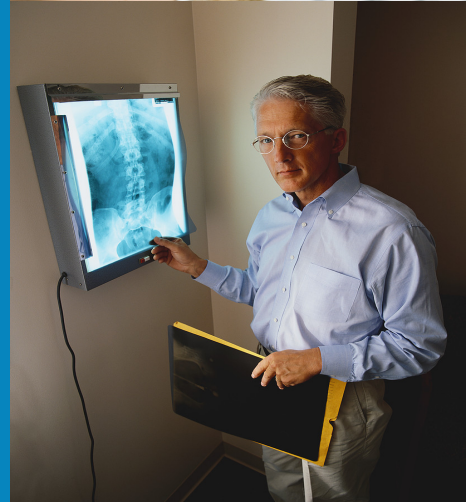
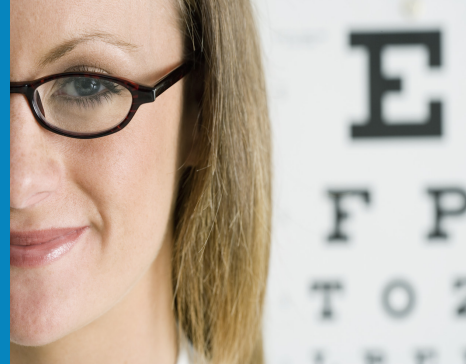


Delaware's Allied Health Professionals 2007

by Tibor Tóth, Ph.D.

Center for Applied Demography &
Survey Research
University of Delaware



**Delaware's Allied Health Professionals
2007**

prepared for

**Delaware Health Care Commission
and
Delaware's Division of Public Health/Bureau of Health Planning and
Resources Management**

by

Tibor Tóth, Ph.D.

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

Newark, Delaware 19716

Tel: 302-831-3320

February, 2008

The University of Delaware is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, color, gender, religion, ancestry, national origin, sexual preference, veteran status, age, or disability in its educational programs, activities, admissions, or employment practices as required by Title IX of the Educational Amendments of 1972, Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, the Americans with Disabilities Act, other applicable statutes, and University policy. Inquiries concerning these statutes and information regarding campus accessibility and Title VI should be referred to the Affirmative Action Officer, 305 HULLIHEN HALL, 302/831-2835 (voice), 302/831-4552(TDD).

ACKNOWLEDGEMENTS

This report was primarily funded by the Delaware Health Care Commission and Delaware's Division of Public Health/Bureau of Health Planning and Resources Management.

The author would also like to acknowledge the Delaware Division of Professional Regulation for providing the licensure data that served as the basis for the survey.

TABLE OF CONTENTS

	Page
Acknowledgements	iii
List of Figures	v
Overview	I
Pharmacists	4
Demographic Characteristics	4
Other Characteristics	13
Other Allied Health Professionals	23
Demographic Characteristics	23
Other Characteristics	33
APPENDIX	41

LIST OF FIGURES

Figure	Page
1.1 Number of Pharmacists by County	4
1.2 Gender of Pharmacists by County	5
1.3 Race of Pharmacists by County	6
1.4 Hispanic Origin of Pharmacists by County	6
1.5 Age of Pharmacists by County	7
1.6 Active Five Years from Now by County	8
1.7 Active Ten Years from Now by County	8
1.8 State of High School Graduation by County	9
1.9 State of Pharmacist School Graduation by County	10
1.10 Highest Degree Earned by County	11
1.11 Number of Years Practicing as Pharmacist by County	12
1.12 Setting of Principal Employment by County	13
1.13 Form of Employment by County	14
1.14 Years Practicing at Current Location by County	15
1.15 Full Time vs. Part Time by County	16
1.16 Hours Worked per Week by County	16
1.17 Number of Pharmacists Working at Current Location by County	17
1.18 Pharmacist Vacancies at Current Location by County	18
1.19 Number of Pharmacist Vacancies at Current Location by County	18
1.20 Ability to Communicate in a Language Other than English by Someone at Current Location by County	19
1.21 Languages Spoken at Current Location	20
1.22 Income Level of Clients Served at the Location by County	20
1.23 Barriers in Work as Pharmacist	21
2.1 Number of Allied Health Professionals by County	23
2.2 FTE Allied Health Professionals by County	24
2.3 Gender of Allied Health Professionals by County	24
2.4 Race of Allied Health Professionals by County	25
2.5 Hispanic Origin of Allied Health Professionals by County	26
2.6 Age of Allied Health Professionals by County	27
2.7 Active Five Years from Now by County	28
2.8 Active Ten Years from Now by County	28

2.9	State of High School Graduation by County	29
2.10	State of Professional Education by County	30
2.11	Highest Degree Earned by County	31
2.12	Number of Years Practicing in Profession by County	32
2.13	Form of Primary Employment by County	33
2.14	Years Practicing at Current Location by County	34
2.15	Full Time vs. Part Time by County	34
2.16	Hours Worked per Week by County	35
2.17	Number of Others with Same Profession Working at Current Location by County	36
2.18	Vacancies at Current Location by County	37
2.19	Number of Vacancies of the Same Profession at Current Location by County	37
2.20	Income Level of Clients Served at the Location by County	38
2.21	Ability to Communicate in a Language Other than English by Someone at Current Location by County	39
2.22	Languages Spoken at Current Location	39
2.23	Barriers in Work as Allied Health Professional	40

OVERVIEW

Delaware's Division of Public Health, along with the Delaware Health Care Commission, has continuously monitored the number, practice characteristics and demographics for a number of health professions across Delaware. This report expands the scope of previous efforts by studying allied health professionals. The objective of this report is to aid policymakers in their decision-making by providing a snapshot of active allied health professionals across Delaware.

The target population of the study - allied health professionals licensed and active in the State of Delaware - was agreed upon by the Delaware Health Care Commission and Delaware's Division of Public Health/Bureau of Health Planning and Resources Management. This definition of the target population was in line with observations of previous studies indicating that the number of licensed health professionals in Delaware differs significantly from the number of active health professionals (working full time or part time) active in the state.

The starting point to defining the study frame was the list of allied health professional licensed to practice in Delaware obtained from the Division of Professional Regulation and from the Division of Public Health. This list included all pharmacists, paramedics, physical therapists, physical therapists assistants, physician assistants, respiratory practitioners, speech/language pathologists, therapeutic optometrists, radiologic specialists (cardiovascular radiologic technologists, medical radiation technicians, medical radiologic technologists, nuclear medicine technologists, radiation therapists) and dental radiologic technicians (dental assistants, dental radiation technicians). Since the objective of the study was to provide a snapshot of the active licensed allied health professionals in Delaware (rather than all licensed allied health professionals), the study frame was defined as allied health professionals whose address on the license file is either in Delaware, or within 100 miles of Delaware. This limited the investigation to those who are likely to be actively working as allied health professionals in Delaware. Taking into account both reporting needs and cost limitations, a decision was made to conduct a complete census of all pharmacists, paramedics, physical therapists, physical therapists' assistants, physician assistants, respiratory practitioners, speech/language pathologists, and therapeutic optometrists in the study frame, and perform a survey of radiologic specialists and dental radiologic technicians based on a simple random sample.

Overall the original license file of allied health professionals supplied by the Division of Professional Regulation and the Division of Public Health contained 7,293 records, and removing the duplicates yielded 7,239 unique records. These records were geo-coded, and a subset of 6,420 records was identified that met the criteria of being in Delaware (4,409) or being no further than 100 miles away (2,011). These represented the study frame. A simple random sample of 900 subjects was pulled for radiologic specialists and dental radiologic technicians. A

decision was made to conduct a census of the other allied health professions (3,827). A total of 4,727 allied health professionals were identified for the study.

The method chosen to gather information was a mail survey. Allied health professionals included in the study were contacted up to five times, which included a pre-letter, 1st mailing of survey, reminder card, 2nd mailing of survey and 3rd mailing of survey. Responses were tracked and only those subjects who did not respond to previous correspondence received subsequent mailings. Because of important differences between pharmacists and the rest of the allied health professionals, two separate survey instruments were utilized. The survey instruments¹ were developed collaboratively with Delaware's Division of Public Health/Bureau of Health Planning and Resources Management and the Delaware Health Care Commission. Input from the members of the Delaware Health Care Commission's Workforce Data Committee was incorporated in the questionnaire. The instruments were pre-tested on a randomly selected sample of 100 allied health professionals. As a result of the pre-test, adjustments were made to a number of questions, order of items was changed, and the design of the questionnaire was improved. All of these changes were implemented to enhance readability, comprehension and applicability of survey questions to the population studied.

Within the data collection period from the beginning of August 2007, through the end of October 2007, 2,732 responses were received. This represents an overall response rate of 57.8%. Individual response rates for different professionals varied notably, ranging from 65% for speech/language pathologists to 39% for dental radiation technicians. From the 2,732 responses, 47 were removed as unusable or as duplicates. Thus, the usable response rate was 56.8%.

The tabulation of the data revealed that out of the 2,732 respondents, a total of 1,781 respondents (388 pharmacists and 1,393 other allied health professionals) indicated that their practice address is in Delaware and they are actively practicing in Delaware (full time or part time). The remaining respondents are licensed in Delaware, their address is within 100 miles of Delaware, but they do not practice in the state.

To estimate the number and characteristics of Delaware's active allied health professionals, the responses were weighted. The respondent weight is calculated as a ratio between the number of licensed allied health professionals (pharmacists, physical therapists etc.) in a Census County Division and the number of responses received from these professionals in the same Census County Division. The geo-location of licensed allied health professionals is derived from the address provided on the license file. The geo-location of the respondents is derived from the address they provided as the address of their employment. Based on the responses and the weighting technique employed, the estimate is that there are 3,554 allied health professionals active in Delaware. This includes 589 active pharmacists and 2,965 other allied health professionals.

¹ See Appendix

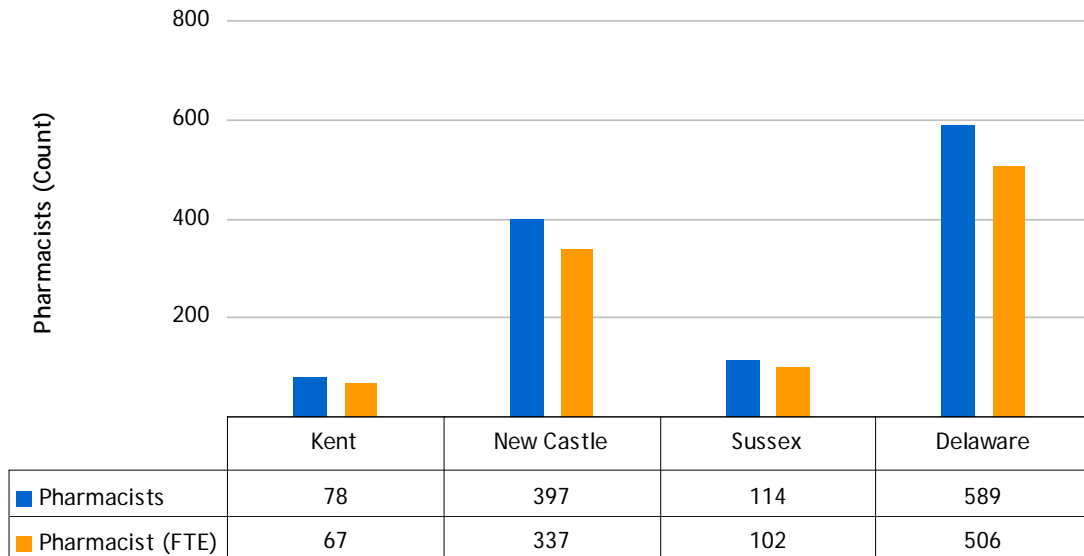
Given the objectives of the study, the tabulations in this report are solely based on the estimate of 3,554 allied health professionals actively practicing in Delaware.

PHARMACISTS

Demographic Characteristics

Figure I.1 summarizes the current number of active pharmacists in Delaware by county of practice. The number of pharmacists is indicated along with the Full Time Equivalent (FTE) number of pharmacists. Since not all pharmacists work full time, a more realistic view of the pharmacists is the FTE measure. A pharmacist who was employed 40 or more hours per week received a score of 1.0 FTE. For each hour less than 40 hours, 0.1 FTE was deducted. Given Delaware’s population of 863,904², there were about 1,707 persons for each full time equivalent pharmacist in 2007. For the three counties, the estimates are 2,247 persons per 1 FTE pharmacist in Kent County, 1,571 persons per 1 FTE pharmacists in New Castle County, and 1,802 persons per 1 FTE pharmacist in Sussex County.

**Figure I.1
Number of Pharmacists
by County**



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

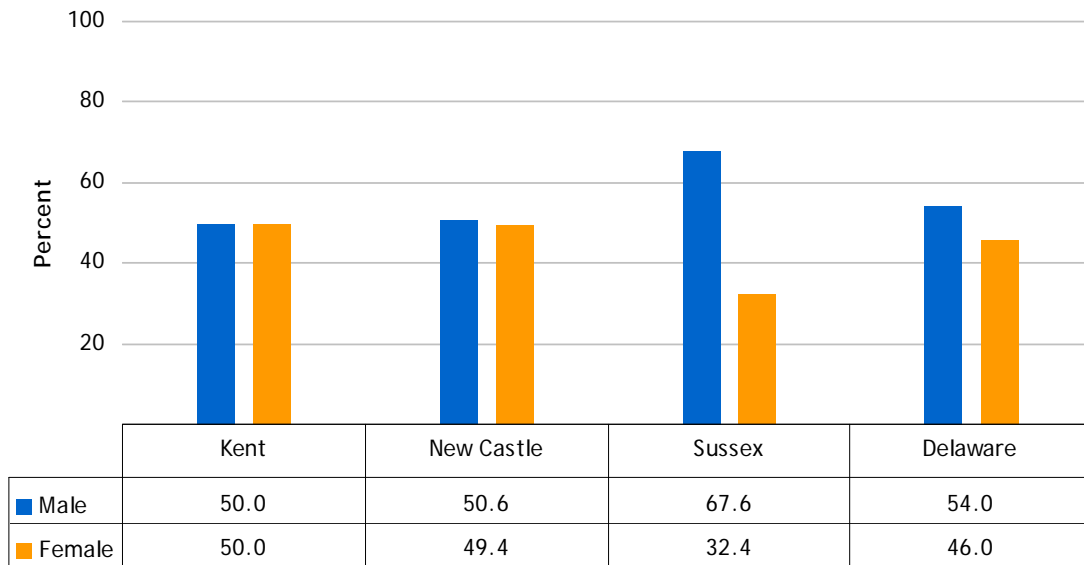
As changes in demographic characteristics of the general Delaware population occur, the issue of demographic diversity among Delaware’s health professional workforce gains importance. Patients might feel more comfortable and are able to communicate better with health professionals having particular characteristics. This is especially important for the relationship between pharmacist and patients. Improved communication and mutual trust

² Delaware Population Consortium, Annual Population Projections, October 23, 2007, Version 2007.0, Dover, Delaware

between them can potentially prevent unwanted prescription drug interactions and thus save lives.

The pharmacist workforce in Delaware is evenly split between the two genders. However in Sussex County a larger proportion of pharmacists tend to be male: 68% vs. 32% (Figure 1.2). No apparent explanation is available for this difference.

**Figure 1.2
Gender of Pharmacists
by County**



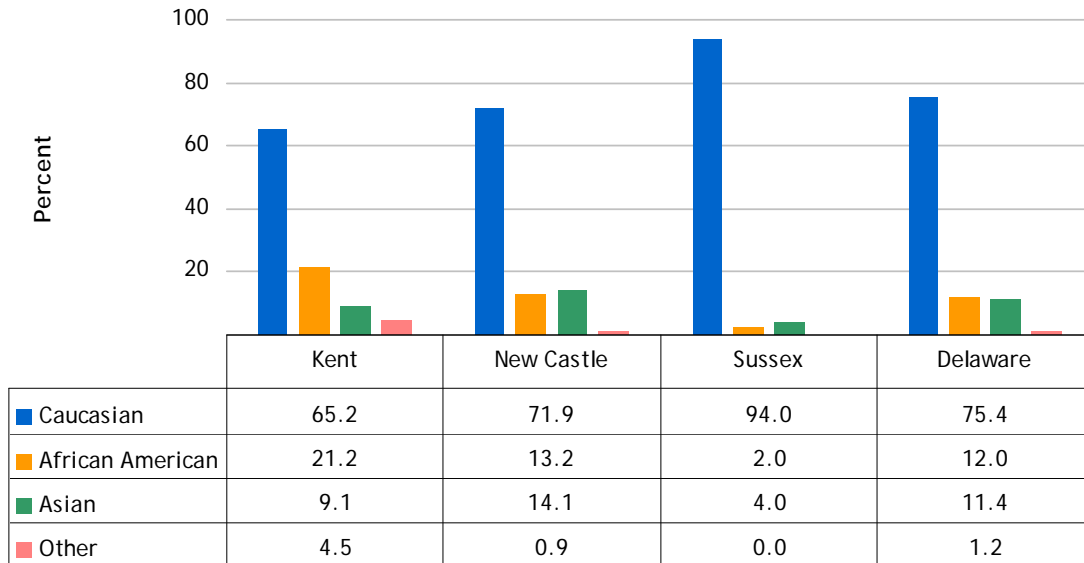
Source: Center for Applied Demography & Survey Research
University of Delaware

The racial distribution of pharmacists across the state is presented in Figure 1.3. A notable aspect of this figure is the relatively low proportion of African American pharmacists in Sussex County. While this is to be somewhat expected – Sussex County’s general population is less diverse than the rest of the state – however, only 2% of pharmacists in Sussex County are African American, compared to 14%³ for the county’s general population. The proportion of Asian pharmacists is the highest in New Castle County and stands at 14%.

Just as for the other health professions, the Hispanic origin of pharmacists has taken on a particular importance, given the growth of that population across Delaware. Figure 1.4 summarizes the distribution of Hispanic origin of Delaware’s counties. Delaware’s population today is about 5% Hispanic; however, the data suggests that Delaware’s pharmacists are less diverse. Only 1% of them indicated that they are of Hispanic origin.

