Specialty Care Physicians in Delaware 2001

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by

Edward C. Ratledge

Center for Applied Demography & Survey Research College of Human Services, Education and Public Policy University of Delaware

Newark, Delaware 19716

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Overview

In 1995, the Division of Public Health began an effort to measure the number and spatial distribution of primary care physicians practicing in Delaware. The objective was to identify medically underserved areas and to understand any existing or developing trends that could impact the supply of primary care services. At the same time a smaller amount of information was captured for practitioners of other types of specialty care. This represents the first time this information has been collated and reported for physicians of all types.

The method chosen to gather the information was a mail survey combined with telephone follow-up of non-respondents. This survey was also conducted in 1997, 1998, and 2001. Each time, the survey instrument was refined and shortened with the objective of reducing the burden on the responding physician and improving the quality and relevance of the data gathered. As new information was gathered, it would either replace information supplied by the physician at an earlier date, or in the case of a first time respondent, it would extend the coverage of the database. At the same time, responses from physicians in prior years, who no longer had an active Delaware license as determined from the state license file, were eliminated from the database. The resulting database contains information gathered from 1995 through 2001 by mail and by telephone from physicians who currently hold a Delaware medical license and provide clinical medical services in Delaware.

At the conclusion of this years project, 1,485 physicians have participated in the survey in some way. Approximately 89% of the physicians have responded to the full survey with the balance of those responding having provided some information via telephone. Of those responding, 1,441 were practicing clinical medicine either full or part-time.

Delaware currently has licensed 2,765 physicians to practice clinical medicine in Delaware. Of those, 1,669 have a Delaware address, but it does not mean they are active or that they have a Delaware practice. Similarly, physicians living in other states may have an active practice in Delaware. Based on the survey results over the past three years, the number of physicians with an active practice in Delaware is estimated to be 1,720. This total is used to produce all estimates presented throughout this report.

Not all physicians practice full-time. Others practice full-time but do not deliver direct patient care on a full-time basis. To give a more realistic view of the supply of physicians, a

second measure is provided. A physician who was engaged in delivering care directly to patients 40 or more hours per week was defined as a full-time physician. Anything less than 40 hours was considered as less than full-time. For each four hours less than 40 hours, 0.1 FTE was deducted. Anything more than 40 hours was considered only as full-time.¹ In other words, a physician delivering 60 hours per week of primary care was still counted as one full-time equivalent physician.

Finally, it is important to note that the estimates provided here exclude the foreign doctors with J-1 visas who are permitted to practice primary care for three years.² A J-1 Exchange Visitor visa allows international medical graduates (IMG) the opportunity to obtain residency training at an American medical training institution which agrees to sponsor him/her. The graduate must return to his/her home country for a minimum of two years upon completing the residency program before he/she can apply for US citizenship. A J-1 visa waiver allows an IMG to remain in the United States without having to return to his/her home country for the two-year period. In order to receive a J-1 visa waiver, an IMG must obtain employment to practice medicine full-time in a federally designated health professional shortage area or a medically underserved area. Physicians that obtain waivers are required to practice in these shortage areas for a minimum of three years. While these physicians have an impact on access to care, they cannot be counted since they are not required to remain in the area upon completing their three-year waiver requirement. Currently, a number of Delaware's practicing J-1 physicians are applying for permanent status. At the time the physician license file was examined, there were 44 such physicians currently practicing in Delaware, and 23 of those had primary care specialties.

When interviewed, physicians were asked for a Delaware address where they actually practiced. This address might or might not be the same as the address used when applying for a medical license. Clearly for those who applied from out-of-state, the Delaware practice address would never be the same. The telephone interview of non-respondents also revealed that

¹ Federal Register/Vol.45, No.223/ Monday, November17, 1980, Part IV Department of Health and Human Services, 42 CFR Part 5, p.76002.

