## Residency Training Outcomes by Specialty in 2002 for California: A Summary of Responses to the 2000-2002 CA Resident Exit Surveys

March 2003

## **The Center for Health Workforce Studies**

University at Albany
State University of New York
One University Place
Rensselaer, NY 12144-3456

Fax: (518) 402-0252

Web: http://chws.albany.edu



#### PREFACE

This report summarizes the results of the Survey of Residents Completing Training in California (California Exit Survey) for the years 2000, 2001, and 2002. This survey was conducted by the Center for Health Workforce Studies (the Center) at the University of Albany, State University of New York, in collaboration with the University of California, Office of the Vice President – Health Affairs. The survey consists of 33 questions covering four topical areas: demographic and background characteristics of respondents, post-graduation plans, characteristics of post-graduation employment (for respondents with confirmed practice plans), and experiences in searching for a job and impressions of the physician job market (for respondents who had searched for employment).

The primary goal of the Exit Survey is to assist the medical education and health workforce community in California in their efforts to train physicians consistent with the needs of the state and the nation. To achieve this goal, the Center uses the survey results to provide information on the demand for new physicians and on outcomes of residency training, by specialty. The Exit Survey has been conducted in the years 2000, 2001, and 2002 in California and for the past five years (1998 through 2002) in New York. This report summarizes the results for California using aggregated data from 2000, 2001, and 2002. Where appropriate, comparisons with results from New York are provided. For the full report on the New York Exit Survey, please visit the Center's web site (http://chws.albany.edu).

#### **ACKNOWLEDGMENTS**

Funding for the survey and this report was provided by the University of California Office of the Vice President – Health Affairs. The Center received assistance and guidance from Cathryn Nation, MD, Director-Academic Health Sciences in the UC Office of the Vice President – Health Affairs. This survey could not have been conducted without her assistance. The Center also acknowledges the assistance and essential role of the GME deans and directors at the academic centers and teaching hospitals in California.

This report was prepared by Joseph Nolan, Beth A. Hernandez, Mark Beaulieu, Bonnie M. Quickenton, Gaetano J. Forte, and Edward Salsberg of the Center. The Center for Health Workforce Studies is a not-for-profit research center operating under the auspices of the School of Public Health at the University at Albany, State University of New York, and Health Research, Incorporated (HRI). The ideas expressed in this report are those of the Center, and do not necessarily represent the views or positions of the State University of New York, the University at Albany, the School of Public Health, HRI, or the University of California.





## CONTENTS

Executive Summary	ES-1
Key Findings	
Background	1
Methodology	3
Terminology Used in the Report	
Limitations of the Data	
Organization of the Report	
Data Presentation	
Section II: Practice Plans of Respondents with Confirmed Plans to Enter Pa Clinical Practice, 2000-2002	
Section III: Job Market Experiences and Perceptions of Respondents Who I	Have
Searched for a Job (Excludes IMGs with Temporary Citizenship Status), 20 Assessment of Demand by Specialty	000-2002 27 29
Highlights	31
Appendix A. Specialty Classifications Used for Resident Exit Survey	A-1
Appendix B. Survey of Residents Completing Training in CA in 2002	B-1





## EXHIBITS

	Number of Respondents to California Resident Exit Survey by Affiliated Medical	
Exhibit 1-2.	Number of Respondents to California Resident Exit Survey by Specialty Group	9
Exhibit 1-3.	Background Characteristics of Survey Respondents by Specialty 1	0
Exhibit 1-4.	Percentage of Respondents who are Female by Specialty Group	1
	Percentage of Respondents who are Under-represented Minorities by Specialty	1
Exhibit 1-6.	Percentage of Respondents who are IMGs by Specialty Group	2
	Percentage of Respondents who have Temporary Citizenship Status by Specialty1	
Exhibit 1-8.	Primary Activity After Completion of Current Training Program by Specialty 1	3
Exhibit 1-9.	Subspecialization Rates by Specialty Group	4
	Percentage of Respondents with Confirmed Plans to Enter Patient Care/Clinical and Practice Location by Specialty	7
Exhibit 2-2.	Location of Upcoming Practice	8
	Percentage of Respondents Entering Practice within California (i.e., In-State n) by Specialty Group1	8
Exhibit 2-4.	Rank of In-State Retention Rates by Specialty	9
Exhibit 2-5.	Practice Setting of Respondent's Upcoming Principal Practice by Specialty 2	0
Exhibit 2-6.	Practice Setting of Respondent's Upcoming Principal Practice	1
	Demographics of Practice Location and Percentage of Respondents Entering in a Federal HPSA by Specialty	2
Exhibit 2-8.	Demographics of Practice Location	3
	Percentage of Respondents who are Entering Practice in a Federal HPSA by Group	3
Exhibit 2-10	Descriptive Statistics for Starting Income by Specialty	4



Exhibit 2-11. Median Starting Income (in \$1,000s) by Survey Year and Specialty Group	25
Exhibit 2-12. Median Starting Income in Primary Care and Non-Primary Care Specialties by Survey Year for NY and CA	
Exhibit 2-13. Rank of Median Starting Income by Specialty	26
Exhibit 3-1. Percentage of Respondents Having Difficulty Finding a Satisfactory Practice Position	32
Exhibit 3-2. Main Reason for Difficulty Finding a Satisfactory Practice Position	33
Exhibit 3-3. Percentage of Respondents Having Difficulty Finding a Satisfactory Practice Position, in Primary Care and Non-Primary Care Specialties, by Survey Year, for CA and NY	
Exhibit 3-4. Rank of Percentage of Respondents Having Difficulty Finding a Satisfactory Practice Position by Specialty	34
Exhibit 3-5. Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities	35
Exhibit 3-6. Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities by Specialty Group and Survey Year	36
Exhibit 3-7. Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities in Primary Care and Non-Primary Care Specialties by Survey Year for CA NY	
Exhibit 3-8. Rank of Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities by Specialty	37
Exhibit 3-9. Offers for Employment/Practice Opportunities	38
Exhibit 3-10. Mean Number of Job Offers Received by Respondents by Specialty Group an Survey Year	
Exhibit 3-11. Mean Number of Job Offers Received by Respondents in Primary Care and N Primary Care Specialties by Survey Year for CA and NY	
Exhibit 3-12. Rank of Mean Number of Job Offers Received by Respondents by Specialty	40
Exhibit 3-13. Likert Scores for Respondents' View of the Regional Job Market	41
Exhibit 3-14. Likert Scores for Respondents' Assessments of the Regional Job Market by Specialty Group	42



Exhibit 3-15. Likert Scores for Respondents' Assessments of the Regional Job Market in Primary Care and Non-Primary Care Specialties by Survey Year for CA and NY	
Exhibit 3-16. Rank of Mean Likert Score for Respondents' Assessments of the Regional Job Market by Specialty	43
Exhibit 3-17. Likert Scores for Respondents' View of the National Job Market	44
Exhibit 3-18. Mean Likert Scores for Respondents' Assessments of the National Job Market by Specialty Group	45
Exhibit 3-19. Mean Likert Score's for Respondents' Assessments of the National Job Market in Primary Care and Non-Primary Care Specialties by Survey Year for CA and NY	45
Exhibit 3-20. Rank of Mean Likert Score for Respondents' Assessments of the National Job Market by Specialty	46
Exhibit 3-21. Assessment of Relative Demand for Each Specialty based on Respondents to California Resident Exit Survey	47
Exhibit 3-22. Assessment of Relative Demand for Each Specialty based on Respondents to New York Resident Exit Survey	48
Exhibit 3-23. Scatter Plot of Specialty Demand Scores for California and New York	49





#### EXECUTIVE SUMMARY

In order to provide the medical education community with useful information on the demand for physicians and the outcomes of training in California, the Center for Health Workforce Studies at the University at Albany, State University of New York conducted a survey of physicians completing a residency or fellowship training program in the state in each of the past three years, 2000 - 2002. The survey instrument was developed by the Center in consultation with the University of California, Office of the Vice President - Health Affairs. Many of the questions on the California Exit Survey were designed to assess demand for physicians by specialty.

In the month of May of each year from 2000 to 2002, the Center distributed the survey to GME directors and administrators at teaching hospitals in California. Through the collaboration of participating teaching hospitals, a total of 3,178 physicians responded to the survey. These physicians represented about 41% of the estimated 7,700 physicians completing a training program in the state (based on the AMA's GME file) during the three years. For various reasons, graduates at several institutions never received the surveys. Thus the response rate (calculated as the number of respondents divided by the number of graduates who received the survey) was considerably higher than this figure. Although it is not possible to determine the exact response rate, it is estimated to be well above 50% for participating teaching hospitals..

This report presents specialty-specific statewide results. Comparisons are made between respondents from the California Exit Survey and a similar survey in New York State.

#### KEY FINDINGS

## 1. Overall, the job market for physicians in California appears strong.

- Only 1% of respondents who had actively searched for a job had not received any job offers at the time they completed the survey in late May or June of the year they completed training.
- About one-quarter (24%) of respondents who had actively searched for a position reported having difficulty finding a satisfactory practice position. Of those reporting difficulty, 20% indicated the main reason for difficulty was an overall lack of jobs. Lack of jobs in desired locations (42%) was the most common reason for difficulty. The percentage who reported difficulty in California (24%) was less than the percentage that reported difficulty in New York State (31%).



- Fourteen percent (14%) of California respondents had to change plans due to limited practice opportunities. Again this was below the percentage who found it necessary to change plans in New York (17%).
- Respondents' evaluations of the regional job market were somewhat positive, with the average response falling somewhere between "Few Jobs" and "Some Jobs." Evaluations of the national job market were more positive than the regional market.
- 2. Demand for non-primary care physicians (specialists) was stronger than for primary care physicians (generalists Family Practice, General Internal Medicine, General Pediatrics, and IM & Peds—Combined). Generalists experienced more difficulty and had a less optimistic assessment of the job market than specialists. This finding was consistent along all indicators used to measure demand. Among those respondents who had searched for a job, after adjusting for citizenship status:
  - Specialists received more job offers than generalists (mean of 3.92 versus 2.82).
  - Specialists were less likely than generalists to have had difficulty finding a satisfactory practice positions (20% versus 31%) and to have had to change plans due to limited practice opportunities (12% versus 17%).
- 3. There were differences in the job market experiences and assessments for different specialties. The overall job market appeared strong for new graduates, but there were differences by specialty.
  - Based on several indicators, specialties experiencing the highest demand were Child & Adolescent Psychiatry, Gastroenterology, Pulmonary Disease, Cardiology, General Anesthesiology, Urology, Adult Psychiatry, and Hematology/Oncology.
  - Pathology, Pediatric Subspecialties, General Pediatrics, Internal Medicine & Pediatrics— Combined, Geriatrics, Ophthalmology, and Physical Medicine & Rehabilitation are experiencing relatively weak demand.
- 4. Most graduates with confirmed practice plans were staying in California to begin practice, although there were differences by specialty.
  - About 79% of graduates with confirmed practice plans were staying in the state to begin practice. By comparison New York State retains about one-half (51%) of its graduates...
  - In-state retention varied by specialty. Among specialties with at least 10 respondents, in-state retention ranged from 92% (Child & Adolescent Psychiatry, Adult Psychiatry, and General Internal Medicine) to 47% (Orthopedics).



5. Nearly one-quarter (24%) of California graduates were subspecializing, excluding IMGs on temporary visas (who are much more likely to subspecialize). This was below the overall subspecialization rate in New York where nearly one-third (31%) of graduates planned to subspecialize at completion of training. The subspecialization rates of General Internal Medicine graduates from California and New York were 32% and 38%, respectively. For General Pediatrics these rates were 23% and 30%, respectively.





#### BACKGROUND

A survey of physicians completing training in a state provides a valuable snapshot of the physician workforce and the outcomes of residency training in the state. While the demographic characteristics and experiences of new graduates may be different than those of established, practicing physicians, a resident exit survey provides a good picture of the future physician workforce and the current balance between supply and demand. The experiences of new physicians provide particularly relevant and valuable information to the medical education community.

The Center's Resident Exit Survey consists of 33 questions designed to collect information on residents' demographic characteristics, post-graduation plans, characteristics of post-graduation practice, and experiences in and impressions of the physician job market. Many of the questions are designed to help assess demand for physicians in general, and by specialty. The Resident Exit Survey provides a snapshot of training outcomes and the physician marketplace at a particular point in time. However, by conducting the survey on an annual or periodic basis, it is possible to observe changes over time that can uncover trends in demand and provide a useful tool for forecasting future supply and demand.

In addition to relative demand by specialty and information on the characteristics of physicians entering practice, the Resident Exit Survey also provides valuable information on other topics of interest to medical educators and policy makers. These topics include: the rate at which the graduates of residency training in California stay in the state to practice (i.e., in-state retention rate), the rate of subspecialization, the rate at which graduates plan to practice in underserved areas, starting income levels, and the comparative experiences of graduates with different demographic and educational backgrounds, such as gender, race and location of medical education and training.

Under a multi-year memorandum of understanding with the Governor's office between 1994 and 2002, the University of California was directed to increase the number and proportion of residents enrolled in family practice and other primary care training programs. The results of this survey can provide useful information on the outcomes of training and the appropriateness of this memorandum by measuring demand for physicians entering practice and by comparing the experiences of primary care (generalist) and non-primary care (specialist) graduates.





#### METHODOLOGY

The survey instrument was prepared by the Center for Health Workforce Studies at the University at Albany, State University of New York and was based on the survey instrument used by the Center in New York State since 1997. The survey instrument used in California in 2002 was identical to that which was used in 2000 and 2001. A copy of the instrument can be found in Appendix B.

The surveys were distributed by the UC Office of the Vice President – Health Affairs to the GME deans and directors at each of its five medical schools. The GME deans and directors, in turn, distributed the surveys to program directors who then distributed them to the residents completing a training program in 2000, 2001, and 2002. The survey was also sent by the UC Office of the Vice President – Health Affairs to other major teaching hospitals in the state. However, due to time and resource constraints, not all teaching hospitals in the state received the survey. Completed surveys were returned to the UC Office of the Vice President – Health Affairs and passed on to the Center in Albany, NY for processing and optical scanning.

The Center received 1,183 completed surveys in 2000, 937 in 2001, and 1,058 in 2002, which are estimated to represent approximately 41% of the residents completing training in the state over the past three years. Approximately 71% of the completed surveys were from residents completing training in the UC system. Recognizing that UC affiliated programs train an estimated 45% of all California trainees, it is important to note that non-UC affiliated programs are under-represented in the survey results.

