Residency Training Outcomes by Specialty in 1998 for New York State

A Summary of Responses to the 1998 Resident Exit Survey

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Prepared by

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PREFACE

This report summarizes the results of the *Survey of Residents Completing Training in New York State in 1998* conducted by the Center for Health Workforce Studies. The survey was designed to assist hospitals in better understanding the supply and demand for physicians by specialty in New York State and to support institutional GME decision making. To this end, the survey included a series of questions regarding the plans of residents and their assessments of their experience in searching for a practice position. The survey also collected information on the age, gender, ethnicity, location of medical school, citizenship status and other variables that may affect the experience of the respondent in the job market.

This report was prepared by Joseph Nolan, project director for the survey, with assistance from Paul Wing and Edward Salsberg.

The Center for Health Workforce Studies is a not-for-profit research center under the auspices of Health Research Incorporated (HRI) and the School of Public Health at the University at Albany. The Center for Health Workforce Studies received partial support for the data analysis from the Federal Health Resources and Services Administration (HRSA). The ideas expressed in this report are those of the Center, and do not necessarily represent the views or positions of HRSA, HRI, the School of Public Health or the University at Albany.

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Section 1. Executive Summary

This report summarizes the results of the *Survey of Residents Completing Training in New York State in 1998* conducted by the Center for Health Workforce Studies in May and June of 1998. The survey, which was administered with the cooperation and assistance of residency program directors and hospital GME directors across the state, consisted of 30 questions requesting information on respondents' demographic characteristics, post-graduation plans, characteristics of post-graduation employment and impressions of the physician job market. A total of 3,048 (66%) of the estimated 4,624 physicians completing residency training in New York in 1998 completed the survey. Of the respondents, 56% had plans to enter patient care, 37% were planning to continue their training, and 9% had other plans.

Some of the tables and charts list data for groupings of specialties (e.g. Primary Care). In this report, Primary Care includes Family Practice, Internal Medicine, Pediatrics and Combined Medicine/Pediatrics.

One notable finding from the survey is the significantly worse job market experiences of international medical school graduates (IMGs) with temporary (J-1, J-2, H-1, H-2 or H-3) visas. With few exceptions, physicians with temporary visas can remain in the U.S. only if they practice in a Health Professionals Shortage Area or continue training. Not surprisingly, these individuals experienced greater difficulty finding employment than U.S. medical school graduates (USMGs) and IMGs who are citizens or permanent residents. In addition, respondents on temporary visas with confirmed practice plans reported lower salaries and greater likelihood of practicing in rural and inner-city areas.

There were significant differences in the job plans and assessments of the job market for different specialties and specialty groupings, although the number of IMGs confounds the results in certain specialties. Adjusting for citizenship status, respondents in primary care specialties reported more difficulty finding a satisfactory practice position than their non-primary care counterparts, although there was no statistically significant difference in their likelihood of having to change plans due to limited practice opportunities. In addition, the salaries reported by primary care physicians were generally lower.

More detailed findings are presented below and in Sections 2 and 3 of the report. Appendix A contains a copy of the 1998 Exit Survey instrument and Appendix B gives response rates by specialty and region.

Characteristics of All Respondents

- Approximately one-third (36%) of all survey respondents were female.
- Thirteen percent (13%) of respondents were under-represented minorities (URMs).
- Just over one-half (52%) of respondents were international medical graduates (IMGs). This varies widely by specialty with the highest concentrations of IMGs found in Internal Medicine (72%), Pediatric Subspecialties (71%), Medicine Subspecialties (69%), Pediatrics (67%) and Psychiatry (67%).
- One-fifth (20%) of respondents were J-1 or J-2 exchange visitors. The highest percentages of J-1 or J-2 visas were found in Pediatrics (33%), Pediatric Subspecialties (33%), Internal Medicine (31%) and Medicine Subspecialties (25%).

Post-Graduation Plans of All Respondents

- Fifty-seven percent (57%) of all survey respondents were planning to enter patient care/ clinical practice on completion of their residency training.
- Approximately one-third (34%) planned to subspecialize or pursue further training. The remaining 9% were split equally among those entering positions as chief residents, teaching/research and other.

Practice Plans of Respondents With Confirmed Plans to Enter Patient Care

- Over one-half (55%) of respondents with confirmed practice plans were entering practice within New York State. Of these, the vast majority (89%) were staying in the same region in which they trained.
- Surgical Subspecialties had the lowest in-state retention rates (43%). Only one-third of respondents in Orthopedic Surgery (34%) and Urology (35%) were remaining instate to begin practice.

- The majority of respondents (57%) were entering group practices. Nearly three quarters (72%) of these were going into group practices as employees as opposed to partners.
- Only four percent (4%) of respondents were planning to enter solo practice and many specialties had no respondents going into solo practice.
- Nearly one-third (31%) of those going into practice were entering practice in hospitals. Of these, nearly two-thirds (65%) were entering ambulatory care or emergency room settings as opposed to inpatient care.
- Over one-fourth (27%) of respondents reported entering practice in inner city locations and another nine percent (9%) were going to rural locations. One-fifth (20%) said they would be practicing in a federal HPSA.
- Respondents from Internal Medicine (37%), Pulmonary Disease (30%), Psychiatry (28%), Pediatrics (27%) and Family Practice (26%) were most likely to be entering practice in HPSAs. Surgical Subspecialists (3%) were least likely to be entering HPSAs.

Salaries Expected by Respondents With Confirmed Plans to Enter Patient Care

- A total of 1,262 (96%) of the 1,318 respondents with confirmed practice plans answered the questions related to starting income. For these respondents the overall median starting income was \$117,715 and the mean was \$124,430.
- Specialties with the highest median income (rounded to nearest thousand) were Orthopedic Surgery (\$181,000), Other Surgical Subspecialties (\$181,000), Emergency Medicine (\$158,000), Diagnostic Radiology (\$156,000) and Ob/Gyn (\$155,000).
- Among the specialty subgroups, Primary Care Specialties had the lowest starting income (\$106,000). Within Primary Care, Pediatrics had the lowest starting income of all specialties (\$98,000). Other specialties with low starting incomes were Psychiatry (\$102,000), Pediatric Subspecialties (\$106,000), Rehabilitation Medicine (\$107,000) and Geriatrics (\$107,000).

Job Market Experiences and Perceptions of All Respondents

The survey included several questions related to the experiences of residents in finding a practice position. Any respondents who were entering or who considered entering patient care/clinical practice were asked to complete this section.

- When IMGs on temporary visas were excluded, more than one-third (34%) of respondents reported difficulty finding a satisfactory position, and nearly one-fifth (18%) found it necessary to change plans due to limited practice opportunities.
- Again, when IMGs holding temporary visas are excluded, specialties with a low proportion of respondents reporting difficulty and needing to change plans included Urology (11%, 4%), Cardiology (17%, 3%) and Emergency Medicine (6%, 8%).
- Overall, respondents' views of the national job market were very positive. Over four-fifths (84%) of respondents felt there were either "Many Jobs" (41%) or "Some Jobs" (43%) available. Less than one percent (0.4%) felt there were "No Jobs".
- Respondents' views of the regional job market were somewhat less positive. Fifty-six percent (56%) felt there were either "Many Jobs" (16%) or "Some Jobs" (40%). Twenty-one percent (21%) reported "Few Jobs" and approximately one-fourth said there were either "Very Few Jobs" (18%) or "No Jobs" (5%) in their region of training.

Section 2. Results For New York State

This section of the report summarizes the responses of all survey respondents. The section is organized into four segments:

- The first segment describes the basic demographic and specialty characteristics of *all* survey respondents.
- The second segment describes the planned activities of *all* survey respondents upon completion of their training.
- The third segment describes the practice locations, practice settings, demographic locations and starting incomes of *respondents with confirmed plans to enter patient care/clinical practice* (i.e. those who have secured a practice position).
- The fourth segment summarizes the job market experiences and perceptions of the physician job market of all survey respondents who were entering or considered entering patient care/clinical practice based on three different questions on the survey. Some of the tabulations in this section exclude IMGs on temporary visas because this subgroup experienced more difficulty due to their visa status. This subgroup confounds the results when making comparisons across specialties.

2.1. Background Characteristics of All Respondents

Table 2.1 presents background characteristics of all survey respondents. This information is presented because some of these variables have been found to be associated with several outcome variables of interest. For example, IMGs, particularly those on temporary visas, are much more likely to report difficulty finding a satisfactory practice position. Thus, the proportion of IMGs in each specialty will confound (i.e. bias) the results when making comparisons across specialties. Appendix B provides more details about response rates by specialty and region.

- Over one-third (36%) of survey respondents were female. Specialties with the largest proportion of females were Dermatology (58%), Therapeutic Radiology (57%) and Pediatrics (56%).
- Surgical Subspecialties and Medicine Subspecialties had the lowest proportion of females (17% and 26%, respectively) among specialty groups. Individual specialties with the lowest percentage of females were Urology (3%) and Cardiology (6%).
- Thirteen percent (13%) of respondents were under-represented minorities (URMs).
 Psychiatry (22%), Ob/Gyn (19%) and Family Practice (18%) had the highest percentage of URMs while Nephrology (0%) and Therapeutic Radiology (5%) had the lowest.
- The median age of all respondents was 32. The oldest subgroup was Medicine Subspecialties (34). Pathology and Psychiatry (both 35) were individual specialties with the oldest respondents. Respondents completing Primary Care specialties were the youngest (31) but Family Practice (34) was an outlier in this group.
- Just over one-half (52%) of all respondents were international medical graduates (IMGs). This fraction varies widely by specialty with the highest concentrations of IMGs found in Internal Medicine (72%), Pediatric Subspecialties (70%), Medicine Subspecialties (69%), Pediatrics (67%) and Psychiatry (67%).

- The specialty group with the smallest proportion of IMGs was Surgical Subspecialties (9%). Individual specialties with small percentages of IMGs were Emergency Medicine (11%), Ob/Gyn (12%) and Dermatology (13%).
- One-fifth (20%) of all respondents were J-1 or J-2 exchange visitors. The highest concentrations of J-1 or J-2 visas were found in Pediatrics (33%), Pediatric Subspecialties (32%), Internal Medicine (31%) and Medicine Subspecialties (25%). Among Medicine Subspecialties, Geriatrics (15%) had a significantly lower percentage of J-1 and J-2 visa holders than the rest.
- Surgical Subspecialties had the lowest fraction of J-1 and J-2 exchange visitors (3%). Individual specialties with low percentages of J-1 and J-2 visas were Emergency Medicine (1%), Ob/Gyn (3%), Dermatology (6%) and Diagnostic Radiology (7%).

