,278         27.3%           General Surgery         896         39.3%           Surgical Subspecialties         896         39.3%           Neurological Surgery         65         13.8%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         467         25.3%           Facility Based Specialties         2,047         29.1%           Pathology         1,346         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         2,212         33.3%           Other Specialties         660         25.9%	* **	505	29.7%
General Surgery         896         39.3%           Surgical Subspecialties         39.3%           Neurological Surgery         65         13.8%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         2         25.3%           Facility Based Specialties         2         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         2,212         33.3%           Other Specialties         660         25.9%           Pediatrics-Subspecialties         660         25.9%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5% <td>·</td> <td></td> <td></td>	·		
Surgical Subspecialties   Neurological Surgery   65   13.8%		3,278	
Neurological Surgery         65         13.8%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         2         2.53%           Facility Based Specialties         2         2.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         2         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         660         25.9%           Pediatrics-Subspecialties         665         28.2%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399 <t< td=""><td>General Surgery</td><td>896</td><td>39.3%</td></t<>	General Surgery	896	39.3%
Neurological Surgery         65         13.8%           Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         2         2.53%           Facility Based Specialties         2         2.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         2         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         660         25.9%           Pediatrics-Subspecialties         665         28.2%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399 <t< td=""><td>Surrical Subanaciation</td><td></td><td></td></t<>	Surrical Subanaciation		
Ophthalmology         109         33.9%           Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         2         467         25.3%           Facility Based Specialties         382         45.8%         29.4%           Pathology         1,047         29.1%         29.	•	GE.	13.99/
Orthopedics         70         28.6%           Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         467         25.3%           Facility Based Specialties         1,346         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         50         50           Dermatology         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%     <			
Otolaryngology         32         46.9%           Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         29.4%           Pathology         1,346         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         50         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%			
Plastic Surgery         34         26.5%           Urology         58         20.7%           Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         25.3%           Anesthesiology         1,346         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         5         28.2%           Dermatology         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%			
Urology Other         58 99         20.7% 16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         346         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         5         20.2%           Dermatology         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%			
Other         99         16.2%           Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         382         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         5         28.2%           Dermatology         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%	_ ·	<del>-</del>	
Total Surgical Subspecialties         467         25.3%           Facility Based Specialties         1,346         29.4%           Pathology         1,047         29.1%           Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         5         28.2%           Dermatology         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%			
Anesthesiology       1,346       29.4%         Pathology       1,047       29.1%         Radiology       382       45.8%         Total Facility Based Specialties       2,775       31.6%         Psychiatry       2,212       33.3%         Other Specialties       5       20.2%         Dermatology       49       14.3%         Emergency Medicine       81       48.1%         Neurology       685       28.2%         Pediatrics-Subspecialties       660       25.9%         Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%			
Anesthesiology       1,346       29.4%         Pathology       1,047       29.1%         Radiology       382       45.8%         Total Facility Based Specialties       2,775       31.6%         Psychiatry       2,212       33.3%         Other Specialties       5       20.2%         Dermatology       49       14.3%         Emergency Medicine       81       48.1%         Neurology       685       28.2%         Pediatrics-Subspecialties       660       25.9%         Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%	Escility Resed Specialties		
Pathology       1,047       29.1%         Radiology       382       45.8%         Total Facility Based Specialties       2,775       31.6%         Psychiatry       2,212       33.3%         Other Specialties       0ermatology       49       14.3%         Emergency Medicine       81       48.1%         Neurology       685       28.2%         Pediatrics-Subspecialties       660       25.9%         Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%	· · · · · · · · · · · · · · · · · · ·	1 346	20.4%
Radiology         382         45.8%           Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         5         20.2           Dermatology         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%			
Total Facility Based Specialties         2,775         31.6%           Psychiatry         2,212         33.3%           Other Specialties         5         2,212         33.3%           Other Specialties         49         14.3%         14.3%         14.3%         14.3%         14.3%         14.1% <td></td> <td></td> <td></td>			
Other Specialties         49         14.3%           Dermatology         49         14.3%           Emergency Medicine         81         48.1%           Neurology         685         28.2%           Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%			
Dermatology       49       14.3%         Emergency Medicine       81       48.1%         Neurology       685       28.2%         Pediatrics-Subspecialties       660       25.9%         Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%	Psychiatry	2,212	33.3%
Dermatology       49       14.3%         Emergency Medicine       81       48.1%         Neurology       685       28.2%         Pediatrics-Subspecialties       660       25.9%         Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%	Other Specialties		
Emergency Medicine       81       48.1%         Neurology       685       28.2%         Pediatrics-Subspecialties       660       25.9%         Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%		40	1/1 20/
Neurology       685       28.2%         Pediatrics-Subspecialties       660       25.9%         Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%	— <del>- •</del>		
Pediatrics-Subspecialties         660         25.9%           Physical Med & Rehab         268         48.5%           Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%	-		
Physical Med & Rehab       268       48.5%         Preventive Medicine       54       24.1%         Transition Year       399       12.5%         Combined Specialties-Other       45       37.8%         Total Other Specialties       2,241       27.7%	<del></del>		
Preventive Medicine         54         24.1%           Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%	•		
Transition Year         399         12.5%           Combined Specialties-Other         45         37.8%           Total Other Specialties         2,241         27.7%			
Combined Specialties-Other4537.8%Total Other Specialties2,24127.7%			
Total Other Specialties 2,241 27.7%			
TOTAL 24 703 30 9%	TOTAL	24,703	30.9%

Figure 1-6 Number of IMG Residents by Specialty Grouping Over Time, New York State 1988, 1993, 1994, 1995 and 1996

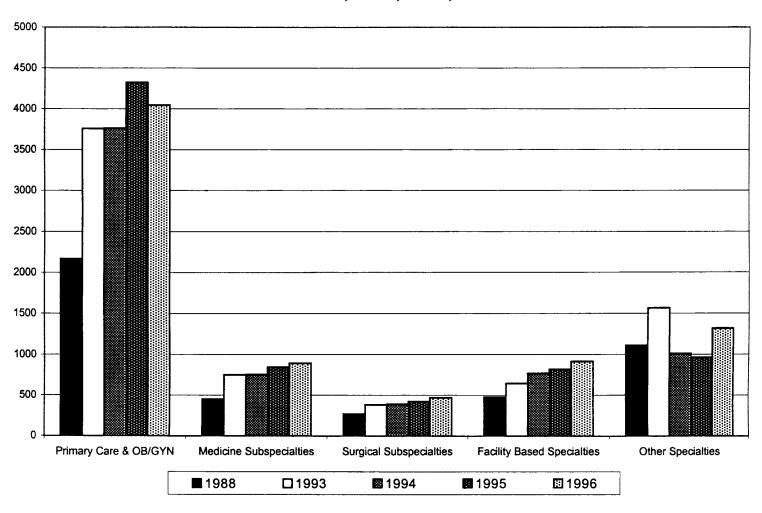


TABLE 1-6 Number of IMG Residents by Specialty Over Time, New York State 1988, 1993, 1994, 1995 and 1996

Specialty	1988 IMG's	1993 IMG's	1994 IMG's	1995 IMG's	1996 IMG's	% Change '93 to '96
Primary Care	103					
Family Practice		231	220	283	313	35.5%
General Internal Medicine	1,330	2,449	2,663	2,879	2,786	13.8%
Pediatrics	528	843	777	868	820	-2.7%
Combined Specialties	0	14	11	35	34	142.9%
Total Primary Care	2,034	3,662	3,671	4,065	3,953	7.9%
Obstetrics/Gynecology	136	100	95	99	94	-6.0%
Internal Medicine Subspecialties						
Cardiology	74	156	153	174	192	23.1%
Gastroenterology	73	51	59	84	93	82.4%
Hematology/Oncology	92 🛂	124	123	132	136	9.7%
Infectious Diseases	32	59	68	71	67	13.6%
Nephrology	64 🛣	102	94	92	92	-9.8%
Pulmonary/Critical Care	63	146	153	160	150	2.7%
Other	54	113	105	135	164	45.1%
Total Medicine Subspecialties	452	751	755	848	894	19.0%
General Surgery	218	331	329	349	352	6.3%
Surgical Subspecialties						
Neurosurgery	6	4	6	6	9	125.0%
Opthamology	7 🙋	13	14	18	37	184.6%
Orthopedics	7 🚨	4	6	11	20	400.0%
Otolaryngology	6 🕦	4	10	11	15	275.0%
Plastic Surgery	3	8	5	6	9	12.5%
Urology	17	10	12	12	12	20.0%
Other	3 17 6	7	8	9	16	128.6%
Total Surgical Subspecialties	52	50	61	73	118	136.0%
Facility Based Specialties						
Anesthesiology	190	308	384	368	396	28.6%
Pathology	221	246	251	282	305	24.0%
Radiology	67 🛪	90	91	120	175	94.4%
Total Facility Based Specialties	478	644	726	770	876	36.0%
Psychiatry	466	622	634	688	737	18.5%
Other Specialties						
Dermatology	3	4	2	4	7	75.0%
Emergency Medicine	10 🙋	55	44	50	39	-29.1%
Neurology	92	138	139	156	193	39.9%
Pediatrics-Subspecialties	73	124	124	147	171	
Physical Med & Rehab	54 🗲	75	79	106	130	73.3%
Preventive Medicine	7 🛱	7	6	11	13	85.7%
Transition Year	14	43	23	0	50	16.3%
Combined Specialties-Other	0	1	5	13	17	
Total Other Specialties	253	447	422	487	620	38.7%
TOTAL	4,016	6,482	6,693	7,379	7,644	17.9%

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Source: AMA Medical Education Research and Information Database, 1996
19 Excludes Osteopathic and Dental Programs

TABLE 1-7
PGY-1 Residents in New York State: USMG and IMG Over Time
New York State1988, 1993, 1994, 1995 and 1996

	USM	IG	IMG	;	Tot	al
YEARS	#	%	#	<u>%</u>	#	%
1988	1724	68%	816	32%	2540	100%
1993	1481	45%	1832	55%	3313	100%
1994	1436	42%	1967	58%	3403	100%
1995	1624	48%	1774	52%	3398	100%
1996	1629	51%	1546	49%	3175	100%

<sup>\*</sup> First Year in Program with no Prior US Residency Training

Figure 1-7
Trends in Number of PGY 1 Residents,
New York State 1996

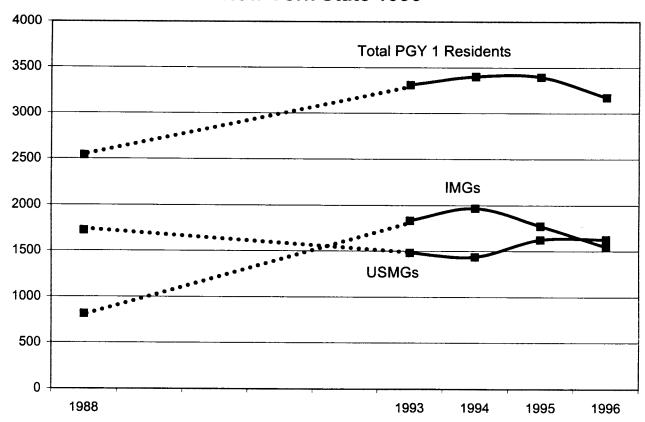
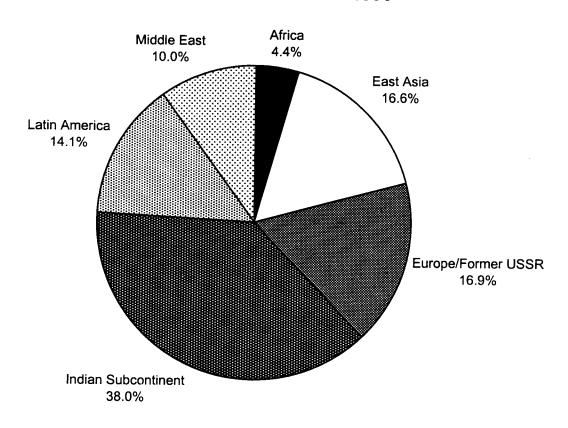


Table 1-8
New York State IMG Residents by Citizenship/Visa Status,
New York State 1996