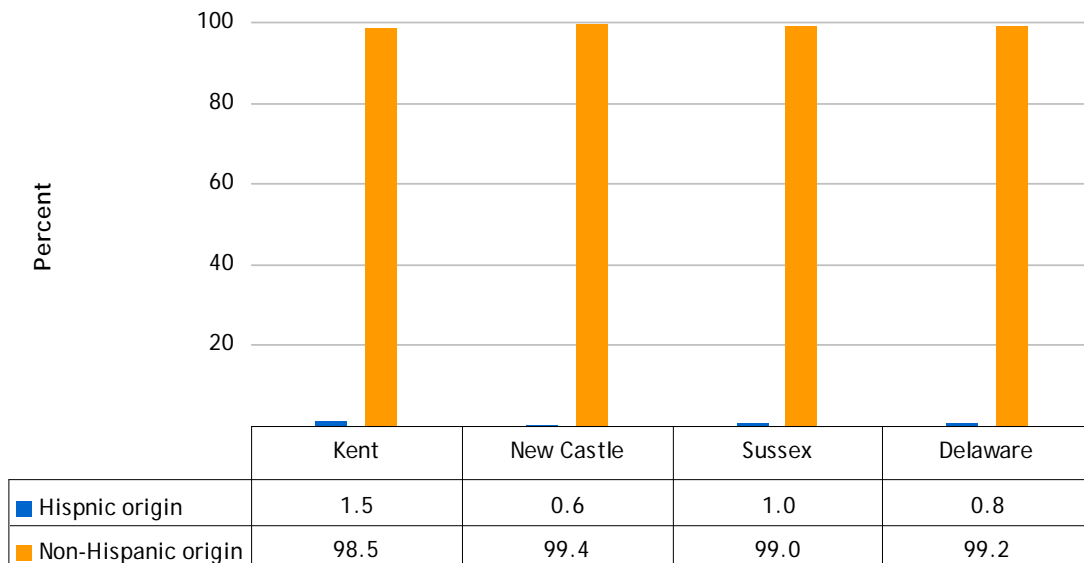
³ Delaware Population Consortium, Annual Population Projections, October 23, 2007, Version 2007.0, Dover, Delaware

**Figure I.3
Race of Pharmacists
by County**



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

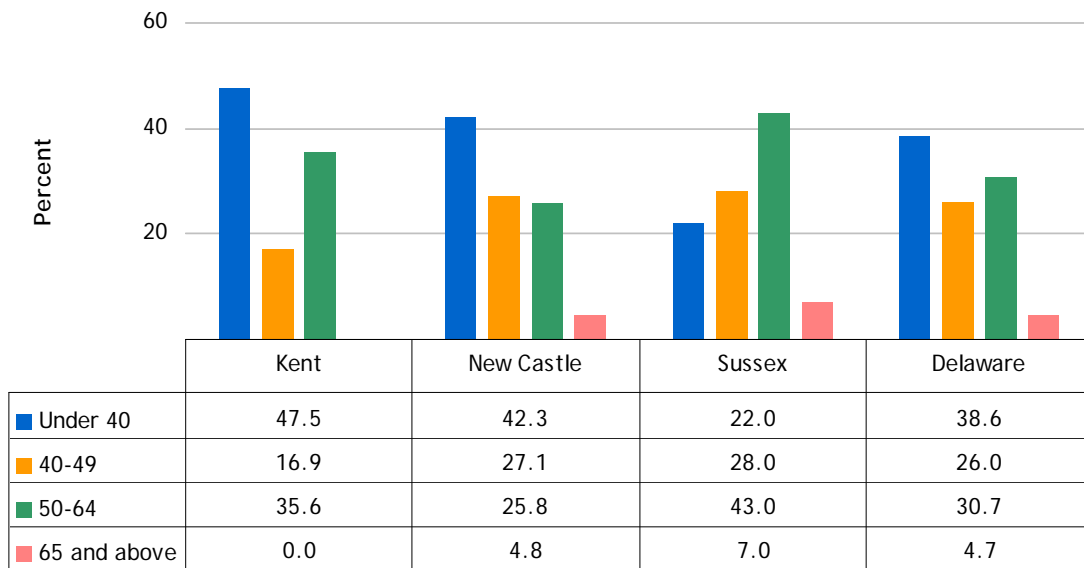
**Figure I.4
Hispanic Origin of Pharmacists by County**



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

The age distribution of pharmacists is shown in Figure 1.5. The highest proportion of pharmacists under 40 can be found in Kent County (47%), while the highest proportion of pharmacists age 50 and above can be found in Sussex County (50%). For both counties, the results are as expected. Kent County has the youngest resident population (55% of the population in Kent County is under 40, compared to 54% in New Castle County and 43% in Sussex County). Sussex County has the oldest resident population age 65 and above, (21% compared to 12% in New Castle County and 12% in Kent County⁴).

**Figure 1.5
Age of Pharmacists
by County**

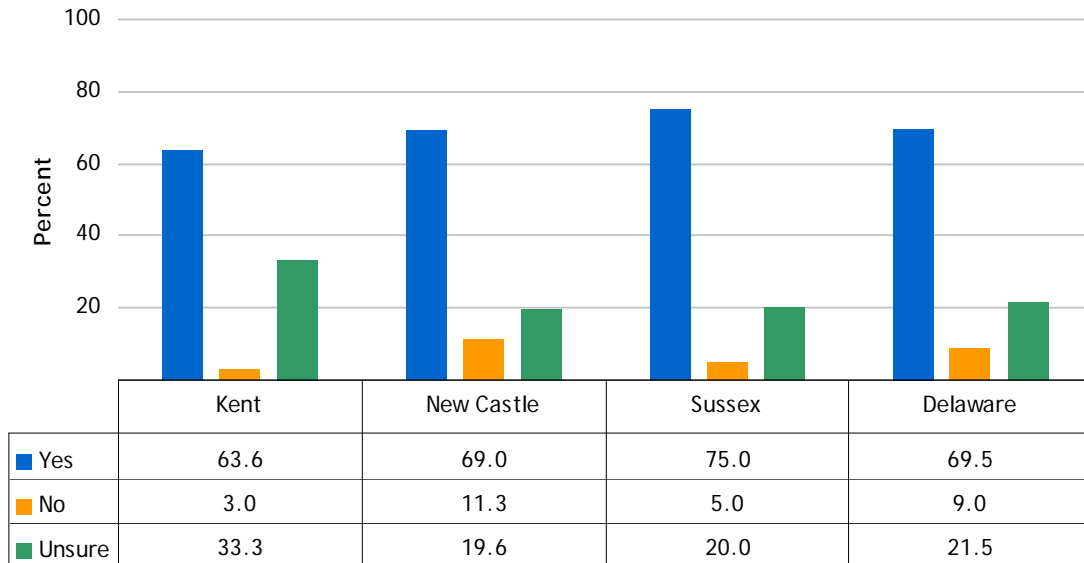


Source: Center for Applied Demography & Survey Research
University of Delaware

Pharmacists were asked if they planned to stay active as pharmacists in Delaware five and 10 years from now. The results are shown in Figure 1.6 and 1.5. In general, 70% of pharmacists indicated that they will be working five years from now. Sussex County's pharmacists tend to be less pessimistic (compared to New Castle and Kent) about staying active in the next five years; around 75% of Sussex County's pharmacists indicated that they will be active five years from now. Even though Kent County has the highest proportion of younger (under 40) pharmacists, this county's pharmacists are most pessimistic about their future. Over 33% indicated not being active or being unsure about their activity as pharmacists five years from now. The outlook for 10 years from now seems a bit more evenly distributed. The expectation is that around 60% of Delaware's pharmacists will not be active in Delaware ten years from now.

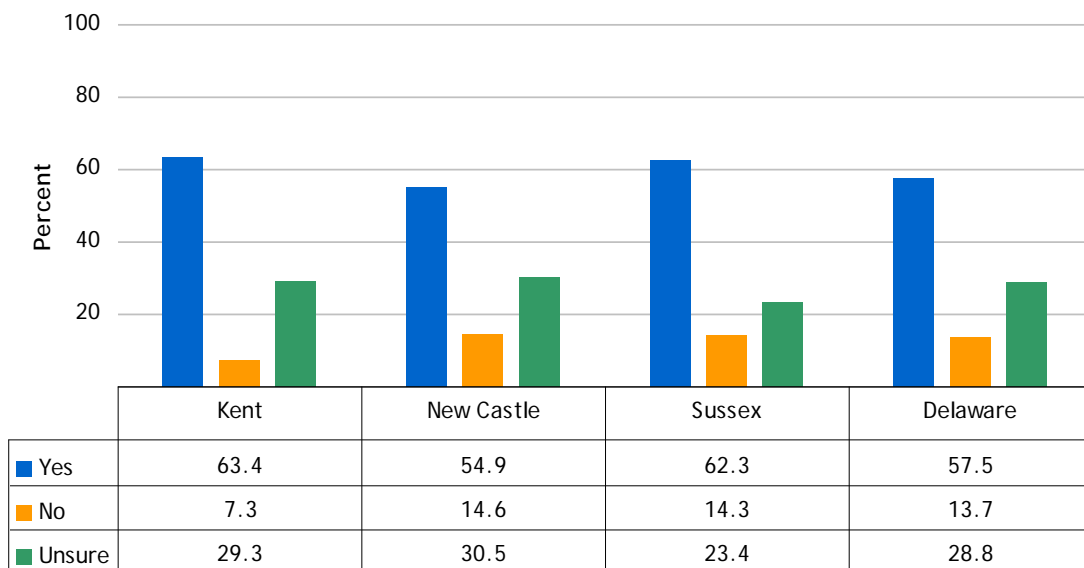
⁴ Delaware Population Consortium, Annual Population Projections, October 23, 2007, Version 2007.0, Dover, Delaware

Figure I.6
Active Five Years From Now
by County



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

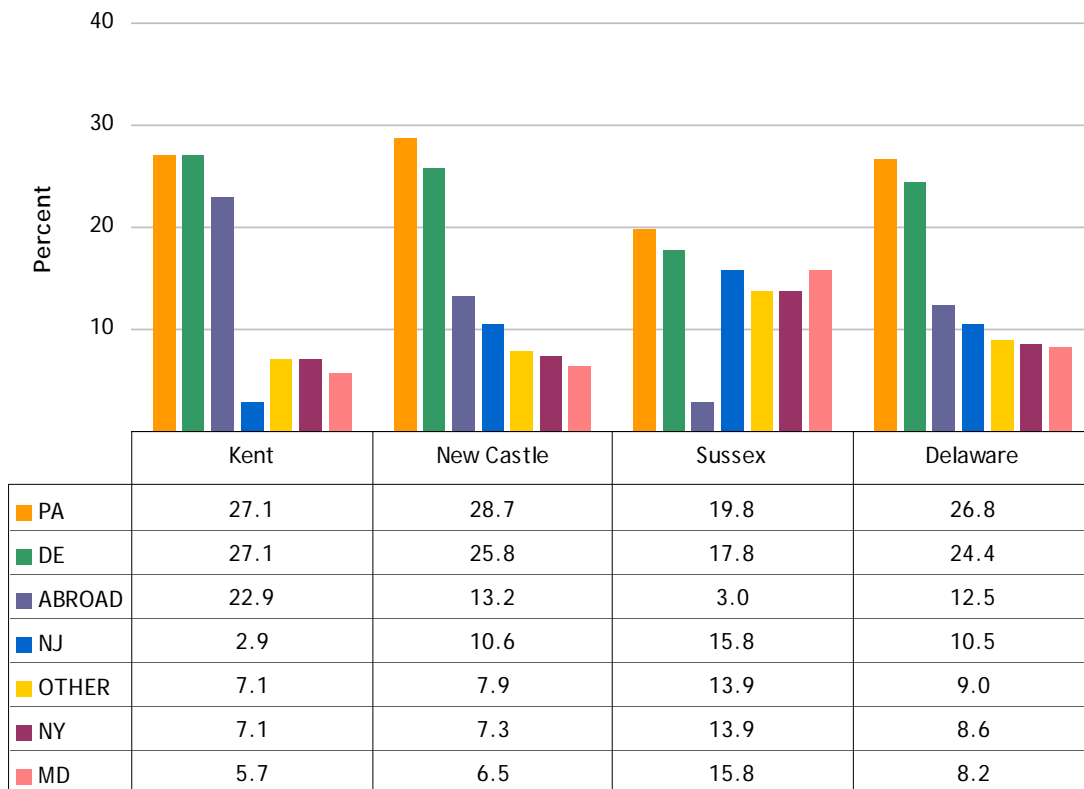
Figure I.7
Active Ten Years From Now
by County



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

The geographical source of pharmacists is an important input when considering policy tools to ensure an adequate supply of pharmacists in the state. The geographic source of pharmacists in this survey is measured by two variables. First, where did the pharmacist reside at the time of high school graduation? Second, in what state did the pharmacist obtain his or her pharmacist education?

Figure 1.8
State of High School Graduation
by County



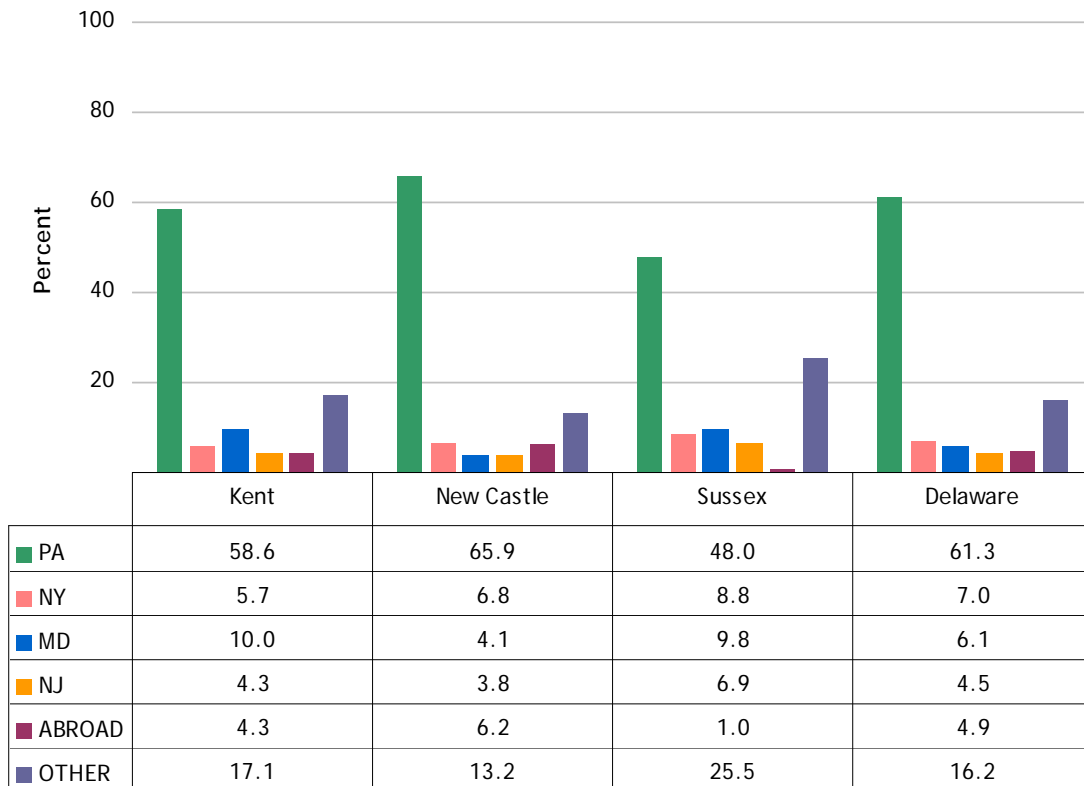
Source: Center for Applied Demography & Survey Research
University of Delaware

Figure 1.8 shows the results. One quarter (24%) of Delaware’s pharmacists is from Delaware. Overall, more than three quarters (78%) of Delaware’s active pharmacists resided in Delaware or in the region (MD, NJ, PA, NY) at the time of high school graduation. Interestingly, about the same proportion (12% and 9%) of Delaware’s pharmacists are from outside of the region or outside of the country respectively. Sussex County is more successful (compared with Delaware’s other counties) in attracting pharmacists from MD, NY, NJ and outside of the region. Kent County is most successful from all of Delaware’s counties to attract pharmacists

who resided abroad at the time of high school graduation. Almost 23% of Kent County's pharmacists resided abroad when they graduated from high school.

A similar measure of geographic source for Delaware's pharmacists is the state (or country if applicable) in which the institution was located where the pharmacist obtained his or her initial pharmacist education. The frequency distribution of answers to the above question is presented in Figure I.9. While the region (PA, NY, NJ, MD) still provides for about 79% of Delaware's pharmacists, the results are quite different from ones presented for Figure I.8. One of the main reasons is the absence of a pharmacist program in Delaware, which limits respondent answers. In general, the data indicates that Pennsylvania's pharmacist schools are the major source of Delaware's pharmacists. Overall, 61% of Delaware's pharmacists received their initial education as pharmacists in the Pennsylvania. While differences between Delaware's counties exist, they are in most cases insignificant. The proportion of pharmacists who earned their pharmacist education abroad stands at 5%. Around 16% of pharmacists earned their pharmacist education in states outside of the region.

