

# Delaware Primary Care Health Needs Assessment 2015

**Assessing populations and areas with unmet health care needs, disparities, and access barriers to support designations of health professional shortage areas and the recruitment and retention of primary care providers**



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**Prepared by the Delaware Division of Public Health, State Office of Primary Care  
for the Health Resources and Services Administration**



**DELAWARE HEALTH AND SOCIAL SERVICES**  
**Division of Public Health**

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## Introduction

The Division of Public Health's (DPH) Office of Primary Care (OPC) received a "Primary Care Services Resource Coordination and Development Primary Care Office" (PCO) grant from the federal Health Resources and Services Administration, U.S. Department of Health and Human Services. The Delaware PCO is located within the Department of Health and Social Services (DHSS) and supported by the Office of Health Planning and Resources Management.

The overarching purpose of the grant is to improve access to primary care service delivery and health care workforce availability to meet the needs of underserved and vulnerable populations in Delaware. The Delaware PCO supports the Federally Qualified Health Centers and other safety-net providers in their efforts to increase their capacity to treat underserved patients. The PCO supports the overarching program goals, in part, by conducting a statewide primary care needs assessment, conducting shortage designation coordination, and ensuring technical assistance and collaboration that seeks to expand access to primary care.

The submission of a primary care needs assessment report to the HRSA is a recent grant requirement. The PCO expects this report to benefit HRSA and Delaware's health care community.

The report is based on research conducted by the Delaware PCO and uses national and state statistical reports and health care measures and hospital community needs assessments. The research also includes coordination with the Title V Maternal and Child Health Care's recently completed five-year needs assessment, and listening sessions with key stakeholder safety net organizations. Data and information also was mined using the Delaware Health Tracker, which is described below.

*"Delaware Health Tracker, at [www.delawarehealthtracker.com](http://www.delawarehealthtracker.com), brings non-biased data, local resources, and a wealth of information to one accessible, user-friendly location. It can help hospitals, community members, and policy-makers learn about the health and well-being of Delaware communities, and can give our communities the tools they need to read and understand public health issues affecting the quality of life in Delaware. The tools can also help communities set goals and evaluate progress. Delaware Health Tracker data is updated whenever source data is updated, which lessens the likelihood of using outdated data where possible. Sources of data include, among others, Behavioral Risk Factor Surveillance System, American Community Survey, U.S. Census Bureau, National Cancer Institute, Community Health Rankings, etc."*

*Delaware Health Tracker is an initiative of the Delaware Healthcare Association, and it is funded and supported by many Delaware hospitals.*

Contact information: The PCO's phone number is 302-744-4555. Its website address is:

<http://www.dhss.delaware.gov/dhss/dph/hsm/pcohome.html>. Information about health professional shortage areas, medically underserved areas, provider recruitment resources, community health centers, and reports on health care are available at the site.

## General Characteristics of Delaware

### Location and Size

Delaware, located in the northeastern region of the United States, is the second smallest state in the nation. Its total land area is 1,983 square miles. It has three counties: New Castle County, Kent County, and Sussex County. The state is 96 miles in length and 35 miles in width at its widest point.

Delaware became the first state of the United States, as the first of the 13 colonies to ratify the constitution on December 7, 1787.

The state capitol, Dover, is located in Kent County, in central Delaware. Wilmington, in New Castle County, is the largest city. In southern Delaware, western Sussex County is largely agricultural and rural, while eastern and coastal Sussex County is more metropolitan and attracts tourists and Delawareans to its beaches.

### Population

In 2014, Delaware's population was approximately 935,614: 71 percent white, 22 percent black, and 9 percent Hispanic, according to the U.S. Census Bureau. Almost 88 percent of the population age 25 or older is a high school graduate or higher, and almost 30 percent hold a bachelor's degree or higher.

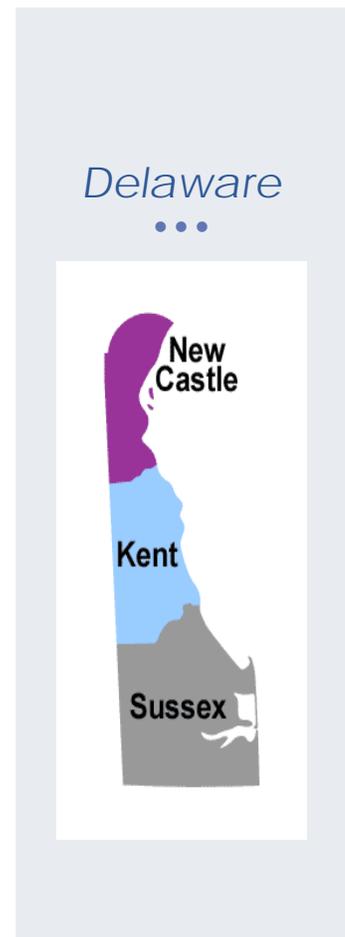
The median household income for 2009-2013 was \$59,878. For the same period, the percent of persons with income below the federal poverty level was 11.7 percent.

In 2013, 22 percent of Delawareans were under 18 years old, almost 16 percent were 65 years old or older, and just a little over half of the population was female (51.6 percent).

The U.S. Census Bureau forecasts Delaware's population to increase by 229,058 people between the 2000 and 2030, reaching just under 1.013 million in 2030 -- a 29.2 percent increase over the 2000 population of 783,600.

The Delaware Population Consortium (DPC) is an informal, cooperative organization including state, county, and local governments that produces an annual, common set of population and household projections for the state, counties, and major municipalities.

(Visit [http://stateplanning.delaware.gov/information/dpc\\_projections.shtml](http://stateplanning.delaware.gov/information/dpc_projections.shtml).)



According to the consortium, Delaware's population, like America's, is aging -- only more so. Some of the increase in the senior population is driven by Delaware's baby boomers -- generally defined as those born between 1946 and 1964 -- who are aging in place. However, some of the increase is fueled by senior citizens moving to Delaware. Delaware's relatively low taxes for the region, moderate weather, and proximity to New York, Washington D.C, and Philadelphia make it an attractive retirement location. Delaware's population is also becoming more racially and ethnically diverse. The DPC estimates that the black, non-Hispanic population will number 200,873 in 2015 and grow by 12,780 persons by 2020. The Hispanic population will grow from 86,818 to 101,645 by 2020, an increase of 14,827. The white population will grow from 494,399 to 600,090 persons. The total projected 2020 population of 979,216 will be 61 percent white, 21 percent black, and 10 percent Hispanic. The remaining Delawareans will fall into categories of individuals reporting other races, including two or more races.

### **Delaware State Health Rankings**

Delaware is ranked as the 32nd healthiest state in *American's Health Rankings® 2015 Edition*, produced by the United Health Foundation with its partners at the American Public Health Association and Partnership for Prevention. The World Health Organization defines health as: "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." Using that definition, the analysis is based on the premise that social determinants of health directly influence health outcomes. The determinants are divided into four categories: behavior, community and environment, policy, and clinical care. The analysis uses data on such factors as the prevalence of smoking and obesity, poverty rates, physical activity, the availability of primary care physicians and dentists, the percent of low birthweight infants, the prevalence of diabetes, high school graduation rates, and more.

Delaware has much work to do if it is to meet its stated goal of being one of the five healthiest states in the nation by 2019. Its "Triple Aim" strategy is expected to improve the health of Delawareans, improve health care quality and patient experience, and reduce health care costs.

According to the *America's Health Rankings® 2015 Edition*, Delaware's overall rank of 32 includes a determinants rank of 31 and an outcomes rank of 34. Delaware's 2015 ranking is better than its 2014 ranking of 35 but worse than its 2013 ranking of 31.

Delaware's strengths include high per capita public health funding, high immunization coverage among teens, and a low incidence of pertussis. Challenges are its high prevalence of diabetes, its high infant mortality rate, and its high violent crime rate.

The number of primary care physicians per 100,000 population was 114.3 in 2015, compared to Massachusetts with 206.7 primary care physicians per 100,000 population. Delaware dentists per 100,000 population was 45.4, in 2015, compared to New Jersey's dental provider coverage of 81.2. Preventable hospitalizations (number per

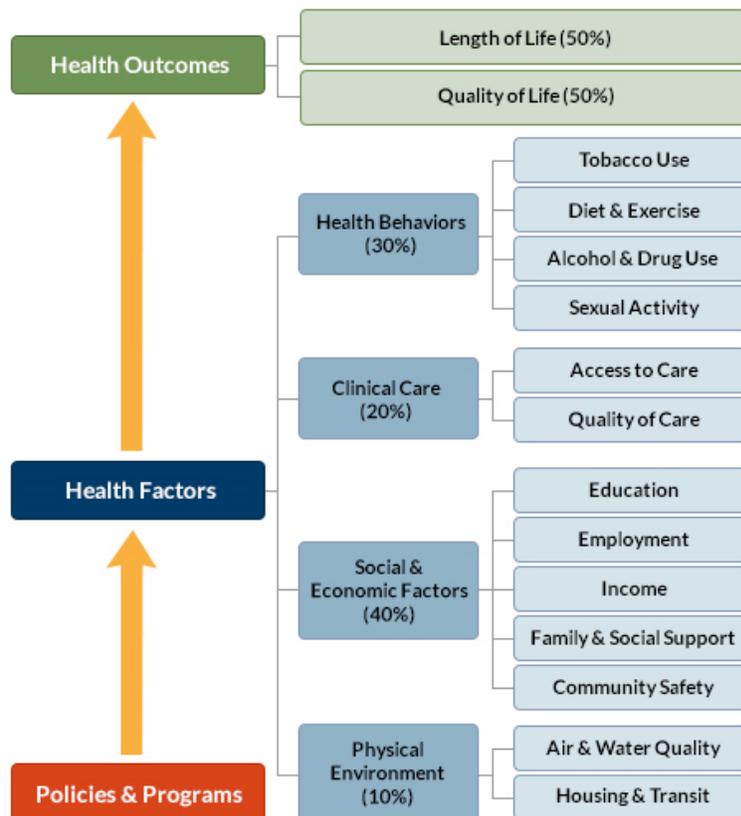
1,000 Medicare beneficiaries) stood at 53.3 in 2015, compared to 24.4 for Hawaii. The percent of low birthweight (percent of live births) was 8.3, compared to Alaska at 5.8.

## Delaware County Health Rankings

County Health Rankings, at [www.countyhealthrankings.org](http://www.countyhealthrankings.org), is an annual Robert Wood Johnson assessment program. The Delaware State Office of Primary Care reviewed this resource to help understand Delaware's health rankings at the county level. The County Health Rankings measure the health of nearly all counties in the nation and rank them within states. The rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights. The determinants are divided into four categories.

For rankings on both health outcomes and health factors, Sussex County is ranked as the healthiest of the three counties, New Castle County is the second healthiest, and Kent County ranked third as the least healthy county. (See Figure 1.)

**Figure 1. County Health Rankings Model of Population Health**



Source: County Health Rankings

Health outcomes are based on equal weighting of length and quality of life. Ranks for health factors are based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment.

**Table 1. 2015 County Health Rankings on Select Clinical Care and Health Behavior Factors**

	New Castle County	Sussex County	Kent County	Top U.S. Performers	Delaware
Preventable Hospital Stays	54	51	60	41	54
Diabetic Monitoring	84%	87%	86%	90%	85%
Mammography Screening	67%	72.6%	69.3%	70.7%	69.7%
Adult Smoking	16%	20%	21%		20%
Adult Obesity	26%	31%	33%		28%
Excessive Drinking	22%	18%	26%		20%

Source: 2015 County Health Rankings, Delaware

## Healthy 2020 Goals – How Delaware Fares

### Access to Care

According to Healthy People 2020, “Medical costs in the United States are extremely high, so people without health insurance may not be able to afford medical treatment or prescription drugs. They are also less likely to get routine checkups and screenings, so if they do become ill they will not seek treatment until the condition is more advanced and therefore more difficult and costly to treat. Many small businesses are unable to offer health insurance to employees due to rising health insurance premiums. The Healthy People 2020 national health target is to increase the proportion of people with health insurance to 100 percent.”

**Table 2. Adults with Health Insurance, in Delaware, by County, 2014**

<b>The HP2020 Target: 100 percent</b>	
Kent County	90.1%
New Castle County	90.2%
Sussex County	87.0%

Source: American Community Survey, 2015

**Table 3. Children with Health Insurance, in Delaware, by County, 2014**

<b>The HP2020 Target: 100 percent</b>	
Kent County	94.1%
New Castle County	94.5%
Sussex County	93.7%

Source: American Community Survey, 2015

In February 2015, the Gallup Healthways Well-Being survey found that Delaware’s uninsured rate dropped from 10.5 percent in 2013 to 9.6 percent in 2014. The Kaiser Family Foundation reported in *The Wall Street Journal* that at the end of the 2015 open enrollment period, in February 2015, 52 percent of Delawareans eligible for Marketplace coverage had enrolled. These statistics were presented by DHSS Secretary Rita Landgraf during the Delaware Health Care Commission’s April 2015 meeting.

Cancer

**Table 4. Age-Adjusted Death Rate Due to Breast Cancer, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 20.7 deaths/100,000 population</b>	
Kent County	26.3
New Castle County	21.8
Sussex County	20.2

Source: National Cancer Institute, 2014

**Table 5. Age-Adjusted Death Rate Due to Colorectal Cancer, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 14.5 deaths/100,000 population</b>	
Kent County	16.3
New Castle County	15.0
Sussex County	13.1

Source: Delaware Health Tracker, National Cancer Institute, 2014

**Table 6. Age-Adjusted Death Rate Due to Lung Cancer, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 45.5 deaths/100,000 population</b>	
Kent County	59.4
New Castle County	52.3
Sussex County	54.5

Source: Delaware Health Tracker, National Cancer Institute, 2014

**Table 7. Age-Adjusted Death Rate Due to Prostate Cancer, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 21.8 deaths/100,000 males</b>	
Kent County	22.0
New Castle County	24.0
Sussex County	20.9

Source: Delaware Health Tracker, National Cancer Institute, 2014

**Table 8. Cervical Cancer Incidence Rate, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 7.1 deaths/100,000 females</b>	
Kent County	9.4
New Castle County	8.9
Sussex County	8.2

Source: Delaware Health Tracker, National Cancer Institute, 2014

**Table 9. Colorectal Cancer Incidence Rate, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 38.6 deaths/100,000 population</b>	
Kent County	43.0
New Castle County	39.2
Sussex County	39.6

Source: Delaware Health Tracker, National Cancer Institute, 2014

Heart Disease and Stroke

**Table 10. Age Adjusted Death Rate due to Cerebrovascular Disease (Stroke), in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 34.8 deaths/100,000 population</b>	
Kent County	36.7
New Castle County	43.4
Sussex County	28.8
State of Delaware	37.7

Source: Delaware Health Tracker, Delaware Department of Health and Social Services, Division of Public Health, Vital Statistics Report, 2011

**Table 11. High Blood Pressure Prevalence, in Delaware, by County, 2013**

<b>The HP2020 Target: 26.9 percent/adults age 18 years and older</b>	
Kent County	39.2%
New Castle County	32.3%
Sussex County	38.4%
State of Delaware	35.6%

Source: Delaware Health Tracker, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System Survey Data, 2014

**Table 12. High Cholesterol Prevalence, in Delaware, by County, 2013**

<b>The HP2020 Target: 13.5 percent/adults age 20 years and older</b>	
Kent County	40.5%
New Castle County	38.8%
Sussex County	45.1%
State of Delaware	40.6%

Source: Delaware Health Tracker, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System Survey Data, 2014

Maternal and Child Health

**Table 13. Babies with Low Birth Weight, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 7.8%</b>	
Kent County	8.3%
New Castle County	8.9%
Sussex County	7.9%
State of Delaware	8.6%

Source: Delaware Department of Health and Social Services, Division of Public Health, Vital Statistics Report 2012

**Table 14. Infant Mortality Rate, in Delaware, by County, 2008-2012**

<b>The HP2020 Target: 6.0 deaths/1,000 live births</b>	
Kent County	7.6
New Castle County	9.3
Sussex County	5.2
State of Delaware	8.1

Source: Delaware Department of Health and Social Services, Division of Public Health, Vital Statistics Report 2012

**Table 15. Mothers who Received Early Prenatal Care, in Delaware, by County, 2005-2009**

<b>The HP2020 Target: 77.9%</b>	
Kent County	68.7%
New Castle County	82.6%
Sussex County	59.8%
State of Delaware	77.9%

Source: Delaware Health Tracker, Delaware Department of Health and Social Services, Division of Public Health, Vital Statistics Report

Mental Health and Mental Disorders

**Table 16. Age-Adjusted Death Rate due to Suicide, in Delaware, by County, 2007-2011**

<b>The HP2020 Target: 10.2 deaths/100,000 population</b>	
Kent County	11.3
New Castle County	10.7
Sussex County	13.1
State of Delaware	11.3

Source: Delaware Health Tracker, Delaware Department of Health and Social Services, Division of Public Health, Vital Statistics Report 2011

**OBESITY**

**Table 17. Adults who are Obese, in Delaware, by County, 2014**

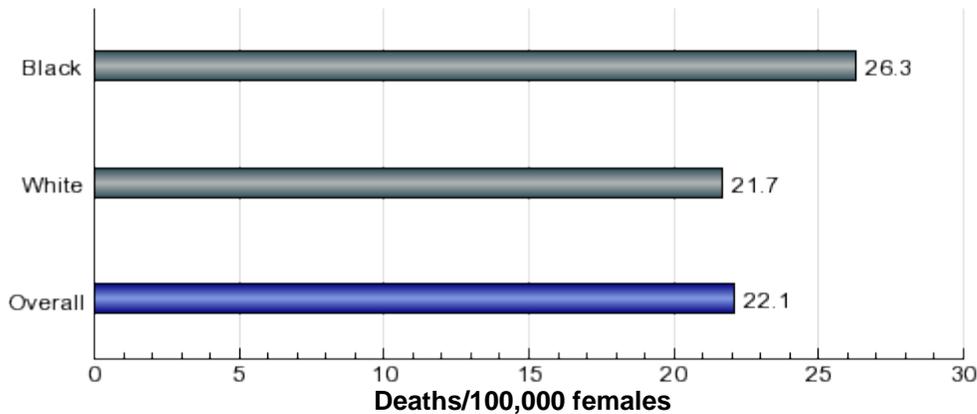
<b>The HP2020 Target: 30.5 percent</b>	
<b>County/State</b>	<b>Percent</b>
Kent County	31.9
New Castle County	26.8
Sussex County	31.8
State of Delaware	28.8

Source: Delaware Health Tracker, Behavioral Risk Factor Surveillance System

## Health Disparities

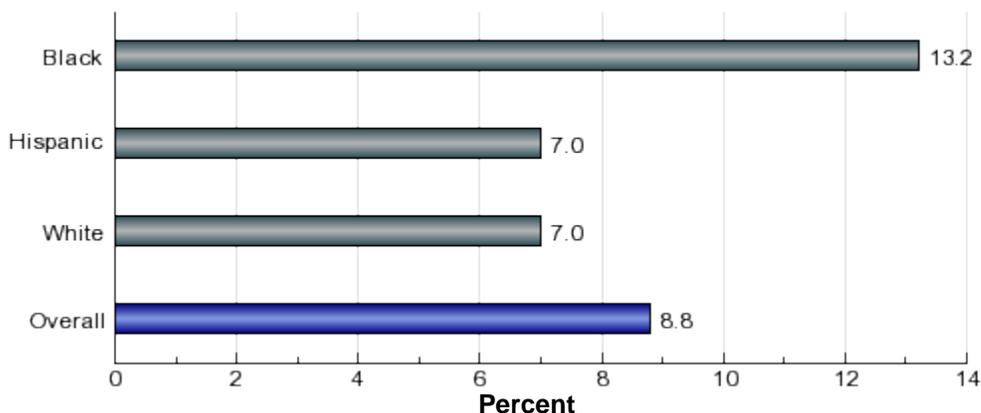
Health disparities refer to differences in the health status of different groups of people. Some groups of people have higher rates of certain diseases, and more deaths and suffering from them. The following tables detail health disparities from reliable sources.

**Figure 2. Age-Adjusted Death Rate due to Breast Cancer by Race/Ethnicity, in Delaware, 2007-2011, The HP2020 Target: 20.7/100,000 Females**



Source: Delaware Health Tracker, National Cancer Institute

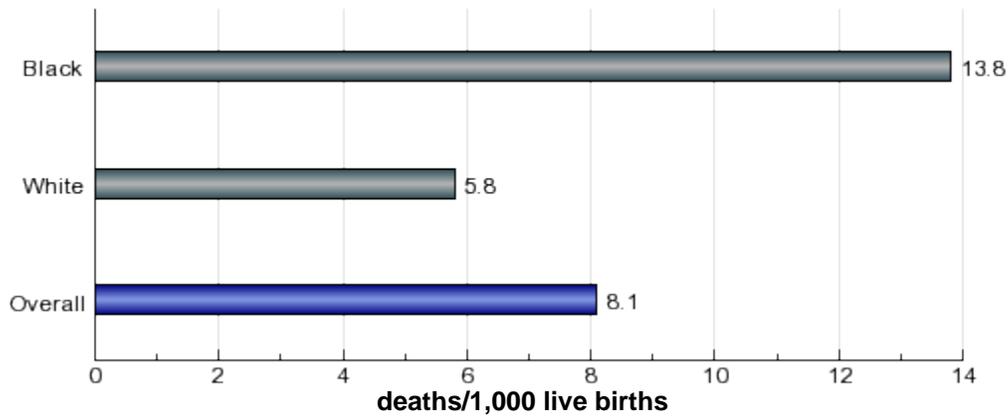
**Figure 3. Babies with Low Birth Weight by Maternal Race/Ethnicity, in Delaware, 2007-2011, The HP2020 Target: 7.8 percent**



Source: Delaware Health Tracker, Delaware Department of Health and Social Services, Division of Public Health, Delaware Vital Statistics Report, 2011

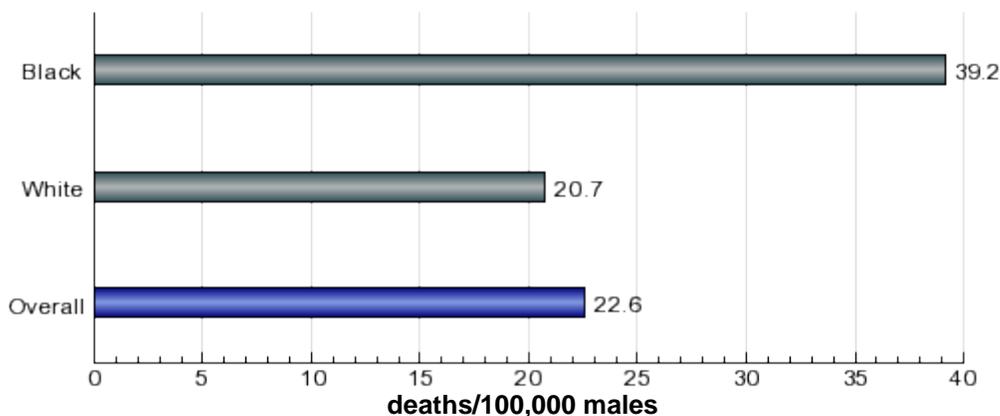
Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in the neonatal intensive care unit. Low birth weight is typically caused by premature birth and fetal growth restriction, both of which are influenced by a mother's health and genetics. The most important things an expectant mother can do to prevent low birth weight are to seek prenatal care, take prenatal vitamins, stop smoking, and stop drinking alcohol and using drugs.

