August 23, 2018

Penn Medicine Princeton Health
2018 Community Health Needs Assessment

Final Report

Submitted to:
Penn Medicine Princeton Health

Health Resources in Action
Advancing Public Health and Medical Research

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EXECUTIVE SUMMARY

Background

Improving the health of a community is essential to enhancing the quality of life for residents in the region and supporting future social and economic well-being. In 2018, Penn Medicine Princeton Health (Princeton Health) engaged Health Resources in Action (HRiA), a non-profit public health consultancy organization, to conduct a community health planning process to gather information about the health of residents in Princeton Health's three-county region (Mercer, Middlesex, and Somerset). This effort includes two phases: (1) a community needs health assessment (CHNA) to identify the health-related needs and strengths of the region and (2) a strategic implementation plan (SIP) to identify major health priorities, develop goals, and select strategies and identify partners to address these priority issues across the region. This report provides an overview of key findings from the community health needs assessment (CHNA). To guide planning efforts underway, an additional, in-depth analysis of a specific geographic region that includes the town of Robbinsville and several surrounding towns is also included as an Addendum to this full CHNA report.

Princeton Health has conducted similar community health needs assessments in 2012 and 2015. Priority areas identified in the 2015 CHNA included chronic disease, obesity, healthy eating and active living; behavioral health; health care access; maternal and child health; and elder health. Princeton Health and its partners developed and implemented a range of strategies to address these identified needs (see Appendix A).

Community Health Needs Assessment Methods

The community health needs assessment was guided by a participatory, collaborative approach, which examined health in its broadest sense. This process included integrating existing secondary data on social, economic, and health issues in the region with quantitative information from a community health survey and qualitative information from 9 focus groups with community residents and service providers and 14 interviews with community stakeholders. Focus groups were conducted with seniors, parents, EMTs, members of Princeton Health's Cancer Committee, public health officers, hospital staff and volunteers, school nurses and guidance counselors, and members of the Penn Medicine Princeton Health Medical Advisory Board. Interviewees included local public health officials, social service providers, health care providers, community leaders, and Princeton Health staff. The community health survey was administered online and disseminated through multiple channels to individuals who live or work in Mercer, Middlesex, and Somerset Counties. A total of 1,037 people completed the survey.

Key Findings

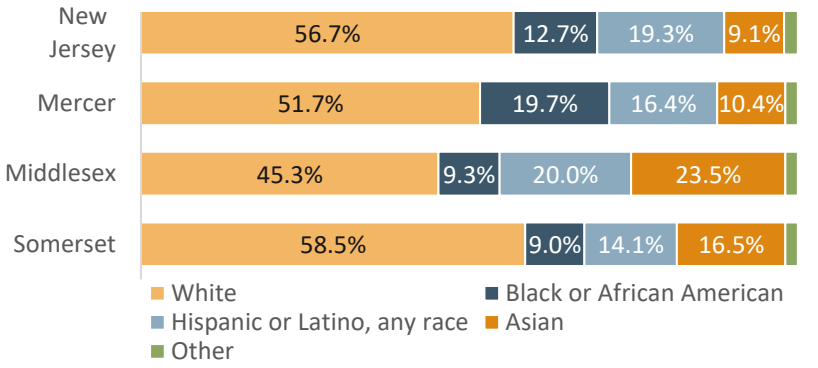
The following provides a brief overview of key findings that emerged from this assessment.

<u>Community Social and Economic Context</u>

- **Overall Population:** In 2016, the total population of the three counties served by Princeton Health was over 1.5 million, about 17% of New Jersey's total population. Between 2011 and 2016, the population of all three counties grew.
- **Age Distribution:** The age distribution in the three counties is similar to that for the state overall. Slightly over 20% of residents in each of the counties are under 18 years old while about 14% are over age 65. The proportion of senior residents grew slightly across the counties since 2015.

- **Racial and Ethnic Diversity:** Focus group and interview participants stated that the Princeton Health service area includes residents from many different countries and cultures, who contribute substantially to the vitality of local communities. Middlesex County is the most diverse of the three counties, with the largest proportion of Asian (23.5%) and Hispanic (20%) residents. Diversity in the region has increased since the 2015 CHNA.

Racial and Ethnic Distribution, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

- **Income, Poverty, and Employment:** The three counties comprising Princeton Health's service area are largely affluent, with median household income of each exceeding the state median. However, wealth is not equally shared across residents and some families in the region struggle. The poverty rate is highest in Mercer County (8.2%). The proportion of families living below the poverty level across the region and state rose from 2011 to 2016.
- **Education:** A well-educated population and substantial access to high quality educational opportunities are regional assets. A higher proportion of adult residents in all three counties than in the state overall have a college degree or higher; over half of adults in Somerset County have a bachelor's degree or higher.
- **Housing:** Housing costs in the region are high and interview and focus group participants expressed concern that some are being priced out of the region. In all three counties at least 25% of owners contribute 35% or more of their household income to housing costs and over 40% of renters do so.

> *"We have trailer parks, apartments and multi-million dollar homes across the street from each other."*
> – Key Informant

- **Transportation:** Transportation—identified as a substantial area of concern for residents in the 2012 and 2015 CHNAs—continues to be of concern in 2018. There are few local public transportation options. Transportation is especially a challenge for seniors and low-wage workers.
- **Crime and Safety:** Mercer County experiences higher rates of both violent and nonviolent crime than the other two counties. However, crime rates have declined between 2013 and 2017 in all three counties, and crime was not identified as a pressing concern in focus groups or interviews.

<u>Community Health Outcomes and Behaviors</u>

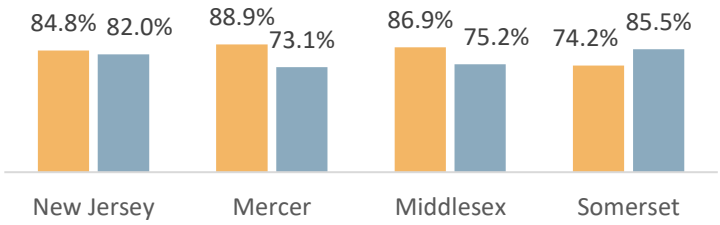
- **Overall Community Health Status and Health Concerns:** The majority of community health survey respondents in the three counties reported that overall their community's health was "very good" or "excellent", a proportion similar to that in 2015. The top three personal health issues identified by survey respondents for residents and their families were musculoskeletal issues, aging, and overweight or obesity, with over one third of respondents selecting these as one of the top three health concerns. The top community health concerns identified by survey respondents were access to health care services, mental health issues, aging health concerns, caregiving, and drug / alcohol abuse.

- **Morbidity and Mortality:** The top five causes of death are the same across the three counties and the state and include heart disease, cancer, accidents, stroke, and chronic lower respiratory disease.
- **Overweight and Obesity:** Obesity, especially among children and youth, was identified as a concern for the region, as in 2015. Focus group participants and interviewees reported rising obesity rates among residents, and related chronic diseases such as diabetes, heart disease, and sleep apnea were of growing concern. Over one quarter of adults in Middlesex and Mercer Counties were obese in 2016, a rate similar to the state overall. Obesity rates rose in Mercer County between 2013 and 2016, declined slightly in Middlesex County, and remained the same in Somerset.
- **Chronic Disease:**
    - *Heart Disease:* Age-adjusted death rates due to heart disease were lower in the three counties in 2016 than in the state overall. Heart disease was not a prominent theme in interviews or focus groups; rates declined between 2012 and 2016 in all three counties.
    - *Diabetes:* As in 2015, in 2018, diabetes emerged as a chronic disease of great concern to interviewees and focus group participants, with particular concern about the rising number of children being diagnosed with the disease. Adult diabetes rates increased in all three counties between 2013 and 2016 while they remained steady for the state overall.

> *"We are seeing more Type II diabetes in younger ages."*
> – Focus Group Participant

    - *Cancer:* Cancer is the second leading cause of death in all three counties and in the state of New Jersey. Age-adjusted cancer death rates and incidence rates declined between 2012 and 2016 in the three counties. Among the three counties, Somerset had the highest rates of breast and cervical cancer incidence. Between 2012 and 2016, rates of mammography screening declined in Middlesex County, and rates of cervical cancer screening (pap test) declined in both Mercer and Middlesex Counties. Mercer County had the highest rates of prostate cancer and lung cancer incidence. Colorectal cancer incidence rates were lower in all three counties than the state and declined between 2012 and 2015.

Percent Females Aged 21-65 Reported to Have Had a Pap Test in Past Three Years, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

    - *Asthma:* Asthma rates among adults are substantially higher in Mercer County than in other geographies and have increased from 2013 to 2016.
- **Healthy Eating and Physical Activity:** CHNA participants reported that while the region offers substantial opportunities for healthy eating and physical activity, residents face barriers. The proportion of adults who report having had no leisure time physical activity has risen between 2013 and 2016 across the three counties. CHNA participants noted that long workdays, in addition to family commitments, make it difficult for residents to find time to exercise. The increasingly sedentary habits of children and youth were of particular concern.
- **Behavioral Health:**
    - *Mental Health:* Among focus group members and interviewees, mental health was cited as an issue of substantial concern for residents in the Princeton Health service area, as it was in

the previous CHNAs. Interview and focus group participants reported that mental health issues exist across all age groups, with a particular concern for the mental health of children and youth. As in both 2012 and 2015, CHNA participants cited lack of sufficient mental health services as a major unmet need in the region. Systemic issues, including low reimbursement, insurance-defined limits on number of visits, high workforce turnover, long wait times, and aging providers further contribute to concerns. A recent statewide initiative to increase psychiatric beds was seen as a positive development.

  - *Substance Use and Abuse:* Substance use continues to be a challenge for the Princeton Health service area, as it was in 2012 and 2015. The abuse of opioids was of highest concern. Drug poisoning mortality rates increased substantially across the three counties and the state overall between 2012 and 2016. Data about substance use treatment admissions show that treatment for alcohol and heroin addiction comprised the largest proportion of admissions in 2016 in both the state and the three counties. CHNA participants also noted that among students use of marijuana, Adderall and Ritalin, and vaping is increasing. Lack of sufficient substance use services including in-patient, out-patient and those that provide medication assistive therapies were noted.

> *"Substance abuse is rampant and mental health has been ignored so long."*
> – Focus Group Participant

- **Immunization and STIs:** Communicable diseases were not extensively discussed by focus group participants or interviewees, although some mentioned rising rates of Hepatitis C.
- **Reproductive and Maternal Health:** Reproductive and maternal health concerns were not discussed extensively among focus group and interview participants. However, quantitative data indicate that Mercer County experiences higher adolescent birth and infant mortality rates and lower rates of prenatal care than the other two counties.
- **Oral Health:** A higher proportion of adults in all three counties reported that they had a dental visit in the past year than the state overall. A few interview and focus group participants reported lack of access to dentists for underserved groups.

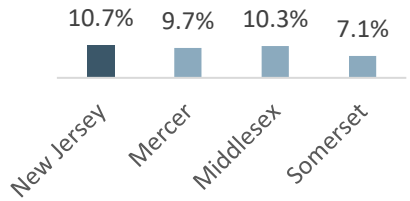
<u>Health Care Access and Utilization</u>

- **Current Emergent and Non-Emergent Healthcare Services Including Telehealth:** Focus group members and interviewees reported that health care services were plentiful in the Princeton Health service region. The majority of community health survey respondents (71.1%) indicated that they have used an online portal to access medical information. In interviews and focus groups, perspectives on the use of technology—such as videoconferencing—to deliver healthcare and interact with providers were mixed.
- **Provider Availability:** Overall, most interview and focus group participants reported that there were sufficient numbers of general healthcare providers in the Princeton Health service region, although they noted a need for more behavioral health services.
- **Access to Health Care Services:** While the region has extensive health care services, some residents face challenges in accessing them. Community health survey respondents ranked mental health services and alcohol or drug treatment for both adults and minors as the most difficult services to access. Among survey respondents, the most frequently cited barriers to accessing needed services were long wait times for appointments and lack of evening or weekend services. Other barriers to accessing health care services included:
  - *Obtaining Health Insurance:* Focus group participants and interviewees reported that, while the ACA has enhanced access to healthcare, there are still people who are uninsured or underinsured. Somerset County had the smallest uninsured population (7.1%) while

Middlesex County (10.3%) had the highest. White, non-Hispanic residents in the region were more likely to be insured than other racial or ethnic groups.

- *Navigating Insurance Coverage:* Another challenge to accessing healthcare mentioned in focus groups and interviews is the difficulty of navigating health insurance.
- *Cost of Health Care Services:* The expenses associated with healthcare—including insurance premiums, deductibles and cop-pays, and medication costs—were all mentioned in focus groups and interviews as barriers.

Percent Population Uninsured, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012 and 2016

- *Cultural Barriers:* Cultural attitudes about health and distrust of the healthcare system can result in delayed or inadequate care. Providers spoke about the tension between a desire to respect cultural norms and the need to deliver a high standard of care. Providers and others saw a need for more education of providers around cultural diversity.
- *Navigating Healthcare:* Navigating the healthcare system, including understanding billing and provider networks, is also a challenge for the region's residents, especially for those who struggle with chronic disease or serious health issues. A related issue is a need for enhanced coordination of services after hospital discharge.
- *Transportation:* Lack of transportation creates challenges to accessing healthcare in the region as well. While there are some medical transportation options, these are restricted to certain patients and some have waiting lists or require advance notice.

> *"When you have to waste a half a day getting to the doctor, you may just say 'forget it, I'm not going to deal with it.'"*
> – Key Informant

Community Resources and Assets

CHNA participants identified many strengths and assets in their communities including:

- **Amenities and Location:** Proximity to large urban centers, a large number of multinational corporations, and research and healthcare institutions all contribute to the economic success and intellectual vitality of the region. Additionally, accessibility to open spaces, beaches, trails, local events, and arts and cultural opportunities contribute to a high quality of life.
- **Human and Economic Resources:** Educated residents and educational opportunity were seen as substantial assets in the region as were diversity and social cohesion.
- **Health Care and Social Services Infrastructure:** A key theme among CHNA participants was the wide availability of health care services and the high quality of those services. The region also enjoys strong community-based programming and has strong faith communities.

Community Suggestions and Vision for the Future

Community health survey respondents identified increasing the number of services to help the elderly stay in their homes, expanding the health/medical services focused on seniors (65+), and offering more programs or services focusing on prevention of chronic disease as top priority issues. Focus group members and interviewees identified the following additional suggestions for future programming:

- **Behavioral Health Services:** Community members stated that the region needs more behavioral health services, both in-patient and out-patient, especially for children and youth, as well as community-based programs to provide long-term care to those in need after discharge from detox or mental health in-patient services. Mental health triage—the process of early identification and

coordination of appropriate treatment—and more education about mental health and substance use were also mentioned as needed.