² Federal Register/Vol.45, No.223/ Monday, November17, 1980, Part IV Department of Health and Human Services, 42 CFR Part 5, p.76002.

physicians could and do periodically change practice addresses. Usually this happens because the business moves, but it can also reflect the fact that the physician joined a different practice. Overall, nearly 8% of physicians responding were at a different location than they were 12 months ago.



Figure 1.1 Physicians by County

Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 1.1 above summarizes the estimates of physicians in Delaware during 2001 by county of practice. Primary care specialists include those with specialties in the areas of family practice, internal medicine, pediatrics, and obstetrics/gynecology. There are cases where physicians with non-primary care specialties also report a primary care specialty within the three specialties they were allowed to report. If they reported a primary care specialty among those three, they were included in the primary care group.

Those specialists who are practicing in the primary care domain are slightly less numerous in all three counties. The proportion of primary care specialists is similar in all three counties ranging between 40% and 46% with an overall average of 43%. While there are no known ratios that can be used as standards, it is still interesting to find the distribution that close in such diverse counties.



Figure 1.2 Full-time Equivalent Physicians by County

Source: Center for Applied Demography & Survey Research, University of Delaware

In Figure 1.2, above, estimates of the number of full-time equivalent physicians are provided. Given Delaware's 2001 population of 797,000, there are about 1,252 persons served by each full-time equivalent primary care specialist. For the three counties, the estimates are 1,709 for Kent County, 1,144 for New Castle County, and 1,363 for Sussex County. There are no overall standards for non-primary care specialists relative to the population, but the ratios in the counties follow the same pattern observed earlier. Kent has 1,316 persons for each non-primary care specialist, Sussex County has 1,238, and New Castle County has the most favorable ratio with 898 persons. Delaware has roughly one non-primary care specialist for every thousand residents.

In the remainder of this report different aspects of physicians and their practices will be examined. Overall the objective is to provide a first look at specialty care in Delaware. In the section that follows, the basic demographics of the physician population are discussed. Of particular interest is the age structure and diversity of these practitioners. The next section deals with a few practice characteristics that were collected for all physicians. Finally, in the last section, the spatial distribution of primary care physicians at the sub-county level is addressed.

Demographics

The topic of demographic diversity within the physician community is probably important as changes occur in the population of Delaware. Some patients may feel more comfortable with and are able to communicate better with physicians having particular characteristics. In addition, physicians with particular demographic characteristics may be more likely to train in one of the specialties.





Source: Center for Applied Demography & Survey Research, University of Delaware

The primary care physician community in Delaware is somewhat more than 70% male. There is however some variation between the counties. Kent and Sussex counties both have more male primary care physicians than does New Castle County, although the difference is probably not substantively important. The same pattern appears in the non-primary care specialties although it too is to a very large difference. It is interesting that women are more likely to choose one of the primary care specialties. When looking at the entire physician database, 56% of women were in one of those specialties while only 38% of men chose primary care.





The racial distribution of physicians by county and specialty is shown in Figure 2.2 above. Probably the most interesting aspect of this table is the lack of African American primary care physicians and the preponderance of Asian physicians.

The paucity of African American physicians in Sussex County is a puzzle. However, the number of physicians of "Other" races is highest in Sussex County. On the average, African American physicians are more likely to choose a primary care specialty (59%) in comparison with Caucasians (40%) and those of other races (46%).

Hispanic origin has taken on a particular interest in Delaware with the rapid growth of that population in the 1990s, particularly in Sussex County. The distribution of primary care physicians by Hispanic origin is found in Figure 2.3, below.



Figure 2.3 **Hispanic Origin of Primary Care Physicians**

Today, Delaware's population is nearly 5% Hispanic, and the physician population essentially mirrors that. The highest proportion of Hispanic physicians is found in Sussex County (8%) where nearly 7% of the population is now Hispanic. This held true for both primary care specialists and other specialists as well where the Hispanic proportion was about double the average for the state. The smallest proportion of Hispanic physicians is currently in Kent County where the average is half of that for the state.