**Figure 4. Infant Mortality Rate by Race/Ethnicity, in Delaware, 2007-2011, The HP2020 Target: 6.0/1,000 live births**



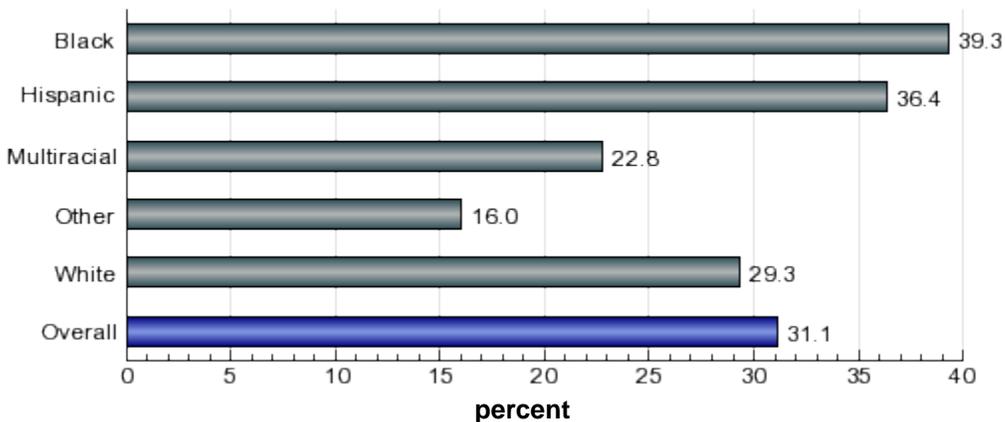
Source: Delaware Health Tracker, Delaware Department of Health and Social Services, Division of Public Health, Delaware Vital Statistics Report 2011

**Figure 5. Age-Adjusted Death Rate due to Prostate Cancer by Race/Ethnicity, in Delaware, 2007-2011, The HP2020 Target: 21.8/100,000 males**



Source: Delaware Health Tracker, Delaware Department of Health and Social Services, Division of Public Health, Delaware Vital Statistics Report 2011

**Figure 6. Adults who are Obese by Race/Ethnicity, 2011, The HP2020 Target: 30.5 percent**



Source: Delaware Health Tracker, Behavioral Risk Factor Surveillance System, 2011

The federal Office on Women's Health produces an annual report that presents key health indicators at the state level for different racial and ethnic and populations in the 50 states, the District of Columbia, Guam, Puerto Rico, and the U.S. Virgin Islands. *The 2014 Health Disparities Profiles* can be accessed at the following link:

[http://www.healthstatus2020.com/disparities/ChartBookData\\_search.asp](http://www.healthstatus2020.com/disparities/ChartBookData_search.asp)

In the report, The Delaware Disparities Profile, (Table 18) received this introduction:

*“Delaware has moderately low rates of death due to colorectal cancer, suicide, and influenza and pneumonia. Death rates due to coronary heart disease, cancer and stroke are moderately high, with death rates for each of these causes being higher for the black population than for the white population. With regard to health risk factors, the black population in Delaware fares worse than the white population with higher rates of high blood pressure, obesity and physical inactivity. Delaware ranks among the states with the best rates of preventive care and health insurance coverage, and is third in the nation in percent of population having had a routine check-up within the past two years.”*

A Delaware Disparities Profile chart (Table 18) that is in the *2014 Health Disparities Profiles* appears on page 12.

**Table 18. Delaware Disparities Profile, 2014**

	Non-Hispanic White	Non-Hispanic Black	Hispanic	American Indian/Alaskan Native	Asian/Pacific Islander	State Total	Healthy People 2020 National Target	State Rank
Population (2012) (all ages)	65.5	21.9	8.6	0.7	3.8	<b>917,092</b>		
<b>Major causes of death (rate per 100,000)¶</b>								
All cause	768.5	855.8	386.3	316.7	312.7	<b>769.6</b>	+	33
Heart disease	172.9	208.5	79.9	*	*	<b>175.7</b>	+	31
Coronary heart disease	119.6	141.8	77.2	*	*	<b>121.1</b>	100.8	31
Total cancer	187.6	199.1	63.9	*	69.6	<b>185.7</b>	160.6	43
Colorectal cancer	15.1	14.7	*	*	*	<b>15.0</b>	14.5	19
Lung cancer	61.8	48.8	*	*	*	<b>58.3</b>	45.5	47
Stroke	39.3	48.7	*	*	*	<b>40.7</b>	33.8	32
Chronic obstructive pulmonary diseases (age 45 & over)	133.0	85.3	*	*	*	<b>122.0</b>	98.5	26
Diabetes-related	65.7	112.1	52.7	*	*	<b>71.9</b>	65.8	30
Influenza and pneumonia	13.3	15.1	*	*	*	<b>13.8</b>	+	20
Unintentional injuries	45.6	29.1	28.4	*	*	<b>39.2</b>	36	25
Suicide	14.7	*	*	*	*	<b>11.3</b>	10.2	12
<b>Health risk factors (percent) §</b>								
Diagnosed high blood pressure (2011)	31.0	44.6	24.4	*	10.4	<b>33.3</b>	26.9	38
Obesity (2012) (age 20 & over)	25.8	36.0	30.0	*	2.6	<b>27.6</b>	30.6	22
No leisure-time physical activity (2012)	21.7	25.5	30.0	*	14.1	<b>22.9</b>	32.6	32
Smoking currently (2012)	23.1	19.4	13.5	*	0.6	<b>20.4</b>	12	31
Eats 5+ fruits and vegetables a day (2009)	25.3	20.7	22.0	*	28.9	<b>25.2</b>	+	17
<b>Preventive care (percent) §</b>								
Cholesterol screening in past 5 yrs. (2011)	79.5	81.6	76.5	*	73.4	<b>79.6</b>	82.1	5
Routine check-up in past 2 yrs. (2012)	88.2	94.1	84.4	*	84.1	<b>89.3</b>	+	3
Dental visit within the past year (2012)	73.4	60.8	65.8	*	81.8	<b>69.9</b>	+	14
<b>Health insurance coverage (percent)</b>								
Health insurance coverage (2012) (ages 18–64)	88.8	84.0	69.7	*	88.4	<b>86.1</b>	100	10

¶ Estimate age-adjusted and for all ages unless noted.  
 § Estimate age-adjusted and for 18 years of age and over unless noted.  
 \* Figure does not meet standard of reliability or precision.  
 + No Healthy People 2020 target associated with this health indicator.

NOTE: All data are from 2010 unless noted.  
 NOTE: Low numerical rankings indicate better relative health status.  
 NOTE: State rank includes the 50 states, District of Columbia, Guam, Puerto Rico and Virgin Islands, where data are available and reliable.  
 NOTE: Healthy People targets correspond with the Healthy People 2020 Objectives.

Source: Office of Women’s Health, U.S. Department of Health and Human Services, Quick Health Data Online, accessed 2014

## Hospital Community Needs Assessments

Delaware community hospitals conducted community health needs assessments during Calendar Year 2012-2013. Several common findings emerged among all hospitals that identified the importance of focusing on prevention, improving access to health care services, and reducing health disparities. In addition to stakeholder interviews and focus groups, the hospital needs assessments relied on data from Delaware Health Tracker.

All hospital community needs assessments are available at this link:

<http://www.delawarehealthtracker.com/index.php?module=Article&func=collection&cid=1&topic=5>

From the Delaware Health Tracker:

“Delaware Health Tracker, at [www.delawarehealthtracker.com](http://www.delawarehealthtracker.com), brings non-biased data, local resources, and a wealth of information to one, accessible, user-friendly location. It can help hospitals, community members, and policy-makers learn about the health and well-being of Delaware communities, and can give our communities the tools they need to read and understand public health issues affecting the quality of life in Delaware. The tools can also help communities set goals and evaluate progress. Delaware Health Tracker data is updated whenever source data is updated, which lessens the likelihood of using outdated data where possible. Sources of data include, among others, Behavioral Risk Factor Surveillance System, American Community Survey, U.S. Census Bureau; National Cancer Institute, Community Health Rankings, etc.”

## New Castle County Hospital Community Needs Assessments

Parts of New Castle County are designated Health Professional Shortage Areas for primary medical and dental care. Westside Family Healthcare, a federally qualified health center system, has five practice sites located in New Castle County (2 in Wilmington and 1 each in Newark, Bear, and Middletown). Henrietta Johnson Medical Center, another federally qualified health center system, has two practice sites in New Castle County (both in Wilmington).

**Christiana Care Health System** conducted a community needs assessment for both of its hospitals, Christiana Hospital, and Wilmington Hospital. Christiana Care defined its service area as New Castle County, Delaware, as it comprises 80 percent of its patient base.

Takeaways: Health Indicators

- The percentage of adults who are obese in New Castle County is lower than the state.
- New Castle County has a higher incidence of HIV and tuberculosis than state averages.
- New Castle County has a lower percentage of adults who smoke than Delaware rates. However, the percentage is higher than the recommended 12 percent designated by Healthy People 2020.
- New Castle County has a higher rate of low birth weight babies than the state average, and there is disparity among racial/ethnic groups. Nearly 15 percent of live births to Black/African American mothers in the county are of low birth weight.
- Cancer rates also show a disparity among racial/ethnic groups. The Hispanic population has a lower death rate from lung cancer than White and Black populations.

Key Informant Interviews: Unmet Need

- There is a shortage of high quality, culturally sensitive health care providers, particularly dentists and specialists.
- Good quality health care, specifically medical and dental care, is not adequately available for much of the low income communities.
- There are a limited number of specialists who are willing to see patients without health insurance.
- There is a shortage of dentists, especially those who will see patients without insurance.
- Community members' health would benefit from additional education about eating well, exercising, and having a healthier lifestyle.
- The senior population faces unique problems, as they want to “age in place” and also need help to manage their health and medical care.
- There is a sense that a lack of cultural sensitivity exists on the part of medical providers. As a result, often people with chronic illnesses forego monitoring and testing and they do not keep appointments.
- There is a shortage of mental health providers and accessible treatment centers available to a substantial proportion of those with mental illness.

**St. Francis Healthcare** is located in the city of Wilmington, the largest city in the state. St. Francis Healthcare conducted its community health needs assessment to study the health care needs of the Wilmington area and to develop a plan to address unmet or partially met needs. Visit

[http://assets.thehcn.net/content/sites/delaware/St\\_Francis\\_Healthcare\\_Delaware.pdf](http://assets.thehcn.net/content/sites/delaware/St_Francis_Healthcare_Delaware.pdf)

The community needs assessment process included a review of data from Delaware Health Tracker. In conducting its needs assessment, St. Francis Healthcare also utilized its relationships with organizations and members of the community and a needs assessment committee to gain knowledge about the needs.

A review of the information depicted these needs:

- Pre-natal, maternal, infant and child health
- Smoking cessation
- Stroke prevention and care, particularly education about risks due to high blood pressure and high cholesterol
- Heart disease, particularly in various ethnic communities
- Seniors living below the poverty line are present and have health needs in this community
- Cancer, with a particular focus on breast, prostate, lung and colorectal caners
- Dental care
- Partnership with St. Francis from parishes and other community centers for coordinated programs of health and wellness to impact particular communities
- Violence in the city is increasing.

The Catholic Health East Community Needs Score uses (CNS) socioeconomic indicators from the U.S. Census to assign a community need score to an area that is based on a composite value derived from scores on five perceived barriers to better health status: income barrier; cultural barrier; education barrier; insurance barrier; and housing barriers. There is a high correlation between high CNS scores and high rates of hospital utilization, including those which are preventable with adequate primary care. The CNS Score for Saint Francis Healthcare's surrounding community indicates a high area of need. The CNS component with highest percentage in the immediate service area is racial and ethnic minorities (88%), followed by adults age 65 and over who are living in poverty (66%). Two in five single female-headed households with children are living in poverty (44%). Eight percent of the residents in Saint Francis Healthcare's immediate service area do not speak English and more than 23 percent do not have a high school diploma.

### **Kent County Hospital Community Needs Assessments**

The entirety of Kent County is a designated Health Professional Shortage Areas for primary medical and dental care. Westside Family Healthcare, a federally qualified health center system, has one practice site located in Kent County (in Dover).

**Bayhealth/Kent General Hospital** published its community needs assessment for Kent County in June 2013. To conduct its needs assessment, Bayhealth analyzed a variety of publicly reported data and gathered input from key stakeholders in Kent County. To gain insight on the needs of vulnerable families in Kent County, Bayhealth analyzed interview and survey responses from individual and community based organizations including state service centers, bureaus within the Division of Public Health, federally qualified health centers, school wellness centers, community physicians, and community organizations that interact with low-income groups.

Four health concerns were identified as priority issues:

- obesity rates
- cancer rates, specifically prostate and lung
- lack of access to and awareness of existing health care services
- lack of mental health and substance abuse services

With regard to access to health care, recurring concerns included the following:

- lack of transportation
- lack of access to local medical specialists
- lack of knowledge regarding support services, including social services

The most prevalent race in Kent County is white. Minority and low income populations appear to be at the greatest risk for being unaware of existing community services, such as free health and cancer screenings. Kent County has the lowest rates of influenza vaccination, is slightly above average for pneumonia vaccination, and of

the three counties, has the highest number of deaths associated with influenza and pneumonia. The incidence of sexually transmitted diseases is also high in Kent County.

### **Sussex County Hospital Needs Assessments**

Sussex County is designated a Health Professional Shortage Area for primary medical, dental and mental health HPSA. La Red Health Center, a federally qualified health center system, has practice sites in Georgetown and Seaford and recently opened a third facility in Milford, Delaware.

A brief *Community Health Survey* was distributed in 2012 by the three hospital systems in Sussex County: Bayhealth/Milford Memorial Hospital, Beebe Medical Center, and Nanticoke Memorial Hospital. Outreach staff facilitated its distribution via face-to-face interactions with community-based organizations in conjunction with the Healthier Sussex County Task Force. The online survey was distributed via Survey Monkey in English and Spanish, and collected approximately 600 responses over four months. In addition, qualitative data was collected from 85 Sussex County residents who were interviewed, participated in focus groups, or completed a survey that was similar to the Community Health Survey but allowed for more open-ended responses.

The information from these encounters identified the following as the greatest health needs:

- cancer (39.4 percent responses)
- obesity (31.8 percent)
- diabetes (26.2 percent)
- heart disease (23.9 percent)
- mental health (12.9 percent)
- injury prevention (6.5 percent)

The greatest barriers to accessing necessary health care were identified as the following:

- cost/insurance aspect of health care (67.9 percent)
- prescription/medication costs (19.9 percent)
- availability of health care services (13.2 percent)
- lack of specialty physicians (13.0 percent)
- transportation (10.6 percent)
- language/culture barriers (7.5 percent)

The groups identified as most in need were Hispanics (35.4 percent), Blacks (28.4 percent), and Whites (29.4 percent).

Community members were asked which preventive procedures they had done within the past three to five years. The following responses came from self-report preventive screenings responses (some checked multiple boxes): mammograms (94 percent of females 45+ years old), blood pressure checks (74.6 percent), general health

exams (69.9 percent), cholesterol checks (66.3 percent), colon cancer (44.4 percent from respondents 45 years old and older), and general immunizations (41.2 percent).

In addition to these efforts mentioned above, each hospital reviewed additional information, including that from Delaware Health Tracker, Community Health Rankings, and the Delaware Health Statistics Center to prepare their community health needs assessments. The hospitals also conducted focus groups, conducted town hall meetings, community leader interviews and online surveys between September 2012 and January 2013.

**Bayhealth/Milford Memorial Hospital** published its Community Health Needs Assessment for Sussex County, Delaware in June 2013. Milford Memorial Hospital is located on the border of Kent and Sussex Counties. Approximately 65 percent of Milford Memorial Hospital's patients are from Sussex County and 30 percent are from contiguous Kent County.

The four health concerns identified as priority issues by Bayhealth Milford Memorial Hospital were obesity rates and associated chronic diseases, such as diabetes and heart disease; cancer rates, specifically prostate and lung; lack of access to and awareness of existing health care services; and insufficient mental health and substance abuse services.

Other concerns highlighted through the process included access to health care fueled by lack of transportation, lack of access to medical specialty providers, and a lack of knowledge about existing support services.

As in Kent County, low income and minority populations in Sussex County seem to be most affected by the lack of transportation and ability to access health services. Barriers include inability to pay, inability to get transportation to the provider, and not being aware of available services.

In addition to the Sussex County statistics detailed on page 18, the Milford Memorial Hospital report notes a higher than average rate of the incidence of syphilis and gonorrhea in Sussex County, as compared to the other two counties and to the state average.

**Beebe Medical Center**, located in Lewes, Delaware in southeastern Sussex County, completed its needs assessment in June 2013. The hospital serves both a beach and vacation resort area and a rural and farming community. The hospital needs assessment team compiled the Sussex County Community Health Survey results (see pages 15 and 16) by ZIP code and tabulated data for each of the questions. The survey results from the ZIP codes within the immediate Beebe service area were very similar to the county-wide results for the questions about the greatest health care needs. Cancer was identified as the greatest health care need (43.9 percent), followed by obesity (28.9 percent), diabetes (26.4 percent), heart disease (25.3 percent), mental health (12.8 percent), other (7.3 percent), and injury prevention (6.4 percent). Results identified as the greatest health care barrier also identified cost/insurance as the predominate barrier to necessary care (68.2 percent), followed by prescription/medication cost (22.4 percent), access/availability of services (11.3 percent), lack of specialty physicians (13.9 percent), transportation (9.8 percent), and language/cultural barriers (8.6 percent).

Beebe Medical Center's needs assessment also included stakeholder responses from 85 individuals who were surveyed with open-ended questions, were interviewed individually, or who shared information via focus groups. Greater access to high quality, timely, and convenient care was identified as the health care issue with the greatest potential to have an impact. Second to this need, the stakeholders identified the need for affordable care and coverage. They identified the top health concerns as cancer, obesity, and mental health. The top responses relative to what health care systems could do to improve the community's quality of life included improved quality and access through more providers, lower health care costs, better access to transportation, better insurance coverage, better health conditions, prevention education, and more preventive screenings.

When all sources of data and information were analyzed together, the five highest ranking need areas were obesity, cancer, mental/behavioral health, cost of care/health insurance/access, and transportation. Beebe determined that transportation should be supported by additional county-wide transportation resources through community organizations and state-funded program. The priority focus areas for the hospital were decided as obesity prevention and treatment; cancer screening, education and prevention; access to care and coverage for services; and mental health and substance abuse services.

**Nanticoke Health Services**, located in southwestern Sussex County completed its needs assessment in 2013 in conjunction with the efforts of Healthier Sussex County Task Force. Nanticoke included health findings presented by the Healthier Sussex County Task Force as central pieces of its needs ranking. As a small community provider, the hospital's community needs assessment states that it believes that working with community partners toward improved community health makes the best use of resources while reducing overlapping initiatives and expanding the reach of programming, thereby providing more value to the community at large.

Priority health needs for the community agreed upon by Nanticoke Health Services and the Healthier Sussex County Task Force include:

- Obesity – a growing problem in Sussex County and an underlying risk factor for many chronic conditions including diabetes which is too prevalent in Delaware and in Sussex County.
- Prostate cancer and screening education – with a specific focus on the disparities among minority population in both incidence and mortality rates.
- Access to Care – connecting uninsured and underinsured populations with affordable health care options by having enough health care providers available to meet the community's needs and connecting the eligible uninsured to health care coverage through Medicaid and the Health Insurance Marketplace.

In addition to these areas, Nanticoke Health Services identified as high need areas:

- 1) A strategy to expand cancer education and screenings in Western Sussex County.
- 2) Special attention given to the needs of the minority population, community outreach, and education and screening relative to diabetes in western Sussex County.

- 3) Smoking cessation and prenatal care for Hispanic women who have higher rates of high birth weights and to African American women who have the highest rate of low birth rates.
- 4) Initiatives to improve prenatal care, particularly for the African American women who face challenges with low birth weight and Hispanic women who have issues related too high of a birth weight.

Furthermore, Nanticoke Health Services recognized through its needs assessment process that there is insufficient data to provide an accurate assessment of the health needs of the minority populations, specifically the Black and Hispanic populations in western Sussex County. Nanticoke identified the need to develop specific health needs assessments for the African American community and the Hispanic community in Western Sussex County.

### **Child and Adolescent Community Needs Assessment - Nemours/Alfred I. DuPont Hospital for Children**

The goal of the 2013 Child and Adolescent Community Needs Assessment conducted by Professional Research Consultants Inc. (PRC) was to gather information to determine the health status, behaviors and needs of children and adolescents in the service area of Nemours/Alfred I. DuPont Hospital for Children, which is located in Wilmington, Delaware. The service area for the study included households with children in Sussex, Kent and New Castle counties in Delaware, and in Chester and Delaware counties in Pennsylvania. The assessment used data from quantitative sources (survey, vital statistics, and other data) and qualitative sources (key informant focus groups).

Based on the information gathered, the following “areas of opportunity” represent significant needs:

- Access to Health Services, with the need for/access to specialists, being ranked the #3 top concerns among focus group participants, who identified barriers as poverty, low health literacy, under of uninsured families, language services, transportation and house of operations
  - For Sussex County, Delaware, outmigration for children's services was a concern
  - For Kent County, Delaware, dental visits was a concern
- Alcohol and Tobacco and Other Drugs use, including marijuana
  - Households is Kent County with someone who smokes cigarettes is a specific concern
- Mental and Emotional Health, with awareness of mental health resources, ranked as #2 top concerns among focus group participants, who emphasized: pervasiveness of behavioral health issues; the difficulty accessing behavioral health services, cultural barriers and stigma
- Nutrition, Physical Activity and Weight: concerns about levels of fruit/vegetable consumption, physical activity levels, and computers in children's bedrooms. This ranked as #1 top concern among focus group participants, who emphasized childhood obesity, poor food choices (citing food deserts, cost, prevalence of fast food establishment, nutrition and cooking education) and hunger.
  - Childhood overweight & obesity prevalence as well as TVs in children's bedrooms are specific concerns relative to Sussex and Kent County

- Prenatal & Infant Health: concerns about infant mortality and low birth weights
  - Timely prenatal care in Sussex and Kent counties in Delaware is a specific concern
- Sexual Activity, with primary concerns being sexually active teens and births to teenager,

After reviewing the information prepared by PRC, leadership of Nemours/Alfred I duPont Hospital for Children met to evaluate and prioritize the top health needs for children in the service area. They evaluated each significant health issue using the following criteria:

- Magnitude – the number of children affected and the differences from state/national data or Healthy People 2020 objectives
- Seriousness – the degree to which a health issue leads to death, disability or loss of quality of life
- Impact – the degree to which it affects/exacerbates other health issues
- Feasibility – the ability to reasonably impact the issue, given available resources
- Consequences of inaction – the risk of exacerbating the problem by not addressing it at the earliest opportunity

The process produced the following top priorities for children and adolescents in the service area:

- Nutrition, Physical Activity and & Weight
- Access to Health Services
- Mental & Emotional Health

### **Title V Maternal and Child Health Needs Assessment**

In September 2014, DPH initiated its 2015 Title V Strengths and Needs Assessment process. Every five years, as a part of the federal Maternal and Child Health Title V Block Grant, the states are required to complete a comprehensive assessment of maternal and child health systems and populations' strengths and needs. The Title V Block Grant serves as the foundation for much of Delaware's Maternal and Child Health Program, and is administered by DPH.

The Delaware Bureau of Health Planning and the State Office of Primary Care participated in the process by having two senior staff members on the MCH Needs Assessment Steering Committee: the Delaware Primary Care Officer and the director of the Bureau of Health Planning and Resources Management.

The process included presentations to stakeholders, gathering of quantitative data, a survey of professionals and families, key informant interviews and community focus groups. The Steering Committee then conducted an analysis of this quantitative and qualitative data, and used it to inform the selection of priority needs. The steering committee was responsible for reviewing and understanding the data and scoring and ranking 15 national health areas. Seven variables were considered in this prioritization process: size and seriousness of the health issue; disparities in outcomes; stakeholder support; importance to the community; and alignment with national and state

goals. Once all individual rankings were completed, the findings were combined to determine the overall priority ranking. The final step was to ensure that the six Title V population domains were represented in the priority health area selection, and that all rules outlined in the Title V guidance had been considered.

