



2012 Indiana Physician Assistant Licensure Survey Report

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Table of Contents

Acknowledgements.....	2
Executive Summary.....	1
Background and Methods.....	1
Responses to the 2012 Indiana Physician Assistant Re-licensure Survey.....	1
Trends from the 2004, 2006, 2008, 2010, and 2012 Physician Assistant Surveys.....	2
Location of Physician Assistants by County	2
Conclusion.....	2
Chapter 1: Background and Methods.....	3
Background	3
Methods.....	3
Inclusion and Exclusion Criteria	4
Maps of Indiana Physician Assistant Workforce.....	5
Response Rate.....	6
Data Analysis.....	6
Limitations.....	7
Chapter 2: Responses to the 2012 Indiana Physician Assistant Re-licensure Survey.....	8
Demographic Composition	8
Education and Special Skills	11
Practice Characteristics.....	15
Chapter 3: Trends in Responses from the 2004, 2006, 2008, 2010, and 2012 Physician Assistant Surveys	26
Demographic Composition	26
Education and Special Skills	28
Professional Characteristics.....	32
Chapter 4: Location of Physician Assistants by County in Indiana.....	34
Chapter 5: Conclusions	40
Appendix 1: 2012 Indiana Physician Assistant Re-Licensure Survey	41
Appendix 2: Physician Specialties with No Practicing PAs.....	49
Appendix 3: Condensed Work Settings.....	51

Executive Summary

Background and Methods

Physician assistants (PAs) were asked to participate in a survey when they renewed their state license to practice in 2012. There were 989 total PAs who renewed their licenses in 2012, of which 819 completed their renewal online and were offered the survey. Of those offered the survey, 730 (89.1%) completed it. There were 660 physician assistants who met all of the inclusion criteria for the analysis. Individuals included in the analysis must have (1) responded to the survey, (2) held an active or probationary Indiana license, (3) listed at least one Indiana practice address, and (4) indicated that they were actively working as a physician assistant. Only individuals who listed a primary practice address in Indiana were included in the maps in Chapter 4. The sample analyzed in this report represents 66.7 percent of the total number of PA licensees in the state.

Responses to the 2012 Indiana Physician Assistant Re-licensure Survey

The majority of survey respondents were white (93.0%), non-Hispanic (97.8%) females (65.5%) who delivered direct patient care at least 40 hours per week (70.2%) in hospital or private practice settings (80.1%) in urban counties (89.4%). Hospital Emergency Room/Emergency Departments (ER/EDs) were the most common work setting (21.3%), and PAs most commonly worked with supervising physicians whose specialty was emergency medicine (22.4%). More than half (55.7%) of PAs made between \$75,001 and \$100,000 per year at their current position. Approximately one in five PAs (18.3%) were licensed in additional states, most commonly those contiguous with Indiana (Illinois, Kentucky, Ohio, and Michigan).

Physician assistants primarily attended Indiana training institutions (53.0%) and held a master's degree as their highest credential (59.4%). Nearly one-fifth (18.8%) of physician assistants received a scholarship to help with costs of PA education. The majority of PAs (56.9%) had between \$25,001 and \$100,000 in student loan debt.

Trends from the 2004, 2006, 2008, 2010, and 2012 Physician Assistant Surveys

The proportion of physician assistants under the age of 35 has increased each year since 2004. Since 2004 there has been an increase in the proportion of the workforce that is female (56.7% in 2004 and 65.5% in 2012). The racial and ethnic diversity of the workforce has seen little change over this time period. The most common credential held among PAs in 2004 was a bachelor's degree (60.2%); but by 2012 was a master's degree (59.4%). The practice setting of physician assistants has shifted toward hospital-based settings since 2004 (41.8% in 2004 to 50.2% in 2012).

Location of Physician Assistants by County

The majority of physician assistants practiced in urban, populous counties (89.4%). Marion County had the highest number of PA full-time equivalents (FTEs) (190) and the highest ratio of PAs to population (21 PA FTEs per 100,000 population). The ratio of providers per 100,000 population was chosen to conform to standard reporting of workforce statistics.

Conclusion

Women are increasingly represented in Indiana's PA workforce. Racial and ethnic diversity is largely unchanged and remains low. Since 2004, the master's degree has surpassed the bachelor's degree as the most common PA credential. The majority of PAs worked at least 40 hours per week and practiced in hospital-based settings. Emergency medicine was the most common specialty in which PAs practiced.

Chapter 1: Background and Methods

Background

Understanding the status of Indiana's healthcare workforce is critical to ensuring that Indiana residents have access to high quality care, to developing programs that will train practitioners to meet future needs, and to recruiting and retaining healthcare professionals in Indiana. The purpose of this report is to provide a description of Indiana's physician assistant (PA) workforce.

The Indiana Professional Licensing Agency (IPLA) implements the Indiana PA Licensure Survey as part of its biennial license renewal process. All PAs that renewed their license electronically were asked to complete a voluntary survey instrument. A copy of the survey instrument can be found in *Appendix I*. This report summarizes the responses to the 2012 Indiana PA Licensure Survey.

Methods

There were 989 total PA license renewals and initial licensures completed during the 2012 licensure period. Of these licenses, 819 were completed online and were offered a voluntary survey which was completed by 730 licensees. Those who did not complete the survey or did not renew their license online were not included in this report. Among the 730 PAs that responded to the survey, 660 met all inclusion criteria and were included in the analysis. Therefore, the sample represents 66.7 percent of the total licensed PA workforce in Indiana. Thus the sample of the Indiana PA workforce analyzed and presented in this report represents 66.7 percent of the licensed PA workforce in Indiana.

The data used to generate this report were extracted from the 2012 Indiana PA Licensure Survey dataset collected by the Indiana State Department of Health (ISDH) and the PA license dataset maintained by the IPLA. The 2012 Indiana PA Licensure Survey instrument included questions on current work status, principal practice location, principal position, activities performed in the principal practice location, major specialty of the supervising physician, principal practice setting, average hours worked, current education level, current and initial salary as a PA, debt load after completion of PA training, and demographic information. A copy of the 2012 Indiana PA Licensure Survey instrument is included in *Appendix 1*. The data provided by the IPLA included date of birth for all licensed physician assistants. The two datasets were merged by matching the license number of each physician assistant using SAS 9.3 statistical software and age was calculated using May 15, 2012 as a reference date since surveys were completed from April of 2012 through June of 2012. Filters applied to the merged dataset yielded only respondents that met the inclusion criteria.

Inclusion and Exclusion Criteria

All 819 individuals who renewed their license online were initially filtered to include only PAs with an active or probationary license status. Almost all of the respondents who renewed their license online held an active Indiana license (refer to Table 1.1).

Table 1.1 Current License Status

Physician Assistant Licensure Status	Number	Percent
Active	815	99.5
Probation	1	0.1
Other	3	0.4
Total	819	100.0

The dataset was further refined by excluding individuals who did not complete the online survey. Individuals who responded to the survey but indicated that they were not currently active as a physician assistant were also excluded. PAs were asked to provide up to three practice locations. If none of these addresses were in Indiana then the individual was excluded from the dataset. Those who did not list any practice address information but responded to the rest of the survey were excluded if the address provided on their licensing information was outside of Indiana. Table 1.2 shows how the 819 PAs who renewed their license online were parsed to the 660 who were included in this analysis.

Table 1.2 Included and Excluded Physician Assistants

Included and Excluded Physician Assistants	Number	Percent
Excluded from Data Sample		
Did not respond to survey instrument	90	11.0
Listed <i>exclusively</i> non-Indiana practice address(es) on survey instrument	41	5.0
Temporarily inactive as a physician assistant	14	1.7
No survey address, license address outside Indiana	11	1.3
Total Excluded from Data Sample	156	19.1
Included in Data Sample		
Actively working as a physician assistant	660	80.9
Total Included in Data Sample	660	80.9
Total Active/Probationary Licensed PAs	816	100.0

Maps of Indiana Physician Assistant Workforce

Chapter 4 provides maps that display the distribution of the PA workforce in Indiana. These maps depict only PAs who indicated on the survey that their primary practice location was in Indiana. Therefore, these maps display only a portion of the Indiana PA workforce. The maps also display PA FTEs rather than a simple headcount because not all respondents indicated that they worked full-time. Thus, measuring the number of PA FTEs provides a more accurate picture of the availability of PAs in each county. Each respondent had an FTE assigned to them based on their survey response indicating the average number of weekly hours spent in all work related activities. This report assigns an FTE to each respondent based on the range of weekly hours each respondent reported (refer to Table 1.3). PAs who worked more than 40 hours per week were still only given an FTE of 1.0 to maintain consistency with other workforce studies reports. There were some individuals who did not indicate the average number of hours worked per week. Because the mean FTE reported by those who did respond to the question was 0.96, non-responders were assigned an FTE of 1.0.

Table 1.3 FTE Definition for PAs

Average Weekly Hours	FTE
1 - 9	0.25
10 - 19	0.50
20 - 29	0.75
30 - 39	1.00
40 or more	1.00

Response Rate

Although only PAs who met the inclusion criteria were analyzed for this report, the denominator used for determining the survey response rate was the total number of PAs who renewed their licenses electronically from April 31, 2012 to June 30, 2012 (refer to Table 1.4). The response rate for the survey was calculated by dividing the number of PAs who renewed their license electronically and responded to at least one question on the survey by the total number of electronic (online) renewals. This denominator was chosen because PAs who did not renew their license online were not offered a chance to complete the survey. The survey response rate was 89.1 percent; the overall response rate was 73.8 percent (730 who answered at least one question on the survey divided by 989 who were licensed in 2012).