The age of physicians is ultimately a factor in their availability. In addition, there are differences in specialties related to age. A physician who is currently age 40 or less is more likely to have a primary care specialty when compared to those that are older. This suggests that physicians training today are more likely to choose one of the primary care specialties than they were ten years ago. Over the next ten years then, it would be reasonable to expect an increase in primary care physicians even if the total number of physicians in the state was constant. Looking across the age groups, the largest proportion of physicians associated with primary care was 50% and the lowest was 38%. However, the pattern is variable.

The age distribution of physicians is found in Figure 2.4, below. There are several points of interest in this display. First, a smaller proportion of younger primary care physicians is found in Kent County (48%). Overall, about 54% of physicians are under the age of 50. This will

Source: Center for Applied Demography & Survey Research, University of Delaware

change over time as the physicians in the "baby boomer" bracket age. This is likely to produce a shortage as the population ages and grows. The problem will probably become more acute in Sussex County first, since it is the fastest growing county and at the same time its residents are the oldest on average. Kent County has a slightly different problem. While their residents are the youngest, they have a higher concentration of physicians in the 50 and over age group and thus have a larger proportion of physicians who are in their less active years.

There are age differences among the counties between specialties as well. Sussex County has a far greater proportion of non-primary care specialists in the under 40 category. This pattern is reversed in New Castle County, while the two groups are roughly balanced in Kent County. Similarly, there are far fewer non-primary care specialists in the oldest age group in Sussex County while that pattern is again reversed in New Castle County. On average across the state, primary care physicians tend to be older (50) compared to non-primary care specialists (47).





Source: Center for Applied Demography & Survey Research, University of Delaware

Physicians were asked if they planned to be active in clinical medicine five years from now. Those answers are summarized in Figure 2.5, below. In general, 84% of physicians expect to be active in five years. The lowest proportion is found in Kent County (76.6%) among primary care specialists. Nearly 95% of the two younger age groups (under 50) expect to be active five years from now. That drops to 80% for the next age group and 33% for those already of age 65 and over. There are really two break points with respect to this data. The first occurs at about age 58 when the affirmative answers drop to about 67% and the physician becomes unsure. The second point is at about age 67 when the affirmative answer falls to 28%.





The data for Kent County shows a large group of primary care physicians who are *unsure*. This undoubtedly relates to the large group in the 50-64 age group and 65+ group shown in Figure 2.4. That result is not repeated for non-primary care specialists. In contrast to Kent County, physicians of both groups in Sussex County are both much more positive and less unsure than those practicing in the other counties. These results serve to lessen some, but not all of the concern about the future adequacy of physicians in Sussex County.

Some physicians choose to practice clinical medicine in Delaware and others practice in other states. The way this choice is made determines the adequacy of the supply for serving Delaware's residents. Several pieces of information are useful for this purpose. First, where did this physician originally reside as measured by the state from which they graduated high school. Second, in what state did the physician attend medical school. A third key variable, which is not

Source: Center for Applied Demography & Survey Research, University of Delaware

presented here, is the state in which the physician did his/her residency. (This information will be available in later surveys as sufficient data is gathered.)

In Figure 2.6, the distribution of the state of the physician's high school graduation is shown. The first interesting aspect of this figure is that 60% of Delaware's physicians grew up in the region and approximately 11% are from Delaware. The proportion of non-primary care specialists from Delaware is slightly smaller (10%). The only difference between the two physician groups statewide is that a larger proportion of specialists appears to be from New York.



Figure 2.6 State of High School Graduation by County and Specialty

Source: Center for Applied Demography & Survey Research, University of Delaware

There also appears to be a different orientation by county as well. Physicians who grew up in Maryland are more likely to locate in Kent or Sussex counties. This holds true for both physician groups. In contrast, physicians from Pennsylvania are more oriented toward New Castle County and Sussex County within both groups. Physicians of both specialty groups currently practicing in New Castle County are more likely to have roots in Delaware when compared to the other two counties.

The pattern observed for the state of high school graduation is replicated in part for the state of medical school graduation (Figure 2.7). Significantly more physicians graduating from

medical schools in Maryland locate in Kent County. Also, those from medical schools in Pennsylvania are more likely to locate in New Castle County.