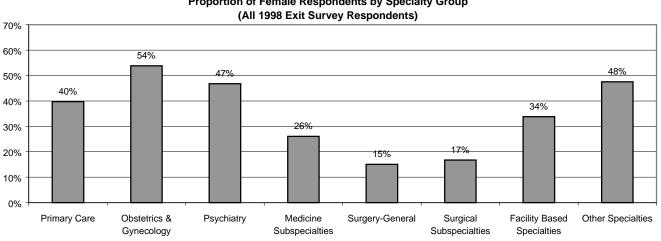
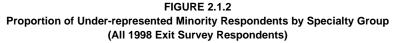
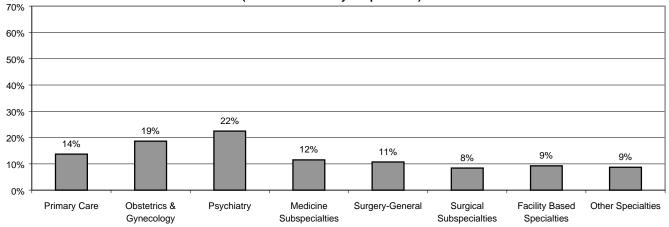


FIGURE 2.1.1 Proportion of Female Respondents by Specialty Group (All 1998 Exit Survey Respondents)





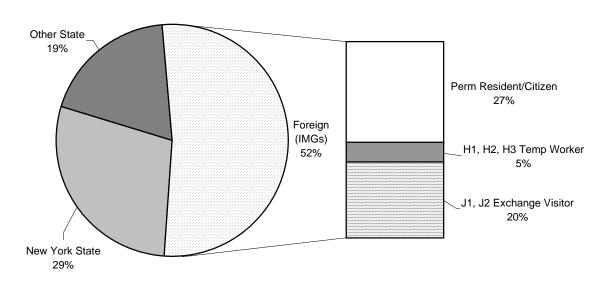


FIGURE 2.1.3 Respondents Location of Medical School & Citizenship Status (All 1998 Exit Survey Respondents)

FIGURE 2.1.4 Propotion of Respondents Who Are IMGs by Specialty Group, (All 1998 Exit Survey Respondents)

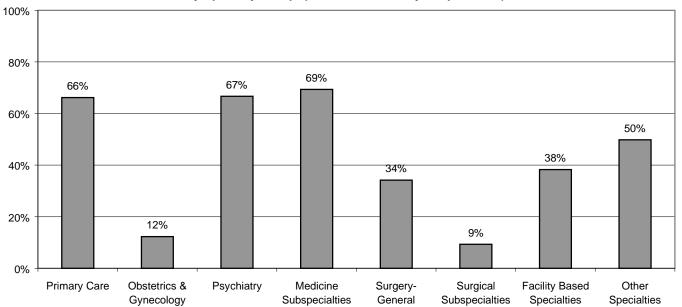


TABLE 2.1

Background Characteristics of Respondents by Specialty, (All 1998 Exit Survey Respondents)

Specialty	n	% Female	% Under Represented Minorities ¹	Median Age	% IMG ²	% J1, J2 Exchange Visitor³
Primary Care	1384	40%	14%	31	66%	29%
Family Practice	151	42%	18%	34	39%	12%
Internal Medicine-General	903	33%	12%	31	72%	31%
Pediatrics-General	299	56%	17%	32	67%	33%
IM & Pediatrics (Combined)	31	55%	10%	30	26%	10%
Obstetrics & Gynecology	130	54%	19%	31	12%	3%
Psychiatry	189	47%	22%	35	67%	17%
Surgery-General	114	15%	11%	32	34%	15%
Internal Medicine Subspecialties	284	26%	12%	34	69%	25%
Cardiology	70	6%	14%	33	64%	27%
Geriatrics	34	50%	15%	34	65%	15%
Hematology/Oncology	36	36%	9%	34	78%	25%
Nephrology	35	17%	0%	33	86%	24%
Pulmonary Disease	41	24%	10%	33	63%	28%
Other IM Subspecialties	68	35%	15%	34	68%	26%
Surgical Subspecialties	269	17%	8%	32	9%	3%
Ophthalmology	63	24%	10%	30	10%	2%
Orthopedic Surgery	87	15%	8%	32	3%	0%
Otolaryngology	30	23%	10%	32	20%	7%
Urology	31	3%	10%	32	6%	0%
Other Surgical Subspecialties	58	16%	5%	34	14%	9%
Facility Based Specialties	454	34%	9%	33	38%	10%
Anesthesiology	133	24%	8%	34	59%	11%
Emergency Medicine	84	33%	16%	32	11%	1%
Pathology	93	48%	7%	35	66%	21%
Radiology (Diagnostic)	123	30%	9%	32	18%	7%
Radiology (Therapeutic)	21	57%	5%	33	14%	10%
Other Specialties	224	48%	9%	34	50%	19%
Dermatology	31	58%	7%	31	13%	6%
Neurology	62	47%	7%	34	53%	20%
Pediatric Subspecialties	53	55%	14%	34	70%	32%
Physical Medicine & Rehab	39	41%	8%	32	46%	16%
All Other	39	38%	8%	37	49%	13%
Total (All Specialties)	3048	36%	13%	32	52%	20%

¹ Under-represented minorities includes Black/African American, Hispanic/Latino and Native American.

² IMG = International (Foreign) Medical Graduate.

³ All J1 & J2 exchange visitors are IMGs.

2.2. Planned Activities Following Completion of Training (All Respondents)

The following summarizes the planned primary activity of all survey respondents following completion of their current training program. Respondents were given the following choices: patient care/clinical practice, subspecializing/continuing training, chief residency, teaching/research and other. Respondents indicating they were entering patient care/clinical practice were asked if they had secured a practice position. Those who had secured a practice position are included in the subgroup labeled "with Confirmed Plans" [Figure 2.2.1]. Respondents indicating they had not been able to find a position or had not searched are in the "No Confirmed Plans" category.

- Fifty-seven percent (57%) of all survey respondents were planning to enter patient care following training completion [Table 2.2]. Of these, eighty percent (80%) had confirmed practice plans.
- Approximately one-third (34%) planned to subspecialize or pursue further training. The remaining 9% were split equally among those entering positions as chief residents, teaching/research and other.
- Emergency Medicine (91%), Family Practice (89%), Ob/Gyn (88%) and Urology (87%) had the highest proportions of respondents planning to enter patient care.
- Specialties with the highest subspecialization rates were Surgery (71%), Neurology (65%) and Diagnostic Radiology (63%). The lowest subspecialization rates were found in Geriatrics (3%), Emergency Medicine (5%), Ob/Gyn (5%) and Family Practice (6%).
- The subspecialization rates in Internal Medicine and Pediatrics were forty-two percent (42%) and thirty-five percent (35%) respectively. However, there were significant differences between J-1 & J-2 exchange visitors and all other respondents: in Internal Medicine the subspecialization rate for J-1 & J-2 exchange visitors was 63% vs. only 33% for all others and in Pediatrics the rates were 59% vs. 24%.
- Pediatrics (6%), Internal Medicine (5%), Combined Medicine/Pediatrics (6%) and Surgery (4%) had the highest percentages of respondents entering chief residencies.

• The highest proportions of respondents entering teaching/research positions were found in Pediatric Subspecialties (15%), Hematology/Oncology (14%), Cardiology (11%), Pathology (11%) and Dermatology (10%).

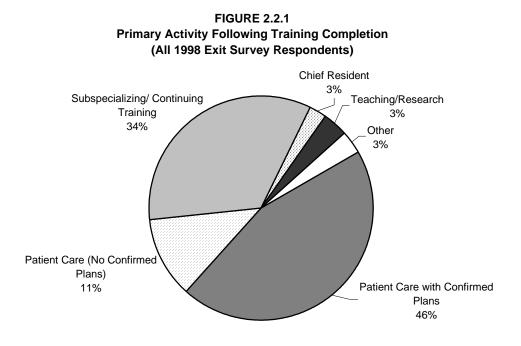
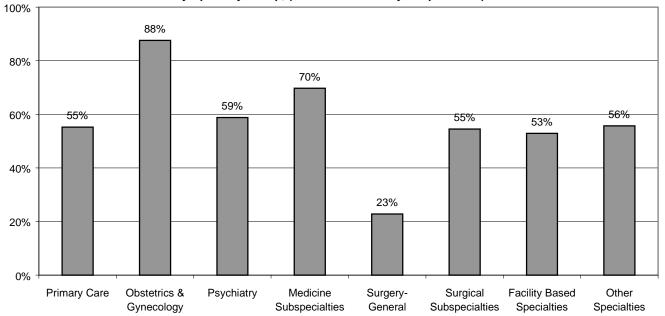


FIGURE 2.2.2 Proportion of Respondents Planning to Enter Patient Care/Clinical Practice by Specialty Group, (All 1998 Exit Survey Respondents)



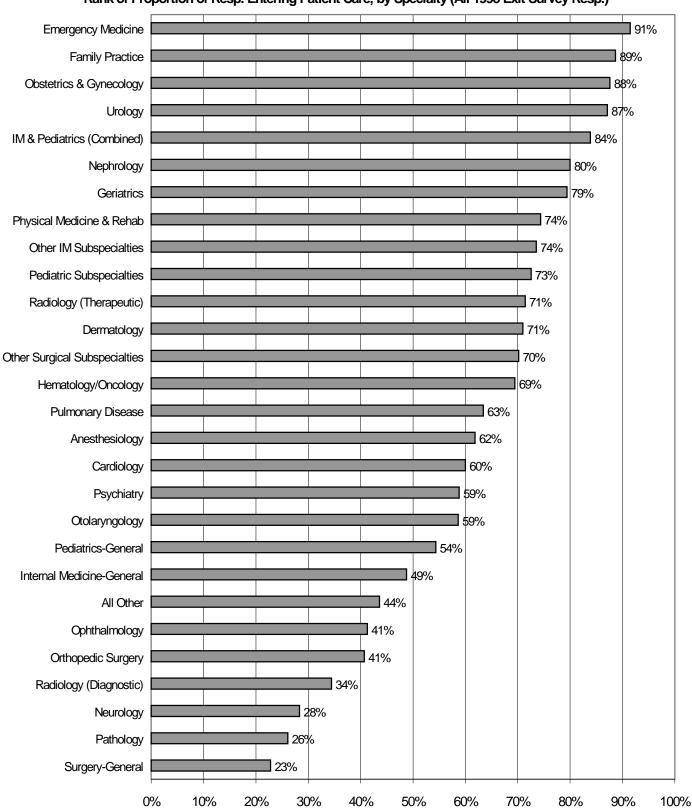


FIGURE 2.2.3 Rank of Proportion of Resp. Entering Patient Care, by Specialty (All 1998 Exit Survey Resp.)

TABLE 2.2

Primary Activity Following Training Completion by Specialty, (All 1998 Exit Survey Respondents)

	Patient Care/	Subspecializing/	Chief	Teaching/	
Specialty	Clinical Practice	Cont. Training	Resident	Research	Other
Primary Care	55%	36%	5%	1%	3%
Family Practice	89%	6%	1%	1%	3%
Internal Medicine-General	49%	42%	5%	1%	3%
Pediatrics-General	54%	35%	6%	2%	3%
IM & Pediatrics (Combined)	84%	10%	6%	0%	0%
Obstetrics & Gynecology	88%	5%	2%	5%	1%
Psychiatry	59%	33%	1%	4%	4%
Surgery-General	23%	71%	4%	1%	1%
Internal Medicine Subspecialties	70%	16%	0%	10%	5%
Cardiology	60%	27%	0%	11%	1%
Geriatrics	79%	3%	0%	3%	15%
Hematology/Oncology	69%	11%	0%	14%	6%
Nephrology	80%	11%	0%	6%	3%
Pulmonary Disease	63%	24%	0%	7%	5%
Other IM Subspecialties	74%	10%	1%	12%	3%
Surgical Subspecialties	55%	41%	0%	3%	1%
Ophthalmology	41%	52%	0%	2%	5%
Orthopedic Surgery	41%	56%	0%	3%	0%
Otolaryngology	59%	38%	0%	3%	0%
Urology	87%	10% 25%	0% 0%	3% 5%	0% 0%
Other Surgical Subspecialties	70%	25%	0%	5%	0%
Facility Based Specialties	53%	38%	0%	4%	4%
Anesthesiology	62%	31%	0%	2%	5%
Emergency Medicine	91%	5%	0%	4%	0%
Pathology	26%	50% 63%	1%	11%	12%
Radiology (Diagnostic) Radiology (Therapeutic)	34% 71%	63% 19%	0% 0%	1% 5%	2% 5%
Other Specialties	56%	28%	0%	10%	6%
Dermatology	71%	19%	0%	10%	0%
Neurology	28%	65% 2%	0% 2%	3%	3%
Pediatric Subspecialties	73% 74%	2% 15%	2% 0%	15% 3%	8% 8%
Physical Medicine & Rehab All Other	74% 44%	23%	0% 0%	3% 21%	8% 13%
Total (All Specialties)	57%	34%	3%	3%	3%

2.3. Practice Plans of Respondents with Confirmed Plans to Enter Patient Care

The following section summarizes four different characteristics of the practice plans of survey respondents *with confirmed plans to enter patient care/clinical practice*.

2.3.1. Practice Location

Table 2.3.1 gives the practice location of respondents with confirmed practice plans. This is a subset of "All Respondents" so the number in this subgroup is presented for each specialty in the first column. A total of 1,360 respondents indicated they had confirmed practice plans. Three-percent (3%) of respondents (a total of 42) were planning to practice outside the U.S. These physicians have been excluded from all other subsections within Section 2.3 of this report.