Table 1.4 Survey Response Rate

Survey Response Rate	Number	Percent
Renewed electronically and responded to the survey	730	89.1
Total electronic license renewals in 2012	819	

Data Analysis

Frequency and cross-tabulation analyses were performed to describe the characteristics of PAs within Indiana. The data were coded in Microsoft Excel 2007[®] and analyzed using SAS 9.3 and IBM SPSS Statistics 20. Maps were developed to illustrate the estimated number of PA FTEs per Indiana county, the ratio of PA FTEs per 100,000 residents, and to indicate rural and non-rural counties. Rurality of counties was defined by the United States Department of Agriculture's Urban-Rural Continuum Codes (URCC). The URCC is a score associated with each county ranging from 1 to 9. The most urban counties are given a score of 1 and the most rural counties are given a score of 9. Counties with a URCC score from 1 – 3 were considered urban, and those with a URCC score from 4 – 9 were considered rural. The maps were designed using ArcGIS[™] 10.1 geodatabasing software.

Limitations

The analysis presented in this report was carried out on a sample of the Indiana physician assistant workforce that may not be representative of the entire workforce. Only 66.7 percent of all physician assistants who held a license in Indiana were included in this analysis, the rest either were not actively practicing or did not participate in the survey. Since individuals who listed an Indiana practice address as their secondary or tertiary practice location (but not primary practice location) were also included in the sample it is uncertain how much of their time was spent helping patients in Indiana communities.

The quality of the data collected by the survey instrument is not verified. Data presented in the analysis are based on self-reported information and may be subject to bias. Completion of the survey during licensure is not mandatory therefore some individuals may rush through without verifying the information they submit or may choose to only partially answer the survey.

Chapter 2: Responses to the 2012 Indiana Physician Assistant Re-licensure Survey

The results in this chapter reflect the personal and professional characteristics of only those 660 physician assistants licensed in Indiana who were actively practicing in Indiana and responded to the 2012 Indiana PA Licensure Survey. Caution should be taken when making generalizations about all Indiana physician assistants since those who renewed their license by paper, as well as those who did not respond to the electronic survey are not included in these results. Each table shows the number of valid and missing responses to each survey item and the percentage of valid responses. The text describes the responses to the survey.

Demographic Composition

The demographic characteristics shown are age, gender, race and ethnicity of survey respondents. The age distribution of respondents is provided in Table 2.1. Nearly half (47.8%) of the respondents were between 25 and 34 years of age, while only 9.8 percent of respondents were nearing retirement (age 55 or older).

Table 2.1 Age Groups

Age	Number	Percent
Under 25 years old	9	1.4
25 - 34 years old	313	47.8
35 - 44 years old	178	27.2
45 - 54 years old	91	13.9
55 - 64 years old	59	9.0
Greater than 65 years old	5	0.8
Total	655	100.0
No Response Given	5	

Table 2.2 shows the gender distribution of survey respondents. Almost two-thirds (65.5%) of the respondents were female. The gender distribution of respondents differed between age groups of practitioners (refer to Table 2.3). Younger PAs were predominantly female (78.9% of respondents under 35 were female). Older PAs were predominantly male.

Table 2.2 Gender

Gender	Number	Percent
Female	419	65.5
Male	221	34.5
Total	640	100.0
No Response Given	20	

Table 2.3 Gender by Age Group

Age	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Under 25 years old	1	11.1	8	88.9	9	100.0
25 - 34 years old	66	21.4	242	78.6	308	100.0
35 - 44 years old	65	38.5	104	61.5	169	100.0
45 - 54 years old	44	50.0	44	50.0	88	100.0
55 - 64 years old	38	67.9	18	32.1	56	100.0
Greater than 65 years old	4	80.0	1	20.0	5	100.0
Total	218	34.3	417	65.7	635	100.0
No Response Given					25	

Tables 2.4 and 2.5 display the racial and ethnic characteristics of respondents. A majority of the respondents were white (93.0%) and 2.2 percent were of Hispanic or Latino origin. Table 2.6 shows the demographic breakdown of Indiana residents as a comparison with the demographic information for respondents¹.

Table 2.4 Race

Race	Number	Percent
White	601	93.0
Black/African American	14	2.2
Asian/Pacific Islander	13	2.0
Other	12	1.9
Multi-racial	4	0.6
American Indian/Native Alaskan	2	0.3
Total	646	100.0
No Response Given	14	

Table 2.5 Ethnicity

Ethnicity	Number	Percent
Not Hispanic or Latino	629	97.8
Hispanic or Latino	14	2.2
Total	643	100.0
No Response Given	17	

Table 2.6 Race and Ethnic Composition of Indiana

Indiana Demographic Information	Number	Percent
White	5,467,906	84.3
Black or African-American	591,397	9.1
American Indian/Alaska Native	18,462	0.3
Asian	102,474	1.6
Asian Indian	27,598	0.4
Chinese	22,553	0.3
Filipino	10,652	0.2
Japanese	4,896	0.1
Korean	10,322	0.2
Vietnamese	6,845	0.1
Other Asian	19,608	0.3
Native Hawaiian	2,348	0.0
Hispanic or Latino (of any race)	389,707	6.0
Total Population	6,483,802	100.0

¹ United States Census, 2010. Retrieved on January 15, 2012 <http://2010.census.gov/2010census/data/>

Education and Special Skills

Table 2.7 shows the highest physician assistant education credentials attained by survey respondents. Approximately one-third (33.8%) of respondents indicated that a Bachelor's degree was their highest credentialing degree and 59.4 percent of respondents held a Master's degree. Overall, 93.5 percent of respondents held a Bachelor's degree or higher. The highest degree obtained by respondents in *any* field is displayed in Table 2.8.

Table 2.7 Highest Physician Assistant Credentials/Degree of Respondents

Highest PA Credential	Number	Percent
Certificate of Completion	20	3.1
Associate Degree	22	3.4
Bachelor's Degree	219	33.8
Master's Degree	385	59.4
Doctorate	2	0.3
Total	648	100.0
No Response Given	12	

Table 2.8 Highest Degree in Any Field

Highest Credential in Any Field	Number	Percent
Diploma	2	0.3
Associate Degree	12	1.9
Bachelor's Degree	227	35.0
Master's Degree	401	61.9
Doctorate	6	0.9
Total	648	100.0
No Response Given	12	

Table 2.9 displays the university or state that survey respondents received their *entry level* physician assistant credentials. Over half of respondents (53.0%) completed a program in Indiana. Of the respondents who attended programs outside of Indiana, states with the highest number of respondents tended to be those contiguous with Indiana (Illinois, Ohio, and Kentucky).

Table 2.9 University or State of Physician Assistant programs Attended by Survey Respondents

Entry Level PA Training Institution/State	Number	Percent
Butler University/Methodist Hospital	217	33.3
University of Saint Francis/Lutheran College of Health Professions – Fort Wayne	113	17.4
Illinois	66	10.1
Ohio	38	5.8
Kentucky	25	3.8
Pennsylvania	23	3.5
Indiana University - Fort Wayne	15	2.3
New York	14	2.2
Michigan	13	2.0
Arizona	11	1.7
Florida	11	1.7
Nebraska	10	1.5
Texas	9	1.4
Missouri	8	1.2
Georgia	7	1.1
Tennessee	7	1.1
Wisconsin	7	1.1
California	6	0.9
North Carolina	5	0.8
Oklahoma	5	0.8
West Virginia	5	0.8
Alabama	4	0.6
Connecticut	4	0.6
Iowa	4	0.6
Arkansas	3	0.5
Kansas	3	0.5
Virginia	3	0.5
Maryland	2	0.3
New Jersey	2	0.3
Colorado	1	0.2
Delaware	1	0.2
Idaho	1	0.2
Maine	1	0.2
Massachusetts	1	0.2
Montana	1	0.2
New Hampshire	1	0.2
Non U.S. PA Education Program	1	0.2
North Dakota	1	0.2
Oregon	1	0.2
South Carolina	1	0.2
Total	651	100
No Response Given	9	

The amount of debt accumulated by respondents after completing their PA training is displayed in Table 2.10. Over one-half of respondents (56.9%) completed their PA training with between \$25,000 and \$100,000 in student loan debt. Of the respondents who completed PA training with no debt (12.2%), many indicated that their tuition was covered by military service or other scholarships. Nearly one out of five respondents (19.5% of respondents) completed their PA training with greater than \$100,000 in student loan debt.

Table 2.10 Student Loan Debt Upon Completion of PA Training

Student Loan Debt	Number	Percent
No Debt	66	12.2
\$1 - \$25,000	62	11.4
\$25,001 - \$50,000	102	18.8
\$50,001 - \$75,000	93	17.1
\$75,001 - \$100,000	114	21.0
\$100,001 - \$125,000	54	9.9
\$125,001 - \$150,000	33	6.1
Greater than \$150,000	19	3.5
Total	543	100.0
No Response Given	117	

Less than one-fifth of respondents indicated that they received some type of scholarship to help pay their tuition expenses incurred from their PA training program (refer to Table 2.11).

Table 2.11 Scholarship for PA Training

Received Scholarship for PA Training	Number	Percent
Yes	114	18.8
No	494	81.3
Total	608	100.0
No Response Given	52	

Table 2.12 shows the distribution of additional languages spoken by respondents. Spanish was the most common second language at 2.6 percent. Several respondents indicated that they spoke multiple languages fluently. The “Percent” column in Table 2.12 shows the percentage of the entire sample (660 PAs) who indicated that they fluently spoke the corresponding language.

Table 2.12 Additional Languages Spoken

Language	Number	Percent
Spanish	17	2.6
French	6	0.9
Hindi	3	0.5
Russian	3	0.5
Arabic	2	0.3
Chinese	2	0.3
Vietnamese	2	0.3
African languages	1	0.2
German	1	0.2
Greek	1	0.2
Pennsylvania Dutch	1	0.2
Portuguese	1	0.2
Sign language	1	0.2
Tagalog	1	0.2
Thai	1	0.2
Total	43	6.5
No Response Given	617	

Practice Characteristics

Table 2.13 shows the distribution of respondents across various practice settings. Most commonly, physician assistants worked in hospital emergency rooms/emergency departments (21.3%). Additionally, 17.9 percent reported working in a physician's private practice with a single specialty group, and 13.0 percent worked in hospital (in- and out-patient) settings. The cross-tabulations of practice setting by age group and practice setting by gender did not reveal any notable patterns; therefore, the tables for those results were not included in this report.