### Terminology Used in the Report

**Resident**: As used in this report, residents refers to both residents and fellows.

**Residents completing training**: GME and program directors were asked to have all residents or fellows in their last year of a program complete the survey. They were asked to *exclude* residents completing a preliminary year of training as well as graduates of dental and podiatry programs. In this report, residents completing training refers to those residents who completed an allopathic or osteopathic graduate medical eduction program in the spring/summer of 2000, 2001 and 2002.



**Primary care**: While many tables and figures present results by individual specialty, some organize the results by specialty grouping. For the purpose of this report, Primary Care includes Family Practice, General Internal Medicine, General Pediatrics, and Internal Medicine and Pediatrics - Combined.

**Facility-based specialties**: For purposes of this report, Facility-Based specialties include Anesthesiology, Radiology, and Pathology. (For a complete illustration of how individual specialties have been grouped together in the data presented in this report, please see Appendix A.)

### Limitations of the Data

**Descriptive statistics**: For the most part, this report presents a description of the residents completing training. Because respondents represented only 41% of all graduates in California, and the inability to accurately determine the response rate, the Center urges caution in interpreting the results. The Center has *not* run tests of statistical significance on any of the presented results.

**Small cell sizes**: When analyzed by specialty and other variables, some individual cell sizes become small. This reduces the stability of the results. In order to compensate for small cell sizes in most specialties in any single year, most of the results in this report are based on analysis of aggregated data from the 2000, 2001, and 2002 California Exit Survey.

**Self-defined terms and unaudited responses**: Several questions may be subject to interpretation, such as the question on the resident's upcoming practice, which includes the options of "inner city" and "rural." While there may be some variation in interpretation, results for California and New York State have been consistent over time and consistent with other research. This gives the Center confidence in the results, especially in the comparisons across groups.

**Measure of demand**: There is no single, generally accepted measure of physician demand. Therefore, the Center has developed a composite measure of demand based on several indicators. At the same time, the Center recognizes that other interpretations of the data are possible. For example, some of the questions are subjective: a respondent's assessment of whether they had to "change plans due to limited job opportunities" will reflect in part their previous expectations of the job market. These expectations may vary by specialty. For this



reason, this report presents the results for each of the underlying indicators of demand by specialty in addition to the composite score.

**Demand compared to need**: It is also recognized that demand for a specialty can be quite different than need. The exit survey data reflect marketplace demand (i.e., the current job market). While some might think it preferable to have more physicians in a specific specialty to adequately serve the medical needs of a given population, marketplace demand may reflect other factors, such as the reimbursement and financing of services.

## Organization of the Report

Section 1 of this report presents information on demographic characteristics of all survey respondents and outlines their planned activities following completion of their current training program. Section 2 pertains to respondents who reported plans to enter patient care/clinical practice and had confirmed those plans (i.e., they had accepted a job offer or would be self-employed) at the time they completed the survey. Section 3 summarizes the responses to several questions used to measure demand and relating to respondents' experiences in searching for a practice position. This section excludes respondents who had not yet searched for a practice position and IMGs with temporary visas because these individuals experienced substantially more difficulty in the job market due to their visa status.

#### Data Presentation - Specialty Groupings

The report presents data for 8 specialty groupings and for 28 individual specialties. These 28 represent the specialties with the greatest number of respondents to the survey. While there are over 100 specialties and subspecialties recognized by the American Board of Medical Specialties, for most, the number of new graduates in California are too few to provide meaningful information. Appendix A provides a detailed illustration of how specialties have been grouped in the data presented in this report.





#### SECTION I

# Background Characteristics of All Respondents to the Survey of Residents Completing Training In California, 2000-2002

- Of the 3,178 survey respondents, 2,248 (71%), were graduates of programs sponsored by the University of California education system. Of the non-UC program respondents, one-half (50%) were from the University of Southern California.
- Primary care specialties accounted for over one-third (37%) of the respondents.
- Female graduates accounted for 40% of all respondents. However, the percentage of female respondents varied greatly by specialty. Obstetrics/Gynecology (78%), General Pediatrics (62%), Geriatrics (61%), and Pathology (56%) had the highest proportions of females. Collectively, the fewest females were found in surgical subspecialties (17%).
- Under-represented minorities (URMs) accounted for 11% of all respondents. Only 3% of the Medicine Subspecialties residents were URMs. The largest percentages of URM respondents were found in Family Practice (20%), General Surgery (20%), Urology (14%), and General Pediatrics (14%). Cardiology was the only individual specialty without any URM respondents. None of the Internal Medicine Subspecialties (i.e., Cardiology, Gastroenterology, Geriatrics, Hematology/Oncology, Nephrology, and Pulmonary Disease) had more than 10% URM.
- International medical school graduates (IMGs) made up 13% of all respondents. The two specialty groupings with the largest percentage of IMG respondents were Medicine Subspecialties (26%) and Psychiatry (26%). Of the 8 major specialty categories (the highlighted specialty categories/groupings in Exhibit 1-3), Obstetrics/Gynecology (3%) and Surgical Subspecialties (5%) had the lowest percentage of IMG respondents. The individual specialties with the largest percentage of IMG respondents were Gastroenterology (40%), Pathology (38%), Child & Adolescent Psychiatry (31%), General Anesthesiology (29%) and Nephrology (28%). There were two specialties with no IMG respondents: Otolaryngology and Urology.
- Temporary visa holders made up a very small percentage of all respondents (3%). Temporary visa holders accounted for more than 10% of respondents in Pediatric Subspecialties (12%), Neurology (11%) and Pain Management (11%).
- Sixty-five percent (65%) of respondents planned to directly enter patient care/clinical practice. This compares to 55% in New York State who were going directly into patient care practice. Almost a quarter (24%) of the respondents indicated they planned on subspecializing/continuing training. Two percent (2%) of respondents were taking positions as a chief resident, 4% planned to teach or do research, and 5% had other plans.



- The specialties with the highest percentage of respondents indicating they planned to directly enter patient care/clinical practice were Pain Management (95%), Child & Adolescent Psychiatry (88%), Emergency Medicine (85%), Gastroenterology (83%), and Urology (82%). The specialties with the lowest percentage of respondents planning to enter patient care/clinical practice were Neurology (37%), Orthopedics (38%), Radiology (42%), Pathology (49%), and Opthalmology (49%).
- The specialties with the largest percentage of respondents planning to subspecialize were Orthopedics (57%), Neurology (53%), and Radiology (52%). Respondents from Pain Management (0%), Hematology/Oncology (3%) and Nephrology (3%) programs were least likely to be subspecializing.
- Hematology/Oncology (24%), Pediatric Subspecialties (19%), and Geriatrics (13%) were the individual specialties with the largest percentage of respondents planning on teaching/research after graduation. There were no respondents from Opthamology, Orthopedics, Plastic Surgery, Urology, or Pain Management that planned on entering positions in teaching/research.



Exhibit 1-1. Number of Respondents to California Resident Exit Survey by Affiliated Medical School, 2000 to 2002 Combined Data

<b>Affiliated</b>	<b>Number of</b>
<b>Medical School</b>	Respondents
UC-Davis	446
UC-Irvine	328
UC-Los Angeles	553
UC-San Diego	314
UC-San Francisco	607
UC Total	2,248
COMP (Osteopathic)	0
King/Drew	134
Loma Linda	239
Stanford	89
USC	468
Non-UC Total	930
TOTAL	3,178

Exhibit 1-2. Number of Respondents to California Resident Exit Survey by Specialty Group, 2000 to 2002 Combined Data

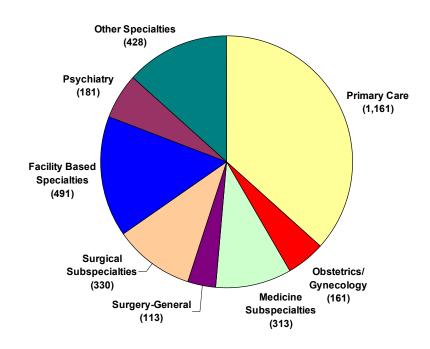




Exhibit 1-3. Background Characteristics of Survey Respondents by Specialty, 2000 to 2002 Combined Data

Specialty	Number of Resp (N)	%Female	%Under-rep Minorities	%IMG	%Temp Visa Holders
Primary Care	1.161	49%	15%	9%	1%
Family Practice	427	50%	20%	5%	0%
Internal Medicine-General	427	39%	10%	15%	2%
Pediatrics-General	274	62%	14%	7%	1%
IM & Peds (Combined)	33	52%	12%	12%	0%
Obstetrics/Gynecology	161	78%	12%	3%	2%
	313	32%	3%	26%	6%
Internal Medicine Specialties	49	15%	0%	18%	2%
Cardiology			5%		
Gastroenterology	42	21%		40%	5%
Geriatrics	38	61%	3%	22%	3%
Hematology/Oncology	34	38%	3%	24%	3%
Nephrology	40	28%	10%	28%	5%
Pulmonary Disease	45	36%	5%	13%	2%
Surgery-General	113	31%	20%	9%	4%
Surgical Subspecialties	330	17%	6%	5%	3%
Ophthalmology	71	37%	7%	10%	4%
Orthopedics	101	6%	3%	2%	0%
Otolaryngology	44	18%	2%	0%	5%
Plastic Surgery	33	21%	3%	6%	3%
Urology	28	11%	14%	0%	0%
Facility Based	491	31%	8%	22%	3%
Anesthesiology-General	151	25%	8%	29%	3%
Pain Management	19	16%	5%	16%	11%
Pathology	102	56%	6%	38%	2%
Radiology	215	26%	8%	9%	3%
Psychiatry	181	42%	11%	26%	4%
Adult Psychiatry	114	42%	10%	27%	5%
Child & Adolescent Psych	49	46%	12%	31%	2%
Other	428	37%	10%	10%	4%
Dermatology	50	53%	6%	6%	0%
Emergency Medicine	186	28%	13%	2%	1%
Neurology	57	30%	7%	25%	11%
Pediatric Subspecialties	58	53%	7%	24%	12%
Physical Medicine & Rehab	30	30%	10%	13%	0%
Total (All Specialties)	3,178	40%	11%	13%	3%

<sup>\*</sup>Specialties with small numbers of respondents are not shown but are included in subgroup totals and overall total.

 $<sup>{}^{**}</sup> Under\text{-}represented \ minority includes \ Black/African \ American, Hispanic/Latino, and \ Native \ American.$ 

<sup>\*\*\*</sup>IMG = International (Foreign) Medical Graduate.

<sup>\*\*\*\*</sup>Temporary Visa Holder refers to respondents with temporary citizenship status. This includes J1 or J2 Exchange Visitors and H1, H2, or H3 Temporary Workers.



Exhibit 1-4. Percentage of Respondents who are Female by Specialty Group, 2000 to 2002 Combined Data

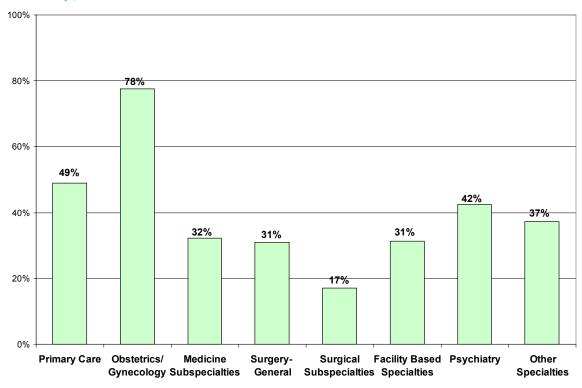


Exhibit 1-5. Percentage of Respondents who are Under-represented Minorities by Specialty Group, 2000 to 2002 Combined Data

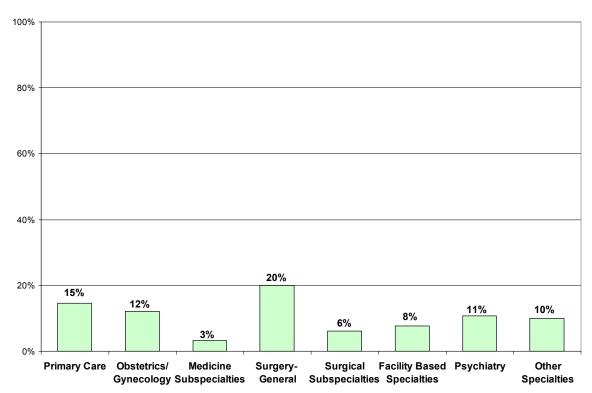




Exhibit 1-6. Percentage of Respondents who are IMGs by Specialty Group, 2000 to 2002 Combined Data

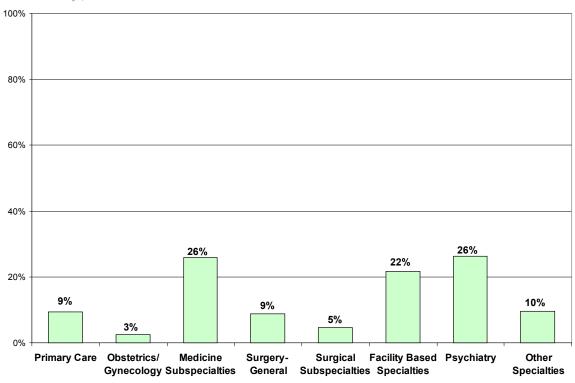


Exhibit 1-7. Percentage of Respondents who have Temporary Citizenship Status by Specialty Group, 2000 to 2002 Combined Data