In the end, a set of eight priorities were selected for Delaware’s Title V Program. They can be viewed at <http://dethrives.com/title-v>. Based on input and discussions with many stakeholders, a high-level action plan was developed to address each of these priorities.

It is important to note that this plan represents the role that the Title V Program can play in improving the health of mothers and children, given DPH’s resources and capacity, and is not intended to be a comprehensive strategic plan to address each of the targeted health areas. Moving the needle on any of these health priority areas will require collective effort from many partners throughout the state.

The priorities selected for Delaware’s Title V Program for years 2015-2020 are presented in Table 19. They are listed by population domain, as defined by the federal Maternal and Child Health Bureau. Many factors were considered in selecting these priorities, including: size and seriousness of the health issue; disparities in outcomes; stakeholder support; importance to the community; and alignment with national and state goals.

**Table 19. Delaware Title V Program Priorities**

Population Domain	Health Priority
Women/Maternal Health	Increase the number of women who have an annual well visit to optimize the health of women before, between, and beyond pregnancies.
Perinatal/Infant Health	Improve breastfeeding rates (initiation and duration).
Child Health	Increase healthy lifestyle behaviors (healthy eating and physical activity).
Children and Youth with Special Health care Needs	Improve rates of developmental screening in the health care setting using a validated screening tool.  Increase the percent of children with special health care needs with a medical home.
Adolescent Health	Decrease rates of bullying by promoting the development of social and emotional wellness.
Cross Cutting Health Issues	Increase the percent of children who are adequately insured.  Improve the rate of oral health preventive care in pregnant women and children.

Source: Delaware’s Title V Block Grant, Delaware Thrives, <http://dethrives.com/title-v>, January 14, 2016

Findings from the stakeholder survey and focus groups brought forward common themes of barriers to gaining access to health care and maintaining good health. These included lack of affordable health insurance, lack of transportation, lack of knowledge about services, language barriers, and long appointment wait times.

Overarching themes for Spanish speaking-respondents included inadequate health insurance, lack of medical translators, perceived discrimination based on language, income for insurance, and few providers, especially mental health providers in Kent and Sussex County. Also cited was a lack of services and supports for Children and Youth with Special Health Care Needs.

The Delaware PCO works with the Bureau of Maternal and Child Health to help alleviate some of these challenges. For instance, DHSS encourages individuals to obtain health insurance coverage through the Health Insurance Marketplace or Medicaid. The PCO is also administering (or helping to administer) health care provider recruitment and retention programs to alleviate the shortage of providers in underserved areas. In addition, the OPC sponsors cultural competency trainings for medical providers, front office staff, and managers of health promotion programs in partnership with the Primary Care Association.

### **Health Professional Workforce Capacity**

The Delaware PCO has contracted with the University of Delaware's Center for Applied Demography and Survey Research (UD CADSR) since 1995 to conduct survey research to measure the number and spatial distribution of primary care physicians. PCO has also contracted with UD CADSR since 1998 to conduct survey research to measure the number and spatial distribution of dentists; and since 2005 to measure the number and spatial distribution of mental health professionals.

The objective is to understand the provider counts, full-time equivalent (FTE) counts, demographic characteristics including age, race and ethnicity, practice characteristics, spatial distribution at the sub-county level, and provider-to-population ratios; as well as to identify areas for shortage designations. The information is also used by provider recruitment programs, including the State Loan Repayment Program, the Conrad State 30 J-1/Visa Waiver Program, and the National Health Service Corps Program. The reports are used by health planners, grant writers, and policymakers, including those affiliated with hospitals and health systems, federally qualified community health centers, the Delaware Health Care Commission, and the Delaware Center for Health Care Innovation and its committees that focus on the adequacy of the health professional workforce.

The research is ongoing and three reports are routinely produced: one on primary care physicians, another on dentists, and a third on mental health professionals. The research is conducted on a rolling basis and the reports are released about every three years. The number of providers is provided in the resulting reports along with estimates of full time equivalents.

- *Primary Care Physicians in Delaware, 2013*, released in June 2014, includes information about physicians practicing in five specialties: family practice, general practice, internal medicine, pediatrics, and obstetrics/gynecology.
- *Dentists in Delaware, 2012*, released in January 2013, has information about general and pediatric dentists.

- *Mental Health Professionals in Delaware, 2014*, released in October 2014, has information about psychiatrists and the following mental health specialists: psychologists, social workers, professional counselors of mental health, and specialists in chemical dependency care and psychiatric advance practice.

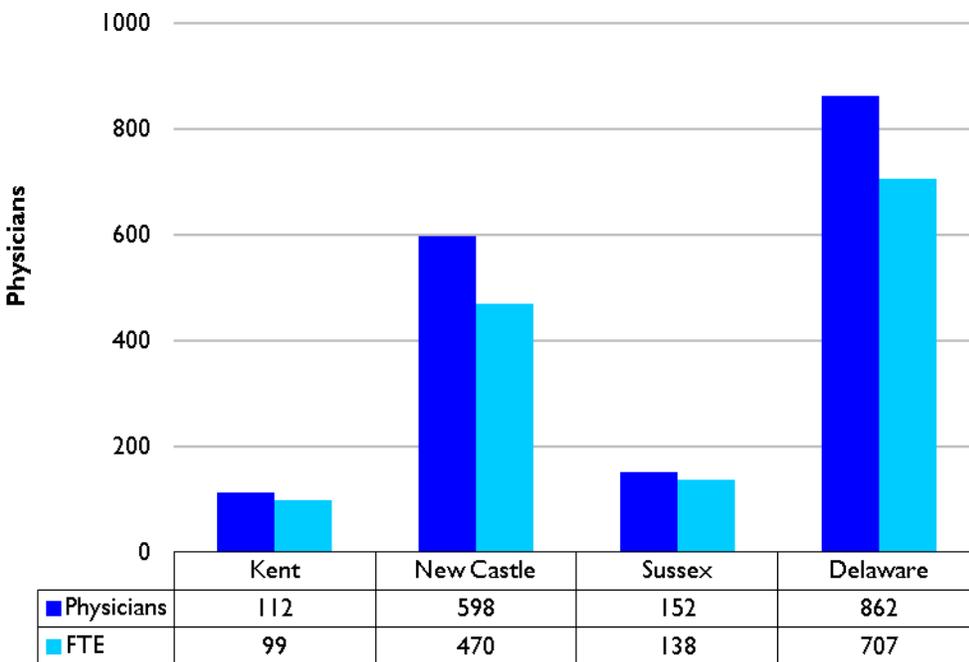
These reports are utilized in analyses of Health Professional Shortage Area (HPSA) designations. The reports can be viewed at: <http://www.dhss.delaware.gov/dhss/dph/hsm/pcoreports.html>

### Primary Care Physicians in Delaware, 2013

#### Statewide and County Snapshot

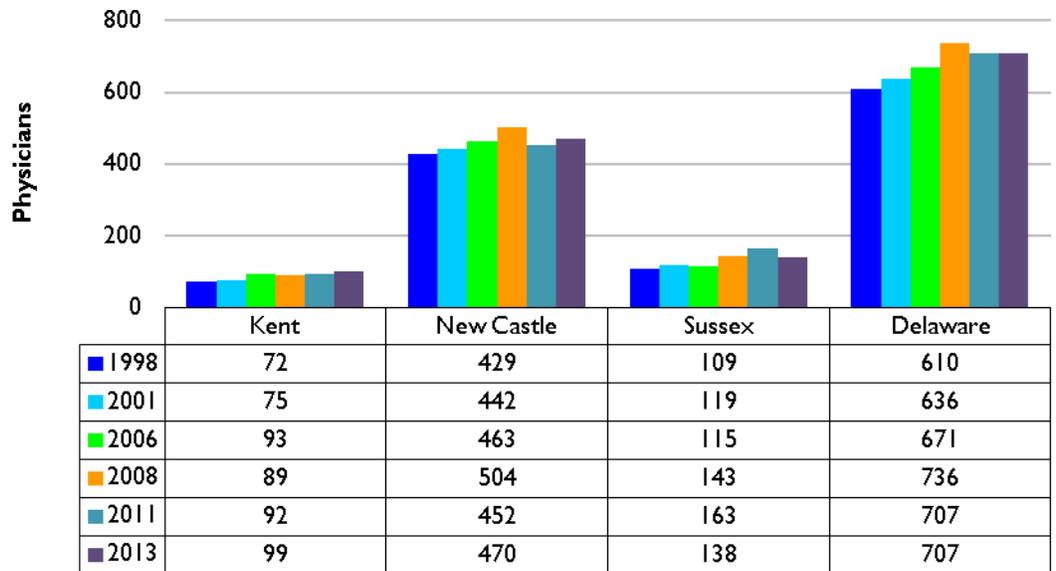
About 1,271 persons were served by each full-time-equivalent (FTE) primary care physician in 2013. The number of FTE primary care physicians has remained unchanged since the last survey in 2010. That does not mean that no physicians left or new physicians started practicing. There was a slight increase in Kent and New Castle counties and a slight decrease in Sussex County.

**Figure 7. Primary Care Physicians, in Delaware, by county, 2013**



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

Figure 8. FTE Primary Care Physicians, in Delaware, by county, 1998-2013

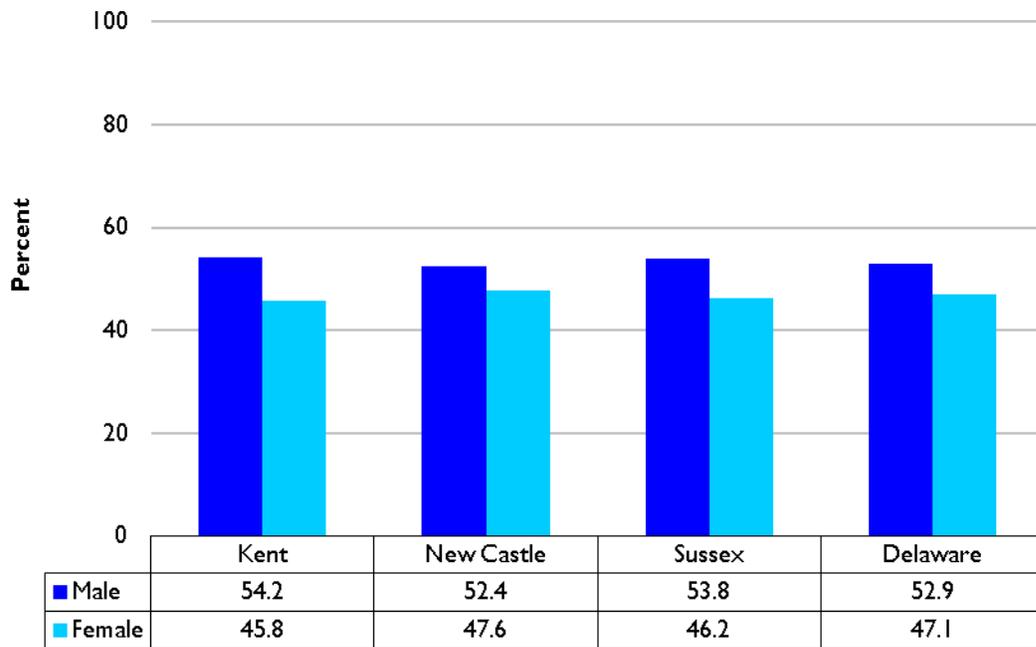


Source: Center for Applied Demography & Survey Research  
University of Delaware

Not all physicians practice full-time. Some practice full-time but do not deliver direct patient care full time. Therefore, full time equivalents were calculated. A physician delivering primary care directly to patients 40 or more hours per week was defined as a full-time primary care physician. For each four hours less than 40 hours, 0.1 of a full-time-equivalent was deducted. Anything more than 40 hours was considered only as full-time, in accordance with calculation rules of the Department of Health and Human Services. Also as specified by those same rules, foreign doctors with J-1 visas are not included in the estimates. (Reference: Federal Register/Vol. 45, No.223/Monday, November 17, 1980. Part IV Department of Health and Human Services, 42 CFR Part 5, p. 76002).

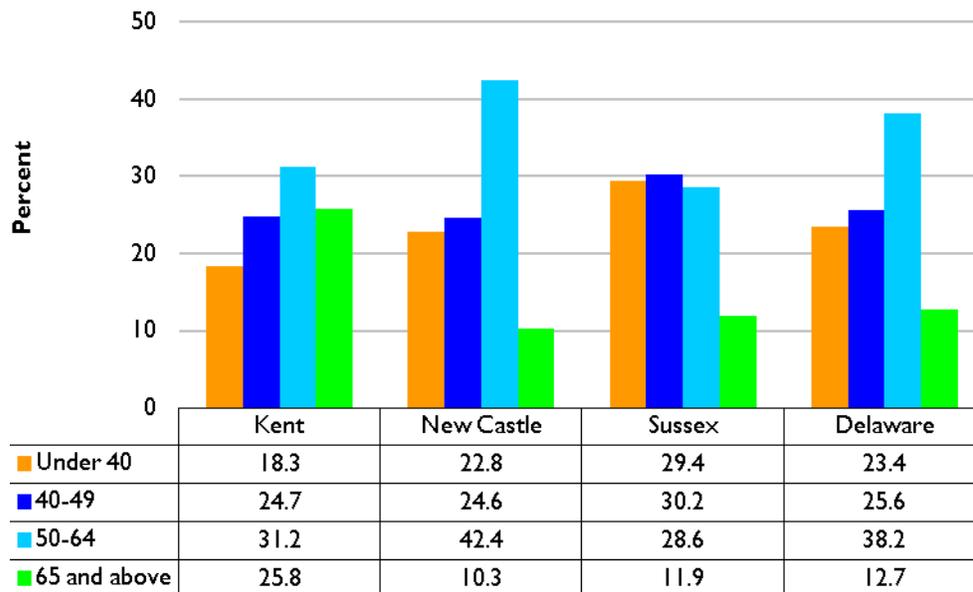
Demographics

Figure 9. Gender of Primary Care Physicians, in Delaware, by county, 2013



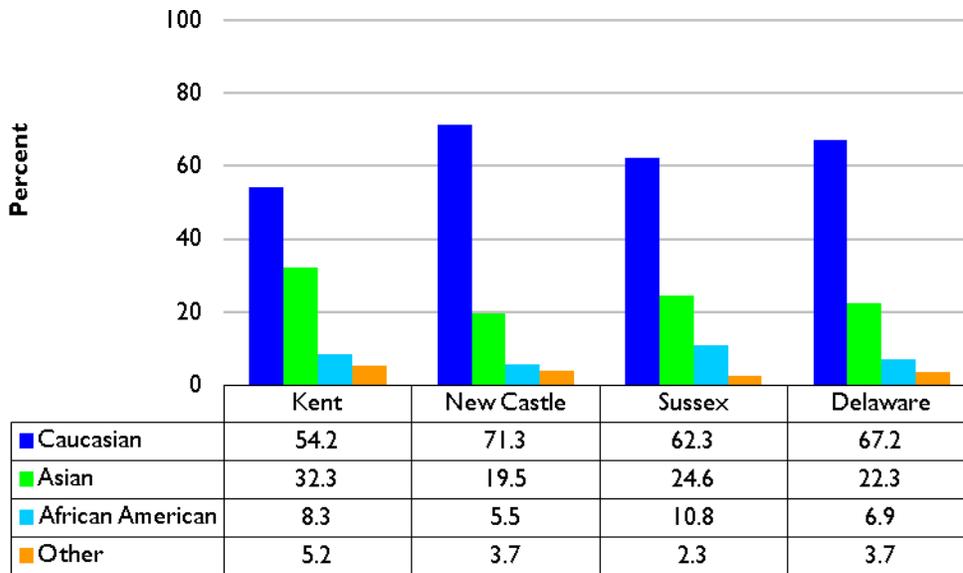
Source: Center for Applied Demography & Survey Research  
University of Delaware

Figure 10. Age of Primary Care Physicians, in Delaware, by county, 2013



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

**Figure 11. Race of Primary Care Physicians, in Delaware, by county, 2013**

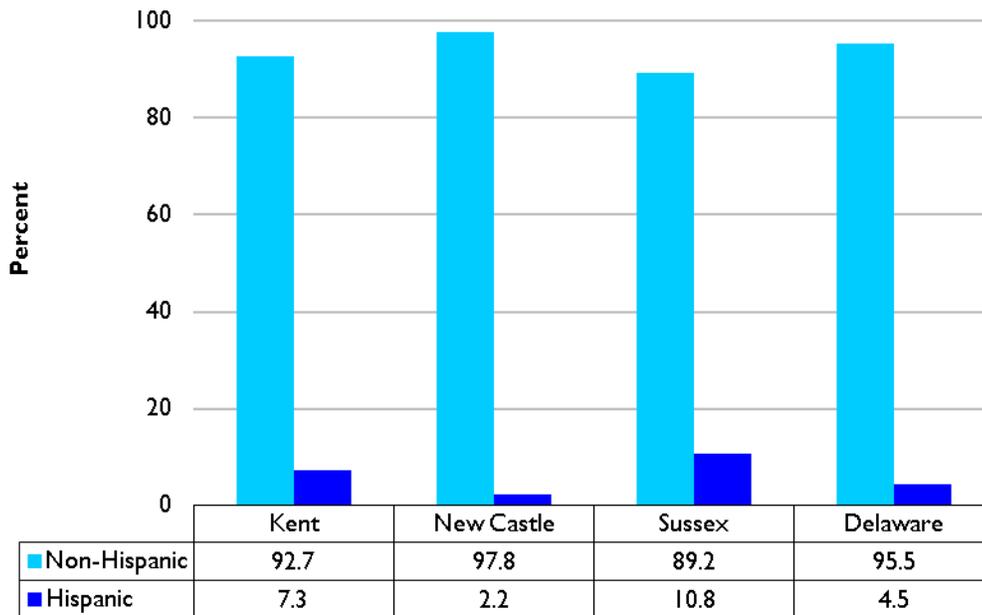


**Source:** Center for Applied Demography & Survey Research  
University of Delaware

According to the Primary Care Physicians in Delaware report, “The most interesting aspect of this table is the low proportion of Black primary care physicians and the preponderance of Asian American physicians compared to the population characteristics of the state. The current survey indicates the highest proportion of Black physicians to be in Sussex County, even though the proportion of Blacks in the general population is the lowest in Sussex County. At the state level, the ratio of Asian American physicians is about five times higher than the proportion of Asian Americans in the population. The proportion of Asian American primary care physicians is the highest in Kent County.”

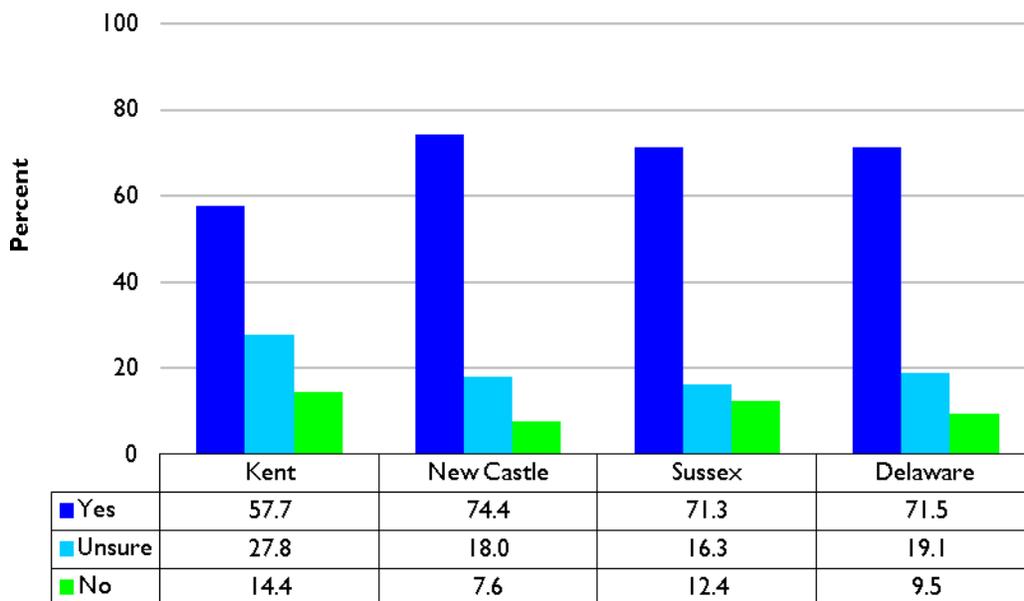
Hispanic origin has taken on a particular interest in Delaware with the rapid growth of that population, particularly in Sussex County. The distribution of primary care physicians by Hispanic origin is found in Figure 12.

Figure 12. Hispanic Origin of Primary Care Physicians, in Delaware, by county, 2013



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

Figure 13. Active Five Years from Now, in Delaware, by county, 2013



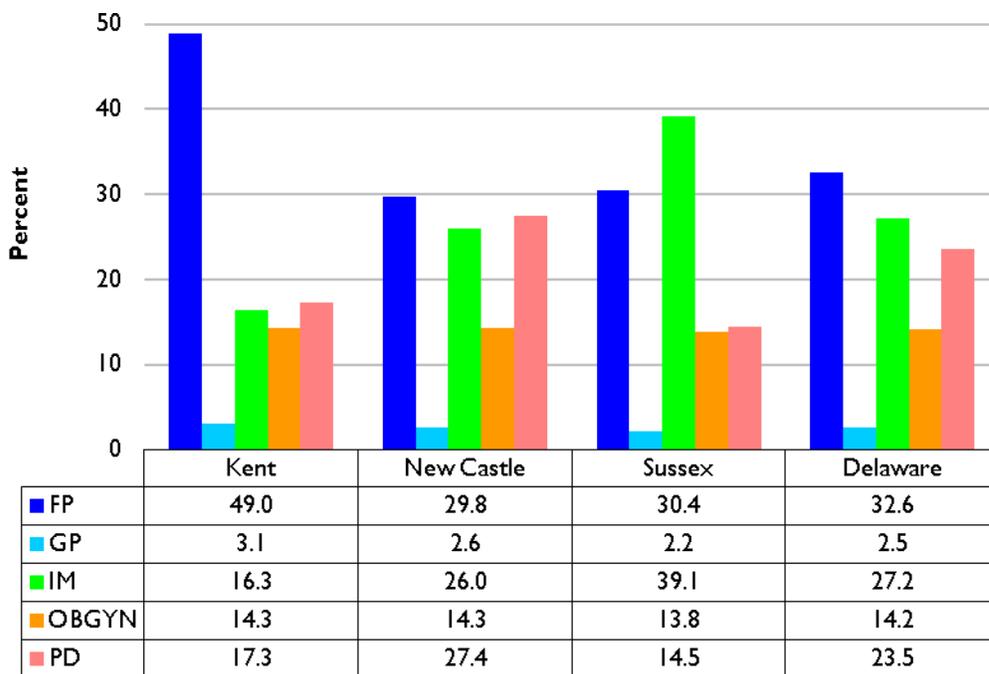
Source: Center for Applied Demography & Survey Research  
University of Delaware

As Figure 13 shows, in general 72% of physicians expect to remain active in five years. However, in Kent County only 58 percent of physicians indicated that they will be actively practicing in five years.

**Primary Care Physician Practice Characteristics**

Primary care physicians are distributed across different specialties. Although they deliver similar services, they focus in their particular specialties (obstetrics/gynecology, pediatrics, etc.).