- **Expanded Prevention Services/Education:** CHNA participants recognized that greater awareness and education was needed to foster the behavior changes that contribute to good health. They saw a need for enhanced programming in areas such as healthy lifestyles, vaccine-preventable diseases, aging issues, and vector-borne diseases. Providers and community agency staff suggested that screening programs be expanded, particularly to reach vulnerable populations.
- **Healthy Living and Disease Prevention:** Participants suggested expansion of successful evidence-based chronic disease management programs. Programs for diabetes education, in partnership with primary care providers, were seen as particularly essential.
- **Expanded Collaboration with Community Organizations:** Community institutions—schools, faith communities, and workplaces—are trusted by and connected to residents. Partnerships with these institutions, as well as with primary care providers and pediatricians, were seen as critical.
- **Healthcare Navigation Support:** Participants also saw a need to enhance the care coordination/navigation workforce to ensure that patients are connected to needed health and community services during and after hospitalization.
- **Cultural Competency:** A few interview and focus group participants also suggested that more work was needed to enhance the skills of the provider workforce relative to working with people of different cultures, working with the elderly, and working with LGBTQ patients.

Key Themes and Conclusions

Many of the issues identified in the 2015 CHNA continue to be pressing needs in the region. Overarching themes that emerge from this synthesis include:

- **While residents of Mercer, Middlesex, and Somerset Counties are generally highly educated and affluent, the high cost of living in the area creates challenges for some.** Median household income in the area remains higher than the state of New Jersey overall, and rates of unemployment remain low. Access to high-quality education in the area was frequently cited as an asset. However, the proportion of families living in poverty in the area has risen slightly since the last CHNA. The area's high cost of living leads to a variety of challenges such as difficulty finding affordable housing and accessing transportation
- **Diversity in the three-county region is increasing.** There is substantial racial, ethnic, and cultural diversity in the region. Since the previous CHNA, the percentage of residents who self-identify as Hispanic or Latino and the percentage of residents who self-identify as Asian have increased slightly. While in general interview and focus group participants valued this diversity, some noted a need for additional outreach and culturally-appropriate services.
- **Overall, Mercer, Middlesex, and Somerset Counties compare favorably to the state on many health indicators. However, health concerns remain. Similar to the 2012 and 2015 CHNA, behavioral health was one of the most frequently cited health concerns.** In the community health survey, mental health and substance use issues were identified by respondents as top health issues for the community. Interview and focus group participants also described concerns related to stress and anxiety, for the population in general and specifically for children and youth. Opiate use was also frequently mentioned, as it was in 2015. Concerns about use of marijuana and vaping by youth were more prominent in 2018 than in past years. While systemic efforts are underway, interview and focus group participants cited a need for increased mental health and substance use treatment.
- **Chronic disease and related issues remain important issues for the community.** Interview and focus group participants frequently shared concerns related to diabetes and weight management, and noted the relationship of these issues to lifestyle factors and barriers such as lack of exercise for

both children and adults. Chronic disease including heart disease and diabetes, physical activity and nutrition, and overweight or obesity were rated by survey respondents as top issues and /or high priorities for future areas for programs and services. Heart disease and cancer remain the leading causes of death in the three-county region, though death rates from these causes are declining. While cancer incidence and screening rates are generally similar to the state overall, self-reported screening rates have declined slightly in some counties and for some cancers. Interview and focus group participants also expressed concern regarding barriers to cancer screenings, particularly for low-income and immigrant communities.

- **While the area benefits from the availability of many high-quality health care facilities, access and navigation are challenges for some residents.** There are many health care services in the three-county region. However, despite this availability, barriers to accessing care and challenges navigating the health care system remain. A need for additional mental health and substance use services was noted. Additional access barriers included issues related to scheduling appointments, cost of care and insurance issues, challenges navigating and coordinating care, transportation, and cultural barriers. It was noted that access issues are particularly common for lower income residents, undocumented communities, and new immigrants.
- **A need for additional health-related services and supports for seniors and their caregivers was commonly cited.** Demographic data indicates that the region is aging slightly. Existing resources such as senior centers and adult communities were described as assets. However, health concerns related to aging (including musculoskeletal issues such as joint pain and arthritis) and caregiving were selected as top health issues by survey respondents, who also indicated expansion of services for elderly to stay in their homes and health/medical services for seniors as high priority issues for future funding and resources.
- **Given these identified needs, various recommendations were offered** including expanding programs and services to address behavioral health, providing more health education and healthy living and prevention programming (including screening programs), collaborating with trusted community organizations to engage and reach residents, increasing support for health system navigation, and increasing cultural competency.

Priority Health Needs of the Community

In July and August 2018, HRiA led a facilitated process with senior leaders from Penn Medicine Princeton Health. In July 2018, HRiA presented the priorities identified by the 2018 community health needs assessment (CHNA), including the magnitude and severity of these issues and their impact on priority populations. Penn Medicine Princeton Health leadership determined that all of the community needs identified in the CHNA would be included in the 2018-2020 Strategic Implementation Plan (SIP) in the following clustered priority categories:

- Priority 1: Chronic Disease, Obesity, and Healthy Eating and Active Living (HEAL)
- Priority 2: Behavioral Health
- Priority 3: Health Care Access
- Priority 4: Maternal Child Health
- Priority 5: Elder Health

These priority needs continue from the previous CHNA-SIP process, as they are ongoing needs and several initiatives are still in progress to address them. In August 2018, HRiA led SIP planning sessions that included mapping current and emerging programs and initiatives against these needs, as well as decision-making regarding which existing programs and initiatives would be continued and what new programs or initiatives would be developed. All areas highlighted by the 2018 CHNA are being addressed by the 2018-2020 Strategic Implementation Plan.

BACKGROUND

Overview of Penn Medicine Princeton Health

Penn Medicine Princeton Health (Princeton Health) is one of the most comprehensive healthcare systems in New Jersey. Princeton Health provides acute care hospital services through Princeton Medical Center; behavioral healthcare through Princeton House Behavioral Health; in-home nursing, rehabilitation, and hospice care through Princeton HomeCare; primary and specialty care through Princeton Medicine Physicians; ambulatory surgery and wellness services. Since May 2012, Princeton Medical Center has been located in a state-of-the-art facility in Plainsboro Township which offers services in areas such as cancer, cardiac and pulmonary care, critical care, emergency, imaging and outpatient laboratory services, maternal and newborn care, neuroscience, surgery, sleep disorders, pediatric care, and eating disorders. Princeton Health also houses the Bristol-Myers Squibb Community Health Center which provides adult and pediatric care to uninsured and underinsured residents and maintains a partnership with The Children's Hospital of Philadelphia (CHOP). In January 2018 Princeton Health and its affiliates joined the University of Pennsylvania Health System (UPHS), one of the world's leading academic medical centers.

As part of its commitment to the community, Princeton Health established the Community Education and Outreach Program to offer a dynamic curriculum of comprehensive health education, screenings, and support facilitated by its outstanding physicians, nurses, and health professionals. The Program also works closely with leading national organizations—the American Cancer Society, the American Heart Association, and the Susan G. Komen Breast Cancer Foundation, among others—to raise funds, heighten awareness, and bring important health programming to the community it serves. Princeton Health is dedicated to promoting healthy living at every stage of life and to enhancing quality of life by addressing the unique needs of women, men, seniors, children, adolescents, and diverse populations.

Summary of Previous Community Health Needs Assessment

Princeton Health's previous CNHA utilized a methodology similar to that used to develop this report. This comprehensive 2015 community needs assessment used a collaborative approach and focused on Mercer, Middlesex, and Somerset Counties. Data from key informant interviews, focus groups, a community health survey, and secondary sources were analyzed to describe the community's social and economic issues, health behaviors and health outcomes, health care access, strengths and challenges, and resources to help achieve a vision for the future. Priority areas identified in the 2015 CHNA included chronic disease, obesity, healthy eating and active living; behavioral health; health care access; maternal and child health; and elder health. Princeton Health and its partners have developed and implemented a range of strategies to address these identified needs. The full 2015 CHNA may be accessed here: https://www.princetonhcs.org/community.

Review of Initiatives

As a result of the 2015 CHNA, Penn Medicine Princeton Health developed a plan to address identified key health needs and issues through clinical care, programs and services, and in collaboration with a variety of community agencies. Since the 2015 CHNA, Penn Medicine Princeton has provided a variety of services and programming to address the identified key needs and issues (see Appendix A). Strategic Initiatives have been implemented to address the following Priority Areas: Chronic Disease, Obesity, and Health Eating Active Living; Behavioral Health; Health Care Access; Maternal and Child Health; and Elder Care.

Purpose and Scope of the 2018 Princeton Health Community Health Needs Assessment (CHNA)
To ensure that Princeton Health is achieving its mission and meeting the needs of the community, and in furtherance of its obligations under the Affordable Care Act, Princeton Health undertook a community health needs assessment (CHNA) process in the spring of 2018. Health Resources in Action (HRiA), a non-profit public health consultancy organization, was engaged to conduct the CHNA. HRiA conducted a similar assessment for Princeton Health in spring 2012 and spring 2015.

A CHNA process aims to provide a broad portrait of the health of a community in order to lay the foundation for future data-driven planning efforts. In addition to fulfilling the requirement by the IRS Section H/Form 990 mandate, the Princeton Health CHNA process was undertaken to achieve the following overarching goals:

- To examine the current health status of residents in the three-county region served by Princeton Health, including met and unmet health needs, within the larger social context of the community; and
- To identify community assets and current infrastructure, which may be leveraged to guide future programming and strategic opportunities for Princeton Health.

The CHNA process included three components: a review of existing social, economic, and health data about the three counties comprising Princeton Health's service area; a community health survey; and in-depth interview discussions with leaders in public health, health care, education, social services, and other sectors, and focus groups with residents to identify the perceived health needs of the community, challenges to accessing services, the current strengths and assets, and opportunities.

<u>Definition of Community Served</u>
Princeton Health's service area spans Mercer, Middlesex, and Somerset Counties. Figure 1 below shows the location of these three counties within the state of New Jersey. This assessment examined the social, economic, and health issues across the three counties. While the assessment looked at conditions across the counties, particular emphasis was given to examining issues among populations that were most at-risk, seniors, and from racial/ethnic minority groups. In many instances, quantitative data were not available for these specific sub-groups; therefore, qualitative data collection—through focus groups with residents and interviews—was conducted to identify the needs of those from these populations.

Figure 1. Mercer, Middlesex, and Somerset Counties, New Jersey

DATA SOURCE: Map created by Health Resources in Action using 2010 data from the U.S. Department of Commerce, Bureau of the Census

Robbinsville Addendum

As part of the 2018 CHNA and to guide planning efforts underway, Princeton Health requested an additional, in-depth analysis of a specific geographic region that includes the town of Robbinsville and several surrounding towns. Specifically, this analysis of the "Robbinsville area" includes the following towns: Columbus, Roosevelt, Trenton/Hamilton, Allentown, Windsor, Bordentown, Wrightstown, and Robbinsville. This analysis is included as an Addendum to this report (see Robbinsville Addendum).

METHODS

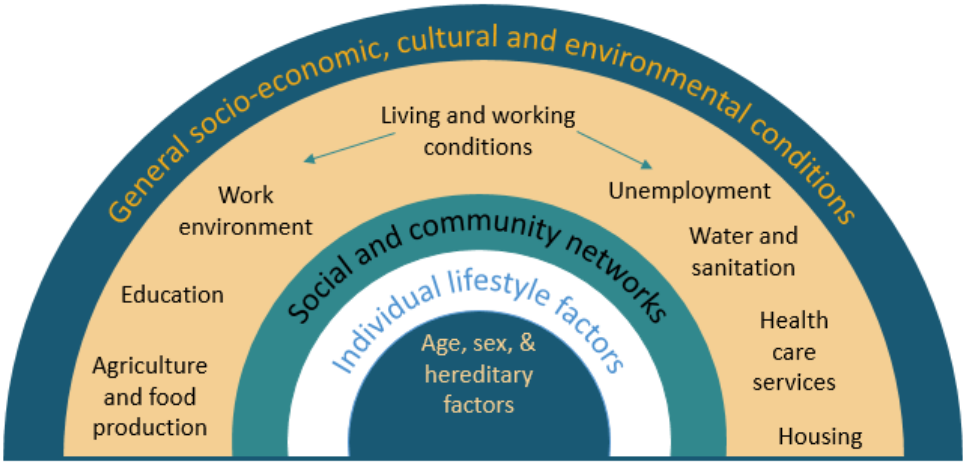
The following section details how the data for the Penn Medicine Princeton Health (Princeton Health) community health needs assessment was compiled and analyzed, as well as the broader lens used to guide this process. Specifically, the community health needs assessment defines health in the broadest sense and recognizes that numerous factors and multiple levels— from lifestyle behaviors (e.g., diet and exercise) to clinical care (e.g., access to medical services) to social and economic factors (e.g., employment opportunities) to the physical environment (e.g., air quality)—all have an impact on the community's health.

Approach and Social Determinants of Health Framework

It is important to recognize that multiple factors have an impact on health, and there is a dynamic relationship between people and their lived environments. Where we are born, grow, live, work, and age—from the environment in the womb to our community environment later in life—and the interconnections among these factors are critical to consider. That is, not only do people's genes and lifestyle behaviors affect their health, but health is also influenced by more upstream factors such as employment status and quality of housing stock. The social determinants of health framework addresses the distribution of wellness and illness among a population. While the data to which we have access is often a snapshot of a population in time, the people represented by that data have lived their lives in ways that are constrained and enabled by economic circumstances, social context, and government policies. Building on this framework, this assessment approaches data in a manner designed to discuss who is healthiest and least healthy in the community, as well as examines the larger social and economic factors associated with good and ill health.

Figure 2 below provides a visual representation of this relationship, demonstrating how individual lifestyle factors, which are closest to health outcomes, are influenced by more upstream factors such as employment status and educational opportunities. This report provides information on many of these factors, as well as reviews key health outcomes among the residents of this Central New Jersey region.

Figure 2. Social Determinants of Health Framework



DATA SOURCE: World Health Organization, Commission on the Social Determinants of Health, Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health, 2005. Graphic reformatted by Health Resources in Action.