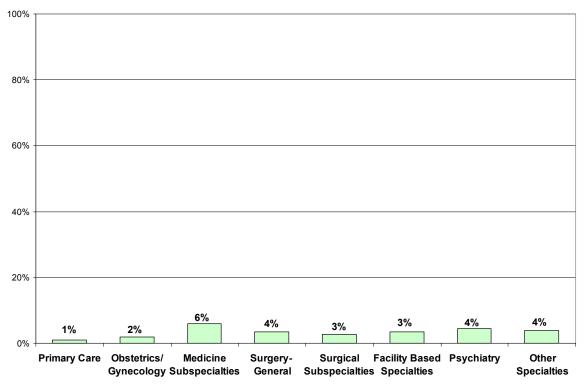


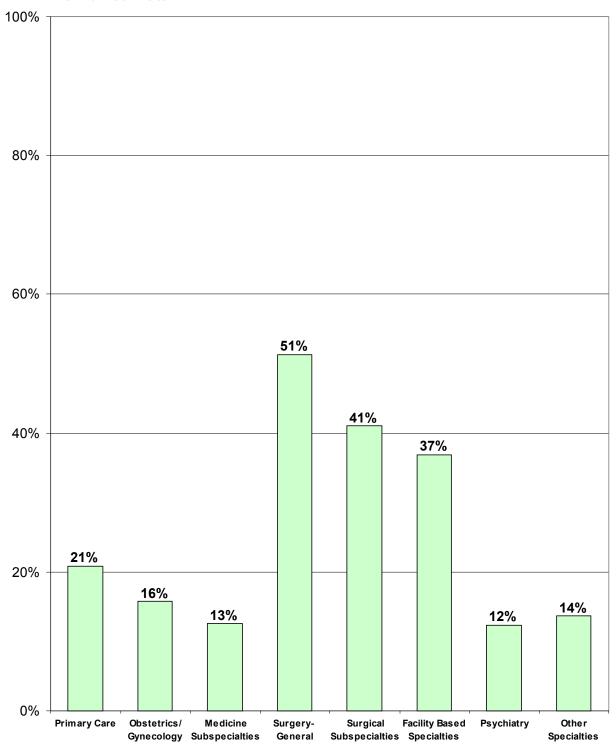


Exhibit 1-8. Primary Activity After Completion of Current Training Program by Specialty, 2000 to 2002 Combined Data

Specialty	Patient Care/ Clinical Practice	Subspecializing/ Cont. Training	Chief <u>Resident</u>	Teaching/ Research	Other
Primary Care	66%	21%	5%	3%	6%
Family Practice Internal Medicine-General Pediatrics-General IM & Peds (Combined)	81% 53% 63% 73%	7% 33% 23% 15%	1% 7% 7% 6%	4% 2% 2% 3%	7% 5% 5% 3%
Obstetrics/Gynecology	76%	16%	0%	4%	5%
Internal Medicine Specialtie	71%	12%	0%	11%	6%
Cardiology	59%	35%	0%	2%	4%
Gastroenterology	83%	7%	0%	7%	2%
	58%	16%	0%	13%	13%
Geriatrics			- , ,	, .	
Hematology/Oncology	68%	3%	0%	24%	6%
Nephrology	80%	3%	0%	10%	8%
Pulmonary Disease	76%	11%	0%	9%	4%
Surgery-General	45%	51%	0%	4%	0%
Surgical Subspecialties	54%	41%	1%	1%	4%
Ophthalmology	49%	46%	0%	0%	4%
Orthopedics	38%	57%	0%	0%	5%
Otolaryngology	61%	36%	0%	2%	0%
Plastic Surgery	67%	27%	0%	0%	6%
Urology	82%	18%	0%	0%	0%
Facility Based	56%	37%	0%	2%	5%
Anesthesiology-General	75%	21%	0%	1%	3%
Pain Management	95%	0%	0%	0%	5%
Pathology	49%	36%	0%	2%	13%
	42%	52%	0%	2%	4%
Radiology					
Psychiatry	73%	12%	0%	8%	7%
Adult Psychiatry	68%	16%	0%	9%	8%
Child & Adolescent Psych	88%	4%	0%	2%	6%
Other	72%	14%	1%	8%	5%
Dermatology	74%	10%	2%	10%	4%
Emergency Medicine	85%	5%	2%	5%	3%
Neurology	37%	53%	0%	5%	5%
Pediatric Subspecialties	67%	9%	0%	19%	5%
Physical Medicine & Rehat		17%	0%	3%	0%
Total (All Specialties)	65%	24%	2%	4%	5%
is is the state of	5575	, ,	_,,,	.,,	- 70



Exhibit 1-9. Subspecialization Rates by Specialty Group, 2000 to 2002 Combined Data





#### SECTION II

## Practice Plans of Respondents with Confirmed Plans to Enter Patient Care/Clinical Practice, 2000-2002

- Nearly two-thirds (65%) of respondents had plans to enter patient care/clinical practice after completing their current training. Eighty-six percent (86%) of those respondents with plans to enter patient care/clinical practice had confirmed practice plans (i.e. they had accepted a job offer or would be self-employed).
- Respondents with confirmed practice plans were very likely to remain in California (79%) to practice. About 1% of respondents planned to practice outside the United States.
- The specialties with the highest in-state retention rates were General Internal Medicine (92%), Adult Psychiatry (92%), Child & Adolescent Psychiatry (92%), Geriatrics (90%), and Physical Medicine & Rehabilitation (90%).
- The specialties with the lowest in-state retention rates were Orthopedics (50%), Pediatric Subspecialties (44%), Urology (30%), Plastic Surgery (29%) and Emergency Medicine (29%).
- Generalists were more likely to remain in California to practice than were specialists (85% vs 75%).
- Nearly one-half (48%) of respondents with confirmed practice plans were entering practice in a group setting. Respondents were three times more likely to enter a group practice as an employee (36%) than as an owner/partner (12%).
- Five percent (5%) of respondents with confirmed practice plans stated that they were entering solo practice and seven percent (7%) planned to enter partnerships (i.e., two-physician practice).
- Seventeen percent (17%) of respondents were entering hospital based practices.
- Plastic Surgery (64%) and Dermatology (45%) respondents were most likely to some level of ownership in their upcoming practice (i.e., those entering solo practice, partnerships, or group practice as an owner/partner).
- Four percent (4%) of respondents with confirmed practice plans were entering practice in a rural area and 16% were entering practice in an inner-city location. Suburban (35%) and other (i.e., non-inner city) areas in major cities (34%) were the most common locations for a respondent's upcoming practice.
- Seven percent (7%) of respondents reported that they would be practicing in a federally designated Health Professional Shortage Area (HPSA). Respondents from Family Practice (22%) and Internal Medicine & Pediatrics-Combined (21%) were the most likely to have confirmed plans to enter practice in a federal HPSA.



- The median starting annual income for all respondents with confirmed plans was \$132,100. The mean annual starting income was \$141,200.
- Primary Care specialties (\$115,300) had the lowest median starting income of all the specialty groupings. Facility based specialties (\$175,500) had the highest median starting income. Overall, Primary Care physicians reported incomes well below those of Non-Primary Care physicians (\$159,000).
- The specialties with the highest median starting incomes were Orthopedics (\$199,400), General Anesthesiology (\$198,500), Cardiology (\$193,000), Radiology (\$180,200) Emergency Medicine (\$175,700), and Urology (\$174,700).
- General Pediatrics (\$99,200), Adult Psychiatry (\$113,300), Family Practice (\$113,800), and Internal Medicine & Pediatrics-Combined (\$122,400) had the lowest median staring incomes.
- Respondents from California had slightly higher median starting incomes than did respondents from New York State. Primary Care respondents form California in 2002 had a median starting income of \$123,000 while that of Primary Care respondents from New York was \$114,000. Non-Primary Care respondents from California also had higher median starting incomes than New York respondents in 2002 (\$159,000 compared to \$157,000).

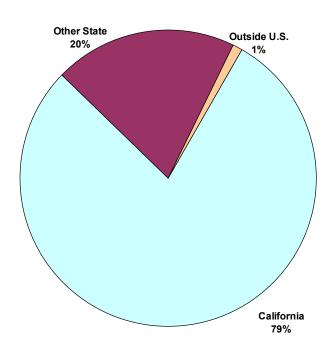


Exhibit 2-1. Percentage of Respondents with Confirmed Plans to Enter Patient Care/Clinical Practice and Practice Location by Specialty, 2000 to 2002 Combined Data

	Number with	APOLT.	045.	ا مدید ا
Specialty	Confirmed Practice Plans	Within California	Other State	Outside U.S.
Primary Care	626	85%	14%	1%
Family Practice Internal Medicine-General Pediatrics-General IM & Peds (Combined)	285 183 139 19	82% 92% 83% 79%	17% 8% 15% 21%	1% 0% 1% 0%
Obstetrics/Gynecology	108	76%	24%	0%
Internal Medicine Specialties Cardiology Gastroenterology Geriatrics Hematology/Oncology Nephrology Pulmonary Disease	201 26 33 21 21 21 28 31	79% 81% 76% 90% 81% 75% 77%	21% 19% 21% 10% 19% 21% 23%	1% 0% 3% 0% 0% 4% 0%
Surgery-General	43	76%	24%	0%
Ophthalmology Orthopedics Otolaryngology Plastic Surgery Urology	28 36 27 17 23	64% 79% 47% 70% 65% 70%	33% 18% 50% 26% 29% 30%	3% 4% 3% 4% 6% 0%
Facility Based	246	76%	22%	2%
Anesthesiology-General Pain Management Pathology Radiology	109 15 40 79	81% 79% 80% 68%	17% 21% 20% 28%	2% 0% 0% 4%
Psychiatry	128	93%	7%	0%
Adult Psychiatry Child & Adolescent Psych	75 39	92% 92%	8% 8%	0% 0%
Other	279	71%	27%	1%
Dermatology Emergency Medicine Neurology Pediatric Subspecialties Physical Medicine & Rehab	35 147 20 33 21	80% 69% 85% 56% 90%	20% 29% 15% 44% 10%	0% 1% 0% 0% 0%
Total (All Specialties)	1,792	79%	20%	1%



Exhibit 2-2. Location of Upcoming Practice, 2000 to 2002 Combined Data (for Respondents with Confirmed Practice Plans)



**Exhibit 2-3. Percentage of Respondents Entering Practice within** California (i.e., In-State Retention) by Specialty Group, 2000 to 2002 **Combined Data** 

(for Respondents with Confirmed Practice Plans)

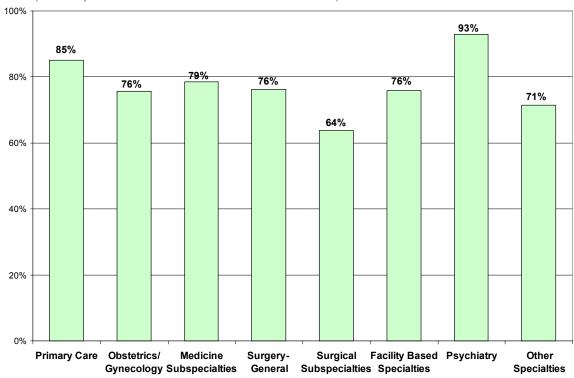




Exhibit 2-4. Rank of In-State Retention Rates by Specialty, 2000 to 2002 Combined Data

(for Respondents with Confirmed Practice Plans)

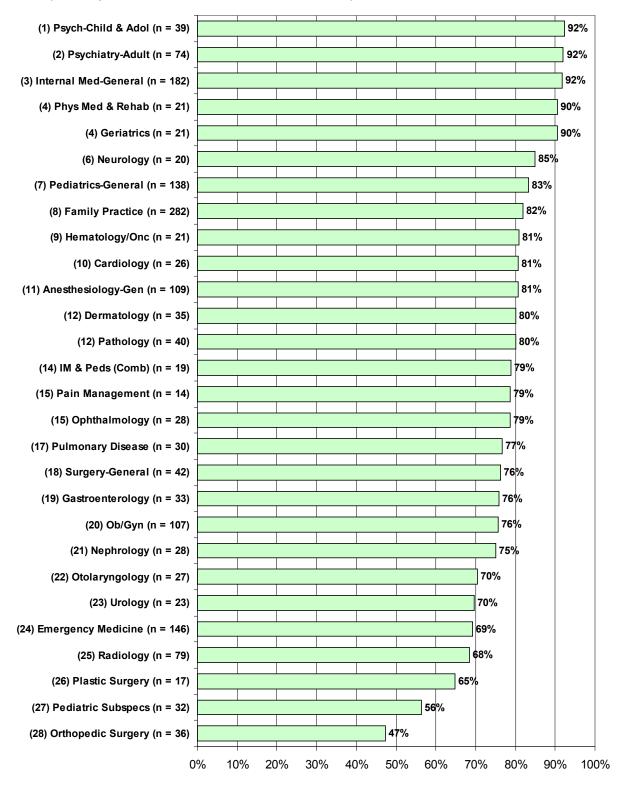


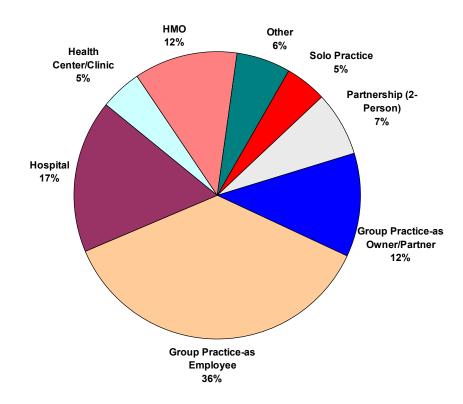


Exhibit 2-5. Practice Setting of Respondent's Upcoming Principal Practice by Specialty, 2000 to 2002 Combined Data (for Respondents with Confirmed Practice Plans)

		Partner-	GROUP PI	RACTICE				
	Solo	ship (2	As Owner/	As Em-	Hos-	Hith Ctr/		
<u>Specialty</u>	<b>Practice</b>	Person)	<u>Partner</u>	<u>ploye e</u>	<u>pital</u>	<u>Clinic</u>	<u>HMO</u>	<u>Other</u>
Primary Care	3%	5%	7%	41%	16%	8%	15%	6%
Family Practice	3%	3%	7%	46%	5%	13%	13%	9%
Internal Medicine-General	3%	4%	8%	32%	29%	2%	20%	1%
Pediatrics-General	3%	10%	6%	39%	20%	5%	12%	5%
IM & Peds (Combined)	6%	6%	11%	56%	17%	0%	6%	0%
Obstetrics/Gynecology	3%	12%	7%	47%	3%	3%	21%	5%
Internal Medicine Specialti	8%	8%	11%	43%	11%	1%	11%	7%
Cardiology	4%	4%	17%	52%	9%	4%	9%	0%
Gastroenterology	6%	10%	16%	45%	6%	0%	10%	6%
Geriatrics	10%	5%	0%	24%	10%	5%	24%	24%
Hematology/Oncology	5%	10%	14%	48%	14%	0%	10%	0%
Nephrology	8%	8%	8%	46%	4%	0%	12%	15%
Pulmonary Disease	3%	3%	17%	38%	21%	0%	14%	3%
Surgery-General	5%	5%	14%	40%	10%	0%	19%	7%
Surgical Subspecialties	5%	18%	16%	32%	8%	1%	12%	8%
Ophthalmology	4%	27%	12%	35%	4%	0%	15%	4%
Orthopedics	6%	9%	27%	27%	6%	3%	12%	9%
Otolaryngology	4%	16%	8%	28%	8%	4%	20%	12%
Plastic Surgery	14%	36%	14%	14%	14%	0%	0%	7%
Urology	0%	27%	14%	36%	0%	0%	18%	5%
Facility Based	1%	4%	27%	40%	16%	0%	7%	4%
Anesthesiology-General	1%	3%	27%	47%	19%	0%	1%	2%
Pathology	0%	0%	19%	32%	24%	0%	14%	11%
Radiology	0%	7%	36%	33%	11%	0%	10%	4%
Psychiatry	19%	1%	3%	9%	26%	25%	4%	13%
Adult Psychiatry	15%	0%	3%	6%	33%	31%	4%	8%
Child & Adolescent Psych	25%	0%	6%	11%	14%	19%	6%	19%
Other	3%	9%	13%	30%	35%	0%	7%	3%
Dermatology	3%	33%	9%	39%	6%	0%	9%	0%
Emergency Medicine	1%	1%	18%	24%	51%	0%	3%	2%
Neurology	12%	18%	0%	41%	6%	0%	24%	0%
Pediatric Subspecialties	0%	3%	7%	30%	37%	0%	10%	13%
Physical Medicine & Rehal	16%	5%	21%	26%	11%	0%	21%	0%
Total (All Specialties)	5%	7%	12%	36%	17%	5%	12%	6%