Table 2.13 Respondents' Practice Setting

Work Setting	Number	Percent
Hospital ER/ED	139	21.3
Physician private practice - single specialty group	117	17.9
Hospital (in- & out-patient)	85	13.0
Hospital (in-patient only)	66	10.1
Physician private practice - multi specialty group	40	6.1
Physician private practice - solo physician	38	5.8
Primary care center/clinic	36	5.5
Urgent care center/clinic	26	4.0
Community health center/clinic	22	3.4
Hospital operating room	19	2.9
Occupational health setting	14	2.1
Hospital (out-patient only)	13	2.0
Ambulatory care setting (surg./other)	11	1.7
Other	9	1.4
College health facility	5	0.8
Hospital intensive care/critical care unit	5	0.8
Physician assistant educational program	4	0.6
Community mental health center	1	0.2
Prison/Correctional facility	1	0.2
Surgical center, freestanding	1	0.2
Total	652	100.0
No Response Given	8	

Table 2.14 displays the average number of hours worked per week performing all physician assistant activities. The majority of respondents (70.1%) worked 40 hours or more each week and fewer than 12 percent worked less than 30 hours per week.

Table 2.14 Average Number of Hours Worked Per Week

Average Hours per Week	Number	Percent
1 - 9	5	0.8
10 - 19	17	2.6
20 - 29	50	7.7
30 - 39	122	18.8
40 - 49	324	49.8
50 - 59	93	14.3
60 or more	39	6.0
Total	650	100.0
No Response Given	10	

Nearly one in five respondents (18.3%) indicated that they were licensed as a physician assistant in additional states outside of Indiana (see Table 2.15).

Table 2.15 Licensed as a PA in another State

Licensed in Additional States	Number	Percent
Yes	114	18.3
No	510	81.7
Total	624	100.0
No Response Given	36	

Table 2.16 lists the additional states in which PAs are licensed. Some respondents were licensed in more than one additional state. The “Percent” column in Table 2.16 shows the percent of the entire workforce that is licensed in each state. Contiguous states (Illinois, Kentucky, Ohio, and Michigan) were the most common states in which Indiana PAs were also licensed.

Table 2.16 Additional States in which Indiana PAs Were Licensed

Additional States of Licensure	Number	Percent
Illinois	36	5.5
Kentucky	17	2.6
Ohio	15	2.3
Michigan	14	2.1
North Carolina	7	1.1
Wisconsin	6	0.9
Arizona	4	0.6
California	3	0.5
Florida	3	0.5
Colorado	2	0.3
Georgia	2	0.3
Alaska	1	0.2
Indiana	1	0.2
Iowa	1	0.2
Kansas	1	0.2
Maryland	1	0.2
Massachusetts	1	0.2
Minnesota	1	0.2
Nebraska	1	0.2
New Jersey	1	0.2
New York	1	0.2
Tennessee	1	0.2
Texas	1	0.2
Virginia	1	0.2
No Response Given	552	

Only eight percent of respondents indicated that they practiced within a federally designated underserved area (Table 2.17). Federally designated underserved areas are defined as either Health Professional Shortage Areas (HPSAs) or Medically Underserved Areas/Populations (MUA/Ps). These designations are maintained at a federal level by the Health Resources and Services Administration (HRSA) and rely on the ratio of providers to population in a given area (as well as other population and provider criteria). More than one in five respondents (21.5%) were unsure of whether or not they were practicing in a federally designated underserved area.

Table 2.17 Practice in an Underserved Area

Practice in Federally Underserved Area	Number	Percent
Yes	51	8.0
No	449	70.5
Don't Know	137	21.5
Total	637	100.0
No Response Given	23	

Table 2.18 displays the specialty of the primary supervising physician of each survey respondent. Specialties are listed in descending order from most common to least common. Emergency medicine was the most common specialty (22.4%) followed by family practice/family medicine (16.6%) and orthopedic surgery (7.5%). The top three specialties comprised 46.5 percent of survey respondents and the bottom 16 specialties (each with one survey respondent) comprised only 2.5 percent of survey respondents.

Table 2.18 Physician Assistants by Specialties of Primary Supervising Physicians

Specialty of Supervising Physician	Number	Percent
Emergency Medicine	146	22.4
Family Practice/Family Medicine	108	16.6
Orthopedic Surgery	49	7.5
Internal Medicine - General	37	5.7
Surgery - Cardiothoracic	26	4.0
Dermatology	22	3.4
Occupational Medicine	17	2.6
Hospitalist	16	2.5
Orthopedic Surgery - Sports Medicine	14	2.2
Orthopedic Surgery - Trauma	14	2.2
Radiology - Vascular and Interventional Radiology	13	2.0
Surgery - Neurological	12	1.8
Surgery - General	11	1.7
Surgery - Cardiovascular	11	1.7
Urgent Care Medicine	11	1.7
Cardiology - Cardiovascular Disease	10	1.5
Gastroenterology	9	1.4
Orthopedic Surgery - Orthopedic Adult Reconstructive Surgery	8	1.2
Orthopedic Surgery - Surgery of the Spine	8	1.2
Orthopedic Surgery - Hand Surgery	6	0.9
Pediatrics - General Pediatrics	6	0.9
Internal Medicine - Pediatrics	5	0.8
Neurology	5	0.8
Urology	5	0.8
Cardiology - Cardiac Electrophysiology	4	0.6
Cardiology - Interventional Cardiology	4	0.6
General Practice	4	0.6
Hematology	4	0.6
Physical Medicine & Rehabilitation	4	0.6
Critical Care Medicine	3	0.5

Table 2.18 Physician Assistants by Specialties of Primary Supervising Physicians (Cont'd.)

Specialty of Supervising Physician	Number	Percent
Orthopedic Surgery - Pediatric Orthopedic Surgery	3	0.5
Otolaryngology	3	0.5
Pain Medicine	3	0.5
Plastic Surgery	3	0.5
Pulmonary Critical Care Medicine	3	0.5
Addiction Medicine	2	0.3
Family Practice - Sports Medicine	2	0.3
Gynecological Oncology	2	0.3
Infectious Diseases	2	0.3
Neonatal - Perinatal Medicine	2	0.3
Nephrology	2	0.3
Obstetrics & Gynecology	2	0.3
Oncology	2	0.3
Pediatrics - Pediatric Critical Care	2	0.3
Psychiatry	2	0.3
Radiology	2	0.3
Surgery - Abdominal	2	0.3
Surgery - Thoracic	2	0.3
Surgery - Urological	2	0.3
Dermatology - Procedural	1	0.2
Family Practice - Geriatric Medicine	1	0.2
Geriatrics	1	0.2
Hematology/Oncology	1	0.2
Obstetrics & Gynecology-Critical Care	1	0.2
Orthopedic Surgery - Orthopedic Musculoskeletal Oncology	1	0.2
Pathology – Blood banking	1	0.2
Plastic Surgery - Facial Plastic Surgery	1	0.2
Psychiatry - Pain Medicine	1	0.2
Pulmonary Disease	1	0.2
Radiology - Abdominal Radiology	1	0.2
Radiology - Neuroradiology	1	0.2
Surgery - Surgical Oncology	1	0.2
Surgery - Traumatic	1	0.2
Surgery - Vascular	1	0.2
Undersea Medicine & Hyperbaric Medicine	1	0.2
Total	651	100.0
No Response Given	9	

Table 2.19 compares the specialties of physician assistants' primary supervising physician with the number of physicians who practice within each specialty. In general, physician assistants practiced under physicians in the most common specialties. Table 2.19 also includes the number of physician assistants per 100 physicians. Orthopedic surgery-trauma had the highest ratio of PAs to physicians with 155.6 PAs per 100 physicians (a ratio of 1.56 : 1). Of the 64 specialties in which respondents worked, 34 had ratios less than 10 physician assistants per 100 physicians. Overall, there were approximately eight (8.4) physician assistants per 100 physicians. Note that not all physicians are included in this table as there were several specialties in which no physician assistants practiced.

Table 2.19 Comparison of Physician Assistants' Primary Supervising Physicians' Specialties with the Specialties of Indiana Physicians

Specialty	2012 Physician Assistants		2011 Physicians		PAs per 100 Physicians
	Number	Percent	Number	Percent	
Emergency Medicine	146	22.4	718	9.3	20.3
Family Practice/Family Medicine	108	16.6	1,692	21.9	6.4
Orthopedic Surgery	49	7.5	229	3.0	21.4
Internal Medicine - General	37	5.7	795	10.3	4.7
Surgery - Cardiothoracic	26	4.0	0	0	n/a
Dermatology	22	3.4	105	1.4	21.0
Occupational Medicine	17	2.6	78	1.0	21.8
Hospitalist	16	2.5	176	2.3	9.1
Orthopedic Surgery - Sports Medicine	14	2.2	26	0.3	53.8
Orthopedic Surgery - Trauma	14	2.2	9	0.1	155.6
Radiology - Vascular and Interventional Radiology	13	2.0	58	0.7	22.4
Surgery - Neurological	12	1.8	69	0.9	17.4
Surgery - General	11	1.7	271	3.5	4.1
Surgery - Cardiovascular	11	1.7	0	0	n/a
Urgent Care Medicine	11	1.7	52	0.7	21.2
Cardiology - Cardiovascular Diseases	10	1.5	149	1.9	6.7
Gastroenterology	9	1.4	149	1.9	6.0
Orthopedic Surgery - Orthopedic Adult Reconstructive Surgery	8	1.2	18	0.2	44.4
Orthopedic Surgery - Surgery of the Spine	8	1.2	26	0.3	30.8
Orthopedic Surgery - Hand Surgery	6	0.9	38	0.5	15.8
Pediatrics - General Pediatrics	6	0.9	523	6.8	1.1
Internal Medicine - Pediatrics	5	0.8	83	1.1	6.0
Neurology	5	0.8	183	2.4	2.7
Urology	5	0.8	96	1.2	5.2
Cardiology - Cardiac Electrophysiology	4	0.6	34	0.4	11.8
Cardiology - Interventional Cardiology	4	0.6	73	0.9	5.5
General Practice	4	0.6	90	1.2	4.4
Hematology	4	0.6	13	0.2	30.8
Physical Medicine & Rehabilitation	4	0.6	89	1.2	4.5
Critical Care Medicine	3	0.5	22	0.3	13.6
Orthopedic Surgery - Pediatric Orthopedic Surgery	3	0.5	8	0.1	37.5
Otolaryngology	3	0.5	116	1.5	2.6
Plastic Surgery	3	0.5	67	0.9	4.5
Pulmonary Critical Care Medicine	3	0.5	80	1.0	3.8

Table 2.19 Comparison of Physician Assistants' Primary Supervising Physicians' Specialties with the Specialties of Indiana Physicians (Cont'd.)