	1993	3 IMG	1990	6 IMG
Citizenship/Visa Status	Count	%	Count	%
Native Born U.S.	576	8.9%	474	6.2%
Naturalized U.S.	815	12.6%	508	6.6%
Permanent Resident	2068	31.9%	2169	28.4%
Temporary Status				
Temporary Visitor (B1,B2)	35		33	
Temporary Worker (H1,H2,H3	210		848	
Exchange Visitor (J1, J2)	2239		2683	
Temporary Status Total	2484	38.3%	3564	46.6%
Immigrant	299	4.6%	45	0.6%
Other	126	1.9%	224	2.9%
Unknown	114	1.8%	660	8.6%
TOTAL	6482	100%	7644	100%

Figure 1-8
Distribution of IMG Residents by Location of Medical School,
New York State Residents 1996



Source: AMA Medical Education Research and Information Database, 1996 21 Excludes Osteopathic and Dental Programs

Figure 1-9
Concentration of IMGs within Residency Programs
New York State, 1993 and 1996

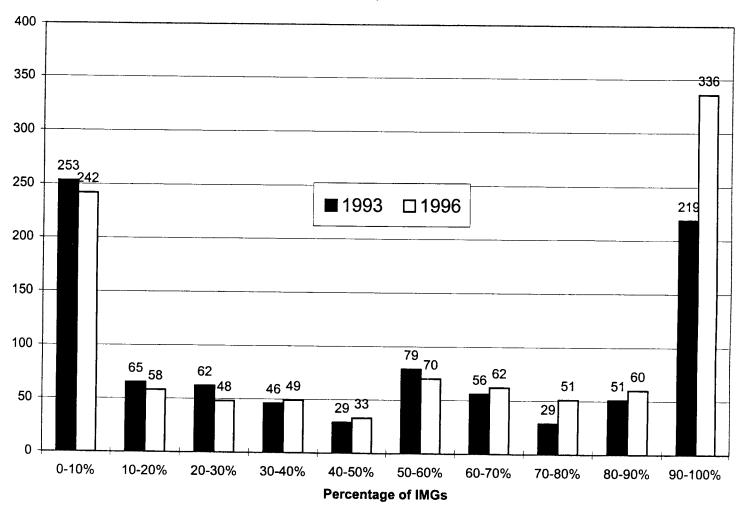


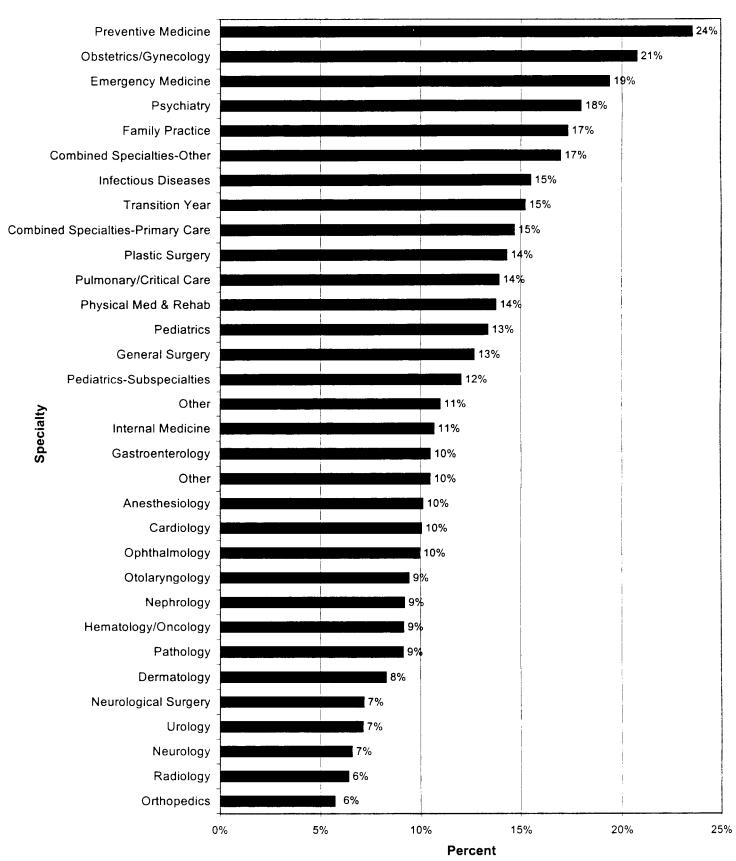
TABLE 1-9
Under-Represented Minority<sup>1</sup> Residents by Specialty,
New York State 1996

	Number of Residents	Under-Represented Minority	Percent of
Specialty	in NYS	Residents	all Residents
Primary Care			
Family Practice	624	108	17.3%
Internal Medicine	4,049	431	10.6%
Pediatrics	1,335	178	13.3%
Combined Specialties-Primary Care	116	17	14.7%
Total Primary Care	6,124	734	12.0%
Obstetrics/Gynecology	680	141	20.7%
Internal Medicine Subspecialties			
Cardiology	339	34	10.0%
Gastroenterology	153	16	10.5%
Hematology/Oncology	197	18	9.1%
Infectious Diseases	97	15	15.5%
Nephrology	109	10	9.2%
Pulmonary/Critical Care	216	30	13.9%
Other	210	23	11.0%
Total Medicine Subspecialties	1,321	146	11.1%
General Surgery	1,201	152	12.7%
Surgical Subspecialties			
Neurological Surgery	98	7	7.1%
Ophthalmology	252	25	9.9%
Orthopedics	405	23	5.7%
Otolaryngology	149	14	9.4%
Plastic Surgery	56	8	14.3%
Urology	155	11	7.1%
Other	67	7	10.4%
Total Surgical Subspecialties	1,182	95	8.0%
Facility Based Specialties			
Anesthesiology	634	64	10.1%
Pathology	428	39	9.1%
Radiology	691	44	6.4%
Total Facility Based Specialties	1,753	147	8.4%
Psychiatry	997	179	18.0%
Other Specialties			
Dermatology	109	9	8.3%
Emergency Medicine	408	79	19.4%
Neurology	275	18	6.5%
Pediatrics-Subspecialties	225	27	12.0%
Physical Med & Rehab	233	32	13.7%
Preventive Medicine	34	8	23.5%
Transition Year	79 50	12	15.2%
Combined Specialties-Other	59	10	16.9%
Total Other Specialties	1,422	195	13.7%
TOTAL	14,680	1789	12.2%

<sup>&</sup>lt;sup>1</sup> Under-Represented Minorities Include: Blacks, Hispanics, American Indians, Mexican Americans

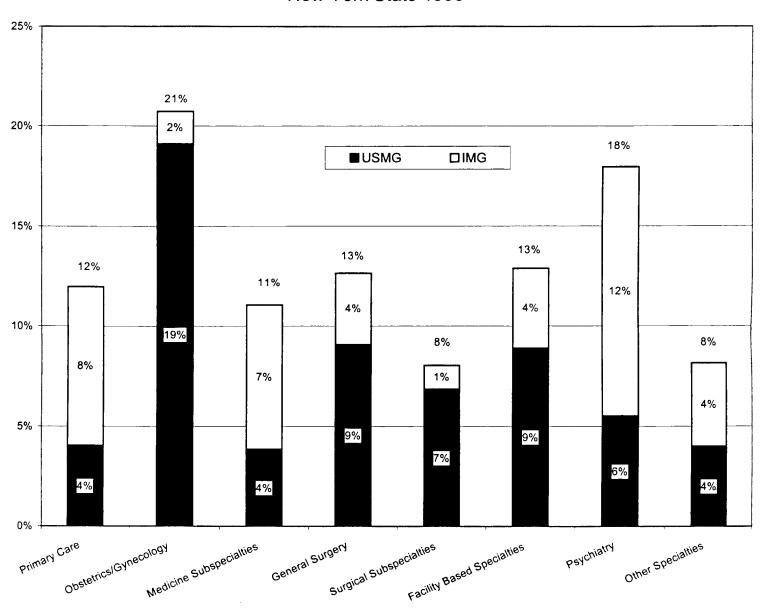
Source: AMA Medical Education Research and Information Database, 1996
23 Excludes Osteopathic and Dental Programs

Figure 1-10
Ranking of Under-Represented Minority Residents by Specialty,
New York State 1996



Source: AMA Medical Education Research and Information Database, 1996
24 Excludes Osteopathic and Dental Programs

Figure 1-11
Percent of Under-Represented Minorities by Specialty Grouping,
New York State 1996



Note: Percent Represents Percent of Residents in Specialty

TABLE 1-10
Under-Represented Minority<sup>1</sup> (URM) Residents by Specialty: USMGs and IMGs,
New York State 1996

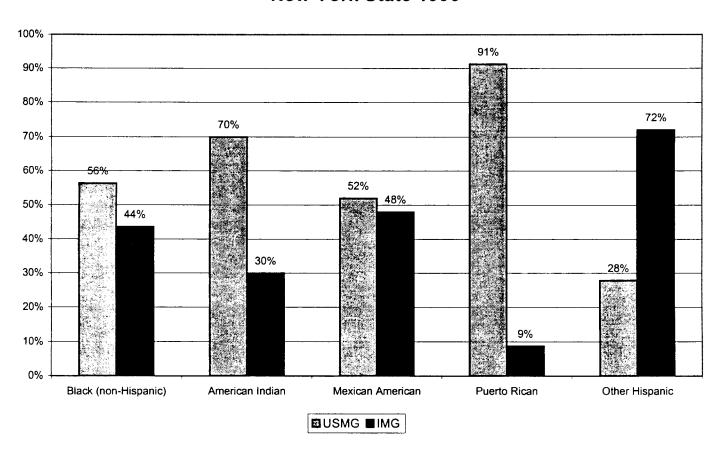
		USMG			IMG	
	Total USMG	Total USMG		Total IMG	Total IMG	
Specialty	Residents	URM	<u>%</u>	Residents	URM	
Primary Care						
Family Practice	311	58	18.6%	313	50	16.09
Internal Medicine	1,263	117	9.3%	2,786	314	11.39
Pediatrics	515	61	11.8%	820	117	14.39
Combined Specialties-Primary Care	82	12	14.6%	34	5	14.79
Total Primary Care	2,171	248	11.4%	3,953	486	12.39
Obstetrics/Gynecology	586	130	22.2%	94	11	11.79
Internal Medicine Subspecialties						
Cardiology	147	14	9.5%	192	20	10.49
Gastroenterology	60	9	15.0%	93	7	7.59
Hematology/Oncology	61	3	4.9%	136	15	11.09
Infectious Diseases	30	8	26.7%	67	7	10.49
Nephrology	17	3	17.6%	92	7	7.69
Pulmonary/Critical Care	66	9	13.6%	150	21	14.09
Other	46	5	10.9%	164	18	11.09
Total Medicine Subspecialties	427	51	11.9%	894	95	10.6%
General Surgery	849	109	12.8%	352	43	12.2%
Surgical Subspecialties						
Neurological Surgery	89	7	7.9%	9	0	0.0%
Ophthalmology	215	19	8.8%	37	6	16.29
Orthopedics	385	21	5.5%	20	2	10.0%
Otolaryngology	134	13	9.7%	15	1	6.79
Plastic Surgery	47	6	12.8%	9	2	22.29
Urology	143	11	7.7%	12	0	0.0%
Other	51	4	7.8%	16	3	18.89
Total Surgical Subspecialties	1,064	81	7.6%	118	14	11.9%
Facility Based Specialties						
Anesthesiology	238	29	12.2%	396	35	8.8%
Pathology	123	14	11.4%	305	25	8.2%
Radiology	516	41	7.9%	175	3	1.79
Total Facility Based Specialties	877	84	9.6%	876	63	7.29
Psychiatry	260	55	21.2%	737	124	16.8%
Other Specialties						
Dermatology	102	8	7.8%	7	1	14.39
Emergency Medicine	369	72	19.5%	39	7	17.99
Neurology	82	5	6.1%	193	13	6.79
Pediatrics-Subspecialties	54	4	7.4%	171	23	13.59
Physical Med & Rehab	103	20	19.4%	130	12	9.29
Preventive Medicine	21	6	28.6%	13	2	15.49
Transition Year	29	6	20.7%	50	6	12.09
Combined Specialties-Other	42	8	19.0%	17	2	11.89
Total Other Specialties	802	129	16.1%	620	66	10.69
TOTAL	7,036	887	12.6%	7,644	902	11.89