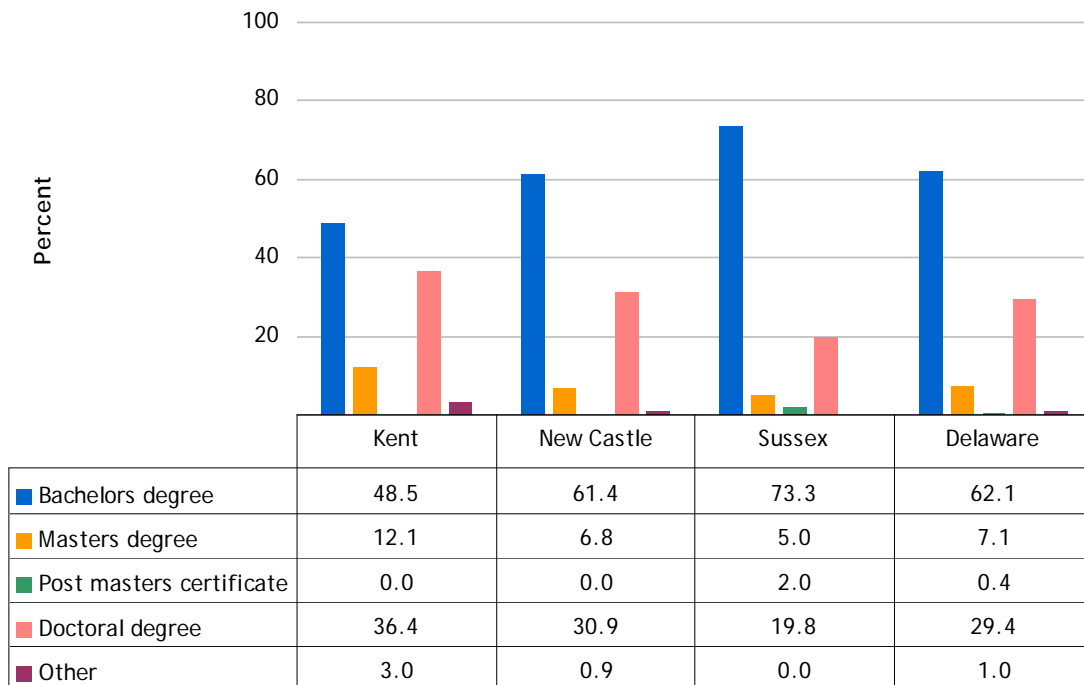
Figure I.9
State of Pharmacist School Graduation
by County



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

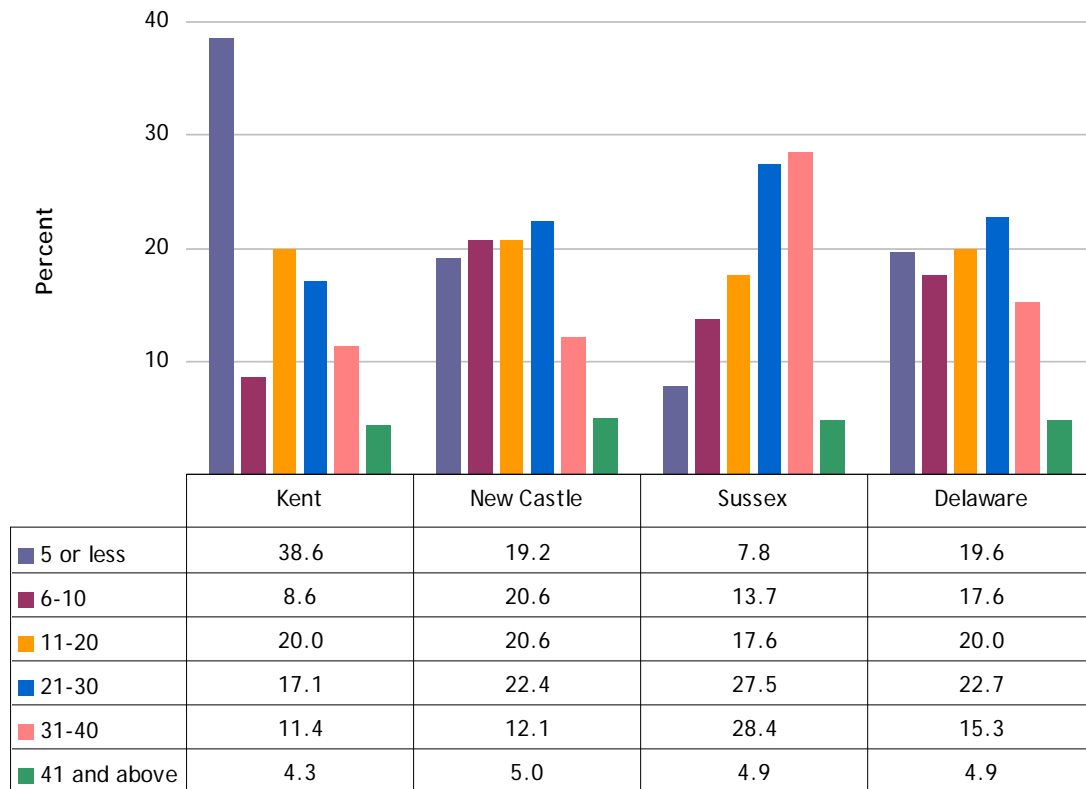
Educational background of pharmacists is a salient issue for both policymakers and practitioners. Survey respondents were asked to identify the highest degree they have earned. In general, Bachelor's and Doctoral degrees are the most common degrees held by pharmacists (62% and 29% respectively). Master's degrees are held by less than 7% of the respondents. It is important to note the significant difference between Kent and Sussex counties for both Bachelor's and Doctoral degrees. Over 36% of Kent County's pharmacists hold a Doctoral degree while only 20% of pharmacists in Sussex have this level of education. The situation is reversed in the case of Bachelor's degrees. Over 73% of pharmacists in Sussex County hold a Bachelor's degree while only 48% of Kent County's pharmacists have this level of education. This is very likely a result of the two congruent factors. First of all, Kent County's pharmacist population is younger than Sussex County's population. Second, the introduction of doctoral degrees for pharmacists is a phenomenon of the last 15 or so years. Thus, younger pharmacists would more likely hold doctoral degrees.

**Figure I.10
Highest Degree Earned
by County**



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

Figure I.11
Number of Years Practicing as Pharmacist
by County



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

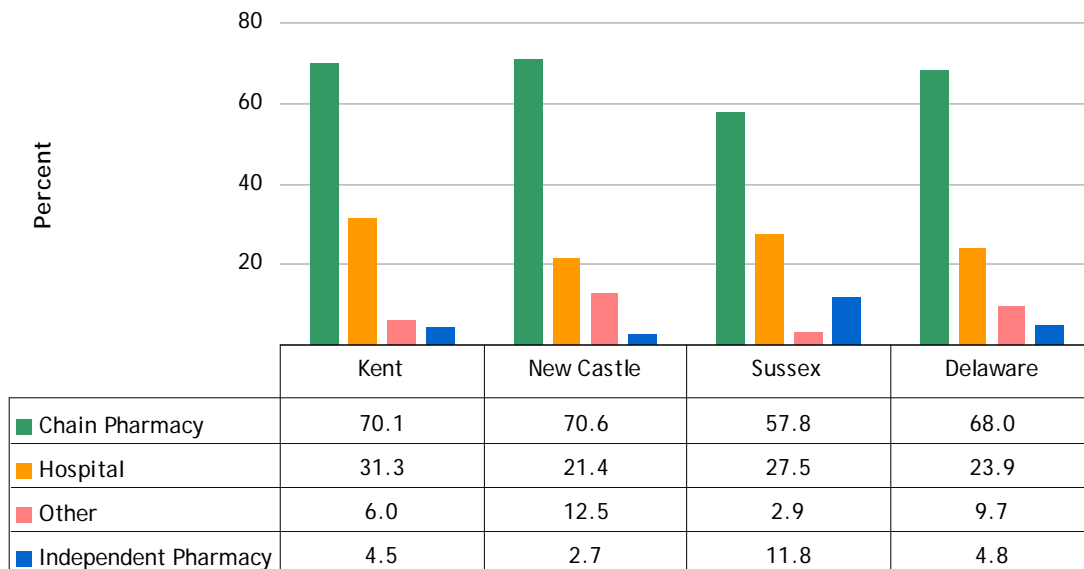
Previous observations concerning the differences in pharmacists' age is confirmed when respondents are asked to identify the number of years they have been practicing as pharmacists (Figure I.11). As expected, Kent County has the highest proportion (39%) of younger pharmacists (practicing up to 5 years) compared to 8% in Sussex County. On the other hand, Sussex County has the highest proportion (33%) of pharmacists who have practiced 31 or more years.

Other Characteristics

In the following section, the other characteristics of the pharmacists actively practicing in Delaware are examined.

When looking at the availability of pharmacists, the site of their employment should be considered. In light of this, respondents were asked to identify the setting of their principal employment. The results are tabulated in Figure 1.12 (please note, the sums do not add up to 100% because respondents were given a choice to select more than one option). Overall, 70% of Delaware’s pharmacists work for chain pharmacies, while only about 5% of pharmacists indicated that they work for independent pharmacies. There is some variation across counties. Sussex County’s physicians are more likely (12% vs. 4.5% and 2.7%) to report working for independent pharmacies compared with pharmacists in Kent and New Castle County respectively. New Castle County’s pharmacists are more likely (12% vs. 6% in Kent and 3% in Sussex) to indicate that they work in a setting other than chain pharmacy, hospital or independent pharmacy.

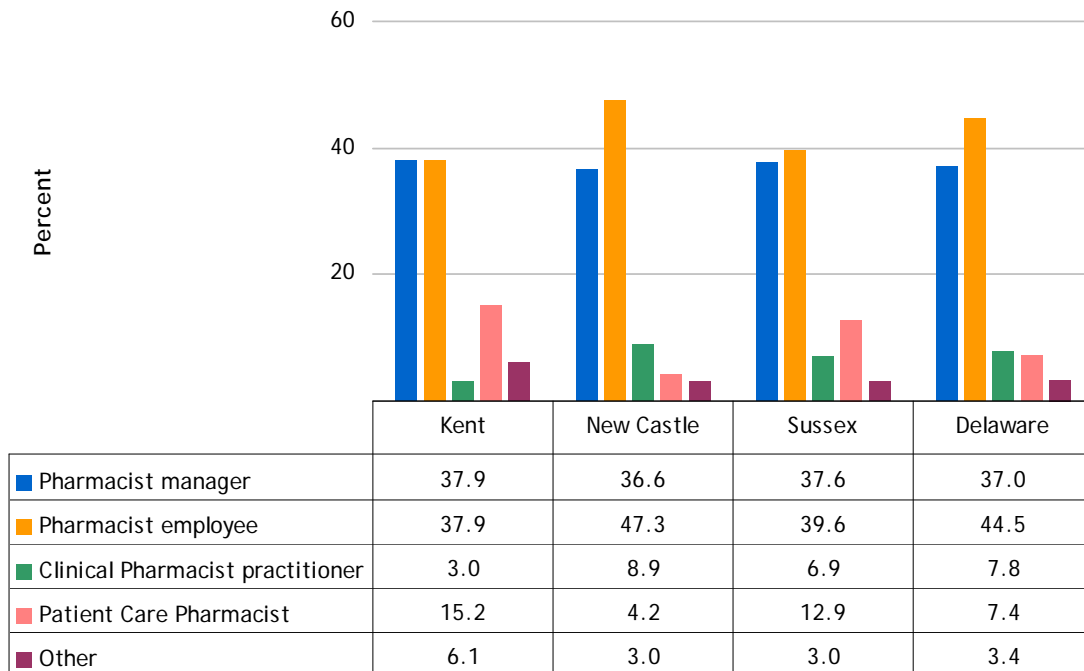
**Figure 1.12
Setting of Principal Employment
by County**



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

Respondents were next asked to indicate the form of their employment. Results are shown in Figure I.13. The split between pharmacist manager and pharmacist employee is virtually even for Kent and Sussex counties (at around 38%). While in New Castle County, a larger proportion (47%) of pharmacists indicated being pharmacist employees versus pharmacist managers (37%).

**Figure I.13
Form of Employment
by County**

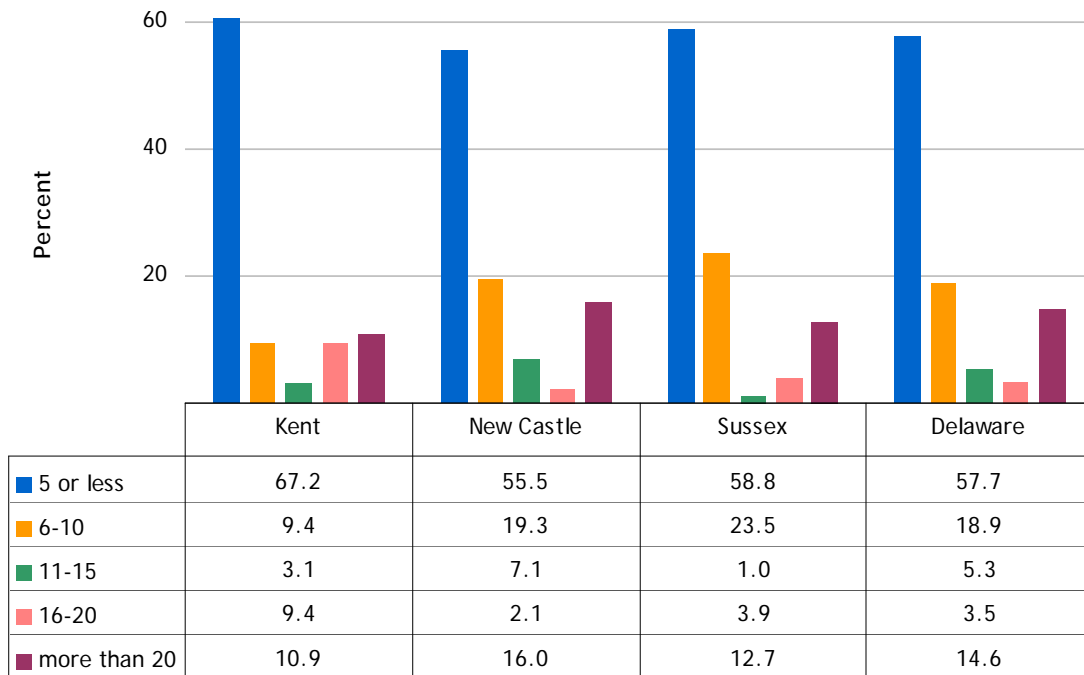


Source: Center for Applied Demography & Survey Research
University of Delaware

Figure I.14 presents the distribution of pharmacists by the number of years practiced at current location. Almost 60% of Delaware’s pharmacists have worked at their current location for up to five years, while only 20% (Figure I.11) have been practicing five years or less. This indicates an extensive amount of mobility of pharmacists within the last five years.

Overall, 19% of Delaware’s pharmacists have worked at their current location for 6-10 years. However, differences exist among counties. Kent County’s pharmacists are half as likely (9% vs. 19% and 25%) as their counterparts from New Castle and Sussex counties to have worked at their current location between 6-10 years.

**Figure I.14
Years Practicing at Current Location
by County**



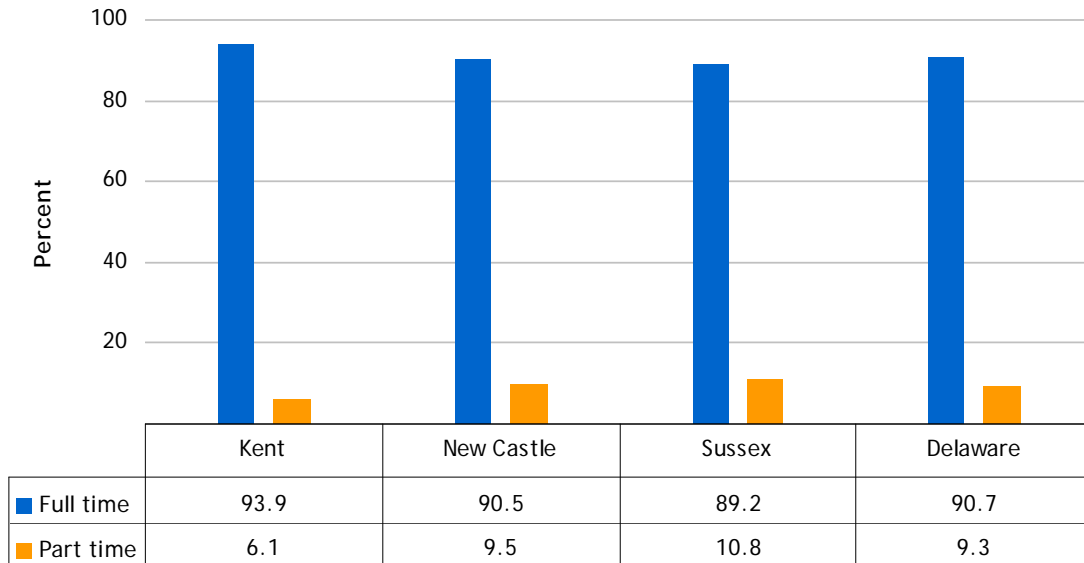
Source: Center for Applied Demography & Survey Research
University of Delaware

Respondents were asked to identify whether they work full time or part time as a pharmacist in Delaware, as well as the number of hours they work on average per week at their current location. The distribution of the answers to these questions is presented in Figure I.15 and Figure I.16.

In general, around 91% of pharmacists in Delaware have indicated that they work full time. The differences among counties are insignificant.

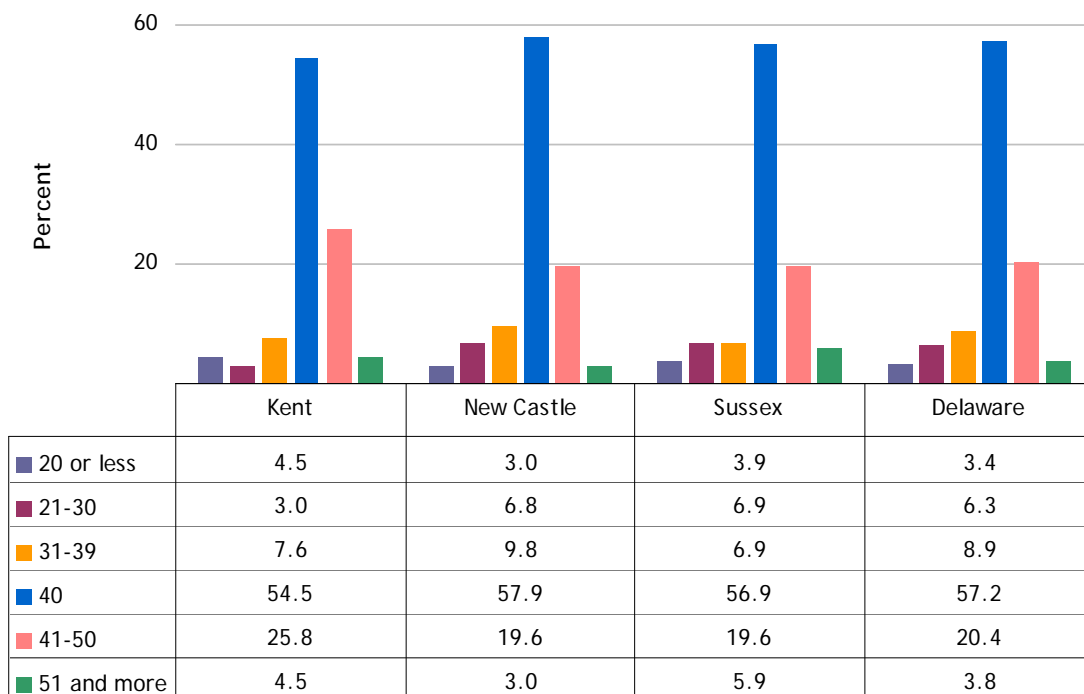
Overall for Delaware, 57% of pharmacists work a 40 hour work week (Figure I.16). Around 4% of pharmacists work 51 hours or more per week. The proportion of pharmacists grouped in the categories by hours worked varies minimally across counties. An important element of Figures I.15 and I.16 presented side by side is mentioned here. The sum of proportions for physicians responding as working 39 and less hours (almost 19% for Delaware in Figure I.16) is significantly higher than the proportion of those who indicate that they work part time (9% For Delaware in Figure I.15). The difference is not exactly understood but is very likely a result of the difference between the administrative designation of “part time” and the generally accepted definition of part time being anyone under 40 hours per week.