**Figure 14. Distribution of Primary Care Specialties, in Delaware, by county, 2013**



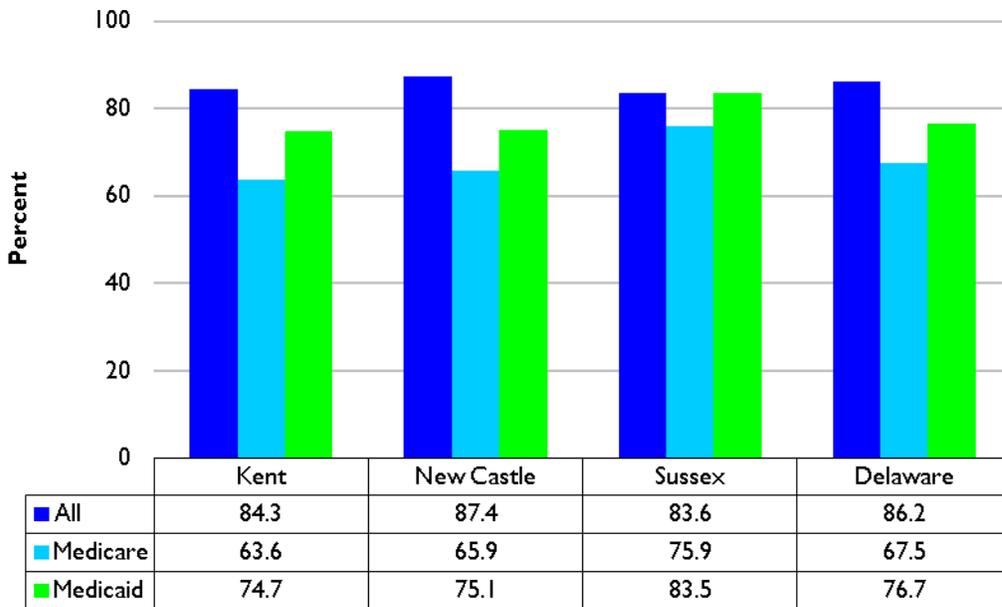
Source: Center for Applied Demography & Survey Research  
University of Delaware

**Chart Legend**

FP – Family Practice, GP -General Practice, IM – Internal Medicine,  
OBGYN – Obstetrics/Gynecology, PD - Pediatrics

One of the most important issues relative to patient access to primary care services is whether the primary care physicians are accepting new patients. Between 84 percent and 87 percent of primary care physicians reported in 2013 that they were accepting new patients.

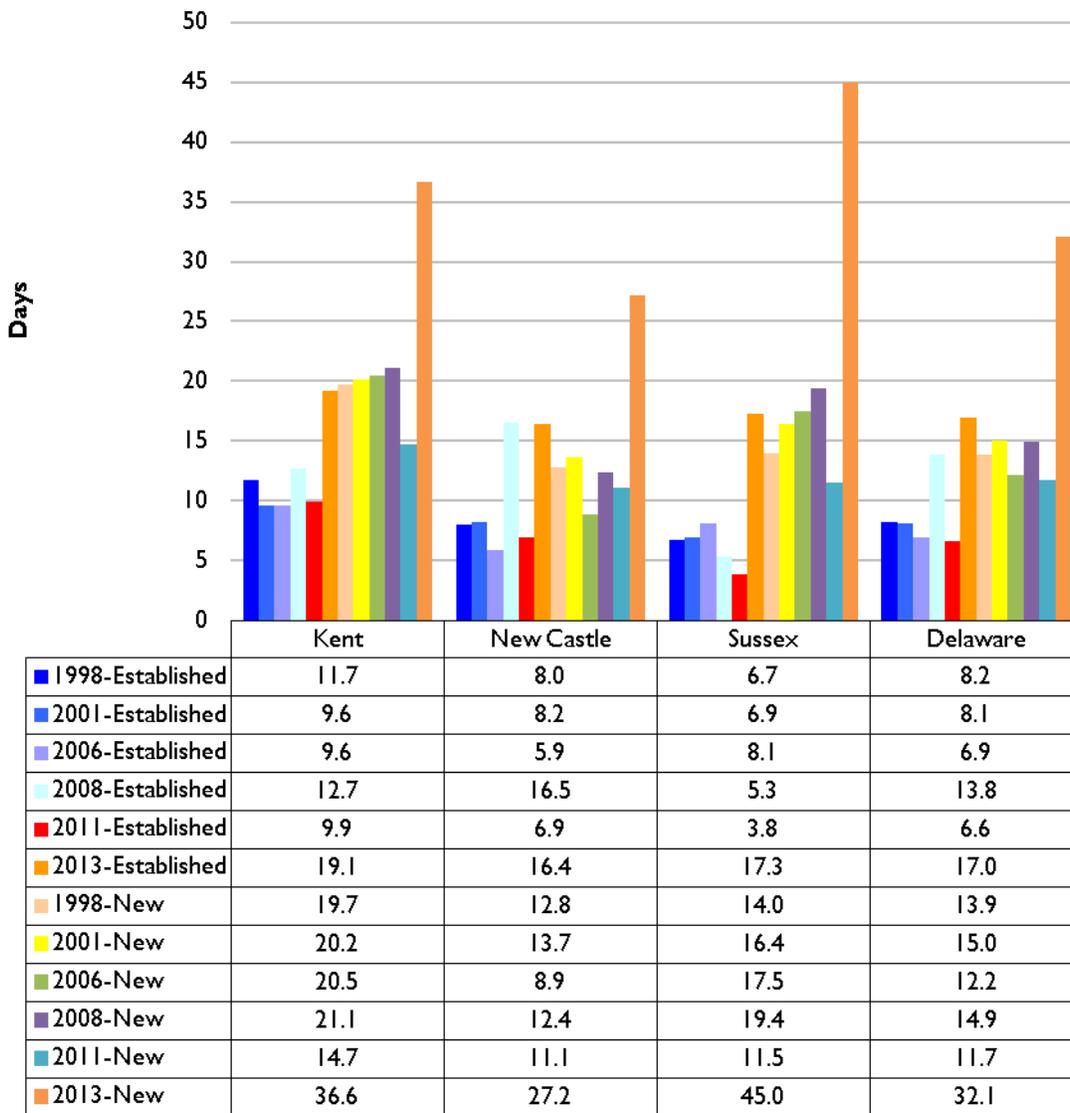
**Figure 15. Accepting New Primary Care Patients, in Delaware, by county, 2013**



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

Another important indicator to help gauge patients' access to primary care is how long a person must wait for an appointment in non-emergency situations. When the 2013 data is compared to the previous survey results, an increase in the average wait time is observed across all three counties. On average, an established patient will wait about 17 days. The new patient will wait 32 days.

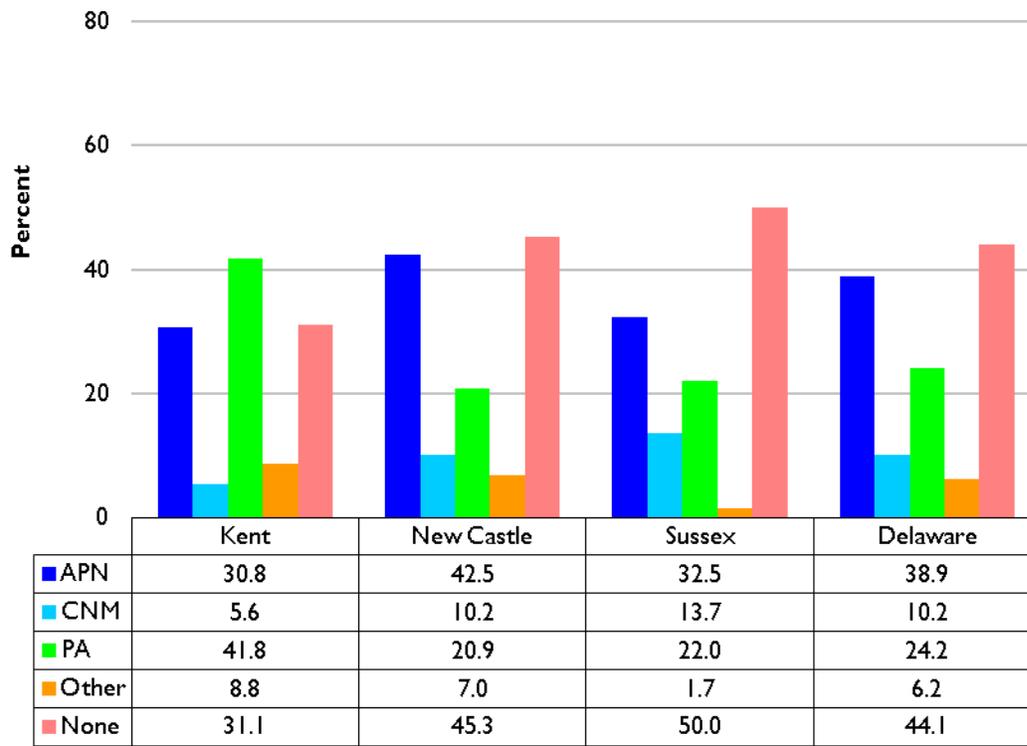
Figure 16. Average Wait Time for Types of Patients, in Delaware, by county, 2013



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

The advanced practice nurse (APN), the certified nurse midwife (CNM), and the physician assistant (PA) are the most typical non-physician resources that primary care physicians use to extend their own ability to serve patients. The survey responses show differences in the level of use of these non-physician resources among the counties.

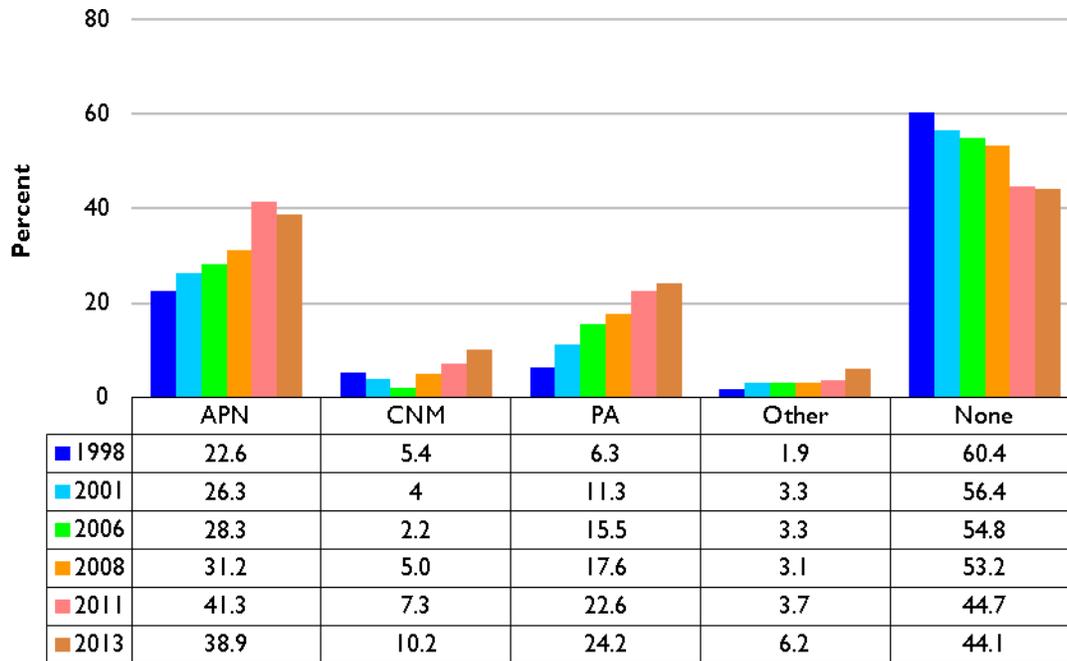
Figure 17. Use of Non-Physician Resources, in Delaware, by county, 2013



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

When data from 1998 through 2013 is compared, the survey research suggests a steady movement toward greater use of these non-physician resources by primary care physicians in Delaware. The proportion of the primary care physicians who use them is now larger than the proportion of primary care physicians who do not use them.

**Figure 18. Use of Non-Physician Resources, in Delaware, 1998-2013**



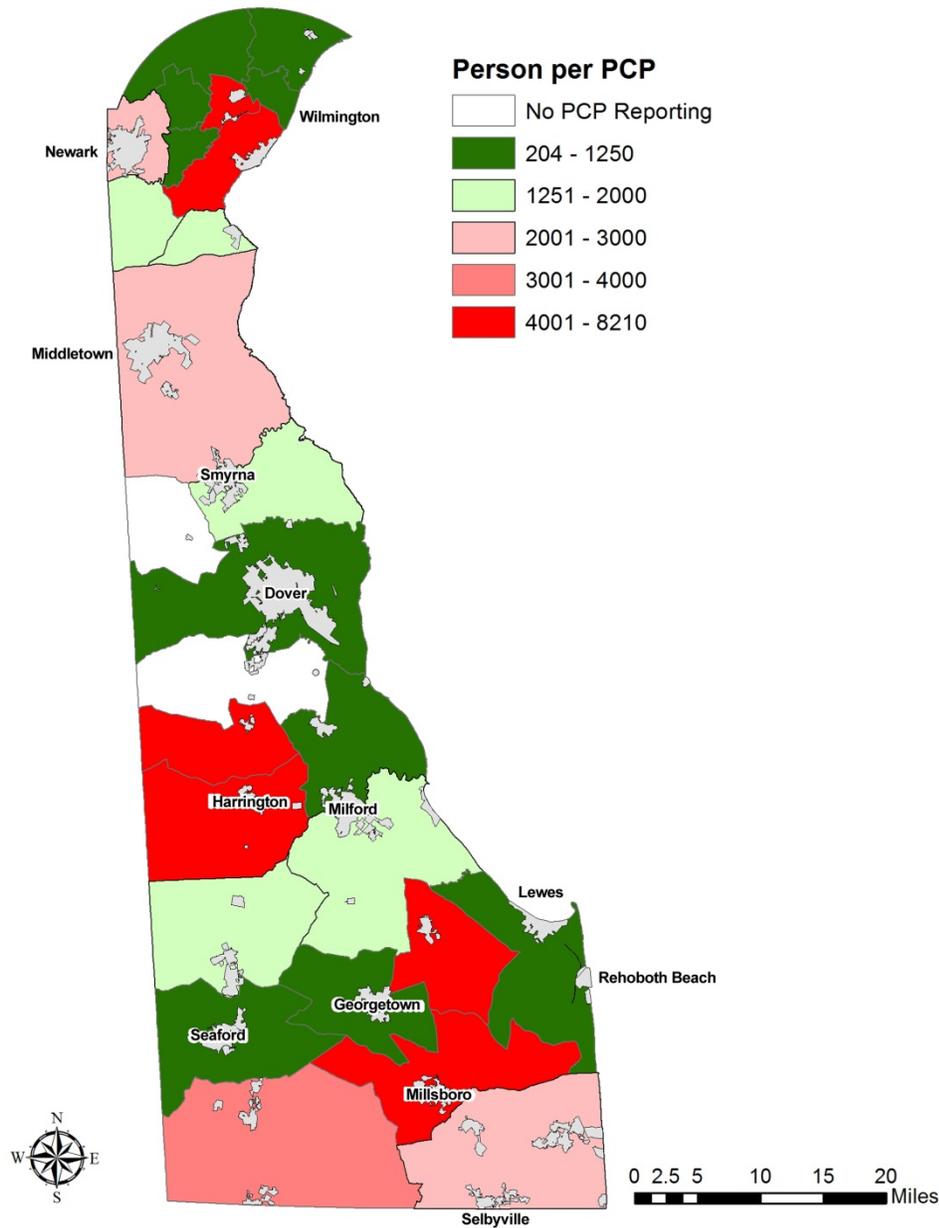
Source: Center for Applied Demography & Survey Research  
University of Delaware

### Spatial Distribution and Number of Persons per Primary Care Physician

According to the American Council on Graduate Medical Education (ACGME), a ratio of 1,250:1 of persons per primary care physicians is at the lower end of the acceptable range for the supply of primary care physicians. According to the *Primary Care Physicians, 2013* report, the most recent report available, Delaware has a ratio of 1,271:1 without considering non-physician providers or international medical school graduates here holding J-1 visas. The ratios are: 1,146:1 for New Castle County, 1,661:1 for Kent County, and 1,422:1 for Sussex County. As such, Delaware is in the ACGME acceptable range at the state and county levels.

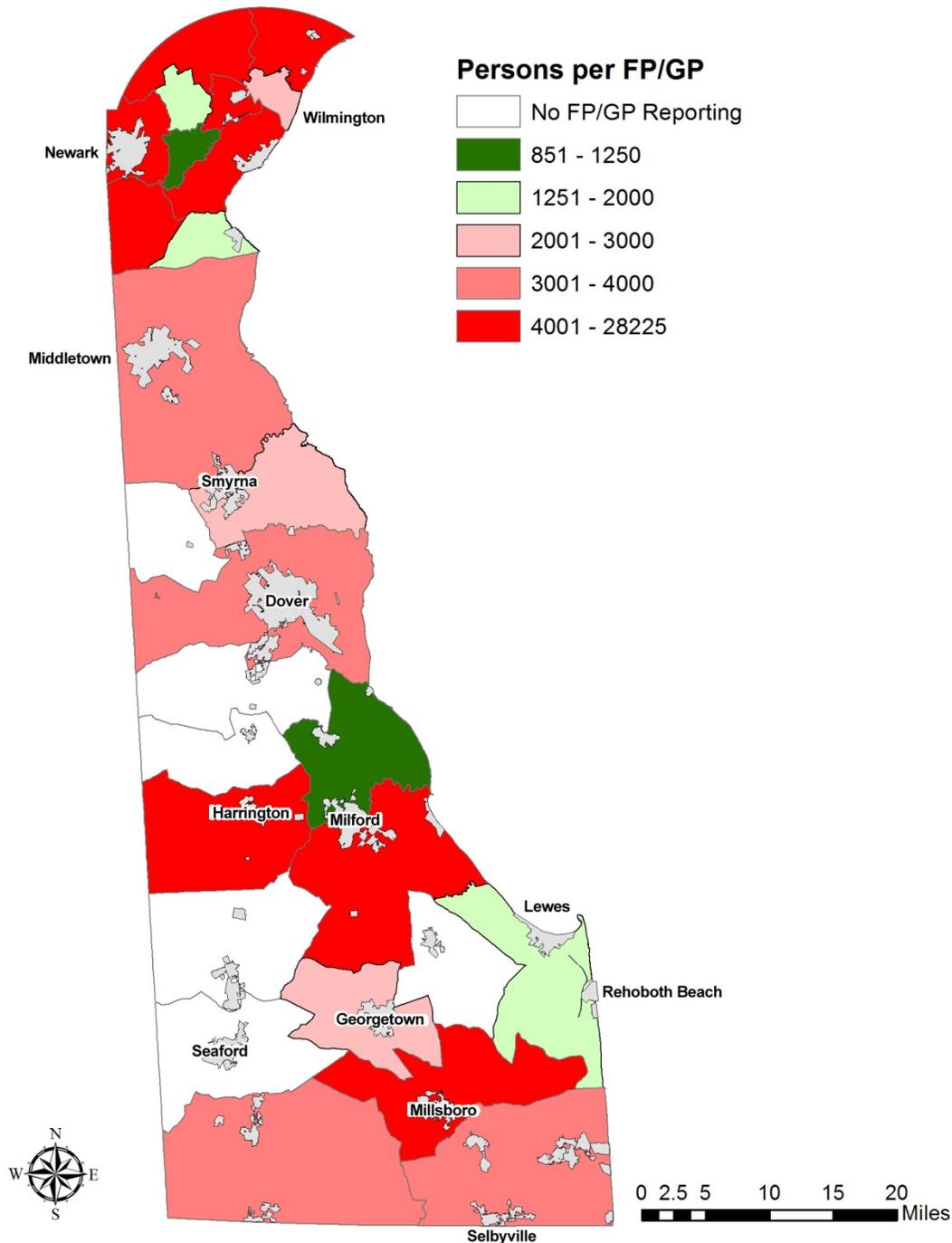
However, as the federal government designates medically underserved areas and populations, it is important to have an adequate number of primary care physicians in areas smaller than a state or a county. (See Figures 19 and 20.)

Figure 19. Number of Persons per Primary Care Physicians, in Delaware, by census county division, 2013



Source: *Primary Care Physicians in Delaware 2013*, Center for Applied Demography & Survey Research, University of Delaware, June 2014

**Figure 20. Number of Persons per Family Practice Physicians, in Delaware, by census county division, 2013**



Source: *Primary Care Physicians in Delaware 2013*, Center for Applied Demography & Survey Research, University of Delaware, June 2014

## **Dentists in Delaware, 2012**

The *Dentists in Delaware, 2012* survey follows its predecessors administered in 2008, 2005, and 1998. The report focuses on all dentists. This includes general/pediatric dentists along with specialists in one of eight areas.

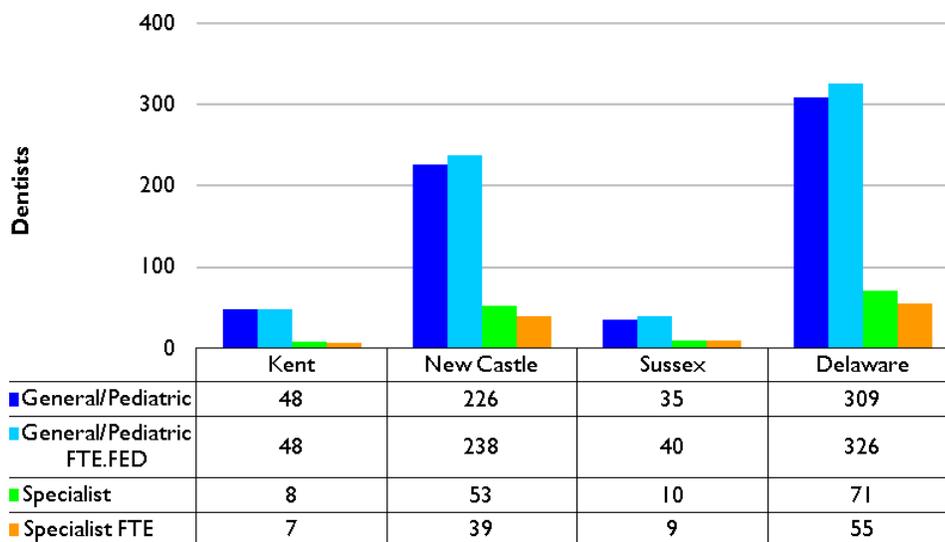
The term general/pediatric dentist refers to dentists who chose the following three self-designated practice codes when asked about their specialty: DG – general/pediatric dentistry; PED DENT – pediatric dentistry; and GRP – general practice residency. The inclusion of these dentists among general/pediatric dentists is based on Health Professional Shortage Areas designation criteria. The term “specialist” refers to dentists who selected one of the remaining eight specialties.

According to *Dentists in Delaware, 2012*, 309 dentists are working in general/pediatric dentistry and 71 are working in other specialties. The following highlights can be drawn from the survey findings:

- The number of active dentists decreased since 2008 from 396 to 380.
- The number of general/pediatric dentists decreased from 331 in 2008 to 309 while the number of specialists increased from 65 to 71.
- The full-time equivalent (using federal guidelines) general/pediatric dentist count decreased from 379 in 2008 to 326 in 2012. The full-time equivalent count of specialists increased from 50 in 2008 to 55 in 2012.
- The population-to-dentist (general/pediatric) ratio (using federal guidelines) increased 22 percent, from 2,300 persons per full-time equivalent dentist in 2008 to 2,806 persons in 2012.
- If entire counties are considered national service areas, neither Kent nor New Castle counties would be considered underserved areas. However, Sussex County exceeds the Health Professional Shortage Area threshold of 5,000:1. The population to provider ratio is only one of the variables used for Health Professional Shortage Area designation.
- Nearly 45 percent of dentists statewide are 55 years of age or older. Just over 20 percent are 65 years of age or older.
- About 18 percent of Delaware dentists will either not be practicing dentistry in five years or are unsure if they will be practicing.
- More than 97 percent of general/pediatric dentists and specialists in Delaware state that they are accepting new patients.
- General/pediatric dentists in Sussex County see more patients per week than their colleagues in New Castle and Kent counties. Weekly patient encounters for general/pediatric dentists in Kent County are 87 patients per week and 113 patients per week in Sussex County, while general/pediatric dentists in New Castle County see 90 patients per week.
- Wait times for new patients seeking an appointment with a general/pediatric dentist are somewhat longer in Sussex County (about 10 days) than in Kent County (about seven days) or New Castle (about five days).