<sup>&</sup>lt;sup>1</sup> Under-Represented Minorities Include: Blacks, Hispanics, American Indians, Mexicans

TABLE 1-11
Under-Represented Minorities by Race and Ethnicity for: USMGs and IMGs
New York State 1996

	USM	IG		IMG	;		Tota	al
Under-Represented Minority	Number	%	₽ N	umber	%	<u> </u>	lumber	%
Black (Non-Hispanic)	553	56%		429	44%		982	100%
American Indian	14	70%		6	30%		20	100%
Mexican American	13	52%		12	48%	<b>\$</b> .	25	100%
Puerto Rican	136	91%		13	9%	5	149	100%
Other Hispanic	171	28%	÷	442	72%	P	613	100%
Total	887	50%	à	902	50%	i.	1789	100%

Figure 1-12
Distribution of Under-Represented Minority by USMG/IMG
New York State 1996



Source: AMA Medical Education Research and Information Database, 1996
27 Excludes Osteopathic and Dental Programs

TABLE 1-12 Number of PGY-1 Residents in Primary Care Over Time, New York State 1998, 1993, 1994, 1995 and 1996

PRIMARY CARE SPECIALTIES	1988	F	1993	1994	1995	1996	Percent Change 93-96
Family Practice	105		127	146	160	199	36%
Internal Medicine - General	1135		1557	1670	1630	1410	-10%
Pediatrics	337		484	425	430	470	-3%
Combined Specialties	0	R.	12	19	31	30	60%
TOTAL	1577	B.	2180	2260	2251	2109	-3%

<sup>\*</sup> First Year in Program with no Prior US Residency Training

Figure 1-13
Trends in Primary Care PGY 1 Positions USMG/IMG,
New York State 1996

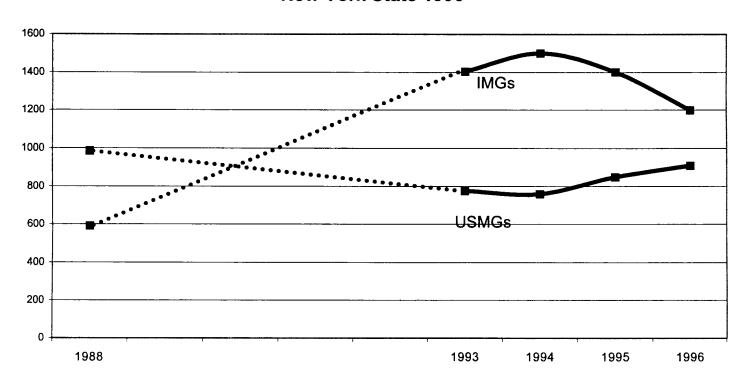


TABLE 1-13
Number of Primary Care PGY-1 Residents USMGs and IMGs Over Time,
New York State 1998, 1993, 1994, 1995 and 1996

	Fami	y Practic	e
	USMG	IMG	% IMGs
YEARS			
1988	81	24	22.9%
1993	51	76	59.8%
1994	82	64	43.8%
1995	82	78	48.8%
1996	133	66	33.2%

	Internal Me	edicine - (	General % IMGs
YEARS		<del></del>	
1988	740	395	34.8%
1993	571	986	63.3%
1994	521	1149	68.8%
1995	568	1062	67.3%
1996	553	857	60.8%

	Pe	diatrics	<u></u>
	USMG	IMG	% IMGs
YEARS			
1988	165	172	51.0%
1993	149	335	69.2%
1994	147	278	65.4%
1995	174	256	59.5%
1996	202	268	57.0%

<sup>\*</sup> First Year in Program with no Prior US Residency Training

Table 1-14
Top Ten States in Total Residents and
Residents per 100,000 Population by State
1996

#### **Top Ten States in Number of Residents**

	Number of Residents	No. of Residents per 100,000
New York	14680	81
California	8662	27
Pennsylvania	6509	54
Texas	6107	33
Illinois	5472	46
Ohio	4706	42
Massachusetts	4331	71
Michigan	4249	44
Florida	2678	19
New Jersey	2435	31

#### Top Ten States in No. of Residents per 100,000

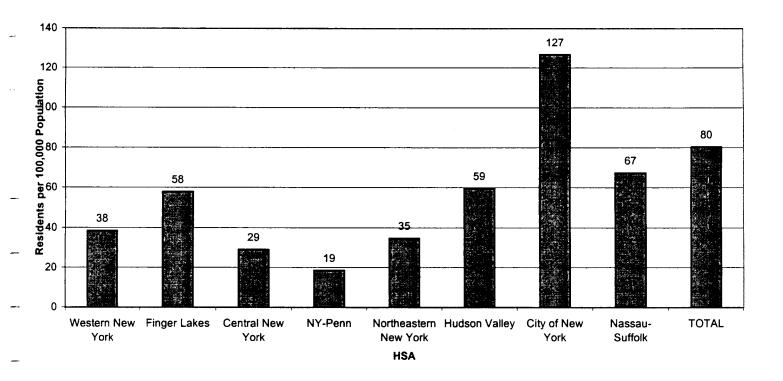
	Number of Residents	No. of Residents per 100,000
New York	14680	81
Massachusetts	4331	71
Rhode Island	649	66
Pennsylvania	6509	54
Connecticut	1747	53
Illinois	5472	46
Minnesota	2065	45
Maryland	2266	45
Michigan	4249	44
Ohio	4706	42

Total U.S. Residents per 100,000 U.S. Population = 37

TABLE 1-15
Residents and Residents per 100,000 by HSA Region, 1996

	Residents	HSA Region Population	Residents per 100,000 population
HSA .			
Western New York	642	1,669,573	38.5
Finger Lakes	729	1,261,113	57.8
Central New York	432	1,489,860	29.0
NY-Penn	60	323,091	18.6
Northeastern New York	494	1,420,546	34.8
Hudson Valley	1,245	2,092,570	59.5
City of New York	9,278	7,316,767	126.8
Nassau-Suffolk	1,800	2,675,180	67.3
TOTAL	14,680	18,248,700	80.4

Figure 1-14
Residents per 100,000 Population by HSA Region
New York State 1996



Center for Health Workforce Studies School of Public Health University at Albany 12/1/97

Source: AMA Medical Education Research and Information Database, 1996
31 Excludes Osteopathic and Dental Programs

TABLE 1-16
Ratio of Medical Students to PGY-1 Positions,
New York State 1996

School/Consortia	Medical School Graduates	PGY1s	Res/Med Graduate Ratio
Albany Medical College	130	117	1:0.90
SUNY Syracuse College of Medicine	143	147	1:1.03
SUNY Buffalo School of Medicine	150	165	1:1.10
University of Rochester School of Medicine	93	176	1:1.89
Upstate Total	516	605	1:1.17
Albert Einstein College of Medicine Columbia University Cornell University Medical College Mount Sinai School of Medicine New York Medical College	166 140 105 119 189	489 236 249 247 383	1:2.95 1:1.69 1:2.37 1:2.08 1:2.03
NYU School of Medicine	140	282	1:2.01
SUNY Brooklyn Health Sciences Center SUNY Stony Brook School of Medicine	175 110	473 211	1:2.70 1:1.92
Downstate Total	1144	2570	1:2.25
Total	1660	3175	1:1.91

Note: Includes only Allopathic Medical School Graduates and ACGME Residency Positions

# SECTION 2 SURVEY OF RESIDENTS COMPLETING TRAINING IN NEW YORK STATE IN 1997 SELECTED PRELIMINARY RESULTS

#### Introduction

To help policy makers and residency program directors assess the supply and demand for physicians in New York State and to assess the outcomes of training by specialty, the Center for Health Workforce Studies undertook a survey of all physicians completing training in New York in 1997. The survey obtained information on the practice plans and job search experiences of nearly 2,200 physicians across the state. This section summarizes some of the initial findings from the survey. With the exception of one table, all of the initial results presented here are for the greater New York region (New York City, Long Island and Westchester). A more complete analysis will be available in early 1998.

Partial support for the analysis of the data was provided by the Bureau of Health Professions of the Health Resources and Services Administration (HRSA) in the federal Department of Health and Human Services.

### Research Design

The Center for Health Workforce Studies distributed the surveys to graduating residents through GME consortia, hospitals and occasionally residency programs in May of 1997. Each of the more than 1000 residency programs were targeted in the distribution. The consortia, hospitals and programs were asked to distribute the survey to all graduating residents and to collect completed surveys.

The survey instrument included 30 questions, several of which described the experiences of graduates finding practice opportunities. The survey included questions covering four broad areas:

- 1. Demographic characteristics such as gender, age and ethnicity;
- 2. Medical education characteristics such as specialty and location of medical school;
- 3. Practice Plans including setting, location and compensation; and
- 4. Experiences and perspective on the job market such as, difficulty finding a job, necessity for changing plans, view of regional job market.

### Summary of Responses in Greater New York

There were over 1700 responses to this survey from residency program graduates in the greater New York area, representing approximately half of the residents completing training in 1997. For the purposes of analysis, three groupings of responses were created leading to the use of three different denominators in the different tables and charts.

- 1. All Respondents (1736) This includes all surveys returned by residents completing training programs. This includes physicians continuing training in a subspecialty.
- 2. Respondents with confirmed plans to enter patient care/clinical practice (914) These physicians had confirmed practice plans. This excludes, for example, those that
  are continuing their training, those going into research and those unable to find a practice
  opportunity.
- 3. Respondents entering patient care/clinical practice and those that considered entering patient care/clinical (1406) In order to assess the marketplace and demand by specialty, it was appropriate to include the experience of residents who considered entering the job market but then changed their plans as well as those who were going into patient care/clinical practice. This includes physicians who were unable to locate a satisfactory practice opportunity. The tighter the job market, the more likely that some physicians will choose to subspecialize or undertake other activities.

### Measuring Demand by Specialty

In order to assess demand by specialty, six of the questions directly or indirectly related to demand were selected to rank relative demand. These criteria were scored for each of the 24 largest specialties reported by the respondents. Then each was assigned the weight. Finally, a weighted average rank was computed that combined all scores into a single composite rank for each of the 24 specialties. (Two of the questions were combined into a single indicator.) The following describes the demand indicators and the ranking methodology.

#### 1. Difficulty Finding a Job

Did you have a difficult time finding a job you were satisfied with?

The Answers to this question are directly relevant to the respondents' assessment of the job market. The average of these scores was computed for all respondents in each of the specialties in the ranking process.

### 2. Necessary to Change Plans

Did you have to change your plans because of limited job opportunities?

The more the respondents had to change their plans due to limited job opportunities, the worse the job market. The average of these scores was computed for all respondents in each of the specialties in the ranking process.

#### 3. Mean Starting Income

Expected gross income during first year of practice:

In general, we expect higher incomes to be associated with better job markets, although this typically must be taken into account when the new physicians select their practice specialty. The average first year income was computed for each specialty.

#### 4. Yield to Region

Respondents entering Patient care / Clinical care and remaining in the region divided by total number of respondents in the specialty.

This indicator reflects the answers to two questions: whether the respondent is entering patient care; and whether the respondent will be practicing in the region. This statistic provides a clear indication of the availability of Pt Care jobs in the region where the residents took their training.

### 5. View of Regional Job Market

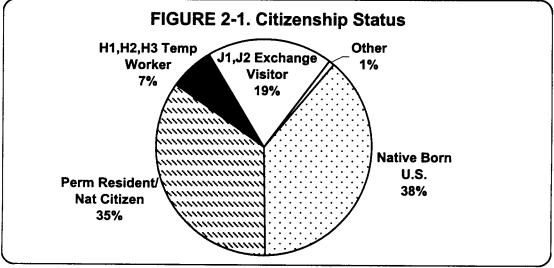
What is your overall assessment of the practice opportunities in your specialty, and within 50 miles of the site where you trained?