Secondary Data

The Princeton Health community health needs assessment (CHNA) incorporates data on important social, economic, and health indicators pulled from various sources, including the U.S. Census, Centers for Disease Control and Prevention, U.S. Bureau of Labor, New Jersey Department of Health and Senior Services, the New Jersey Department of Education, and national databases that compile county-level data, such as University of Wisconsin's County Health Rankings and Community Common's CHNA.org. Types of data include self-reporting of health behaviors from large, population- based surveys such as the Behavioral Risk Factor Surveillance System (BRFSS), as well as vital statistics based on birth and death records. All tables and graphs note the specific data source.

Most of the social, economic, and health data in this report are provided for each of the three counties as well as the state overall. However, county-level data were not available for all measures. In the cases where county-level data were not available, state data are provided. It should also be noted that for data that derive from the American Community Survey, five-year (2012-2016) estimates are used. Per Census recommendations, these five-year aggregates are used to yield a large enough sample size. Where possible, the most current data are compared to data shared in the 2015 CHNA to enable the examination of trends. It should be noted, however, that cancer incidence rates from prior years have been updated by the New Jersey State Cancer Registry and thus may not reflect data shared on the same measures in the 2015 CHNA.

Primary Data: Input from Community Representatives

<u>Community Health Survey</u>

In order to gather quantitative data that were not provided by secondary sources and to understand public perceptions around health issues, a 22-item community survey was developed and administered online and on paper to residents within the three counties during 4.5 weeks from mid-April 2018 through mid-May 2018. The survey explored key health concerns of community residents as well as their primary priorities for services and programming. Princeton Health reviewed and provided feedback on the survey during an in-person kick-off meeting and a pilot test, and also disseminated the online survey link and hard copy survey through a variety of dissemination channels including an employee Listserv, the Bristol-Myers Squibb Community Health Center, and community partner organizations.

A total of 1,037 respondents who live and/or work in Mercer, Middlesex, or Somerset County completed the survey (an additional 31 respondents who lived and worked in other counties or did not specify counties completed the survey were not included in the survey analyses). The survey was administered in both English and Spanish, online and through hard copy. Where possible throughout this report, comparisons are made to the 2015 Princeton HealthCare System CHNA Survey, which was fielded in May-June 2015 and completed by 1,308 respondents who lived and/or worked in Mercer, Middlesex, or Somerset County.

Table 1 presents the demographics of the 1,037 survey respondents included in the analysis. The demographics of respondents from the three counties were similar, therefore in Table 1 summary demographics are presented in the aggregate. The majority (97.4 %) of respondents completed the survey in electronic form and in English. Around half (47.6%) of the respondents reported that they live or work in Mercer county. The age of the respondents ranged from 18 to 65 or older, with 81.6% above the age of 50 and only 19.6% of respondents were parents of children under the age of 18. The majority of respondents were Caucasian (77.6%) and English was the most frequent primary language spoken at home (91.9%). The majority of respondents (72.6%) had at least a college level education.

Table 1: Characteristics of the 2018 Community Health Needs Assessment Survey Mercer, Middlesex, and Somerset County Respondents

	%
County in which work or live	
Mercer	47.6%
Middlesex	29.8%
Somerset	22.6%
Survey method	
Electronic	97.4%
Paper	2.6%
Language survey was administered	
English	97.4%
Spanish	2.6%
Age	
18-39 years old	8.5%
40-49 years old	9.9%
50-64 years old	38.1%
65 years or older	43.5%
Gender	
Female	74.3%
Male	25.7%
Ethnicity	
Caucasian/White, Non-Hispanic	77.6%
African American/Black, Non-Hispanic	5.6%
Hispanic/Latino(a)	5.6%
East Asian / Pacific Islander (e.g., Chinese, Filipino, Vietnamese, Korean), Non-Hispanic	4.0%
South Asian (e.g., Indian, Bangladeshi), Non-Hispanic	3.2%
Other	4.0%
Primary language spoken at home	
English	91.9%
Spanish	3.8%
Other	4.3%
Highest level of education completed	
High school diploma or less	7.3%
Some college	9.6%
Associate's degree/ Technical certification	10.5%
College graduate or more	72.6%
Parent of a child under the age of 18	
Yes	19.6%
No	80.4%

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Qualitative Data: Focus Groups and Interviews

In April 2018, focus groups and interviews were conducted with leaders from wide range of organizations in different sectors. In total, 9 focus groups and 14 key informant discussions were

conducted with individuals from Princeton Health's service area and over 100 individuals were engaged in this qualitative data collection. Focus groups were held with seniors, parents, EMTs, members of Princeton Health's Cancer Committee, public health officers, hospital staff and volunteers, school nurses and guidance counselors, and members of the Penn Medicine Princeton Health Medical Advisory Board. Ten key informant discussions were conducted with individuals including local public health officials, social service providers, health care providers, community leaders, and Princeton Health staff. In addition, one focus group and four interviews were conducted with individuals in the Robbinsville/ Hamilton community. The focus group included board members of the Hamilton YMCA and interviewees included school superintendents, YMCA staff, government leadership, and members of a partnering housing organization. A full list of the different sectors engaged during the focus group and interview process can be found in Appendix B.

Focus group and interview discussions explored participants' perceptions of their communities, priority health concerns, perceptions of public health, prevention, and health care services, and suggestions for future programming and services to address these issues. A semi-structured moderator's guide was used across all discussions to ensure consistency in the topics covered. Each focus group and interview was facilitated by a trained moderator, and detailed notes were taken during conversations. On average, focus groups lasted 90 minutes and included 6-15 participants, while interviews lasted approximately 30-60 minutes. Participants for the focus groups were recruited by Princeton Health, working with clinical and community partners.

The collected qualitative data were coded and analyzed thematically, where data analysis identified themes that emerged across all groups and interviews. Qualitative data collected specifically from Robbinsville were analyzed with the data for the overall region for the main report and examined separately for the Robbinsville Addendum. Frequency and intensity of discussion on a specific topic were key indicators used for extracting main themes. Selected quotes—without personal identifying information—are presented in the report to further illustrate points within topic areas.

Limitations

As with all data collection efforts, there are several limitations related to the assessment's research methods that should be acknowledged. Years of the most current data available differ by data source. In some instances, 2017 may be the most current year available for data, while 2014 or 2015 may be the most current year for other sources. Some of the secondary data were not available at the county level. Additionally, several sources did not provide current data stratified by race/ethnicity, gender, or age – thus these data could only be analyzed by total population. Finally, youth-specific data from the New Jersey Student Health Survey, as were used in past CHNAs, were largely not available. This is because the NJ Department of Education was not able to obtain the number of responses required by the Centers for Disease Control (CDC) to weight the data to be representative of the New Jersey high school student population.

Secondary survey data that is included in this CHNA report and is based on self-reports, such as the Behavioral Risk Factor Surveillance Survey (BRFSS), should be interpreted with particular caution. In some instances, respondents may over- or underreport behaviors and illnesses based on fear of social stigma or misunderstanding the question being asked. In addition, respondents may be prone to recall bias—that is, they may attempt to answer accurately, but they remember incorrectly. In some surveys, reporting and recall bias may differ according to a risk factor or health outcome of interest. Despite these limitations, most of the self- report surveys analyzed in this CHNA benefit from large sample sizes and repeated administrations, enabling comparison over time.

The community health survey fielded specifically for this CHNA used a convenience sample for gathering information; while strong efforts were made to disseminate the survey to a broad cross-section of respondents from the region, results are not necessarily statistically representative of the larger population living in Mercer, Middlesex and Somerset Counties due to non-random sampling techniques. It should also be noted that survey respondents did not always answer every question on the survey; therefore, percentages shown below reflect only those participants who answered each question.

Similarly, while the focus groups and interviews conducted for this study provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Recruitment for focus groups was conducted by Princeton Health, working with clinical and community partners. Because of this, it is possible that the responses received only provide one perspective of the issues discussed. It is also important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.

FINDINGS

Community Social and Economic Context

The health of a community is associated with numerous factors including what resources and services are available (e.g., safe green space, access to healthy foods) as well as who lives in the community. The section below provides an overview of the population of the three-county area served by Penn Medicine Princeton Health (Princeton Health). Who lives in a community is significantly related to the rates of health outcomes and behaviors of that area. While age, gender, race, and ethnicity are important characteristics that have an impact on an individual's health, the distribution of these characteristics in a community may affect the number and type of services and resources available.

Demographic Characteristics

The three counties of Mercer, Middlesex, and Somerset together comprise 1,534,639 people, about 17% of New Jersey's total population (Table 2). Middlesex County is the state's second most populous county with an estimated 804,299 persons. Mercer County and Somerset County are the 12th and 13th most populous, respectively, of New Jersey's 21 counties. Between 2011 and 2016, the population of all three counties, as well as that of New Jersey as a whole, grew, with the population of Middlesex County growing by the largest proportion. Several focus group members and interviewees mentioned the region's growth, describing the change from a farming-oriented to more suburban community, as people from other towns and other countries have moved in.

Table 2. Total Population, by State and County, 2007-2011 and 2012-2016

	2011	2016	% change
New Jersey	8,753,064	8,915,456	1.9%
Mercer	365,318	371,101	1.6%
Middlesex	804,299	831,852	3.4%
Somerset	321,304	331,686	3.2%

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Age Distribution

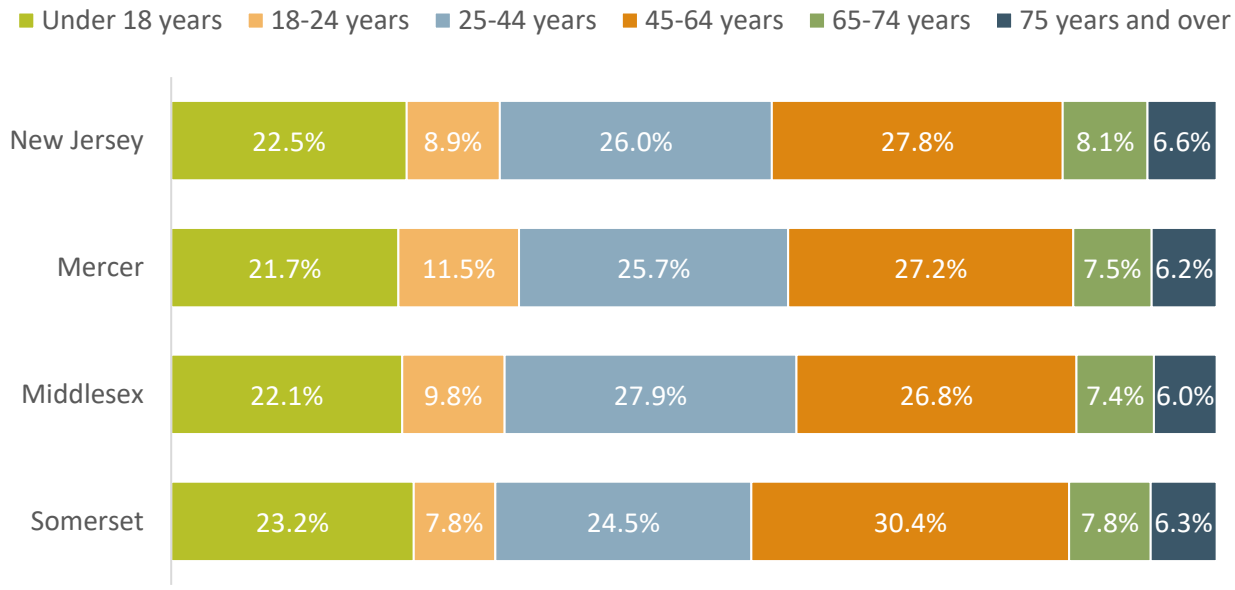
> *"It is a nice community—seniors and a younger age group are coming in."*
> – Focus Group Participant

The population of the three counties largely reflects the population age distribution of the state. Slightly over 20% of residents in each of the counties are under 18 years old (Figure 3). The proportion of 18-24 year-olds is highest in Mercer County, while Somerset has the highest proportion of 45-64 year-olds. Approximately 14% of residents in each of the three counties are over age 65, with about 6% older than 75 years. These numbers are similar to those presented in the 2015 CHNA and the slight uptick in senior population is consistent with the projections presented in the 2015 CHNA (data not shown). Overall, the age distribution in the three counties is similar to that for the state overall.

Focus group members and interviewees shared observations of their communities consistent with the quantitative data. They noted that the region is aging, as evidenced by a growing number of adult communities and senior centers. The towns of Monroe, Windsor, and West Windsor in particular were noted for having large senior populations. Meeting the needs of an aging population – both seniors and the families who care for them – was a theme in many conversations. At the same time, interview and

focus group participants mentioned that communities such as Robbinsville are attracting younger and more culturally diverse families.

Figure 3. Age Distribution, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

Racial and Ethnic Diversity and Country of Origin

> *"A lot of residents are from different ethnic backgrounds; they bring their culture into the community and enhance the community."*
> – Focus Group Participant

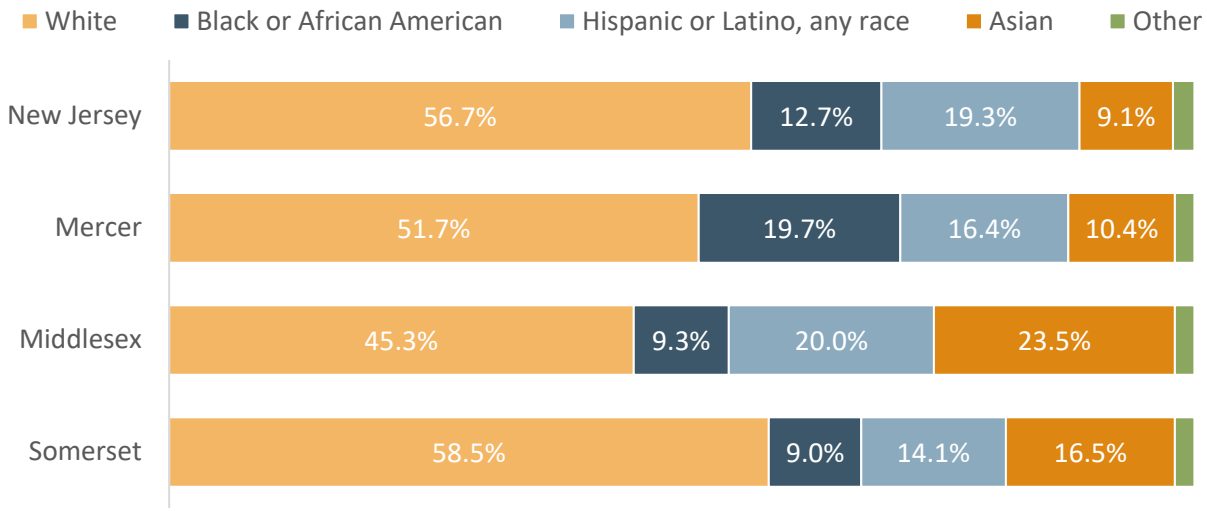
> *"We have changing demographics, and it has also been a challenge to make sure that we are meeting the needs of those communities."*
> – Key Informant

The three counties share substantial racial and ethnic diversity. Focus group and interview participants stated that the Princeton Health service area has residents from many different countries and cultures, who contribute substantially to the vitality of local communities. Participants shared the perception that residents from Asia and Southeast Asia, attracted by the region's high-quality schools and employment opportunities, comprise a large and growing segment of the population. The region also has a large international community employed by New Jersey's multinational corporations and local universities.