**Figure I.15
Full Time vs. Part Time by County**



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

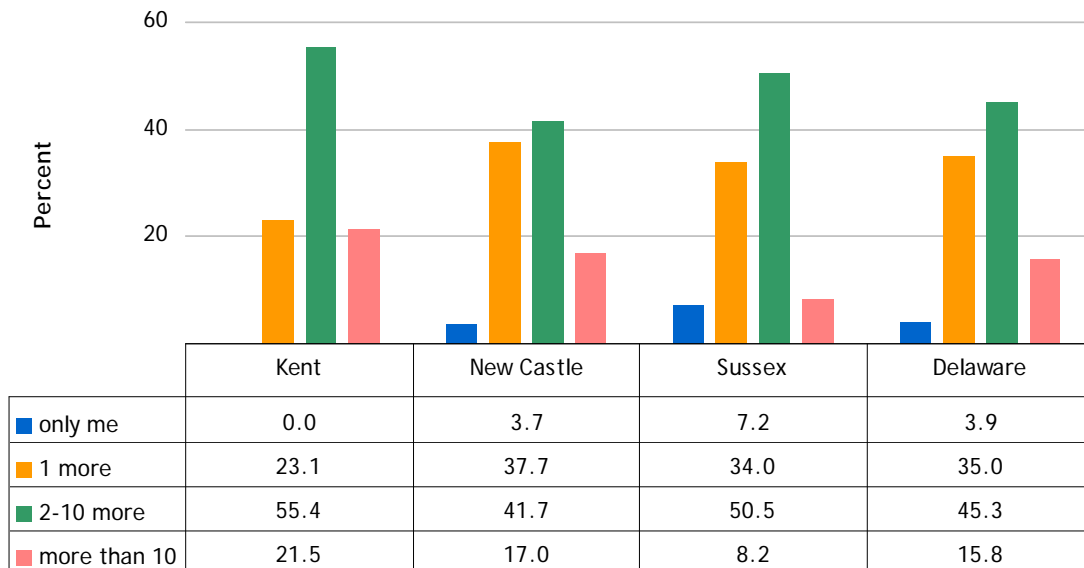
**Figure I.16
Hours Worked per Week by County**



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

Pharmacists were asked to indicate the number of other pharmacists who work at their current location. The responses are shown in Figure 1.17. Overall, about 4% of pharmacists indicated that they are the sole pharmacist at their location. Around 45% of pharmacists indicated that they work with 2-10 additional pharmacists. Some differences exist between counties. First, the proportion of pharmacists indicating that they work with 2-10 other pharmacists is lowest in New Castle County (42%) compared with 55% in Kent and 51% in Sussex County. Second, the responses indicate that Kent County’s pharmacists are more likely (77%) to work with more pharmacists than their counterparts in New Castle (60%) and in Sussex (59%) counties.

Figure 1.17
Number of Pharmacists Working
at Current Location by County

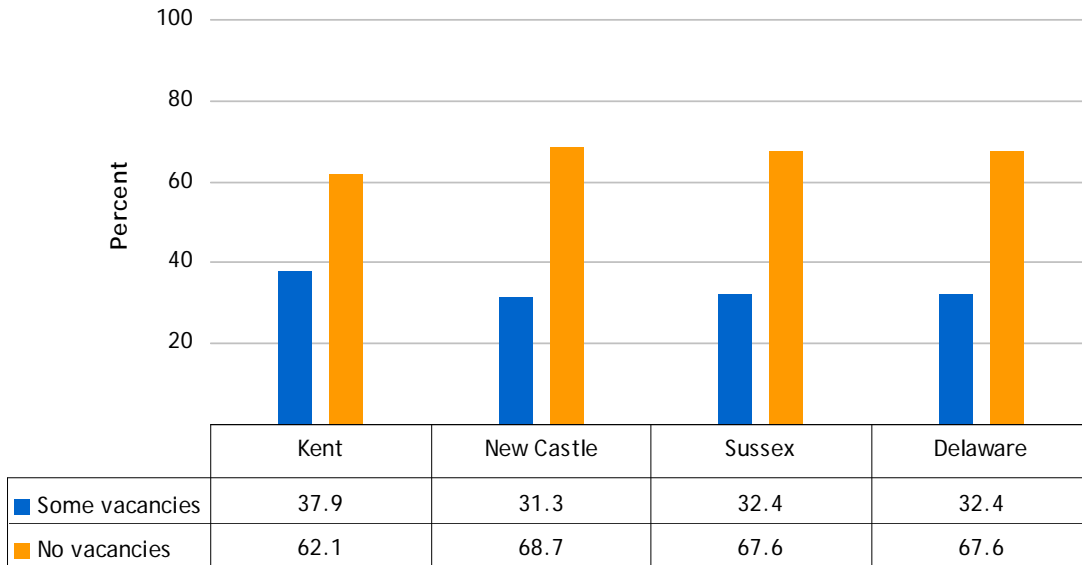


Source: Center for Applied Demography & Survey Research
 University of Delaware

Survey respondents were asked to indicate if vacancies exist at their location along with the number of these vacancies. The results are shown in Figures 1.18 and 1.19. It is important to use the results of these two figures with caution. The objects of the study were pharmacists, not pharmacies. Thus the results tabulated here are for pharmacists only. Attempts to estimate the number of pharmacist vacancies in Delaware using these figures will significantly overstate the number of vacancies in the state. (Explanation: Let us assume that there are 10 pharmacists in the State and all responded to the survey. Five of these pharmacists work at the same location with one vacancy. The other five pharmacists work at other locations with no vacancies. The proportion of pharmacists working at locations with vacancies is 50%. However, there is only one vacancy in the State). Overall in Delaware, 32% of pharmacists indicated that they work at locations with pharmacist vacancies, Figure 1.18. (Please note: Not 32% of locations have vacancies). The variation between counties is insignificant.

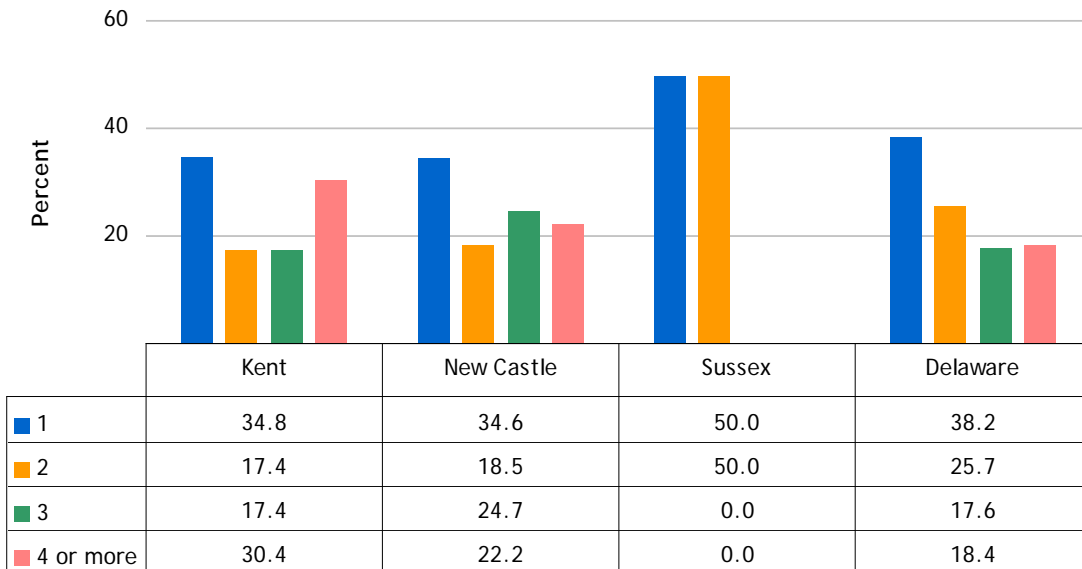
Figure 1.18

**Vacancies at Current Location
by County**



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

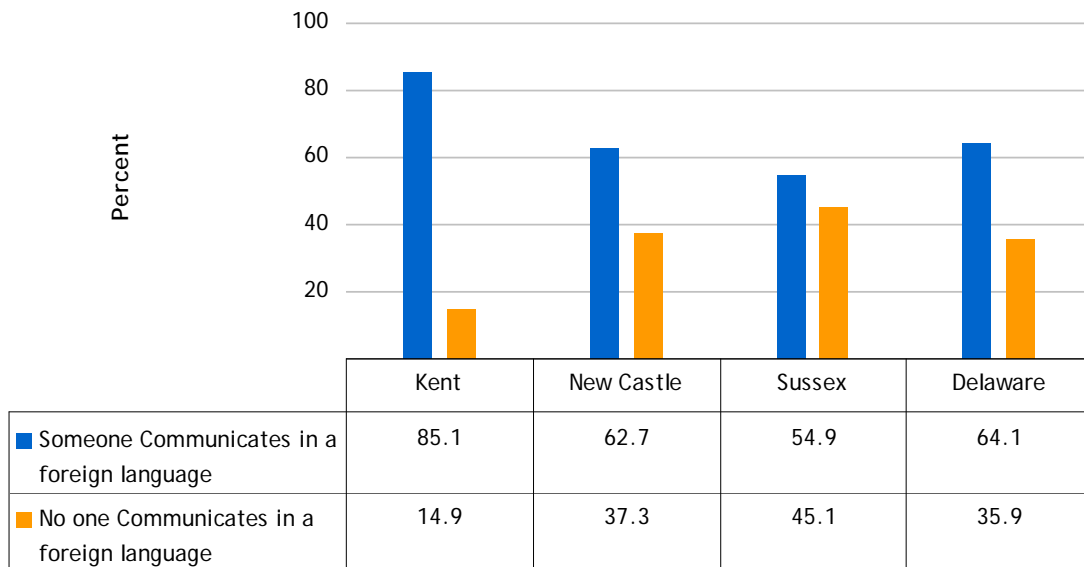
**Figure I.19
Number of Vacancies
at Current Location by County**



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

For those pharmacists who indicated a vacancy at their location, a follow up question was asked to inquire about the number of these openings (Figure I.19). In Delaware, 18% of pharmacists who work at a location with pharmacist openings indicated that there are four of these vacancies at their place of employment. Almost 40% of pharmacists working at a location with a pharmacist vacancy indicated that there is one pharmacist opening where they work. The differences in responses between Kent and New Castle counties are minimal. However, Sussex County differs from New Castle and Kent counties in response to this question. Evenly split, 50% of Sussex County’s pharmacists working at a location with an opening indicate one vacancy and 50% indicate two vacancies at their place of employment.

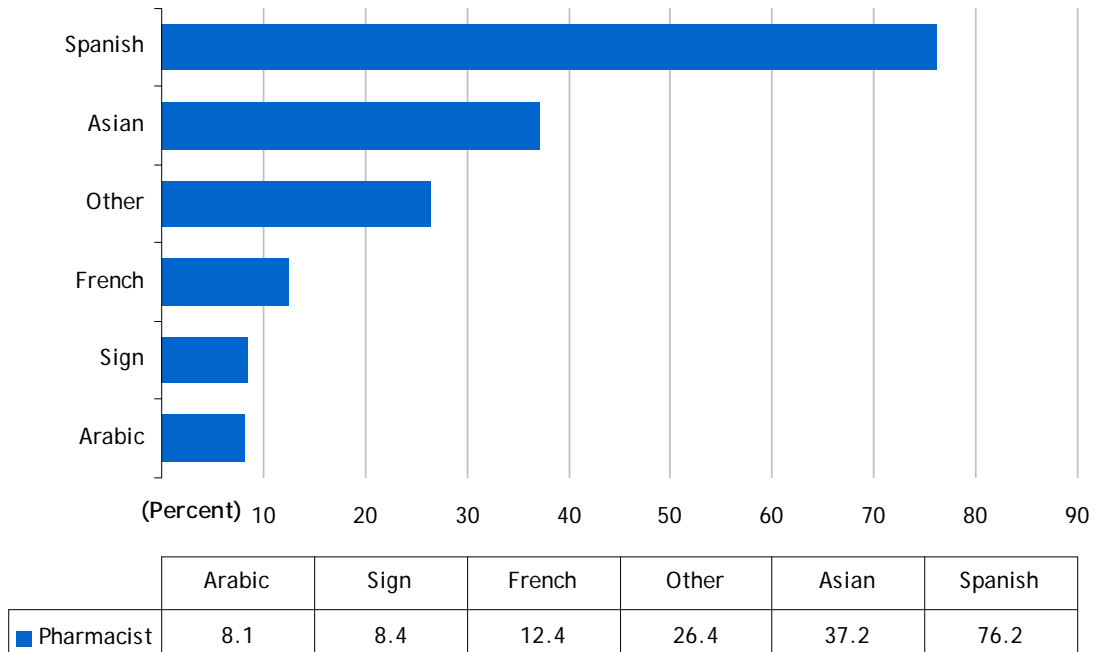
Figure I.20
Ability to Communicate in Languages Other than English by Someone at Current Location by County



Source: Center for Applied Demography & Survey Research

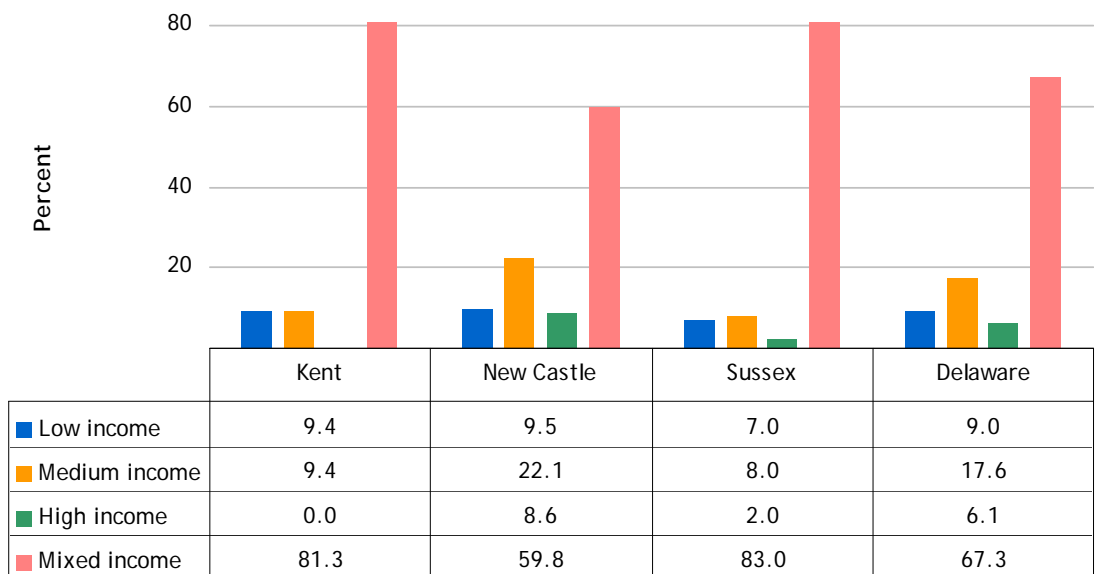
Given the changing of Delaware’s demographics, the ability to communicate in languages other than English is gaining importance. Respondents were first asked to indicate if there is someone at the site of employment who can communicate in a language other than English. Second, they were asked to indicate the languages spoken. Results are presented in Figures I.20 and I.21. For Delaware, 64% of pharmacists indicated that there is someone at their current site who can communicate in a language other than English. Differences exist among counties, with Kent County’s pharmacist indicating most often (85%) that they work at sites where someone speaks a foreign language. As far as the distribution of languages is concerned, Spanish is the most common foreign language spoken. Around 76% of pharmacists working in Delaware indicated that Spanish is spoken at their site of employment.

**Figure I.21
Languages Spoken At Current Location**



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

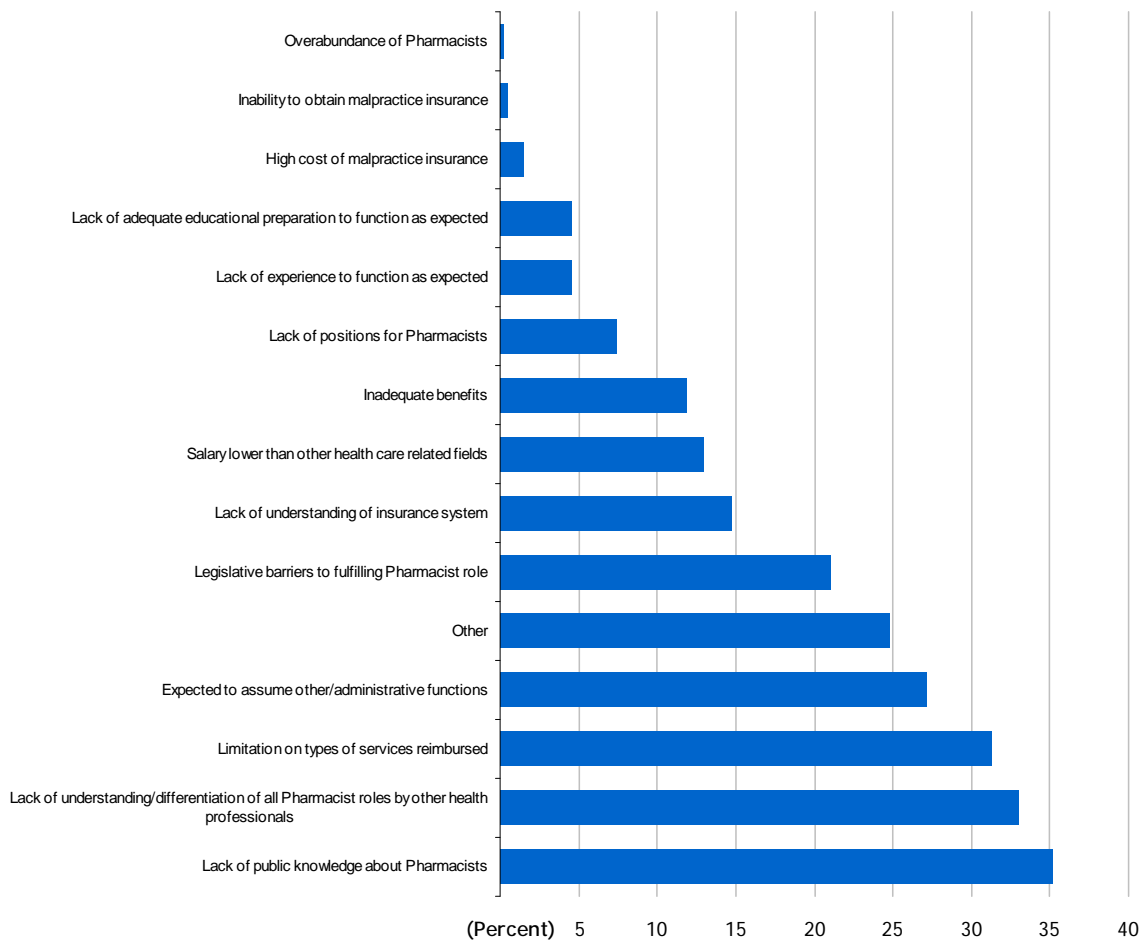
**Figure I.22
Income Level of Clients Served
At the Location by County**



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

Pharmacists were asked to indicate the perceived income category of the clientele served at their current site. The distribution of answers to this question is shown in Figure I.22. It is important to note that no quantitative delineation of categories was provided to respondents. Thus the results are likely influenced by the pharmacists' own background, and as such are subjective. Overall for Delaware, 67% of pharmacists indicated that they work at a site that serves mixed income clientele. Nine percent of pharmacists indicated they serve low income customers while 6% indicated interaction with high income patrons. Looking at the results by county, New Castle County stands out, with 22% of pharmacists indicating medium income clients compared to 9% and 8% for Kent and Sussex counties respectively. New Castle County's pharmacists are least likely (59%) to indicate mixed income clientele compared to 81% in Kent and 83% in Sussex counties.