There clearly is a geographic orientation exhibited by these responses. It is plausible to suggest that similar patterns might emerge with the state of the physician's residency. In fact, that relationship might be even stronger. However, all of these findings also reflect the fact that most people go to college within several hundred miles of their home and also go to medical school within several hundred miles of where they went to college. One interesting relationship was that about 75% of physicians that grew up in Pennsylvania also went to medical school in Pennsylvania. That estimate compares with 50% of those physicians from New York and Maryland and 25% of the physicians who were from New Jersey.



Figure 2.7 State of Medical School Graduation by County

Source: Center for Applied Demography & Survey Research, University of Delaware

Eighty percent of those who graduated from high school in Delaware went to medical school in the region. Comparable percentages for other states in the region were: Maryland-69%, New Jersey-69%, Pennsylvania-86%, and New York-70%. Almost 75% of the physicians who graduated from high school outside of the region also went to medical school outside of the region. All of these results were similar for both groups of physicians.

Practice Characteristics

The typical physician has various alternatives among which they can choose to practice medicine. The survey collected information about these alternatives from physicians in both specialty groups. Some differences between the two groups will be apparent. In other cases, the differences are surprisingly small.

One of the key decisions a physician will make is whether to become self-employed or to join an existing practice as a salaried employee. One would tend to think that this decision is an either/or decision but that model is not supported in Figure 3.1 below.





Source: Center for Applied Demography & Survey Research, University of Delaware

When physicians were asked about their primary employment they were free to choose more than one answer. More than one physician in five responded that they were involved in both primary types of employment. Presumably this suggests that they are salaried but are engaged in consulting activities outside of their primary employment. In addition, there is very little difference between responses from primary care specialists and physicians from outside the primary care specialities.



Figure 3.2 Self-Employment Type by Physician Class

Source: Center for Applied Demography & Survey Research, University of Delaware

While the choice as to type of employment differs little between the physician groups, there are differences within the self-employed group. This is shown in Figure 3.2, above. Clearly primary care physicians are more oriented toward a solo practice (47%) than other specialists (31.3%).

Physicians outside of primary care tend to gravitate toward group practices. It is probably more difficult for those physicians to start a practice if there is an established group in the same specialty area. There also may be some economies of scale that are more easily realized within these specialties when compared to primary care. There might also be some scientific or research related benefits associated with the group practice that is more needed or desired than in the practice of primary care. These are speculative reasons however and are not specifically addressed in the survey.

Physicians who choose to practice medicine as a salaried employee have a wide spectrum of potential employment. This is illustrated in Figure 3.3 below. There are three primary options for those seeking employment. First, they may work for another physician. A primary care physician is more likely (16%) than one of the other specialties (12%) to take this route.



Figure 3.3 Salaried Type by Physician Class

Source: Center for Applied Demography & Survey Research, University of Delaware

The second main option is to work for a group. This option is the one selected most often by specialists outside of primary care (53.2%) and follows the pattern noted with respect to the self-employed earlier. Still, primary care physicians were twice as likely to have a salaried position with a group than with an individual practitioner. The most prominent option for the primary care specialist was working for a non-profit employer such as a hospital or a school. Nearly 40% of salaried primary care specialists chose this option. Other specialists also worked at hospitals but with a lower frequency (28%).

Physicians were also asked to describe the setting of their employment within four broad categories namely, clinical care, federal health facility, school, and a miscellaneous category for special circumstances e.g. medical research institution. Ninety percent of the physicians responding selected only the clinical care settings. Less than 2% of the respondents did not select the clinical care setting. The detailed responses within the clinical care setting are shown in Figure 3.4, below.

First of all, it is important to note that these categories are not mutually exclusive. It is permissible to select more than one setting and many physicians did so. The results are hardly surprising. Primary care specialists are more likely to work from their offices than are the non-

primary care specialists. About a third of the primary care specialists indicate they also work in the hospital setting at times.