Specialty	2012 Physician Assistants		2011 Physicians		PAs per 100 Physicians
	Number	Percent	Number	Percent	
Pain Medicine	3	0.5	44	0.6	6.8
Addiction Medicine	2	0.3	12	0.2	16.7
Family Practice - Sports Medicine	2	0.3	24	0.3	8.3
Gynecological Oncology	2	0.3	8	0.1	25.0
Infectious Diseases	2	0.3	71	0.9	2.8
Neonatal - Perinatal Medicine	2	0.3	64	0.8	3.1
Nephrology	2	0.3	126	1.6	1.6
Obstetrics & Gynecology	2	0.3	420	5.4	0.5
Oncology	2	0.3	52	0.7	3.8
Pediatrics - Pediatric Critical Care	2	0.3	24	0.3	8.3
Psychiatry	2	0.3	317	4.1	0.6
Radiology	2	0.3	82	1.1	2.4
Surgery - Abdominal	2	0.3	12	0.2	16.7
Surgery - Thoracic	2	0.3	58	0.7	3.4
Surgery - Urological	2	0.3	10	0.1	20.0
Dermatology - Procedural	1	0.2	5	0.1	20.0
Family Practice - Geriatric Medicine	1	0.2	22	0.3	4.5
Geriatrics	1	0.2	31	0.4	3.2
Hematology/Oncology	1	0.2	102	1.3	1.0
Obstetrics & Gynecology - Critical Care	1	0.2	5	0.1	20.0
Orthopedic Surgery - Orthopedic Musculoskeletal Oncology	1	0.2	1	0.0	100.0
Pathology - Bloodbanking	1	0.2	7	0.1	14.3
Plastic Surgery - Facial Plastic Surgery	1	0.2	6	0.1	16.7
Psychiatry - Pain Medicine	1	0.2	1	0.0	100.0
Pulmonary Disease	1	0.2	0	0	n/a
Radiology - Abdominal Radiology	1	0.2	5	0.1	20.0
Radiology - Neuroradiology	1	0.2	33	0.4	3.0
Surgery - Surgical Oncology	1	0.2	13	0.2	7.7
Surgery - Traumatic	1	0.2	4	0.1	25.0
Surgery - Vascular	1	0.2	40	0.5	2.5
Undersea Medicine & Hyperbaric Medicine	1	0.2	1	0.0	100.0
Total	651	100.0	7,735	100.0	8.4
No Response Given	9				

Tables 2.20 and 2.21 show the proportion of physician assistants who work in a primary care specialty by gender and age group. Please note that these tables include some individuals (10) who work less than full-time. Primary care specialties include: family practice/family medicine, general practice, general internal medicine, general pediatrics, and pediatric internal medicine. A greater proportion of females practice in primary care compared to males (26.3% vs. 20.4%). Additionally, older PAs were more likely to practice in primary care than younger PAs.

Table 2.20 Primary Care Practice by Gender

Gender	Non-Primary Care		Primary Care		Total	
	Number	Percent	Number	Percent	Number	Percent
Female	303	73.7	108	26.3	411	100.0
Male	176	79.6	45	20.4	221	100.0
Total	479	75.0	160	25.0	639	100.0
No Response Given					21	

Table 2.21 Primary Care Practice by Age Group

Age	Non-Primary Care		Primary Care		Total	
	Number	Percent	Number	Percent	Number	Percent
Under 25 years old	8	88.9	1	11.1	9	100.0
25 - 34 years old	244	78.2	68	21.8	312	100.0
35 - 44 years old	126	73.3	46	26.7	172	100.0
45 - 54 years old	73	81.1	17	18.9	90	100.0
55 - 64 years old	32	55.2	26	44.8	58	100.0
Greater than 65 years old	4	80.0	1	20.0	5	100.0
Total	491	75.4	160	24.6	651	100.0
No Response Given					9	

Table 2.22 shows the distribution of professional activities that physician assistants indicated required the majority of their time. Nearly all respondents indicated that they spent most of their time performing activities related to direct patient care.

Table 2.22 Primary Activities as a Physician Assistant

Area in which Professional Time is Spent	Number	Percent
Direct Patient Care	643	97.7
Physician Assistant Education	10	1.5
Administration	2	0.3
Other	2	0.3
Research	1	0.2
Total	658	100.0
No Response Given	2	

The current salaries of PAs are listed in Table 2.23. The majority of PAs (55.8%) reported that their salary was between \$75,001 and \$100,000 per year. Very few PAs make less than \$50,000 (6.5%) or more than \$150,001 (3.0%) per year.

Table 2.23 Current Salary as a Physician Assistant

Current Salary as a Physician Assistant	Number	Percent
Less than \$50,000	37	6.5
\$50,000 - \$75,000	85	14.9
\$75,001 - \$100,000	319	55.8
\$100,001 - \$125,000	98	17.1
\$125,001 - \$150,000	16	2.8
\$150,001 or greater	17	3.0
Total	572	100.0
No Response Given	34	

Chapter 3: Trends in Responses from the 2004, 2006, 2008, 2010, and 2012 Physician Assistant Surveys

This chapter summarizes the findings of the 2004, 2006, 2008, 2010, and 2012 Indiana PA Licensure Surveys. Questions that were not asked in previous years are not included in this chapter and the information in the tables represents respondents only. Missing responses have been noted in each table, and only valid percentages are presented.

Demographic Composition

Table 3.1 shows the age distribution of respondents active in Indiana in 2004, 2006, 2008, 2010, and 2012 re-licensure periods. Nearly half of respondents were less than 35 years old in each year of the survey (44.5% in 2004, 46.8% in 2006, 47.6% in 2008, 48.1% in 2010, and 49.2% in 2012). Roughly one-tenth of respondents (7.4% in 2004, 8.7% in 2006, 11.3% in 2008, 11.4% in 2010, and 9.8% in 2012) were over 55 years old. The proportion in the under 35 age group increased over time as did the proportion in the 54 to 65 year old group. The proportion in the 35 to 54 year old age group declined over the time period.

Table 3.1 Age Groups

Age	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Under 35	126	44.5	167	46.8	202	47.6	219	48.1	322	49.2
35-54	136	48.1	159	44.5	174	41.0	184	40.4	269	41.1
55-64	15	5.3	30	8.4	45	10.6	47	10.3	59	9.0
65 and greater	6	2.1	1	0.3	3	0.7	5	1.1	5	0.8
Total	283	100.0	357	100.0	424	100.0	455	100.0	655	100.0
No Response Given	0		3		2		6		5	

Gender distribution for respondents in 2004, 2008, 2010, and 2012 is shown in Table 3.2. The question on gender was not asked on the 2006 survey. The proportion of respondents who were females has risen from 56.7 percent in 2004 to 65.5 percent in 2012.

Table 3.2 Gender

Gender	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Female	160	56.7	n/a	n/a	268	63.7	283	63.9	419	65.5
Male	122	43.3	n/a	n/a	153	36.3	160	36.1	221	34.5
Total	282	100.0	n/a	n/a	421	100.0	443	100.0	640	100.0
No Response Given	1				5		18		20	

Table 3.3 displays the races of physician assistant survey respondents in 2004, 2008, 2010, and 2012. The question on race was not asked on the 2006 survey. Almost all (95.7% in 2004, 93.6% in 2008, 93.2% in 2010, and 93.0% in 2012) of the respondents were white. Overall, the proportions of Black/African American, Asian/Pacific Islander, and American Indian/Native Alaskan respondents increased slightly over the time period.

Table 3.3 Race

Race	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
White	270	95.7	n/a	n/a	393	93.6	425	93.2	601	93.0
Black/African-American	2	0.7	n/a	n/a	8	1.9	8	1.8	14	2.2
Asian/Pacific Islander	4	1.4	n/a	n/a	11	2.6	10	2.2	13	2.0
American Indian/Native Alaskan	0	0.0	n/a	n/a	3	0.7	3	0.7	2	0.3
Multi-racial	2	0.7	n/a	n/a	0	0.0	5	1.1	4	0.6
Other	4	1.4	n/a	n/a	5	1.2	5	1.1	12	1.9
Total	282	100.0	n/a	n/a	420	100.0	456	100.0	646	100.0
No Response Given	1				6		5		14	

Table 3.4 shows the ethnicity of respondents for the 2004, 2008, 2010, and 2012 surveys. The question on ethnicity was not asked on the 2006 survey. The percentage of respondents who reported they were of Hispanic origin remained low from 2004 to 2012.