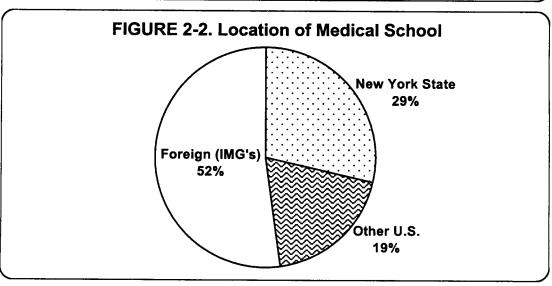
This is another question directly related to the job market near the residency program. Although it provides only subjective assessment of the local situation, these provide the best insights available.

Table 2-4 presents the results of the demand analysis for the greater New York region. Because the initial analysis found significant variations in the practice plans and the experience in the marketplace of USMGs and IMGs with temporary visas, demand was calculated with and without the IMGs with temporary visas. On table 2-4 the column on the left applies the weights to all graduates entering patient care and those who considered patient care. The second applies the same weights, but excludes graduates with temporary visas from the ranking process. Very few of the specialties shift ranks more that one or two positions in the two lists. However, pediatrics moves up seven spots on the list when temporary visa holders are excluded. This occurs because the graduates from pediatric residencies with temporary visas had much more trouble in the job market than pediatricians that were U.S. citizens or permanent residents. Tables 2-8 and 2-9 provide the detail and the rank by specialty on each variables.

### Characteristics of Exit Survey Respondents All GNY Respondents (n = 1736)

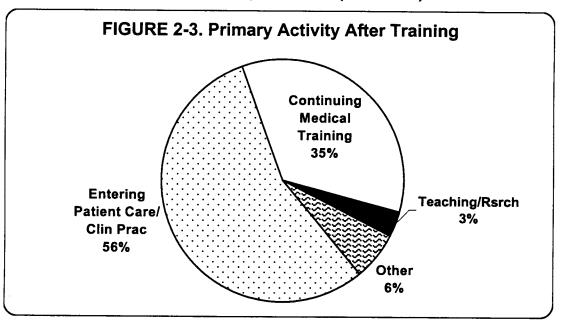
TABLE 2-1. Demographic Information												
Type of Medical Education	Number	Percent										
Allopathic (MD)	1639	95%										
Osteopathic (DO)	87	5%										
Gender												
Male	1092	64%										
Female	618	36%										
Race												
White	807	47%										
Asian/Pacific Islander	589	34%										
Minority (as defined by NYS)*	185	11%										
Other Minorities	53	3%										
Other	78	5%										





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### Characteristics of Exit Survey Respondents All GNY Respondents (n = 1736)



## GNY Respondents Entering Patient Care/Clinical Practice in the U.S. with Confirmed Plans (n = 914)

	•	•
TABLE 2-2. Practice	Plans	
<b>Location Resident is Entering Practic</b>	e <u>Number</u>	Percent
NYS (State Retention)	462	51%
Same City/County	292	32%
Same Region	132	15%
Other Area of NYS	38	4%
Other U.S. Location	417	46%
Other Country*	23	3%
<b>Demographics of New Location</b>		
Inner City	195	23%
Other Location within Major City	193	23%
Suburban	263	31%
Small City (population < 50,000)	115	14%
Rural	77	9%
Entering Practice in a federally design	nated HPSA	
Yes (within New York State)	70	8%
Yes (outside New York State)	129	15%
No	500	59%
Unknown	150	18%

<sup>\*</sup>Respondents entering practice outside the U.S. were excluded from all other questions under this subheading.

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## GNY Respondents Entering Patient Care/Clinical Practice in the U.S. with Confirmed Plans (cont'd)

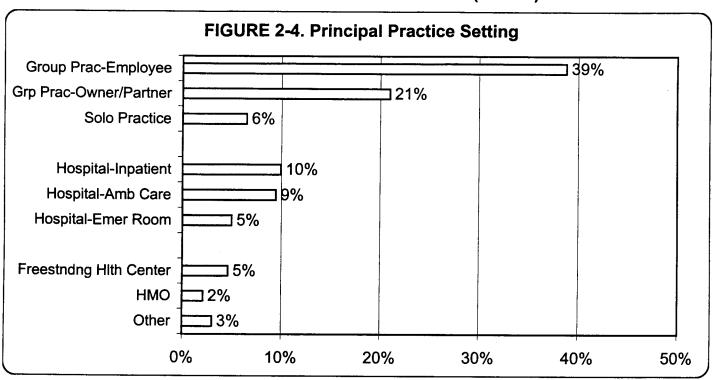


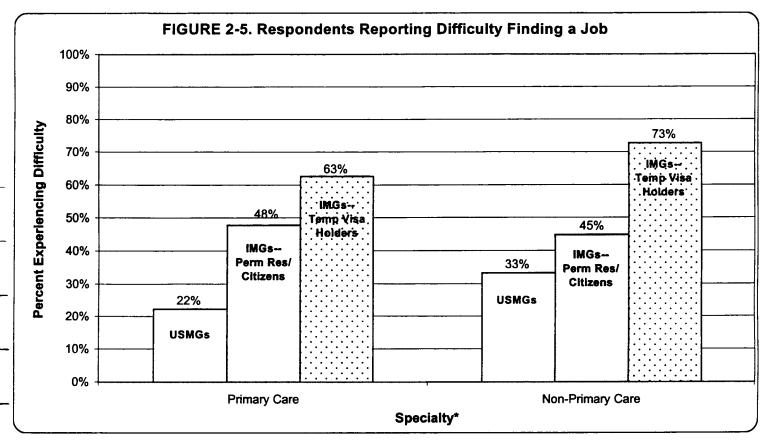
TABLE 2-3. Satisfaction with Practi	ice & Comp	pensation
Satisfaction w/ Principal Prac Setting	Number	<b>Percent</b>
Very Satisfied	486	61%
Somewhat Satisfied	287	36%
Not Too Satisfied	24	3%
Not at All Satisfied	4	0%
Is Principal Practice Temporary/Trans	itional	
Yes	242	29%
No	590	71%
Method of Compensation at Principal I	Practice	
Salaried (without Incentive)	336	40%
Salaried (with Incentive)	419	51%
Fee for Service	55	7%
Other	16	2%
Satisfaction with Income/Compensation	n	
Very Satisfied	290	35%
Somewhat Satisfied	445	54%
Not Too Satisfied	79	9%
Not at All Satisfied	15	2%
Starting Income	<u>Mean</u>	<u>Median</u>
	<b>\$119,715</b>	_\$115,000 <i>/</i>

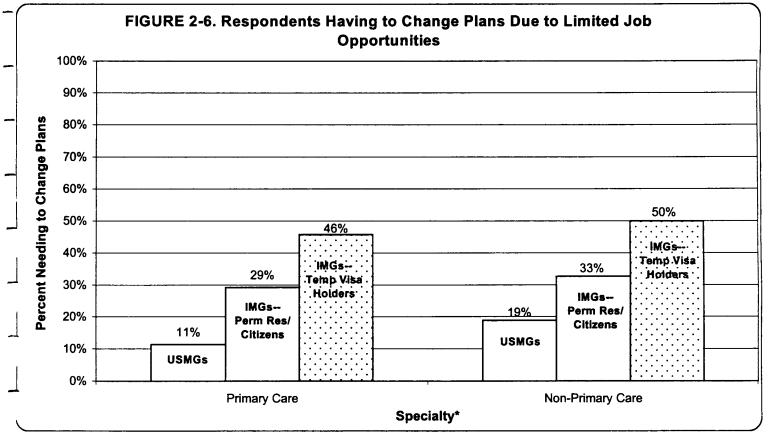
38

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Source: Survey of Residents Completing Training in NYS in 1997

### GNY Respondents Who Are Entering or Who Considered Entering Patient Care/Clinical Practice





➡\*Primary Care includes Family Practice, General Internal Medicine and General Pediatrics. Non-Primary Care includes all other specialties.

### TABLE 2-4. Summary of Demand for Selected Specialties in GNY

### **RESPONDENTS INCLUDED IN ANALYSIS**

Rank*	All Respondents	<b>Temp Visas Excluded</b>
1	Emergency Medicine	Emergency Medicine
2	Ob/Gyn	Ob/Gyn
3	Urology	Urology
4	Dermatology	Family Practice
5	Family Practice	Dermatology
6	Otolaryngology	Neurology
7	Neurology	Otolaryngology
8	Physical Medicine & Rehab	Cardiology
9	Child & Adolescent Psych	Physical Medicine & Rehab
10	Orthopedic Surgery	Pediatrics
11	Cardiology	Orthopedic Surgery
12	Plastic Surgery	Hematology/Oncology
13	Radiology (Therapeutic)	Child & Adolescent Psych
14	Surgery	Psychiatry
15	Hematology/Oncology	Radiology (Therapeutic)
16	Psychiatry	Gastroenterology
17	Pediatrics	Internal Medicine
18	Gastroenterology	Plastic Surgery
19	Radiology (Diagnostic)	Surgery
20	Anesthesiology	Radiology (Diagnostic)
21	Internal Medicine	Anesthesiology
22	Ophthalmology	Infectious Disease
23	Infectious Disease	Ophthalmology
24	Pathology	Pathology

<sup>\*</sup> Rank is based on 1 being in greatest demand and 24 being in least demand.

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Source: Survey of Residents Completing Training in NYS in 1997

### Selected Characteristics of GNY Respondents to 1997 Survey of Residents Completing Training in NYS TABLE 2-5.1. ALL GNY RESPONDENTS

1 1

		Prac		M		atrics		Gyn		ology	_	-				gery		Other		tal
	n =	78	n =	446	n =	194	n =	67	n =	54	n =	103	n =	75	n =	66	n=	653	n =	1736
Type of Medical Education																				
Allopathic (MD)	53	68%	432	98%	188	98%	61	91%	53	98%	99	96%	73	97%	61	94%	619	95%	1	95%
Osteopathic (DO)	25	32%	11	2%	4	2%	6	9%	1	2%	4	4%	2	3%	4	6%	30	5%	87	5%
Gender																				J
Male	36	47%	312	71%	82	42%	31	46%	34	68%	50	50%	48	65%	57	86%	442	69%	1092	64%
Female	40	53%	129	29%	111	58%	36	54%	16	32%	51	50%	26	35%	9	14%	200	31%	618	36%
Race						- 1								ĺ						
White	39	51%	151	34%	58	30%	42	64%	27	50%	56	55%	47	68%	36	56%	351	54%	807	47%
Asian/Pacific Islander	21	28%	216	49%	90	47%	13	20%	14	26%	26	25%	15	22%	17	27%	177	27%	589	34%
Under-represented Minorities*	15	20%	48	11%	36	19%	9	14%	11	20%	19	19%	5	7%	8	13%	87	13%	238	14%
Other	1	1%	27	6%	9	5%	2	3%	2	4%	1	1%	2	3%	3	5%	31	5%	78	5%
Citizenship																				
Native Born U.S.	43	56%	86	20%	41	22%	45	69%	20	38%	29	29%	51	71%	31	49%	306	48%	652	39%
Naturalized/Permanent Resident	26	34%	166	38%	48	26%	18	28%	21	40%	49	49%	16	22%	23	37%	226	35%	593	35%
H1, H2, H3 Temporary Worker	2	3%	63	14%	21	11%	0	0%	3	6%	4	4%	1	1%	2	3%	17	3%	113	7%
J1, J2 Exchange Visitor	6	8%	113	26%	75	40%	2	3%	9	17%	16	16%	4	6%	7	11%	84	13%	316	19%
Other	0	0%	8	2%	1	1%	0	0%	0	0%	2	2%	0	0%	0	0%	4	1%	15	1%
Location of Medical School								- 1												
New York State	32	42%	74	17%	29	15%	36	55%	11	20%	17	17%	48	64%	28	43%	219	34%	494	29%
Other U.S.	16	21%	43	10%	20	10%	21	32%	12	22%	15	15%	17	23%	22	34%	167	26%	333	19%
Foreign (IMG's)	28	37%	326	74%	145	75%	9	14%	31	57%	71	69%	10	13%	15	23%	267	41%	902	52%
Primary Activity After Training																				1
Entering Patient Care/Clinical Practice	69	88%	218	49%	108	57%	54	81%	11	20%	49	49%	22	29%	19	29%	405	63%	955	56%
Continuing Medical Training	4	5%	190	43%	65	34%	7	10%	30	56%	45	45%	45	60%	43	66%	168	26%	597	35%
Teaching/Research	1	1%	5	1%	1	1%	3	4%	2	4%	0	0%	3	4%	0	0%	41	6%	56	3%
Other	4	5%	32	7%	17	9%	3	4%	11	20%	7	7%	5	7%	3	5%	29	5%	111	6%
Ave Sessions/wk in Hospital Amb Setting	3.	6	1	.9	2	.4	2	.7	1	.4	4	.1	2	.9	2		2	.8	2.	.6
Ave Sessions/wk in Community Amb Sett	2.	6	1	.2	1	.2	1	.4	1	.0	2	.3	0	.7	1	.1	1	.2	1.	.3
Location Resident is Moving To**					-															
Same City/County	30	45%	64	32%	21	21%	26	49%	1	10%	19	40%	8	38%	3	18%	120	31%	292	32%
Same Region	10	15%	21	10%	12	12%	6	11%	3	30%	9	19%	4	19%	1	6%	66	17%	132	15%
Other Area of NYS	6	9%	6	3%	3	3%	0	0%	2	20%	2	4%	1	5%	0	0%	18	5%	38	4%
Other U.S. Location	20	30%	110	54%	62	63%	21	40%	4	40%	17	35%	8	38%	11	65%	164	42%	417	46%
Other Country	1	1%	1	0%	0	0%	0	0%	0	0%	1	2%	0	0%	2	12%	18	5%	23	3%

<sup>\*</sup>Includes Native American/Alaskan Natives, Black/African Americans, and Hispanic/Latinos.