Non-primary care specialists are more likely to be found working at a hospital than are those engaged in primary care. However, they are more evenly split between the office and the hospital setting. The two groups select all of the other settings with similar frequencies.



Source: Center for Applied Demography & Survey Research, University of Delaware

In order to calculate full-time equivalencies, physicians were asked to describe the way they distributed their time over a typical week. The categories included direct patient care, administration, teaching, research, and other. In general, the responding physician's workweek was slightly over 50 hours and that held true for both groups. There was very little variation by county either. These averages include the fifteen percent of physicians who work less than 40 hours per week.

The breakdown for the detailed categories is shown in Figure 3.5, below. Not surprisingly, both groups of physicians spend the dominant part of their week (88%) on direct care. Administrative activities tend to take about 10% of the physicians time. Only 3% of physicians indicate that they spend more than 50% of their time on administration. In contrast, only 10% of physicians spend less than 60% of their time on direct patient care.



Source: Center for Applied Demography & Survey Research, University of Delaware





Source: Center for Applied Demography & Survey Research, University of Delaware

While in theory primary care physicians deliver similar services, they also practice in their reported specialties. Figure 3.6 above, contains the estimates for these specialties by county. No one specialization really dominates the distribution. In general the number of physicians in internal medicine is roughly equivalent to those in family practice. Those classified as general practitioners are declining, and the vast majority of those are over the age of 65. The number of OBGYNs and pediatricians in Kent and Sussex counties is clearly showing a different pattern. Some of this can be attributed to different demographics in the two counties in that residents of Kent County are generally younger. The differences in the percentage distribution shown in Figure 3.7 below also reflect these findings.





Source: Center for Applied Demography & Survey Research, University of Delaware

The distribution in Figure 3.7 shows that primary care physicians are distributed essentially in three major groups. One third are family/general practitioners; one third are internists who focus on adults; and one third are primary care physicians focused on smaller groups of patients. About 50% of pediatricians stop seeing patients when the patients reach 18 years of age and the balance will cease treatment by age 21. Similarly, OBGYNs are generally concerned with female patients.

Specialties outside of primary care are far more numerous and are hard to summarize or aggregate. They are also difficult to count since a single physician may practice more than one

specialty. The most often mentioned specialties outside of primary care are found in Figure 3.8, below.



Figure 3.8 Selected Non-Primary Care Physicians by County

Source: Center for Applied Demography & Survey Research, University of Delaware

The specialties in the figure include psychiatry (P), emergency medicine (EM), general surgery (GS), orthopedic surgery (ORS), anesthesiology (AN), ophthalmology (OPH), cardiovascular disease (CD), radiology (R), diagnostic radiology (DR), physical medicine and rehabilitation (PM), urology (U), and gastroenterology (GE). It's obvious from looking at the figure that the distribution between the counties varies considerably. Emergency medicine (EM) specialists are distributed essentially the way the population in the state is distributed. The pattern observed there is one to which the other specialties can be compared. For example, gastroenterologists (GE) according to the survey seem to be substantially underrepresented in Kent County. Physical medicine specialists (PM) and psychiatry (P) may be over represented in New Castle County. Conclusions of this type have to be drawn with care. Differences in income and age structure between the counties may be creating higher/lower needs for service of particular specialties.



Figure 3.9 Percent of Selected Non-Primary Care Physicians by County

Source: Center for Applied Demography & Survey Research, University of Delaware

Another way of looking at these county differences is found in Figure 3.9, above. This figure shows the percentage of each specialty that is located in each county. If the objective would be to have specialists distributed the same way as the population, then emergency medicine (EM) is the way each specialty should look. Seven of the twelve specialties are over represented in New Castle County. At the same time, seven of the specialties are clearly under represented in Kent County.

Once again, drawing conclusions about the proper distribution of specialists is difficult for at least two reasons. First, there are no federal standards published for specialty care as there are for primary care. Second, it probably is reasonable for a person to travel further to see a specialist than they would to seek primary care.