Table 3.4 Ethnicity

Ethnicity	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Hispanic or Latino	4	1.4	n/a	n/a	7	1.7	9	2.0	14	2.2
Not Hispanic or Latino	277	98.6	n/a	n/a	411	98.3	444	98.0	629	97.8
Total	281	100.0	n/a	n/a	418	100.0	453	100.0	643	100.0
No Response Given	2				8		8		17	

Education and Special Skills

Table 3.5 shows the highest educational degree or credential among the respondents. The question on highest physician assistant degree or credential was not asked in 2004. The percentage of physician assistants possessing a Bachelor's degree as their highest credential has decreased from 2006 to 2012 (60.2% in 2006, 55.9% in 2008, 47.0% in 2010, and 33.8% in 2012), while the percentage of physician assistants holding a Master's degree as their highest credential has increased over the same time period (29.0% in 2006, 33.6% in 2008, 44.4% in 2010, and 59.4% in 2012). The percentage of physician assistants with an Associate's degree declined slightly (6.1% in 2006, 5.8% in 2008, 3.7% in 2010, and 3.4% in 2012).

Table 3.5 Highest Physician Assistant Credentialing Degree

Degree	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Certificate of Completion	n/a	n/a	17	4.7	20	4.8	22	4.8	20	3.1
Associate Degree	n/a	n/a	22	6.1	24	5.8	17	3.7	22	3.4
Bachelor's Degree	n/a	n/a	216	60.2	233	55.9	214	47.0	219	33.8
Master's Degree	n/a	n/a	104	29.0	140	33.6	202	44.4	385	59.4
Doctorate	n/a	n/a	0	0.0	0	0.0	0	0.0	2	0.3
Total	n/a	n/a	359	100.0	417	100.0	455	100.0	648	100.0
No Response Given			1		9		6		12	

Table 3.6 shows the location of physician assistant training programs that the respondents completed. This question was not on the 2004 survey instrument. From 2006 to 2012, approximately half of all respondents indicated that they attended a physician assistant training program in Indiana (48.9% in 2006, 47.8% in 2008, 56.2% in 2010, and 53.0% in 2012). Respondents who attended a physician assistant training program outside of Indiana were concentrated in contiguous states (Illinois, Ohio, Kentucky, and Michigan).

Table 3.6 Location of Physician Assistant Programs Attended by Survey Respondents

Location	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Butler University/Methodist Hospital	n/a	n/a	112	31.6	129	31.2	161	35.1	217	33.3
University of Saint Francis/Lutheran College of Health Professions – Fort Wayne	n/a	n/a	61	17.2	69	16.7	83	18.1	113	17.4
Illinois	n/a	n/a	35	9.9	43	10.4	32	7.0	66	10.1
Ohio	n/a	n/a	19	5.4	23	5.6	24	5.2	38	5.8
Kentucky	n/a	n/a	9	2.5	15	3.6	22	4.8	25	3.8
Pennsylvania	n/a	n/a	15	4.2	18	4.3	15	3.3	23	3.5
Indiana University-Fort Wayne	n/a	n/a	0	0.0	0	0.0	14	3.1	15	2.3
Michigan	n/a	n/a	7	2.0	7	1.7	12	2.6	13	2.0
New York	n/a	n/a	4	1.1	8	1.9	9	2.0	14	2.2
Arizona	n/a	n/a	6	1.7	8	1.9	8	1.7	11	1.7
Florida	n/a	n/a	5	1.4	7	1.7	8	1.7	11	1.7
Texas	n/a	n/a	7	2.0	6	1.4	8	1.7	9	1.4
West Virginia	n/a	n/a	5	1.4	3	0.7	7	1.5	5	0.8
Nebraska	n/a	n/a	24	6.8	28	6.8	6	1.3	10	1.5
Iowa	n/a	n/a	2	0.6	2	0.5	5	1.1	4	0.6
Oklahoma	n/a	n/a	5	1.4	3	0.7	5	1.1	5	0.8
Alabama	n/a	n/a	3	0.8	3	0.7	4	0.9	4	0.6
Georgia	n/a	n/a	4	1.1	3	0.7	4	0.9	7	1.1
Missouri	n/a	n/a	4	1.1	1	0.2	4	0.9	8	1.2
Tennessee	n/a	n/a	3	0.8	6	1.4	4	0.9	7	1.1
California	n/a	n/a	3	0.8	4	1.0	3	0.7	6	0.9
Maryland	n/a	n/a	0	0.0	2	0.5	3	0.7	2	0.3
North Carolina	n/a	n/a	5	1.4	6	1.4	3	0.7	5	0.8
Wisconsin	n/a	n/a	3	0.8	4	1.0	3	0.7	7	1.1
New Jersey	n/a	n/a	2	0.6	1	0.2	2	0.4	2	0.3
North Dakota	n/a	n/a	4	1.1	2	0.5	2	0.4	1	0.2
Arkansas	n/a	n/a	0	0.0	0	0.0	1	0.2	3	0.5
Connecticut	n/a	n/a	1	0.3	3	0.7	1	0.2	4	0.6

Table 3.6 Location of Physician Assistant Programs Attended by Survey Respondents (Cont'd.)

Location	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Kansas	n/a	n/a	2	0.6	2	0.5	1	0.2	3	0.5
Maine	n/a	n/a	0	0.0	0	0.0	1	0.2	1	0.2
Massachusetts	n/a	n/a	0	0.0	1	0.2	1	0.2	1	0.2
South Carolina	n/a	n/a	1	0.3	2	0.5	1	0.2	1	0.2
Virginia	n/a	n/a	0	0.0	2	0.5	1	0.2	3	0.5
Washington	n/a	n/a	1	0.3	1	0.2	1	0.2	0	0.0
Louisiana	n/a	n/a	1	0.3	0	0.0	0	0.0	0	0.0
Nevada	n/a	n/a	0	0.0	1	0.2	0	0.0	0	0.0
Colorado	n/a	n/a	0	0.0	0	0.0	0	0.0	1	0.2
Delaware	n/a	n/a	0	0.0	0	0.0	0	0.0	1	0.2
Idaho	n/a	n/a	0	0.0	0	0.0	0	0.0	1	0.2
New Hampshire	n/a	n/a	0	0.0	0	0.0	0	0.0	1	0.2
Montana	n/a	n/a	0	0.0	0	0.0	0	0.0	1	0.2
Non US PA Education Program	n/a	n/a	0	0.0	0	0.0	0	0.0	1	0.2
Oregon	n/a	n/a	1	0.3	1	0.2	0	0.0	1	0.2
Total	n/a	n/a	354	100.0	414	100.0	459	100.0	651	100.0
Missing			13		12		2		9	

Table 3.7 presents the respondents' fluency in languages other than English in 2004, 2006, 2008, 2010, and 2012. In 2004, fluency in Spanish was the only information gathered on languages. Additional languages were added in subsequent surveys. Spanish was the most common language other than English spoken fluently by the respondents (2.5% in 2004, 3.6% in 2006, 2.8% in 2008, 2.8% in 2010, and 2.6% in 2012).

Table 3.7 Language Fluency of Survey Respondents

Language	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Spanish	7	2.5	13	3.6	12	2.8	13	2.8	17	2.6
French	n/a	n/a	3	0.8	6	1.4	4	0.9	6	0.9
Russian	n/a	n/a	1	0.3	4	0.9	2	0.4	3	0.5
Chinese	n/a	n/a	2	0.6	1	0.2	3	0.6	2	0.3
Hindi	n/a	n/a	0	0.0	1	0.2	1	0.2	3	0.5
Vietnamese	n/a	n/a	n/a	n/a	n/a	n/a	1	0.2	2	0.3
Arabic	n/a	n/a	2	0.6	2	0.5	0	0.0	2	0.3
African Languages	n/a	n/a	0	0.0	2	0.5	2	0.4	1	0.2
Portuguese	n/a	n/a	n/a	n/a	2	0.5	2	0.4	1	0.2
Greek	n/a	n/a	2	0.6	0	0.0	1	0.2	1	0.2
Pennsylvania Dutch	n/a	n/a	n/a	n/a	n/a	n/a	1	0.2	1	0.2
Thai	n/a	n/a	0	0.0	1	0.2	1	0.2	1	0.2
Sign Language	n/a	n/a	0	0.0	4	0.9	0	0.0	1	0.2
Tagalog	n/a	n/a	2	0.6	2	0.5	0	0.0	1	0.2
German	n/a	n/a	0	0.0	0	0.0	0	0.0	1	0.2
Filipino	n/a	n/a	1	0.3	1	0.2	1	0.2	0	0.0

Professional Characteristics

The activity in which respondents spent most of their professional time is shown in Table 3.8. Almost all of the respondents spent most of their professional time in “direct patient care” and “patient-care-related” activities.

Table 3.8 Activity in which Most Professional Time Was Spent

Area in which Professional Time is Spent	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Direct patient care/related activities	272	96.5	347	96.4	418	98.4	455	98.7	643	97.7
Physician Assistant Education	5	1.8	2	0.6	0	0.0	2	0.4	10	1.5
Administration	5	1.8	6	1.7	7	1.6	3	0.7	2	0.3
Research	0	0.0	1	0.3	0	0.0	1	0.2	2	0.3
Other	0	0.0	4	1.1	0	0.0	0	0.0	1	0.2
Total	282	100.0	360	100.0	425	100.0	461	100.0	658	100.0
No Response Given	1		0		1		0		2	

Table 3.9 shows the average number of hours worked per week by all respondents. The proportion of respondents in each category has remained stable over the past eight years.