- Over one-half (55%) of all respondents with confirmed practice plans were entering practice within New York State. Of these, the vast majority (89%) were remaining in the same region in which they were completing training.
- Respondents of Combined Medicine/Pediatrics (72%), Family Practice (69%),
 Psychiatry (65%) and Geriatrics (65%) were most likely to remain in-state to practice.
- Overall, forty-two percent (42%) of respondents were entering practice out of state. Surgical Subspecialties had the highest out-migration rates with 57% of respondents leaving the state. Orthopedic Surgery (66%) and Urology (65%) had particularly high out-migration rates.
- Three percent (3%) of all respondents had confirmed practice plans outside the U.S. although this proportion was much higher in Hematology/Oncology (14%), Cardiology (13%) and Pathology (11%).
- Separate analysis revealed that respondents who attended medical school in New York were much more likely to enter practice in-state (75% of NYS medical school graduates were entering practice in-state vs. 44% for other U.S. medical school graduates and 46% for IMGs; p < .0001).

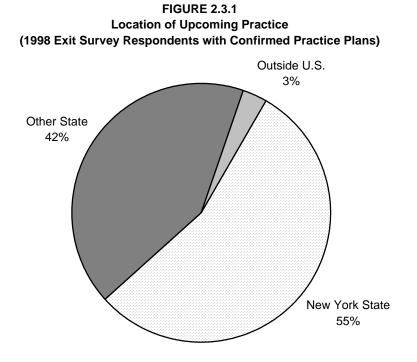
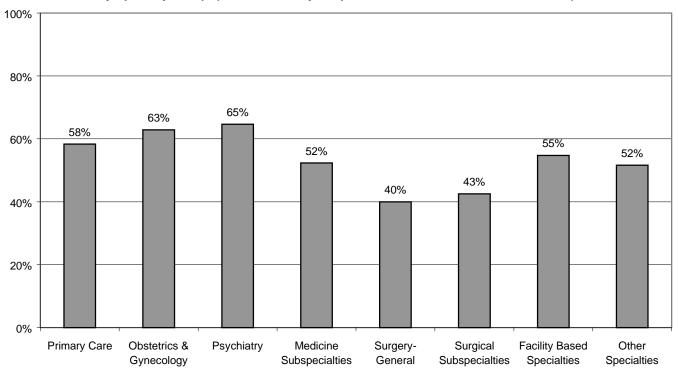


FIGURE 2.3.2 Proportion of Respondents Who Are Entering Practice within New York State by Specialty Group, (1998 Exit Survey Respondents with Confirmed Practice Plans)



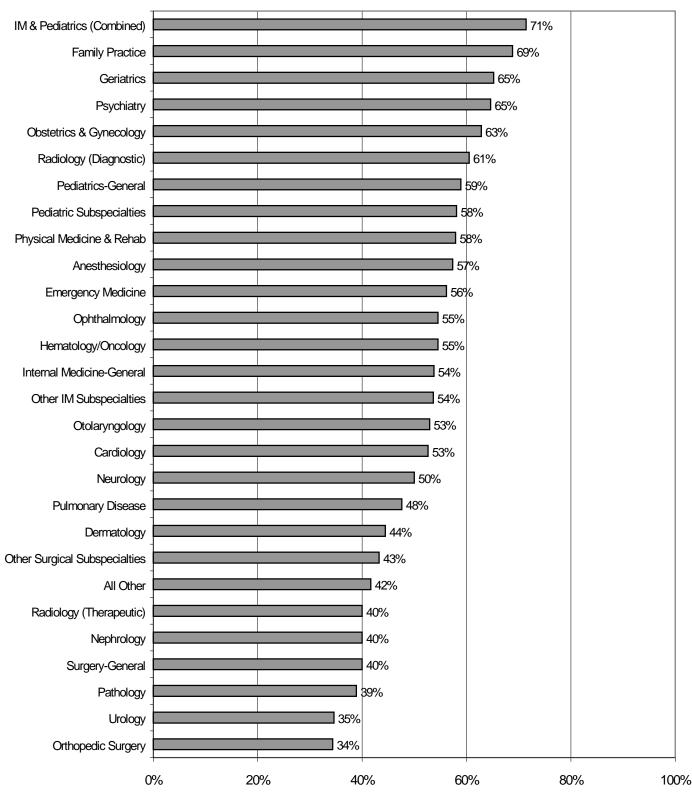


FIGURE 2.3.3 Rank of Proportion of Respondents Who Are Entering Practice within New York State by Specialty, (1998 Exit Survey Respondents with Confirmed Practice Plans)

TABLE 2.3.1

Location of Upcoming Practice by Specialty, (1998 Exit Survey Respondents with Confirmed Practice Plans)

		Within New	York State		
Specialty	n	Same Region	Other Region	Other State	Outside U.S. ¹
Primary Care	539	51%	7%	41%	1%
Family Practice	93	57%	12%	31%	0%
Internal Medicine-General	296	48%	6%	45%	1%
Pediatrics-General	129	52%	7%	39%	2%
IM & Pediatrics (Combined)	21	62%	10%	29%	0%
Obstetrics & Gynecology	105	56%	7%	37%	0%
Psychiatry	82	61%	4%	33%	2%
Surgery-General	21	25%	15%	55%	5%
Internal Medicine Subspecialties	171	48%	5%	42%	6%
Cardiology	39	45%	8%	34%	13%
Geriatrics	23	61%	4%	35%	0%
Hematology/Oncology	22	55%	0%	32%	14%
Nephrology	25	36%	4%	60%	0%
Pulmonary Disease	21	48%	0%	48%	5%
Other IM Subspecialties	41	46%	7%	44%	2%
Surgical Subspecialties	134	40%	3%	54%	4%
Ophthalmology	22	50%	5%	45%	0%
Orthopedic Surgery	32	34%	0%	59%	6%
Otolaryngology	17	41%	12%	47%	0%
Urology	26	35%	0%	65%	0%
Other Surgical Subspecialties	37	41%	3%	49%	8%
Facility Based Specialties	212	50%	5%	42%	4%
Anesthesiology	68	50%	7%	40%	3%
Emergency Medicine	73	56%	0%	41%	3%
Pathology	18	39%	0%	50%	11%
Radiology (Diagnostic)	38	50%	11%	37%	3%
Radiology (Therapeutic)	15	33%	7%	53%	7%
Other Specialties	96	44%	8%	47%	1%
Dermatology	18	39%	6%	56%	0%
Neurology	14	29%	21%	50%	0%
Pediatric Subspecialties	31	52%	7%	42%	0%
Physical Medicine & Rehab	21	53%	5%	37%	5%
All Other	12	42%	0%	58%	0%
Total (All Specialties)	1360	49%	6%	42%	3%

¹ This subgroup (ie. respondents entering practice outside the U.S.) has been excluded from all other subsections within Section 2.3 of this report (i.e. regarding respondents' practice plans).

2.3.2. Principal Practice Setting

Respondents were asked to indicate the practice setting of their upcoming principal practice from a list of 15 choices. Table 2.3.2 shows the breakdown among the most common responses. "Other" here includes freestanding health center or clinic, HMO, urgent care clinic, military, state or local health department, private industry, nursing home, temp agency and other. All of these categories combined accounted for only eight percent (8%) of all responses.

- The majority of respondents (57%) were entering group practices. Nearly three quarters (72%) of these were going into groups as employees as opposed to partners.
- Only four percent (4%) of respondents were planning to enter solo practice and many specialties had no respondents entering solo practice. The outlier in this distribution was Rehabilitation Medicine where twenty-eight percent (28%) went into solo practice, although there were only 21 respondents in the specialty. Other specialties with more than 10% entering solo practice were Ophthalmology (14%), Orthopedic Surgery (13%) and Dermatology (11%).
- Nearly one-third (31%) of respondents were entering practice in hospitals. Of these, nearly two-thirds (65%) were entering ambulatory care or emergency room settings as opposed to inpatient.
- As expected, Emergency Medicine had the highest proportion entering hospitals (87%). Other specialties listed in this report as "Facility Based Specialties" (such as Anesthesiology) did not appear any more likely to be entering hospitals than other specialties. This may be due to the fact that many physicians who practice in hospitals are part of group practices within hospitals and therefore reported group practice for their principal practice setting as opposed to choosing one of the hospital categories.
- Specialties with the lowest proportion entering hospital settings included Nephrology (4%), Ophthalmology (5%), Urology (8%) and Cardiology (9%).
- Specialties most likely to be entering "Other" settings included Psychiatry (24%), Hematology/Oncology (21%) and Therapeutic Radiology (21%).

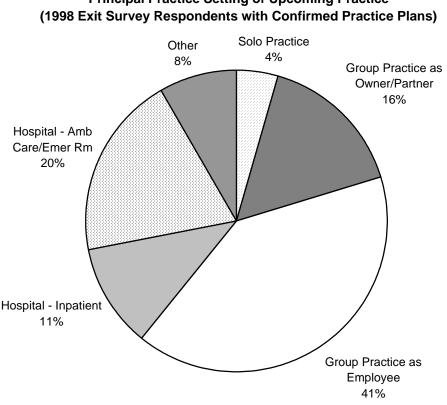


FIGURE 2.3.5 Proportion of Respondents Who Are Entering Solo & Group Practices by Specialty Group, (1998 Exit Survey Respondents with Confirmed Practice Plans)

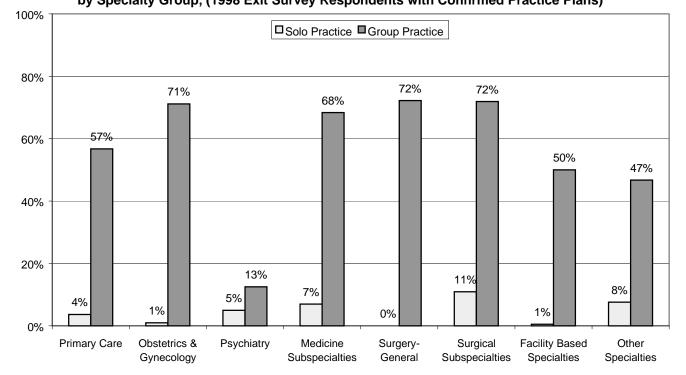


TABLE 2.3.2

Principal Practice Setting of Upcoming Practice by Specialty, (1998 Exit Survey Respondents with Confirmed Practice Plans)

		Group Practice		Hos		
	Solo	as Owner/	as		Amb. Care	
Specialty	Practice	Partner	Employee	Inpatient	or ER	Other
Primary Care	4%	12%	45%	7%	23%	10%
Family Practice	3%	14%	53%	0%	21%	9%
Internal Medicine-General	4%	12%	43%	7%	24%	10%
Pediatrics-General	3%	9%	42%	12%	24%	10%
IM & Pediatrics (Combined)	0%	21%	47%	0%	16%	16%
Obstetrics & Gynecology	1%	31%	40%	9%	9%	11%
Psychiatry	5%	4%	9%	33%	26%	24%
Surgery-General	0%	44%	28%	22%	0%	6%
Internal Medicine Subspecialties	7%	16%	52%	10%	11%	4%
Cardiology	9%	27%	52%	9%	0%	3%
Geriatrics	5%	9%	45%	0%	36%	5%
Hematology/Oncology	5%	11%	47%	0%	16%	21%
Nephrology	4%	21%	71%	4%	0%	0%
Pulmonary Disease	5%	10%	50%	30%	5%	0%
Other IM Subspecialties	10%	15%	48%	15%	13%	0%
Surgical Subspecialties	11%	29%	43%	9%	4%	5%
Ophthalmology	14%	36%	45%	0%	5%	0%
Orthopedic Surgery	13%	30%	33%	7%	3%	13%
Otolaryngology	0%	29%	59%	0%	12%	0%
Urology	4%	27%	58%	4%	4%	4%
Other Surgical Subspecialties	18%	24%	30%	24%	0%	3%
Facility Based Specialties	1%	17%	33%	11%	34%	4%
Anesthesiology	2%	26%	52%	15%	3%	3%
Emergency Medicine	0%	6%	4%	1%	86%	3%
Pathology	0% 0%	25%	44% 54%	25%	0%	6%
Radiology (Diagnostic)	0% 0%	24%	51%	22%	0% 43%	3%
Radiology (Therapeutic)	0%	7%	29%	0%	43%	21%
Other Specialties	8%	5%	41%	23%	18%	4%
Dermatology	11%	6%	72%	0%	11%	0%
Neurology	0%	14%	50%	21%	7%	7%
Pediatric Subspecialties	0%	3%	26%	45%	23%	3%
Physical Medicine & Rehab	28%	6% 0%	33%	17%	11%	6%
All Other	0%	0%	33%	17%	42%	8%
Total (All Specialties)	4%	16%	41%	11%	20%	8%

2.3.3. Demographics of Practice Location

Table 2.3.3 summarizes the responses to two questions relating to the demographics of the practice location. The first four columns give the demographic description of the principal practice location and the last column gives the proportion entering practice in federally designated Health Professionals Shortage Areas (HPSAs). It should be noted that (as is true with all data presented in this report) these numbers are based on <u>self</u>-reporting by respondents.