Figure I.23
Barriers in Work as Pharmacist



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

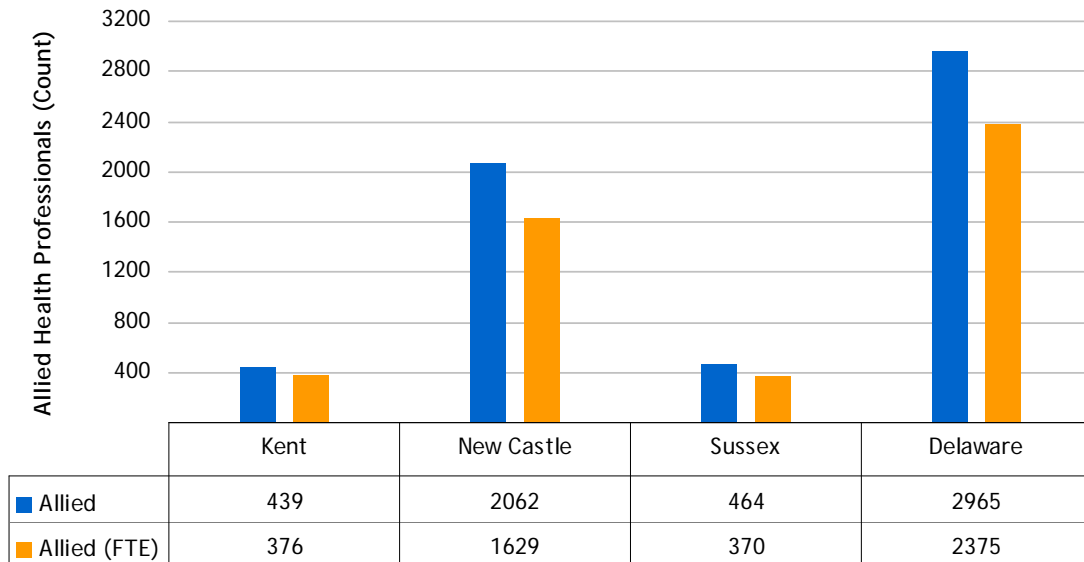
Respondents were next given a list of 15 potential obstacles and asked to indicate which one of these barriers they are experiencing in their work as pharmacists. The responses are tabulated in Figure 1.23 (the sum of percentages does not add up to 100% because respondents could check more than one barrier). Overall 83% (not pictured here) of Delaware's pharmacists indicated that they experience at least one of the barriers listed. For Delaware, four barriers stand out. The most commonly listed barriers among pharmacists were the lack of public knowledge about pharmacists (35%), lack of understanding of pharmacist roles by other health professionals (32%), limitation on the type of services reimbursed (31%) and the expectation to assume other/administrative tasks (27%).

OTHER ALLIED HEALTH PROFESSIONALS

Demographic Characteristics

Figure 2.1 presents the distribution of other allied health professionals by county. The numbers presented below are estimates based on a survey of radiologic specialists and dental radiologic technicians and a census of physical therapists, respiratory practitioners, speech language pathologists, physical therapist assistants, physician assistants, paramedics and therapeutic optometrists. Along with the number of allied health professionals, the number of Full Time Equivalent (FTE) allied health professionals is indicated. Since not all allied health professionals work full time, the FTE measure gives a more realistic count. An allied health professional who was employed 40 or more hours per week received a score of 1.0 FTE. For each hour less than 40 hours, 0.1 FTE was deducted.

Figure 2.1
Number of Allied Health Professionals
by County



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

Figure 2.2 shows the distribution of FTE allied health professionals by profession and county. Overall for Delaware, most numerous (716) are dental radiologic technicians (these are dental assistants and dental radiation technicians who hold a license to operate X-rays). Therapeutic optometrists represent the smallest (54) group of allied health professionals. Please note that the total number of FTE allied health professionals differs between Figure 2.1 and 2.2 due to rounding errors.

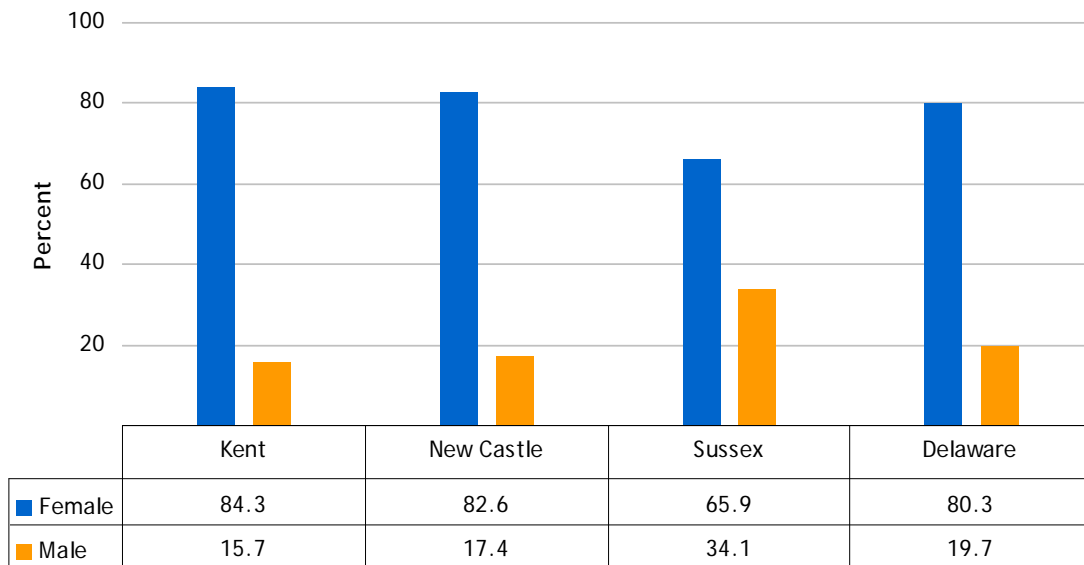
Figure 2.2
FTE Allied Health Professionals
by County

	Kent	New Castle	Sussex	Delaware
Dental Radiologic Technician	153	529	34	716
Radiologic Specialist	76	278	94	448
Physical Therapist	50	272	65	387
Respiratory Practitioner	17	151	44	212
Speech/Language Pathologist	30	134	32	196
Physical Therapist Assistant	11	89	46	146
Physician Assistant	14	93	23	130
Paramedic	13	47	27	87
Therapeutic Optometrist	12	36	6	54
TOTAL	376	1,629	371	2,376

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

Just as with other health professions, demographic characteristics take on an important role for allied health professionals. Patients interacting with allied health professionals might feel more comfortable to deal with individuals having specific characteristics.

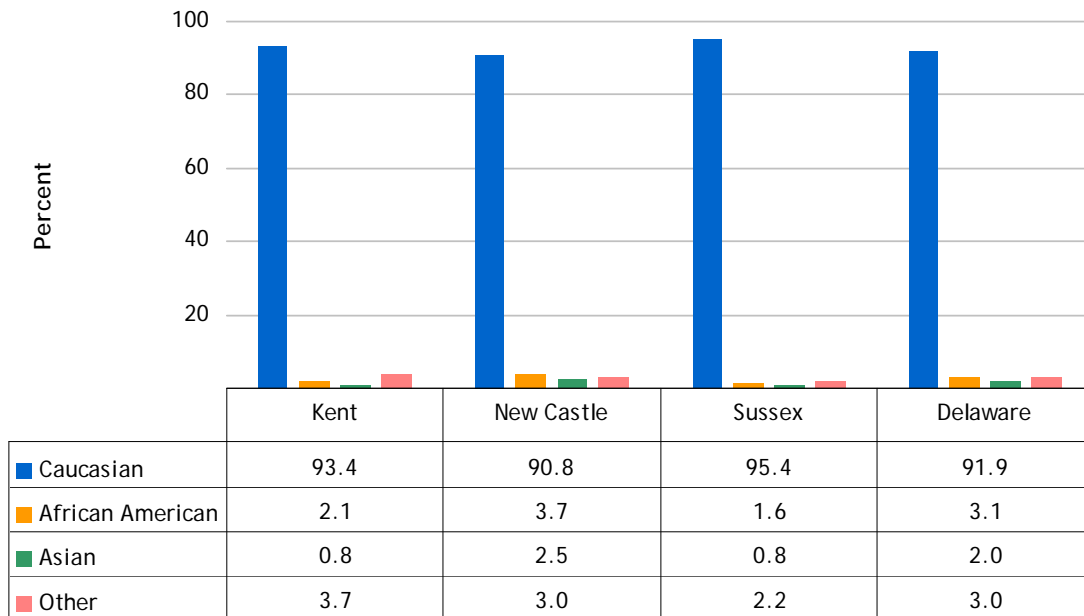
Figure 2.3
Gender of Allied Health Professionals
by County



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

The distribution of allied health professionals by gender is presented in Figure 2.3. In general, 80% of Delaware’s allied health professionals are female. In comparison, 39%⁵ of primary care physicians in Delaware are female and 32%⁶ of psychiatrists in Delaware are female. The distribution among counties varies somewhat. Sussex County stands out with double the proportion of male allied health professionals (34% vs. 16% and 17%) compared to Kent and New Castle counties.

Figure 2.4
Race of Allied Health Professionals
by County



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

Allied health professionals were asked to report their race and Hispanic origin. The results are presented in Figure 2.4 and 2.5. The racial distribution of allied health professionals varies minimally among. Around 92% of allied health professionals reported that they are Caucasian. The general Delaware population is 75%⁷ Caucasian, and around 21.5% African American. The results presented in Figure 2.4 indicate that the population of allied health professionals is less diverse than the general Delaware population. The general Delaware

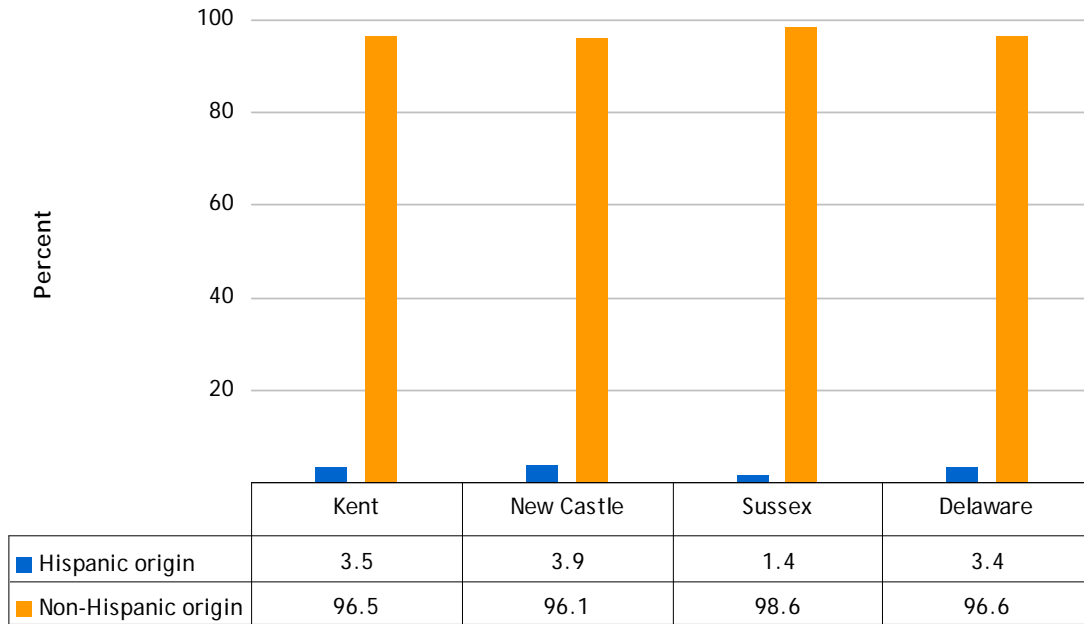
⁵ Primary Care Physicians in Delaware, 2006, Center for Applied Demography & Survey Research, University of Delaware, March, 2007.

⁶ Mental Health Professionals in Delaware, 2005, Center for Applied Demography & Survey Research, University of Delaware, August 2006.

⁷ Delaware Population Consortium, Annual Population Projections, October 23, 2007, Version 2007.0, Dover, Delaware

population is about 5% Hispanic. Around 3% of Delaware’s allied health professionals indicated that they are of Hispanic origin.

Figure 2.5
Hispanic origin of Allied Health Professionals
by County



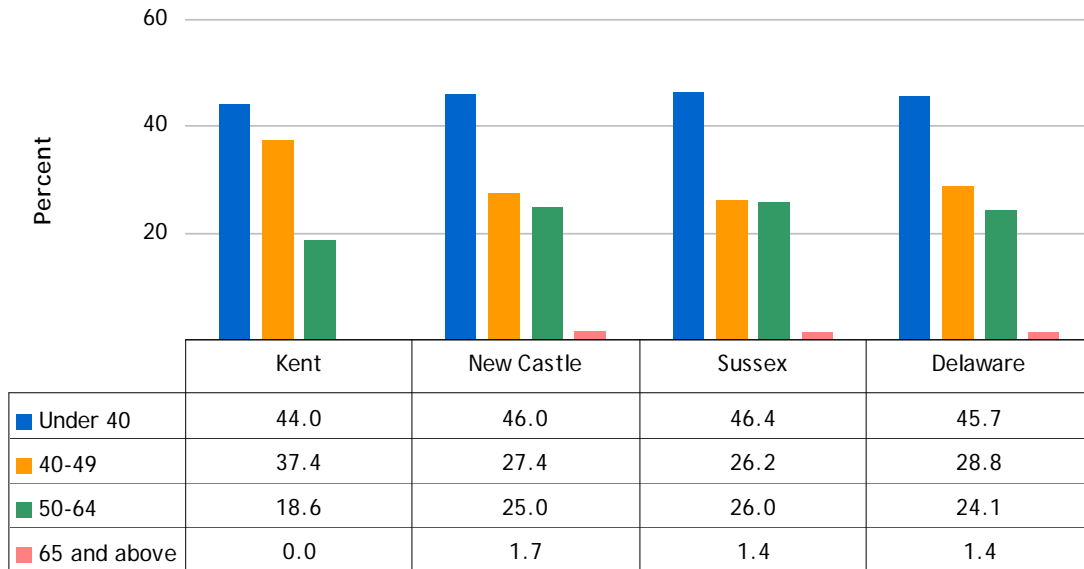
Source: Center for Applied Demography & Survey Research
 University of Delaware

The distribution of allied health professionals by age groups and counties is presented in Figure 2.6. Around 52%⁸ of Delaware’s population is under 40 years old. Around 46% of allied health professionals are in this age group. Looking at counties individually, Sussex County’s general population is 43%⁹ under 40 years old while 46% of allied health professionals fall into this age group. The proportion of allied health professionals aged 40-49 is the largest (37%) in Kent County, while this same county boasts the lowest proportion of allied health professionals aged 50-64.

⁸ Delaware Population Consortium, Annual Population Projections, October 23, 2007, Version 2007.0, Dover, Delaware

⁹ Delaware Population Consortium, Annual Population Projections, October 23, 2007, Version 2007.0, Dover, Delaware

Figure 2.6
Age of Allied Health Professionals
by County

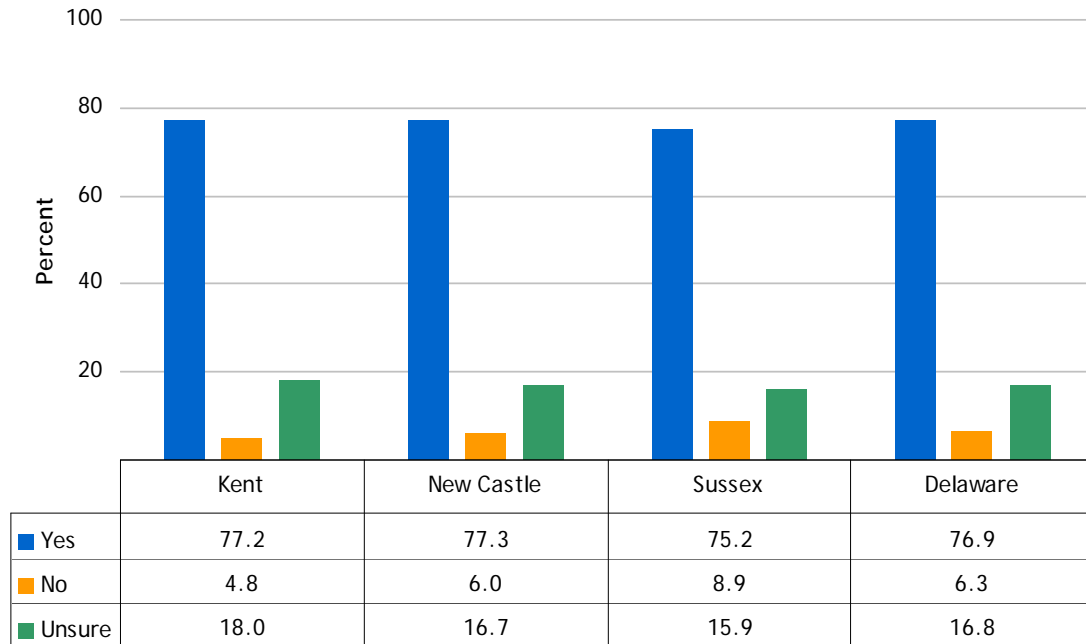


Source: Center for Applied Demography & Survey Research
University of Delaware

While age is an important factor in determining future availability of an allied health workforce across the state, a more direct measure is the activity in five or 10 years. Respondents were asked to indicate if they plan to be active allied health professionals five or 10 years from now. Results are presented in Figures 2.7 and 2.8. In general, 77% of allied health professionals indicated that they will be working five years from now. Around 17% of respondents indicated that they are unsure about their activity five years from now. Six percent of respondents indicated that they are not planning to be active in five years. The differences between counties are minimal.