Table 3.9 Average Hours Worked per Week as a Physician Assistant by Survey Respondents

Hours	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
1-9	4	1.4	4	1.1	3	0.7	5	1.1	5	0.8
10-19	7	2.5	9	2.5	11	2.6	11	2.4	17	2.6
20-29	19	6.7	26	7.2	39	9.2	35	7.6	50	7.7
30-39	41	14.5	72	20.1	83	19.6	79	17.2	122	18.8
40 or more	212	74.9	248	69.1	288	67.9	330	71.7	456	70.2
Total	283	100.0	359	100.0	424	100.0	460	100.0	650	100.0
No Response Given	0		1		2		1		10	

Table 3.10 displays the 10 most common specialties of respondents' primary supervising physicians. Emergency medicine and family practice/family medicine were the top two specialties (in order) in each year from 2004 to 2012, and orthopedic surgery was the third most common specialty in all years except 2006 (general internal medicine was the third most common specialty in 2006). Generally, the distribution of physician assistants among specialties remained relatively constant from 2004 to 2010 with a slight reduction in the percentage working with family physicians.

Table 3.10 Physician Assistants by Specialty of Primary Supervising Physician (10 Most Common)

Specialty	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Emergency Medicine	55	19.4	65	18.1	82	19.3	87	18.9	146	22.4
Family Practice/Family Medicine	54	19.1	63	17.5	74	17.4	77	16.7	108	16.6
Orthopedic Surgery	45	15.9	21	5.8	33	7.8	46	10.0	49	7.5
Internal Medicine - General	14	4.9	24	6.7	20	4.7	21	4.6	37	5.7
Dermatology	7	2.5	11	3.1	15	3.5	17	3.7	22	3.4
Surgery - Cardiothoracic	12	4.2	16	4.4	0	0.0	16	3.5	26	4.0
Occupational Medicine	13	4.6	12	3.3	12	2.8	16	3.5	17	2.6
Hospitalist	n/a	n/a	n/a	n/a	1	0.2	2	0.4	16	2.5
Orthopedic Surgery - Sports Medicine	n/a	n/a	6	1.7	10	2.4	12	2.6	14	2.2
Orthopedic Surgery - Trauma	n/a	n/a	7	1.9	8	1.9	8	1.7	14	2.2

Principal work settings for physician assistants are shown in Table 3.11. Work settings were condensed into three categories (see *Appendix 2* for a list of work settings included in each category). From 2004 to 2010 approximately 40 percent of respondents worked in hospital settings, but that proportion rose to 50.2 percent in 2012. A concordant decline in the percentage of respondents who reported working in a private practice setting was noted in 2012.

Table 3.11 Condensed Principal Work Setting of Survey Respondents

Setting	2004		2006		2008		2010		2012	
	Num	Pct	Num	Pct	Num	Pct	Num	Pct	Num	Pct
Hospital setting	118	41.8	138	38.4	172	40.6	182	39.7	327	50.2
Private practice	92	32.6	146	40.7	178	42.0	200	43.6	195	29.9
Other setting	72	25.5	75	20.9	74	17.5	77	16.8	130	19.9
Total	282	100.0	359	100.0	424	100.0	459	100.0	652	100.0
No Response Given	1		1		2		2		8	

Chapter 4: Location of Physician Assistants by County in Indiana

The following maps display the *estimated* number of PAs by county. Maps 4.1 and 4.2 utilize data drawn from the licensure survey question regarding a PA's principal practice location. Practice location information is taken from the primary practice location listed by PAs when they complete the survey. Therefore, individuals who listed an Indiana practice address as their secondary or tertiary practice location are not included in the maps because it is uncertain how much of their time is spent at these locations. Additionally, individuals who did not list a practice address on their survey, but were included in the analysis based on the address listed on their licensing information are not included in the maps because license addresses are not reliable indicators of where the individual practices.

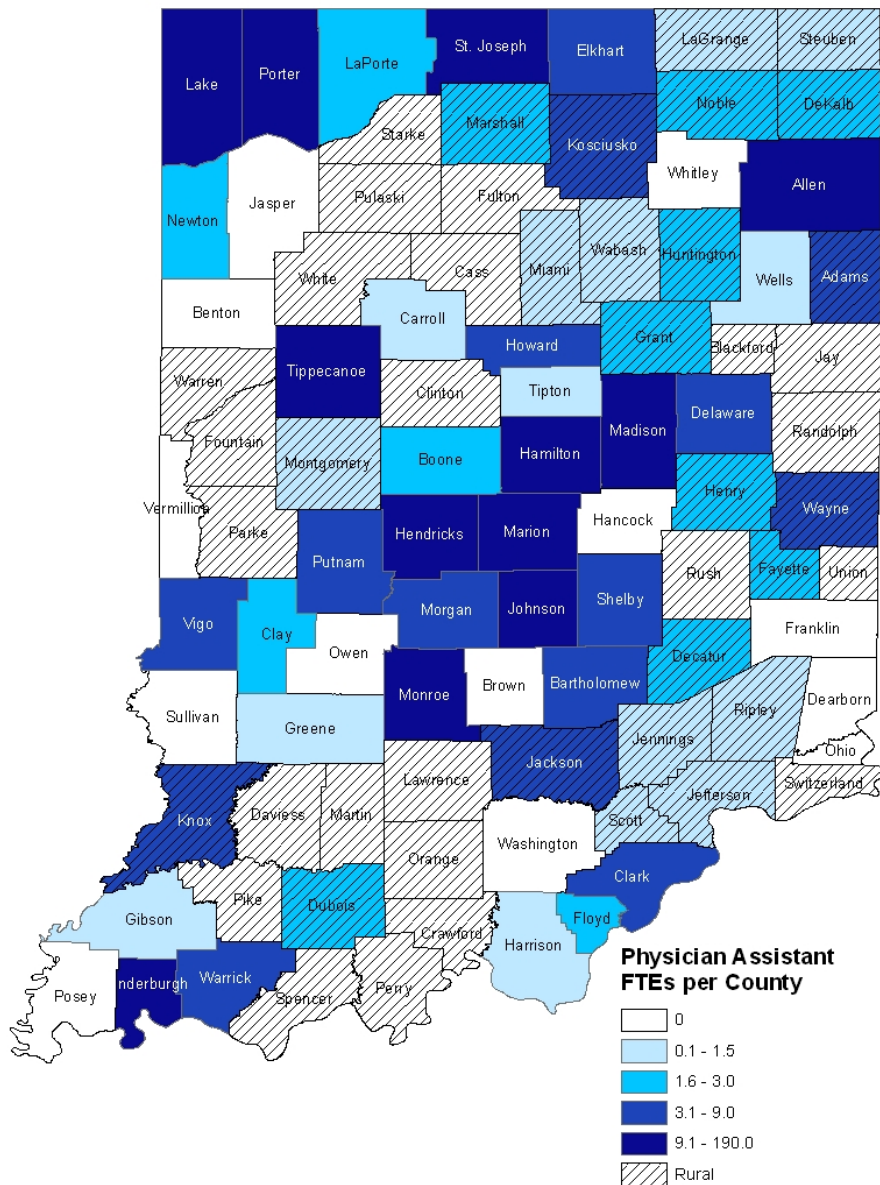
These maps display PA FTEs rather than a simple headcount because not all PAs indicated that they spent all of their time in patient care. PAs who work full time were considered one FTE, whereas PAs who work less than full-time are given an appropriate proportion of a full FTE. FTEs in this report are based off of a PA's response to the survey question, "How many hours per week on average do you spend in all activities as a physician assistant?" Table 4.1 shows how FTEs were assigned to PA respondents based on the average number of hours worked per week. Table 4.2 follows the maps and provides information on each county.

Table 4.1 FTE Calculation for PAs

Average Number of Weekly Hours	FTE
1 - 9	0.25
10 - 19	0.50
20 - 29	0.75
30 - 39	1.00
40 or more	1.00

Map 4.1 shows the number of physician assistant FTEs in each county. Counties with higher population tended to have higher numbers of PA FTEs. Marion County had a far greater number of physician assistant FTEs (190) than any other county. Allen, Hamilton, Lake, and Monroe Counties all had high numbers of PA FTEs. There were 36 counties in which no physician assistant reported practicing. Many of the counties that lacked any PAs were rural.

Map 4.1 Estimated Number of Physician Assistant FTEs per County



Map 4.2 shows the number of PA FTEs per 100,000 population in each county. The distribution shown in this map is similar to that shown in Map 4.1: the most populous counties tended to have the highest ratios of PA FTEs per 100,000 population. Marion County had the highest ratio of physician assistants to population with 21 PAs per 100,000 population.

Map 4.2 Estimated Number of Physician Assistant FTEs per 100,000 Population in each County