- Over one-fourth (27%) of respondents reported entering practice in inner city locations and another nine percent (9%) were going to rural locations. One-fifth (20%) said they would be practicing in a federal HPSA.
- Respondents from Geriatrics (43%), Emergency Medicine (40%) and Rehabilitation Medicine (39%) were most likely to be entering inner city practices.
- Respondents from Primary Care Specialties were most likely to be entering rural areas. The outlier in this group was Pediatrics (8%) which was lower than Family Practice (21%), Internal Medicine (15%) and Combined Medicine/Pediatrics (15%). A high proportion of Psychiatry respondents (13%) were also entering practice in rural areas.
- Respondents from Internal Medicine (37%), Pulmonary Disease (30%), Psychiatry (28%), Pediatrics (27%) and Family Practice (26%) were most likely to be entering practice in HPSAs. Surgical Subspecialists (3%) were least likely to be entering HPSAs.
- It should be noted that citizenship status has a strong influence on an individual's likelihood of entering practice in a HPSA. J-1 and J-2 exchange visitors are required to practice in a federal HPSA or return to their native country. Therefore, specialties with a high proportion of J-1 and J-2 temporary visa holders had high proportions of respondents entering HSPAs [see Figure 2.3.9].

FIGURE 2.3.7 Demographics of Practice Location of Upcoming Practice by Region of Residency Training, (1998 Exit Survey Resp. with Confirmed Practice Plans)

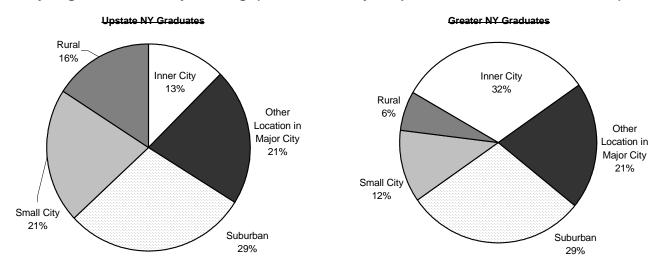


FIGURE 2.3.8 Proportion of Resp Entering Practice in Rural & Inner City Areas by Specialty Group, (1998 Exit Survey Resp with Confirmed Practice Plans)

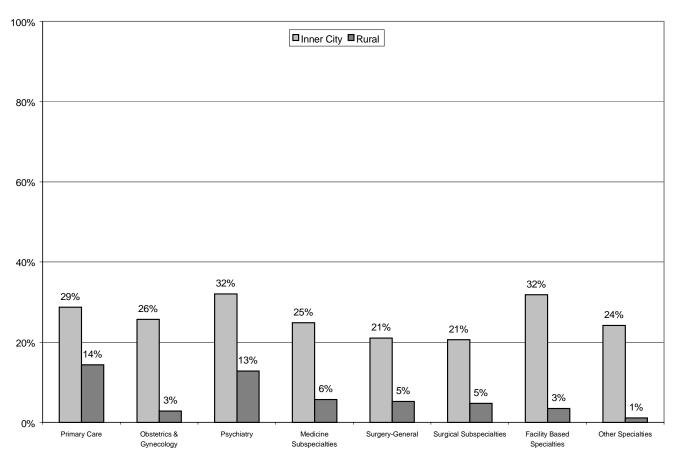


FIGURE 2.3.9 Proportion of Respondents Entering Practice in a Federal HPSA by Location of Medical School & Citizenship Status (1998 Exit Survey Respondents with Confirmed Practice Plans)

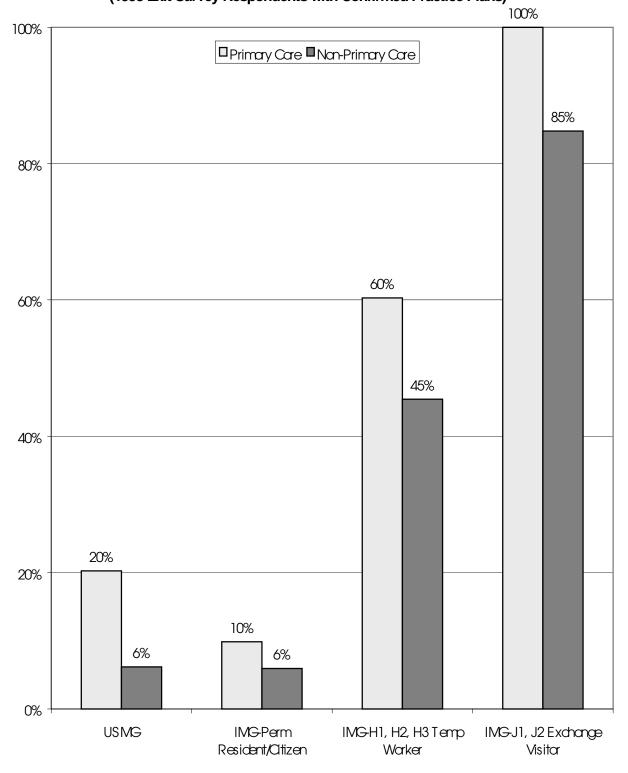


TABLE 2.3.3

Demographics of Practice Location by Specialty, (1998 Exit Survey Respondents with Confirmed Practice Plans)

		% Practicina				
	Inner	Inner Other Area		Small		in a Federal
Specialty	City	in Major City	Suburban	City	Rural	HPSA ¹
Primary Care	29%	14%	27%	15%	14%	32%
Family Practice	21%	10%	34%	14%	21%	26%
Internal Medicine-General	30%	15%	26%	14%	15%	37%
Pediatrics-General	32%	15%	24%	21%	8%	26%
IM & Pediatrics (Combined)	25%	20%	30%	10%	15%	15%
Obstetrics & Gynecology	26%	31%	33%	7%	3%	15%
Psychiatry	32%	22%	23%	10%	13%	28%
Surgery-General	21%	16%	42%	16%	5%	6%
Internal Medicine Subspecialties	25%	19%	33%	17%	6%	20%
Cardiology	21%	27%	27%	18%	6%	16%
Geriatrics	43%	9%	35%	4%	9%	17%
Hematology/Oncology	28%	33%	22%	11%	6%	21%
Nephrology	13%	17%	33%	29%	8%	16%
Pulmonary Disease	32%	16%	26%	21%	5%	30%
Other IM Subspecialties	20%	15%	45%	18%	3%	23%
Surgical Subspecialties	21%	31%	33%	11%	5%	3%
Ophthalmology	5%	27%	41%	23%	5%	0%
Orthopedic Surgery	28%	31%	21%	10%	10%	0%
Otolaryngology	31%	38%	25%	0%	6%	0%
Urology	12%	27%	42%	15%	4%	8%
Other Surgical Subspecialties	27%	33%	33%	6%	0%	6%
Facility Based Specialties	32%	27%	28%	9%	3%	10%
Anesthesiology	35%	15%	42%	6%	2%	9%
Emergency Medicine	40%	30%	11%	13%	6%	17%
Pathology	19%	19%	44%	13%	6%	0%
Radiology (Diagnostic)	22%	44%	25%	6%	3%	5%
Radiology (Therapeutic)	14%	36%	43%	7%	0%	0%
Other Specialties	24%	20%	31%	24%	1%	7%
Dermatology	12%	29%	47%	12%	0%	0%
Neurology	21%	7%	29%	43%	0%	0%
Pediatric Subspecialties	23%	16%	39%	19% 22%	3%	16% 0%
Physical Medicine & Rehab	39% 25%	17% 33%	22% 8%	22%	0%	0% %
All Other	25%			33%	0%	8%
Total (All Specialties)	27%	21%	29%	14%	9%	20%

¹ HPSA = Health Professionals Shortage Area.

2.3.4. Starting Income

Table 2.3.4 presents descriptive statistics for respondents starting income. Each individual's starting income was computed by summing their expected base and additional/incentive income. The number of respondents (n) is given because many specialties had a relatively small number of respondents. As is often the case with salary data, the distribution was skewed so both the mean and median are presented. Finally, the specialties are ranked by each summary statistic in descending order (i.e. 1 is highest income and 28 is lowest).

- A total of 1,262 (96%) of the 1,318 respondents with confirmed practice plans answered the questions relating to starting income. For these respondents, the median starting income was \$117,715 and the mean was \$124,430.
- Specialties with the highest income (rounded to nearest thousand, using medians) were Orthopedic Surgery (\$181,000), Other Surgical Subspecialties (\$181,000), Emergency Medicine (\$158,000), Diagnostic Radiology (\$156,000) and Ob/Gyn (\$155,000).
- Among the specialty subgroups, Primary Care Specialties had the lowest starting income (\$106,000) and Pediatrics had the lowest starting income of all specialties (\$98,000). Other specialties with low starting incomes were Psychiatry (\$102,000), Pediatric Subspecialties (\$106,000), Rehabilitation Medicine (\$107,000) and Geriatrics (\$107,000).
- Specialties with a relatively small number of respondents included Neurology (13), Therapeutic Radiology (14), Pathology (15) and Otolaryngology (15) each of which had 15 or less. In addition, several other specialties had less than 25 respondents. The reader is urged to use caution in drawing conclusions based on these relatively small sample sizes.

FIGURE 2.3.10 Distribution of Starting Income by Region of Residency Training, (1998 Exit Survey Resp. with Confirmed Practice Plans)

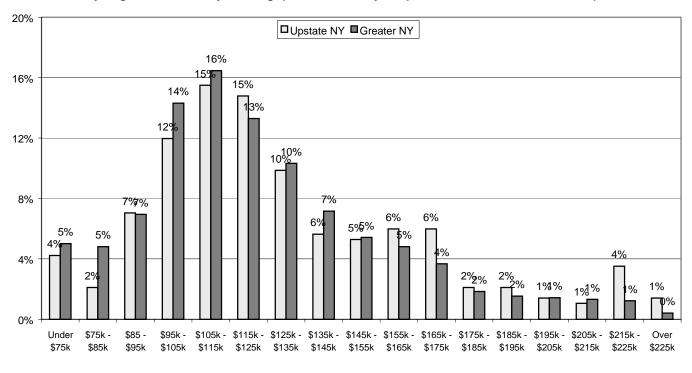
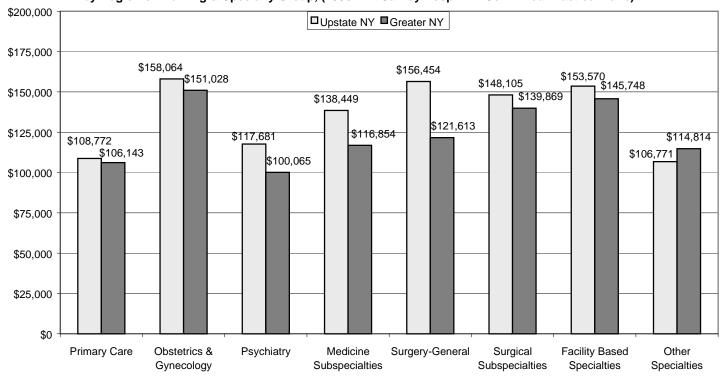


FIGURE 2.3.11 Median Starting Income by Region of Training & Specialty Group, (1998 Exit Survey Resp with Confirmed Practice Plans)