Exhibit 2-6. Practice Setting of Respondent's Upcoming Principal Practice, 2000 to 2002 Combined Data (for Respondents with Confirmed Practice Plans)





**Exhibit 2-7. Demographics of Practice Location and Percentage of** Respondents Entering Practice in a Federal HPSA by Specialty, 2000 to 2002 Combined Data

Demographics of Practice Location % Practicing								
	Inner	Other Area in		Small		in a Federal		
Specialty	City	Major City	Suburban	City	Rural	HPSA		
Primary Care	14%	32%	36%	12%	7%	14%		
Family Practice	13%	24%	32%	18%	12%	22%		
Internal Medicine-Genera	18%	42%	34%	6%	1%	3%		
Pediatrics-General	10%	37%	47%	5%	2%	8%		
IM & Peds (Combined)	16%	32%	26%	16%	11%	21%		
Obstetrics/Gynecology	10%	26%	49%	12%	3%	5%		
<b>Internal Medicine Specialt</b>	18%	37%	33%	7%	4%	5%		
Cardiology	24%	40%	28%	8%	0%	4%		
Gastroenterology	6%	48%	35%	10%	0%	0%		
Geriatrics	24%	38%	24%	10%	5%	5%		
Hematology/Oncology	10%	45%	35%	0%	10%	10%		
Nephrology	23%	31%	38%	8%	0%	4%		
Pulmonary Disease	24%	31%	34%	7%	3%	3%		
Surgery-General	15%	24%	44%	15%	2%	3%		
Surgical Subspecialties	13%	32%	40%	13%	2%	3%		
Ophthalmology	4%	31%	54%	12%	0%	0%		
Orthopedics	24%	21%	24%	24%	6%	9%		
Otolaryngology	12%	27%	54%	8%	0%	8%		
Plastic Surgery	13%	50%	25%	13%	0%	0%		
Urology	0%	45%	50%	5%	0%	0%		
Facility Based	20%	33%	34%	12%	1%	4%		
Anesthesiology-General	22%	37%	27%	13%	1%	3%		
Pain Management	31%	31%	38%	0%	0%	0%		
Pathology	28%	35%	25%	13%	0%	13%		
Radiology	11%	26%	49%	13%	1%	0%		
Psychiatry	27%	44%	19%	7%	3%	5%		
Adult Psychiatry	36%	42%	14%	7%	1%	4%		
Child & Adolescent Psych	19%	43%	24%	8%	5%	8%		
Other	17%	37%	34%	11%	1%	2%		
Dermatology	3%	24%	48%	24%	0%	0%		
Emergency Medicine	20%	38%	29%	11%	1%	2%		
Neurology	25%	30%	30%	15%	0%	5%		
Pediatric Subspecialties	25%	59%	16%	0%	0%	0%		
Physical Medicine & Reha	14%	33%	48%	5%	0%	0%		
Total (All Specialties)	16%	34%	35%	11%	4%	7%		



**Exhibit 2-8. Demographics of Practice Location, 2000 to 2002 Combined Data** 

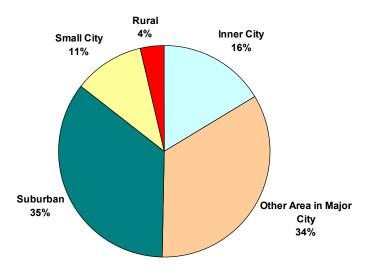
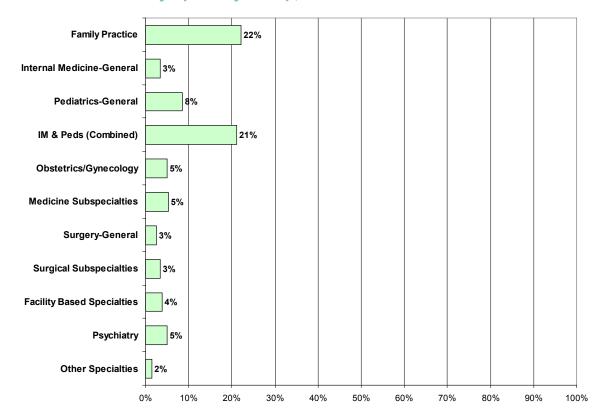


Exhibit 2-9. Percentage of Respondents who are Entering Practice in a Federal HPSA by Specialty Group, 2000 to 2002 Combined Data





# Exhibit 2-10. Descriptive Statistics for Starting Income by Specialty, 2000 to 2002 Combined Data

(for Respondents with Confirmed Practice Plans)

Specialty Primary Care Family Practice Internal Medicine-Genera Pediatrics-General	N 594 269 177 129 19	MEAN \$112,800 \$112,300 \$122,400 \$98,900 \$124,200 \$161,700	(of 28) N/A 27 25 28 23	MEDIAN \$115,300 \$113,800 \$123,400 \$99,200 \$122,400	(of 28) N/A 26 23 28
Family Practice Internal Medicine-Genera Pediatrics-General	269 177 129 19	\$112,300 \$122,400 \$98,900 \$124,200	27 25 28	\$113,800 \$123,400 \$99,200	26 23
	19 <b>103</b>	\$98,900 \$124,200	28	\$99,200	28
<pre>IM &amp; Peds (Combined)</pre>		\$464.700		T,	25
Obstetrics/Gynecology		φισι, <i>τ</i> υυ	10	\$162,300	11
Internal Medicine Specialti	190	\$149,600	N/A	\$144,400	N/A
Cardiology Gastroenterology Geriatrics Hematology/Oncology Nephrology Pulmonary Disease	23 31 21 21 27 29	\$186,400 \$165,800 \$124,100 \$166,900 \$139,200 \$153,700	3 9 24 8 17 12	\$193,000 \$165,400 \$123,100 \$173,500 \$137,800 \$157,200	3 9 24 7 17 12
Surgery-General	40	\$150,400	13	\$153,900	13
Surgical Subspecialties Ophthalmology Orthopedics Otolaryngology Plastic Surgery Urology	26 32 26 16 21	\$166,100 \$128,900 \$197,500 \$155,300 \$143,500 \$174,500	N/A 20 1 11 15 6	\$169,800 \$130,300 \$199,400 \$163,300 \$136,800 \$174,700	N/A 20 1 10 18 6
Facility Based	225	\$176,100	N/A	\$175,500	N/A
Anesthesiology-General Pain Management Pathology Radiology	101 13 39 70	\$190,200 \$179,200 \$130,100 \$180,200	2 5 19 4	\$198,500 \$167,900 \$128,900 \$181,900	2 8 21 4
Psychiatry	120	\$126,000	N/A	\$120,200	N/A
Adult Psychiatry Child & Adolescent Psych	70 37	\$116,700 \$143,200	26 16	\$113,300 \$140,300	27 16
Other	260	\$153,100	N/A	\$151,900	N/A
Dermatology Emergency Medicine Neurology Pediatric Subspecialties	30 139 20 32 21	\$138,600 \$170,100 \$128,100 \$125,400	18 7 21 22 14	\$141,900 \$175,700 \$131,300 \$125,700	14 5 19 22 15
Physical Medicine & Reha  Total (All Specialties) 1	1,678	\$145,400 <b>\$141,200</b>	N/A	\$141,400 <b>\$132,100</b>	N/A



Exhibit 2-11. Median Starting Income (in \$1,000s) by Survey Year and Specialty Group, 2000 to 2002

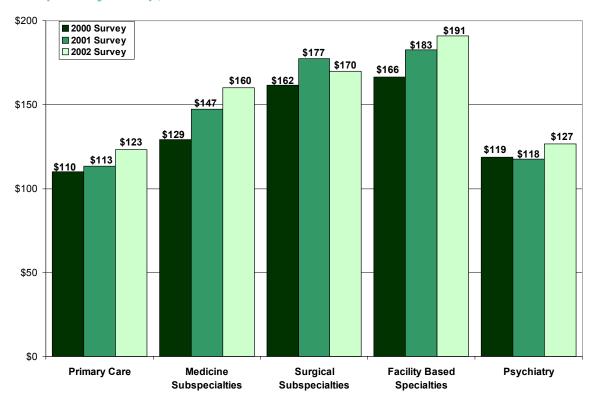


Exhibit 2-12. Median Starting Income in Primary Care and Non-Primary Care Specialties by Survey Year for NY and CA, 2000 to 2002

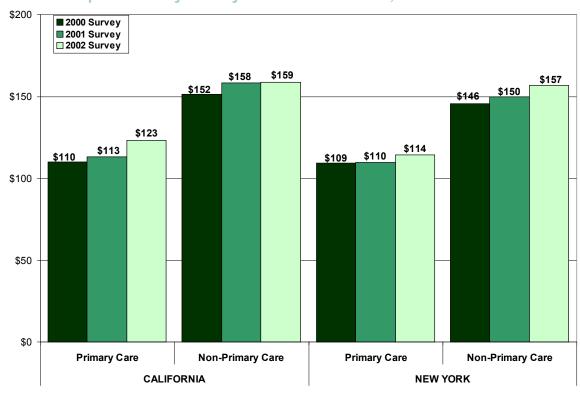
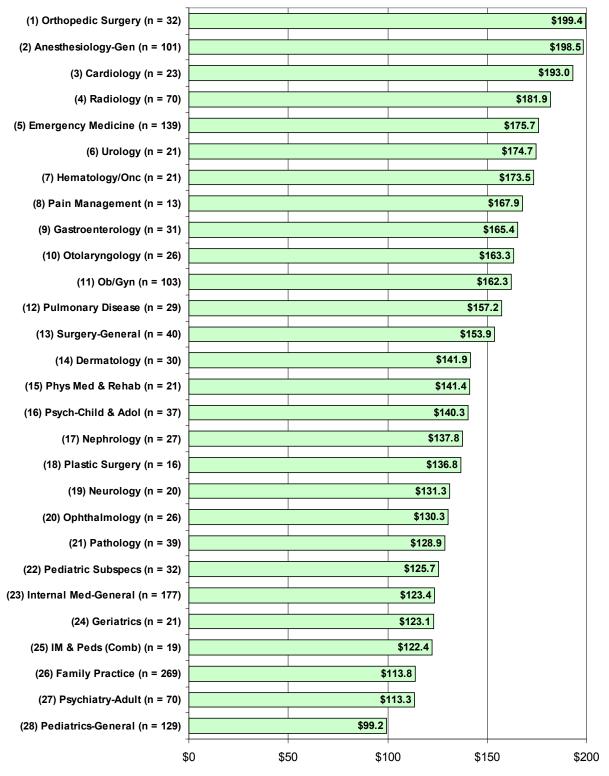




Exhibit 2-13. Rank of Median Starting Income by Specialty, 2000 to 2002 Combined Data

(for Respondents with Confirmed Practice Plans)





#### SECTION III

# Job Market Experiences and Perceptions of Respondents Who Have Searched for a Job (Excludes IMGs with Temporary Citizenship Status), 2000-2002

- About one-quarter (24%) of California survey respondents reported difficulty finding a satisfactory practice position. A higher percentage of New York respondents reported difficulty finding a satisfactory practice position (31%).
- Opthalmology (45%), Geriatrics (44%), Pediatric Subspecialties (38%), General Pediatrics (37%) and Internal Medicine & Pediatrics-Combined (35%) had the largest percentages of California respondents indicating they had difficulty finding a satisfactory practice position.
- The specialties with the lowest percentages of California respondents reporting difficulty finding a satisfactory practice position were Urology (4%), General Anesthesiology (8%), Cardiology (9%), and Adult Psychiatry (9%).
- The most common reason provided for difficulty finding a satisfactory practice position were a "lack of jobs in desired locations" (42%), "overall lack of jobs" (20%), and "lack of jobs in desired settings" (15%).
- Ocalifornia respondents had lower percentages of respondents reporting difficulty finding a satisfactory practice position in 2002 for both Primary Care (31% in California versus 44% in New York) and Non-Primary Care (19% in California versus 22% in New York) than respondents from New York State.
- Fourteen percent (14%) of California respondents indicated they had to change their plans due to limited practice opportunities. New York was slightly higher, with 17% of the respondents stating they had to change plans due to limited practice opportunities.
- Ocalifornia respondents from Primary Care specialties were more likely to report having to change plans due to limited practice opportunities than were their colleagues in Non-Primary Care specialties (17% versus 12%). California respondents in Psychiatry (3%), Urology (4%), Cardiology (6%), and Orthopedics (7%) were the least likely to have to change plans due to limited practice opportunities.
- In California, the individual specialties with the highest percentage of respondents who had to change plans due to limited practice opportunities were Internal Medicine & Pediatrics-Combined (32%), Geriatrics (29%), Pain Management (26%), Plastic Surgery (22%), and Pathology (22%).
- O California had lower percentages of respondents who indicated that they had to change plans due to limited practice opportunities than New York in 2001 for both Primary Care (California: 17% versus New York State: 23%) and Non-Primary Care (California: 12% versus New York State: 14%).