<sup>\*\*</sup>Incudes only respondents who are entering patint care/clinical practice with confirmed plans.

# Selected Characteristics of GNY Respondents to 1997 Survey of Residents Completing Training in NYS TABLE 2-5.2. GNY RESPONDENTS ENTERING PATIENT CARE/CLINICAL PRACTICE IN THE U.S. W/ CONFIRMED PLANS\*

	Fam Prac   IM					Pathology Psychiatry									PLANS*					
		67		<u>191</u> 206				'Gyn		ology						gery	ALL	<u>Other</u>		<u>etal</u>
Demographics of New Location	<del></del>	07	" -	200	n =	100	n =	53	n =	11	n=	48	n =	22	n =	18	n =	389	n=	914
Inner City	24	33%	20	000/	40	470/														
Other Location within Major City	21			20%	16	17%	13	25%	i	0%	16	34%	2	10%	2	15%	87	25%	195	23%
Suburban	12	19%		22%	10	10%	11	22%	4	57%	8	17%	6	30%	7	54%	92	26%	193	23%
	15	24%		26%	33	34%	19	37%		43%		21%	10	50%	1	8%	123	35%	263	31%
Small City (population < 50,000) Rural	11	17%		16%	14	15%	7	14%	0	0%	8	17%	2	10%	2	15%	40	11%	115	14%
	4	6%	31	16%	23	24%	1	2%	0	0%	5	11%	0	0%	1	8%	12	3%	77	9%
Entering Practice in a HPSA																				1
Yes (within New York State)	14	22%	16	8%	7	7%	7	13%	0	0%	1	2%	0	0%	0	0%	25	7%	70	8%
Yes (outside New York State)	6	9%	54	28%	30	32%	2	4%	0	0%	8	17%	0	0%	4	29%	25	7%	129	15%
No	35	54%		45%	48	51%	32	62%	6	75%	28	60%	14	70%	8	57%		68%	500	59%
Unknown	10	15%	35	18%	10	11%	11	21%	2	25%	10	21%	6	30%	2	14%	64	18%	150	18%
Principal Practice Setting						1		- 1							_	, ,	•	.070	100	10 /0
Solo Practice	3	5%	7	4%	8	9%	2	4%	0	0%	5	11%	0	0%	1	7%	26	8%	52	6%
Group Practice-as Owner/Partner	9	15%	41	22%	9	10%	10	19%	1	20%	3	7%	8	44%	5	36%	83	25%	169	21%
Group Practice-as Employee	23	38%	77	42%	48	51%	26	49%	1	20%	8	18%	7	39%	7	50%	116	35%	313	39%
НМО	1	2%	9	5%	1	1%	1	2%	0	0%	0	0%	0	0%	Ó	0%	5	1%	17	39% 2%
Hospital-Inpatient	1	2%	13	7%	8	9%	6	11%	3	60%	11	24%	3	17%	1	7%	34	10%		
Hospital-Ambulatory Care	12	20%	21	11%	9	10%	3	6%	Õ	0%	6	13%	0	0%	Ö	0%	25	7%		10%
Hospital-Emergency Room	1	2%	3	2%	3	3%	Ō	0%	0	0%	1	2%	0	0%	0	0%	32			9%
Freestanding Health Center/Clinic	8	13%	8	4%	6	6%	1	2%	0	0%	6	13%	0	0%	0	0%		10%		5%
Urgent Care Clinic	0	0%	1	1%	0	0%	Ö	0%	0	0%	0	0%	0	0%			8	2%	37	5%
Military	0	0%	0	0%	Ö	0%	3	6%	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%
Other	2	3%	3	2%	2	2%	1	2%	0	0%	5	11%	0	0%	0	0%	2	1%	5	1%
Satisfaction w/ Prin Prac Setting	_	- 70	•		_	- /0	•	2 /0	U	0 /6	J	1170	U	0%	0	0%	4	1%	17	2%
Very Satisfied	38	62%	102	55%	56	64%	35	69%	5	83%	23	52%	10	500/	-	040/	040			
Somewhat Satisfied	22	36%	79	43%	29	33%	13	25%	0	0%	18	41%		59%	- /	64%	210	62%	486	61%
Not Too Satisfied	1	2%	4	2%	2	2%	3	6%	1	17%	3		5	29%	4	36%	117	35%	287	36%
Not at All Satisfied	Ö	0%	0	0%	1	1%	0	0%	0	0%		7%	0	0%	0	0%	10	3%	24	3%
Is Prin Prac Temporary/Transitional	Ū	0,0	U	0 /%	•	170	U	070	U	0%	0	0%	2	12%	0	0%	1	0%	4	0%
Yes	28	47%	73	38%	28	29%	11	22%	2	200/	0.4	400/			_					I
No	32	53%	121	62%	67	71%	39	78%	2	29%	21	46%	4	22%	5	38%	70	20%	242	29%
Method of Compensation at Prin Prac	32	33 %	121	02%	07	/ 1%	39	78%	5	71%	25	54%	14	78%	8	62%	279	80%	590	71%
Salaried (without Incentive)	25	41%	57	30%	45	400/	20	440,												
Salaried (with Incentive)	32				45	48%	22	44%		71%	23	51%	9	53%	4	31%	146	42%	336	41%
Fee for Service		52%	122	64%	48	51%	27	54%	2	29%	16	36%	7	41%	8	62%	157	45%	419	51%
Other	2	3%	9	5%	1	1%	1	2%	0	0%	5	11%	0	0%	1	8%	36	10%	55	7%
*Excludes respondents who said they were	2	3%	3	2%	0	0%	0	0%	0	0%	1_	2%	1	6%	0	0%	9	3%	16	2%

<sup>\*</sup>Excludes respondents who said they were entering "Patient Care/Clinical Practice" as their Primary Activity (Question 12) but also marked "Undecided" or "Unable to Find Work So Far" under Principal Practice Setting (Question 15).

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## Selected Characteristics of GNY Respondents to 1997 Survey of Residents Completing Training in NYS TABLE 2-5.2. GNY RESP ENTERING PATIENT CARE/CLINICAL PRACTICE IN THE U.S. W/ CONFIRMED PLANS (cont'd)

	Fam	Prac		<u>M</u>	<u>Pedi</u>	atrics	Ob/	/Gyn	Path	ology	Psyc	hiatry	Radi	ology	Sur	gery	All C	Other	То	tal
Mean Starting Income Category*:		4		3		2		5	i	3		2		5		5		5		=== 4
Sat. w/ Income/Compensation					-								<del></del>	Ť	,			ALC: NO.		
Very Satisfied	20	31%	60	32%	33	35%	20	40%	4	50%	16	36%	6	32%	3	21%	128	37%	290	35%
Somewhat Satisfied	42	66%	108	58%	50	54%	29	58%	4	50%	21	48%	11	58%	8	57%	172	49%	i	54%
Not Too Satisfied	1	2%	16	9%	10	11%	0	0%	0	0%	6	14%	2	11%	3	21%	41	12%	1	10%
Not at All Satisfied	1	2%	3	2%	0	0%	1	2%	0	0%	1	2%	0	0%	0	0%	9	3%	l	2%

<sup>\*</sup>Mean starting income categorized as follows: Under \$95,000=1; \$95,000-\$104,999=2; \$105,000-\$114,999=3; \$115,000-\$124,999=4; \$125,000-\$149,999=5; \$150,000-\$174,999=6; Over \$175,000=7.

TABLE 2-5.3. GNY RESP WHO ARE ENTERING OR WHO CONSIDERED ENTERING PATIENT CARE/CLINICAL PRACTICE

	Eam	<u>Prac</u>	ac M		<u>Pediatrics</u>		Ob/Gyn		Pathology		<b>Psychiatry</b>		Radiology		Surgery		All Other		Total	
	n =	73	n =	354	n =	154	n =	61	n=	35	n =	85	n =	35	n =	43	n =	566	n =	1406
Difficulty Finding a Job						Ī														
Yes	23	32%	169	50%	67	46%	12	20%	19	58%	34	40%	16	57%	15	39%	234	43%	589	44%
No	48	68%	169	50%	80	54%	48	80%	14	42%	50	60%	12	43%	23	61%	311	57%	755	56%
Reasons for Difficulty Finding a Job**																				
Overall Lack of Jobs	3	4%	38	11%	4	3%	3	5%	11	31%	2	2%	7	20%	5	12%	59	10%	132	9%
Lack of Jobs in Desired Locations	8	11%	48	14%	16	10%	4	7%	2	6%	17	20%	4	11%	6	14%	91	16%	196	14%
Lack of Jobs in Desired Setting	4	5%	16	5%	4	3%	2	3%	1	3%	4	5%	2	6%	1	2%	16	3%	50	4%
Inadequate Salary/Comp. Offered	1	1%	8	2%	3	2%	0	0%	0	0%	7	8%	3	9%	1	2%	23	4%	46	3%
Limited Jobs Due to Visa Status	4	5%	69	19%	40	26%	0	0%	6	17%	7	8%	0	0%	4	9%	47	8%	177	13%
Other	5	7%	5	1%	4	3%	2	3%	0	0%	2	2%	0	0%	1	2%	5	1%	24	2%
Necessary to Change Plans						ŀ														
Yes	12	16%	117	35%	41	28%	7	12%	14	44%	24	29%	8	30%	8	21%	151	28%	382	29%
No	61	84%	220	65%	105	72%	52	88%	18	56%	60	71%	19	70%	30	79%	392	72%	957	71%
View of Regional Job Market																				
Wide Open	8	11%	11	3%	17	11%	0	0%	0	0%	3	4%	0	0%	0	0%	18	3%	57	4%
Good Number of Jobs	32	44%	78	24%	39	26%	24	41%	0	0%	26	32%	2	7%	11	28%	113	21%	325	24%
Somewhat Restricted	25	34%	118	36%	51	34%	22	37%	6	18%	41	51%	13	45%	13	33%	214	39%	503	37%
Very Tight	8	11%	122	37%	44	29%	13	22%	28	82%	11	14%	14	48%	15	38%	204	37%	459	34%
View of National Job Market																				
Wide Open	21	29%	32	10%	25	16%	6	10%	0	0%	8	10%	0	0%	0	0%	31	6%	123	9%
Good Number of Jobs	44	61%	154	46%	82	54%	36	61%	0	0%	52	63%	4	13%	18	45%	212	39%	602	45%
Somewhat Restricted	6	8%	102	31%	30	20%	13	22%	9	26%	22	27%	18	60%	17	43%	217	40%	434	32%
Very Tight	1	1%	45	14%	15	10%	4	7%	25	74%	1	1%	8	27%	5	13%	86	16%	190	14%

<sup>\*\*</sup>Percentages are based on all respondents who experienced difficulty finding a job because multiple responses were accepted on this question.