There are 106 different specialties and sub-specialties in the state including the five primary care specialties. Of the 101 non-primary care specialties, only 31 are found in all three counties. Forty-six of the remaining 70 are available only in New Castle County. A general review of the data suggests that specialties with less than 8 physicians are unlikely to be located

in all three counties. In some instances, where the true number of physicians in the county in a given specialty is small, and no one responded to the survey, the specialty may be practiced but it was not measured.

The final table in this section contains all 101 specialties that appeared at least once in the survey data. The data is presented by county and for the state as a whole. All estimates are rounded up to a whole number for readability. The totals will not add to the total number of physicians since a physician can have more than one specialty.

Specialty*	Delaware	Kent	New Castle	Sussex
А	9	0	8	1
ADL	7	0	7	0
ADM	3	0	2	1
ADP	4	0	4	0
AI	9	2	7	0
AN	55	4	39	12
APM	4	1	0	3
AS	6	2	4	0
ATP	11	2	8	1
CCA	4	0	4	0
CCM	13	2	10	1
ССР	4	0	4	0
CCS	4	0	3	1
CD	44	6	33	5
CDS	7	0	7	0
CG	2	0	2	0
CHN	2	0	2	0
CHP	11	2	9	0
CLP	8	2	5	1
CN	2	0	2	0
CRS	7	0	5	2
D	16	2	13	1
DIA	4	0	4	0
DMP	4	0	3	1
DR	32	9	16	7
EM	77	13	47	17
END	8	2	6	0
FPG	2	2	0	0
FPS	7	3	1	3
FSM	3	0	3	0
GE	27	1	14	12
GO	3	0	3	0
GPM	2	0	0	2
GS	71	10	42	19
GYN	4	0	3	1
HEM	9	0	6	3
HEP	3	2	1	0
HMP	4	0	4	0
HNS	2	0	0	2

Figure 3.10 Non-Primary Care Specialists by County

Specialty*	Delaware	Kent	New Castle	Sussex
HSO	8	3	5	0
HSS	2	0	2	0
ICE	3	0	3	0
ID	12	0	10	2
IG	2	0	2	0
LM	2	0	2	0
MFM	3	0	3	0
MG	2	0	2	0
MM	2	0	2	0
Ν	25	7	15	3
NEP	13	3	9	1
NM	8	0	4	4
NNC	2	0	2	0
NP	3	0	3	0
NPM	4	0	4	0
NR	3	0	2	1
NS	13	2	9	2
OM	16	2	14	0
ON	22	0	17	5
OPH	45	3	34	8
ORS	72	16	47	9
OS	16	7	7	2
OSM	6	0	4	2
OSS	8	0	7	1
OT	3	0	3	0
OTO	16	3	9	4
OTR	11	2	8	1
Р	86	10	66	10
PCH	2	0	2	0
PCP	7	0	7	0
PDA	3	0	3	0
PDC	11	0	11	0
PDE	3	0	3	0
PDP	3	0	3	0
PDR	3	0	3	0
PDS	7	0	7	0
PEM	7	0	7	0
PG	3	0	3	0
PH	3	2	1	0
РНО	6	0	6	0
PM	35	2	29	4
PMD	6	0	6	0

Specialty*	Delaware	Kent	New Castle	Sussex
PN	3	0	3	0
PO	15	3	11	1
POO	2	0	2	0
POP	3	0	3	0
PPR	3	0	3	0
PS	15	3	12	0
PTH	13	1	9	3
PUD	15	2	10	3
PYA	3	0	3	0
R	36	3	30	3
REN	4	0	4	0
RHU	15	6	6	3
RIP	2	0	2	0
RNR	8	0	5	3
RO	10	3	4	3
TRS	6	2	3	1
TS	14	5	4	5
U	33	8	15	10
VIR	4	0	4	0
VS	20	9	5	6

*See A-5 for definition of specialties.