- The mean number of job offers received by all California respondents was 3.52, slightly lower than New York respondents (3.70).
- In California, Child & Adolescent Psychiatry (5.87), Gastroenterology (5.68), Orthopedics (4.96), General Anesthesiology (4.64), and Dermatology (4.60) respondents received the highest mean number of job offers.
- Pathology (2.02), General Pediatrics (2.29), Physical Medicine & Rehabilitation (2.52), Pediatric Subspecialties (2.64), and Internal Medicine & Pediatrics-Combined (2.74) were the five specialties in California that reported receiving the lowest mean number of job offers.
- California respondents received more job offers than did New York State respondents for Primary Care (2.88 versus 2.65). However, California respondents received fewer job offers than New York State respondents in Non-Primary Care (3.96 versus 4.30).
- Among all California respondents, the mean likert score for respondents' assessment of the job market within 50 miles of the site at which they trained (i.e., assessment of the regional job market) was 0.85 (with +2 indicating "Many Jobs" and -2 indicating "No Jobs"). New York State had a slightly lower mean likert score summarizing their assessment of the regional job market (0.81).
- In California, the specialties with the highest assessment of the regional job market were Child & Adolescent Psychiatry (1.72), Adult Psychiatry (1.69), General Anesthesiology (1.48), Gastroenterology (1.19), and Pulmonary Disease (1.14).
- The specialties that had the lowest mean assessment of the regional job market, (based on California respondents), were Plastic Surgery (-0.67), Pediatric Subspecialties (-0.49), Opthalmology (0.23), Pathology (0.39), and General Pediatrics (0.47).
- Primary Care respondents from California gave a more positive assessment of the regional job market than did their counterparts in New York State (0.87 versus 0.48) in 2002. Nevertheless, New York State respondents gave a more positive assessment of the regional job market for Non-Primary Care specialties than did California respondents (0.93 versus 1.03) in 2002.
- California respondents gave a slightly better assessment of the national job market (similarly, using a likert scale with +2 indicating "Many Jobs" and -2 indicating "No Jobs") than New York respondents (mean likert score of 1.55 versus 1.50).
- Among California respondents, Child & Adolescent Psychiatry (1.92), Gastroenterology (1.91), Urology (1.91), General Anesthesiology (1.88), and Cardiology (1.84) were the specialties with the highest scores on the national job market assessment scale.
- O Plastic Surgery (0.57), Opthalmology (0.91), Pathology (0.93), Pediatric Subspecialties (1.17), and General Pediatrics (1.21) were the specialties having the lowest score on the national job market assessment scale for California respondents.



Respondents in California gave a more positive assessment of the national job market for Primary Care specialties than did respondents from New York (1.50 versus 1.40). New York and California respondents, however, had equal mean assessments of the national job market for Non-Primary Care specialties (1.61).

#### **Assessment of Demand by Specialty**

One of the primary objectives of the Resident Exit Survey is to assess the job market for new physicians by specialty. By surveying physicians as they complete residency training and asking a series of questions pertaining to their experiences in searching for a practice position and their general impressions of the job market for physicians, it is possible to measure the relative demand for new physicians by specialty. The following survey items are considered indicators of demand and are used to measure demand:

- percentage of graduates reporting difficulty finding a satisfactory practice position (i.e., "% with difficulty");
- percentage of graduates having to change plans due to limited practice opportunities (i.e., "% having to change plans");
- mean number of job offers received by graduates (i.e., "# of job offers");
- mean likert score for graduates' assessments of the job market for their specialty within 50 miles of the location in which they trained (i.e., "regional job market");
- mean likert score for graduates' assessments of the job market for their specialty in the nation (i.e., "national job market");
- trends (i.e., average annual change) in median starting income.

For questions asking graduates to give their assessment of the regional and national job market, the following likert scale (i.e., point system) was used: "Many Jobs" = +2, "Some Jobs" = +1, "Few Jobs" = -1, "No Jobs" = -2.

The composite index does not use relative income in recognition that this may reflect reimbursement and coverage policies rather than demand. The index does use trends in income which are more likely to reflect which are more likely to relect current demand in a specialty.

While none of the indicators listed above provides a perfect measure of demand, taken together these variables can provide a good picture of relative demand by specialty. In order to synthesize the



information provided by each demand indicator into a composite measure of demand, a ranking methodology was employed. For each demand indicator, specialties were ranked according to where they stood relative to one another (with #1 ranking best and #28 being worst). A demand score was then computed by taking the weighted median of the ranks scored by each specialty on each of the demand indicators

There was a high degree of correlation between the "% with difficulty" variable and the "% having to change plans" variable (i.e., a respondent reporting difficulty was much more likely to report having to change plans). There was also a high degree of correlation between respondents' assessments of the "regional job market" and "national job market." For these reasons, the "job offers" variable was double-weighted in computing a composite measure of demand.

Please note that the Exit Survey **cannot** be used to measure absolute demand (i.e., it cannot be used to determine the number of physicians a given population can support), nor can it be used to measure need (i.e., it cannot be used to determine the appropriate number of physicians necessary to serve a given population). Instead, it is used to measure the demand for each specialty relative to other specialties against which it is compared.



#### **Highlights**

Exhibit 3-21 is a plot of the median of the ranks (i.e., the demand score) of each specialty to illustrate the relative demand for 28 specialties in California. These are based on responses to the 2000 through 2002 California Exit Surveys. Exhibit 3-22 is a plot of relative demand for the same 28 specialties in New York State for the same years. Exhibit 3-23 is a scatter plot of the demand scores for specialties in New York vs. California for 28 specialties.

- In California, Child & Adolescent Psychiatry (average rank of 1.0 out of 28.0 where 1 indicates strongest demand and 28 is weakest), Gastroenterology (2.5) and Pulmonary Disease (4.0) are the specialties experiencing the strongest demand. In addition, Cardiology (4.5), General Anesthesiology (5.0) and Urology (7.0) are also experiencing very high demand.
- Pathology (27.0), Pediatric Subspecialties (25.0), General Pediatrics (23.5), and Internal Medicine & Pediatrics-Combined (23.0) are seeing the weakest relative demand. Geriatrics (22.5) and Opthalmology (21.5) are also experiencing relatively soft demand.
- The demand for Primary Care graduates is weak relative to most specialists. In addition to the weak demand for Pediatrics and Internal Medicine & Pediatrics-Combined mentioned earlier, General Internal Medicine (19.0) and Family Practice (17.0) are also among the lower half of the 28 specialties.
- There is a high degree of correlation in the relative demand for different individual specialties between different states. Despite the many differences that exist between New York State and California in terms of the number and specialty mix of the physician supply, the demographic characteristics of the populations, and the health care delivery systems, the relative demand for physicians by specialty is very similar in these states ( $r^2 = 0.55$ ).



**Exhibit 3-1. Percentage of Respondents Having Difficulty Finding a Satisfactory Practice Position, 2000 to 2002 Combined Data** (of Respondents who have Searched for a Job, IMGs on Temp Visas Excluded\*)

<u>Specialty</u>	California <u>Respondents</u>	<u>RANK</u> (of 28)	New York State <u>Respondents</u>	<u>RANK</u> (of 28)
Primary Care	31%	N/A	46%	N/A
Family Practice	29%	22	40%	21
Internal Medicine-General	27%	18	51%	27
Pediatrics-General	37%	25	43%	23
IM & Peds (Combined)	35%	24	35%	20
Obstetrics/Gynecology	23%	15	29%	18
Internal Medicine Specialties	19%	N/A	26%	N/A
Cardiology	9%	4	18%	7
Gastroenterology	19%	11	15%	6
Geriatrics	44%	27	43%	22
Hematology/Oncology	11%	6	21%	12
Nephrology	11%	5	27%	17
Pulmonary Disease	19%	12	25%	15
Surgery-General	27%	17	44%	24
Surgical Subspecialties	23%	N/A	24%	N/A
Ophthalmology	45%	28	34%	19
Orthopedics	12%	7	20%	10
Otolaryngology	33%	23	18%	8
Plastic Surgery	27%	19	61%	28
Urology	4%	1	12%	4
Facility Based	15%	N/A	15%	N/A
Anesthesiology-General	8%	2	7%	1
Pain Management	29%	21	8%	2
Pathology	28%	20	50%	26
Radiology	17%	10	14%	5
Psychiatry	12%	N/A	20%	N/A
Adult Psychiatry	9%	3	19%	9
Child & Adolescent Psych	15%	8	22%	13
Other	22%	N/A	21%	N/A
Dermatology	21%	14	20%	11
Emergency Medicine	16%	9	11%	3
Neurology	21%	13	22%	14
Pediatric Subspecialties	38%	26	26%	16
Physical Medicine & Rehab	26%	16	45%	25
Total (All Specialties)	24%	N/A	31%	N/A

<sup>\*</sup>This section refers to the job market experiences and perceptions of U.S. citizens and permanent residents who have actively searched for a practice position.



Exhibit 3-2. Main Reason for Difficulty Finding a Satisfactory Practice Position, 2000 to 2002 Combined Data (of Respondents who Reported Having Difficulty, IMGs on Temp Visas Excluded)

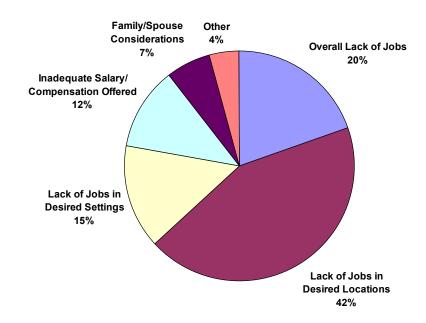


Exhibit 3-3. Percentage of Resp Having Difficulty Finding a Satisfactory Practice Position, in Primary Care and Non-Primary Care Specialties, by Survey Year, for CA and NY, 2000 to 2002

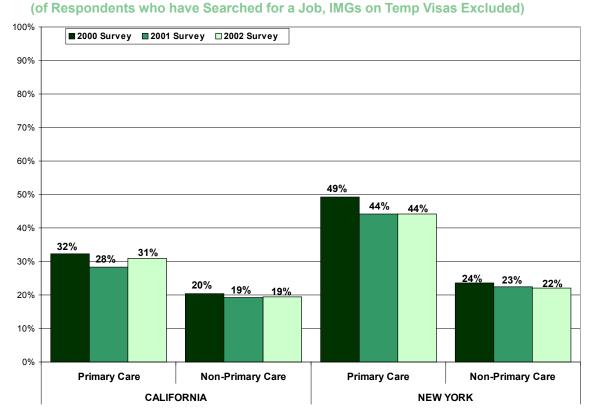




Exhibit 3-4. Rank of Percentage of Respondents Having Difficulty Finding a Satisfactory Practice Position by Specialty, 2000 to 2002 Combined Data (for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

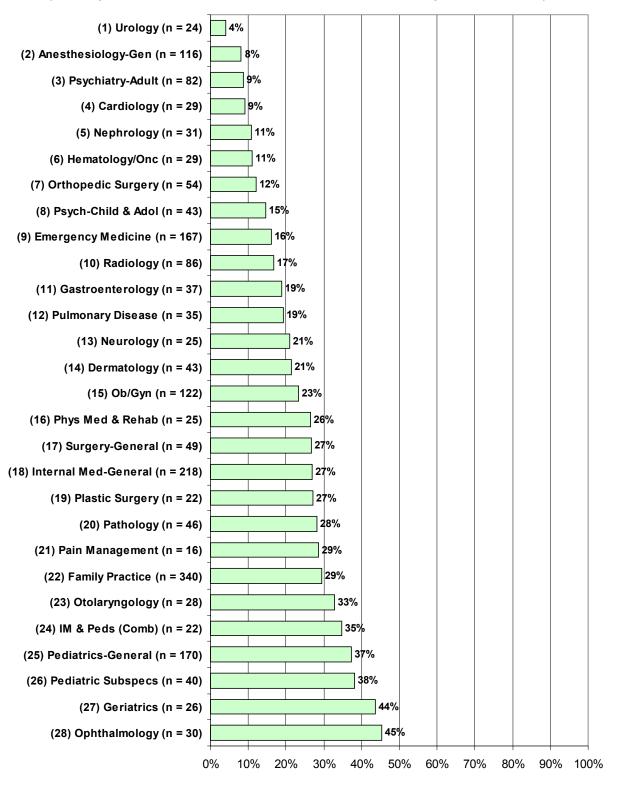




Exhibit 3-5. Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities, 2000 to 2002 Combined Data (for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

<u>Specialty</u>	California <u>Respondents</u>	<u>RANK</u> (of 28)	New York State Respondents	<u>RANK</u> (of 28)
Primary Care	17%	N/A	23%	N/A
Family Practice Internal Medicine-General Pediatrics-General IM & Peds (Combined)	17% 13% 19% 32%	16 14 21 28	22% 25% 22% 15%	22 26 23 15
Obstetrics/Gynecology	10%	9	13%	10
Internal Medicine Specialties	13%	N/A	16%	N/A
Cardiology Gastroenterology Geriatrics Hematology/Oncology Nephrology Pulmonary Disease	6% 11% 29% 11% 11% 18%	4 12 27 10 11 18	9% 9% 17% 16% 17% 21%	6 7 18 16 17 20
Surgery-General	20%	23	22%	21
Surgical Subspecialties	14%	N/A	17%	N/A
Ophthalmology Orthopedics Otolaryngology Plastic Surgery Urology	20% 7% 18% 22% 4%	22 6 17 24 3	24% 18% 13% 32% 3%	25 19 11 28 2
Facility Based	11%	N/A	8%	N/A
Anesthesiology-General Pain Management Pathology Radiology	7% 26% 22% 9%	5 26 25 7	3% 5% 23% 8%	1 3 24 4
Psychiatry	3%	N/A	12%	N/A
Adult Psychiatry Child & Adolescent Psych	3% 0%	2	10% 11%	8 9
Other	14%	N/A	13%	N/A
Dermatology Emergency Medicine Neurology Pediatric Subspecialties Physical Medicine & Rehab	16% 9% 18% 19% 12%	15 8 19 20 13	13% 9% 14% 14% 26%	12 5 13 14 27
Total (All Specialties)	14%	N/A	17%	N/A



Exhibit 3-6. Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities by Specialty Group and Survey Year, 2000 and 2002

(of Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

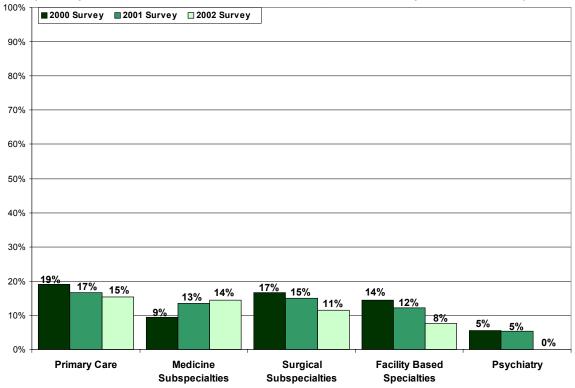


Exhibit 3-7. Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities in Primary Care and Non-Primary Care Specialties by Survey Year for CA and NY, 2000 to 2002