TABLE 2-6. Comparison of USMGs to IMGs (GNY Only)

	o. Gompan	USM		 	IMGs							
ALL DECRONDENTO	Primary C		Non-Prim.		Primary C		Non-Prim. Care					
ALL RESPONDENTS	n = 214	4	n = 61:	3	n = 499		n = 40:	3				
Primary Activity After Training												
Entering Patient Care	124	58%	349	58%	268	54%	210	53%				
Continuing Medical Training	67	32%	204	34%	192	39%	133	34%				
Teaching/Research Other	4	2%	32	5%	2	0%	17	4%				
	17	8%	21	3%	35	7%	37	9%				
RESPONDENTS ENTERING PATIENT CARE/CLINICAL	Primary C		Non-Prim.		Primary C	are	Non-Prim.	Care				
PRACTICE IN THE U.S. WITH CONFIRMED PLANS	n = 118	3	n = 332	2	n = 244	1	n = 181					
Entering Practice in a HPSA	The second of the	1 51 "						11 m				
Yes (within New York State)	17	15%	19	6%	19	8%	14	8%				
Yes (outside New York State)	2	2%	5	2%	88	37%	34	20%				
No	76	67%	240	74%	93	40%	89	51%				
Unknown	19	17%	59	18%	35	15%	36	21%				
Starting Income: Mean	\$111,17	1	\$132,23	9	\$107,63		\$118,66					
Median	\$107,50	0	\$125,00		\$105,00		\$115,00					
RESPONDENTS ENTERING OR WHO CONSIDERED	Primary C	are	Non-Prim.		Primary C		Non-Prim.					
ENTERING PATIENT CARE/CLINICAL PRACTICE	n = 165	;	n = 48	5	n = 411		n = 338					
Difficulty Finding a Job	No. Company Miles		188214 (1881)	44 NS. 11	Art Heaters 1	. 454564						
Yes	35	22%	154	33%	221	56%	176	54%				
No	122	78%	309	67%	175	44%	148	46%				
Reasons for Difficulty Finding a Job*		Y H. Whit		40 <b>136 H</b>				4070				
Overall Lack of Jobs	4	2%	45	9%	41	10%	42	12%				
Lack of Jobs in Desired Locations	20	12%	76	16%	50	12%	48	14%				
Lack of Jobs in Desired Setting	5	3%	15	3%	17	4%	11	3%				
Inadequate Salary/Comp. Offered	5	3%	22	5%	7	2%	12	4%				
Limited Jobs Due to Visa Status	0	0%	0	0%	113	27%	64	19%				
Other	4	2%	4	1%	10	2%	6	2%				
Necessary to Change Plans				3 94 88			omana naželie.	2.70				
Yes	18	11%	86	19%	150	38%	126	39%				
No	141	89%	370	81%	243	62%	200	61%				
View of Regional Job Market		e e e		2				0170				
Wide Open	16	10%	7	2%	19	5%	14	4%				
Good Number of Jobs	65	41%	120	26%	84	22%	55	17%				
Somewhat Restricted	58	36%	183	40%	132	34%	125	38%				
Very Tight	20	13%	151	33%	154	40%	134	30 % 41%				
View of National Job Market				~ ]	n syn V	.0 /0	104	<del>-7</del> 1 /0				
Wide Open	37	23%	24	5%	40	10%	21	6%				
Good Number of Jobs	101	63%	202	44%	177	45%	119	36%				
Somewhat Restricted	16	10%	169	37%	120	31%	126	38%				
Very Tight	6	4%	67	15%	55	14%	62	19%				

<sup>\*</sup>Percentages are based on all respondents who are entering or who considered entering patient care/clin prac b/c multiple responses were accepted on this question.

Training in NYS in 1997

Center for Health Workforce Studies

TABLE 2-7. Comparison of Temporary Visa Holders to All Other Exit Survey Respondents (GNY Only)

•	Temp	orary \	/isa Holders	U.S. Citizens/Permanent Resident						
ALL DECRONDENTS	Primary C		Non-Primary		Primary C		Non-Primary Care			
ALL RESPONDENTS	n = 280	)	n = 149	9	n = 438	3	n = 869	3		
Primary Activity After Training										
Entering Patient Care	132	47%	65	44%	263	60%	495	58%		
Continuing Medical Training	122	44%	64	43%	137	31%	274	32%		
Teaching/Research	3	1%	8	5%	4	1%	41	5%		
Other	22	8%	11	7%	31	7%	47	5%		
RESPONDENTS ENTERING PATIENT CARE/CLINICAL	Primary C		Non-Primary	/ Care	Primary C		Non-Primary			
PRACTICE IN THE U.S. WITH CONFIRMED PLANS	n = 120	)	n = 46		n = 245	<u> </u>	n = 468	8		
Entering Practice in a HPSA										
Yes (within New York State)	12	10%	8	17%	25	11%	25	6%		
Yes (outside New York State)	76	64%	29	63%	14	6%	10	2%		
No	22	19%	7	15%	148	63%	323	72%		
Unknown	8	7%	2	4%	47	20%	93	21%		
Starting Income: Mean	\$105,42		\$109,44		\$110,57	6	\$129,52	.0		
Median	<b>\$105,00</b>	0	\$105,00	0	\$105,00	0	\$125,00	0		
RESPONDENTS ENTERING OR WHO CONSIDERED	Primary C	are	Non-Primary	/ Care	Primary C	are	Non-Primary			
ENTERING PATIENT CARE/CLINICAL PRACTICE	n = 226		n = 116		n = 364		n = 73			
Difficulty Finding a Job										
Yes	134	62%	80	72%	125	37%	250	37%		
No	82	38%	31	28%	215	63%	427	63%		
Reasons for Difficulty Finding a Job*										
Overall Lack of Jobs	20	9%	8	7%	27	7%	80	11%		
Lack of Jobs in Desired Locations	12	5%	7	6%	65	18%	121	17%		
Lack of Jobs in Desired Setting	6	3%	1	1%	20	5%	25	3%		
Inadequate Salary/Comp. Offered	4	2%	0	0%	10	3%	36	5%		
Limited Jobs Due to Visa Status	107	47%	66	57%	12	3%	0	0%		
Other	4	2%	0	0%	13	4%	12	2%		
Necessary to Change Plans										
Yes	97	45%	56	50%	73	21%	156	23%		
No	118	55%	57	50%	268	79%	514	77%		
View of Regional Job Market				-						
Wide Open	8	4%	7	6%	28	8%	14	2%		
Good Number of Jobs	40	18%	18	16%	109	32%	158	23%		
Somewhat Restricted	71	33%	35	30%	123	37%	274	41%		
Very Tight	98	45%	55	48%	76	23%	230	34%		
View of National Job Market										
Wide Open	20	9%	8	7%	58	17%	37	5%		
Good Number of Jobs	95	44%	39	34%	185	54%	283	42%		
Somewhat Restricted	66	31%	42	37%	72	21%	254	37%		
Very Tight	35	16%	25	22%	26	8%	104	15%		

<sup>\*</sup>Percentages are based on all respondents who are entering or who considered entering patient care/clin prac b/c multiple responses were accepted on this question.

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Source: Survey of Residents Complete

TABLE 2-8. Analysis of Exit Survey Indicators of Physician Demand for Selected Specialties

Overall Rank Based on Average of Individual Category Ranks<sup>1</sup>

ALL GNY RESPONDENTS

	Di	fficulty Find	ding		Necessary	to	Mean	Starting I	ncome²		rield to Regio	on³	View of R	egional	
		a Job		<u>C</u>	Change Pla	<u>ns</u>	(If Ent	Pat Care	in U.S.)		% Entering		Job Marke	_	Overall
	Total	% with	Rank	Total		Rank		Income	Rank	Total	Patient Care	Rank	Mean	Rank	Rank
<u>Specialty</u>	Resp	<b>Difficulty</b>	(of 24)	Resp	% Yes	(of 24)	n	Category	(of 24)	Resp	in Region	(of 24)	Index	(of 24)	(of 24)
Anesthesiology	46	54.3%	21	46	32.6%	18	23	4	11	59	25.4%	15	-1.94	19	20
Dermatology	15	26.7%	5	15	6.7%	2	10	4	13	16	37.5%	7	-0.20	5	4
Emergency Med	36	8.3%	2	34	14.7%	5	31	6	3	36	61.1%	1	0.83	1	1
Family Practice	71	32.4%	7	73	16.4%	9	65	4	14	78	51.3%	2	0.10	3	5
IM	338	50.0%	17	337	34.7%	20	189	3	17	446	19.1%	18	-1.13	13	21
IM-Cardiology	30	33.3%	8	31	35.5%	21	19	6	6	33	24.2%	16	-1.00	12	11
IM-Gastro	24	54.2%	20	24	29.2%	16	18	4	16	26	34.6%	9	-2.00	20	18
IM-Inf Disease	21	66.7%	24	20	45.0%	23	15	3	22	23	43.5%	5	-1.29	15	23
IM-Hem/Onc	13	38.5%	10	12	50.0%	24	6	5	8	14	28.6%	12	-1.46	17	15
Neurology	38	31.6%	6	38	15.8%	8	16	4	10	51	19.6%	17	-0.95	11	7
Ob/Gyn	60	20.0%	3	59	11.9%	3	51	6	2	67	47.8%	4	-0.63	9	2
Ophthalmology	24	50.0%	17	22	13.6%	4	7	3	19	33	3.0%	24	-2.22	23	22
Otolaryngology	13	23.1%	4	13	15.4%	7	10	4	11	19	31.6%	11	-0.54	7	6
Pathology	33	57.6%	23	32	43.8%	22	8	3	20	54	7.4%	22	-2.65	24	24
Pediatrics	147	45.6%	16	146	28.1%	13	93	2	24	194	17.0%	19	-0.62	8	17
PM & R	26	50.0%	17	27	14.8%	6	19	4	15	29	41.4%	6	-0.83	10	8
Psychiatry	84	40.5%	14	84	28.6%	14	47	2	23	103	27.2%	14	-0.48	6	15
Psy-Child&Adol	12	33.3%	8	12	33.3%	19	9	3	21	15	33.3%	10	0.67	2	9
Radiology (Diag)	28	57.1%	22	27	29.6%	17	17	6	4	75	16.0%	20	-1.83	18	18
Radiology (Ther)	14	42.9%	15	14	28.6%	14	11	6	7	14	35.7%	8	-2.14	22	13
Surgery	38	39.5%	11	38	21.1%	10	13	5	9	66	6.1%	23	-1.21	14	14
Sur-Orthopedic	38	39.5%	11	- 37	21.6%	11	23	7	1	62	9.7%	21	-1.40	16	9
Sur-Plastic	10	40.0%	13	9	22.2%	12	8	6	5	11	27.3%	13	-2.00	20	11
Urology	18	5.6%	1	18	0.0%	1	15	3	18	18	50.0%	3	0.00	4	3
All Specialties	1344	43.8%	N/A	1339	28.5%	N/A	819	4	N/A	1736	24.4%	N/A	-1.03	N/A	N/A

<sup>&</sup>lt;sup>1</sup> Rank is based on 1 being in highest demand and 24 being in least demand. Specialties with few respondents (<10) have been excluded from this analysis.

<sup>&</sup>lt;sup>2</sup> Mean starting income categorized as follows: Under \$95,000=1; \$95,000-\$104,999=2; \$105,000-\$114,999=3; \$115,000-\$124,999=4; \$125,000-\$134,999=5; \$135,000-\$149,999=6; \$150,000-\$174,999=7; Over \$175,000=8.

<sup>&</sup>lt;sup>3</sup> Yield to region is the number of respondents entering patient care/clinical practice in the region divided by the total number of respondents.

<sup>&</sup>lt;sup>4</sup> Regional job market index is based on the following point system: Wide Open = 3, Good Number of Jobs = 1, Somewhat Restricted = -1, Very Tight = -3.