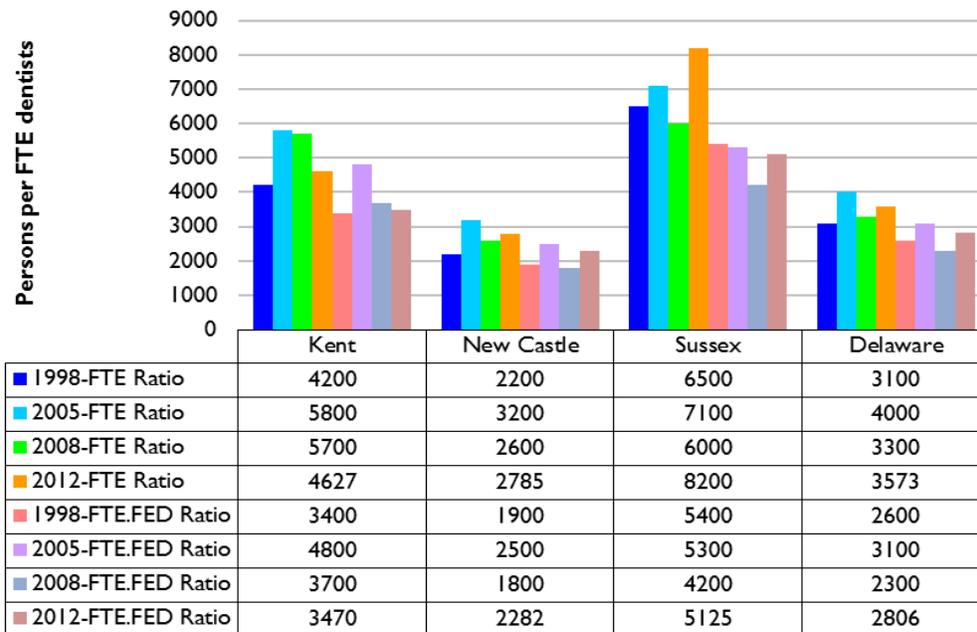
- Most dentists in Delaware participate in dental insurance plans, offer flexible payment plans, and provide charity care.
- Medicaid is accepted by about 67 percent of general/pediatric dentists and 77 percent of specialists.
- Almost all dentists use resources provided by hygienists and dental assistants. Dental technicians were not addressed in this survey.
- Many of Delaware’s dentists offer flexible hours by remaining open at night and on Saturday. General/pediatric dentists are more likely to offer such hours than are specialists. These hours are more likely to be found among dentists in New Castle County.
- Approximately 41 percent of dentists practicing in Delaware accept pediatric patients under three years old.

Figure 21. Delaware Dentists, in Delaware, by county, 2012



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

**Figure 22. Population to Dentist (General/Pediatric) Ratios, in Delaware, by county, 1998-2012**



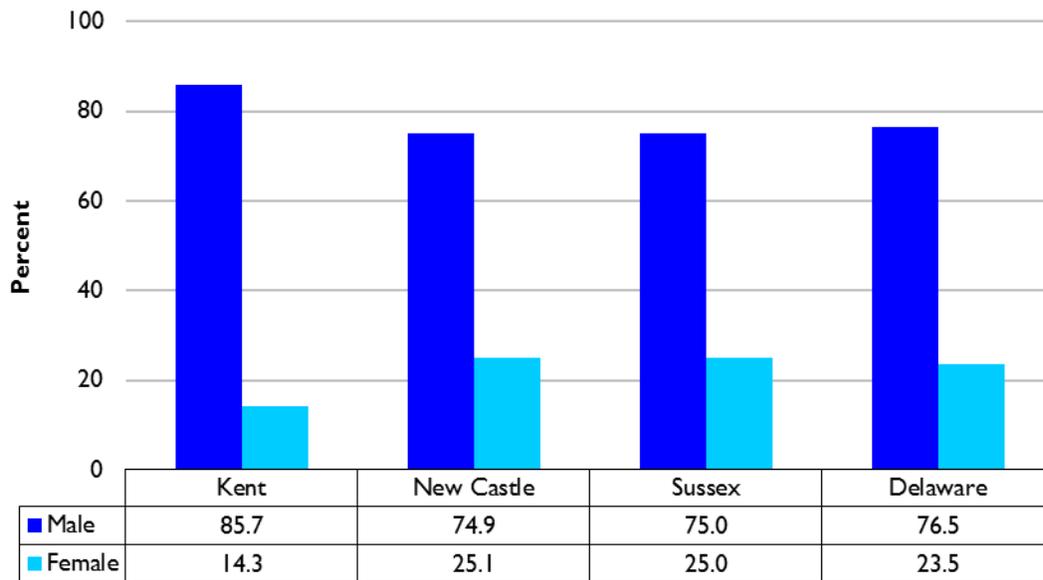
**Source:** Center for Applied Demography & Survey Research  
University of Delaware

Figure 22 provides the number of full-time equivalent (FTE) dentists, those who directly deliver care to patients 40 or more hours a week. The table also shows the full-time equivalent calculated using a federal government productivity factor (FTE.FED) in accordance to rules governing Health Professional Shortage Area Designations. These productivity factors include the age of dentists. Beginning at age 55, a dentist’s FTE is incrementally decreased; however, a dentist’s FTE is increased incrementally for each dental hygienist and/or dental assistant employed. Sussex County has the lowest FTE.FED dentist ratio and Kent County is close behind. In New Castle County, the ratio is the best and has improved since 2008.

**Demographics of Delaware Dentists**

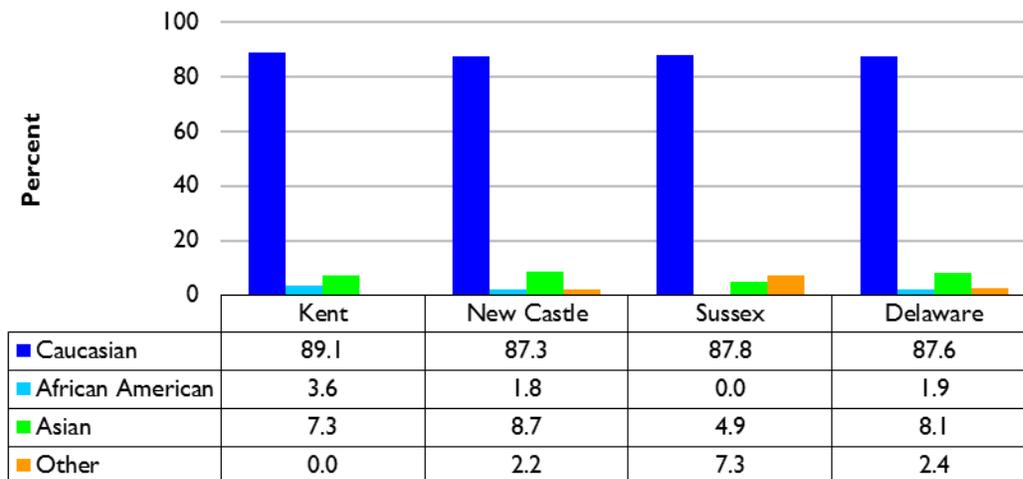
The dental community in Delaware is 76.5 percent male (Figure 23), though there is some variation among the counties. Kent County has about nine percentage points fewer female dentists than the state overall. However, the proportion of female dentists in New Castle County and Sussex County are about the same (~25 percent). The gender distribution among Delaware dentists is similar to that of dentists at the national level. According to the American Dental Association, only about 22 percent of the active dental workforce is female.

Figure 23. Gender of Dentists, in Delaware, by county, 2012



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

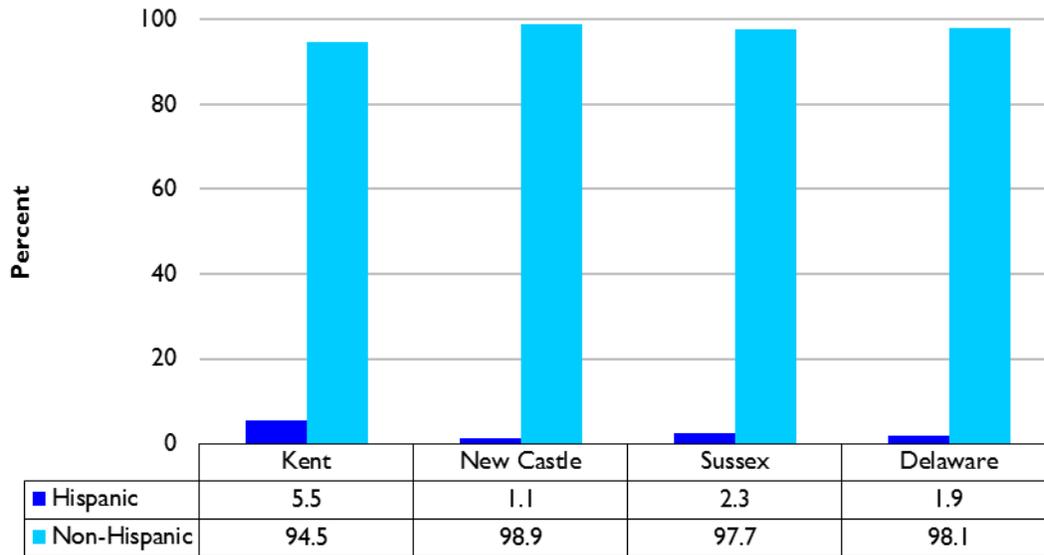
Figure 24. Race of Dentists, in Delaware, by county, 2012



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

Although African Americans account for more than 20 percent of Delaware’s population, only 1.9 percent of Delaware dentists self-report as African American. This is a decrease of four percentage points since the 2008 survey.

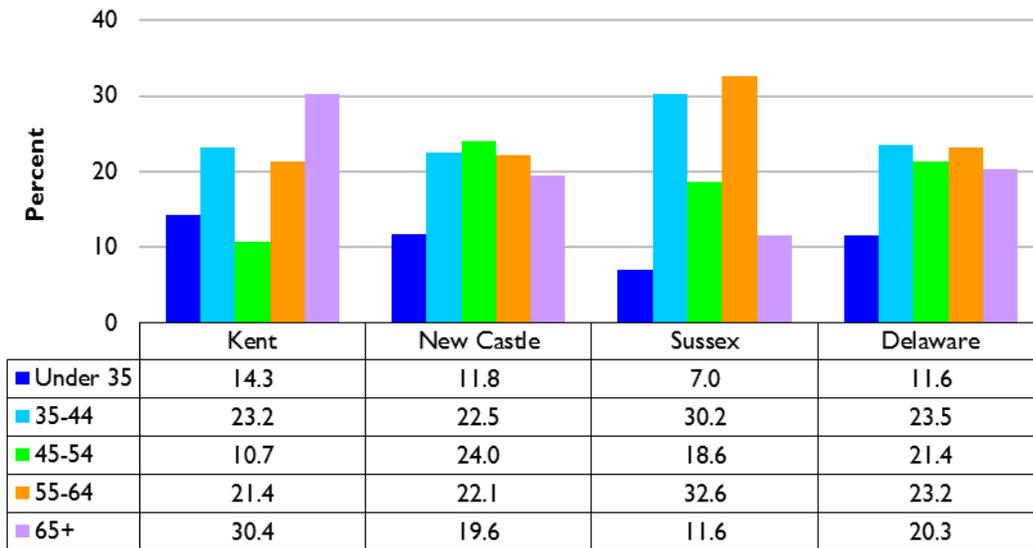
**Figure 25. Hispanic Origin of Dentists, in Delaware, by county, 2012**



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

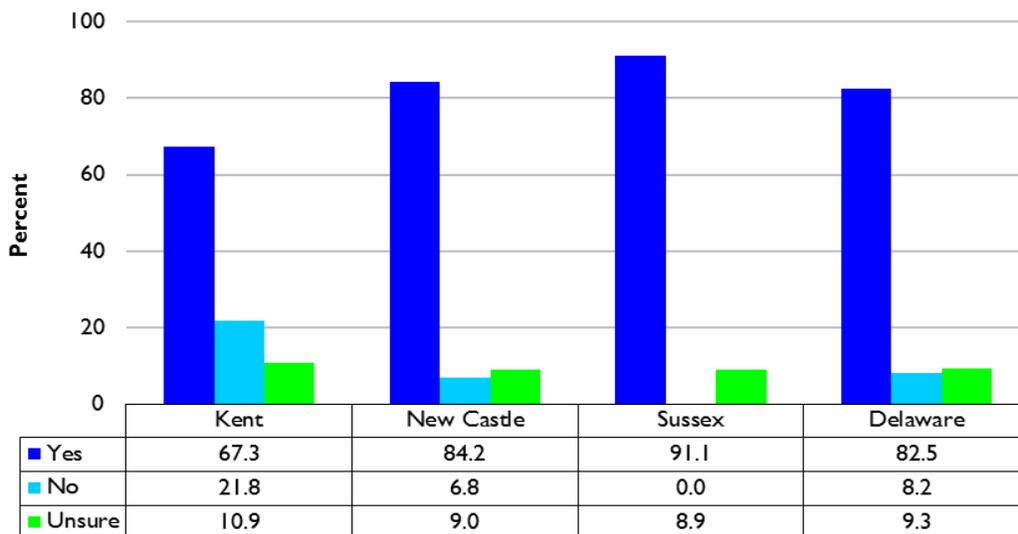
In 2012, Delaware’s Hispanic population was approximately 8 percent and the Hispanic dentist population was about 2 percent. The highest proportion of Hispanic dentists was in Kent County (5.5 percent) where 6 percent of the population was of Hispanic origin.

**Figure 26. Age Distribution of Dentists, in Delaware, by County, 2012**



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

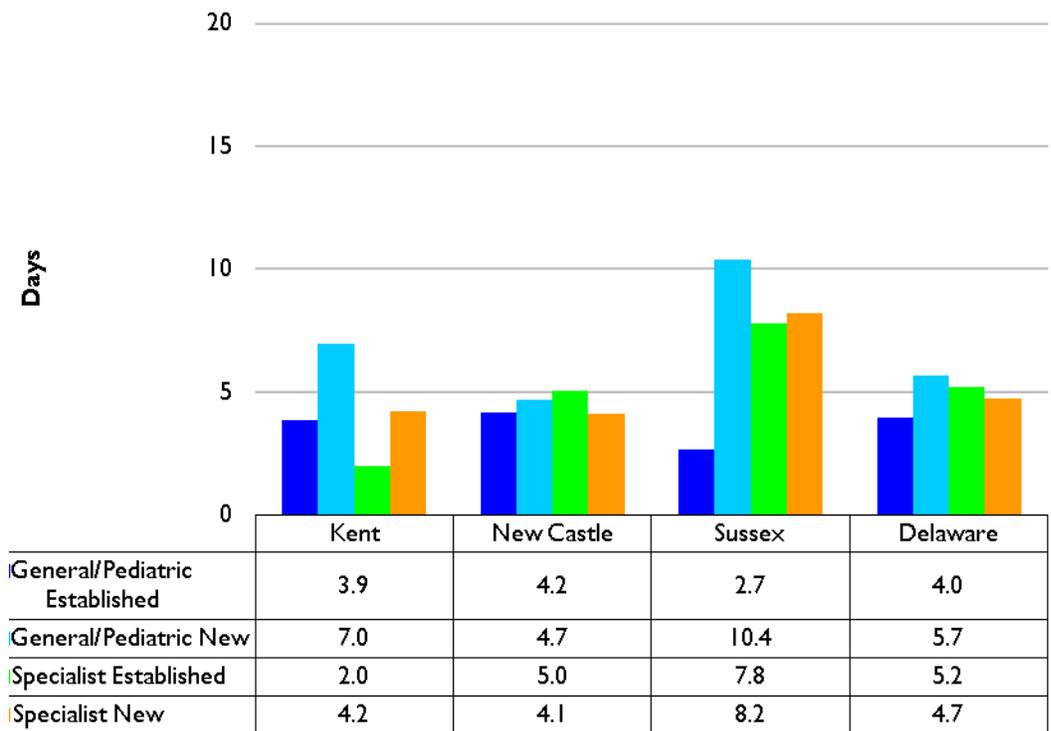
**Figure 27. Percentage of Dentists Active in Five Years, in Delaware, by County, 2012**



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

Dentists were asked if they anticipate that they will still be practicing in five years. Overall, approximately 8 percent of dentists in Delaware did not expect to be providing dental care in 2017, or five from the 2012 when the survey was fielded. About 22 percent of the dentists in Kent County indicated they will not be practicing in five years and 11 percent were unsure.

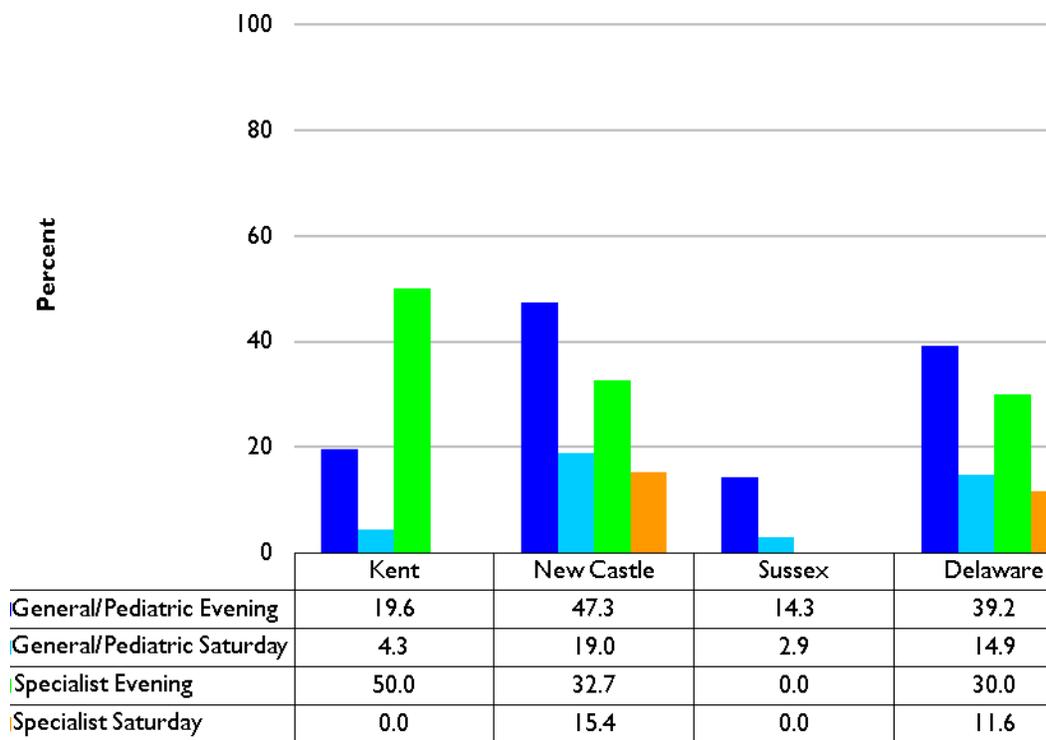
**Figure 28. Average Wait Time for New and Established Patients, in Delaware, by county, 2012**



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

Another measure of access and dental capacity is how long a person has to wait for an appointment. It varies if a person is a new patient or an established patient. It varies by county, as well. For example, a new patient seeking an appointment with a general/pediatric dentist will have to wait an average of more than 10 days in Sussex County and 4.7 days in New Castle County. Kent County falls in the middle at seven days.

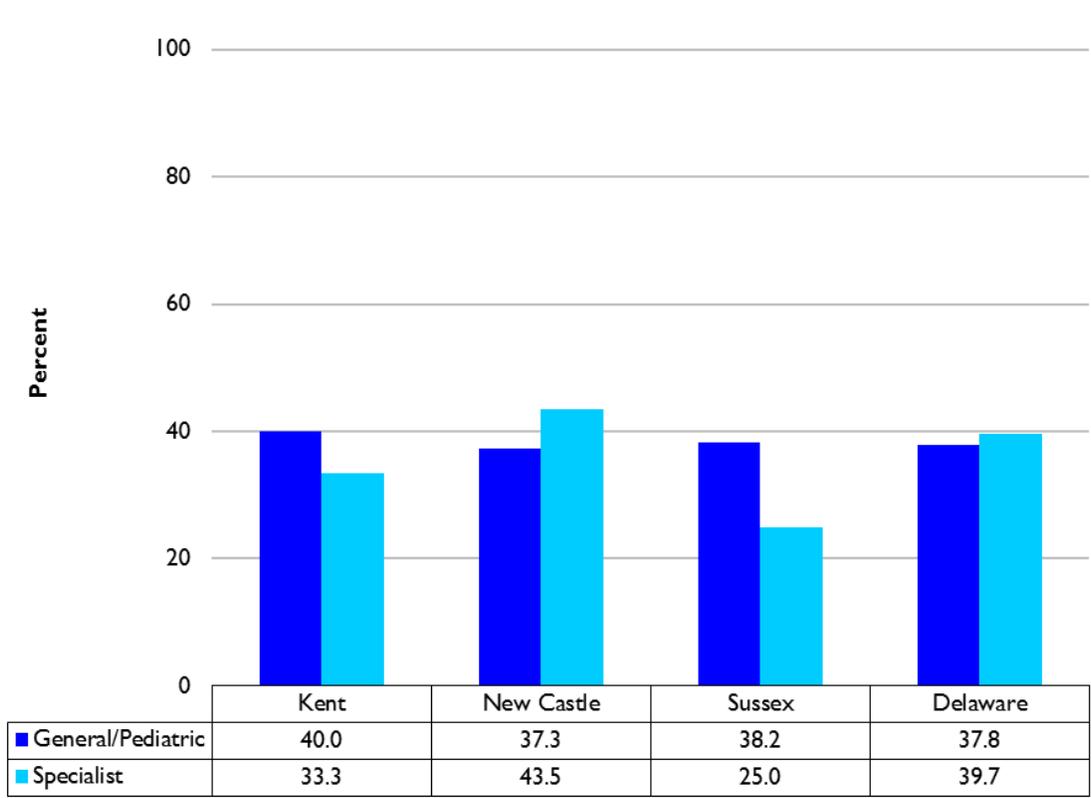
**Figure 29. Dentists with Saturday and/or Evening Hours, in Delaware, by county, 2012**



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

To measure accessibility to dental services, the survey asked for office hours when dental practice will see patients. Having “non-traditional” office hours can make it easier for people who are working or for children who are in school to access a dentist for preventive and routine care.