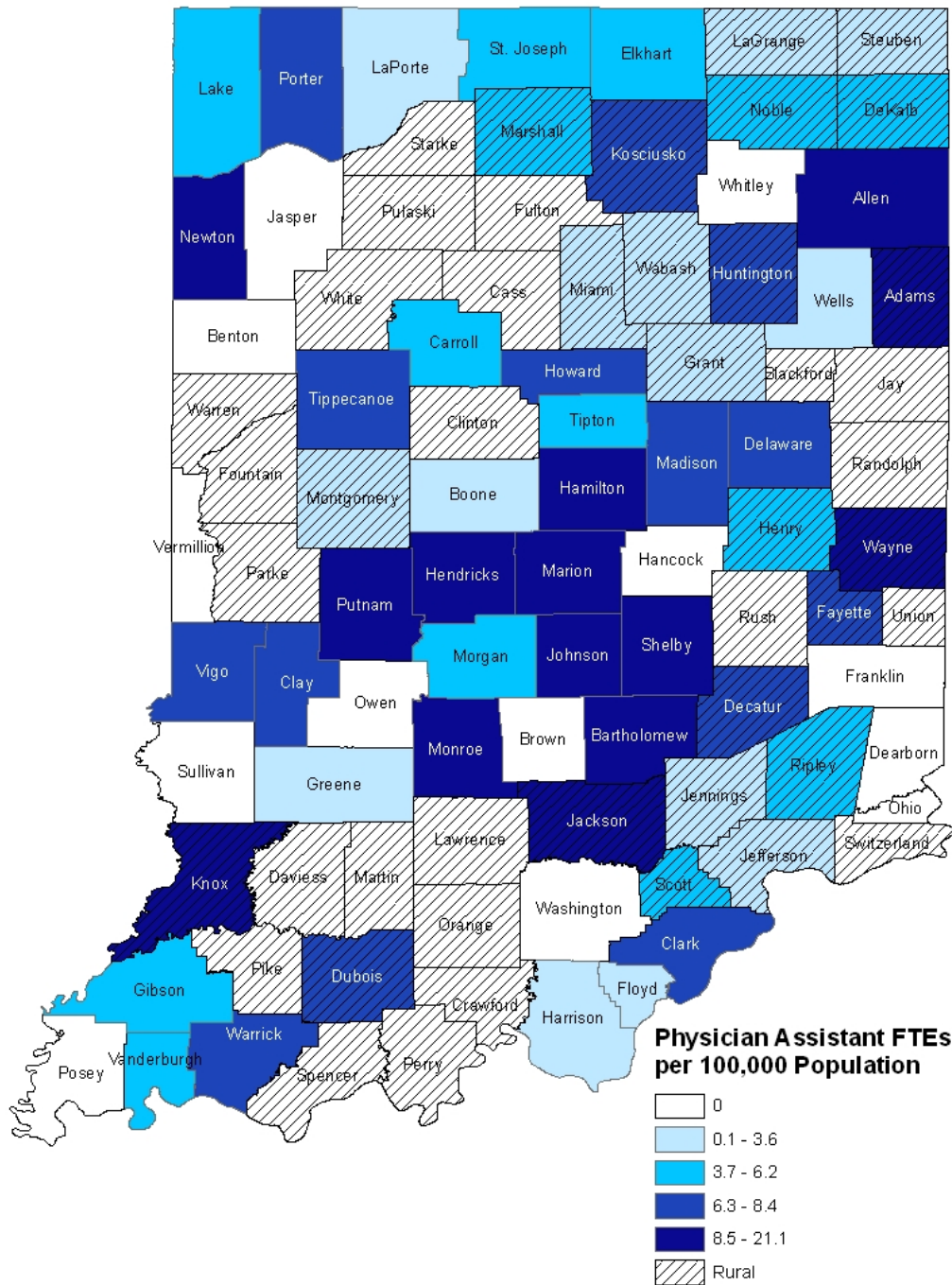


Table 4.2 Estimated PA FTEs and PA FTEs per 100,000 Population in each County

County	PA FTEs	2010 Population	PA FTEs per 100,000 Population
Adams	3.25	34,387	9.5
Allen	64.75	355,329	18.2
Bartholomew	7	76,794	9.1
Benton	0	8,854	0.0
Blackford	0	12,766	0.0
Boone	2	56,640	3.5
Brown	0	15,242	0.0
Carroll	1	20,155	5.0
Cass	0	38,966	0.0
Clark	8	110,232	7.3
Clay	2	26,890	7.4
Clinton	0	33,224	0.0
Crawford	0	10,713	0.0
Daviess	0	31,648	0.0
DeKalb	2.75	50,047	5.5
Dearborn	0	25,740	0.0
Decatur	3	42,223	7.1
Delaware	9	117,671	7.6
Dubois	3	41,889	7.2
Elkhart	7.75	197,559	3.9
Fayette	2	24,277	8.2
Floyd	2	74,578	2.7
Fountain	0	17,240	0.0
Franklin	0	23,087	0.0
Fulton	0	20,836	0.0
Gibson	1.5	33,503	4.5
Grant	2	70,061	2.9
Greene	1	33,165	3.0
Hamilton	40.5	274,569	14.8
Hancock	0	70,002	0.0
Harrison	1	39,364	2.5
Hendricks	18	145,448	12.4
Henry	3	49,462	6.1
Howard	6.25	82,752	7.6
Huntington	3	37,124	8.1
Jackson	4.75	42,376	11.2
Jasper	0	33,478	0.0
Jay	0	21,253	0.0

Table 4.2 Estimated PA FTEs and PA FTEs per 100,000 Population in each County (Cont'd.)

County	PA FTEs	2010 Population	PA FTEs per 100,000 Population
Jefferson	1	32,428	3.1
Jennings	1	28,525	3.5
Johnson	16	139,654	11.5
Knox	5.75	38,440	15.0
Kosciusko	6.5	77,358	8.4
LaPorte	2.75	111,467	2.5
LaGrange	1	37,128	2.7
Lake	30.25	496,005	6.1
Lawrence	0	46,134	0.0
Madison	9.5	131,636	7.2
Marion	190	903,393	21.0
Marshall	2	47,051	4.3
Martin	0	10,334	0.0
Miami	1	36,903	2.7
Monroe	23	137,974	16.7
Montgomery	1	38,124	2.6
Morgan	4	68,894	5.8
Newton	2	14,244	14.0
Noble	2	47,536	4.2
Ohio	0	6,128	0.0
Orange	0	19,840	0.0
Owen	0	21,575	0.0
Parke	0	17,339	0.0
Perry	0	19,338	0.0
Pike	0	12,845	0.0
Porter	11.75	164,343	7.1
Posey	0	25,910	0.0
Pulaski	0	13,402	0.0
Putnam	3.75	37,963	9.9
Randolph	0	26,171	0.0
Ripley	1.5	28,818	5.2
Rush	0	17,392	0.0
Scott	1	24,181	4.1
Shelby	6	44,436	13.5
Spencer	0	20,952	0.0
St. Joseph	14.5	266,931	5.4
Starke	0	23,363	0.0
Steuben	0.75	34,185	2.2

Table 4.2 Estimated PA FTEs and PA FTEs per 100,000 Population in each County (Cont'd.)

County	PA FTEs	2010 Population	PA FTEs per 100,000 Population
Sullivan	0	21,475	0.0
Switzerland	0	10,613	0.0
Tippecanoe	11	172,780	6.4
Tipton	0.75	15,936	4.7
Union	0	7,516	0.0
Vanderburgh	11.25	179,703	6.3
Vermillion	0	16,212	0.0
Vigo	7.25	107,848	6.7
Wabash	1	32,888	3.0
Warren	0	8,508	0.0
Warrick	4.75	59,689	8.0
Washington	0	28,262	0.0
Wayne	9	68,917	13.1
Wells	1	27,636	3.6
White	0	24,643	0.0
Whitley	0	33,292	0.0

Chapter 5: Conclusions

This report summarizes the responses to the 2012 Physician Assistant Licensure Survey. Physician assistants who (1) responded to the survey, (2) held an active or probationary Indiana license, (3) listed at least one Indiana practice address, and (4) indicated that they were actively working as a physician assistant were included in the analysis. Overall, 660 of the 989 (66.7%) total licensees in 2012 were included in the analysis of this report. The licensure survey had a response rate of 89.1 percent.

The gender distribution of Indiana's physician assistant workforce is changing while other demographic characteristics have seen little change. Respondents in 2012 were predominantly female (65.5%). This is a nearly 10 percent increase from 2004 (earliest available data) when 56.7 percent of respondents were female. Furthermore, comparing gender distribution of 2012 respondents by age group shows that 78.9 percent of PAs under 35 years of age were female, and 72.1 percent of respondents over age 55 were male. These trends indicate a shift in gender distribution tending toward a primarily female workforce. The racial and ethnic diversity of the physician assistant workforce has not seen a notable change since data was initially collected in 2004. The proportion of PAs that are white has fallen from 95.7 percent in 2004 to 93.0 percent in 2012 while the proportion of PAs who are of Hispanic or Latino origin has risen from 1.4 percent to 2.2 percent.

The educational characteristics of physician assistants have also changed in the past several years. In 2012, most respondents (59.4%) indicated that they held a Master's degree as their highest physician assistant credential. This contrasts with 2006 data (earliest available) in which 60.2 percent of PAs held a Bachelor's degree as their highest credential and only 29 percent held a Master's degree. Less than one in five physician assistants (18.8%) reported receiving a scholarship toward their PA education. Over 40 percent of PAs completed their training with greater than \$75,000 in student loan debt.

The professional setting in which physician assistants work has seen a shift toward hospital-based practice. The majority (50.2%) of physician assistants reported practicing in a hospital setting in 2012. This is an increase from 2004 when 41.8 percent of PAs worked in hospital settings. These changes have not been accompanied by changes in the number of hours per week or in the specialty of physicians under which PAs practice. The location of physician assistants practices are still in predominantly urban counties, especially Marion and Allen counties. The majority of PAs (55.7%) made between \$75,001 and \$100,000 per year in their current position.

Appendix 1: 2012 Indiana Physician Assistant Re-Licensure Survey

Your answers to these questions will help the Indiana State Department of Health to respond to emergencies and to identify health professional shortages and geographic shortage areas. The survey is voluntary and will not affect the status of your license or your renewal.

Thank you very much for your help.

1. What is your current work status as physician assistant (PA)? **Please choose only one.**

DROP-DOWN LIST

Actively working as a PA (patient care activities, teaching, administration, or research)

Retired as a PA

Temporarily inactive as a PA

2. In which activity do you spend most of your professional time? **Please choose only one.**

DROP-DOWN LIST

Direct patient care/patient care activities

Administration

Physician Assistant Education

Research

Other

3. What is the major specialty of your primary supervising physician at your principal PA position (the position in which you spend the most time)? **Please choose only one.**

DROP-DOWN LIST

IF YOU HAVE ONLY ONE SUPERVISING PHYSICIAN, PROCEED TO QUESTION 4.

- 3a. What is the major specialty of your secondary supervising physician at your principal PA position (the position in which you spend the most time)? **Please choose only one.**

DROP-DOWN LIST

- 3b. What is the major specialty of your tertiary supervising physician at your principal PA position (the position in which you spend the most time)? **Please choose only one.**

DROP-DOWN LIST

4. What type of employer do you work for in your principal PA position? **Please choose only one.**

DROP-DOWN LIST

Private sector employer

A branch of the military (Army, Navy, etc.)