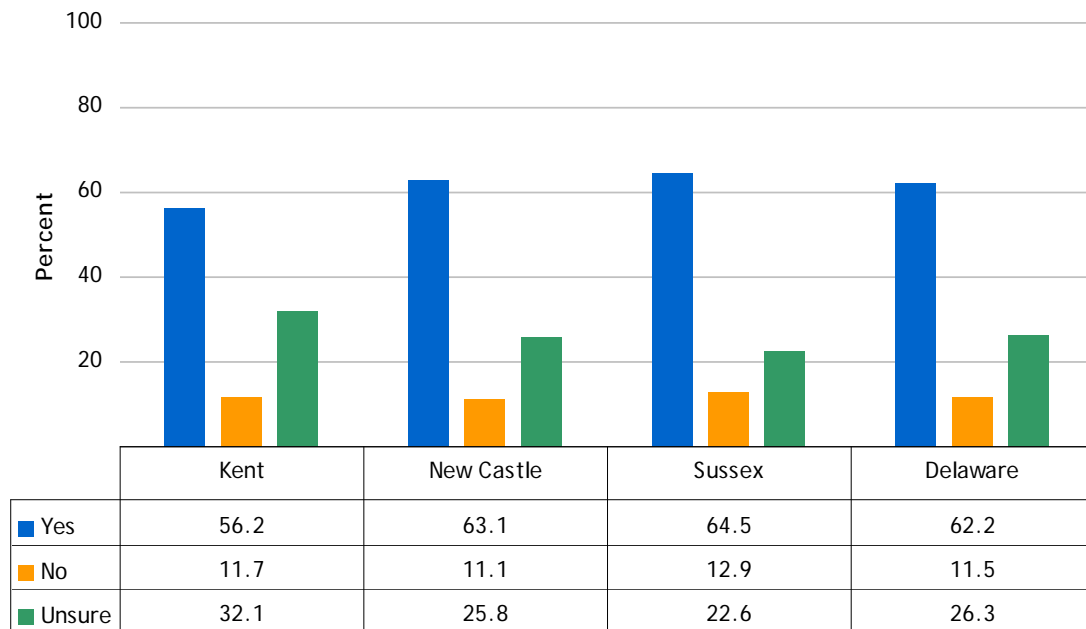
Looking into the future 10 years from now, 62% indicated still being active. The proportion of those definitely inactive increases to almost 12% and the proportion of those unsure increases nine percentage points to 26%. Looking at the results across counties, Kent County's allied health professionals are marginally less likely (56% vs. 63% and 64%) to indicate being active 10 years from now compared to New Castle and Sussex County.

Figure 2.7
Active Five Years From Now by County



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

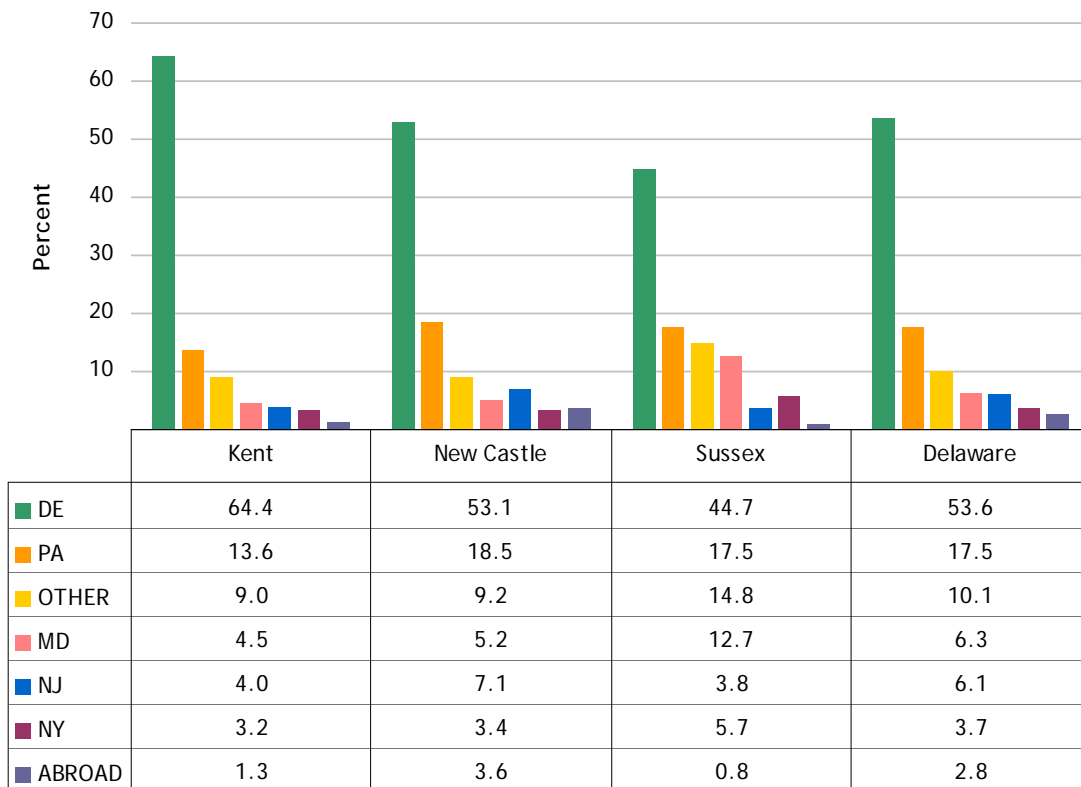
Figure 2.8
Active Ten Years Form Now by County



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

Allied health professionals were next asked to indicate the state in which they resided at the time of high school graduation and the state in which they earned their basic professional regulation in their chosen filed of allied health profession. The results for the state of high school graduation inquiry are presented in Figure 2.9. Around half (54%) of Delaware’s current active allied health professionals are from Delaware as measured by the state of high school graduation. The second highest source is Pennsylvania, where almost 18% of Delaware’s active allied health professionals graduated high school. Around 16% come from other states in the region (MD, NJ, NY). Only around 10% of allied health professionals active in Delaware graduated from states outside of the region, and fewer than 3% graduated high school abroad. Some variance exists among counties. First of all, Sussex County’s allied health professionals are least likely (45% vs. 64% in Kent County and 53% in New Castle County) to indicate that they graduated high school in Delaware. Second, Sussex County is most successful in attracting allied health professionals graduating from high schools outside of the region (15% vs. 9% in Kent County and 9.2% in New Castle County).

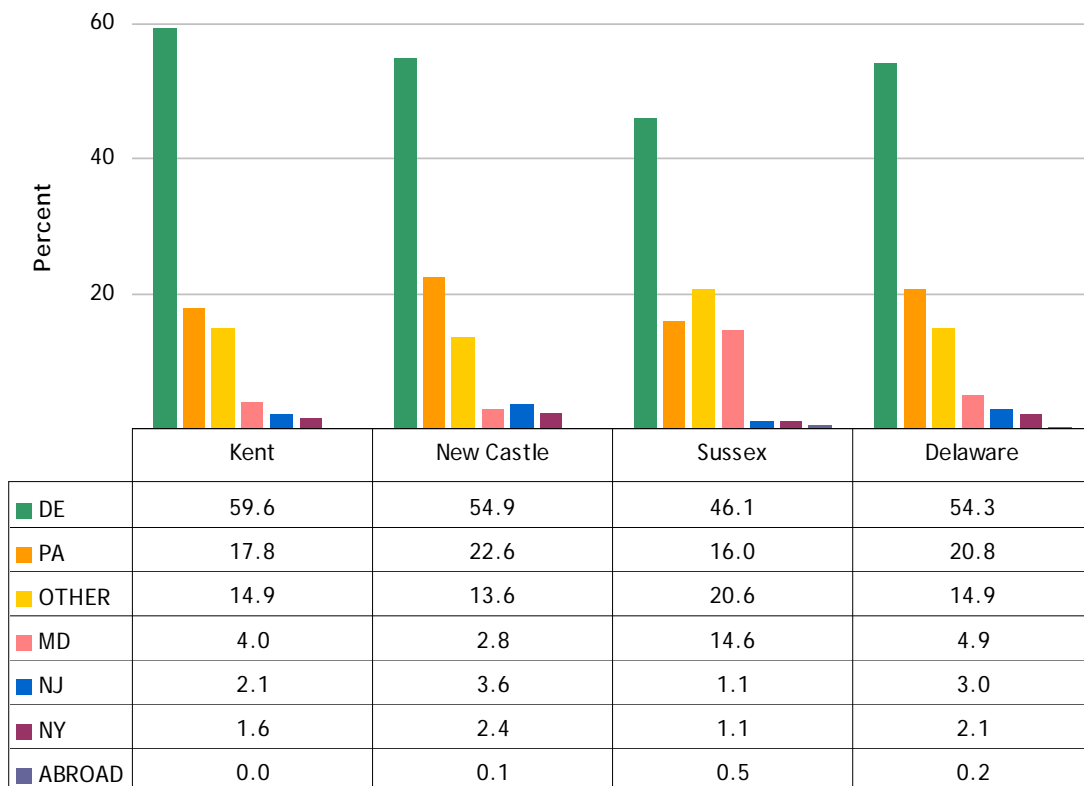
Figure 2.9
State of High School Graduation
by County



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

While the state of high school graduation is a good measure of the geographic source of allied health professionals, the state of professional education rounds out the picture. Results in Figure 2.10 basically mirror the results from Figure 2.9. Slightly more than half (54%) of Delaware's active allied health professionals received their professional education in Delaware. About 20% of professionals graduated from schools in Pennsylvania, while an additional 10% come from other states in the region (MD, NJ, and NY). The proportion of allied health professionals from outside of the region stands at 15%, and less than 1% received their professional qualifications outside of the country.

Figure 2.10
State of Professional Education
by County

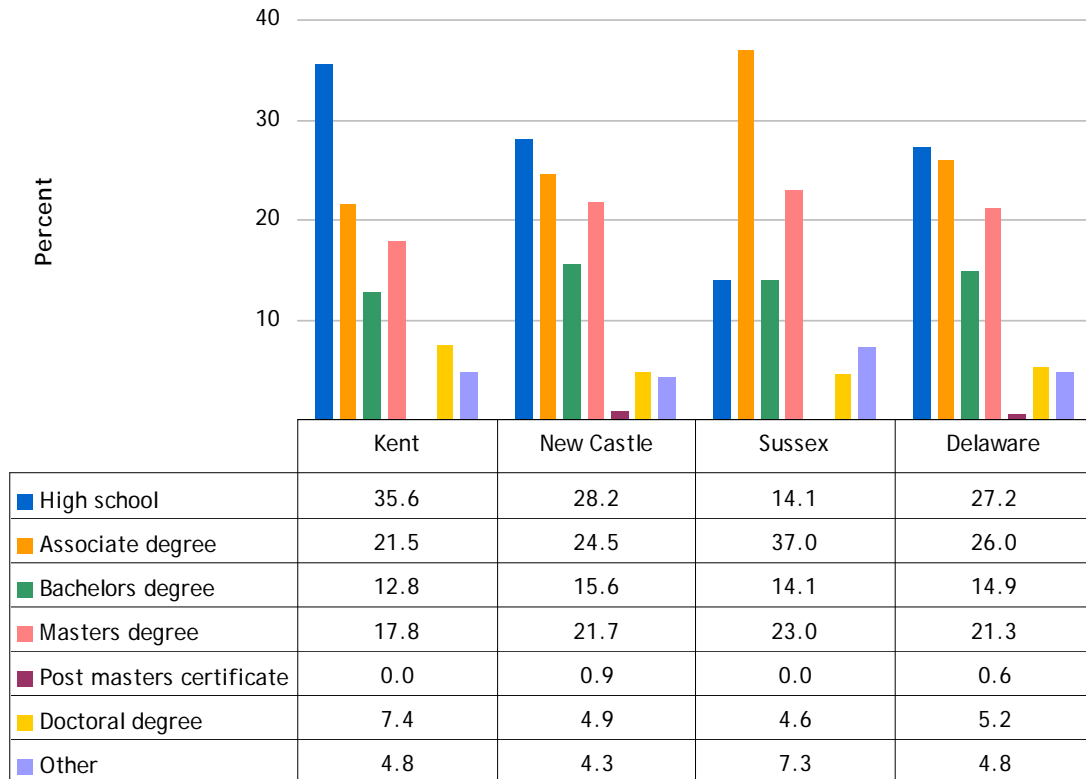


Source: Center for Applied Demography & Survey Research
University of Delaware

The educational background of allied health professionals is quite diverse. This is a result of the general definition of allied health professionals that groups together different professions such as physical therapists, therapeutic optometrists and dental radiation technicians. This educational background of allied health professionals is presented in Figure 2.11. In general more than half (53%) of allied health professionals in Delaware reported having a high school

diploma or an Associate’s degree. Bachelor’s degree as the highest earned degree is indicated by 15% of the respondents. About 5% of those surveyed indicated holding a Doctoral degree. Differences among counties exist but they are mainly explained by the distribution of allied health professionals of different profession among counties.

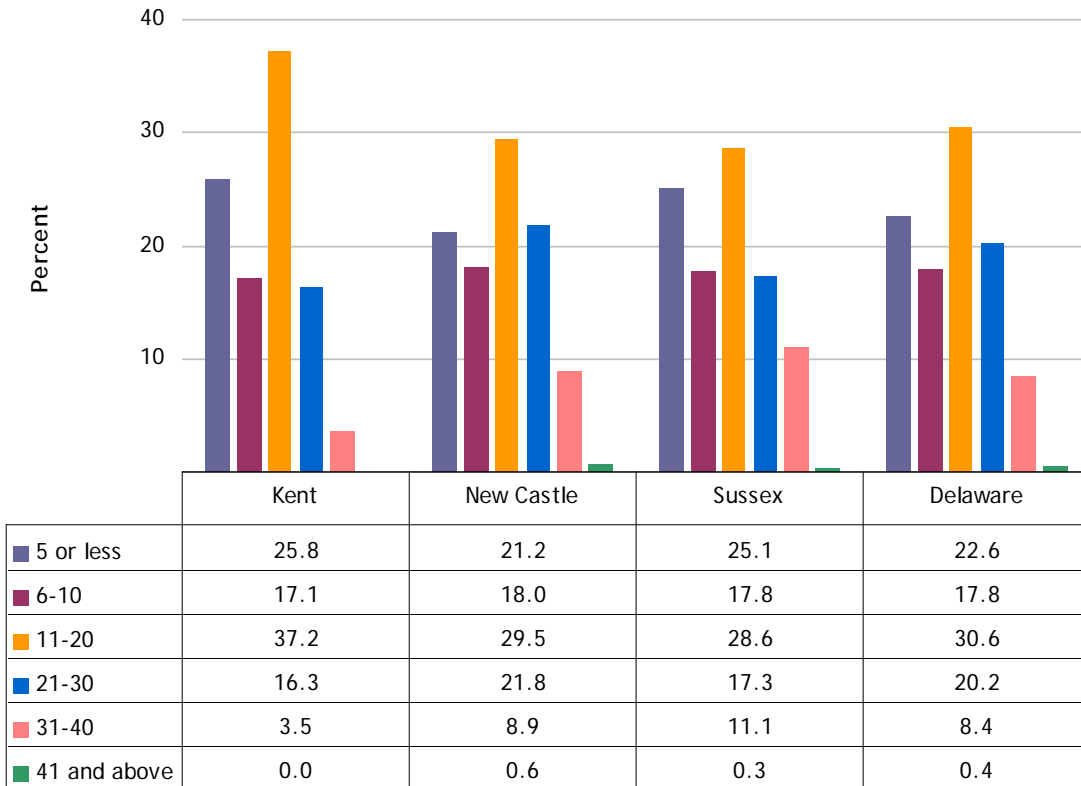
**Figure 2.11
Highest Degree Earned
by County**



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

Respondents were next asked to indicate the number of years they have been working in their chosen profession (Figure 2.12). Around 23% of them indicated that they are quite new (having worked as an allied health professional for five or fewer years). Almost a third (31%) of respondents indicated that they have been working 11 to 20 years). Less than one percent of all allied health professionals indicated having worked over 40 years. Differences exist among counties. Most striking is the high proportion of allied health professionals with 11 - 20 years in Kent County compared to 30% in New Castle County and 29% in Sussex County. Sussex County has the highest proportion (11%) of allied health professionals who indicate having worked 31-40 years compared to 4% in Kent and 9% in Sussex County.

Figure 2.12
Number of Years Practicing in Profession
by County



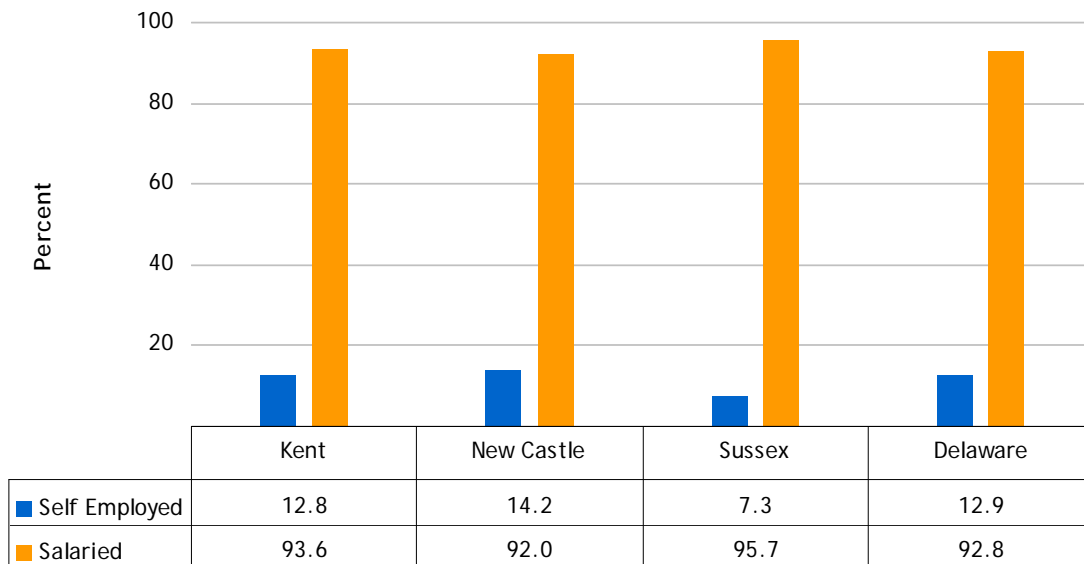
Source: Center for Applied Demography & Survey Research
 University of Delaware

Other Characteristics

The following section presents additional characteristics of allied health professionals in Delaware.

Respondents were first asked to indicate the form of their employment. The results are distributed evenly among counties (Figure 2.13). In general, 93% of allied health professionals indicated that their form of employment is salaried. Around 13% of respondents indicated being self employed. The respondents were allowed to choose more than one option, thus the sum exceeds 100%. About 6% of allied health professionals consider the form of their primary employment to be both salaried and self employed.