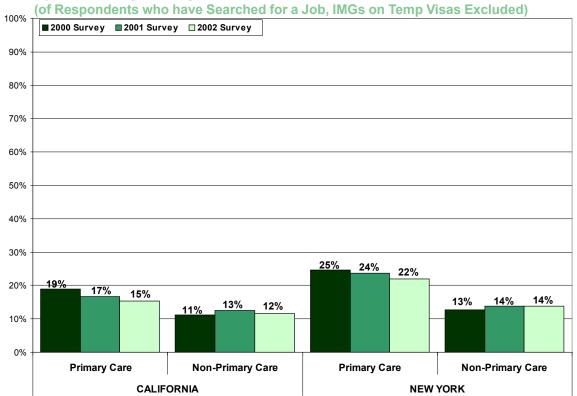
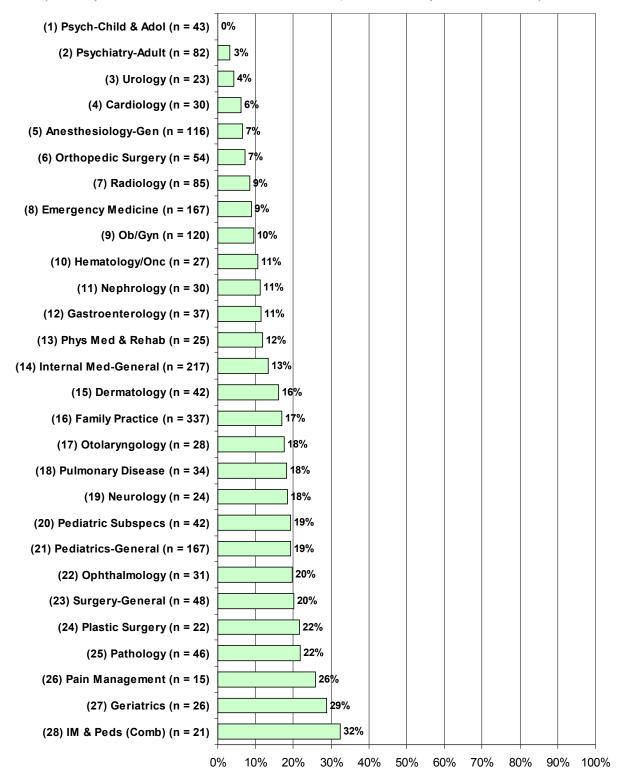




Exhibit 3-8. Rank of Percentage of Respondents Having to Change Plans Due to Limited Practice Opportunities by Specialty, 2000 to 2002 Combined Data

(for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)





**Exhibit 3-9. Mean Number of Offers for Employment/Practice Opportunities, 2000 to 2002 Combined Data** 

(for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

<u>Specialty</u>	California <u>Respondents</u>	<u>RANK</u> (of 28)	New York State Respondents	<u>RANK</u> (of 28)
Primary Care	2.82	N/A	2.73	N/A
Family Practice Internal Medicine-General Pediatrics-General	3.12 2.78 2.29	18 23 27	3.16 2.58 2.49	21 24 25
IM & Peds (Combined)	2.74	24	3.30	20
Obstetrics/Gynecology	3.34	15	4.00	16
Internal Medicine Specialties	4.39	N/A	4.92	N/A
Cardiology Gastroenterology Geriatrics Hematology/Oncology Nephrology	4.48 5.68 2.79 4.33 3.60	7 2 22 9 14	5.76 6.63 3.45 4.80 4.92	3 1 18 9 8
Pulmonary Disease	5.15	3	5.35	4
Surgery-General	3.15	17	2.95	22
Surgical Subspecialties	3.87	N/A	4.34	N/A
Ophthalmology Orthopedics Otolaryngology Plastic Surgery Urology	2.97 4.96 2.99 3.01 4.46	21 4 20 19 8	2.80 4.94 4.62 2.02 5.09	23 7 11 27 6
Facility Based	3.97	N/A	4.26	N/A
Anesthesiology-General Pain Management Pathology Radiology	4.64 4.21 2.02 4.12	5 11 28 12	4.58 4.16 1.93 4.79	12 14 28 10
Psychiatry	4.72	N/A	4.02	N/A
Adult Psychiatry Child & Adolescent Psych	4.32 5.87	10 1	3.57 5.16	17 5
Other	3.56	N/A	3.99	N/A
Dermatology Emergency Medicine Neurology Pediatric Subspecialties Physical Medicine & Rehab	4.60 3.89 3.33 2.64 2.52	6 13 16 25 26	6.07 4.15 4.38 2.46 3.41	2 15 13 26 19
Total (All Specialties)	3.52	N/A	3.70	N/A



Exhibit 3-10. Mean Number of Job Offers Received by Respondents by **Specialty Group and Survey Year, 2000 to 2002** 

(of Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

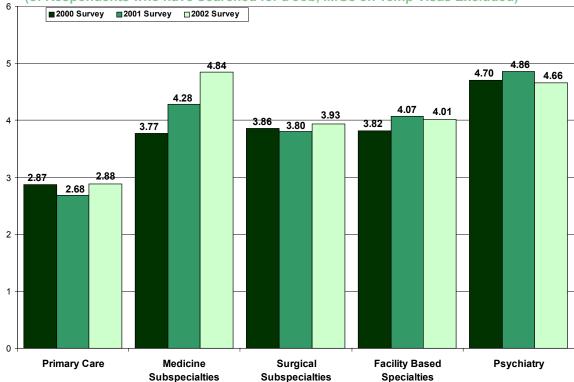


Exhibit 3-11. Mean Number of Job Offers Received by Respondents in Primary Care and Non-Primary Care Specialties by Survey Year for CA and NY, 2000 to 2002

(of Respondents Who Have Searched for a Job, IMGs on Temp Visas Excluded)

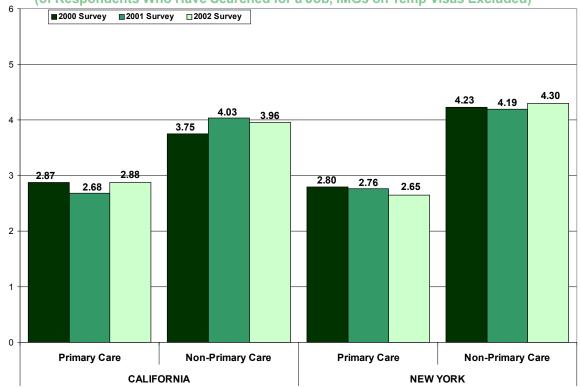




Exhibit 3-12. Rank of Mean Number of Job Offers Received by Respondents by Specialty, 2000 to 2002 Combined Data (for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

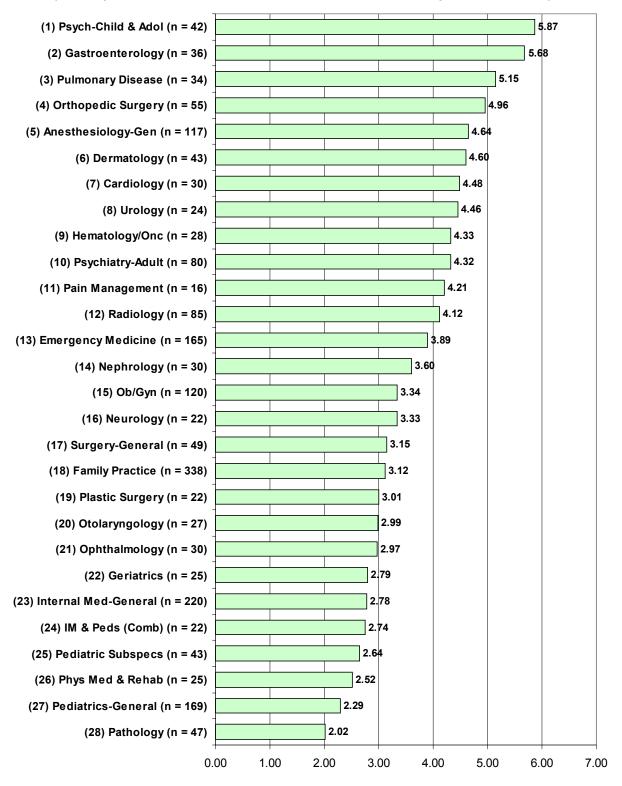




Exhibit 3-13. Likert Scores\* for Respondents' Assessments of the Regional Job Market, 2000 to 2002 Combined Data (of Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

Specialty	California Respondents	<u>RANK</u> (of 28)	New York State Respondents	<u>RANK</u> (of 28)
Primary Care	0.85	N/A	0.45	N/A
Family Practice	0.96	11	0.59	19
Internal Medicine-General	1.03	9	0.41	23
Pediatrics-General	0.47	23	0.37	24
IM & Peds (Combined)	0.49	22	0.57	20
Obstetrics/Gynecology	0.66	16	0.88	15
Internal Medicine Specialties	0.90	N/A	1.02	N/A
Cardiology	0.99	10	1.42	3
Gastroenterology	1.19	4	1.36	5
Geriatrics	0.61	18	0.60	18
Hematology/Oncology	1.06	7	0.92	13
Nephrology	0.82	15	0.91	14
Pulmonary Disease	1.14	5	0.84	16
Surgery-General	0.55	20	0.24	25
Surgical Subspecialties	0.34	N/A	0.60	N/A
Ophthalmology	0.23	26	0.24	26
Orthopedics	0.62	17	0.79	17
Otolaryngology	0.28	25	1.02	12
Plastic Surgery	-0.67	28	-0.58	28
Urology	1.10	6	1.17	11
Facility Based	1.05	N/A	1.24	N/A
Anesthesiology-General	1.48	3	1.58	1
Pain Management	0.57	19	1.35	6
Pathology	0.39	24	0.14	27
Radiology	0.87	14	1.26	9
Psychiatry	1.67	N/A	1.38	N/A
Adult Psychiatry	1.69	2	1.41	4
Child & Adolescent Psych	1.72	1	1.33	7
Other	0.71	N/A	1.05	N/A
Dermatology	0.90	12	1.50	2
Emergency Medicine	1.05	8	1.32	8
Neurology	0.54	21	1.18	10
Pediatric Subspecialties	-0.49	27	0.44	22
Physical Medicine & Rehab	0.90	13	0.46	21
Total (All Specialties)	0.85	N/A	0.81	N/A

<sup>\*</sup>Likert scores computed using the following Likert scale: "Many Jobs" = +2, "Some Jobs" = +1, "Few Jobs" = 0, "Very Few Jobs" = -1, "No Jobs" = -2.



Exhibit 3-14. Likert Scores for Respondents' Assessments of the Regional Job Market by Specialty Group, 2000 to 2002 (of Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

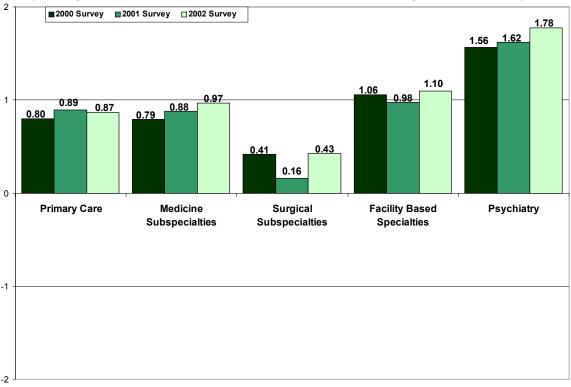


Exhibit 3-15. Likert Scores for Respondents' Assessments of the Regional Job Market in Primary Care and Non-Primary Care Specialties by Survey Year for CA and NY, 2000 to 2002

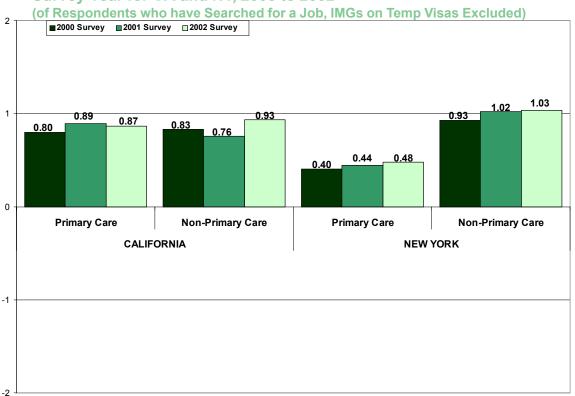




Exhibit 3-16. Rank of Mean Likert Score for Respondents' Assessments of the Regional Job Market by Specialty, 2000 to 2002 Combined Data (for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

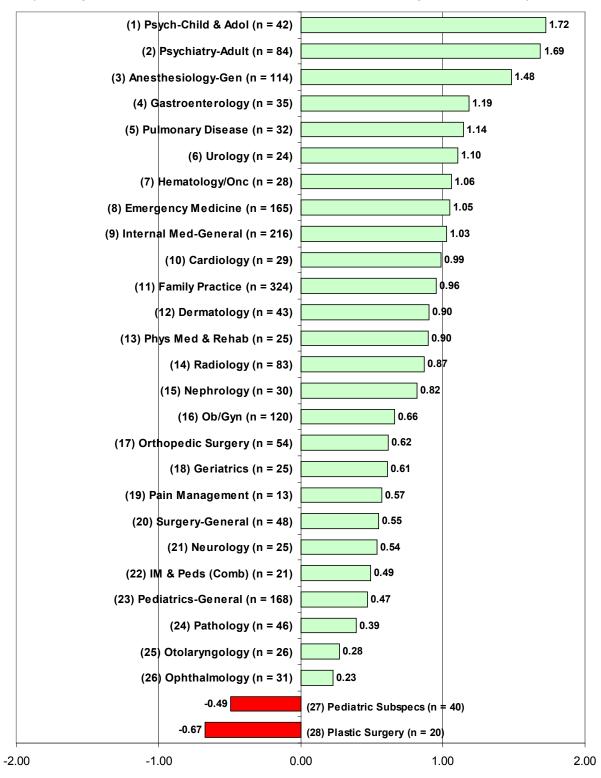




Exhibit 3-17. Likert Scores\* for Respondents' Assessments of the National Job Market, 2000 to 2002 Combined Data (of Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

<u>Specialty</u>	California <u>Respondents</u>	<u>RANK</u> (of 28)	New York State <u>Respondents</u>	<u>RANK</u> (of 28)
Primary Care	1.50	N/A	1.36	N/A
Family Practice	1.58	16	1.53	16
Internal Medicine-General	1.61	14	1.37	21
Pediatrics-General	1.21	24	1.17	24
IM & Peds (Combined)	1.60	15	1.44	19
Obstetrics/Gynecology	1.52	18	1.53	17
Internal Medicine Specialties	1.72	N/A	1.69	N/A
Cardiology	1.84	5	1.80	9
Gastroenterology	1.91	3	1.85	2
Geriatrics	1.56	17	1.53	15
Hematology/Oncology	1.66	10	1.72	11
Nephrology	1.73	7	1.80	8
Pulmonary Disease	1.66	9	1.39	20
Surgery-General	1.37	22	1.35	22
Surgical Subspecialties	1.32	N/A	1.31	N/A
Ophthalmology	0.91	27	0.73	27
Orthopedics	1.51	19	1.47	18
Otolaryngology	1.42	21	1.68	13
Plastic Surgery	0.57	28	0.40	28
Urology	1.91	2	1.81	5
Facility Based	1.63	N/A	1.65	N/A
Anesthesiology-General	1.88	4	1.85	3
Pain Management	1.46	20	1.83	4
Pathology	0.93	26	0.79	26
Radiology	1.68	8	1.68	12
Psychiatry	1.85	N/A	1.80	N/A
Adult Psychiatry	1.82	6	1.81	6
Child & Adolescent Psych	1.92	1	1.91	1
Other	1.52	N/A	1.56	N/A
Dermatology	1.62	13	1.80	7
Emergency Medicine	1.65	11	1.73	10
Neurology	1.37	23	1.66	14
Pediatric Subspecialties	1.17	25	1.10	25
Physical Medicine & Rehab	1.64	12	1.24	23
Total (All Specialties)	1.55	N/A	1.50	N/A

<sup>\*</sup>Likert scores computed using the following Likert scale: "Many Jobs" = +2, "Some Jobs" = +1, "Few Jobs" = 0, "Very Few Jobs" = -1, "No Jobs" = -2.