The three counties, in particular Middlesex, also have a growing Hispanic population (Figure 4). Middlesex County is the most diverse of the three, with about 55% of residents identifying as non-White. The County has the largest Asian population (23.5%) of the three counties. Middlesex also has the largest proportion of Hispanic residents (20%). Somerset County had the largest proportion of white residents (58.5%). Mercer County has the highest proportion of African American residents (19.7%). A comparison of these data with those presented in the 2015 CHNA indicate that diversity in the region

has increased. For example, the percentage of residents who self-identify as Hispanic or Latino and the percentage of residents who self-identify as Asian increased slightly in all 3 counties.

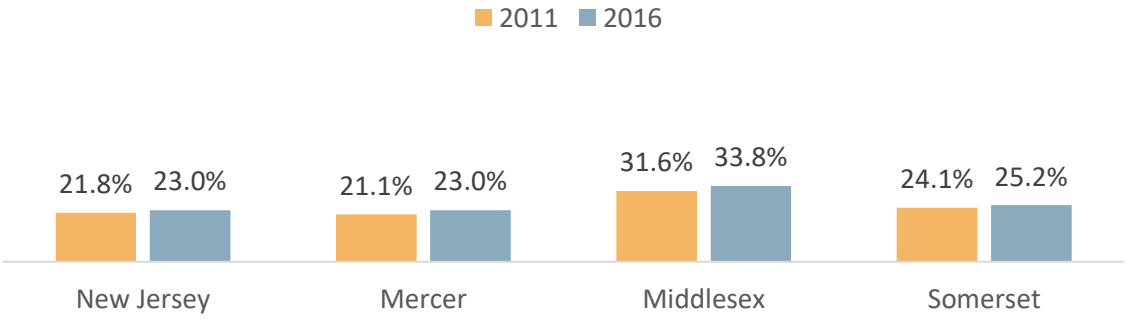
Figure 4. Racial and Ethnic Distribution, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016
NOTE: White, Black, Asian, and Other include only individuals that identify as one race; Hispanic/Latino include individuals of any race; Other includes American Indian and Alaska Native, Native Hawaiian and other Pacific Islander, other race alone, or two or more races

Data from the U.S. Census Bureau show that Middlesex County has the highest proportion of residents who are foreign-born, about one third (Figure 5). Across the region and the state overall, the proportion of foreign-born residents has risen since 2011.

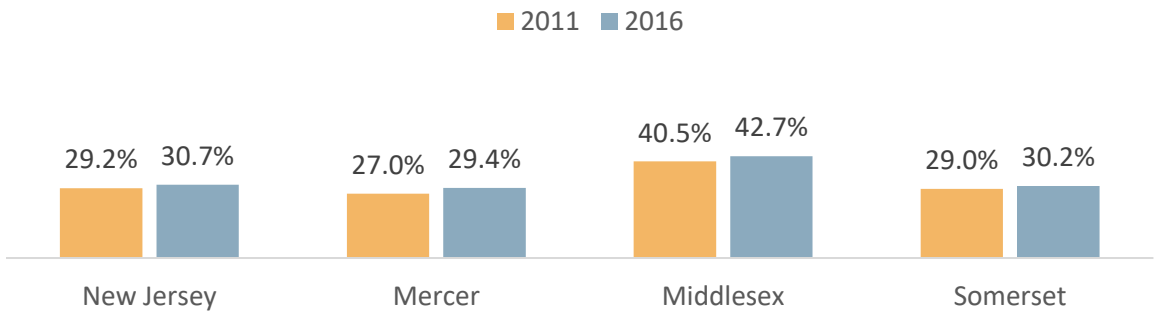
Figure 5. Percent Foreign Born Population, by State and County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

The proportion of residents who speak a language other than English at home has also grown between 2011 and 2016, in all three counties and the state overall (Figure 6). Middlesex County has the highest proportion of residents who speak a language other than English at home (42.7%) while in Mercer County this proportion is substantially lower (29.4%).

Figure 6. Percent Population who Speak a Language Other than English at Home, by State and County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

English and Spanish/Spanish Creole are the top languages spoken at home in the region (Table 3). Other languages spoken at home include Chinese, Hindi, and other Asian languages. Middlesex County has the lowest proportion of residents who speak exclusively English at home (57.6%) and the highest proportion of those who speak Spanish, Hindi, and other Asian languages at home.

Table 3. Top Five Languages Spoken at Home by Percent of Population, by State and County, 2011-2015

	New Jersey	Mercer	Middlesex	Somerset
1	English only **69.5%**	English only **71.0%**	English only **57.6%**	English only **69.4%**
2	Spanish/Spanish Creole **15.8%**	Spanish/Spanish Creole **13.7%**	Spanish/Spanish Creole **15.9%**	Spanish/Spanish Creole **11.6%**
3	Chinese **1.4%**	Chinese **2.5%**	Other Asian languages **3.8%**	Chinese **3.6%**
4	Other Asian languages **1.0%**	Other Asian languages **1.5%**	Hindi **3.2%**	Other Asian languages **1.9%**
5	Tagalog **1.0%**	Hindi **1.1%**	Gujarati **3.1%**	Gujarati **1.7%**

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011-2015
NOTES: Total population 5 years and over as denominator to calculate percentages; Other Asian languages include Asian languages other than Chinese; Japanese; Korean; Mon-Khmer, Cambodian; Hmong; Thai; Laotian; and Vietnamese

Focus group members and interviewees valued the diversity of their communities, but also noted some challenges. Some participants shared their perception that Asian and South Asian residents were generally well-off financially, while Hispanic and African American residents were seen as more disadvantaged. A few interview and focus group participants spoke about resentment of newcomer groups among some more established residents. As one focus group participant explained, *"there are a lot of challenges with incoming people of more diverse backgrounds and people who have been here a long time, thinking 'these people are taking over our town'."* Others worried that some communities—particularly those who don't speak English and those from the local Orthodox Jewish community—are

more isolated and difficult to reach with services and programs. Health and social service provider interviewees and focus group members shared that it can be challenging to provide linguistically and culturally appropriate services. Finally, many participants expressed concern about undocumented residents, including children, who are increasingly disconnected from services because, as one focus group participant stated, *"they don't want people to know they're here."*

Income, Poverty, and Employment

> *"In certain regions in town without a doubt they have an underserved population."*
> – Focus Group Participant

> *"We have trailer parks, apartments and multi-million dollar homes across the street from each other."*
> – Key Informant

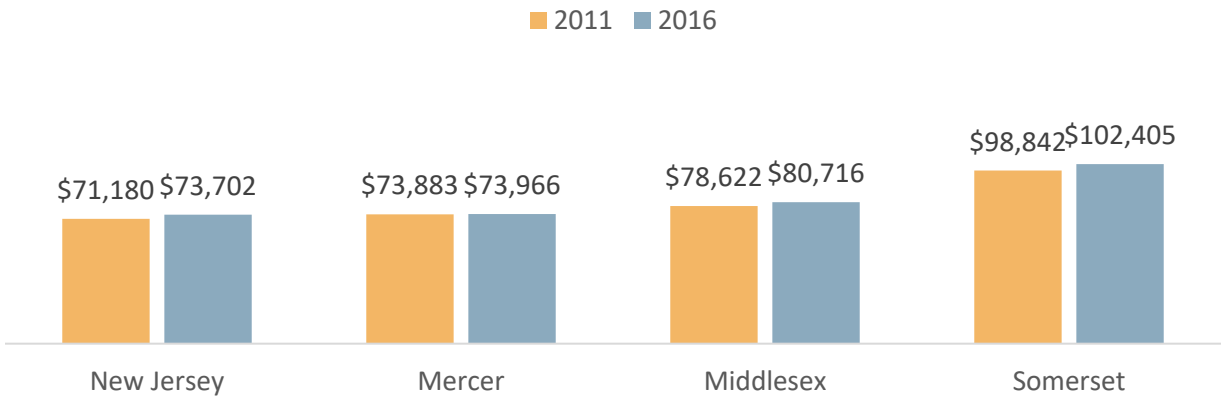
The three counties comprising Princeton Health's service area are largely affluent, but there are communities where residents face economic hardship. **A high cost of living creates further challenges for some.** Focus group members and interviewees described residents of the region served by Princeton Health as largely white-collar professionals, well-educated and upper middle class. The wealth of the region translates to good amenities in many communities. Interview and focus group participants praised the region's shopping, cultural venues, recreational facilities, and healthcare options. However, wealth is not equally shared across residents and respondents noted that some families in the region struggle. As one person described, *"there's a dichotomy"* and numerous participants shared that lower income residents face challenges to meeting basic needs as well as accessing healthcare and facilities and programs that contribute to good health.

Income

Income data for the region show that the median household income in 2016 in each of the three counties was higher than for New Jersey overall (Figure 7). While median household income in Mercer County was only slightly higher than that for the state in 2016, median income in Somerset County, at over $100,000 annually, was substantially higher. Somerset County is the third wealthiest county in New Jersey.[1] Median household income rose for the state and in all three counties between 2011 and 2016.

[1] NJ.com. "Every N.J. county ranked by where people make the most money." Accessed 5/30/18 at: http://www.nj.com/news/index.ssf/2017/09/new_jersey_counties_income_ranked_worst_to_best.html

Figure 7. Median Household Income, by State and County, 2007-2011 and 2012-2016

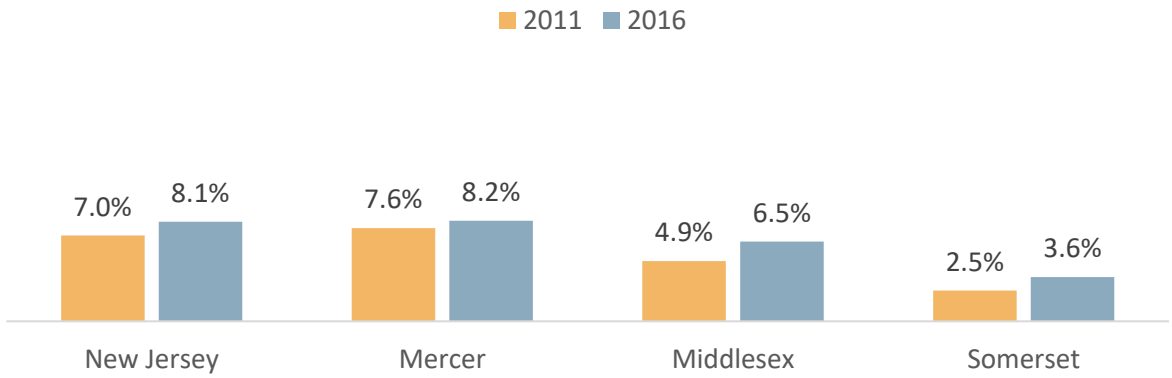


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Poverty

U.S. Census poverty data show that overall poverty rates differ substantially across the three counties (Figure 8). Mercer County had the highest poverty level in 2016, 8.2%, a rate about equal to that for New Jersey overall (8.1%). By contrast, the poverty rate in Somerset County (3.6%) was less than half that rate. The proportion of families living below the poverty level across the region and state rose from 2011 to 2016.

Figure 8. Percent Families Living Below Poverty Level, by State and County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

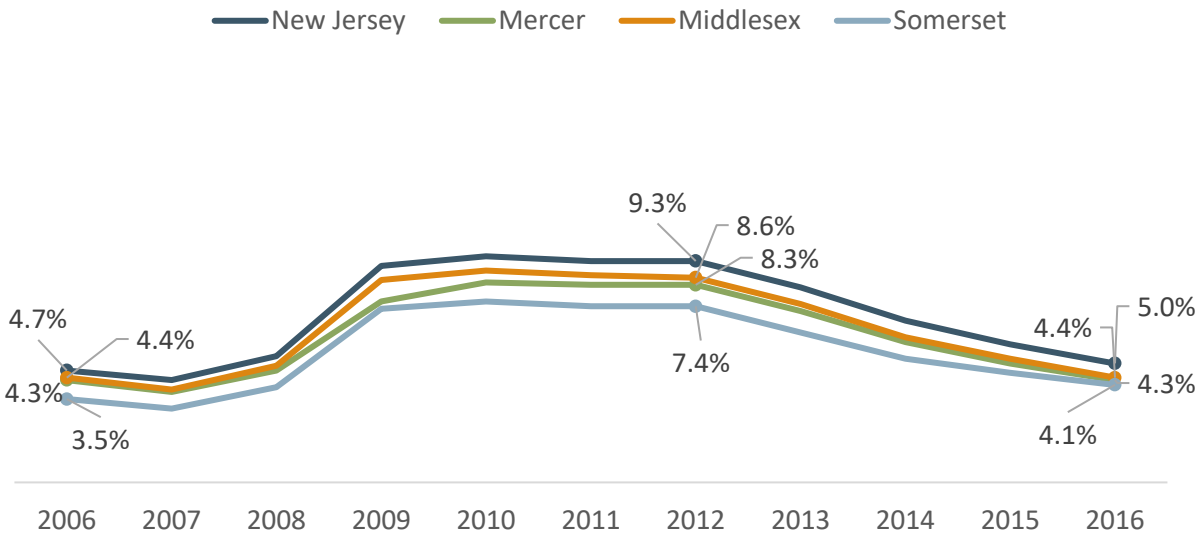
Rising rates of poverty and challenges meeting daily expenses were discussed in several interviews and focus groups. For example, some interview and focus group participants expressed concerns about food security, noting a rise in the number of new food pantries in the region. Others observed that high taxes and expensive housing have led some people, notably seniors, to leave the region. It was noted that the high cost of living affects residents' health as well. As one provider shared, *"it is a very high tax community; when an illness comes their way, people are financially strapped."*

Employment

Trends in unemployment in the region mirror national trends, with unemployment rising during the "great recession" and then declining in recent years (Figure 9). However, over the past decade, unemployment in the three counties was lower than for the state, with Somerset County consistently

experiencing the lowest unemployment rate of the three counties. As shown in Figure 9, in 2016, the unemployment rate in Mercer, Middlesex, and Somerset counties was 4.3%, 4.4%, and 4.1%, respectively, all slightly lower than the rate for the state of New Jersey (5.0%).