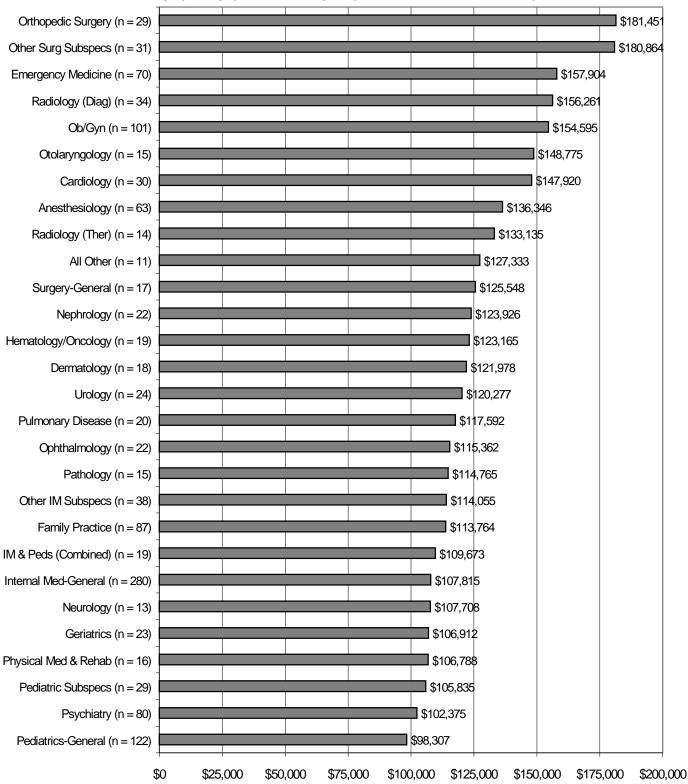


FIGURE 2.3.12 Rank of Median Starting Income by Specialty, (1998 Exit Survey Resp with Confirmed Practice Plans)

TABLE 2.3.4

Rank of Starting Income by Specialty, (1998 Exit Survey Respondents with Confirmed Practice Plans)

			Rank		Rank
Specialty	n	Mean	(of 28)	Median	(of 28)
Primary Care	508	\$107,356	N/A	\$106,436	N/A
Family Practice	87	\$114,922	18	\$113,764	20
Internal Medicine-General	280	\$109,466	24	\$107,815	22
Pediatrics-General	122	\$96,548	28	\$98,307	28
IM & Pediatrics (Combined)	19	\$111,010	22	\$109,673	21
Obstetrics & Gynecology	101	\$152,464	7	\$154,595	5
Psychiatry	80	\$104,658	27	\$102,375	27
Surgery-General	17	\$135,049	10	\$125,548	11
Internal Medicine Subspecialties	152	\$124,470	N/A	\$119,398	N/A
Cardiology	30	\$153,425	6	\$147,920	7
Geriatrics	23	\$106,991	26	\$106,912	24
Hematology/Oncology	19	\$124,669	11	\$123,165	13
Nephrology	22	\$122,351	13	\$123,926	12
Pulmonary Disease	20	\$121,509	15	\$117,592	16
Other IM Subspecialties	38	\$114,877	19	\$114,055	19
Surgical Subspecialties	121	\$152,212	N/A	\$142,318	N/A
Ophthalmology	22	\$115,236	17	\$115,362	17
Orthopedic Surgery	29	\$180,024	1	\$181,451	1
Otolaryngology	15	\$156,359	5	\$148,775	6
Urology	24	\$120,500	16	\$120,277	15
Other Surgical Subspecialties	31	\$174,980	2	\$180,864	2
Facility Based Specialties	196	\$148,130	N/A	\$148,015	N/A
Anesthesiology	63	\$138,573	8	\$136,346	8
Emergency Medicine	70	\$161,934	3	\$157,904	3
Pathology	15	\$110,289	23	\$114,765	18
Radiology (Diagnostic)	34	\$158,507	4	\$156,261	4
Radiology (Therapeutic)	14	\$137,455	9	\$133,135	9
Other Specialties	87	\$115,587	N/A	\$108,676	N/A
Dermatology	18	\$121,680	14	\$121,978	14
Neurology	13	\$108,848	25	\$107,708	23
Pediatric Subspecialties	29	\$112,098	21	\$105,835	26
Physical Medicine & Rehab	16	\$114,700	20	\$106,788	25
All Other	11	\$124,070	12	\$127,333	10
Total (All Specialties)	1262	\$124,430		\$117,715	

2.4. Job Market Experiences and Perceptions of <u>All Respondents</u>

The following section presents the job market perceptions and experiences of respondents who are entering or who considered entering patient care/clinical practice.

2.4.1 Experiences in Searching for a Practice Position (IMGs on Temporary Visas Excluded)

Table 2.4.1 gives the proportion of respondents who reported difficulty finding a practice position with which they were satisfied and the fraction who had to change plans due to limited practice opportunities. *Please note that IMGs on temporary visas have been excluded in computing the percentages presented in this table*. This subgroup experienced more difficulty and were more likely to have to change plans than USMGs and IMGs who are citizens or permanent residents because of limitations due to their visa status. For this reason, temporary visa holders become a strong confounder when making comparisons across specialties [see Figure 2.4.1].

The percentages presented in Table 2.4.1 have an inverse relationship to demand. More respondents having difficulty and/or having to change plans due to limited job opportunities would point to a tighter, more competitive job market and lower demand. For this reason, percentages are ranked in ascending order with 1 for the fewest having difficulty/changing plans and 28 experiencing the most difficulty.

- Nearly one-third (34%) of respondents reported difficulty finding a satisfactory position and nearly one-fifth (18%) found it necessary to change plans due to limited practice opportunities.
- Specialties with the highest proportion of respondents experiencing difficulty and needing to change plans were Therapeutic Radiology (53%, 47%), Rehabilitation Medicine (57%, 40%), Pathology (52%, 44%) and Pulmonary Disease (52%, 36%).
- Specialties with a low proportion of respondents experiencing difficulty and having to change plans included Urology (11%, 4%), Cardiology (17%, 3%) and Emergency Medicine (6%, 8%).

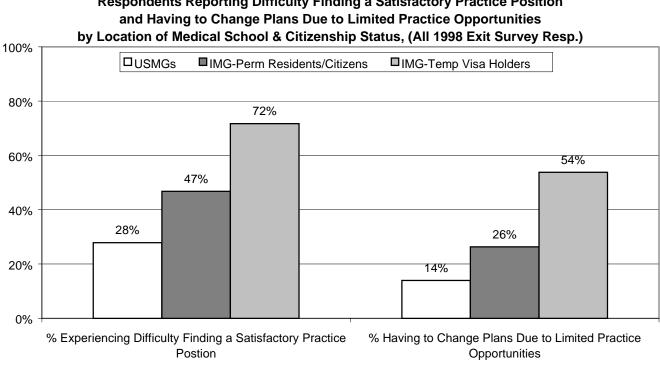


FIGURE 2.4.2 Respondents Having to Change Plans Due to Limited Practice Opportunities by Location of Medical School & Specialty Group, (IMGs with Temporary Visas Excluded)

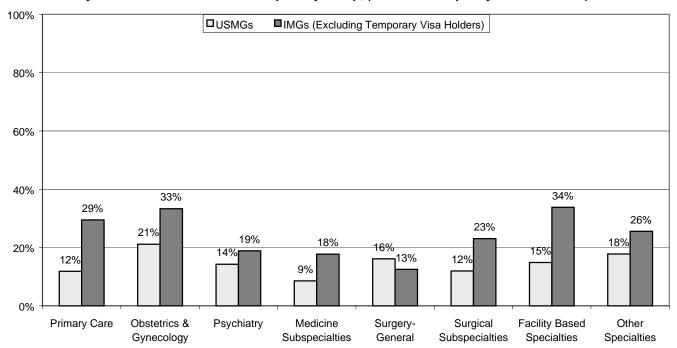


TABLE 2.4.1

Ranks of Proportion of Resp. Experiencing Difficulty Finding a Satisfactory Practice Position and Proportion Having to Change Plans Due to Limited Practice Opportunities

	% of Respondents			
	Reporting Difficulty		Having to Change Plans	
	Finding a Satisfactory	Rank	Due to Limited	Rank
Specialty	Practice Position	(of 28)	Practice Opportunities	(of 28)
Primary Care	43%	N/A	20%	N/A
Family Practice	39%	21	14%	12
Internal Medicine-General	49%	24	24%	22
Pediatrics-General	36%	17	18%	18
IM & Pediatrics (Combined)	36%	18	9%	5
Obstetrics & Gynecology	32%	13	22%	21
Psychiatry	22%	5	17%	16
Surgery-General	24%	8	15%	13
Internal Medicine Subspecialties	32%	N/A	14%	N/A
Cardiology	17%	4	3%	1
Geriatrics	39%	22	21%	20
Hematology/Oncology	33%	14	11%	9
Nephrology	23%	6	13%	10
Pulmonary Disease	52%	26	36%	25
Other IM Subspecialties	33%	14	10%	7
Surgical Subspecialties	28%	N/A	13%	N/A
Ophthalmology	39%	23	14%	11
Orthopedic Surgery	27%	9	9%	6
Otolaryngology	33%	14	28%	23
Urology	11%	2	4%	2
Other Surgical Subspecialties	27%	10	16%	14
Facility Based Specialties	29%	N/A	20%	N/A
Anesthesiology	38%	19	18%	17
Emergency Medicine	6%	1	8%	4
Pathology	52%	25	44%	27
Radiology (Diagnostic)	28%	11	18%	19
Radiology (Therapeutic)	53%	27	47%	28
Other Specialties	32%	N/A	20%	N/A
Dermatology	16%	3	16%	15
Neurology	23%	6	7%	3
Pediatric Subspecialties	30%	12	10%	7
Physical Medicine & Rehab	57%	28	40%	26
All Other	38%	20	33%	24
Total (All Specialties)	34%		18%	

by Specialty, (IMGs with Temporary Visas Excluded)

2.4.2. Perceptions of the Regional Job Market (All Respondents)

Table 2.4.2 presents respondents perceptions of the job market for their specialty within 50 miles of the site at which they trained. Respondents were asked to give their assessment of the regional job market by choosing from five point scale ranging from "Many Jobs" to "No Jobs". In order to allow comparisons to be made, the following Likert Scale was developed: "Many Jobs" = +2, "Some Jobs" = +1, "Few Jobs" = 0, "Very Few Jobs" = -1, and "No Jobs" = -2. A composite score was then computed for each specialty by multiplying the Likert Score for each response by the proportion of responses falling in that category. For example, the composite score for Family Practice was computed as:

Composite Score _{Family Practice} = $2 \times (.26) + 1 \times (.49) + 0 \times (.18) + -1 \times (.07) + -2 \times (.01)$

Composite Score _{Family Practice} = +0.91

Specialties were then ranked in descending order by composite score. Higher positive scores represent a better job market and more jobs.

- Overall, respondents viewed the regional job market somewhat positively. More than one-half (56%) felt their were either Some Jobs (40%) or Many Jobs (16%). Only five percent (5%) felt there were No Jobs.
- Emergency Medicine (+1.31), Dermatology (+1.17) and Psychiatry (+1.05) respondents had the most positive view of the regional job market. Each of these had an average assessment above 1.00 (i.e., Some Jobs) and each had at least one-third (33%) of respondents reporting that there were Many Jobs.
- Pathology (-0.41), Ophthalmology (-0.08) and Therapeutic Radiology (+0.05) respondents had the most pessimistic view of the regional job market. Twelve percent (12%) of Pathology respondents felt there were No Jobs.
- Among Primary Care Specialties, Family Practice had the highest composite score (+0.91). Cardiology (+0.69) was best among Medicine Subspecialties and Urology (+0.77) among Surgical Subspecialties.