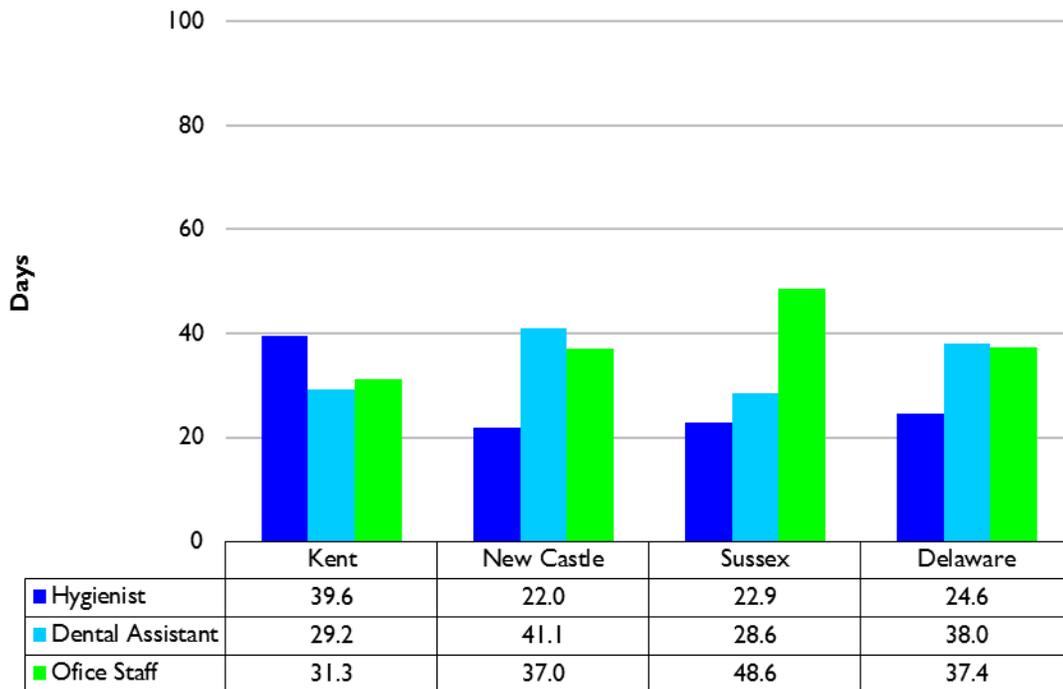
**Figure 30. Dentists Indicating Shortage of Qualified Dental Staff (Dental Hygienists and Dental Assistants), in Delaware, by county, 2012**



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

About 89 percent of general/pediatric dentists report that their offices are fully staffed. An issue impacting productivity and access to dental care is the availability of dental hygienists and dental assistants. Survey respondents were asked if they perceive a shortage in qualified applicants for these positions, and the results are above.

**Figure 31. Most Difficult Positions to Fill Identified by Dentists, in Delaware, by county, 2012**



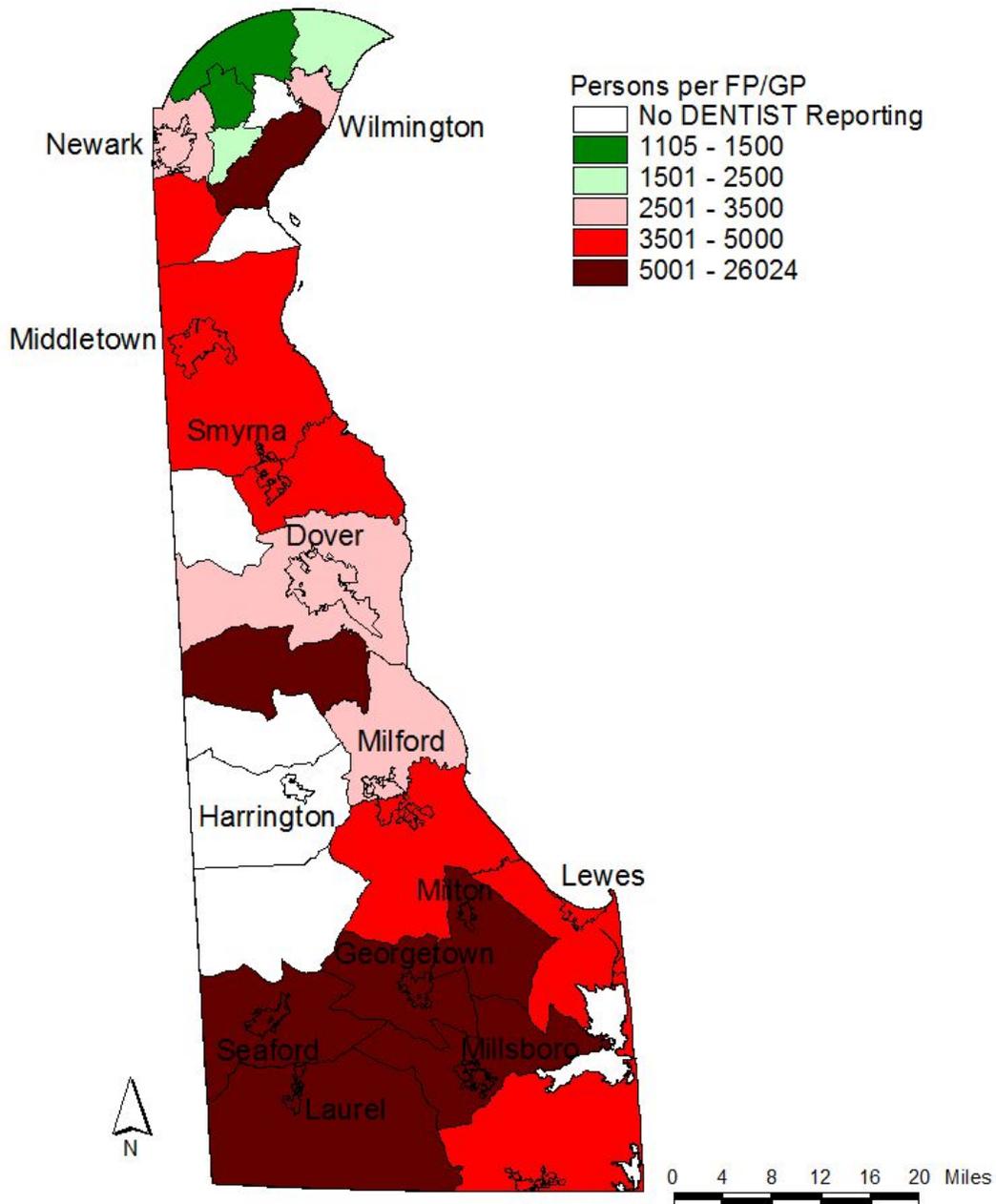
**Source:** Center for Applied Demography & Survey Research  
University of Delaware

Dentist Health Professional Shortage Areas Designations

According to the federal guidelines, an underserved area will have a population-to-dentist ratio of 5,000:1 or higher. This ratio is only one of the criteria used for determining shortage designation. “Rational” areas for the delivery of primary dental care services can be counties, parts of counties, or a neighborhood within a metropolitan area with a strong identify and a population of 20,000 or more. The travel distance to a service area is also considered. Within inner portions of metropolitan areas, information on the public transportation system is used.

Figure 32 depicts the distribution of general/pediatric dentists to the population by census county division.

Figure 32. Persons per FTE General/Pediatric Dentist, in Delaware, by census county division, 2014



Center for Applied Demography & Survey Research, University of Delaware

Source:

### ***Mental Health Professionals in Delaware, 2014***

The information gleaned from the survey research conducted in 2014 is separated into two sub-groups: psychiatrists and mental health specialists. Mental health specialists include psychologists, social workers, professional counselors of mental health, chemical dependency professionals, and psychiatric advanced/practice nurses. The term “mental health professionals” refers to psychiatrists and mental health specialists. The survey response rate was 47.2 percent. Based on the survey results, which was adjusted for non-respondents, there were approximately 1,004 mental health professionals, representing 541 full-time equivalent mental health professionals with an active practice in Delaware. The overall proportion of psychiatrists to mental health specialists is 1 to 6.3.

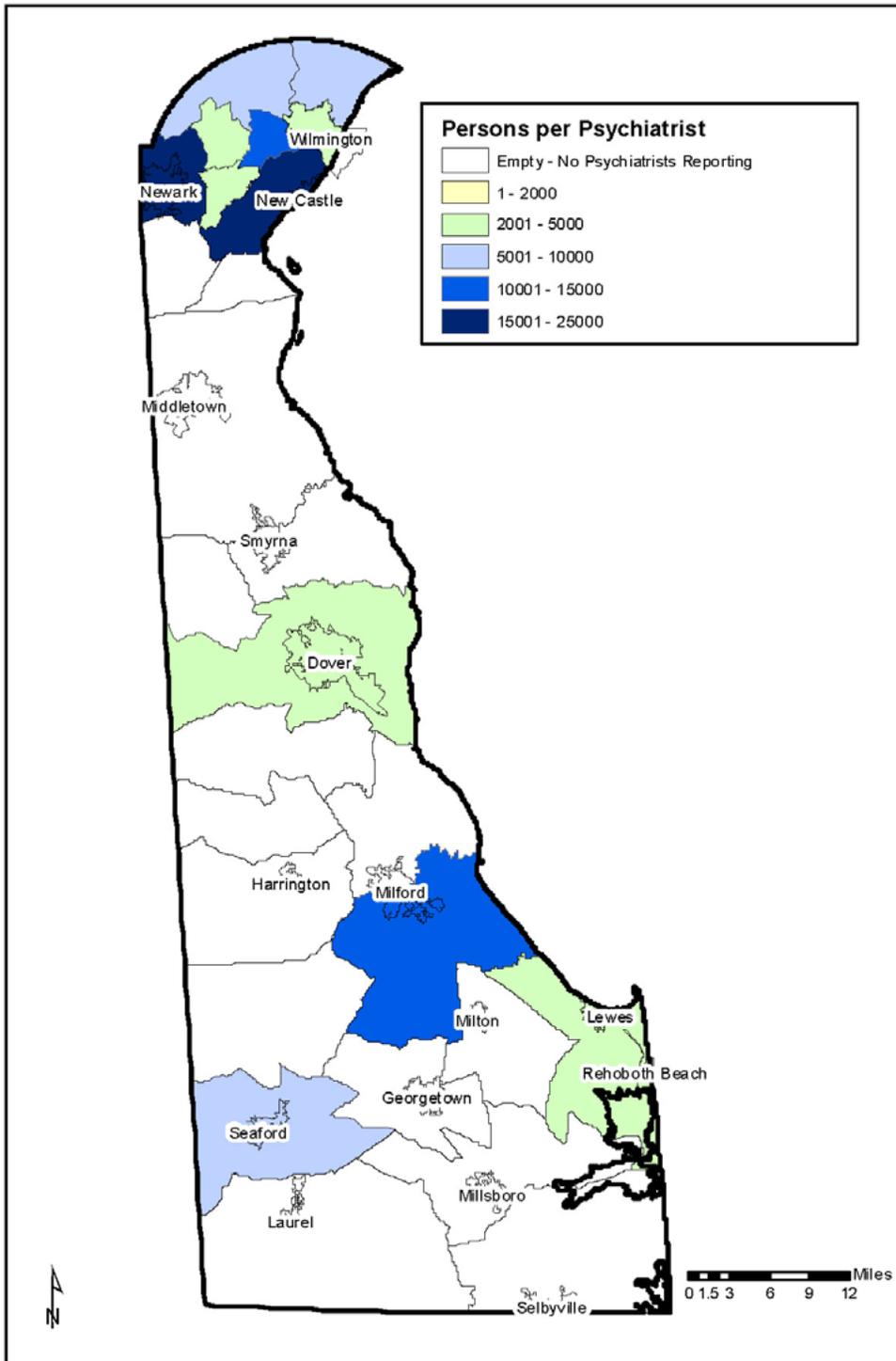
As stated in the report, *Mental Health Professionals in Delaware, 2014*:

- According to estimates based on this study, in Delaware there are 98 full-time equivalent psychiatrists and 541 full-time equivalent mental health specialists (psychologists, social workers, professional counselors of mental health, chemical dependency care specialists, and psychiatric advance practice nurses).
- Sussex County has the least favorable ratio of 15,206 persons served by one full-time equivalent psychiatrist, compared to 1:9,575 in Kent County and 1:7,936 in New Castle County. The statewide ratio of full-time equivalent psychiatrists to the population is 1:9,185.
- Mental health specialists are more likely to be women in all counties, while psychiatrists in Sussex County are more likely to be men. About three-quarters of psychiatrists in Sussex County are men.
- About 24 percent of all psychiatrists in Delaware are Asian, compared to 1 percent of mental health specialists indicating Asian as their race.
- The highest proportion (35 percent) of psychiatrists reporting with Hispanic origin can be found in Kent County. None reported from New Castle and Sussex counties.
- Sussex County, the fastest growing county with the oldest residents on average, has the highest proportion (41 percent) of mental health specialists that are age 60 years old and above.
- None of the psychiatrists reporting from Kent and Sussex counties indicated that they do not expect to be active five years from now.
- Over 66 percent of psychiatrists practicing in Delaware graduated from colleges and universities outside of Delaware or the region, while 73 percent of mental health specialists practicing in Delaware graduated

from colleges and universities in the region (Pennsylvania, New York, New Jersey, and Maryland) or Delaware.

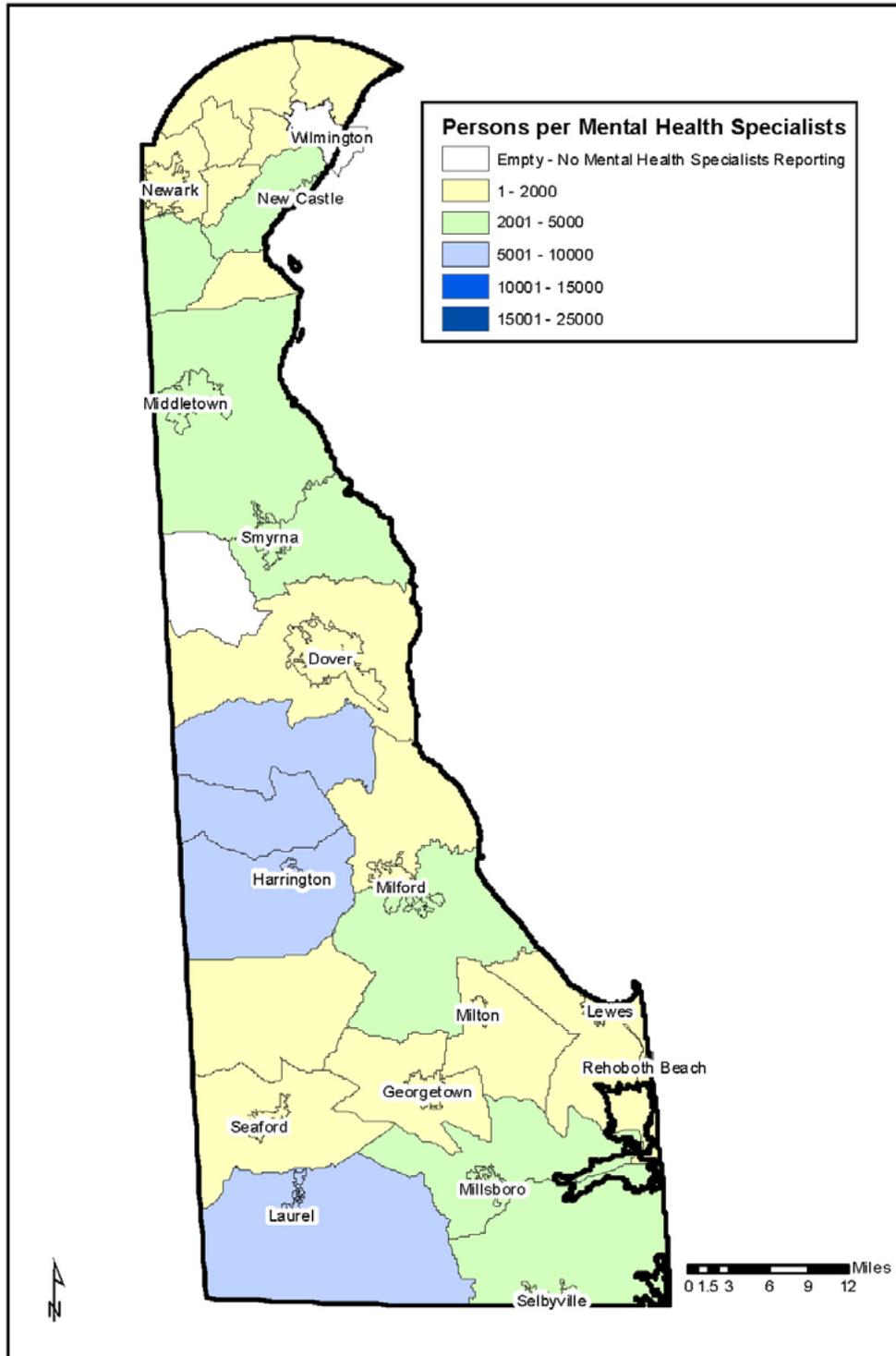
- The majority (77 percent) of Delaware's mental health specialists grew up in Delaware or the region; 36 percent are from Delaware. Almost half (47 percent) of psychiatrists grew up in Delaware or the region and about 14 percent of psychiatrists grew up in Delaware.
- About 50 percent of both psychiatrists and mental health specialists report to be self-employed in Delaware.
- On average, psychiatrists spend about 33 hours of their work week on direct patient care while mental health specialists spend about 29 hours per week on direct patient care. The remainder of their time is spent mostly on administration.
- About 47 percent of mental health professionals have practiced at their current location for less than five years.
- On average, psychiatrists see about 43 patients per week, while mental health specialists report seeing 24 patients weekly.
- Kent County has the highest proportion of psychiatrists (50 percent) indicating that they see pediatric patients, compared with 42 percent in New Castle County and 25 percent in Sussex County.
- Mental health specialists are more likely to offer flexible hours than psychiatrists. Offering evening hours is more than twice as popular as providing Saturday hours.
- An overwhelming majority of all mental health specialists (89 percent) accept new patients. The percentage of psychiatrists accepting new patients is 80 percent.
- Mental health specialists are most likely (70 percent) to refer a patient to a private practice when they cannot see a patient, while psychiatrists are most likely (100 percent) to refer patients they can't see to a hospital emergency room.
- The acceptance of medical insurance among psychiatrists is lowest in Kent County (50 percent), compared with 69 percent in New Castle County and 75 percent in Sussex County.

Figure 33. Number of Persons per FTE Psychiatrist, in Delaware, by census county division, 2014



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

**Figure 34. Number of Persons per FTE Mental Health Specialist, in Delaware, by census county division, 2014**



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

## **Federally Designated Shortage Areas**

A federally designated Health Professional Shortage Area (HPSA) is a geographic area, population group, or health care facility that the federal government designates as having a shortage of health professionals. The federal Office of Shortage Designation explains that there are three categories of HPSAs: primary care (shortage of primary care clinicians), dental (shortage of oral health professionals), and mental health (shortage of mental health professionals). HPSAs are designated using several criteria, including population-to-clinician ratios. This ratio is usually 3,500:1 for primary care, 5,000:1 for dental health care, and 30,000:1 for mental health care. When there are 3,500 or more people per primary care physician, an area is eligible to be designated as a primary care HPSA. When there are 5,000 or more people per dentist, an area is eligible to be designated as a dental HPSA. And when there are 30,000 or more people per psychiatrist, an area is eligible to be designated as a mental health HPSA.

DPH has contracted with the University of Delaware's Center for Applied Demography & Survey Research (UD CADSR) on health professional shortage area designations since 2007. UD CADSR has performed HPSA designations, Medically Underserved Area/Population (MUA/P) designations and Governor's Exceptional MUP Designations. The federal government defines the methodology by which HPSAs and MUA/Ps are designated. For areas that do not meet criteria, Exceptional MUP Designations are permitted if "unusual local conditions which are a barrier to access to or the availability of personal health services" exist and are documented.

Below is an overview of the process and criterion required for an area to be designated as a HPSA (primary care, dental, or mental) or a MUA:

### **Primary Care HPSA**

A geographic area will be designated as having a shortage of primary medical care professionals if the following three criteria are met:

1. The area is a rational area for the delivery of primary medical care services.
2. One of the following conditions prevails within the area:
  - (a) The area has a population to full-time-equivalent primary care physician ratio of at least 3,500:1.
  - (b) The area has a population to full-time-equivalent primary care physician ratio of less than 3,500:1 but greater than 3,000:1 and has unusually high needs for primary care services or insufficient capacity of existing primary care providers.
3. Primary medical care professionals in contiguous areas are over utilized, excessively distant, or inaccessible to the population of the area under consideration.

### **Dental HPSA**

A geographic area will be designated as having a dental professional shortage if the following three criteria are met:

1. The area is a rational area for the delivery of dental services.
2. One of the following conditions prevails in the area:
  - (a) The area has a population to full-time-equivalent dentist ratio of at least 5,000:1, or
  - (b) The area has a population to full-time-equivalent dentist ratio of less than 5,000:1 but greater than 4,000:1 and has unusually high needs for dental services or insufficient capacity of existing dental providers.
3. Dental professionals in contiguous areas are over-utilized, excessively distant, or inaccessible to the population of the area under consideration.

### **Mental Health HPSA**

A geographic area will be designated as having a shortage of mental health professionals if the following four criteria are met:

1. The area is a rational area for the delivery of mental health services.
2. One of the following conditions prevails within the area:
  - (a) The area has --
    - (i) A population-to-core-mental-health-professional ratio greater than or equal to 6,000:1 and a population-to-psychiatrist ratio greater than or equal to 20,000:1, or
    - (ii) A population-to-core-professional ratio greater than or equal to 9,000:1, or
    - (iii) A population-to-psychiatrist ratio greater than or equal to 30,000:1.
  - (b) The area has unusually high needs for mental health services, and has --
    - (i) A population-to-core-mental-health-professional ratio greater than or equal to 4,500:1 and a population-to-psychiatrist ratio greater than or equal to 15,000:1, or
    - (ii) A population-to-core-professional ratio greater than or equal to 6,000:1, or
    - (iii) A population-to-psychiatrist ratio greater than or equal to 20,000:1.
3. Mental health professionals in contiguous areas are over-utilized, excessively distant, or inaccessible to residents of the area under consideration.

### **Medically Underserved Area**

Data are analyzed to calculate an Index of Medical Underservice (IMU) for a service area. The IMU scale is from zero to 100, where zero represents completely underserved and 100 represents best served or least underserved. Under the established criteria, each service area found to have an IMU of 62.0 or less qualifies for designation as an MUA. The IMU involves four variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and

percentage of the population age 65 or over. The value of each of these variables for the service area is converted to a weighted value, according to established criteria.

HPSA analyses are based on a periodic survey of health professionals. Before being administered, the surveys are reviewed by key stakeholders across the state, which results in certain questions being removed and others added. This ensures that the questions are both pertinent and valuable to application for federal designations, to obtain information that is relevant, and to inform the public and policymakers of the ability of Delawareans to access health care services. The appropriateness of accessing health care services is judged by the ratio of providers to patients in a given geographic location, wait times for new and existing patients, languages spoken, and other factors. These surveys are conducted every three to four years. Physicians, dentists, and mental health professionals are surveyed using a self-administered, paper-based questionnaire.