Federal government

State government

Local government

Other type of employer

5. In what type of setting do you spend most of your time at your principal PA position? **Please choose only one.**

DROP-DOWN LIST

6. How many hours per week on average do you spend in ALL activities as a physician assistant? **Please choose only one.**

DROP-DOWN LIST

1-9

10-19

20-29

30-39

40-49

50-59

60 or more

7. Would you be willing to provide services in case of a bio-terrorism event or other public health emergency? If you answer "Yes," we may contact you using your PLA contact information.

DROP-DOWN LIST

Yes

No

8. Are you fluent in any of the following languages? **Please select all that apply.**

DROP-DOWN LIST

African languages

Arabic

Burmese

Cambodian

Chinese

Filipino

French

German

Greek

Hindi

Italian

Japanese

Korean

Pennsylvania Dutch

Polish

Portuguese

Russian

Sign language

Spanish

Tagalog

Thai

Turkish

9. What is the name of the institution that provided your entry level PA training? **Please choose only one.**

DROP-DOWN LIST

Butler University

University of Saint Francis

Lutheran College of Health Professions

Indiana University-Fort Wayne

Etc...

10. What is your highest PA credential/degree? **Please choose only one.**

DROP-DOWN LIST

Certificate of completion

Associate

Bachelors

Masters

Doctorate

11. What is the name of the institution or the state in which you earned your highest PA credential? **Please choose only one.**

DROP-DOWN LIST

Butler University

University of Saint Francis
Lutheran College of Health Professions
Indiana University-Fort Wayne

12. What is your highest degree in any field?

DROP-DOWN LIST

Diploma
Associate
Bachelors
Masters
Doctorate

13. Which of the following best describes your race? **Please select only one.**

DROP-DOWN LIST

American Indian/Native Alaskan
Asian/Pacific Islander
Black/African American
White
Multi-racial
Other

14. Are you of Hispanic origin?

DROP-DOWN LIST

Yes
No

15. What is your gender?

DROP-DOWN LIST

Female

Male

16a. Please enter the STREET ADDRESS of your principal practice location (where you work the most hours as a physician assistant) [TEXT BOX]

16b. Please enter the CITY of your principal practice location [TEXT BOX]

16c. Please enter the 2-character STATE CODE (example: IN) for your principal practice location [TEXT BOX]

16d. Please enter the 5-character ZIP CODE for your principal practice location [TEXT BOX]

17a. Please enter the STREET ADDRESS of your secondary practice location (where you work the most hours as a physician assistant) [TEXT BOX]

17b. Please enter the CITY of your secondary practice location [TEXT BOX]

17c. Please enter the 2-character STATE CODE (example: IN) for your secondary practice location [TEXT BOX]

17d. Please enter the 5-character ZIP CODE for your secondary practice location [TEXT BOX]

18a. Please enter the STREET ADDRESS of your third practice location (where you work the most hours as a physician assistant) [TEXT BOX]

18b. Please enter the CITY of your third practice location [TEXT BOX]

18c. Please enter the 2-character STATE CODE (example: IN) for your third practice location [TEXT BOX]

18d. Please enter the 5-character ZIP CODE for your third practice location [TEXT BOX]

19. Do you practice in a federally underserved area (Health Professional Shortage Area or Federal Medically Underserved Area or Population)?

DROP-DOWN LIST

Yes

No

Don't know

20. Are you currently licensed to practice as a physician assistant in a state other than Indiana?

DROP-DOWN LIST

Yes

No

21. In what other state or states are you licensed as a physician assistant?

Please enter the 2-character STATE CODE (example: IN) [TEXT BOX]

I am not licensed in any other states

22. What is your **current** annual income as a physician assistant?

DROP-DOWN LIST

Less than \$50,000

\$50,000 - \$75,000

\$75,001 - \$100,000

\$100,001 - \$125,000

\$125,001 - \$150,000

\$150,001 or greater

23. What was your **initial** annual income as a physician assistant when you first entered the workforce?

DROP-DOWN LIST

Less than \$50,000

\$50,000 - \$75,000

\$75,001 - \$100,000

\$100,001 - \$125,000

\$125,001 - \$150,000

\$150,001 or greater

24. Did you receive any scholarships to help pay for your training/education as a physician assistant?

DROP-DOWN LIST

Yes

No

25. Approximately how much debt did you incur to complete your physician assistant training/education?

TEXT BOX

\$ _____

Appendix 2: Physician Specialties with No Practicing PAs

Adolescent Medicine	Neurology - Neurodevelopmental Disabilities
Aerospace Medicine	Neurology - Neurology/Diagnostic
Alternative Medicine	Radiology/Neuroradiology
Allergy	Neurology - Neuromuscular Medicine
Allergy and Immunology	Neurology - Neuroradiology
Allergy and Immunology - Diagnostic Laboratory	Neurology -Vascular Neurology
Diagnostic Laboratory Immunology	Neuroradiology - Endovascular Surgical
Anesthesiology - Critical Care	Nuclear Medicine
Anesthesiology - Pain Management	Obstetrics
Anesthesiology - Pediatric	Obstetrics & Gynecology - Critical Care
Anesthesiology	Ophthalmology - Pediatric
Cardiology - Nuclear Cardiology	Ophthalmology
Dermatology - Clinical & Laboratory	Orthopedic Surgery - Foot and Ankle
Dermatological Immunology	Osteopathic Manipulative Medicine
Dermatology - Dermatological	Other Specialty
Immunology/Diagnostic & Laboratory	Otolaryngology - Pediatric Otolaryngology
Immunology	Otology - Neurotology
Dermatology - Dermatopathology	Palliative Medicine
Dermatology - Pediatric	Pathology - Anatomic Pathology
Diabetes	Pathology - Anatomic/Clinical Pathology
Emergency Medicine - Medical Toxicology	Pathology - Clinical Pathology
Emergency Medicine - Pediatric Emergency	Pathology - Cytopathology
Medicine	Pathology - Forensic Pathology
Emergency Medicine - Sports Medicine	Pathology - Hematology
Endocrinology, Diabetes, Metabolism	Pathology - Medical Microbiology
Epidemiology	Pathology - Neuropathology
Family Practice - Adolescent Medicine	Pathology - Pediatric Pathology
General Preventive Medicine	Pediatrics - Adolescent Medicine
Genetics - Clinical Biochemical Genetics	Pediatrics - Developmental Behavioral
Genetics - Clinical Genetics	Pediatrics
Genetics - Medial Genetics	Pediatrics - Pediatric Allergy
Gynecology	Pediatrics - Pediatric Cardiology
Hepatology	Pediatrics - Pediatric Cardiothoracic Surgery
Immunology	Pediatrics - Pediatric Emergency Medicine
Internal Medicine - Cardiac Electrophysiology	Pediatrics - Pediatric Endocrinology
Internal Medicine - Geriatrics	Pediatrics - Pediatric Gastroenterology
Internal Medicine - Sports Medicine	Pediatrics - Pediatric Hematology/Oncology
Legal Medicine	Pediatrics - Pediatric Infectious Disease
Maternal & Fetal Medicine	Pediatrics - Pediatric Neonatal - Perinatal
Medical Informatics	Medicine
Medical Management	Pediatrics - Pediatric Neurodevelopmental
Nephrology - Pediatric Nephrology	Disabilities
Neurology - Child Neurology	Pediatrics - Pediatric Otolaryngology
Neurology - Clinical Neurophysiology	Pediatrics - Pediatric Pulmonary

Pediatrics - Pediatric Radiology	Radiology - Neuroradiology Endovascular Surgical
Pediatrics - Pediatric Rehabilitation Medicine	Radiology - Nuclear
Pediatrics - Pediatric Rheumatology	Radiology - Pediatric
Pediatrics - Pediatric Sports Medicine	Reproductive Endocrinology
Pediatrics - Pediatric Surgery	Rheumatology
Pharmaceutical Medicine	Sclerotherapeutic Pain Management
Pharmacological - Clinical Pharmacology	Sleep Medicine
Phlebology	Surgery - Colon & Rectal
Physical Medicine and Rehabilitation - Spinal Cord Injury	Surgery - Cosmetic
Physical Medicine and Rehabilitation - Sports Medicine	Surgery - Critical Care
Plastic Surgery - Head & Neck	Surgery - Dermatological
Proctology	Surgery - Hand
Psychiatry - Addiction	Surgery - Neurological
Psychiatry - Child	Surgery - Neuroradiology Endovascular
Psychiatry - Forensic	Surgery - Oral & Maxillofacial
Psychiatry - Geriatric	Surgery - Pediatric Cardiothoracic
Psychiatry - Psychosomatic Medicine	Surgery - Pediatric Surgery
Public Health/General Preventative Medicine	Surgery - Thoracic
Radiation Oncology	Surgery - Transplant
Radiology - Cardiothoracic Radiology	Undersea & Hyperbaric Medicine - Emergencies
Radiology - Diagnostic Radiology	Urology - Pediatric
Radiology - Musculoskeletal	

Appendix 3: Condensed Work Settings

The work settings shown in Table 2.13 were condensed into three categories for Table 3.11. The table below shows how work settings were condensed.

Condensed Setting	Included Work Settings
Hospital setting	Hospital ER/ED, Hospital (in- & out- patient), Hospital (in-patient only), Hospital operating room, Hospital (out-patient only), Hospital intensive care/critical care unit
Private practice setting	Physician private practice - single specialty group, Physician private practice - multi specialty group, Physician private practice - solo physician
Other setting	Primary care center/clinic, Urgent care center/clinic, Community health center/clinic, Occupational health setting, Ambulatory care setting (surg./other), Other, College health facility, Physician assistant educational program, Community mental health center, Prison/Correctional facility, Surgical center, freestanding