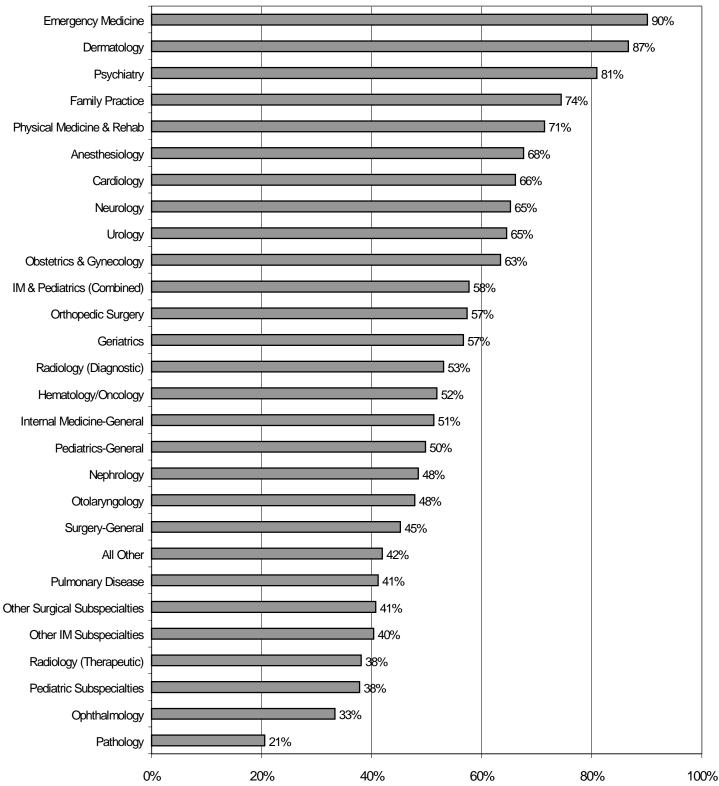


FIGURE 2.4.3 Rank of Prop of Resp Reporting Many Jobs or Some Jobs in their Region of Training by Specialty, (All 1998 Exit Survey Respondents)

TABLE 2.4.2

Resp. Assessment of the Job Market for Their Specialty in Their Region of Training¹ by Specialty with Ranking by Composite Score, (All 1998 Exit Survey Respondents)

	Many	Some	Few	Very Few	No	Composite	Rank
Specialty	Jobs	Jobs	Jobs	Jobs	Jobs	Score ²	(of 28)
Primary Care	14%	40%	20%	19%	7%	0.36	N/A
Family Practice	26%	49%	18%	7%	1%	0.91	4
Internal Medicine-General	10%	41%	20%	20%	8%	0.25	20
Pediatrics-General	20%	30%	22%	21%	7%	0.34	16
IM & Pediatrics (Combined)	15%	42%	23%	19%	0%	0.54	12
Obstetrics & Gynecology	20%	43%	23%	13%	1%	0.69	9
Psychiatry	33%	48%	12%	6%	1%	1.05	3
Surgery-General	14%	32%	30%	22%	3%	0.32	17
Internal Medicine Subspecialties	15%	37%	23%	20%	5%	0.36	N/A
Cardiology	18%	48%	21%	11%	2%	0.69	8
Geriatrics	23%	33%	17%	20%	7%	0.47	14
Hematology/Oncology	11%	41%	30%	11%	7%	0.37	15
Nephrology	15%	33%	24%	21%	6%	0.30	18
Pulmonary Disease	12%	29%	26%	26%	6%	0.15	22
Other IM Subspecialties	11%	30%	25%	30%	5%	0.11	24
Surgical Subspecialties	11%	37%	23%	26%	3%	0.28	N/A
Ophthalmology	2%	31%	24%	43%	0%	-0.08	27
Orthopedic Surgery	11%	47%	24%	17%	1%	0.48	13
Otolaryngology	26%	22%	35%	17%	0%	0.57	11
Urology	26%	39%	23%	13%	0%	0.77	5
Other Surgical Subspecialties	6%	35%	17%	31%	11%	-0.07	26
Facility Based Specialties	17%	41%	19%	19%	4%	0.48	N/A
Anesthesiology	22%	45%	16%	14%	3%	0.70	6
Emergency Medicine	44%	46%	7%	1%	1%	1.31	1
Pathology	1%	19%	29%	38%	12%	-0.41	28
Radiology (Diagnostic)	4%	49%	21%	23%	2%	0.30	19
Radiology (Therapeutic)	0%	38%	33%	24%	5%	0.05	25
Other Specialties	19%	40%	22%	15%	4%	0.55	N/A
Dermatology	33%	53%	10%	3%	0%	1.17	2
Neurology	17%	48%	22%	13%	0%	0.70	7
Pediatric Subspecialties	11%	27%	36%	20%	7%	0.15	23
Physical Medicine & Rehab	23%	49%	9%	14%	6%	0.69	10
All Other	19%	23%	26%	23%	10%	0.19	21
Total (All Specialties)	16%	40%	21%	18%	5%	0.45	N/A

¹ The *Region of Training* was defined as "within 50 miles of training site" on the survey question.

² Composite Score computed using the following Likert scale: "Many Jobs" = +2, "Some Jobs" = +1, "Few Jobs" = 0, "Very Few Jobs" = -1, "No Jobs" = -2.

2.4.3. Perceptions of the National Job Market (All Respondents)

Table 2.4.3 presents the perceptions of all survey respondents concerning the national job market in their respective specialties. The response choices and composite score are the same as used in Table 2.4.2 (referring to the regional job market). As one might expect, there is a high degree of correlation between respondents view of the regional and national job market (r = 0.826; p<.0001). In general, however, the national job market was viewed more positively than the New York job market.

Highlights

- Overall, respondents view of the national job market was positive (composite score = +1.18) and less than one-percent (0.4%) felt there were No Jobs. Over four-fifths (84%) of all respondents felt there were either Some Jobs (43%) or Many Jobs (41%).
- Family Practice respondents had the highest composite score (+1.74) and over threefourths (76%) said there were Many Jobs. Nephrology had the second highest composite score (+1.69) which was a surprise given their relatively negative view of the regional job market. Other specialties with high composite scores included Emergency Medicine (+1.67), Psychiatry (+1.56) and Dermatology (+1.55).
- Although no specialty had a negative composite score, Pathology (+0.03) was substantially lower than any other specialty. Other specialties with relatively low scores included Ophthalmology (+0.60), Therapeutic Radiology (+0.76) and Diagnostic Radiology (+0.81).

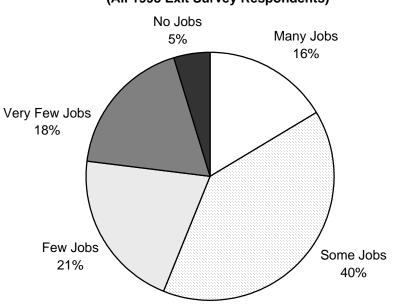


FIGURE 2.4.4 Respondents Assessment of the Regional Job Market in Their Specialty (All 1998 Exit Survey Respondents)

FIGURE 2.4.5 Respondents Assessment of the National Job Market in Their Specialty (All 1998 Exit Survey Respondents)

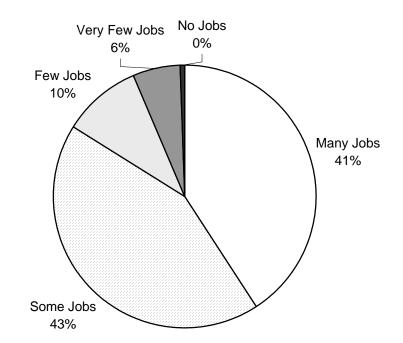


TABLE 2.4.3

Respondents' Assessment of the National Job Market for Their Specialty by Specialty with Ranking by Composite Score, (All 1998 Exit Survey Respondents)

by opcolarly with Ranking	Many	Some	Few	Very Few	No	Composite	, Rank
Specialty	Jobs	Jobs	Jobs	Jobs	Jobs	Score ²	(of 28)
Primary Care	44%	40%	9%	6%	0%	1.21	N/A
Family Practice	76%	23%	1%	1%	0%	1.74	1
Internal Medicine-General	40%	43%	10%	7%	1%	1.14	17
Pediatrics-General	39%	41%	11%	9%	0%	1.10	18
IM & Pediatrics (Combined)	48%	40%	8%	4%	0%	1.32	12
Obstetrics & Gynecology	48%	46%	5%	2%	0%	1.39	10
Psychiatry	61%	35%	3%	1%	1%	1.56	4
Surgery-General	35%	55%	6%	4%	0%	1.21	14
Internal Medicine Subspecialties	39%	47%	10%	4%	0%	1.22	N/A
Cardiology	34%	54%	9%	3%	0%	1.18	16
Geriatrics	58%	39%	0%	3%	0%	1.52	7
Hematology/Oncology	57%	39%	4%	0%	0%	1.54	6
Nephrology	71%	26%	3%	0%	0%	1.69	2
Pulmonary Disease	25%	58%	8%	8%	0%	1.00	20
Other IM Subspecialties	17%	53%	25%	5%	0%	0.81	23
Surgical Subspecialties	28%	51%	15%	7%	0%	0.99	N/A
Ophthalmology	8%	51%	36%	6%	0%	0.60	27
Orthopedic Surgery	31%	51%	13%	5%	0%	1.09	19
Otolaryngology	44%	52%	4%	0%	0%	1.40	9
Urology	52%	48%	0%	0%	0%	1.52	7
Other Surgical Subspecialties	21%	50%	11%	16%	2%	0.73	26
Facility Based Specialties	33%	43%	14%	11%	1%	0.96	N/A
Anesthesiology	43%	41%	11%	4%	0%	1.23	13
Emergency Medicine	71%	27%	1%	1%	0%	1.67	3
Pathology	1%	36%	29%	31%	3%	0.03	28
Radiology (Diagnostic)	19%	57%	11%	12%	1%	0.81	24
Radiology (Therapeutic)	5%	67%	29%	0%	0%	0.76	25
Other Specialties	38%	47%	8%	6%	1%	1.15	N/A
Dermatology	55%	45%	0%	0%	0%	1.55	5
Neurology	34%	54%	10%	2%	0%	1.20	15
Pediatric Subspecialties	25%	58%	4%	10%	2%	0.94	21
Physical Medicine & Rehab	44%	44%	12%	0%	0%	1.32	11
All Other	38%	29%	12%	18%	3%	0.82	22
Total (All Specialties)	41%	43%	10%	6%	0%	1.18	N/A

² Composite Score computed using the following Likert scale: "Many Jobs" = +2, "Some Jobs" = +1, "Few Jobs" = 0, "Very Few Jobs" = -1, "No Jobs" = -2.

Section 3. Summary of Results by Specialty Group

Section 3 provides a summary of exit survey results for each of four specialty groups and for "All Specialties". The specialty groups used are:

- <u>All Primary Care</u>: Includes Family Practice, Internal Medicine, Pediatrics and Combined Medicine/Pediatrics.
- <u>Medicine Subspecialties</u>: Includes Cardiology, Critical Care Medicine, Electrophysiology, Endocrinology & Metabolism, Gastroenterology, Geriatrics, Hematology/Oncology, Infectious Disease, Nephrology, Pulmonary Disease and Rheumatology.
- <u>Surgical Subspecialties</u>: Includes Neurosurgery, Ophthalmology, Orthopedic Surgery, Otolaryngology, Plastic Surgery, Thoracic Surgery and Urology.
- <u>All Non-Primary Care</u>: Includes all specialties not included in the "All Primary Care" group.

Section 3 contains the following subsections:

3.1. Background Characteristics of All Respondents – gives response rates for each column of the report, demographic characteristics of respondents including gender, race and average age, and respondents citizenship status and location of medical school.

3.2. Future Plans of All Respondents – gives respondents' planned primary activity following training completion and the location of that activity.

3.3. Practice Plans of Respondents with Confirmed Plans to Enter Patient Care – gives practice plans for respondents who reported that they were planning to enter patient care/clinical practice and had found a practice position; for this subgroup several practice characteristics are given including principal practice setting, demographics of practice location and whether or not that practice is located in a federally designated Health Professionals Shortage Area (HPSA), descriptive statistics for income, satisfaction with practice plans and the weekly number of hours respondents will be providing primary care.

3.4. Job Market Experiences and Perceptions of All Respondents – gives the proportion of respondents who reported difficulty finding a satisfactory practice position and the reasons for the difficulty, the proportion of respondents having to change plans due to limited practice opportunities, the average number of job offers received and respondents' perceptions of the job market for their specialty in their region of training and in the nation.