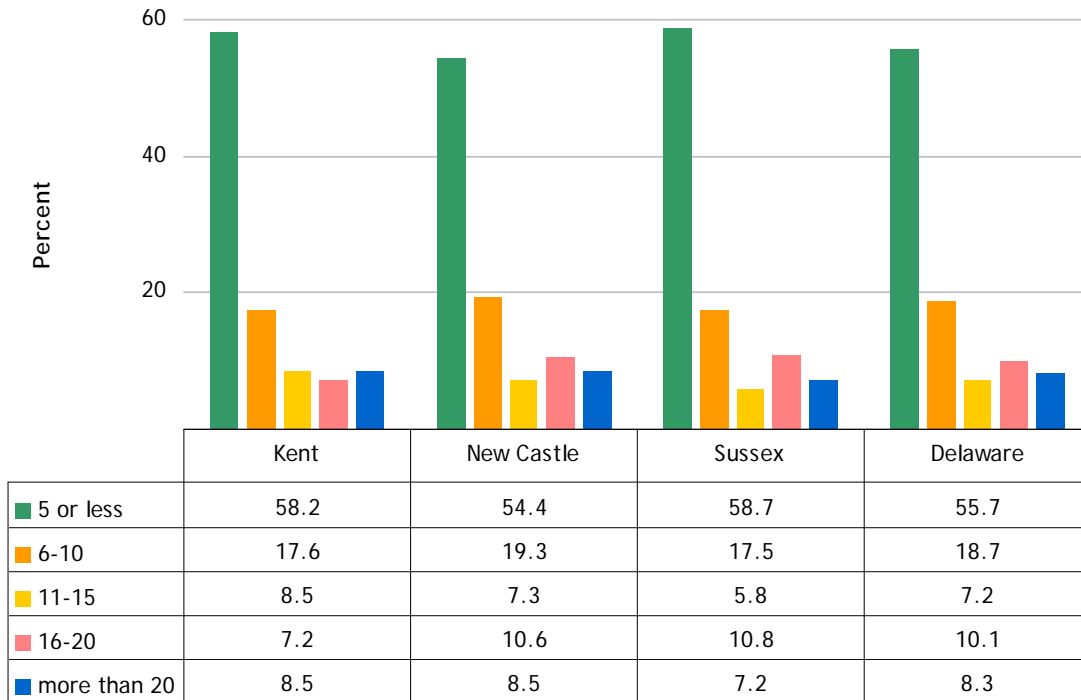
**Figure 2.13
Form of Primary Employment
by County**



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

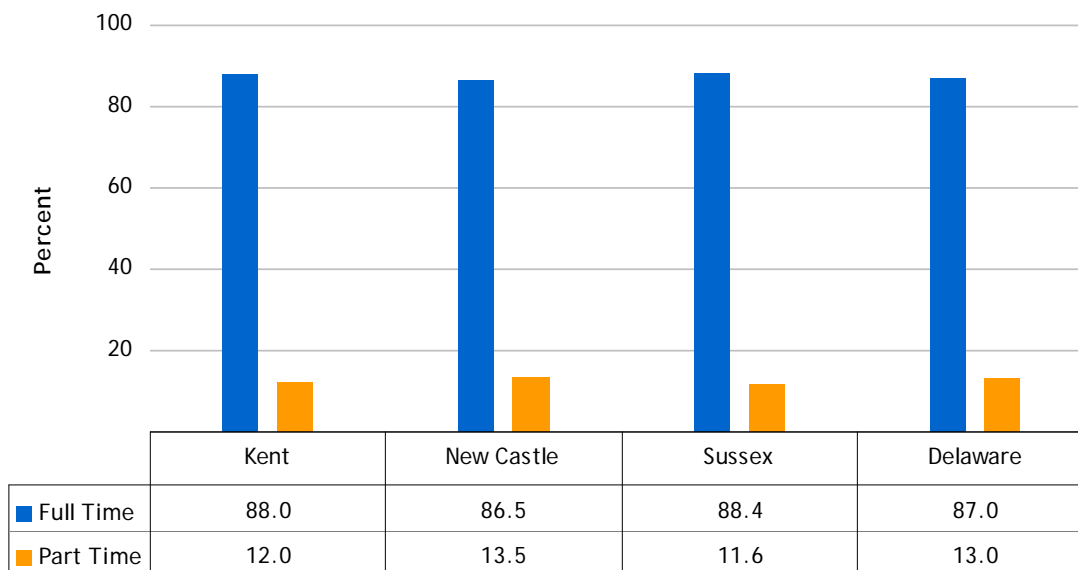
Figure 2.14 presents the distribution of allied health professionals by the number of years they have been working at their current location. Around 56% of allied health professionals have worked up to five years at their current place of employment. Less than 19% of respondents indicated having worked 6-10 years at their current place of employment. Only around 8% of respondents indicated over 20 years at the current location. The differences among counties are insignificant.

Figure 2.14
Years Practicing at Current Location by County



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

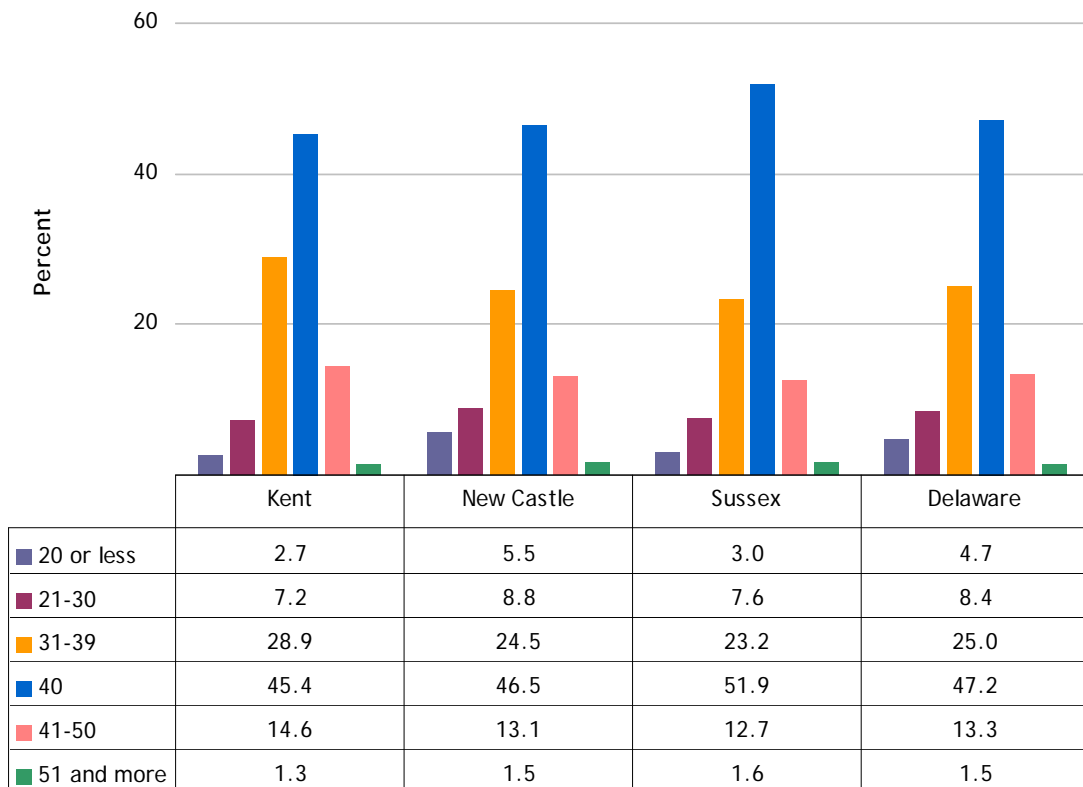
Figure 2.15
Full Time vs. Part Time by County



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

Respondents were asked to indicate if they work full time or part time in Delaware. The results are presented in Figure 2.15. For Delaware, 87% of allied health professionals active in Delaware work full time in the First State. There are no significant differences among counties.

Figure 2.16
Hours Worked per Week by County



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

The distribution of number of hours worked per week is presented in Figure 2.16. For the State of Delaware, almost half (47%) of allied health professionals indicated that they worked an average of 40 hours per week. One quarter of respondents indicated having worked an average of 31 to 39 hours per week; only 9% of pharmacists (Figure 1.16) indicated having worked 31-39 hours per week. Around 15% (13.3+1.5%) of allied health professionals indicated that they work more than 40 hours per week on average. The differences among counties are minimal. Sussex County’s allied health professionals (52%) are somewhat more likely to indicate working 40 hours per week compared with Kent (45%) and New Castle counties (47%).

Figure 2.17

**Number of Others with Same Profession
Working at Current Location
by County**

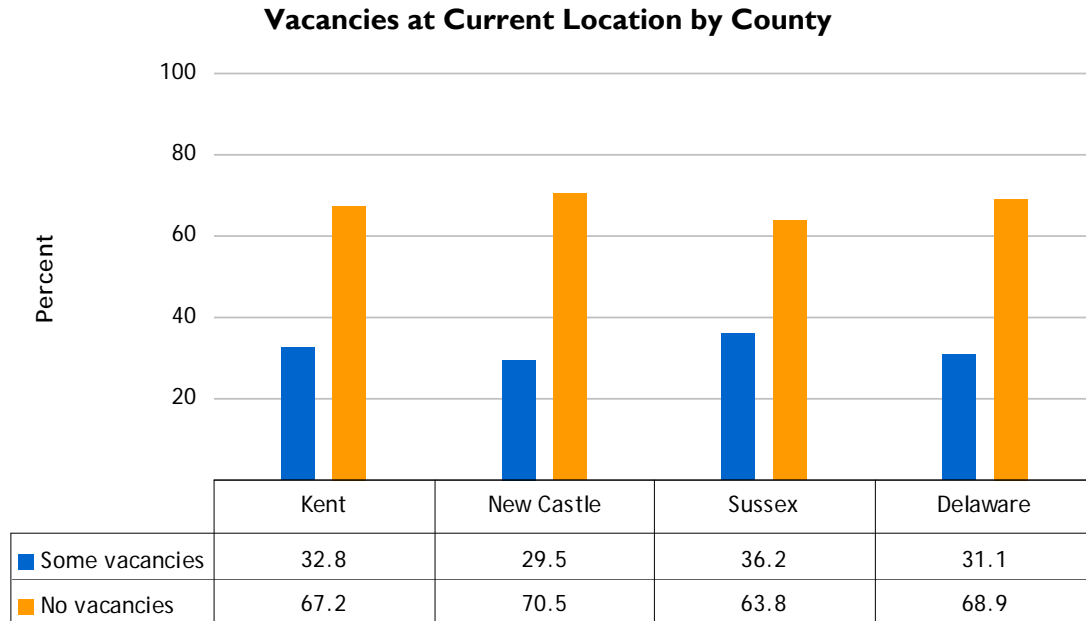


Source: Center for Applied Demography & Survey Research
University of Delaware

Allied health professionals were next asked to report the number of other allied health professionals with the same occupation employed at their current location. Results are tabulated in Figure 2.17. Differences among counties are minimal. For Delaware, 16% of allied health professionals indicated being the only one at the location in the same line of work. Almost half (48%) indicated having 2-10 colleagues with the same profession at their current place of employment. About a quarter of respondents indicated working with more than 10 colleagues of the same profession at their place of employment.

Survey respondents next indicated if vacancies existed at their place of employment along with the number of these vacancies. The results are presented in Figure 2.18 and Figure 2.19. Around 70% of allied health professionals indicated that there are vacancies at their place of employment. Please note the possible double count of vacancies since these are reported by individual health professionals rather than health facilities. Three quarters of allied health professionals indicated four or more vacancies.

Figure 2.18



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

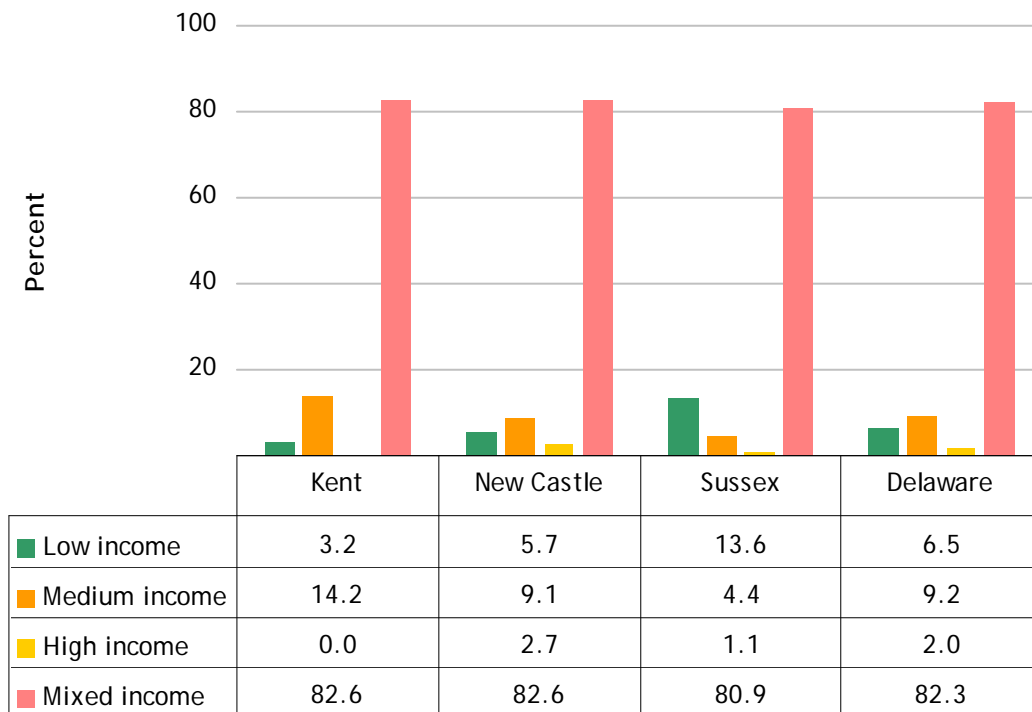
Figure 2.19
Number of Vacancies of the Same Profession
at Current Location by County



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

Allied health professionals were asked to indicate the perceived income level of patients that they encounter at the place of employment. Please note that responses to this question are likely to be subjective and thus should be used with caution. In general, an overwhelming majority (82%) of allied health professionals indicated serving clients with mixed income. Only 2% of allied health professionals indicated serving high income clients while low income clients are being served by almost 7% of allied health professionals. The difference between counties is the proportion of low income (3%) in Kent vs. 14% in Sussex and medium income in Kent (14%) and 4% in Sussex.

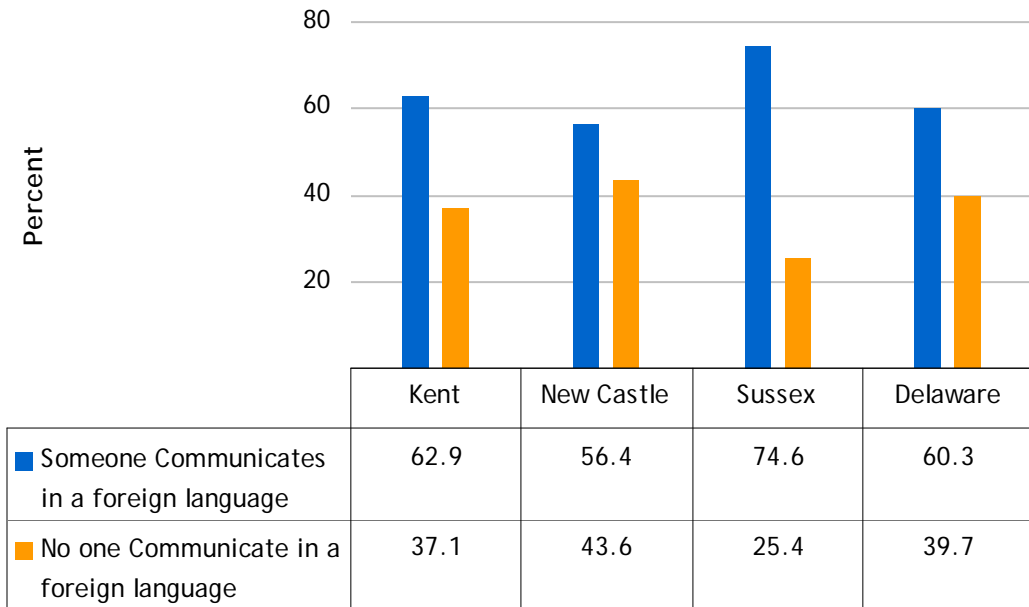
Figure 2.20
Income Level of Clients Served
at the Location by County



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

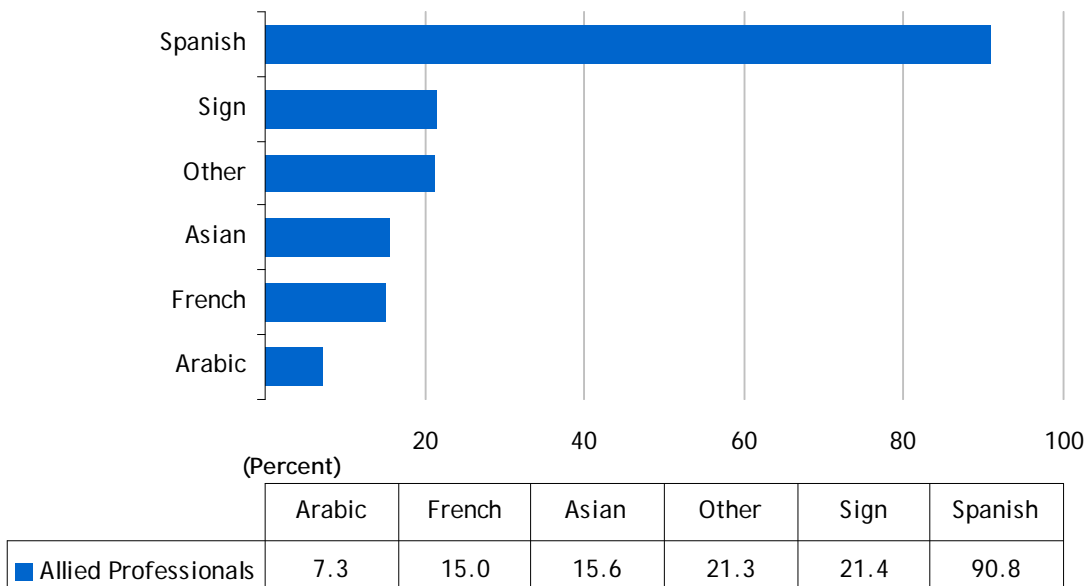
As demographic changes occur in Delaware, the ability of the health workforce to communicate in languages other than English is gaining importance. Respondents were asked to indicate if there is someone at their place of employment who can communicate in a language other than English along with the language spoken. Results are presented in Figure 2.21 and 2.22. On average, for Delaware, 60% of respondents indicated having someone at their place of employment who can communicate in a language other than English. Differences among counties are significant, with New Castle County’s allied health professionals indicating the lowest proportion of foreign language ability. Spanish has been indicated as the language spoken by 90% of respondents.