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TABLE 2-9. Analysis of Exit Survey Indicators of Physician Demand for Selected Specialties

Overall Rank Based on Average of Individual Category Ranks<sup>1</sup>

GNY RESPONDENTS EXCLUDING TEMPORARY VISA HOLDERS

	<b>l</b> Di	ifficulty Find	lina l		Necessary :	•	Moon	Starting I	2		W-1-14- D. J	3	I	!	ľ
		•	9		-			_		<u>-</u>	Yield to Region	מ <u>ר</u> י	View of R		
	Total	<u>a Job</u> % with	Rank	Total	Change Pla		(If Ent	Pat Care			% Entering		Job Marke		Overall
Specialty	Resp	Difficulty	(of 24)	Resp	% Yes	Rank	_	Income	Rank	Total	Patient Care	Rank	Mean	Rank	Rank
Anesthesiology	41	48.8%	19	41	29.3%	(of 24) 20	n	Category	(of 24)	Resp	in Region	(of 24)	<u>Index</u>	(of 24)	(of 24)
Dermatology	13	30.8%	11	13	7.7%		22		11	49	30.6%	15	-1.90	19	21
Emergency Med	32	6.3%	' 1	30	10.0%	2	9	-	16	14	42.9%	6	-0.23	5	5
Family Practice	62	27.4%	8	64		3	28	-	2	32	62.5%	1	0.87	1	1
IM	187	39.6%	16	186	12.5%	5	59	-	13	69	55.1%	2	0.16	3	4
IM-Cardiology	24	20.8%	4		26.3%	17	113	<del>-</del>	17	252	31.3%	12	-0.83	10	17
IM-Gastro	19	47.4%	' 1	24	29.2%	19	19	_	8	26	30.8%	13	-1.08	13	8
IM-Inf Disease	15		18	19	21.1%	12	16		14	21	42.9%	6	-1.95	20	16
IM-Hem/Onc		66.7%	24	14	35.7%	22	10	·=	19	17	47.1%	5	<b>-1</b> .80	18	22
	9	22.2%	5	8	62.5%	24	5	6	7	9	33.3%	10	-1.67	17	12
Neurology	34	26.5%	6	34	14.7%	7	15	4	10	43	23.3%	19	-0.88	12	6
Ob/Gyn	57	19.3%	3	56	12.5%	5	49	6	3	63	47.6%	4	-0.61	8	2
Ophthalmology	22	50.0%	20	20	15.0%	9	6	3	18	31	3.2%	24	-2.24	23	23
Otolaryngology	11	27.3%	7	11	18.2%	10	9	4	12	17	29.4%	16	-0.64	9	6
Pathology	23	56.5%	23	22	50.0%	23	6	2	21	41	9.8%	22	-2.67	24	24
Pediatrics	68	27.9%	9	68	11.8%	4	46	2	24	89	29.2%	17	-0.29	6	10
PM & R	26	50.0%	20	27	14.8%	8	19	4	15	28	42.9%	6	-0.83	10	9
Psychiatry	66	31.8%	12	66	22.7%	14	38	2	23	78	32.1%	11	-0.43	7	14
Psy-Child&Adol	10	30.0%	10	10	30.0%	21	8	2	22	13	38.5%	9	0.60	2	13
Radiology (Diag)	26	53.8%	22	25	28.0%	18	15	6	4	67	16.4%	20	-1.64	16	20
Radiology (Ther)	13	38.5%	14	13	23.1%	15	10	6	5	13	30.8%	13	-2.08	22	15
Surgery	30	33.3%	13	30	23.3%	16	8	6	9	54	3.7%	23	-1.45	15	19
Sur-Orthopedic	36	38.9%	15	35	20.0%	11	23	7	1	57	10.5%	21	-1.37	14	11
Sur-Plastic	10	40.0%	17	9	22.2%	13	8	6	6	11	27.3%	18.	-2.00	21	18
Urology	16	6.3%	1	16	0.0%	1	14	3	20	16	50.0%	3	-0.13	4	3
All Specialties	967	36.7%	N/A	962	22.7%	N/A	632	4	N/A	1245	31.3%	N/A	-0.96	N/A	N/A

<sup>&</sup>lt;sup>1</sup> Rank is based on 1 being in highest demand and 24 being in least demand. Specialties with few respondents (<10) have been excluded from this analysis.

<sup>&</sup>lt;sup>2</sup> Mean starting income categorized as follows: Under \$95,000=1; \$95,000-\$104,999=2; \$105,000-\$114,999=3; \$115,000-\$124,999=4; \$125,000-\$134,999=5; \$135,000-\$149,999=6; \$150,000-\$174,999=7; Over \$175,000=8.

<sup>&</sup>lt;sup>3</sup> Yield to region is the number of respondents entering patient care/clinical practice in the region divided by the total number of respondents.

<sup>&</sup>lt;sup>4</sup> Regional job market index is based on the following point system: Wide Open = 3, Good Number of Jobs = 1, Somewhat Restricted = -1, Very Tight = -3.

**TABLE 2-10. Regional Comparison** 

	New		State (T		. •		HSAs 1	-5)	i GNV	/ /LIQ /	As 6, 7 8	P 0\
			Non-Pri		Primary		Non-Prin	,			Non-Prir	
ALL RESPONDENTS	n=			1302	n = 1		n = 1		n = 3			1018
Primary Activity After Training						*			0.00			1010
Entering Patient Care	515	59%	726	56%	120	72%	166	59%	395	55%	560	56%
Continuing Medical Training	295	34%	424	33%	36	22%	I .	31%	259	36%		34%
Teaching/Research	10	1%	65	5%	3	2%		6%	7	1%		5%
Other	60	7%	70	5%	7	4%		4%	53	7%	_	6%
RESPONDENTS ENTERING PATIENT CARE/CLINICAL	Primar	/ Care	Non-Prir	n Care	Primary	/ Caro	Non-Prin				<del></del>	
PRACTICE IN THE U.S. WITH CONFIRMED PLANS	n = 4		n = 1		n = 1		n = 1		Primary n = 3		Non-Prin	
Entering Practice in a HPSA					•					,03	11-3	314
Yes (within New York State)	54	12%	42	7%	17	16%	9	6%	37	440/	1 2	70
Yes (outside New York State)	108	23%	50	8%	18	17%	11	7%	90	11% 26%		7%
No `	227	49%	434	67%	57	53%	104	70%	170	48%	E .	8%
Unknown	71	15%	119	18%	16	15%		16%	55	16%		66%
Starting Income: Mean	\$109,		\$129,	4.0	\$112,		\$136,		10. 3. 003.5.1		<u> </u>	19%
Median			\$125,		\$107,		\$130, \$132,		\$108,		\$127,	
RESPONDENTS ENTERING OR WHO CONSIDERED									\$105,		\$125 <u>,</u>	000
ENTERING PATIENT CARE/CLINICAL PRACTICE	Primary n = 7		Non-Prin n = '		Primary n = 1		Non-Prin		Primary		Non-Prin	
Difficulty Finding a Job	11-7	30	11-	1004	11 = 1	49	n = 2	239	n = 5	81	n = 8	325
Yes	306	44%	405	40%	47	220/	75	220/	050	4-04		
No	395	56%	613	60%	98	32% 68%	75 155	33% 67%	259	47%	330	42%
Reasons for Difficulty Finding a Job*		0070	0.13	00 /8	90	00 %	100	0/%	297	53%	458	58%
Overall Lack of Jobs	50	7%	113	11%	5	3%	26	11%	45	8%	07	440/
Lack of Jobs in Desired Locations	90	12%	154	14%	18	12%	30	13%	72	12%	87	11%
Lack of Jobs in Desired Setting	27	4%	30	3%	3	2%	4	2%	24	4%	124 26	15%
Inadequate Salary/Comp. Offered	14	2%	37	3%	2	1%	3	1%	12	2%	34	3%
Limited Jobs Due to Visa Status	135	18%	83	8%	22	15%	19	8%	113	19%	64	4% 8%
Other	16	2%	11	1%	2	1%	1	0%	113	2%	10	1%
Necessary to Change Plans						1		, J		2 /0	10	170
Yes	208	30%	263	26%	38	26%	51	22%	170	31%	212	27%
No	492	70%	750	74%	106	74%	179	78%	386	69%	571	73%
View of Regional Job Market								, .	000	0376	J/1	1370
Wide Open	49	7%	35	3%	13	9%	14	6%	36	7%	21	3%
Good Number of Jobs	207	30%	228	22%	58	40%	52	23%	149	27%	176	22%
Somewhat Restricted	238	34%	410	40%	44	31%	101	44%	194	35%	309	39%
Very Tight	203	29%	345	34%	29	20%	60	26%	174	31%	285	36%
View of National Job Market		}						-570	.,,	51/0	200	30%
Wide Open	107	15%	65	6%	29	20%	20	9%	78	14%	45	6%
Good Number of Jobs	371	53%	421	41%	91	62%	99	42%	280	50%	322	41%
Somewhat Restricted	158	22%	384	37%	20	14%	88	37%	138	25%	296	37%
Very Tight	67	10%	157	15%	6	4%	28	12%	61	11%	129	16%

<sup>\*</sup>Percentages are based on all respondents who are entering or who considered entering patient care/clin prac b/c multiple responses were accepted on this question.

Center for Health Workforce Studies

### SECTION 3 A COMPARISON OF RESIDENCY TRAINING IN CALIFORNIA AND NEW YORK, 1995

#### Introduction

California and New York states are similar in a number of ways. Both are large, have diverse populations including large numbers of immigrants; both have several major urban areas as well as large rural areas; both have nationally renowned academic medical centers. On the other hand, in terms of medical education and training, the states are very different: New York is the nation's major center for medical education and training. California benefits from migration of physicians into the state.

To facilitate the assessment of residency training in New York, this section presents a comparison of key graduate medical education data for New York and California. While California can be viewed as a benchmark for reviewing GME, this should be done with caution because of the significant differences in the culture of health care in the two states.

Hopefully, the data for California will be instructive. In any case, the sharp differences between the states are provocative .

### Background on the Analysis

The following tables and figures are part of an analysis the Center is conducting to compare medical education, residency training and the supply and distribution of practicing physicians in New York and California.

The analysis is being conducted in collaboration with the Center for the Health Professions at the University of California at San Francisco, which is being supported by the Bureau of Health Professions in the Health Resources and Services Administration (HRSA) in the federal Department of Health and Human Services. A full report on this analysis will be available in early 1998.

Table 3-1
Number of Medical Students, Residents, and Practicing Physicians<sup>1</sup>
New York and California 1995

	Num	iber	Percent of U.S.		
	New York	California	New York	California	
Population	18,489,997	32,398,000	7.0%	12.3%	
Medical Students	7,822	5,047	10.5% <sup>2</sup>	6.5% <sup>2</sup>	
Residents	14,937	8,678	15.4%	8.9%	
Practicing Physicians	43,727	59,767	9.6%	13.2%	

Sources: Journal of the American Medical Association, 1996, 276 (9), Medical Education theme issue; Data from the Graduate Medical Education Database, Copyright 1996, American Medical Association, Chicago, Illinois; Physician Characteristics and Distribution in the U.S., 1996/1997 Edition, American Medical Association, Chicago, Illinois; New York College of Osteopathic Medicine; College of Osteopathic Medicine of the Pacific; California Statistical Abstract; New York State Statistical Yearbook.

Table 3-2 Medical Students<sup>3</sup>, Residents, and Practicing Physicians per 100,000 Population, New York, California and the U.S. 1995

	New York	California	U.S.
Medical Students	42.3 (37.9)	15.6 (13.5)	(25.3)
Residents	80.8	26.8	36.8
Practicing Physicians	236.5	184.5	171.7

Sources: Journal of the American Medical Association, 1996, 276 (9), Medical Education theme issue; Data from the Graduate Medical Education Database, Copyright 1996, American Medical Association, Chicago, Illinois; Physician Characteristics and Distribution in the U.S., 1996/1997 Edition, American Medical Association, Chicago, Illinois; New York College of Osteopathic Medicine; College of Osteopathic Medicine of the Pacific; California Statistical Abstract; New York State Statistical Yearbook.

<sup>&</sup>lt;sup>1</sup> Medical students and practicing physicians include allopathic and osteopathic. Residents include number of residents in allopathic residency programs. Unless otherwise noted, practicing physicians are non-federal, active patient care physicians and excludes residents.