3.1. Background Characteristics of All Respondents

TABLE 1	TABLE 1. Response Rates	Primary Care Specialties	All Non-Primary Care Specialties	Medicine Subspecialties	Surgical Subspecialties	All Specialties	ll alties
	Number of Respondents (n) =	1384	1664	284	269	3048	48
	Number of Graduates (N) =	1984	2640	514	384	4624	24
	Response Rate (n / N) =	70%	63%	55%	20%	66%	%
TABLE	TABLE 2. Demographic	Primary Care	All Non-Primary	Medicine	Surgical	AII	
	Characteristics	Specialties	Care Specialties	Subspecialties	Subspecialties	Specialties	alties
Condor	Male	830 60%	1103 67%	210 74%	224 83%	1933	64%
aniian	Female	546 40%	551 33%	74 26%	45 17%	1097	36%
	White	524 39%	896 55%	120 43%	179 69%	1420	48%
	Asian	574 42%	471 29%	107 38%	48 18%	1045	35%
Race	Minority (as defined by NYS ¹)	125 9%	171 10%	26 9%	22 8%	296	10%
	Other Under-represented Minority	60 4%	21 1%	6 2%	%0 0	81	3%
	Other	68 5%	71 4%	19 7%	12 5%	139	5%
050	Average	32.8	34.1	34.8	32.6	33.5	ю
Age	Median	31.0	33.0	34.0	32.0	32.0	0.
¹ Includes	¹ Includes Black/African American, Hispanic/Latino & Native American/Alaskan Native who are U.S. citizens or U.S. medical school graduates (USMGs)	atino & Native Amer	ican/Alaskan Native w	ho are U.S. citizens or	r U.S. medical school	graduates (USMGs).
	TABLE 3. Citizenship & Location of	Primary Care	All Non-Primary	Medicine	Surgical	AII	
	Medical School	Specialties	Care Specialties	Subspecialties	Subspecialties	Specialties	alties
							1001

TABLE 3	TABLE 3. Citizenship & Location of	Primary	/ Care	All Non-Primary	[⊃] rimary	Medicine	cine	Surgical	ical	AII	_
	Medical School	<u>Specia</u>	alties	Care Specialties	<u>scialties</u>	Subspecialties	<u>cialties</u>	Subspecialties	<u>cialties</u>	Specialties	<u>alties</u>
Citizon_	Native Born U.S.	394	29%	786	49%	80	29%	194	73%	1180	40%
chin	Naturalized/Permanent Resident	445	33%	561	35%	117	42%	60	23%	1006	34%
dille	H1, H2, H3 Temporary Worker	114	6%	51	3%	11	4%	0	1%	165	6%
ordius	J1, J2 Exchange Visitor	382	29%	215	13%	68	25%	8	3%	597	20%
	U.S. or Canada (USMGs)	464	34%	976	59%	87	31%	244	91%	1440	47%
Medical	New York State	307	22%	551	33%	59	21%	124	46%	858	28%
School	Other U.S.	156	11%	410	25%	25	9%	117	43%		19%
Location	Canada	1	%0	15	1%	ς Υ	1%	ς Υ	1%		1%
	Other Country (IMGs)	911	66%	688	41%	197	69%	25	9%6	1599	53%

* Primary Care Specialties include: Family Practice, Internal Medicine, Pediatrics and Combined Medicine/Pediatrics.

** All Non-Primary Care Specialties are all specialties not included in Primary Care Specialties.

*** Medicine Subspecialties and Surgical Subspecialties are subsets within All Non-Primary Care Specialties.

**** Surgical Subspecialties does not include General Surgery.

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3.2. Future Plans of All Respondents

%9 45% 10% 2% 49% 46% 5%34% 55% 42% 51% 3% 3% 3% 2% 42% 7% **Specialties Specialties Specialties** ² "With Confirmed Plans" means the respondent indicated that (s)he was entering patient care/clinical practice and had secured a position. F P F 1360 288 57 82 542 62 667 Part B. Respondents Entering Positions in Teaching/Research, as Chief Residents or Subspecializing/Continuing Training 604 1705 749 1026 569 33 499 105 78 78 101 50% 3% 1% 40% 3% 26% 3% **Subspecialties Subspecialties Subspecialties** 43% 54% 30% 55% 41% %0 3% 4% 64% %9 1% Surgical Surgical Surgical 134 0 53 έ 35 145 72 109 75 57 0 იო 9% 0% 5%48% 54% 4% 60% **Subspecialties** 20% 52% 42% **Subspecialties Subspecialties** 58% 16% %9 31% 11% %0 10% 5% Medicine Medicine Medicine 26 Ω 39 81 171 42 198 89 10 8 8 23 7 + > Part A. Respondents with Confirmed Plans to Enter Patient Care/Clinical Practice 6% 2% 48% 5%43% %9 50% **Care Specialties Care Specialties Care Specialties** All Non-Primary All Non-Primary All Non-Primary 43% 58% 32% 54% 48% 1% 3% 45% %9 %9 4% TABLE 5. Location of Primary Activity Following Training Completion 266 104 396 42 821 27 302 438 952 535 352 27 283 40 7 6 60 13% 50%5% 40% 2% 51% 7% Primary Care 54% Primary Care TABLE 4. Primary Activity Following Training Completion 55% 36% 58% 41% Primary Care 5% 1% 39% 7% 1% 3% **Specialties Specialties Specialties** 302 26 539 184 30 40 276 271 217 753 311 ശ 216 38 491 67 4 4 Have Not Looked Yet for Prac. Position Have Not Yet Found Practice Position Other/Undecided/Temp Out of Medicine Subspecializing/Continuing Training Same Region within NYS Same Region within NYS Other Area within NYS Other Area within NYS Patient Care/Clinical Practice: Within New York State: Within New York State: With Confirmed Plans² Teaching/Research Outside U.S. Outside U.S. Other State Other State Chief Resident

Source: CHWS, Survey of Residents Completing Training in NYS in 1998.

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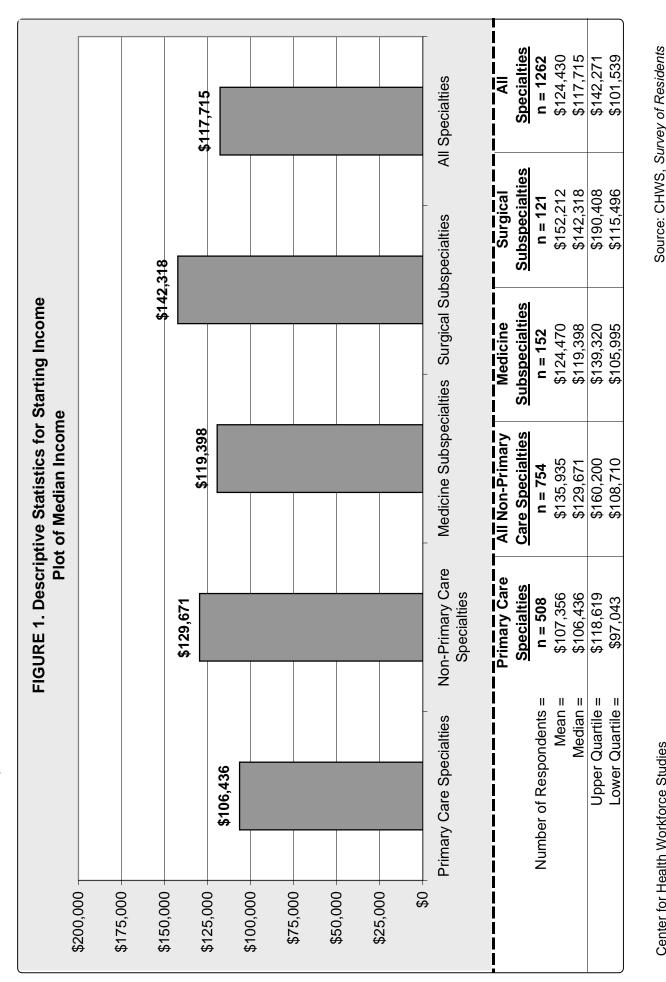
3.3. Practice Plans of Respondents with Confirmed Plans to Enter Patient Care

Solo Practice Group Practice: as <i>Owner/Partner</i> as <i>Employee</i> Principal Hospital: <i>Inpatient</i> <i>Ambulatory</i> Care <i>Emergency Room</i> Freestanding D & TC HMO											
Solo Grouj Frees HMO	_	Primary Care	Care	All Non-Primary	rimary	Medicine	sine	Surgical	ical	AII	_
Solo Groun Hosp HMO		Specialties	<u>ties</u>	Care Specialties	<u>cialties</u>	Subspecialties	<u>sialties</u>	Subspecialties	<u>sialties</u>	Specialties	<u>alties</u>
Ground Hosp HMO		19	4%	38	5%	1	7%	14	11%	57	4%
Frees Hosp		296	57%	442	56%	108	68%	92	72%	738	57%
Hosp Frees	jr S	62	12%	146	19%	26	16%	37	29%	208	16%
Hosp Frees		234	45%	296	38%	82	52%	55	43%	530	41%
Frees		153	30%	249	32%	33	21%	16	13%	402	31%
Frees		33	7%	111	14%	16	10%	11	9%	144	11%
Emergency Room Freestanding D & TC HMO		97	19%	68	9%	15	9%	5	4%	165	13%
Freestanding D & TC HMO	ш	23	4%	20	9%	2	1%	0	%0	93	7%
HMO		23	4%	20	3%	7	1%	0	%0	43	3%
. 3		12	2%	10	1%	~	1%	7	2%	22	2%
Other		18	3%	26	3%	e	2%	4	3%	44	3%
Domo Inner City		150	29%	207	27%	39	25%	26	21%	357	27%
Contraction of the Area within Major City	or City	74	14%	195	25%	30	19%	39	31%	269	21%
		142	27%	240	31%	52	33%	41	33%	382	29%
ractice Small City		80	15%	66	13%	27	17%	14	11%	179	14%
Location Rural		75	14%		5%	6	6%	9	5%	112	
Yes		166	32%	100	13%	32	20%	4	3%	266	20%
Practicing Within NYS		81	16%		7%	13	8%	2	2%	134	
in Federal Other State		85	16%		6%	19	12%	2	2%	132	
HPSA ⁴ No		288	55%	571	73%	113	71%	109	85%	859	
Unknown		67	13%	112	14%	14	6%	15	12%	179	14%

³ Other includes: Urgent Care Clinic, Military, State or Local Health Department, Private Industry, Nursing Home, Temp. Agency and Other.

⁴ HPSA indicates federally designated Health Professionals Shortage Area.

3.3. Practice Plans of Respondents with Confirmed Plans to Enter Patient Care



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Completing Training in NYS in 1998.