Figure 9. Trend in Unemployment Rate, by State and County, 2006-2016



DATA SOURCE: Bureau of Labor Statistics, Local Area Unemployment Statistics, 2006-2016
NOTE: There were revised population controls and model re-estimation when calculating the percentages for New Jersey for 2013 and onward.

Data on disconnected youth, defined as those ages 16-24 who are neither in school nor employed, show that Mercer County has the highest proportion of such youth (11.4%) among the three counties and the state overall (Figure 10). Somerset County has the lowest rate (7.3%).

Figure 10. Percent Disconnected Youth, by State and County, 2016

DATA SOURCE: Measure of America of the Social Science Research Council, using U.S. Census Bureau, American Community Survey, 1-Year Estimates, 2016, *More Than a Million Reasons for Hope*, http://www.measureofamerica.org/DYinteractive/, 2016
NOTE: Disconnected youth is defined as youth between the ages of 16 and 24 years old who are neither in school or employed, excluding those in the military or are in school or working part-time. Youth actively seeking jobs are also considered disconnected.

Education

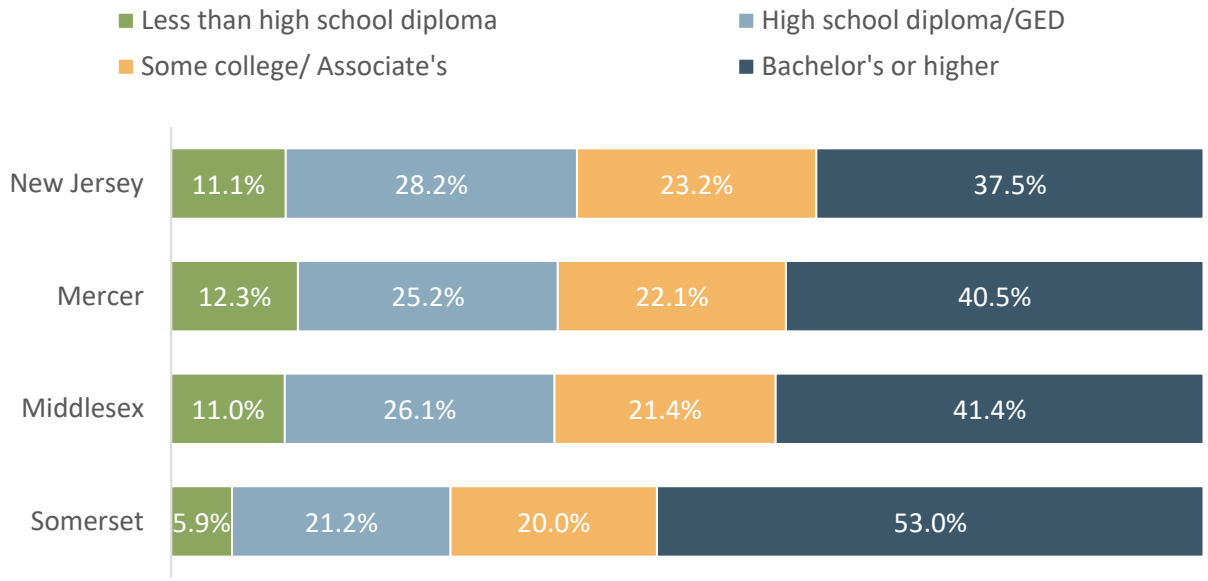
> *"Really good schools—that is why people come to our community."*
> – Focus Group Participant

> *"There are wonderful school districts in the area—they are high-performing. But it's also a challenge: there is lots of pressure on kids and pressure on parents to help their kids succeed."*
> – Key Informant

A well-educated population and substantial access to high quality educational opportunities was consistently identified as a substantial asset in the region, and the reason many choose to live there. A downside to this, however, is substantial academic pressure on students. Focus group members and interviewees consistently pointed to the high quality of local schools as well as local universities and the community college system as a strength of the region. They reported that community members are very academically motivated. Southeast Asian families in particular were mentioned for their strong academic focus.

Data about educational achievement among adults ages 25 years and older show that a higher proportion of residents in all three counties than in the state overall have a college degree or higher (Figure 11). Over half of adults in Somerset County have a bachelor's degree or higher; less than 6% have not completed high school. By contrast, a far higher proportion of adults in Mercer and Middlesex Counties did not complete high school. The proportion of adults with a bachelor's degree or higher has risen slightly since the 2015 CHNA, across all counties and the state, while the proportion with less than a high school diploma has fallen slightly (data not shown).

Figure 11. Education Attainment for Population 25 Years and Over, by State and County, 2012-2016

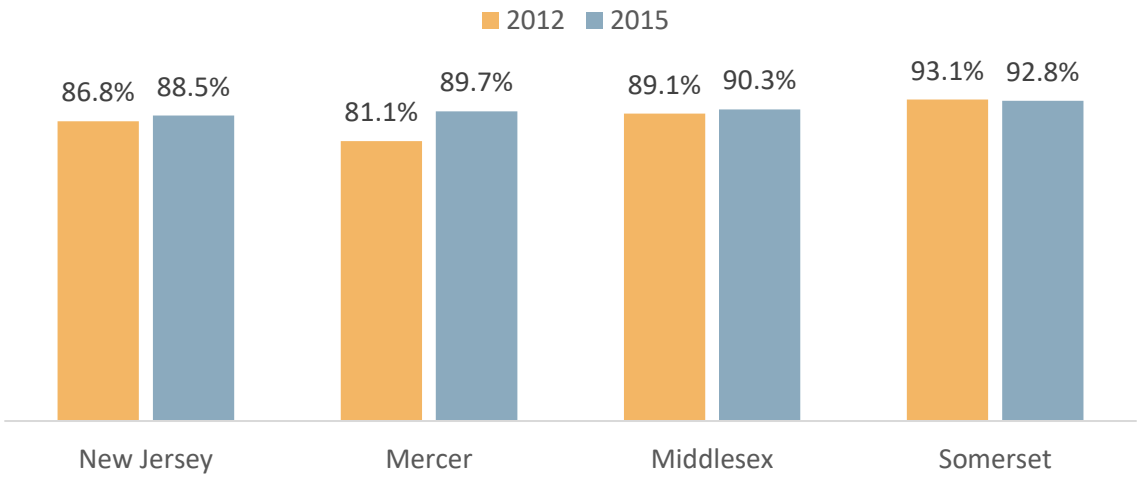


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

A higher proportion of high school students in all three counties than in the state received their high school diplomas in four years during the school year 2014-2015, with Middlesex County experiencing

the highest rate (Figure 12). On time graduation rates rose substantially in Mercer County between 2012 and 2015, and remained relatively consistent in Middlesex and Somerset counties and the state overall.

Figure 12. Percent Students Receiving High School Diploma in Four Years, by State and County, 2011-2012 and 2014-2015



DATA SOURCE: U.S. Department of Education, EDFacts, accessed via Data.gov, analyzed by CARES, and reported by Community Commons, 2011-2012 and 2014-2015

While high quality schools and a "culture of excellence" contributes substantially and draws families to the region, focus group members and interviewees also pointed to some negative consequences. They cited concerns about mental health issues, bullying, and substance use among children and youth as consequences of a high-pressure culture. As one school staff person stated, *"we are finding more anxiety-ridden students, starting as young as kindergartners, coming in and struggling with being able to cope with home and school expectations."*

Housing and Transportation

Housing

> *"Somerset's and Middlesex's population is exploding—lots of building of new, more expensive housing."*
> – Key Informant

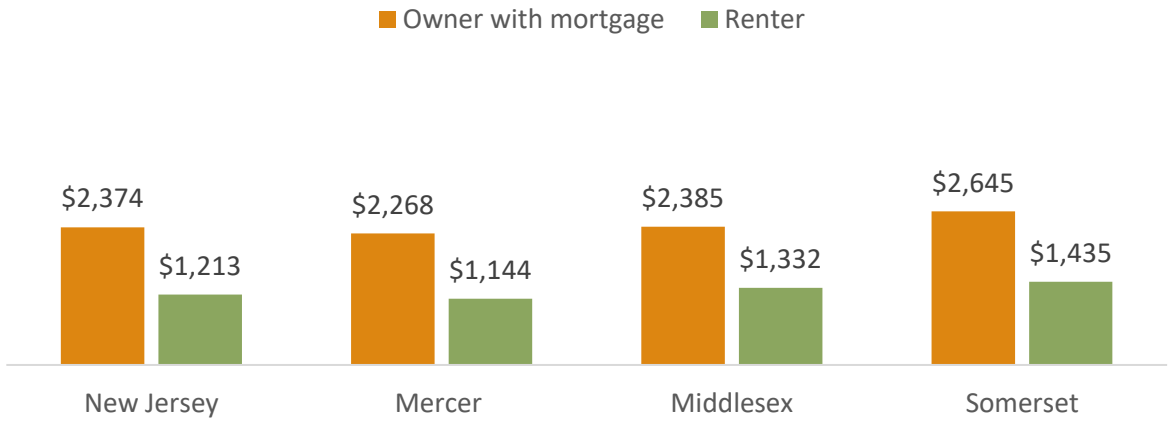
> *"Housing is a big challenge. People can't afford this area and they have to look 20 to 30 miles away."*
> – Key Informant

High housing costs and lack of affordable housing were identified as substantial challenges in the region. A prominent theme in focus group discussions and interviews was the high cost of housing in the region. Interview and focus group participants reported that expensive housing continues to be developed, and some expressed concerns that millennials and younger families are being priced out of the region. A few participants mentioned a growing push for more affordable housing for families in the region, although with the exception of Robbinsville, participants reported that this has not yet been

developed. Senior housing communities continue to be developed, including planned senior housing, both independent and assisted living, near the Princeton Health campus.

Quantitative data show that while housing costs for renters and owners in Middlesex and Mercer Counties is similar to the state overall, in Somerset County they are higher (Figure 13). A comparison of median housing costs to those reported in the 2015 CHNA reveal that median costs for owners declined slightly between 2009-2013 and 2012-2016, while costs for renters rose slightly over this time period (data not shown).

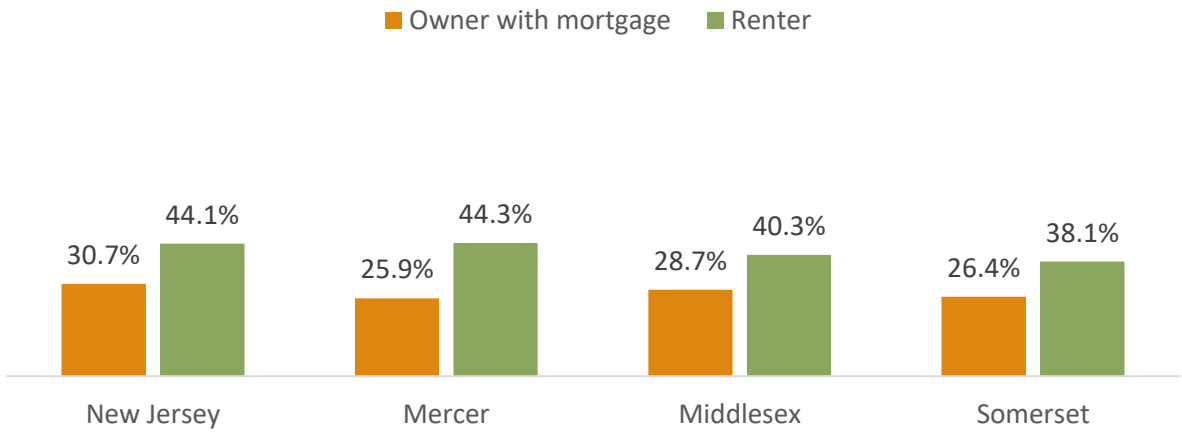
Figure 13. Median Monthly Housing Costs by Tenure, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

The proportion of residents whose housing costs are greater than 35% of household income is lower or about the same in the three counties as for the state, for both renters and owners (Figure 14). However, in all three counties at least 25% of owners contribute 35% or more of their household income to housing costs and over 40% of renters do so. Challenges for renters were mentioned by a few focus group members and interviewees. They stated that the high cost of rental housing has led to some overcrowding. Poor quality housing, including issues with heating and cooling, was also reported. As one interviewee stated, *"owners don't take care of apartments."* Finally, bedbugs were reported to be a concern in some rental communities.

Figure 14. Percent Households where Housing Costs are 35% or More of Household Income by Tenure, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

A comparison of housing data from the 2015 CHNA reveals that the proportion of owners who pay more than 35% for housing declined from 2009-2013 to 2012-2016 in all three counties and the state overall (data not shown). Over the same time period, the proportion of renters who pay more than 35% for housing declined in Somerset while it remained roughly the same in the other two counties and the state overall.

Transportation

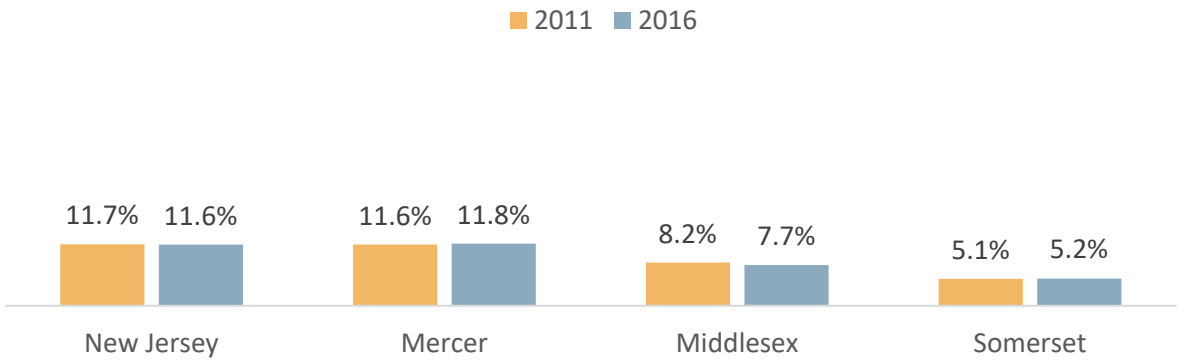
> *"If you live in New Jersey, you need a car."*
> – Focus Group Participant

> *"Even in suburban areas we have pockets of needs—resources and services are not convenient [to residents] and transportation is a challenge."*
> – Focus Group Participant

Transportation—identified as a substantial area of concern for residents in the 2012 and 2015 CHNAs—continues to be of concern in 2018. Focus group members and interviewees consistently mentioned transportation as a challenge for the region's residents, especially seniors and low-wage workers. Residents living in the three counties are largely car-reliant. While trains run to NYC and Philadelphia, local public transportation options were reported to be limited. While Uber and Lyft expanded transportation choices, interview and focus group participants shared that these options are too expensive for some and that using an "app" to coordinate rides was a barrier for others.