<sup>2</sup> Percent of U.S. medical students represents state's percentage of U.S. allopathic medical students.

<sup>&</sup>lt;sup>3</sup> Numbers in parentheses represent allopathic only student-to-population ratios.

Table 3-3
Number of Residents by Specialty Grouping
New York and California 1995

	New York Residents	California Residents
Primary Care	6,241	3,332
Family Practice	551	905
Internal Medicine - General	4,240	1,644
Pediatrics	1,347	728
Combined Specialty	103	55
Obstetrics/Gynecology	710	441
Internal Medicine Subspecialties	1,341	627
General Surgery	1,214	790
Surgery Subspecialties	1,162	803
Facility Based Specialties	1,851	1,089
Psychiatry	1,048	534
Other Specialties	<u>1,281</u>	<u>930</u>
Total <sup>4</sup>	14,937	8,678

<sup>&</sup>lt;sup>4</sup> Includes Transitional Year and Missing categories.

Table 3-4
Residents per 100,000 Population by Specialty Grouping
New York and California 1995

	New York Residents	California Residents	Ratio (California Residents per Pop.: New York residents per Pop.)
Primary Care	33.8	10.3	1:3
Family Practice	3.0	2.8	1:1
Internal Medicine - General	22.9	5.1	1:4.5
Pediatrics	7.3	2.2	1:3
Combined Specialty	0.6	0.2	1:3
Obstetrics/Gynecology	3.8	1.4	1:2.7
Internal Medicine Subspecialties	7.3	1.9	1:3.5
General Surgery	6.6	2.4	1:2.7
Surgery Subspecialties	6.3	2.5	1:2.5
Facility Based Specialties	10.0	3.4	1:2.5
Psychiatry	5.7	1.6	1:3.5
Other Specialties	<u>6.9</u>	<u>2.9</u>	<u>1:3</u>
Total <sup>5</sup>	80.8	26.8	1:3

Sources: Data from the Graduate Medical Education Database, Copyright 1996, American Medical Association, Chicago, Illinois; California Statistical Abstract; New York State Statistical Yearbook.

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<sup>&</sup>lt;sup>5</sup> Includes Transitional Year and Missing categories.

Figure 3-1
Percent of Total Statewide Residents by Specialty Grouping
New York and California 1995

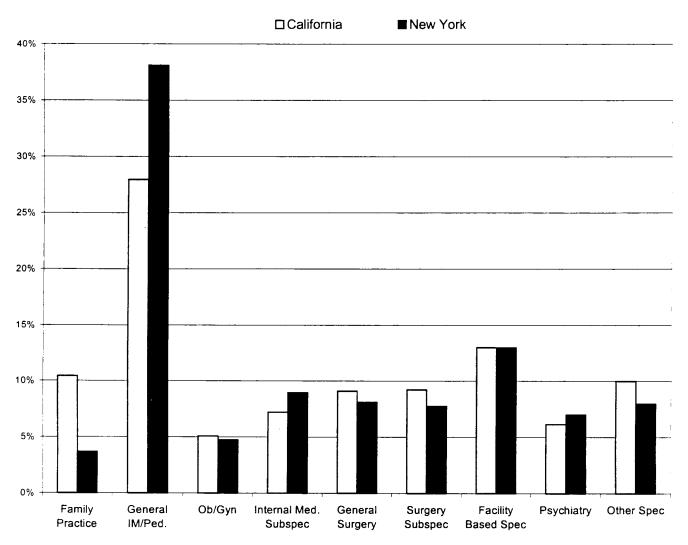


Figure 3-2
Location of Medical School for Residents
New York and California 1995

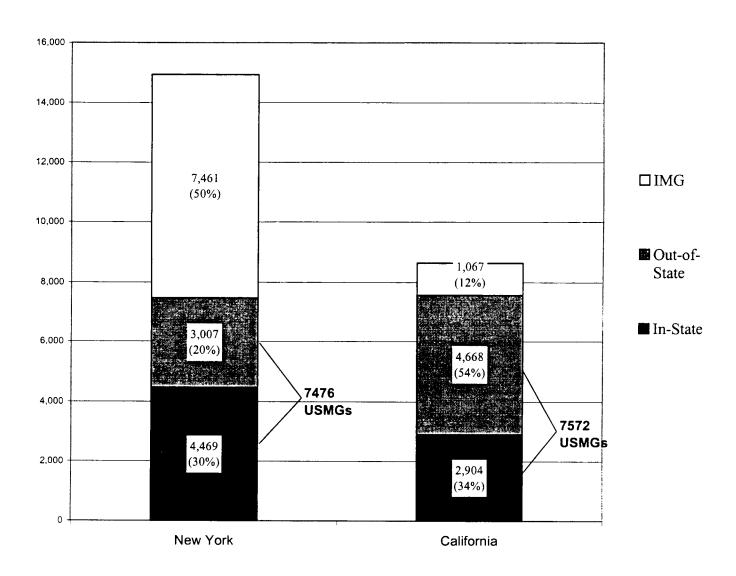
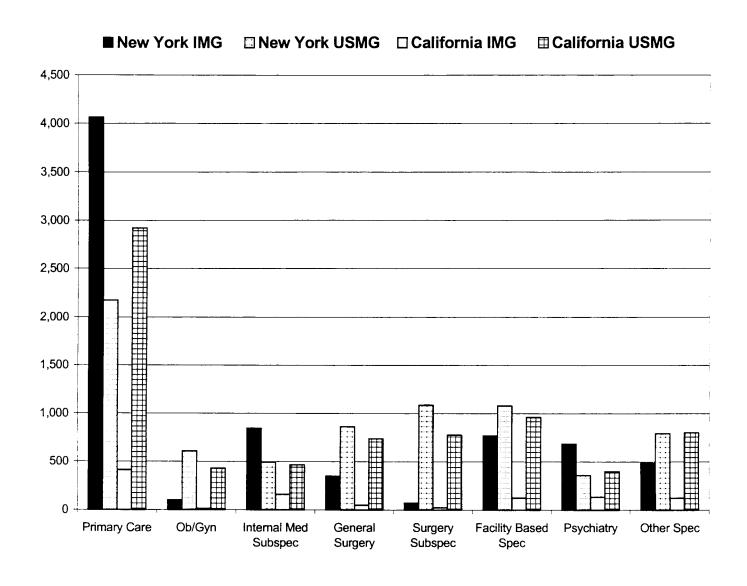


Figure 3-3
Number of IMG and USMG Residents by Specialty Grouping
New York and California 1995



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Table 3-5
International Medical Graduate Residents by Specialty Grouping
New York and California 1995

		New York			California	
	Total Residents	IMG Residents	Percent Grouping IMG	Total Residents	IMG Residents	Percent Grouping IMG
Primary Care	6,241	4,065	65%	3,332	410	12%
Obstetrics/Gynecology	710	99	14%	441	14	3%
Internal Medicine Subspecialties	1,341	848	63%	627	160	26%
General Surgery	1,214	349	29%	790	50	6%
Surgery Subspecialties	1,162	73	6%	803	24	3%
Facility Based Specialties	1,851	770	42%	1,089	125	11%
Psychiatry	1,048	688	66%	534	135	25%
Other Specialties	1,281	487	38%	930	125	13%
Total <sup>6</sup>	14,937	7,461	50%	8,678	1,067	12%

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<sup>&</sup>lt;sup>6</sup> Includes Transitional Year and Missing categories.

Table 3-6 Citizenship/Visa Status of International Medical Graduates New York and California 1995

	New York	California
Native Born U.S.	507	107
Naturalized U.S.	526	130
Permanent Resident	1,888	490
Temporary Status	3,702	243
<u>Other</u>	<u>756</u>	<u>74</u>
Total <sup>7</sup>	7,461	1,067

<sup>&</sup>lt;sup>7</sup> Includes Transitional Year and Missing categories.

Table 3-7
Training Location of Practicing Physicians
New York and California 1993

Training Location	Percent of Physicians					
Docution	New York	California				
In-State	78%	62%				
Out-of-State	22%	38%				

Seifer, Sarena D., 1995, "Graduate Medical Education and Physician Practice Location: Implications for Physician Workforce Policy", Journal of the American Medical Association, 274 (9), 685-691.

Table 3-8
Resident Retention Rate
New York and California 1993

Practice Location	Percent of Residents					
Location	New York	California				
In-State	51%	71%				
Out-of-State	49%	29%				

Seifer, Sarena D., 1995, "Graduate Medical Education and Physician Practice Location: Implications for Physician Workforce Policy", Journal of the American Medical Association, 274 (9), 685-691.

Table 3-9
"Balance of Trade" in Physician Training
New York and California 1995

	Practicing California Physicians Trained in New York	Practicing New York Physicians Trained in California
Primary Care	2,220	240
Percent of State's Primary Care Physicians	10.7%	1.6%
Non-Primary Care	6,184	1,075
Percent of State's Non- Primary Care Physicians	16.8%	4.0%
Total	8,404	1,315
Percent of All Practicing Physicians in the State	14.1%	3.0%

Data from the Physician Masterfile Database, Copyright 1996, American Medical Association, Chicago, Illinois.

Table 3-10
Residents per Occupied Hospital Bed
New York and California 1995

	New York	California
Population	18,489,997	32,398,000
Residents	14,937	8,678
Average Daily Census	76,784	57,923
Residents per 100,000 Population	80.8	26.8
Average Daily Census per 100,000 Population	415	179
Residents per Occupied Hospital Bed	0.19	0.15
Occupied Hospital Beds per Resident	5.1	6.7

Sources: Data from the Graduate Medical Education Database, Copyright 1996, American Medical Association, Chicago, Illinois; California Statistical Abstract; New York State Statistical Yearbook; Hospital Statistics: Emerging Trends in Hospitals: The AHA Profile of United States Hospitals, 96/7 Edition, American Hospital Association, Chicago, Illinois.

#### APPENDIX

### **Data Sources Limitations and Technical Notes**

Osteopathic, Dental and Podiatric Residency Positions are not Included in the data on current residents: The AMA GME file includes only data on allopathic residency positions. While this includes osteopathic residents training in allopathic residency positions, it does not include an estimated XXXX osteopathic residency positions in the state. The data also do not include dental or podiatric residency positions. All of these positions are eligible for Medicare and Medicaid GME reimbursement.

Incomplete Reporting: The AMA estimates that their GME file includes between 95% and 97% of the allopathic residents. While this response rate assures an accurate description overall, it can be a problem for more detailed analysis by specialty, geographic subdivision and other factors. For example, in assessing trends in the number of international medical graduates by specialty overtime, failure by one program to report in one year could create a misleading picture trends in the specialty. Readers, therefore, should use caution in assessing year to year changes in any individual specialty.

**Self Reporting:** The data collected in the 1997 Resident Exit Survey is all based on self-reported judgements about job opportunities, difficulties finding acceptable employment, etc. While the categories for some of the questions are unambiguous, for other questions they involve the subjective judgements of the respondents.

Technical Notes on Exit Survey: The response rate for the Exit Survey is not easy to determine, primarily because the numbers of residents graduating from each of the 1000 plus programs across the state are not available from a single source. We estimate there were 3,873 graduates in greater New York in 1997, based on a variety of sources including the directors of the responding residency programs. Comparable estimates based on the AMA GME file place the number of graduates for greater New York in 1997 at 3,659. Since we know that several hospitals never even received the questionnaires due to logistical problems encountered in this first full implementation of the survey, the true denominator for the response rate should probably be reduced by at least 480. Depending on which base one uses, and whether an adjustment is made for non-receipt of questionnaires, the overall response rate for greater New York is somewhere between 45% and 55%.

In any case, there remains a question about the representativeness of the actual respondents. To help make a judgment about this, a comparison has been conducted of several demographic characteristics between the Exit Survey responses and the AMA GME file. These comparisons show the following:

<u>Characteristic</u>	1997 Exit Survey	AMA GME File
% Female	36%	34%
% White	47%	52%
% Minority	14%	14%
% IMG	52%	56%
% Native U.S.	38%	37%

Based on these numbers we see no obvious reasons for concern about the representativeness of the responses to the 1997 survey.