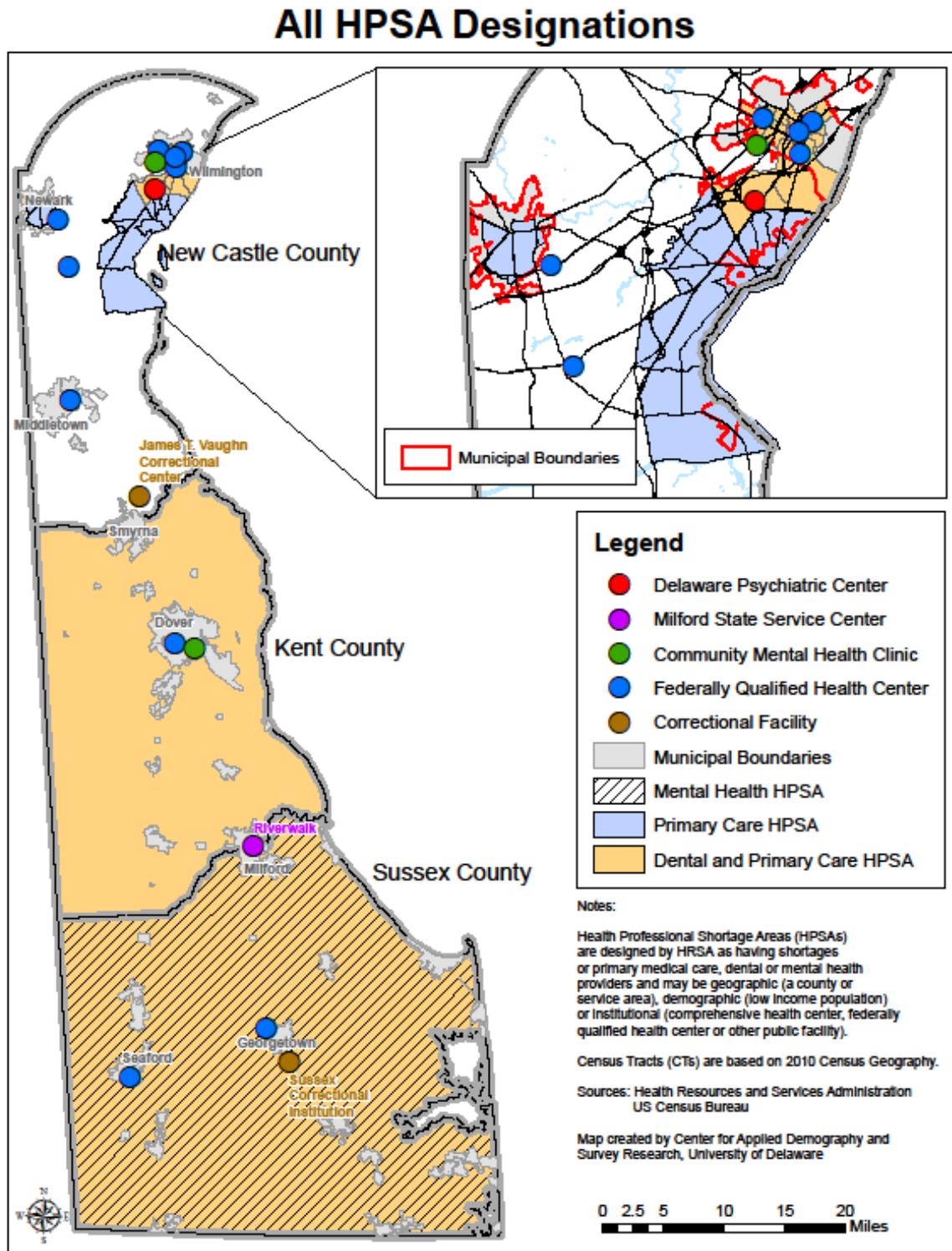
The frame (list of health professionals currently licensed to practice in Delaware) for the survey is obtained from the Delaware Division of Professional Regulation (DPR) that licenses all health professionals in Delaware. The results of these surveys and the instrument are published and made widely available to organizations and individuals. These reports are routinely provided to include Federally Qualified Health Centers, the Delaware Health Care Commission, the Delaware Healthcare Association, DPR, health professional associations, health programs (such as the Maternal Child Health Program), and other health care advocates. These organizations utilize the reports in their applications for state and federal funding, to place health care providers in areas of highest needs, and to make programmatic decisions. In addition, the reports are available online within the sections on the State of Delaware's official website in the reference sections relative to health planning, resources management, primary care, and rural health care. Survey data is used to estimate the number of active health professionals and their geographic distribution. The information is used also to update the state-provided physician records included in the Shortage Designation Management System (SDMS) for the Shortage Designation Branch, Division of Policy and Shortage Designation, Bureau of Health Workforce, Health Resources and Services Administration.

Designation of underserved areas usually takes place as an outcome of:

1. Health professional survey indicating a shortage
2. Re-designation of existing shortage areas as they come up for renewal
3. Request from providers or facilities indicating increased need

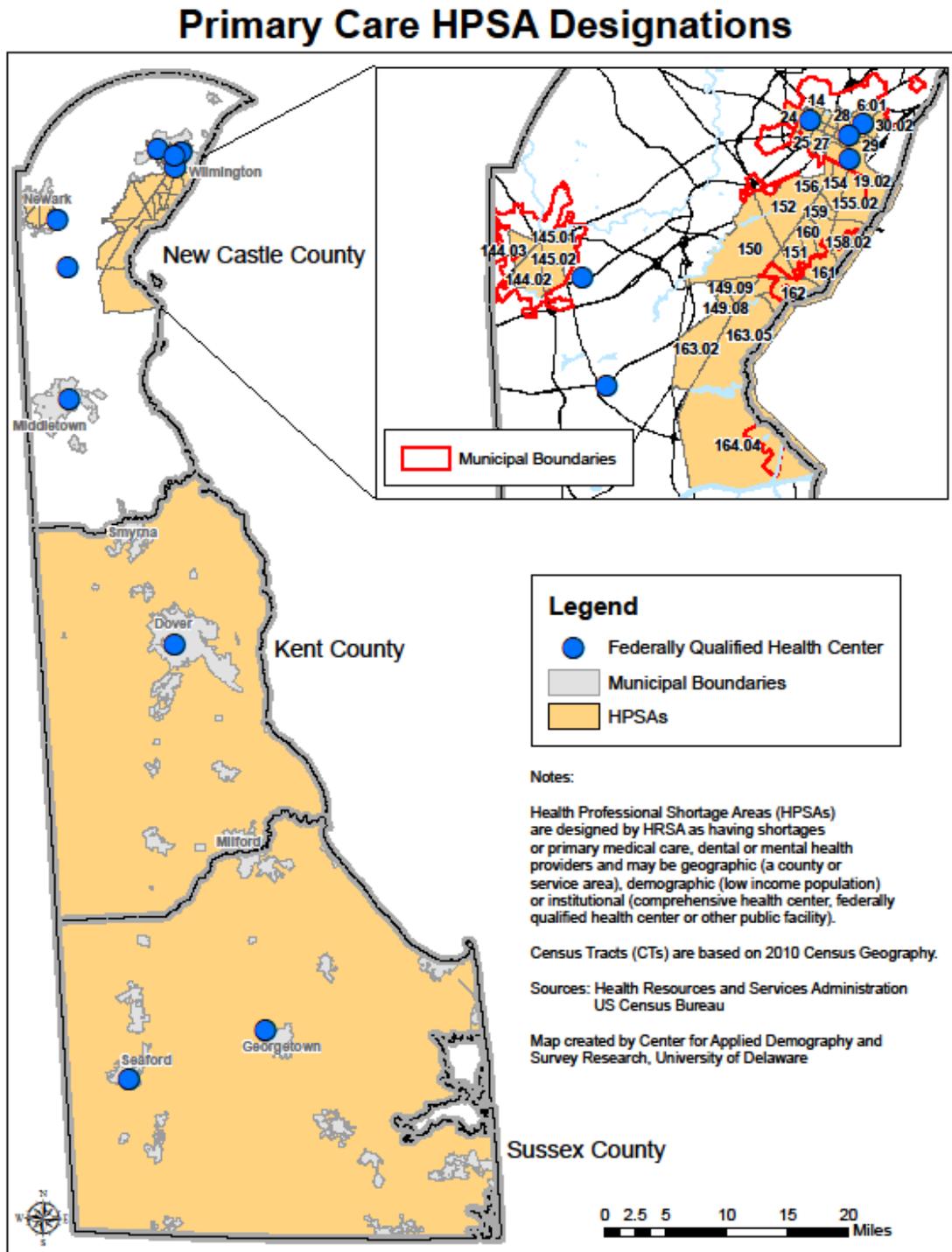
Figures 35–38 depict maps that show Delaware's HPSA, MUA and MUP areas.

Figure 35. All Health Professional Shortage Area Designations in Delaware, 2015



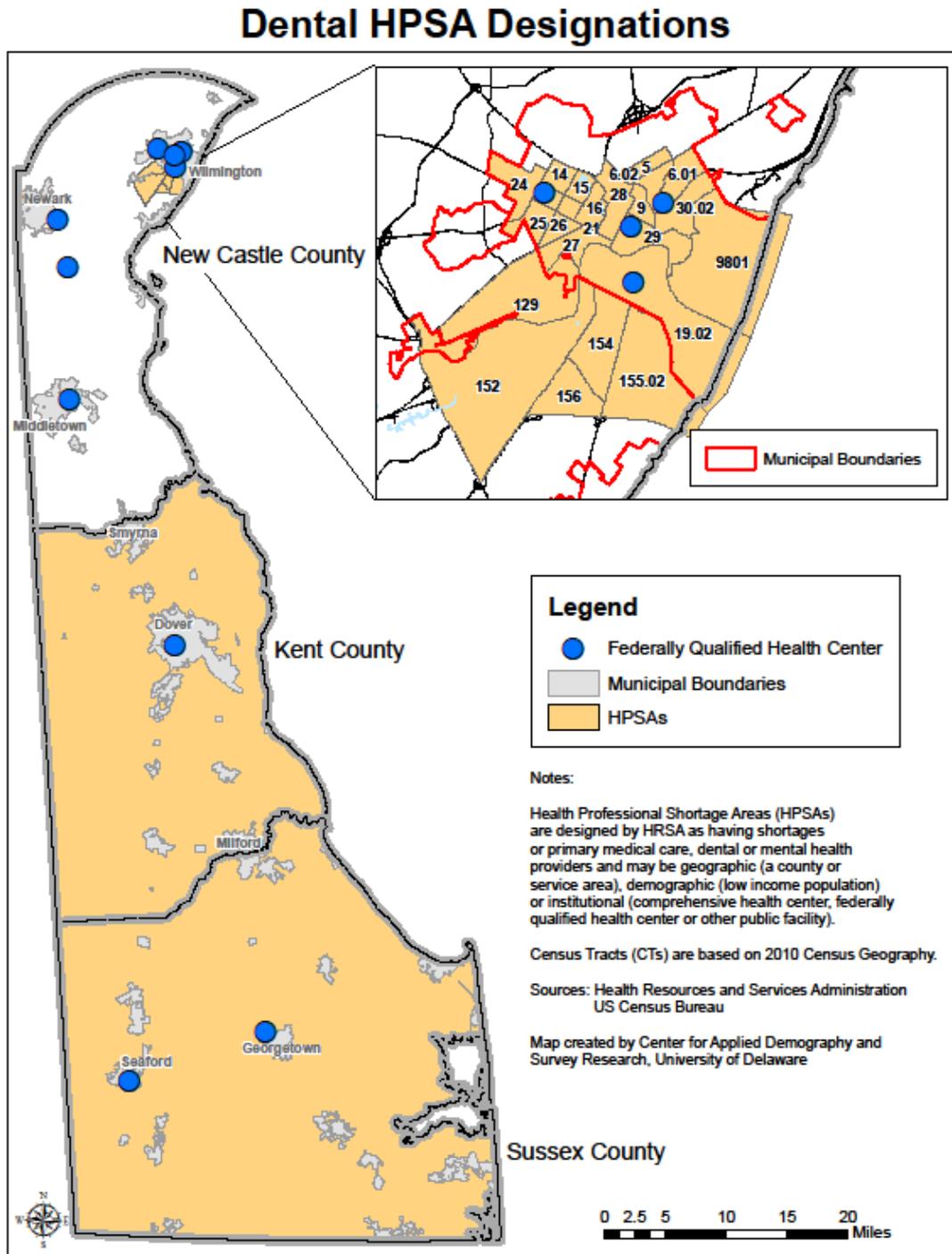
Source: State of Delaware, Office of Primary Care and Rural Health

Figure 36. Primary Care Health Professional Shortage Area Designations in Delaware, 2015



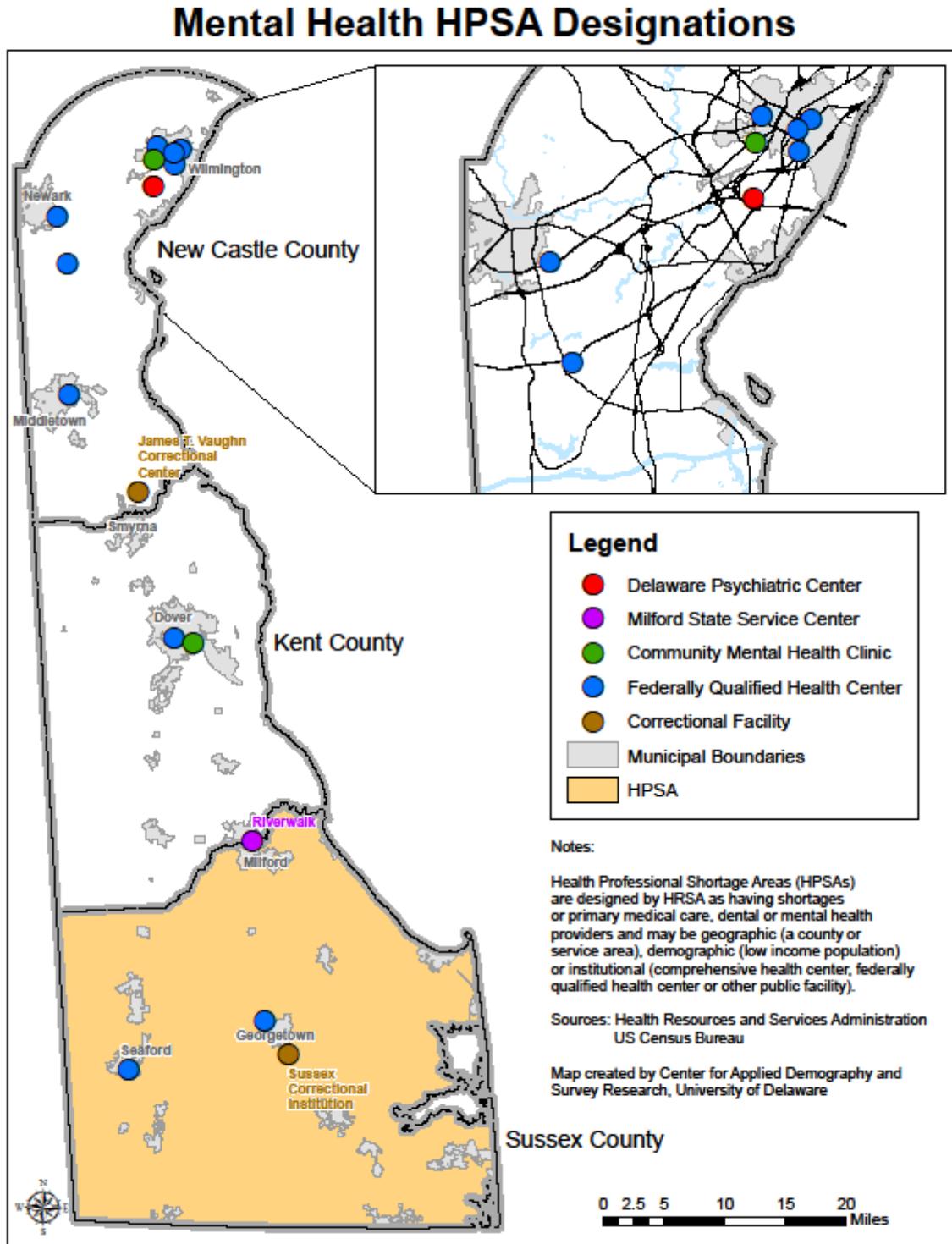
Source: State of Delaware, Office of Primary Care and Rural Health

Figure 37. Dental Health Professional Shortage Area Designations in Delaware, 2015



Source: State of Delaware, Office of Primary Care and Rural Health

Figure 38. Mental Health Professional Shortage Area Designations in Delaware, 2015



Source: State of Delaware, Office of Primary Care and Rural Health

## Safety Net Programs

Below is a list of Safety Net Programs available to uninsured and underserved Delawareans.

Screening for Life: Provides payment for cancer screening tests to qualified Delaware adults. Services provided to eligible Delawareans include mammograms and clinical breast exams, pap tests, prostate cancer screening tests, colorectal cancer screening tests, lung cancer screening tests, health education, and help with coordinating associated care. To be eligible, individuals must meet all of three criteria related to income, insurance, and age.

Delaware Health Care Connections: Provides access to primary care providers and medical specialists, and help with access to other health resources such as prescriptions, laboratory services, and radiology services. Eligible recipients receive discounted services based on their income. Medical services are provided through community health centers, and by private doctors who participate in the Medical Society of Delaware's Voluntary Initiative Program (VIP). VIP is a network of private physicians that provide services to the uninsured, those ineligible or exempt from the federal mandate to health insurance, and persons with incomes below 200 percent of the Federal Poverty Level.

Delaware Cancer Treatment Program: Provides coverage for cancer treatment services for uninsured Delaware residents. To be eligible, individuals must have incomes below 650 percent of the Federal Poverty Level and be uninsured and exempt from the federal requirement to have coverage.

Delaware Emergency Medical Diabetes Fund: The fund provides diabetes services, medications, and supplies to resident Delawareans on an emergency need basis. It provides payment for items directly related to diabetes care. The maximum total benefit is \$400 per client, per year. Individuals must not have other insurance that will provide for diabetes services, medications, and/or supplies requested.

Delaware Thrives Home Visiting Program is funded in part through federal investments from the Maternal, Infant, and Early Childhood Home Visiting Program (Home Visiting Program). It provides voluntary, evidence-based home visiting services to at-risk pregnant women and parents with young children.

The Home Visiting Program, which builds upon decades of scientific research, provides voluntary, culturally-appropriate, individually-tailored supports to families in their homes, including providing information about children's health, development, and safety, and when appropriate, referrals to support services. Through federal grants from the Home Visiting Program, in Fiscal Year 2014, home visitors in Delaware:

- Made 3,729 home visits to 1,788 parents and children in 1,049 families
- Enrolled 868 new parents and children to the program
- Served families living in communities in three counties across the state, or 100 percent of Delaware counties

The Home Visiting Program in Delaware:

- Created a statewide centralized intake system using the Help Me Grow framework
- Has \$1.3 million of state-appropriated funds for its Nurse-Family Partnership

- Developed an Early Childhood Plan in partnership with early childhood stakeholders

Like all Home Visiting Program grantees, Delaware uses evidence-based home visiting models that are proven to improve child health and to be cost effective. To serve children and families across the state; Delaware leverages federal funds to implement three models: Healthy Families America, Nurse-Family Partnership, and Parents as Teachers.

### **Federally Qualified Health Centers**

Three federally qualified health center systems are in Delaware. Federally qualified health centers offer comprehensive primary care, dental, and mental health services with fees using a sliding fee scale based on household income for patients without insurance. To qualify for the sliding fee scale, total gross annual household income cannot be more than 200 percent of the Federal Poverty Guidelines. Eligibility is based on total family size and total gross annual household income. Financial aid assistance is available at all centers to help patients apply for Medicaid, Medicare, the Delaware Healthy Children Program, and commercial insurance sold through the Health Insurance Marketplace.

Westside Family Healthcare has five facilities located in New Castle County and one facility located in Kent County. The New Castle County facilities are in Wilmington, Newark, Bear, and Middletown. The Kent County facility is in Dover. Westside also provides services to migrant and seasonal workers in Kent County and Sussex County. Westside Family Healthcare received national recognition for being a certified Primary Care Medical Home.

La Red Health Center has three facilities in Sussex County. They are located in Georgetown, Seaford, and Milford. La Red Health Center also received national recognition for being a certified Primary Care Medical Home.

Henrietta Johnson Medical Center has two locations in New Castle County, both of which are located in Wilmington.

### **Provider Recruitment and Retention Programs**

**State Loan Repayment Program** – Since 2001, the Delaware Health Care Commission (DHCC) has acted as the lead agency for the loan repayment program for Delaware. However, the SLRP is a comprehensive statewide effort jointly administered by the DHCC, the Delaware Higher Education Office, and DPH. Recently, the Division of Substance Abuse and Mental Health (DSAMH) was added as a key collaborative partner as part of a broader mental health focus. Under the State Loan Repayment Program, the Delaware Higher Education Commission is authorized to make awards to primary care clinicians for repayment of outstanding government and commercial

loans incurred during undergraduate or graduate education, in exchange for practicing a minimum of two years in a federally designated HPSA. The program aims to increase the availability and accessibility of primary care, dental, and mental health services.

**Conrad State 30/J1 Visa Waiver Program** – This program is used to place international medical graduates who have completed their medical education in the United States in underserved areas of the state. Normally, upon completion of their education, these international medical graduates are required to return to their country of nationality for at least two years before returning to the United States. However, under the Conrad State 30/J-1 Visa Waiver Program, this home residency requirement can be waived for up to 30 J-1 physicians annually. In exchange, the J-1 physicians must agree to practice medicine full time at a Delaware pre-approved sponsoring site for at least three years. These practice sites must be located in federally designated HPSAs or a MUA, with the exception of 10 positions that can be placed in areas of need that are not in federally designated HPSAs. The program aims to improve access to primary care and needed specialty care for Delawareans.

**National Health Service Corps** – This program offers financial and other support to primary care providers and sites in underserved communities. The National Health Service Corps (NHSC) Program offers the following incentives to health care professionals agreeing to practice in a federally designated health professional shortage area:

- NHSC Loan Repayment Program: \$50,000 (up to the outstanding balance of qualifying student loans if less than \$50,000) provided tax free, to primary care medical clinicians in exchange for two years of service at an approved site in a designated Health Professional Shortage Area.
- NHSC Scholar Program: Tuition, required fees, and other education costs (including books, clinical supplies, laboratory expenses, instruments, uniforms and travel for one clinical rotation) provided tax free, for up to four years. Recipients also receive a monthly living stipend, which is taxable. National Health Service Corps scholars are committed to complete a primary care residency (family medicine, general pediatrics, general internal medicine, or obstetrics/gynecology), become licensed, and serve one year for each year of support (minimum of two years of service) at an approved site in a high-need Health Professional Shortage Area upon graduation.

**National Rural Recruitment and Retention Network (3RNet)** – DPH supports health professional recruitment efforts of Delaware's medical community through membership in The National Rural Recruitment and Retention Network for Healthcare Professionals (3RNet). Through this membership, community health centers, hospitals, private practices, and community-based organizations have the opportunity to post job vacancies that can be easily accessed by candidates seeking employment. This is a free service, providing national exposure for practice sites' recruitment efforts. Along with job postings, practice sites may include information about their practices' characteristics and other information. Professional marketing and recruiting firms are not eligible for this service. Delaware health care providers interested in recruitment can use this service by contacting the

provider recruitment office, which is housed within the Bureau of Health Planning and Resources Management. The staff assists practices and health care practitioners seeking employment through the 3RNet website: <https://www.3rnet.org/>

### **Telehealth**

Telehealth in Delaware is used to address health care access issues, whether from shortfalls in critical health care specialties or in underserved geographic locations, as well as for remote patient monitoring. Delaware Medicaid reimburses health care providers for telehealth services if the services are also covered when provided face-to-face. Legislation enacted in 2015 requires private insurance regulated by the Delaware Department of Insurance to reimburse for telehealth services as of January 2016. It is anticipated that many large self-insured employers will follow suit. The use of telehealth in Delaware is supported by state government as an important cost-effective, access improvement tool. To help fully integrate telehealth into Delaware's health care system, in 2015 the state created the position of Director of Telehealth Planning and Development within DHSS's Office of the Secretary. Delaware is supported by the Mid-Atlantic Telehealth Resources Center and the Delaware Telehealth Coalition. The Coalition and more than 85 stakeholders developed a Delaware Telehealth Strategic Action Plan to advance telehealth through advocacy and favorable public policies and legislation. The action plan can be reviewed at: [http://media.wix.com/ugd/6cf508\\_68c8cc2905f04e9daa63bf3b6d04c355.pdf](http://media.wix.com/ugd/6cf508_68c8cc2905f04e9daa63bf3b6d04c355.pdf)

### **Barriers to Access: A Brief Literature Review**

One result of inadequate access to primary care is the number of people who go to hospital emergency departments for conditions that could have been prevented or treated in a primary care setting. To better understand this, the Delaware PCO conducted an informal review of easily available literature. A July 2013 article in *Health Affairs*<sup>1</sup>, based on qualitative interview with patients with low socioeconomic status, revealed that they perceive it as less expensive, more accessible, and of higher quality than ambulatory care. The authors state that "the underuse of primary care and overuse of hospital-based care has two negative consequences. First, these patients are less likely to gain the benefits of primary care, exacerbating health disparities. Second, this pattern of use is costly for the health care system.