Exhibit 3-18. Mean Likert Scores for Respondents' Assessments of the National Job Market by Specialty Group, 2000 to 2002

(of Respondents who have Searched for a Job, IMGs on Temp Visas Excluded) 1.85 1.65 1.65 1.62 1.66 1.58 1.49 \_ 1.50 1.36 1.33 0 **Primary Care** Medicine **Facility Based Psychiatry** Surgical Subspecialties **Subspecialties Specialties** ■ 2000 Survey ■ 2001 Survey □ 2002 Survey

Exhibit 3-19. Mean Likert Scores for Respondents' Assessments of the National Job Market in Primary Care and Non-Primary Care Specialties by Survey Year for CA and NY, 2000 to 2002

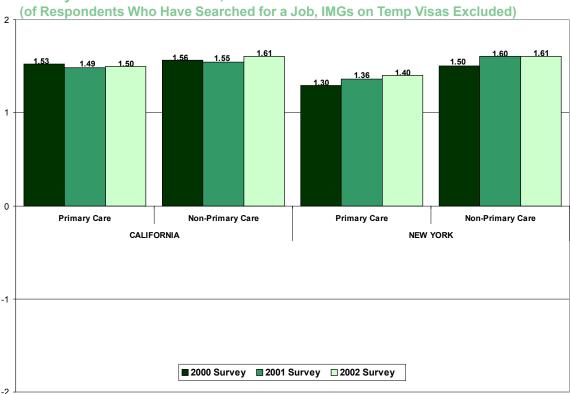




Exhibit 3-20. Rank of Mean Likert Score for Respondents' Assessments of the National Job Market by Specialty, 2000 to 2002 Combined Data (for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

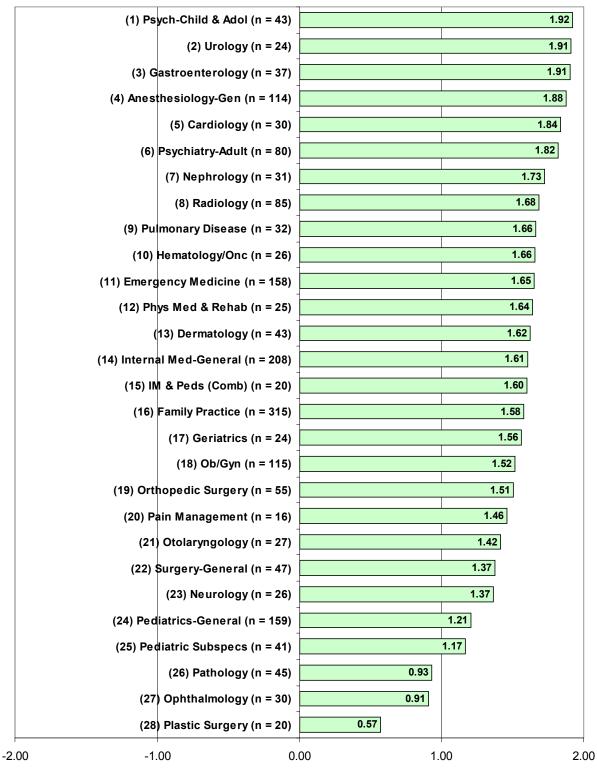




Exhibit 3-21. Assessment of Relative Demand for Each Specialty based on Respondents to California Resident Exit Survey, 2000 to 2002 Combined Data

(for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

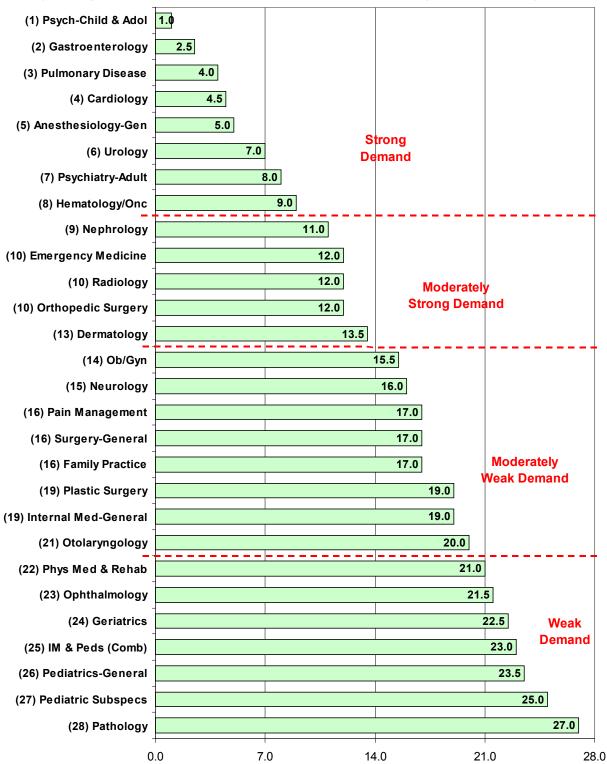




Exhibit 3-22. Assessment of Relative Demand for Each Specialty based on Respondents to New York Resident Exit Survey, 2000 to 2002 (for Respondents who have Searched for a Job, IMGs on Temp Visas Excluded)

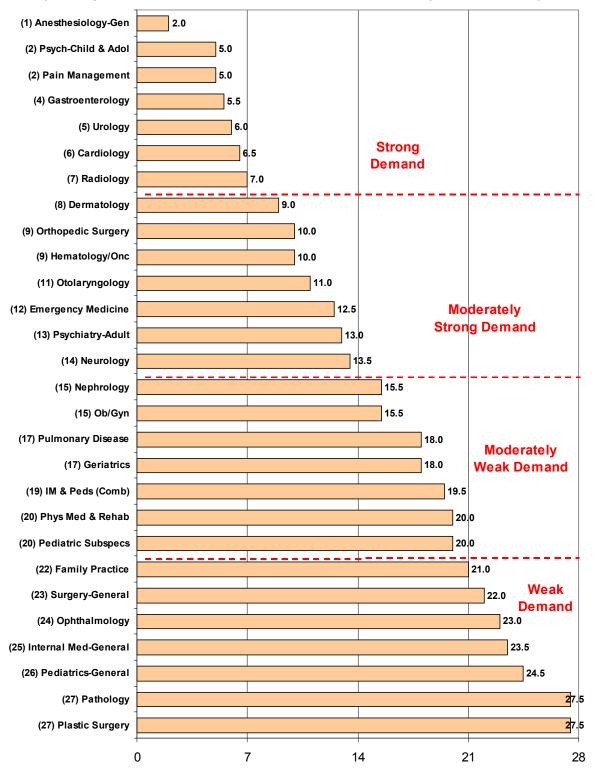
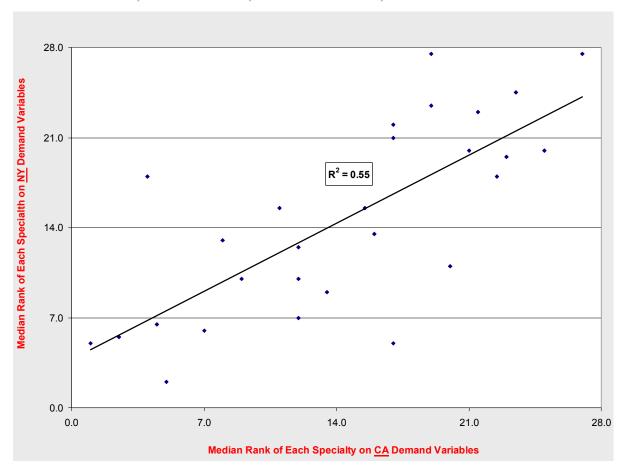




Exhibit 3-23. Scatter Plot of Specialty Demand Scores for California (from Exhibit 3-21) vs. New York (from Exhibit 3-22)



This plot shows the significant correlation between the median demand score for specialties in California and the median demand score for corresponding specialties in New York. This is an important finding because it shows that despite the many differences between California and New York in terms of healthcare systems, populations being treated, financing and delivery of services, and GME training, the relative demand for most specialties is similar.





### APPENDIX A.

**Specialty Classifications Used for Resident Exit Survey** 





<b>Primary</b>	Care		Specialty (as
	ACGME #	ACGME Specialty	Classified on Survey)
	120	Family Practice	Family Practice
	125	Family Practice-Geriatric Medicine	Family Practice
	127	Family Practice-Sports Medicine	Family Practice
	140	Internal Medicine	Internal Med
	320	Pediatrics	Pediatrics
	800	Internal Medicine/Pediatrics (Combined)	IM & Peds (Comb)
	840	Internal Med/Family Practice (Combined)	Family Practice

Obstetrics/Gynecology	Specialty (as	
ACGME #	ACGME Specialty	Classified on Survey)
220	Obstetrics/Gynecology	Ob/Gyn

<u>Medicin</u>	e Subspecialties	<u> </u>	Specialty (as
	ACGME #	<b>ACGME Specialty</b>	Classified on Survey)
	141	Internal Medicine-Cardiology	IM-Cardiology
	142	Internal Medicine-Critical Care	IM-CCM
	143	Internal Medicine-Endocrin & Metabolism	IM-End & Met
	144	Internal Medicine-Gastroenterology	IM-Gastro
	145	Internal Medicine-Hematology	IM-Hem/Onc
	146	Internal Medicine-Infectious Disease	IM-Inf Disease
	147	Internal Medicine-Oncology	IM-Hem/Onc
	148	Internal Medicine-Nephrology	IM-Nephro
	149	Internal Medicine-Pulmonary Diseases	IM-Pulm Dis
	150	Internal Medicine-Rheumatology	IM-Rheum
	151	Internal Medicine-Geriatric Medicine	IM-Geriatrics
	152	Internal Medicine-Interventional Cardiology	IM-Cardiology
	154	Internal Medicine-Electrophysiology	IM-Cardiology
	155	Internal Medicine-Hematology/Oncology	IM-Hem/Onc
	156	Internal Medicine-Pulm Dis/Critical Care Med	IM-Pulm Dis
	157	Internal Medicine-Sports Medicine	IM-Other Subsp



Surgery-GeneralSpecialty (asACGME #ACGME SpecialtyClassified on Survey)440SurgerySurgery

Surgical Subspecialties		Specialty (as
ACGME #	ACGME Specialty	Classified on Survey)
060	Colon and Rectal Surgery	Surg-Other Subsp
160	Neurological Surgery	Surg-Neuro
240	Ophthalmology	Ophthalmology
260	Orthopaedic Surgery	Surg-Ortho
261	Orthopaedics-Adult Reconstructive Ortho	Surg-Ortho
262	Orthopaedics-Foot and Ankle Surgery	Surg-Ortho
263	Orthopaedics-Hand Surgery	Surg-Ortho
265	Orthopaedics-Pediatric Orthopaedics	Surg-Ortho
267	Orthopaedics-Spinal Surgery	Surg-Ortho
268	Orthopaedics-Sports Medicine	Surg-Ortho
269	Orthopaedics-Trauma Surgery	Surg-Ortho
270	Orthopaedics-Musculoskeletal Oncology	Surg-Ortho
280	Otolaryngology	Otolaryngology
286	Otolaryngology-Otology-Neurotology	Otolaryngology
288	Otolaryngology-Pediatrics Otolaryngology	Otolaryngology
360	Plastic Surgery	Surg-Plastic
361	Plastic Surgery-Craniofacial Surgery	Surg-Plastic
363	Plastic Surgery-Hand Surgery	Surg-Plastic
442	Surgery-Critical Care	Surg-Other Subsp
443	Surgery-Hand Surgery	Surg-Other Subsp
445	Surgery-Pediatric Surgery	Surg-Other Subsp
450	Surgery-Vascular Surgery	Surg-Other Subsp
460	Thoracic Surgery	Surg-Thoracic
480	Urology	Urology
485	Urology-Pediatric Urology	Urology