American Community Survey data show that the region's residents are very reliant on private cars (Figure 15). In 2016, about 11.8% of Mercer County households did not have a vehicle available, a proportion similar to the state overall. A smaller proportion of Middlesex County residents (7.7%) and Somerset County residents (5.2%) reported this. The proportion of residents with no vehicle available has remained relatively steady between 2011 and 2016.

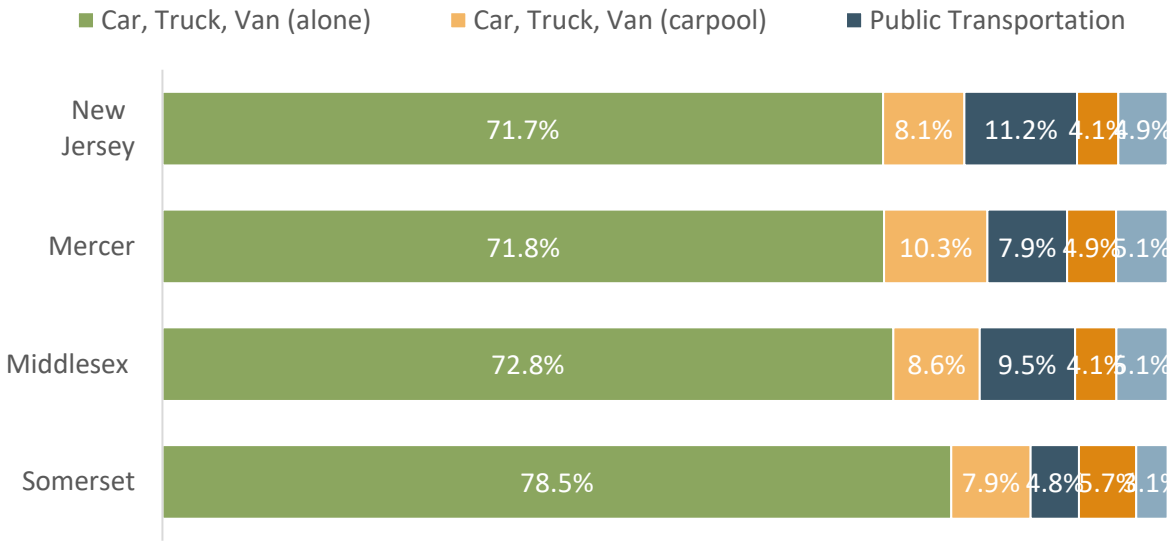
Figure 15. Percent Households with No Vehicle Available, by State and County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Most workers across the three counties and the state of New Jersey drive alone to work (Figure 16). The highest proportion of Somerset workers (78.5%) drive alone to work. Use of public transportation by adult workers in the three counties is smaller than for the state overall, and substantially smaller for Somerset County. The use of public transportation to get to work has not increased substantially over the past few years (data not shown).

Figure 16. Means of Transportation to Work for Workers 16 Years and Over, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

Crime and Safety

Crime and safety were not identified as a pressing concern in focus groups or interviews. Interview and focus group participants generally viewed their communities as safe although a couple perceived a rise in thefts and a rise in domestic violence over the past several years. Crime statistics from the state of New Jersey indicate that Mercer County experiences substantially higher rates of both violent and

nonviolent crime than the other two counties or the state overall in 2017 (Table 4). Crime rates have declined between 2013 and 2017 in all three counties and the state overall, for both violent and nonviolent crimes.

Table 4. Violent and Nonviolent Crime Rate per 100,000 Population, by State and County, 2013 and 2017

	2013		2017	
	Violent Crime	Nonviolent Crime	Violent Crime	Nonviolent Crime
New Jersey	284.6	1,872.2	226.8	1,551.8
Mercer	414.0	2,108.8	378.7	1,896.4
Middlesex	149.0	1,591.3	139.5	1,306.1
Somerset	68.0	1,220.7	62.3	1,016.6

DATA SOURCE: State of New Jersey, Department of Law and Public Safety, Uniform Crime Reporting Unit, 2017 and Uniform Crime Report, 2013; Rates calculated per U.S. Census Bureau, American Community Survey 1-Year Estimates, 2016

NOTE: Violent crime includes homicide, rape, robbery, assault and simple assault; Nonviolent crime includes burglary, larceny – theft, and motor vehicle theft

Community Health Outcomes and Behaviors

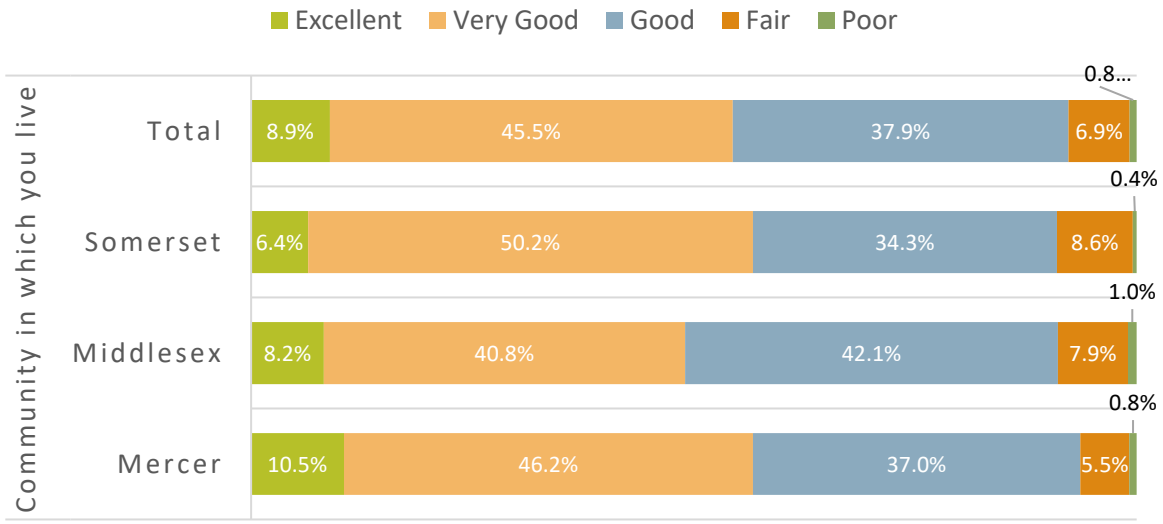
This section focuses on health issues and concerns that emerged during the Penn Medicine Princeton Health (Princeton Health) needs assessment process. It examines health outcomes as well as the lifestyle behaviors among residents that support or hinder health including physical activity, nutrition, and alcohol and substance use. Where appropriate and available, county-level statistics are compared to the state as a whole as well as data reported in the 2015 community health needs assessment.

Overall Community Health Status and Health Concerns

Overall, quantitative data suggest that residents in the Princeton Health service region are healthier compared the rest of the state. The County Health Rankings system provides an overview of county-level health based on several key indicators.[2] According to the 2018 County Health Rankings, Somerset County ranked 3rd, Middlesex County ranked 6th and Mercer County ranked 14th among New Jersey's 21 counties for health outcomes including length and quality of life. This is a slight decline in rankings from 2015 in all counties. Within the Health Factors ratings, which assesses health behaviors, clinical care, social and economic factors, and the physical environment, Somerset County ranked 2nd, Middlesex ranked 6th and Mercer ranked 9th. Compared to 2015, Somerset County improved by one place, Mercer declined by one place, and Middlesex remained the same.

Data from the community health survey conducted for this CHNA indicate that the majority of survey respondents in the three counties reported that their overall community's health was "very good" or "excellent" health (Figure 17). A smaller proportion of respondents from Mercer County than the other two counties reported their community's health as "fair" or "poor health." In the 2015 CHNA Survey, 54.2% of respondents across all three counties rated their community's health as "excellent" or "very good"; similarly, in this 2018 CHNA Survey, 54.4% of respondents rated their community's health as "excellent" or "very good".

Figure 17: Perceived Health Status of Community in Which Live by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

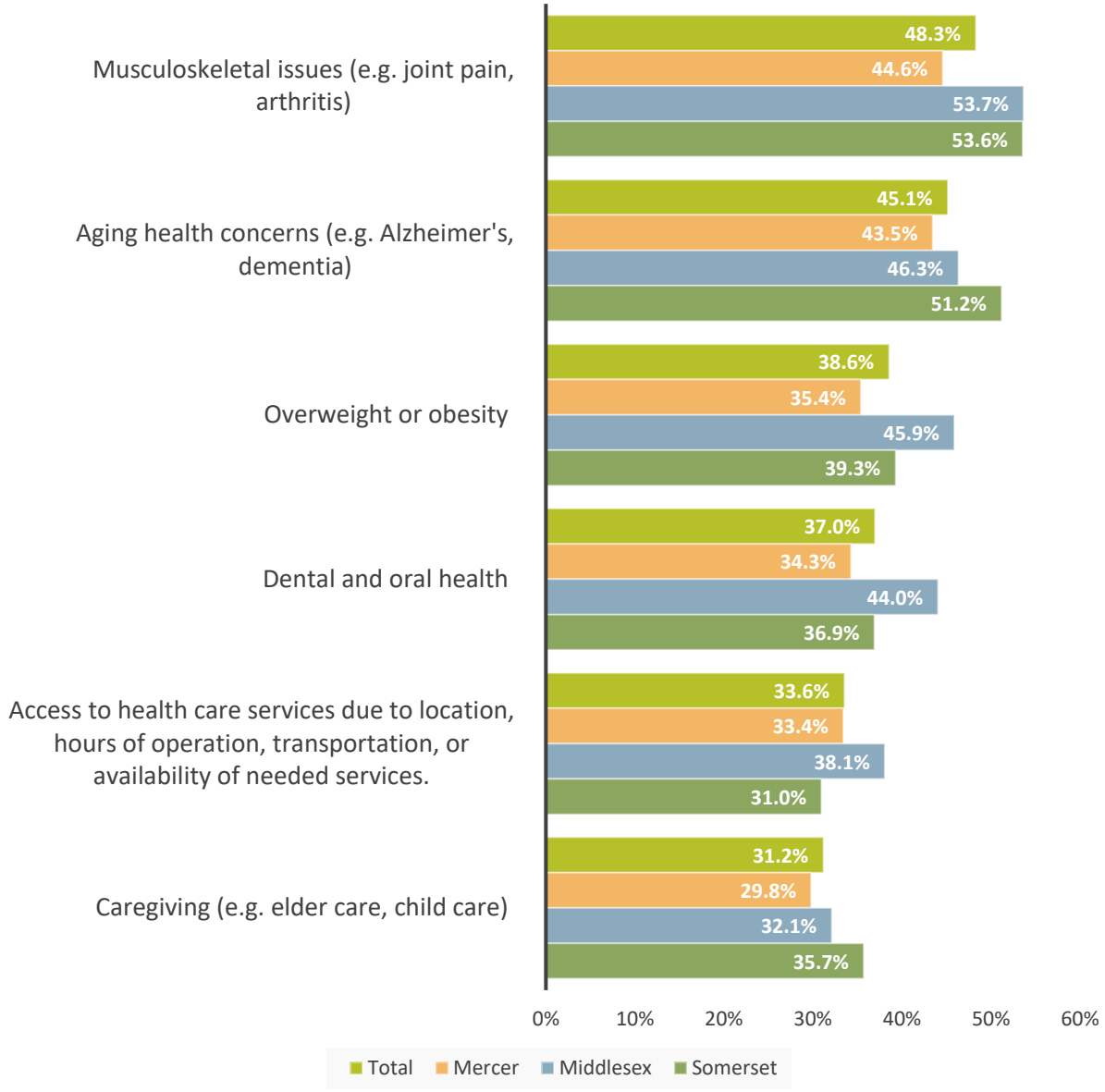
[2] http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2018_NJ.pdf

Community survey respondents were also asked to select the top 5 health issues that have the biggest impact on them and their families personally, and the community in which they live. The health concerns that survey respondents indicated had the biggest impact on themselves or their family were related to musculoskeletal issues (e.g. joint pain, arthritis), aging, and overweight or obesity, with over one third of respondents selecting these as one of the top three health concerns (Figure 18). Dental and oral health, access to health care, and caregiving (including elder and child care) were the next most commonly cited issues as affecting respondents. It should be noted that response options for "other chronic disease" (such as diabetes, heart disease, and hypertension) and "violence in your community" were included in the hard copy survey but not the online survey. However, in the "other" response option of the online survey, however, many respondents noted that chronic diseases (including cardiac health, heart health, blood pressure, and hypertension) are priority concerns. A full list of health issues listed can be found in Appendix D.

There were some differences across respondents from different counties. A higher proportion of Somerset County residents than residents of the other two counties, for example, identified aging concerns and caregiving as a top health concerns. A higher proportion of residents from Middlesex County than the other two counties reported concerns related to overweight or obesity and dental and oral health.

When compared to the 2015 Community Health Needs Assessment survey, "aging health concerns" was selected as a top health issue in both 2015 and 2018. Oral health issues and musculoskeletal issues were not identified as a top health issue in 2015 (though "musculoskeletal issues" was a new response option in 2018). "Overweight and obesity" was a top concern in 2015, as in 2018; in 2015, "chronic disease" was also a top health issue.