An examination of health care cost and utilization drivers among Delaware's Medicaid population by the Real World Evidence Health Collaborative was presented for internal discussion within DHSS. The study was based on claims data. A disproportionate high rate of Ambulatory Care-Sensitive Conditions is presumed to reflect problems in obtaining appropriate primary care. The high level observations of the study included that:

- Over 25 percent of inpatient admissions are for Ambulatory Care-Sensitive Conditions and could be potentially avoidable.

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<sup>1</sup> Understanding Why Patients of Low Socioeconomic Status Prefer Hospitals Over Ambulatory Care, *Health Affairs*, July 2013, vol.32 no 7 1196-1203, Shreya Kangovi, Fances K. Barge, et. all

- Nearly half of all hospital emergency department visits among Medicaid recipients could potentially be avoidable or treated in an ambulatory/outpatient setting.

### **Health System Reform: Delaware Center for Health Innovation (DCHI)**

The DCHI was established in the summer of 2014 to serve as a non-profit organization with the mission of achieving the vision outlined in Delaware's State Health Care Innovation Plan. The DCHI is led by a diverse Board of Directors representing Delaware's major providers, payers, state agencies, community organizations, and the business community. DCHI represents a partnership between the public and private sectors with a shared vision of providing all Delawareans with accessible, effective, and well-coordinated care in a way that supports the Triple Aim. DCHI strongly believes that successful transformation of the health care delivery system is dependent on similar and aligned transformation at across multiple, hierarchical levels. In May 2015, the DCHI Board of Directors approved a consensus paper outlining a plan for achieving transformation at the primary care practice-level. A similar transformation is required at the provider-level. DCHI also acknowledges the critical role of the patient, family, and loved ones as members of the health care team. Given these interdependencies, DCHI recommends explicitly connecting development and delivery of the new Health Care Workforce Learning and Re-Learning Curriculum with activities related to enhancing patient and consumer engagement, creating the community-based Healthy Neighborhoods program, and transforming primary care practices. DCHI also recommends leveraging existing expertise, resources, and best practices to maximize efficient implementation of the new curriculum.

The development of Delaware's State Health Care Innovation Plan has been catalyzed by the State Innovation Models (SIM) initiative, a national grant program administered by the Center for Medicare & Medicaid Innovation (CMMI). The goal of the SIM initiative is to support states to move toward value-based payment models and to improve population health. Since early 2013, Delaware stakeholders came together to develop and implement a State Health Care Innovation Plan. The plan builds from the innovation occurring across the state to improve the health of Delawareans, improve health care quality and patient experience, and control the growth in health care costs. In February of 2013, CMMI awarded Delaware a design grant, which funded the development of the State Health Care Innovation Plan. The State was awarded a SIM testing grant in 2015 to support the implementation and testing of the plan.

This collaborative effort is designed to improve health, health care quality and patient experience, and reduce the rise in health care costs. Patients, physicians, nurses, other health care professionals, hospitals, Federally Qualified Health Centers, insurers, and community organizations all agree that while the state has great health care resources, the time is now to transform the health system to get greater value from the investments. Delaware developed a plan to improve on each dimension of the Triple Aim: to be one of the top five healthiest states, to be in the top 10 percent on health care quality and patient experience, and to reduce growth in health care costs by 1-2 percent.

Building on the ongoing innovation in the health system today, Delaware plans to implement a comprehensive approach to health system transformation. The core elements of this change include:

- 1) Supporting local communities to work together to enable healthier living and better access to primary care.
- 2) Transforming primary care so every Delawarean has access to a primary care provider and better coordinate care among primary care and behavioral health care providers, other specialists, and hospitals for those patients with the greatest health needs.
- 3) Across Medicare, Medicaid, State employees, and major commercial payers, shifting to payment models that reward high quality and better management of costs, with a common scorecard across payers.
- 4) Developing the technology needed for providers to access better information about their performance and for consumers to engage in their own health.

While Delaware's approach is consensus-based, the State will use its purchasing and regulatory authority to support these changes, including through its requirements for Medicaid Managed Care Organizations and Qualified Health Plans on the Health Insurance Marketplace. If successfully implemented, Delaware expects to create \$282 million in cost-of-care savings through 2018 and \$3.8 billion through 2024, with the majority of savings in the early years reinvested in the delivery system. The aim is that 90 percent of Delaware's primary care physicians will participate, as well as advance practice nurses practicing under the Collaborative Agreement, improving health and health care for nearly 800,000 beneficiaries across Medicare, Medicaid, State employees, and major commercial payers. The four-year budget is approximately \$139 million, which will support investments in practice transformation, health IT, workforce development, community-based population health programs, and overall program management.

### **Stakeholder Interviews/Listening Sessions**

Between September and December 2015, DPH conducted listening sessions with key stakeholders as part of this primary care/shortage designation needs assessment process. The DPH team included Kathleen Russell, Southern Health Services; Cort Massey and Christi Lancellotti, Northern Health Services; Katherine Collision, Office of Primary Care and Rural Health; and Judy Chaconas, Office of Health Planning and Resources Management. These opportunities allowed stakeholders to share what they perceive to be their clients' greatest needs, barriers to care, and general access challenges (network adequacy, transportation, availability of mental health care services, insurance, and the availability of culturally competent health care providers). Participants included the Federally Qualified Health Centers, Medicaid, the Mid-Atlantic Association of Community Health Centers, and the Division of Substance Abuse and Mental Health, and others.

To make the best use of time and focus the discussions, stakeholders received advance information about the context within which the interviews were being conducted and a list of questions.

The information gathered from the listening sessions augments the information from the hospitals' community needs assessments, Center for Disease Control and other statistics from Delaware Health Tracker, Healthy 2020 goals, health care provider capacity reports, disparity measures, and health professional shortage areas.

Questions included:

- 1) What do you perceive to be the greatest needs?
- 2) What are the greatest barriers to care (network adequacy, transportation, mental health, insurance, culturally competent providers, other)?
- 3) How has the ACA affected your clients?
- 4) What communities or areas in the state have the:
  - Greatest unmet health care needs?
  - Greatest access disparities?
  - Greatest health workforce shortages?
  - Insufficient training for providers? (e.g. cultural competence)
  - Lack of access to fluoride varnish or fluoridation?
- 5) Does licensure present an issue?
- 6) Does credentialing present an issue?
- 7) What strategies could help alleviate these challenges?
- 8) Is there anything else that is important for us to know or that you would like to discuss?

The following are highlights or "take homes" from the interview sessions.

### **Delaware Division of Public Health, Bureau of Oral Health and Dental Services**

DPH's Bureau of Oral Health and Dental Services received a federal grant to help Federally Qualified Health Centers integrate primary care and dental care.

The three Federally Qualified Health Center systems in Delaware report that they are interested in integrating oral evaluations and fluoride varnish applications by physicians into their clinics. However, their efforts have been limited without having staff to coordinate the services. The FQHCs are troubled about the number of young children who, having been seen by a physician, fail to make a dental appointment. This demonstrates the need to provide the preventive services when the child is at the medical appointment and then schedule the next appointment with the dentist. The grant will assist them with these goals. As of just recently, physicians can apply fluoride varnish and be reimbursed for the service. The fluoride varnish reimbursement will provide an incentive for the physicians to include the oral evaluations. Unfortunately, the FQHCs are not eligible for reimbursement of the fluoride varnish by Medicaid as it is considered to be included in the bundled rate for well-child visits.

However, the FQHCs have been able to coordinate dental services for children who children who present for a well-child visit. An additional incentive is that the Delaware State Health Care Innovation Model work, being conducted under the Center for Medicaid and Medicare Innovation's State Innovation Model (SIM) initiative, promotes a common provider scorecard that includes as a measure of success the application of pediatric fluoride varnish by primary care physicians.

One of the greatest oral health needs is to increase awareness among the general population and policymakers about the importance of oral health to overall health. Adults often are unaware that baby teeth are important and that children should be seen by a dentist. They do not realize that oral health is part of total health and is a risk factor for diabetes, heart disease, and other chronic conditions.

Transportation to a dentist can also be a challenge, particularly for older adults and persons with access and functional needs. Dentists rarely travel to someone's home or place of residence.

Language barriers and cultural competency are other challenges.

Vulnerable populations, particularly those in nursing homes and persons with access and functional needs, do not have adequate access. In addition, institutional culture needs to change to go beyond providing what is minimally required. For example, oral health needs to go beyond in-take assessments during admission to a nursing home to ensure that residents are flossing and getting their dentures cleaned on a daily basis. Medicare does not reimburse for dental care and that is an additional barrier.

A shortage of dentists also is a challenge. Two-thirds of Delaware's three counties and parts of the third county are federally designated Dental Health Professional Shortage Areas.

Delaware licensure requirements also make recruiting dentists difficult. Delaware has its own clinical exam; the state does not accept passage of the regional exam. As such, someone licensed in Pennsylvania cannot easily come to Delaware to practice. Delaware also does not have reciprocity.

### **Delaware Federally Qualified Health Centers**

#### ***La Red Health Center – October 23, 2015 Listening Session***

La Red Health Center has three practice sites in Sussex County. They are located in Georgetown, Seaford and Milford. La Red's website address is: <http://www.laredhealthcenter.org/>

The DPH team participated in a listening session at La Red's Georgetown office. The following summarizes the highlights of the discussion.

**Provider Recruitment** – Recruitment of primary care physicians to La Red's facility located in Seaford has been particularly challenging. A diabetes educator and a nutritionist also are needed. La Red has had reasonable success recruiting mid-level primary care and behavioral health practitioners.

**Transportation** - Many patients depend on La Red for transportation to the clinic or from the clinic to a specialty provider. LogistiCare is available to transport Medicaid recipients. However, 40 percent of La Red patients are “self-pay” and not eligible for LogistiCare services. Transportation is needed to help their patients get from their homes to La Red, to see sub-specialty providers, and to commute to the A.I. duPont Hospital for Children in Wilmington. Even those with LogistiCare experience access issues as a mother cannot bring her children if she has an appointment for herself. And, if only one of her children has an appointment, she cannot bring her other children with her.

**Poverty and Uninsured/Underinsured** – Despite the Affordable Care Act, there has not been a reduction in the number of uninsured patients seeking services at La Red and this is not necessarily due to an undocumented immigrant population. There also is a lot of provider turnover in the county due to a poor economy. In Sussex County, whose economy is largely reliant on agriculture and tourism, many of the jobs are seasonal and pay low wages. Many incomes fall below the income level subject to the Affordable Health Care Act’s individual mandate. In addition, many of those who are insured by commercial insurance purchased on the Health Insurance Exchange have deductibles and copayments that are high, which results in these patients being unable to pay their medical bills for services that do not qualify as preventive services.

**Migrant Workers** – The poultry industry is a major employer in Sussex County that predominantly employs migrant workers. Individuals employed in the poultry plants are permitted only a minimum number of absences per year, even if they are for legitimate medical reasons. Prenatal patients often have to miss or re-schedule appointments at La Red, because they cannot miss work. The employers encourage their workers to go to their own wellness centers/occupational health centers first (before seeking care at a community health center or private physicians) and deduct the cost that care from their paycheck when they don’t pay their medical bill. It is believed that many continue to seek care at the hospital emergency department because they are open 24 hours a day, seven days a week. However, it is likely that many delay getting care until their medical condition has worsened beyond what it would have been had they received medical care sooner. There is a perception that walk-in clinics, which are open after traditional working hours and on the weekends, are “not welcoming” to the migrant workers, and they also demand “up front” payments.

**Patients** – La Red Health Center operates a school-based wellness clinic at Sussex Technical High School. Mothers who attend the high school have selected La Red as their medical home. Thirty-two percent of La Red’s overall patient mix is 18 years of age or younger. The average patient at La Red is working and between 30 and 40 years old. Approximately 8 percent of the patient population is 65 years old or older.

Of La Red’s three facilities, there are more with chronic disease at the Seaford facility than the Georgetown facility or at the newly opened facility in Georgetown. Seaford has very poor health indicators, with very high rates of all chronic diseases.

One component of La Red's strategic plan is to convene three focus groups on the needs of the geriatric population. They are discussing this with the CHEER Centers (senior centers) and eventually would like to have a La Red presence within the senior centers so individuals in adult day care would have on-site medical homes.

La Red is planning to intensify outreach to Sussex County men and increase its male patient population. The female population at La Red is about twice the size of the male population.

The number of homeless clients is increasing at La Red.

La Red has the largest prenatal program in Sussex County. Many prenatal patients are Medicaid eligible. La Red has to transport many of the patients to a private practice provider to receive prenatal care. La Red also helps them get to a State Service Center to apply for WIC.

**Women, Infants and Children (WIC)** – La Red would like an on-site WIC office. It is a burden for La Red's patients to travel offsite to access WIC services and for La Red to transport them there. In addition, patients can be challenged at off-site locations because of language barriers.

**Diabetes** – Providers at La Red voice a need for more diabetes education services. Many patients have diabetes or pre-diabetes, are overweight or obese, and have or are at risk of cardiac problems. In addition, a diabetes educator and a nutritionist are needed for the Sussex Tech School Based Wellness Center.

**Mental Health** – In 2013 and 2014, mental health conditions were the most frequent diagnoses. La Red has been able to embed mental health consultants for both children and adults into their primary care teams. La Red is using tele-psychiatry in its Georgetown and Seaford facilities. A contract with the Delaware Department of Services for Children, Youth and their Families (DSCYF) will allow it to provide bilingual mental health services to DSCYF clients.

**Medications** – Access to prescribed medications is not much of a problem for La Red patients, even when they are referred out for sub-specialty services. The federal 340 B Prescription Drug Program, a Delaware emergency fund, and a relationship with Walgreens where patients can receive low-cost prescriptions are helpful.

**Care Coordination for Sub-Specialty Care** – La Red is exploring a contract with DPH to support a bilingual care coordinator to help patients keep referral appointments, such as referrals for colorectal screenings.

### ***Westside Family Health Center – October 26, 2015 Listening Session***

Westside Family Health Center is comprised of five practice sites, four of which are located in New Castle County and one that is located in Kent County. The four practice sites in New Castle County are in Wilmington, Newark, Bear, and Middletown. The Kent County site is in Dover. Westside's website address is:

<http://www.westsidehealth.org/en-us>

The DPH team conducted a listening session at Westside's administrative offices in Wilmington. The following comprises highlights of the discussion with the Westside staff.

**Provider Recruitment** – Recruitment of mental health professionals is a challenge, particularly for the Dover office, and to serve clients who speak Mandarin, French, Spanish, and Haitian.

**Referral Challenges** – Westside experiences “general referral issues” for neurosurgery, urology, and gastroenterology. There is also shortage of pediatric behavioral health providers, which makes it difficult to find appointments for children in need of these services.

DPH and the Medical Society of Delaware administer the Health Care Connection/Voluntary Initiative Program (VIP). The programs' goals are to provide reduced cost care for individuals ineligible for health care coverage on the Health Insurance Marketplace or who are exempt from the federal coverage requirements of the Affordable Care Act. However, Westside is reporting that it can take up to a month to get an appointment for a patient who needs a referral to certain specialists.

**Cultural Competence** – Westside reports that many providers in the private sector do not meet the cultural and linguistic competencies of the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (the National CLAS Standards). Some also do not fully utilize available translation services.

**Dental Care** – Delaware Medicaid does not cover dental services for adults. In addition, the state's licensure requirements have long been viewed as a barrier to practicing dentistry in Delaware. If state funding is not available to implement full Medicaid coverage for adults, the State should begin by providing Medicaid coverage for dental services for pregnant women.

**Primary Care Workforce** – The demand for primary care providers nationally and in Delaware is well known. The training of nurse practitioners is a component of this struggle to consistently provide quality primary care. Limited exposure during clinical rotations to a wide diversity of patients does not fully prepare students for the complete spectrum of assistance needed by the patient population served by a federally qualified health center.

**Care Coordination** – Patients, particularly those who are referred to specialty care, need hands-on assistance to help them follow through with their treatment plan. Patients often do not understand the instructions for taking a medication, for example.

**Affordable Care Act/Insurance** – Many of Westside's clients do not have steady incomes, and the incomes they do have are quite low. These patients cannot afford to pay the premiums and deductibles associated with commercial coverage purchased on the Health Insurance Marketplace. The Affordable Care Act has helped some people have an initial visit with a clinician and begin to get untreated conditions addressed, but the deductibles are resulting in gaps for their ongoing care.

**Affordable Care Act/Delivery System Reforms** – The complexity of implementing health system delivery changes, payment reforms, and health information technology is needed but also is burdensome to the primary care workforce. Some of these changes include the creation of accountable care organizations, patient-centered medical homes, payments tied to new performance scorecards, information technology that is time intensive and expensive, and more. The impact of so many changes occurring at the same time could, in some cases, negatively impact provider retention.

***Henrietta Johnson Medical Center – November 17, 2015 Listening Session***

Henrietta Johnson Medical Center (HJMC) has two practice sites in the New Castle County and absorbed a third site as of December 1, 2015. Two are located in urban Wilmington, Delaware and one is nearby in Claymont, Delaware. The link to HJMC's website is: <http://henriettajohnson.publishpath.com/>

The DPH team participated in a listening session at their main location in Wilmington. The following reflects the highlights of the discussion.

**Oral Health** – Recruitment of dentists is one of the greatest needs. Even when you find a dentist, they sometimes do not want to accept the employment position due to issues related to Delaware's licensure requirement. They do not accept the position once they understand what they must do to become licensed in Delaware. Multiple dentists have left the area in recent years. It is challenging for people to find a dentist in the community, but it is especially challenging to find a dentist accepting self-pay patients.

**Mental Health** – Recruitment of psychiatrists has also been difficult. Some progress has been made by integrating primary care and mental health. More psychiatrists and better coordination are needed to combat the substance abuse needs in East Side Wilmington. A full-time licensed clinical social worker has helped improve access to mental health services. A local methadone program is greatly needed to address the current problem of addiction. Patients present at the health center and demand access to certain medications to relieve their withdrawal symptoms. This is beyond what the primary care staff is trained to handle. They have discussed entering into a contractual arrangement with psychiatrists but there is concern about whether the psychiatrists would be covered by the Federal Tort Claims Act.

**Primary Care** – While primary care is generally accessible, there are unmet needs in the southern part of New Castle County (Old New Castle/Route 9).

**WIC** – They would like to make WIC available in each of their locations to make it more accessible to their clients (and more of a one-stop shop). WIC is currently only available at the health center's Claymont location. Ensuring access to fresh foods/fruit would help because it is hard for some to access fresh foods in that location.

**Transportation** – Transportation is a big issue, especially for the homeless. Most patients take the bus which stops right outside. Medicaid provides transportation, but they have to arrange it ahead of time, which poses a problem. Because of the lack of convenient transportation, the no-show rate is very high. Offering transportation assistance to patients directly may help.

**Cultural Competency** – Training is provided by an outside agency once a year to all staff. Training focuses on the population served. The language line is available when no one is readily available who speaks the patient's language. To break down some of the language barriers, recruiting bilingual staff is important.

**ACA** – No more than 5 percent of self-pay patients at HJMC have signed up for commercial insurance through the Health Insurance Marketplace. The Medicaid expansion has helped, though, and now more than 40 percent of patients are Medicaid recipients. The rest of the patient insurance break-out is approximately 11 percent with Medicare coverage, 18 percent with private insurance, and 20 percent who self-pay. A lot of undocumented patients are being seen. No patients are being denied care due to inability their to pay. They are still billed based on income, as required as a federal grantee.

**Education/Health Literacy** – HJMC is planning to conduct outreach services to ensure the community is aware of what services HJMC provides.

**Health Disparities** – The health disparities affecting the communities served by HJMC are abundant. The environment in which the patients live has a significant impact on their health, including poor housing (which creates problems with asthma), high poverty, high crime rates (that results in children being kept indoors with no exercise or fresh air), very few jobs, substance abuse, etc.

### ***Additional Observations***

In addition to the interviews/listening sessions highlighted above, intentional conversations relative to primary care needs took place with the leadership from the DSAMH, Delaware Medicaid, the state's medical director, and the Mid-Atlantic Association of Community Health Centers (Delaware's Primary Care Association).

Observations include references to shortages of providers in the following categories:

- Gastroenterologists
- Neurosurgeons
- Psychiatrists
- Orthopedists
- Dentists
- Obstetrics and Gynecologists
- Primary Care Providers

- Nurse Practitioners with behavioral health training and certification

The cultural competency of health care providers and language barriers repeatedly surfaced as a challenging issue, despite the availability of language translation (phone) lines and an array of cultural competency trainings provided throughout the state.

A fear of deportation among undocumented immigrants and feelings of stigma also was voiced repeatedly. Both challenge the provision of primary and preventive care services to this population.

Substance abuse -- particularly an opioid addiction epidemic in Delaware -- is another area of grave concern. There is a shortage of health care practitioners who are trained to treat addictions and a shortage of readily available treatment programs to which they can refer patients.

Integration of mental health services and primary care is also an area for more work. Federally qualified health centers are generally more advanced in this area than private primary care settings. The health centers are using a variety of integration strategies, including embedding mental health providers in their practices, telehealth, and phone consultations with mental health providers.

Patients seen by the Division of Substance Abuse and Mental Health often have chronic illnesses that need to be managed, such as diabetes. Trying to manage co-occurring illnesses can be difficult for anyone, but especially someone with underlying mental health and/or substance abuse issues. Even something like making or keeping appointments may prove to be very difficult. The integration of primary care and mental health services could be the answer as having medical care and supportive services in one location may make it easier for them.

Finally, additional resources to provide “wrap around” social supports to lower-income or otherwise vulnerable populations are needed, especially for persons with access and functional needs, mental illness, and alcohol and substance abuse problems. These populations need assistance with housing, legal issues, transportation, and finding employment.

## **Conclusion**

The findings of the 2015 Delaware Primary Care Health Needs Assessment highlight an overall shortage and/or maldistribution of primary care, mental health professionals and dentists across the state. Some populations and geographic locations are affected more than others. Changing demographics, language barriers, transportation, cultural competency, provider shortages (both primary care and specialty providers), poverty, and a growing addiction problem continue to challenge Delaware’s multi-pronged efforts to improve the health of the population.

Delaware’s collaborative agreement between its Primary Care Office (PCO) and the federal Health Resources and Services Administration ensures progressive actions to improve access to primary care and to improve the health care workforce’s ability to meet the needs of underserved and vulnerable populations. The PCO will utilize the needs assessment to inform its future work. As well, the PCO will continue to focus on activities, such as the

following, which are designed to help improve access to quality health care services for uninsured and underserved Delawareans:

- Update/designate Health Professional Shortage Areas (HPSAs) that meet the federal criteria for designation (including primary care, dental and mental health)
- Utilize health care recruitment programs, such as the National Health Service Corps Program, the Conrad State 30/J-1 Visa Waiver Program and the State Loan Repayment Program, to ensure an adequate supply of health care professionals is available to meet the needs of uninsured and underserved Delawareans
- Conduct an annual Cultural Competency Training for health care professionals and the staff of safety-net providers
- Conduct an annual Recruitment and Retention Conference designed to inform those involved in health care recruitment about recruitment/retention programs available, best practices, etc.
- Conduct a Rural Health Conference (in collaboration with the State Office of Rural Health staff) to focus on issues affecting access to health care