<b>Facility</b>	<u>Based</u>		Specialty (as
	ACGME #	ACGME Specialty	Classified on Survey)
	040	Anesthesiology	Anesthesiology
	042	Anesthesiology-Pediatric Anesthesiology	Anes-Other Subsp
	045	Anesthesiology-Critical Care	Anes-Other Subsp
	048	Anesthesiology-Pain Management	Anes-Pain Mngt
	200	Nuclear Medicine	Nuclear Med
	300	Pathology	Pathology
	301	Pathology-Selective Pathology	Pathology-Subsp
	305	Pathology-Blood Banking	Pathology-Subsp
	306	Chemical Pathology	Pathology-Subsp
	307	Pathology-Cytopathology	Pathology-Subsp
	310	Pathology-Forensic Pathology	Pathology-Subsp
	311	Pathology-Hematology	Pathology-Subsp
	313	Pathology-Immunopathology	Pathology-Subsp
	314	Pathology-Medical Microbiology	Pathology-Subsp
	315	Pathology-Neuropathology	Pathology-Subsp
	316	Pathology-Pediatric Pathology	Pathology-Subsp
	420	Radiology-Diagnostic	Radiology (Diag)
	421	Radiology-Abdominal Radiology	Radiology (Diag)
	423	Radiology-Neuroradiology	Radiology (Diag)
	424	Radiology-Pediatric Radiology	Radiology (Diag)
	425	Radiology-Nuclear Radiology	Radiology (Diag)
	426	Radiology-Musculoskeletal Radiology	Radiology (Diag)
	427	Radiology-Vascular & Interventional Rad	Radiology (Diag)
	430	Radiation Oncology	Radiology (Ther)
	860	Neurology/Diag Rad/Neurorad (Combined)	Radiology (Diag)
	870	Diag Rad/Nuclear Med/Nuclear Rad (Combined)	Radiology (Diag)
	880	Internal Med/Nuclear Med (Combined)	Radiology (Ther)

<b>Psychia</b>	<u>itry</u>		Specialty (as
	ACGME #	ACGME Specialty	Classified on Survey)
	400	Psychiatry	Psychiatry
	401	Psychiatry-Addiction Medicine	Psych-Other Subsp
	405	Psychiatry-Child and Adolescent Psych	Psych-Child & Adol
	406	Psychiatry-Forensic Psychiatry	Psych-Other Subsp
	407	Psychiatry-Geriatric Psychiatry	Psych-Other Subsp
	815	Internal Medicine/Psychiatry (Combined)	Psychiatry
	820	Psychiatry/Family Practice (Combined)	Psychiatry
	830	Pediatrics/Psych/Child Psych (Combined)	Psych-Child & Adol
	855	Psychiatry/Neurology (Combined)	Psychiatry



**Other** 

ACGME#	ACGME Specialty	Specialty (as Classified on Survey)
020	Allergy/Immunology	Allergy & Immun
025	Allergy/Immunology-Diag Lab Immunology	Allergy & Immun
080	Dermatology	Dermatology
100	Dermatopathology	Dermatology
110	Emergency Medicine	Emergency Med
114	Emergency Medicine-Pediatric Emer Med	Emergency Med
116	Emergency Medicine-Sports Medicine	Emergency Med
118	Emergency Medicine-Medical Toxicology	Emergency Med
130	Genetics-Medical	Other
180	Neurology	Neurology
185	Neurology-Child Neurology	Neurology
187	Neurology-Clinical Neurophysiology	Neurology
321	Pediatrics-Adolescent Medicine	Peds-Subsp
323	Pediatrics-Critical Care	Peds-Subsp
324	Pediatrics-Emergency Medicine	Peds-Subsp
325	Pediatrics-Pediatric Cardiology	Peds-Subsp
326	Pediatrics-Pediatric Endocrinology	Peds-Subsp
327	Pediatrics-Pediatric Hematology-Oncology	Peds-Subsp
328	Pediatrics-Pediatric Nephrology	Peds-Subsp
329	Pediatrics-Neonatal-Perinatal Medicine	Peds-Subsp
330	Pediatrics-Pediatric Pulmonology	Peds-Subsp
331	Pediatrics-Pediatric Rheumatology	Peds-Subsp
332	Pediatrics-Pediatric Gastroenterology	Peds-Subsp
333	Pediatrics-Pediatric Sports Medicine	Peds-Subsp
335	Pediatrics-Pediatric Infectious Disease	Peds-Subsp
340	Physical Medicine and Rehabilitation	Phys Med & Rehab
345	PM & R-Spinal Cord Injury	Phys Med & Rehab
380	Preventive Medicine-General	Preventive Med
399	Preventive Medicine-Medical Toxicology	Preventive Med
805	Internal Med/Emergency Med (Combined)	Emergency Med
810	Internal Med/Phys Med & Rehab (Combined)	Phys Med & Rehab
825	Pediatrics/Emergency Med (Combined)	Emergency Med
835	Pediatrics/Phys Med & Rehab (Combined)	Phys Med & Rehab
845	Internal Medicine/Neurology (Combined)	Neurology
850	Neurology/PM & R (Combined)	Neurology
851	Internal Medicine/Preventive Med (Combined)	Preventive Med
865	Pediatrics/Medical Genetics (Combined)	Peds-Subsp
875	Internal Med/Emergency Med/CCM (Combined)	Emergency Med



### APPENDIX B.

**Survey of Residents Completing Training in CA in 2001** 



Surve	ey of Resident	s Completing Tra	aining in CA in 2002		
pencil or blue					
or black ink pen only.	University	at Albany, School of	Public Health		
— • Do not use	•	One University Plac			
pens with ink	F	Rensselaer, NY 12144-			
	CGME		For Office		
through the R	esidency		- Use		
paper. Pi	rogram #		dsc		
marks that fill	This questionnaire	should be completed	by all physicians completing a		
the oval	residency/fellowship tra	ining program in Californ	nia in 2002 (excluding preliminary		
z completely.	training positions).				
Make no stray marks on this					
	AST NAME				
Do not fold,	DOT NAME				
Z tear, or	IRST NAME				
mutilate this	• 11 • 1 •				
	ain Hospital at				
	hich You Did ——				
✓ Ø⊗⊙ • Yo	our Training:				
	h question <i>mark d</i>	only one answer unl	ess otherwise directed.		
A. BACKGROUND	•		OUCATION AND TRAINING		
1. Gender: O Male	e O Female		describes the demographics of		
			which you were living on graduation		
2. Age: 3. C	itizenship Status:	from high s			
	•	O Inner City			
	Native Born U.S.		ea within Major City		
	Naturalized U.S.	O Suburbar			
	Permanent Resident		(population less than 50,000)		
1	) H-1, H-2, H-3	○ Rural			
22	Temporary Worker	7			
	D J-1, J-2 Exchange Visito		of your current year of training, how		
	Other Other		years of post-graduate training will		
5 5			ompleted in the U.S.?		
6 6		01 09	$2 \bigcirc 3 \bigcirc 4 \bigcirc 5 \bigcirc 6 \text{ or more}$		
77		Q T 6M	II. 151		
8			dical Education:		
9		O Allopathi	c (M.D.) Osteopathic (D.O.)		
		9. Medical Sci	1.		
4. Race/Ethnicity:					
	Ladian Mart		(if yes, complete below)		
O Native American/Al		O Other U.S	).		
O Asian or Pacific Isla		O Canada	and the second s		
O Black/African Amer		O Other Co			
O Hispanic/Latino (Me			n California:		
O Hispanic/Latino (Al		O U.C.—Davi			
O White (Not Hispani	C/Latino)	O U.C.–Irvin			
O Other		O U.CLos			
5 w		○ U.C.—San			
5. Where was your res	idence on	○ U.C.—San			
graduation from:	High Under-gra		f Osteopathic Medicine of the Pacific		
	School College	O Loma Lind	da		
Northern California	0 0	O U.S.C.			
Southern California	0 0	○ Stanford			
Other U.S.	0 0				
Canada	0 0				
Other Country	0 0				
			continue Page 1		
			_		
	SE DO NOT WRITE IN THE		SERIAL #		

	\$150,00 Over \$2
12. If subspecializing/doing additional fellowship: Specialty you are ENTERING (select only one)	
O	
Anesthesiology (General)	
O	
Other Anesthesiology Subspecialty–specify:	
O	
O Endocrinology and Metabolism	
9,	
ORheumatology	
	:
	necify.
	CCITY.
Pediatrics (General)	
	Medic
O	
O	
O	
O	
O	
Ophthalmology	
Orthopeaic surgery	
Plastic Surgery	
O	
OOther Surgical Subspecialty-specify:	
OOther-specify:	
	(select only one)  Allergy and Immunology Anesthesiology (General) Anesthesiology (General)  Dematology Emergency Medicine Emergency Medicine Family Practice Internal Medicine (General) Cardiology Critical Care Medicine Endocrinology and Metabolism Cardiology Geriatrics Hematology/Oncology Hematology/Oncology Infectious Disease Nephrology Pulmonary Disease/CCM Rheumatology Onther Internal Medicine Subspecialty—specify: Internal Medicine and Pediatrics (Combined) Neurology Detatrics and Gynecology (General) Obstetrics and Gynecology (Subspecialty)—specify: Pathology (General) Dediatrics (General) Pathology (General) Pathology (General) Pediatrics (General) Pediatrics (General) Cher Psychiatry Child and Adolescent Psychiatry C

C. FUIURE PLANS	If you are going into Patient Care		
In your upcoming position, how many hours per week do you expect to spend in each of the following activities?  None 1–9 10–19 20–29 30–39 40–49 50–59 60+	(If you are <u>not</u> going into Patient Care/Clinical Practice after completing your current training—Skip to Part E.)		
Direct Patient  Care  O  O  O  O  O  O  O  O	19. Which best describes the type of Patient Care Practice you will be entering?		
Research O O O O O O O O O O O O O O O O O O O	Principal Secondary <u>Practice</u> <u>Practice</u> <u>Setting</u> <u>Setting(s)</u> (mark only (mark all  one) that apply)		
<ul> <li>Where is the location of your primary activity after completing your current training position?</li> <li>Same City/County as Current Training</li> <li>Same Region within California—but Different City/County</li> <li>Other Area within California</li> <li>Other State</li> <li>Outside of U.S.</li> <li>Don't know yet</li> <li>16. If you are going on for additional training/fellowship, please answer the following:</li> </ul>	Solo Practice Partnership (2 person) Group Practice—as owner/partner Group Practice—as employee Hospital—Inpatient Hospital—Ambulatory Care Hospital—Emergency Room Hospital—Emergency Room Hospital—Emergency Room Huspital—Emergency Room Mursing Home Military Other:		
A. Why are you subspecializing/continuing training? (mark all that apply)  To further your medical education Unable to find a job you are happy with Unable to find any job To stay in the U.S. (i.e., due to visa status) Other (specify): Question does not apply  B. If you are leaving the state to continue your training, do you plan to return to CA to practice when your training is complete?  Yes Don't know yet No Question does not apply	<ul> <li>Is your principal practice setting one of the following:</li> <li>VA Hospital</li> <li>City/County Hospital</li> <li>State Hospital</li> <li>Publicly supported Health Center or Free Clinic</li> <li>None of the Above</li> <li>What is the zip code of the principal practice address at which you will be working (if zip is unknown, please give city/town and state)?</li> </ul>		
<ul> <li>Do you have an obligation or visa requirement to work in a federally designated Health Professional Shortage Area?</li> <li>Yes No</li> <li>If you are planning to enter or considered entering patient care/clinical practice:  A. Have you actively searched for a job?</li> <li>Yes</li> <li>No, not yet</li> <li>No, I will be self-employed</li> <li>B. Have you been offered a job?</li> <li>Yes, and I have accepted an offer</li> <li>Yes, but I declined the offer(s) and am still searching (Skip to Question #29)</li> <li>No, but I have not actively searched yet</li> </ul>	Principal Practice 2ip Code  Principal Practice 2ip Code  Principal Practice 2ip Code  State		
<ul> <li>○ No, Out Thave not actively searched yet</li> <li>○ (Skip to Question #29)</li> <li>○ No, I have not yet been offered any practice position (Skip to Question #29)</li> </ul>	Page 3 continue		

D. PRACTICE PLANS

=	23	Which best describes the area in which you Inner City Other Area within Ma	will be practicing?		position y  O Yes  O No	nave difficulty finding a practice you were satisfied with?
Ē	24	<ul><li>Suburban</li><li>Small City (population</li><li>Rural</li><li>How will you be comp</li></ul>			A. <b>If Yes,</b> main r	what would you say was the eason? (mark only one)  Lack of Jobs/Practice Opportunities Jobs in Desired Locations
Ē		principal practice:  Salary without Incenti Salary with Incentive Fee for Service Other (specify):			<ul><li>Lack of (ex.,</li><li>Inadeo</li><li>Family/</li></ul>	Hospital, HMO, Group Practice, etc.)  Juate Salary/Compensation Offered  Spouse Considerations  HOpportunities Due to Visa Status
Ξ	25	Expected Gross Incompractice:		30.	Did you hecause	nave to change your plans of limited practice opportunities?
Ξ	A	. Base Salary/Income  Less than \$70,000  \$70,000-\$79,999	3. Anticipated Additional Incentive Income  Zero Less than \$5,000		O No	t looked yet (Skip to Question #32)
Ξ		\$80,000-\$89,999 \$90,000-\$99,999 \$100,000-\$109,999 \$110,000-\$119,999 \$120,000-\$129,999	\$5,000-\$9,999 \$10,000-\$14,999 \$15,000-\$19,999 \$20,000-\$24,999 \$25,000-\$29,999	31.	positions fellowshi training p	ny offers for employment/practice did you receive (excluding ps, chief residency and other positions)?
Ξ		\$130,000-\$139,999 \$140,000-\$149,999 \$150,000-\$174,999 \$175,000-\$199,999 \$200,000-\$225,000		32.	<ul><li>None</li><li>1</li><li>2</li></ul> What is w	3 06–10 04 Over 10 5
Ξ	26	<ul><li>Over \$225,000</li><li>What is your level of salary/compensation?</li></ul>			practice of	opportunities in <b>your specialty</b> ,  O miles of the site where
Ē	27	<ul><li>Very Satisfied</li><li>Somewhat Satisfied</li><li>In your upcoming pra</li></ul>	<ul><li>Not Too Satisfied</li><li>Very Dissatisfied</li></ul>		<ul><li>Many J</li><li>Some J</li><li>Few Jo</li><li>Very Fe</li></ul>	lobs bs
Ξ		number of hours per spending in patient ca activities:		22	O No Job	os estados esta
=		<ul><li>○ None</li><li>○ Less than 10</li><li>○ 10 to 19</li></ul>	<ul><li>30 to 39</li><li>40 to 49</li><li>50 to 59</li></ul>			our overall assessment of opportunities in <b>your specialty</b> y?
Ξ	28	<ul><li>✓ 20 to 29</li><li>Will you be practicing nated Health Profession</li><li>✓ Yes</li><li>✓ No</li></ul>	○ 60 or more  in a federally desig-		<ul><li>Many J</li><li>Some J</li><li>Few Jo</li><li>Very Fe</li><li>No Job</li></ul>	lobs bs w Jobs
+ =	Page 4	Mark Reflex® forms by NCS Pearson		ted in U.S.A.		02 NCS Pearson, Inc. All rights reserved.
_						SERIAL #