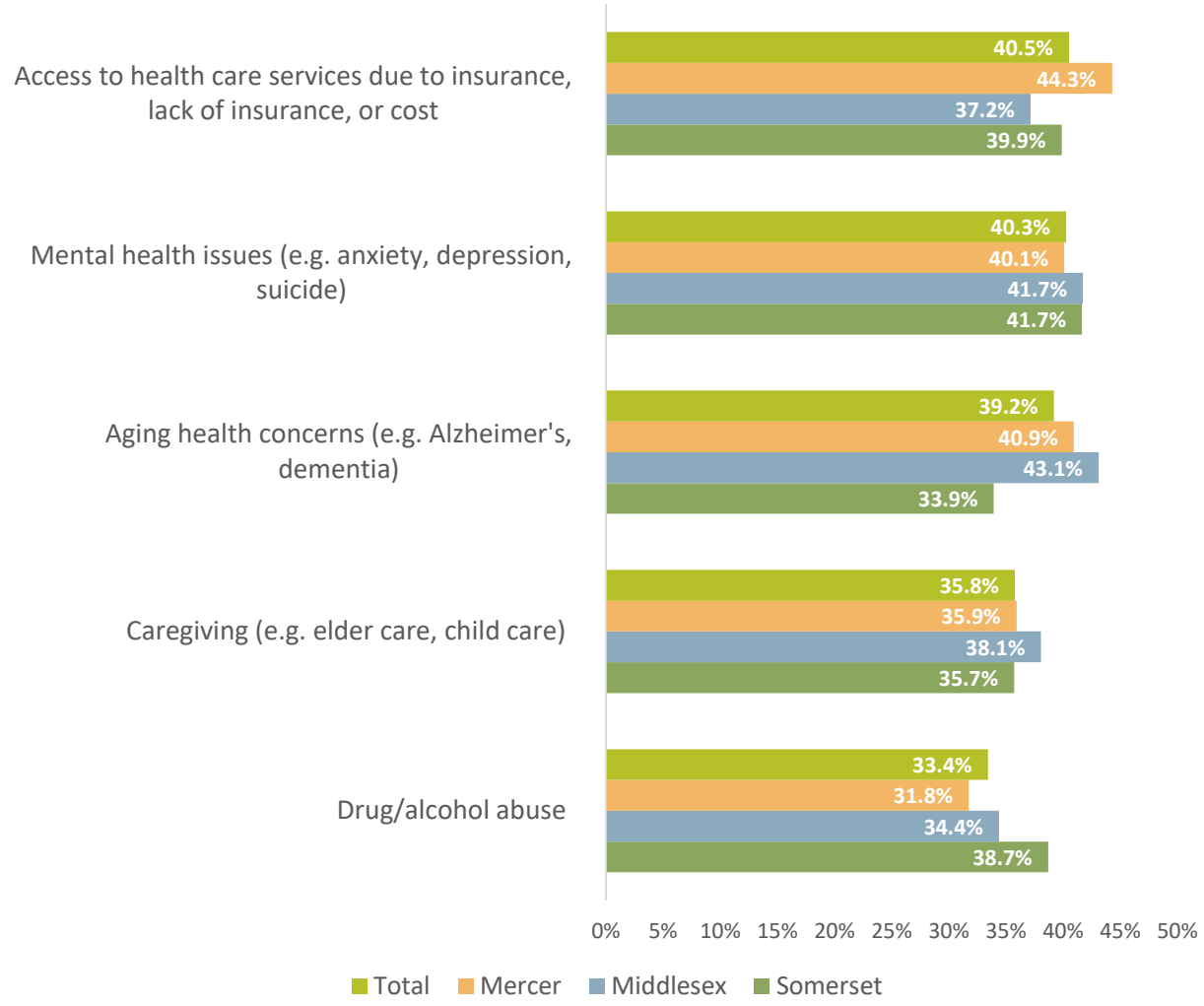
Figure 18: Top Health Issues with the Biggest Impact on Respondent/Respondent's Family by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Community survey respondents identified different top health concerns that they perceived as having an impact on their community overall. When asked about health concerns for their communities, survey respondents identified the following top concerns: access to health care services (due to insurance, lack of insurance, or cost), mental health issues (e.g., anxiety, depression, suicide), aging health concerns (e.g., Alzheimer's, dementia), caregiving (e.g., elder care, child care), and drug / alcohol abuse. While healthcare access, aging, and mental health were the top health issues for communities identified in the 2015 CHNA survey, substance abuse concerns were not among the top community issues selected by survey respondents in 2015 (caregiving was a new response option added in 2018).

Figure 19: Top Health Issues with the Biggest Impact on the Community by County

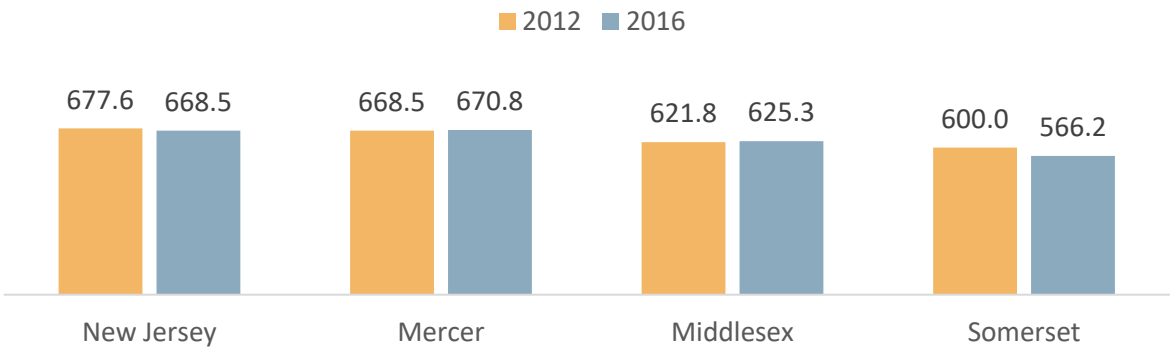


DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Mortality and Morbidity

Overall mortality rates vary across the region. Similar to the state of New Jersey, heart disease and cancer were the leading causes of death in Somerset, Middlesex, and Mercer Counties. The overall age-adjusted death rate was highest in Mercer County (670.8 per 100,000 population), a rate slightly higher than the death rate for the state overall (Figure 20). Somerset had the lowest death rate of the three counties (566.2 per 100,000 population). The overall death rate declined substantially between 2012 and 2016 in Somerset County, declined slightly in the state, and rose slightly in Mercer and Middlesex Counties.

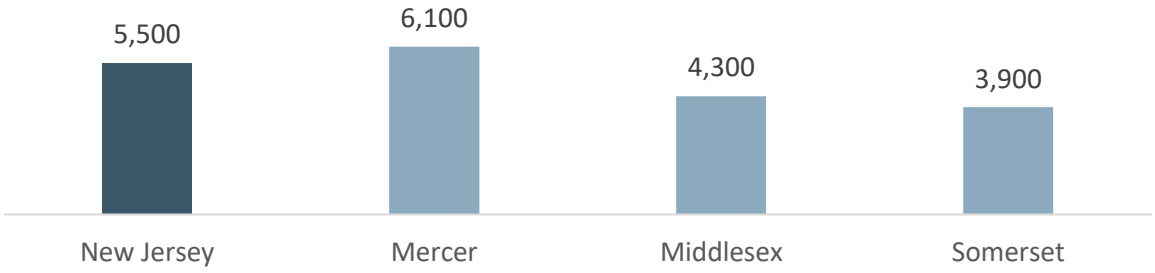
Figure 20. Age-Adjusted Overall Mortality Rate per 100,000 Population, by State and County, 2012 and 2016



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, 2012 and 2016

Another measure of mortality is the Years of Potential Life Lost (YPLL) which assesses premature mortality or the average years a person would have lived if he or she had not died prematurely. Mercer County had the highest age-adjusted rate of YPLL for the years 2014-2016 of the three counties (6,100) and higher than the state overall (Figure 21). Somerset County had the lowest rate (3,900 years).

Figure 21. Age-Adjusted Years of Potential Life Lost Before Age 75 per 100,000 Population, by State and County, 2014-2016



DATA SOURCE: National Vital Statistics System, National Center for Health Statistics - Mortality Files, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2014-2016

The top five causes of death are the same across the three counties and the state and include heart disease, cancer, accidents, stroke, and chronic lower respiratory disease (CRLD) (Table 5). Age-adjusted

death rates across all five causes of death were lower in Somerset County in 2016 than in Mercer and Middlesex Counties or the state. With the exception of cancer mortality rates in Mercer County, death rates were lower in the three countries in 2016 when compared with the state overall.

Table 5. Top Five Leading Causes of Death, Age-Adjusted Rates per 100,000 Population, by State and County, 2016

	New Jersey	Mercer	Middlesex	Somerset
1	Heart disease **164.7**	Heart disease **157.0**	Heart disease **155.2**	Heart disease **131.2**
2	Cancer **149.7**	Cancer **156.3**	Cancer **135.4**	Cancer **125.8**
3	Accidents **40.8**	Accidents **33.3**	Accidents **38.0**	Accidents **29.0**
4	Stroke **30.4**	Stroke **30.2**	Stroke **27.0**	Stroke **27.8**
5	Chronic lower respiratory disease **27.9**	Chronic lower respiratory disease **29.8**	Chronic lower respiratory disease **22.4**	Chronic lower respiratory disease **23.1**

DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, 2012 and 2016

NOTE: Accidents (or unintentional injuries) include ICD-10 codes V01-X59, Y85-Y86. Examples include deaths due to motor vehicle accidents, pedestrian accidents, falls, accidental drowning, accidental poisoning, etc.

Between 2012 and 2016, mortality rates for heart disease, cancer, and diabetes declined across all three counties and the state overall (Table 6). Rates of unintentional injuries increased across all three counties and the state overall during this time period. Mercer County experienced an increase in the rate of deaths due to stroke and chronic lower respiratory diseases over this time period, while Middlesex and Somerset County experienced decreases.

Table 6: Age-Adjusted Death Rates, per 100,000 population, by County, 2012 and 2016

Cause of Death	Mercer County		Middlesex County		Somerset County	
	2012	2016	2012	2016	2012	2016
Heart Disease	163.3	157.0	159.4	155.2	136.0	131.2
Cancer	158.6	156.3	156.5	135.4	152.3	125.8
Stoke	27.7	30.2	28.3	27.0	34.1	27.8
Chronic Lower Respiratory Diseases (CLRD)	28.2	29.8	26.5	22.4	27.0	23.1
Unintentional injuries[5]	28.1	33.3	32.1	38.0	23.5	29.0
Diabetes mellitus[6]	22.0	18.4	17.6	16.5	14.4	12.4

DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, 2012 and 2016.

NOTE: Heart Disease includes ICD-10 codes I00-I09, I11, I13, I20-I51; Cancer includes ICD-10 codes C00-C97; Stroke includes ICD-10 codes I60-I69; CLRD includes ICD-10 codes J40-J47; Unintentional Injuries includes ICD-10 codes V01-X59, Y85-Y86; and Diabetes includes ICD-10 codes E10-E14.

Chronic Diseases and Related Risk Factors

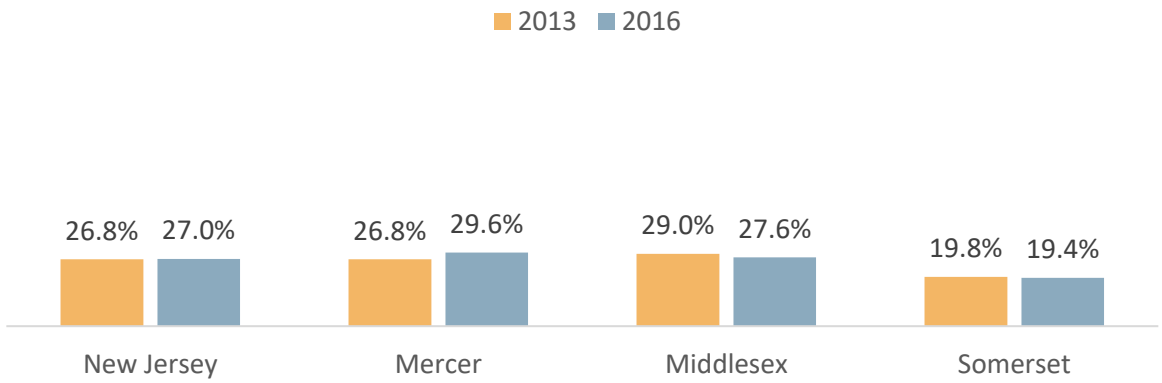
Overweight and Obesity

> *"Obesity has different causes—in poor communities it's that healthy food is expensive; in affluent communities, it's portion sizes."*
> – Key Informant

Obesity, especially among children and youth, was identified as a concern for the region, as in 2015. Focus group members and interviewees reported that rising obesity rates among residents, and related chronic diseases such as diabetes, heart disease, and sleep apnea, were of growing concern. Providers reported rising rates of Type II diabetes among children and youth, with the disease appearing in increasingly younger children. Poor eating habits and sedentary lifestyles were reported to be the leading causes for obesity among children and youth. As noted above, overweight and obesity were also identified as top health concerns in the community health survey.

Quantitative data support perceptions about obesity in the region (Figure 22). Over one quarter of adults in Middlesex and Mercer Counties was obese in 2016, a rate similar to the state overall. The obesity rate in Somerset County was lower (19.4%). A review of trends reveals that obesity rates rose in Mercer County between 2013 and 2016 and declined slightly in Middlesex County over this time period. They have remained the same in Somerset and in the state overall. Current data about obesity rates among children and youth are not available.

Figure 22. Percent Adults Reported to be Obese, by State and County, 2013 and 2016

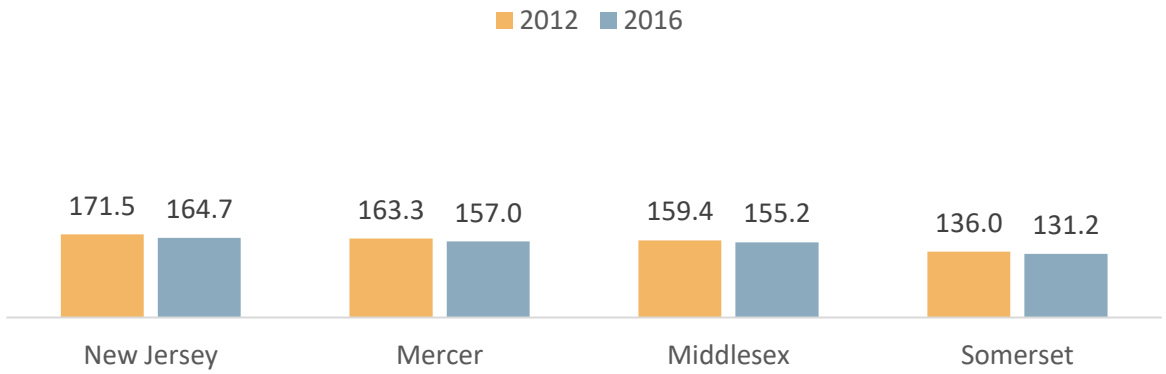


DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016
NOTE: Adults 20 years and older

Heart Disease

Vital statistics data show that age-adjusted death rates due to heart disease were lower in the three counties in 2016 than in the state overall (Figure 23). Heart disease rates declined between 2012 and 2016 in all three counties and the state. Heart disease was not a prominent theme in interviews or focus groups; of greater concern to participants was diabetes.