3.3. Practice Plans of Respondents with Confirmed Plans to Enter Patient Care

			Primary (y Care	All Non-Primary	Primary	Med	Medicine	Surç	Surgical	<	AII
			Special	ialties	Care Sp	Care Specialties	Subspe	ubspecialties	Subspe	ubspecialties	Spec	<u>Specialties</u>
Caticfaction	Very Satisfied	_	178	35%	299	38%	50	31%	51	40%	477	37%
valistaction	Somewhat Satisfied	fied	271	53%	394	51%	82	52%	64	50%	665	52%
WILL STALLING	Not Too Satisfied	p∈	61	12%	78	10%	25	16%	10	8%	139	11%
oalary	Very Dissatisfied	ð	e	1%	9	1%	7	1%	7	2%	ი	1%
Does Resp. Expe	Does Resp. Expect to be at Prin. Yes	Yes	126	24%	117	15%	16	10%	9	5%	243	19%
Practice for less	Practice for less than 3 Years?	No	391	76%	653	85%	140	80%	121	95%	1044	81%

	gical	<u>ubspecialties</u>	48%	14%	8%	11%	4%	15%
	Surgical	Subspe	60	17	10	14	5	19
	Medicine	ubspecialties	16%	15%	19%	11%	%9	32%
	Med	Subspe	25	24	30	17	10	51
re	All Non-Primary	<u>Care Specialties</u>	37%	10%	11%	11%	10%	20%
Be Spending in Primary Care	All Non-	Care Sp	283	76	83	84	78	155
Iding in P	Primary Care	Specialties	3%	2%	4%	6%	29%	53%
	Primar	Speci	16	б	23	48	147	271
TABLE 8. Weekly Hours Respondent Will			None	Less than 10	10 to < 20	20 to < 30	30 to < 40	40 or More

23% 7% 8% 10% 33%

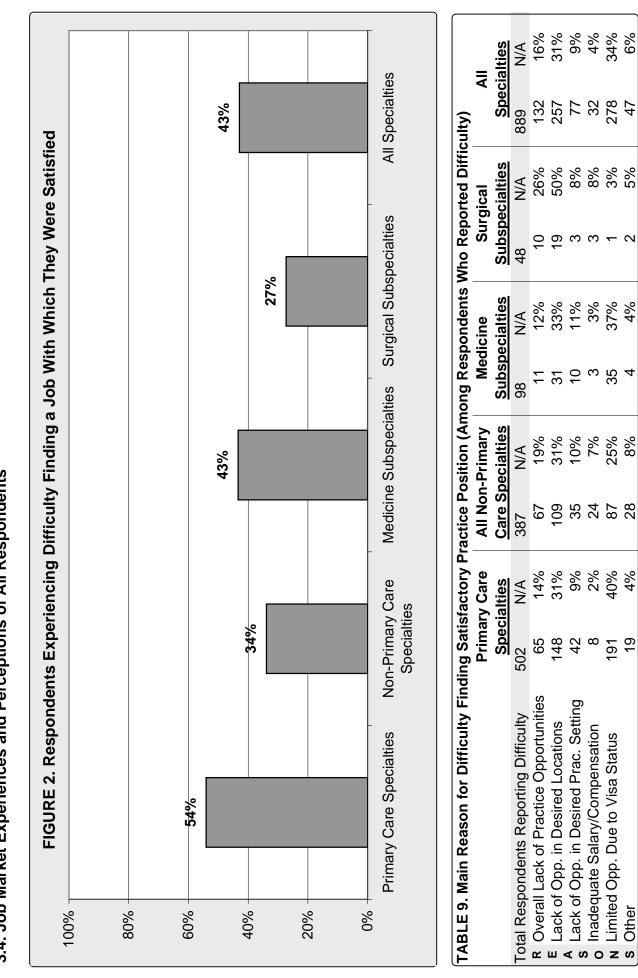
132 225 426

Specialties 299 23%

85 106

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Summary of 1998 Exit Survey Results for New York State by Specialty Group 3.4. Job Market Experiences and Perceptions of All Respondents



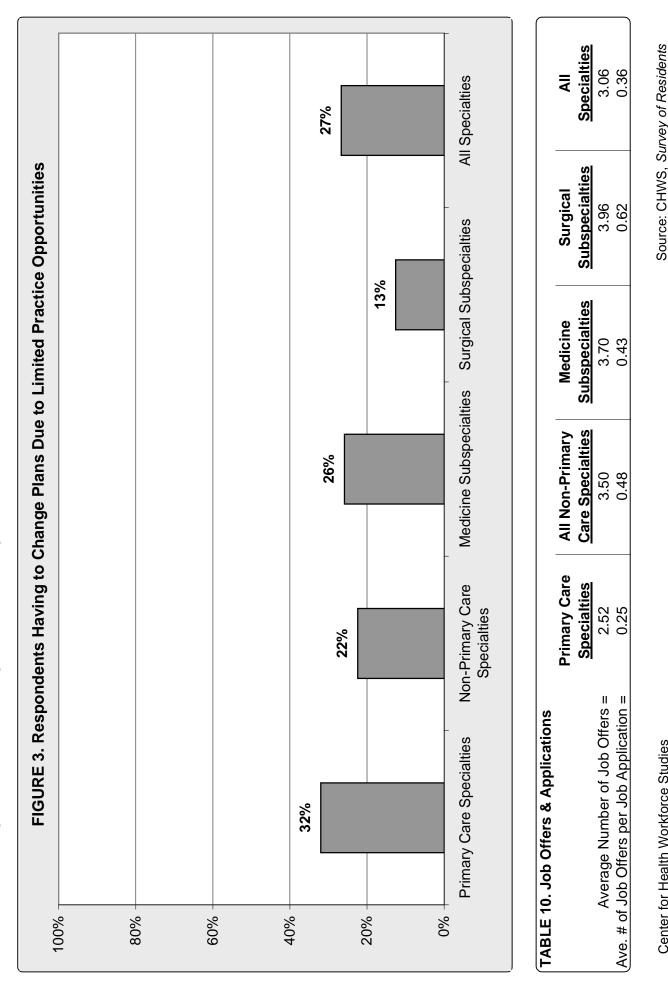
Source: CHWS, Survey of Residents Completing Training in NYS in 1998.

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Other

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3.4. Job Market Experiences and Perceptions of All Respondents



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3.4. Job Market Experiences and Perceptions of All Respondents

□ Many Jobs ■ Some Jobs □ Few Jobs □ Very Few Jobs ■ No Jobs 16% 40% 21% 18% 5% %0 **Specialties** %9 P 10% 398 118 968 503 444 41%^{43%} **Subspecialties** 11% 23% 26% 37% 3% TABLE 11. Respondents' Assessment of the Job Market for Their Specialty in Their Region of Training* Surgical FIGRURE 4. Respondents View of the National Job Market for Their Specialty %0 26 87 54 60 2% 15% Subspecialties 15% 37% 23% 20% 51% 5% Medicine 28% 49 36 89 57 12 %0 4% **Care Specialties** All Non-Primary 18% 40% 21% 18% 3% 10% 47% 249 555 291 250 48 39% %0 **Primary Care** 14% 19% 40% 20% 7% **Specialties** _ہ 6% 10% 149 413 212 194 22 45% 38% Very Few Jobs Many Jobs Some Jobs Few Jobs No Jobs %0 ۱<u>9%</u> 6% 40% 44% 20% 100% 80% 60% 40%

* The Region of Training was defined as "within 50 miles of training site" on the survey question. School of Public Health, University at Albany, (518) 402-0250 Center for Health Workforce Studies

Source: CHWS, Survey of Residents Completing Training in NYS in 1998.

All Specialties

Surgical Subspecialties

Medicine Subspecialties

Non-Primary Care

Primary Care Specialties

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Specialties

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APPENDIX A

1998 Survey Instrument

APPENDIX B

Response Rates by Specialty and Region

1998 Exit Survey Response Rates by Specialty and Region

Section 2, Anesthesiology includes Pain Management and Other Anesthesiology Subspecialties, while Psychiatry includes Adult, Child & Adolescent Medicine Subspecialties having the poorest response rate (55%). This table allows the reader to see what specialties are collapsed into each of the programs (78%). The highest response rates were achieved in Primary Care Specialties (70%) and Surgical Subspecialties (70%) with Internal "Other" categories (i.e. Other IM Subspecialties, Other Surgical Subspecialties and All Other). It should be noted that in the summary tables in Below are response rates for each specialty by region. The overall response rate was 66% but was somewhat higher for Upstate New York and Other Psych Subspecialties. These specialties were not combined in the hospital specific data in the tables presented in Section 3.

	UPSTA'	UPSTATE NY PRO	OGRAMS	GREAT	GREATER NY PROGRAMS	GRAMS	NEW YO	NEW YORK STATE (TOTAL)	TOTAL)
<u>Specialty</u>	Grads	Returned	Resp Rate	Grads		Resp Rate	Grads	Returned	Resp Rate
Primary Care	332	258	78%	1652			1984	1385	20%
Family Practice	87	67	77%	130			217	151	20%
Internal Medicine-General	181	131	72%	1103			1284	903	20%
Pediatrics-General	49	45	92%	396			445	300	67%
IM & Pediatrics (Combined)	15	15	100%	23	16	20%	38	31	82%
Other Core Specialties	94	83	88%	564			658	433	66%
Obstetrics & Gynecology	35	34	97%	137			172	130	76%
Psychiatry	28	25	89%	263			291	189	65%
Adult Psychiatry	21	19	%06	199			220	146	66%
Child & Adolescent Psychiatry	с	2	67%	51			54	29	54%
All Other Psychiatry Subspecs	4	4	100%	13			17	14	82%
Surgery (General)	31	24	%17	164			195	114	58%
Internal Medicine Subspecialties	61	36	59%	453	24	55%	514	284	55%
Cardiology	13	12	92%	96	58	60%	109	20	64%
Geriatrics	6	7	78%	32	27	84%	41	34	83%
Hematology/Oncology	5	4	80%	80	32	40%	85	36	42 %
Nephrology	4	ო	75%	46	32	20%	50	35	20%
Pulmonary Disease	10	8	80%	60	33	55%	20	41	59%
Other IM Subspecialties:	20	2	10%	139	66	47%		68	43%
Critical Care Medicine	2	0	%0	28	18	64%	30	18	%09
Electrophysiology	0	0	N/A	9	~	17%		~	17%
Endocrinology & Metabolism	4	0	%0	24	14	58%		14	50%
Gastroenterology	5	0	%0	32	13	41%	37	13	35%
Infectious Disease	9	-	17%	37	13	35%		14	33%
Rheumatology	3	-	33%	12	7	58%		8	53%

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*Greater NY includes New York City, Long Island and Westchester County; Upstate NY includes the rest of the state.

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	UPSTA ⁻	UPSTATE NY PROGRAMS	GRAMS	GREAT	GREATER NY PROGRAMS	GRAMS	NEW YC	NEW YORK STATE (TOTAL	(TOTAL)
Specialty	Grads	Returned	Resp Rate	Grads	Returned	Resp Rate	Grads	Returned	Resp Rate
Surgical Subspecialties	85	20	82%	299	199	67%	384	269	20%
Ophthalmology	12	11	92%	78	52	67%	<i>06</i>	63	20%
Orthopedic Surgery	29	25	86%	95	62	65%	124	87	20%
Otolaryngology	11	~	64%	31	23	74%	42	30	71%
Urology	8	8	100%	31	23	74%	39	31	%62
Other Surgical Subspecialties:	25	19	76%	64	39	61%	89	58	65%
Neurosurgery	8	9	75%	14	10	71%	22	16	73%
Plastic Surgery	4	4	100%	21	10	48%	25	14	56%
Thoracic Surgery	ω	9	75%	14	o	64%	22	15	68%
All Other Surgical Subspecs	5	Υ	%09	15	10	67%	20	13	65%
Facility Based Specialties	131	98	75%	568	356	63%	669	454	65%
Anesthesiology	41	27	66%	190	106	56%	231	133	58%
General Anesthesiology	26	18	%69%	157	81	52%	183	66	54%
Pain Management	ω	4	50%	18	12	67%	26	16	62%
All Other Anesthes. Subspecs	7	5	71%	15	13	87%	22	18	82%
Emergency Medicine	34	25	74%	100	59	59%	134	84	63%
Pathology	20	19	95%	109	74	68%	129	93	72%
Radiology (Diagnostic)	33	24	73%	147	66	67%	180	123	68%
Radiology (Therapeutic)	ę	ę	100%	22	18	82%	25	21	84%
Other Specialties	61	49	80%	324	174	54%	385	223	58%
Dermatology	5	5	100%	39	26	67%	44	31	20%
Neurology	19	13	68%	92	49	53%	111	62	56%
Pediatric Subspecialties	15	13	87%	74	39	53%	89	52	58%
Physical Medicine & Rehab.	11	80	73%	67	31	46%	78	39	50%
All Other	11	10	91%	52	29	56%	63	39	62%
Allergy & Immunology	ĉ	Υ	100%	13	4	31%	16	7	44%
Nuclear Medicine	e	0	67%	13	8	62%	16	10	63%
Preventive Medicine	က	က	100%	б	8	89%	12	11	92%
All Other Specialties	2	2	100%	17	0	53%	19	11	58%
Total (All Specialties)	764	594	78%	3860	2454	64%	4624	3048	%99

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*Greater NY includes New York City, Long Island and Westchester County; Upstate NY includes the rest of the state.

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1998 Exit Survey Response Rates by Specialty and Region