Spatial Distribution

The federal government publishes standards for medically underserved areas. These standards compare the number of primary care physicians with the population they serve. There are no similar standards for the many non-primary care specialists. In the last section, information was presented that showed many specialties were not available in all three counties. Even for those counties that residents have specialists available, they may not be dispersed around the county. This section contains a brief presentation of maps that describe the location of selected specialists.

The spatial distribution of non-primary care specialists is shown in Figure 4.1. It is clear that specialists are more spatially concentrated than primary care specialists. Nine of 27 census county divisions are without specialists. In contrast only two of the census county divisions are without primary care physicians (see Figure 4.7). The largest number of specialists appears to be in census county divisions that contain hospitals and/or surgery centers.

In Figure 4.2, the spatial distribution of general surgeons, one of the largest specialist groups, is provided. These specialists are found in only 10 of the census county divisions. Seven of the ten contain hospitals.

In Figure 4.3, the spatial distribution of emergency medicine physicians, one of the largest specialist groups, is provided. These specialists are found in even fewer census county divisions, namely eight. Seven of the eight census county divisions contain hospitals.

Figure 4.4 shows the spatial distribution of anesthesiologist. These specialists are found in even fewer census county divisions, namely seven. All seven of the census county divisions contain hospitals.

The spatial distribution of orthopedic surgeons is provided in Figure 4.5. The pattern is similar but perhaps more broadly distributed. While they are found in only eight census county divisions, they are not uniformly located at all the hospitals. They are able to operate in the non-hospital based surgery centers.

Psychiatrists are the largest specialist group among the non-primary care physicians (see Figure 4.6). They are also the most widely distributed with locations in eleven census county divisions. Four of those locations are not associated with hospitals.

These maps show that non-primary care specialists tend to be more centralized than their primary care colleagues. This is also consistent with the fact that they are more likely to belong to a group practice. In addition, their clinical setting is more likely to be a hospital.





Source: Center for Applied Demography & Survey Research, University of Delaware



Figure 4.2 Number of General Surgery FTE's by Census County Division

Source: Center for Applied Demography & Survey Research, University of Delaware



Figure 4.3 Number of Emergency Medicine FTE's by Census County Division

Source: Center for Applied Demography & Survey Research, University of Delaware





Source: Center for Applied Demography & Survey Research, University of Delaware



Figure 4.5 Number of Orthopedic Surgery FTE's by Census County Division

Source: Center for Applied Demography and Survey Research, University of Delaware



Figure 4.6 Number of Psychiatry FTE's by Census County Division

Source: Center for Applied Demography and Survey Research, University of Delaware



Figure 4.7 Number of Persons per Primary Care Physician by Census County Division

Source: Center for Applied Demography & Survey Research, University of Delaware

Observations

The Delaware Physicians Survey, in its third year, is beginning to provide the information that is needed to guide policy-makers in the State of Delaware. With approximately 90% of the primary care physicians participating, along with nearly 70% of the specialists, the database is becoming more complete all the time. There are still refinements to be made to better measure the key items and, at the same time, to eliminate those items that add to the physician's burden without adding to needed knowledge. Even without complete reporting a number of findings can be drawn from the data.

- About 60% of all physicians are non-primary care specialists. That proportion is roughly consistent across all three counties.
- Non-primary care specialists are more likely to be male, are more likely to be Caucasian, less likely to be Hispanic, and tend to be younger.
- Since non-primary care specialists tend to be younger they are more likely to be active five years from now.
- There are distinct patterns in both the state in which the physician graduated from high school and medical school and the state in which they currently practice.
- Primary care physicians and non-primary care specialists chose self-employment and salaried positions at roughly the same rate. However, non-primary care specialists are much more likely to join a group practice.
- Both groups average a 50-hour workweek with 90% of the time going to direct patient care.
- Of 101 non-primary care specialties, 31 are found in all three counties. Forty-six of the remaining 70 specialties are found only in New Castle County.
- In general, non-primary care specialists are more highly concentrated and tend to be located near hospitals and surgery centers.

APPENDIX