Figure 2.21
Ability to Communicate in Languages Other than English by Someone at Current Location by County



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

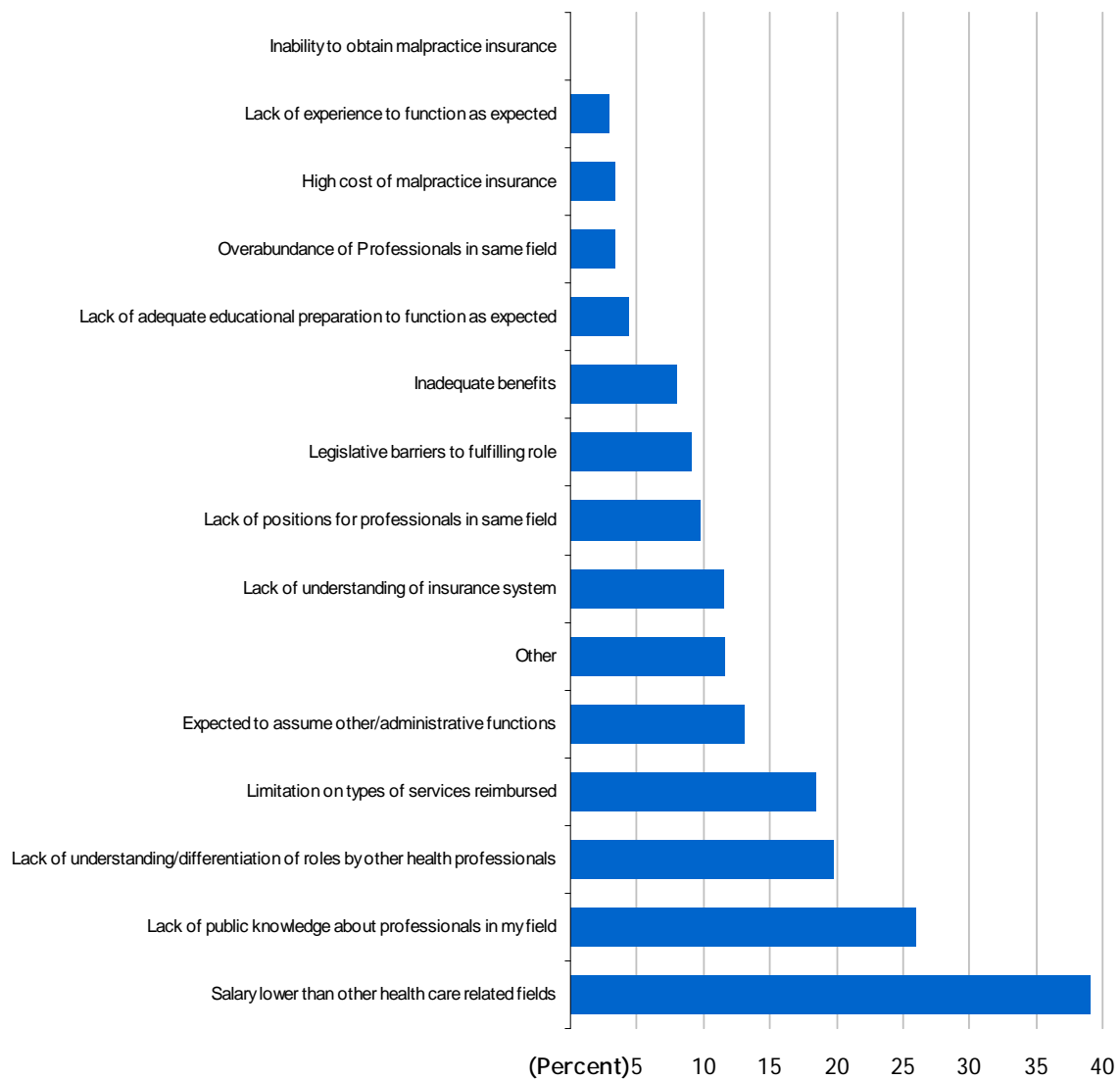
Figure 2.22
Languages Spoken at Current Location



Source: Center for Applied Demography & Survey Research

Allied health professionals responding to the survey were given a list of 15 potential barriers they might be experiencing at work. The tabulation of responses is presented in Figure 2.23 (the sum of the percentages does not add up to 100% because respondents could indicate more than one barrier). Overall 75% (not pictured here) of allied health professionals indicated at least one barrier they experience at work. The most commonly selected barriers among allied health professionals are: low salary compared to other health professionals (40%), lack of public knowledge about professionals in the field (26%), lack of understanding of roles by other health professionals (20%), and limitation on types of services reimbursed (19%).

Figure 2.23
Barriers in Work as Allied Health Professional



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

APPENDIX

1. In what program did you receive your basic professional education as a Physical Therapist? (check ONE)

- 1 High school
- 2 Associate degree
- 3 Baccalaureate degree
- 4 Master's degree
- 5 Post master's certificate
- 6 Doctoral degree
- 7 Other

2. In what year did you graduate from the above professional program?

[year]

3. In what State was the institution located where you received your basic professional education as a Physical Therapist? (if outside of the US, indicate country)

[State]

4. What is your highest degree? (check ONE)

- 1 GED
- 2 High school
- 3 Associate degree
- 4 Bachelor's degree
- 5 Master's degree
- 6 Post master's certificate
- 7 Doctoral degree
- 8 Other

5. What is the form of your primary employment?

(check all that apply)

- 1 Self-employed:
 - 1 Solo practice
 - 2 Partner of group practice
 - 3 Other
- 2 Salaried, employed by:
 - 1 Individual practitioner
 - 2 Partnership or group practitioners
 - 3 Group health plan facility (HMO, PPO, etc.)
 - 4 Other non-govt (hospital, school, etc.)
 - 5 Federal government
 - 6 Federally qualified health center
 - 7 State government
 - 8 Other

6. What is the setting of your primary employment? (check all that apply)

- 1 Clinical care setting:
 - 1 Practitioner's office (solo, partner of group)
 - 2 Hospital (except federal)
 - 3 Nursing home
 - 4 Freestanding clinic (administratively distinct from a hospital, nursing home, etc.)
 - 5 Federally qualified health center
 - 6 Treatment facility for the handicapped or disabled
 - 7 Other
- 2 Federal health facility:
 - 1 Veterans' administration (VA hospital)
 - 2 Other
- 3 School:
 - 1 School-based health clinic
 - 2 Primary or secondary school site; school district
 - 3 School of medicine
 - 4 Other university or college
 - 5 Other
- 4 Miscellaneous Setting:
 - 1 Medical research institution or establishment
 - 2 Professional association
 - 3 Administrative duties in a managed care setting (e.g.: HMO, PPO, etc.)
 - 4 Manufacturing or industrial establishment
 - 5 Other

7. Are you currently working in Delaware as a Physical Therapist? (check ONE)

- 1 Yes, full-time
- 2 Yes, part-time
- 3 No, employed in another state (Specify State)
 [State]
- (GO TO QUESTION 23)
- 4 No, but employed in health care (GO TO QUESTION 23)
- 5 No, employed in another field (other than health care) (GO TO QUESTION 23)
- 6 No, not employed (GO TO QUESTION 23)
- 7 No, recent graduate (GO TO QUESTION 23)
- 8 No, retired (GO TO QUESTION 23)
- 9 No, other (GO TO QUESTION 23)

8. How many years have you been a practicing Physical Therapist?

_____ [years]

9. What is the facility name and address where you are employed as a Physical Therapist?

Facility Name

Address

City, State, Zip

10. How many years have you been working at the above location?

_____ [years]

11. On average, how many hours per week do you work at the above location (employed as a Physical Therapist)?

_____ [Total hours per week working as a Physical Therapist]

12. Keeping in mind the number of hours you work at the above location, how many hours per week do you spend on each of the following activities (employed as a Physical Therapist)?

_____ hours per week – Direct patient care or services and related paperwork

_____ hours per week – Administration and related paperwork

_____ hours per week – Teaching

_____ hours per week – Research

_____ hours per week – Other

13. How many other Physical Therapists are currently employed at the facility where you are employed?

_____ [count]

14. Are there currently any Physical Therapist vacancies at the above location? (check ONE)

Yes

If YES, please indicate the number of these vacancies at the above location.

_____ [number of vacancies]

No

15. Are there people at this site who have the ability to communicate with patients in a language other than English?

Yes

If YES, which one? (check all that apply)

Spanish

French

Arabic

Asian (any Asian language)

Sign Language

Other

No

16. Does this facility mainly serve low income, medium income, or high income clientele, or is the clientele served at this facility diverse in terms of income?

(check ONE)

Low Income

Medium Income

High income

Mixed Income

17. Is a sliding fee scale in which the professional fee is based upon the patient's family income offered at this facility? (check ONE)

Yes

No

Not applicable

18. Are you treating MEDICARE patients at this facility?

(check ONE)

Yes

No

Not applicable

19. Are you treating MEDICAID patients at this facility?

(check ONE)

Yes

No

Not applicable

20. Does your facility participate in the Voluntary Initiative Program (VIP). (VIP is a network of physicians who accept Community Healthcare Access Program (CHAP) patients.) (check ONE)

- 1 Yes
- 2 No
- 3 Not applicable

21. Does your practice or facility use computers for any of the following (check all that apply):

- 1 Billing
- 2 Scheduling
- 3 E-mail
- 4 Internet
- 5 Electronic patient records
- 6 Electronic order entry
- 7 E-prescribing
- 8 Electronic lab/radiology result reporting
- 9 Other

22. Which (if any) of the following barriers are you experiencing in your work as a Physical Therapist? (check all that apply)

- 1 Salary lower than other health care related fields
- 2 Overabundance of professionals in same field
- 3 Lack of positions for professionals in same field
- 4 Lack of adequate educational preparation to function as expected
- 5 Lack of experience to function as expected
- 6 Lack of understanding of the insurance system
- 7 Expected to assume other/administrative functions
- 8 Lack of understanding/differentiation of all Physical Therapist roles by other health professionals
- 9 Lack of public knowledge about professionals in my field
- 10 High cost of malpractice insurance
- 11 Inability to obtain malpractice insurance
- 12 Limitation on types of services reimbursed
- 13 Legislative barriers to fulfilling role
- 14 Inadequate benefits
- 15 Other

23. Do you expect to be an active Physical Therapist in Delaware 5 years from now?

- 1 Yes
- 2 No
- 3 Unsure

If NO or UNSURE, please check your **primary** reason below: (check ONE)

- 1 Retirement (**GO TO QUESTION 25**)
- 2 Change Careers (**GO TO QUESTION 25**)
- 3 Stress/Burnout (**GO TO QUESTION 25**)
- 4 Physical Demand (**GO TO QUESTION 25**)
- 5 Family Reasons (**GO TO QUESTION 25**)
- 6 Return to School (**GO TO QUESTION 25**)
- 7 Financial Reasons (**GO TO QUESTION 25**)
- 8 Other (please specify):

(GO TO QUESTION 25)

24. Do you expect to be an active Physical Therapist in Delaware 10 years from now?

- 1 Yes
- 2 No
- 3 Unsure

If NO or UNSURE, please check **your primary** reason below: (check ONE)

- 1 Retirement
- 2 Change Careers
- 3 Stress/Burnout
- 4 Physical Demands
- 5 Family Reasons
- 6 Return to School
- 7 Financial Reasons
- 8 Other (please specify):

25. What is your date of Birth?

___ / ___ / ___ [month / day / year]

26. What is your gender? (check ONE)

- 1 Male
- 2 Female

27. Are you of Hispanic Origin? (check ONE)

- 1 Yes
- 2 No

28. What is your race? (check ONE)

- 1 Caucasian or White
- 2 Black or African American
- 3 American Indian/Alaskan native
- 4 Asian
- 5 Native Hawaiian or Pacific Islander
- 6 Other

29. What State did you reside in at the time of high school graduation? (if outside of the US, indicate country)

_____ [State]

30. What is the address of your current residence?

Address

City, State, Zip

31. If you have any comments, please feel free to include them in the space provided below.

THANK YOU for helping us with this survey.
Please mail the completed survey to the Center
for Applied Demography & Survey Research in
the enclosed postage-paid envelope

1. In what program did you receive your initial education as a Pharmacist? (check ONE)

- 1 BS in Pharmacy
- 2 Pharm D
- 3 Other (Specify) _____

2. In what year did you graduate from the above Pharmacist program?

_____ [year]

3. In what State was the institution located where you received the above Pharmacist education? (if outside of the US, indicate country)

_____ [State]

4. Have you completed a residency program? (check ONE)

- 1 Yes
- 2 No

5. What is your highest degree? (check ONE)

- 1 Bachelor's degree
- 2 Master's degree
- 3 Post master's certificate
- 4 Doctoral degree
- 5 Other

6. What is the setting of your principal employment? (check all that apply)

- 1 Independent pharmacy
- 2 Small Chain pharmacy
- 3 Chain pharmacy
- 4 Clinic/medical building
- 5 Nursing home
- 6 Hospital
- 7 Government hospital
- 8 Government
- 9 Manufacturing
- 10 Wholesale
- 11 Teaching
- 12 Sales
- 13 Research
- 14 Other

7. What is the form of your employment? (check ONE)

- 1 Pharmacist – manager
- 2 Pharmacist – employee
- 3 Clinical Pharmacist practitioner
- 4 Patient Care Pharmacist (Hospital)
- 5 Other

8. Are you currently working in Delaware as a Pharmacist? (check ONE)

- 1 Yes, full-time
- 2 Yes, part-time
- 3 No, employed in another state (Specify State) _____ [State]
(Go to question 19)
- 4 No, but employed in health care **(Go to question 19)**
- 5 No, employed in another field (other than health care) **(Go to question 19)**
- 6 No, not employed **(Go to question 19)**
- 7 No, recent graduate **(Go to question 19)**
- 8 No, retired **(Go to question 19)**
- 9 No, other **(Go to question 19)**

9. How many years have you been a practicing Pharmacist?

_____ [years]

10. What is the facility name and address where you are employed as a Pharmacist?

Facility Name _____

Address _____

City, State, Zip _____

11. How many years have you been working at the above location?

_____ [years]

12. On average, how many hours per week do you work at the above location (employed as a Pharmacist)?

[Total hours per week working as a Pharmacist]

13. Keeping in mind the number of hours you work at the above location, how many hours per week do you spend on each of the following activities (employed as a Pharmacist)?

hours per week – Administration
 hours per week – Providing information to prescribers and institutional clients
 hours per week – Providing information to patients
 hours per week – Dispensing prescriptions
 hours per week – Teaching or research
 hours per week – Manufacturing or bulk compounding
 hours per week – Retailing non health merchandise
 hours per week – Other

14. How many other Pharmacists are currently employed at the facility where you are employed?

[count]

15. Are there currently any Pharmacist vacancies at the above location?

Yes

If YES, please indicate the number of Pharmacist vacancies at the above location.

[number of vacancies]

No

16. Are there people at this site who have the ability to communicate with patients in a language other than English?

Yes

If YES, which one? (check all that apply)

- Spanish
 French
 Arabic
 Asian (any Asian language)
 Sign Language
 Other

No

17. Does this site mainly serve low income, medium income, or high income clientele, or is the clientele served at this facility diverse in terms of income?

(check ONE)

- 1 Low Income
 2 Medium Income
 3 High income
 4 Mixed Income

18. Which (if any) of the following barriers are you experiencing in your work as a Pharmacist?

(check all that apply)

- 1 Salary lower than other health care related fields
 2 Overabundance of Pharmacists
 3 Lack of positions for Pharmacists
 4 Lack of adequate educational preparation to function as expected
 5 Lack of experience to function as expected
 6 Lack of understanding of the insurance system
 7 Expected to assume other/administrative functions
 8 Lack of understanding/differentiation of all Pharmacist roles by other health professionals
 9 Lack of public knowledge about Pharmacists
 10 High cost of malpractice insurance
 11 Inability to obtain malpractice insurance
 12 Limitation on types of services reimbursed
 13 Legislative barriers to fulfilling Pharmacist role
 14 Inadequate benefits
 15 Other

19. Do you expect to be an active Pharmacist in Delaware 5 years from now?

- 1 Yes
 2 No
 3 Unsure

If NO or UNSURE, please check your **primary** reason below: (check ONE)

- 1 Retirement (**Go to question21**)
 2 Change Careers (**Go to question21**)
 3 Stress/Burnout (**Go to question21**)
 4 Physical Demand (**Go to question21**)
 5 Family Reasons (**Go to question21**)
 6 Return to School (**Go to question21**)
 7 Financial Reasons (**Go to question21**)
 8 Other (please specify):

(Go to question21)

20. Do you expect to be an active Pharmacist in Delaware 10 years from now?

- 1 Yes
- 2 No
- 3 Unsure

If NO or UNSURE, please check your **primary** reason below: (check ONE)

- 1 Retirement
- 2 Change Careers
- 3 Stress/Burnout
- 4 Physical Demands
- 5 Family Reasons
- 6 Return to School
- 7 Financial Reasons
- 8 Other (please specify):

21. What is your date of Birth?

/ / [month / day / year]

22. What is your gender? (check ONE)

- 1 Male
- 2 Female

23. Are you of Hispanic Origin? (check ONE)

- 1 Yes
- 2 No

24. What is your race? (check ONE)

- 1 Caucasian or White
- 2 Black or African American
- 3 American Indian/Alaskan native
- 4 Asian
- 5 Native Hawaiian or Pacific Islander
- 6 Other

25. What State did you reside in at the time of high school graduation? (if outside of the US, indicate country)

[State]

26. What is the address of your current residence?

Address

City, State, Zip

27. If you have any comments, please feel free to include them in the space provided below.

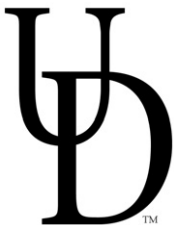
THANK YOU for helping us with this survey. Please mail the completed survey to the Center for Applied Demography & Survey Research in the enclosed postage-paid envelope

Center for Applied Demography & Survey Research
College of Human Services, Education & Public Policy
University of Delaware
287 Graham Hall
Newark, DE 19716

phone: **302-831-8406** fax: **302-831-6434**

www.cadsr.udel.edu

Center for Applied Demography & Survey Research (CADSR) is a project - oriented, policy analysis and survey research center. The Center's primary mission is to ensure that the best possible data and information on important public issues are developed and made available to members of the College, its clients, and, most importantly, to the policy-makers who affect the way we all live and work in Delaware. This mission is accomplished in four different ways: by acting as a clearinghouse for large data sets supplied by local, state, regional, and federal agencies; by maintaining an active survey research capability; by developing and designing custom databases of text, graphical information (including both raster and vector data), drawn from client files; and by using an array of information system technologies.



An Equal Opportunity/Affirmative Action Employer

The University of Delaware is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, color, gender, religion, ancestry, national origin, sexual preference, veteran status, age, or disability in its educational programs, activities, admissions, or employment practices as required by Title IX of the Educational Amendments of 1972, Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, the Americans with Disabilities Act, other applicable statutes, and University policy. Inquiries concerning these statutes and information regarding campus accessibility and Title VI should be referred to the Affirmative Action Officer, 305 Hullihen Hall, 302/831-2835 (voice), 302/831-4552(TDD).