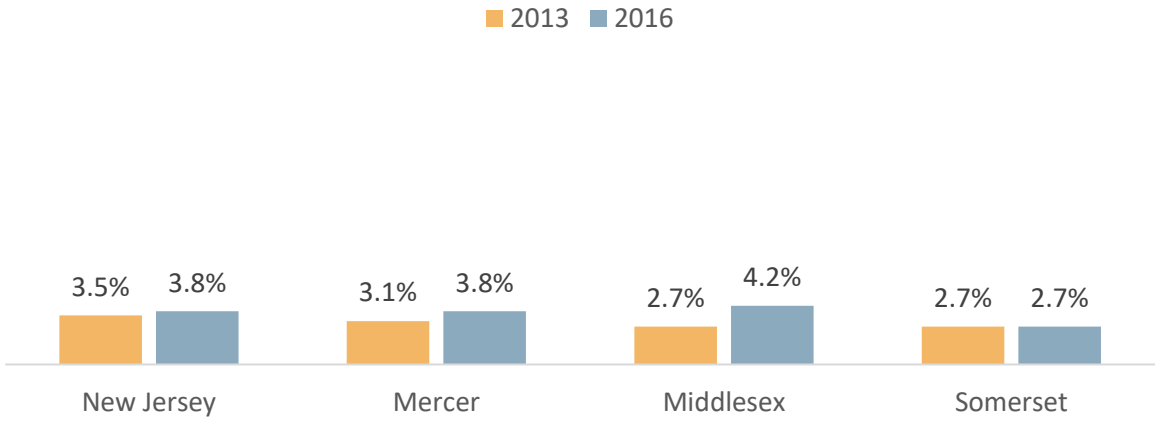
Figure 23. Age-Adjusted Heart Disease Mortality Rate per 100,000 Population, by State and County, 2012 and 2016



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, 2012 and 2016
NOTE: Includes ICD-10 codes I00-I09, I11, I13, I20-I51

According to BRFSS results, self-reported rates of heart attack in 2016 were lowest in Somerset County and highest in Middlesex (Figure 24). Rates have increased in Middlesex County between 2013 and 2016, while they have remained largely the same in the other counties and the state.

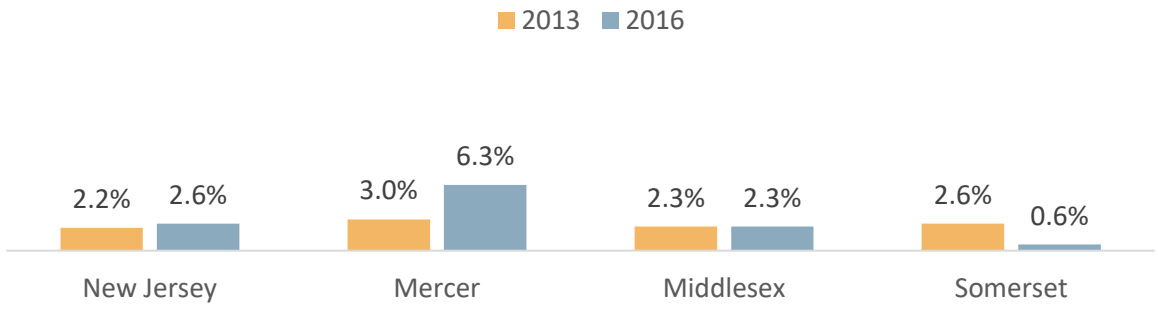
Figure 24. Percent Adults Reported to Have Had a Heart Attack, by State and County, 2013 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

A far higher proportion of adults in Mercer County (6.3%) than those in the other two counties or the state have reported that they ever had a stroke in 2016 (Figure 25). This rate has increased substantially from 2013 to 2016 in Mercer County while it declined substantially in Somerset County.

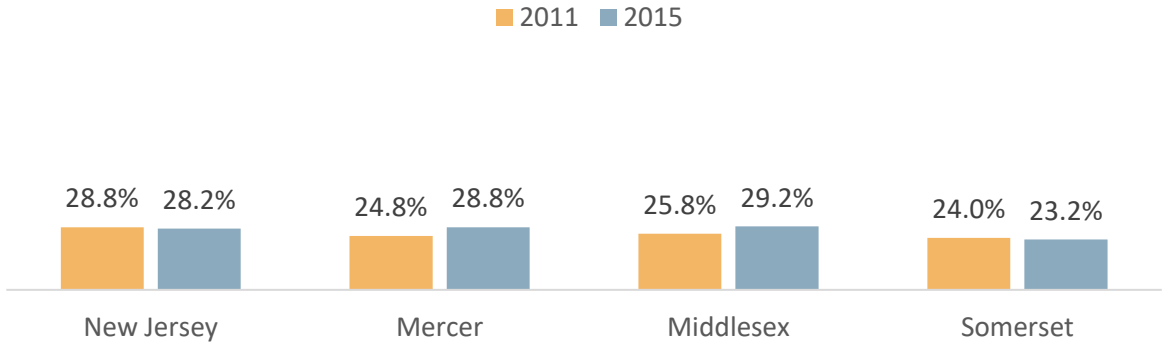
Figure 25. Percent Adults Reported to Have Had a Stroke, by State and County, 2013 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

Self-reported rates of high blood pressure were roughly the same in 2015 in Mercer and Middlesex Counties and the state, about 28% (Figure 26). The rate was slightly lower in Somerset County (23.2%). The rates have increased from 2011 to 2015 in both Mercer and Middlesex Counties.

Figure 26. Percent Adults Reported to Have Had High Blood Pressure, by State and County, 2011 and 2015



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2011 and 2015

Diabetes

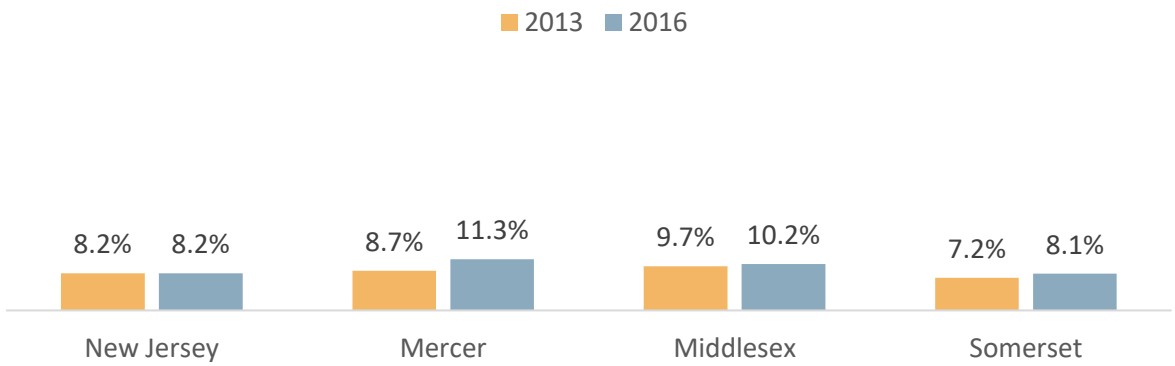
> *"We are seeing more Type II diabetes in younger ages."*
> – Focus Group Participant
>
> *"I deal with a lot of older patients; there is plenty of uncontrolled diabetes."*
> – Focus Group Participant

As in 2015, diabetes emerged as the chronic disease of greatest concern to interviewees and focus group members in 2018. Interview and focus group participants noted the rise in the number of people in the region with diabetes and the rising number of children being diagnosed with the disease. Participants shared a number of causes for rising rates of diabetes among children and youth including poor eating habits, excess screen time, and lack of exercise. High rates of diabetes among Hispanic

residents was also mentioned by several interviewees and focus group members. As one interviewee stated, *"for this group, diabetes is the worst [chronic disease]."* While diet and lack of exercise were cited as causes of the disease among Hispanic residents, interview and focus group participants perceived that its severity is exacerbated by poor understanding of prevention approaches, lack of access to care, and the high cost of effective diabetes medications.

Quantitative data confirm perceptions shared by focus group members and interviewees. Adult diabetes rates increased in all three counties between 2013 and 2016 while they remained steady at 8.2% for the state overall (Figure 27). A higher proportion of adults in Mercer (11.3%) and Middlesex Counties (10.2%) than in Somerset County (8.1%) reported in 2016 that they had been diagnosed with diabetes.

Figure 27. Percent Adults Reported to Have Been Diagnoses with Diabetes, by State and County, 2013 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

Interview and focus group participants reported that diabetes education programs exist in the community. For example, the health clinic provides diabetes self-management education through an on-staff diabetes educator. However, providers saw a need for more evidence-based programs in primary care offices and enhanced outreach and education related to chronic disease prevention, especially to hard-to-reach communities.

Cancer

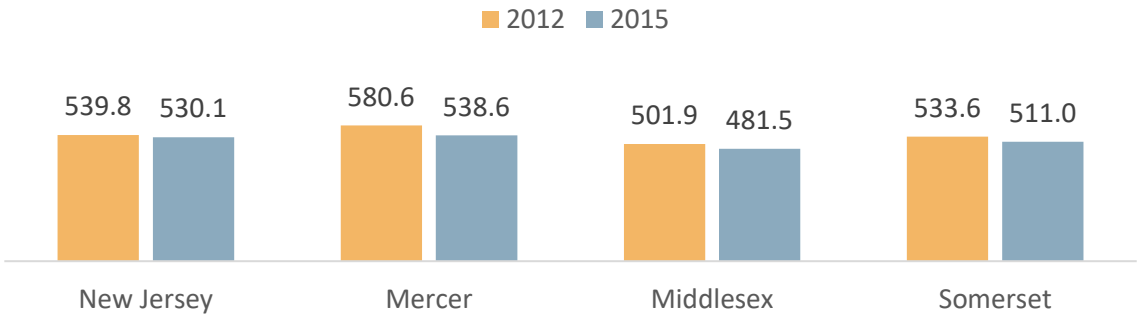
> *"Cancer—it feels like it's inevitable."*
> – Key Informant

> *"These [screenings] are just not something that is culturally acceptable. People are not going in for their screenings."*
> – Focus Group Participant

Cancer was identified as a concern in the Princeton Health service area by some focus groups and interviews. Quantitative data and provider perspectives suggest that lack of cancer screening is a concern, especially among some groups. Perceptions about the prevalence of cancer in the region differed across focus group members and interviewees. Focus group members from the Cancer Collaborative noted rising rates of colorectal cancer among younger patients and an uptick in HPV-related cancers including oral and neck cancers. Prevalence of breast cancer was mentioned by other

interviewees and focus group participants. One person reported seeing cancers—lung and stomach predominantly—among the patients who come for services to Princeton International Health. Quantitative data indicate that cancer is the second leading cause of death in all three counties and in the state of New Jersey (Table 5 above). Age-adjusted cancer death rates declined between 2012 and 2016, with Somerset County experiencing the greatest decline (from 152.3 deaths per 100,000 population to 125.8 per 100,000). Overall cancer incidence rates were highest in Mercer County and lowest in Middlesex County in 2015 (Figure 28). Cancer incidence rates declined in all three counties and in the state overall between 2012 and 2015, with Mercer County experiencing the most substantial decline. As will be shown in later graphs, the incidence of different types of cancers varies substantially across the region, as do trends in incidence rates.

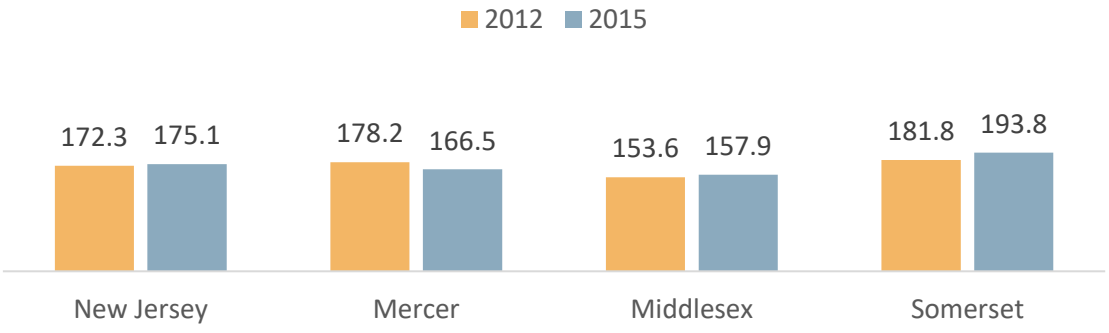
Figure 28. Age-Adjusted Cancer Incidence Rate per 100,000 Population, by County and State, 2012 and 2015



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2012 and 2015
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in May 2018. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Somerset County had the highest breast and cervical cancer incidence rates in 2015, 193.8 per 100,000 population and 9.8 per 100,000, respectively (Figure 29 and Figure 30). The incidence of breast cancer rose between 2012 and 2015 in Middlesex and Somerset Counties and the state overall, while it declined in Mercer County. Cervical cancer rates rose in Somerset County and New Jersey over this time period, while they declined in Middlesex County and remained the same in Mercer County.

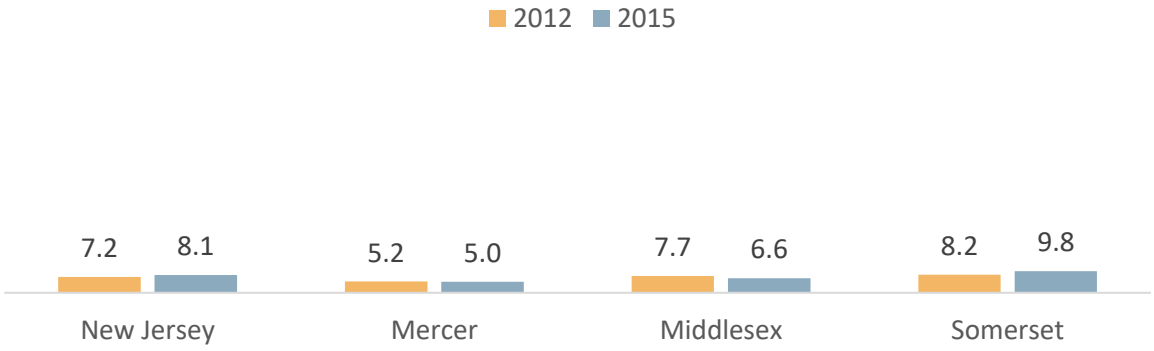
Figure 29. Age-Adjusted Female Breast Cancer Incidence Rate per 100,000 Population, by County and State, 2012 and 2015



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2012 and 2015

NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in May 2018. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

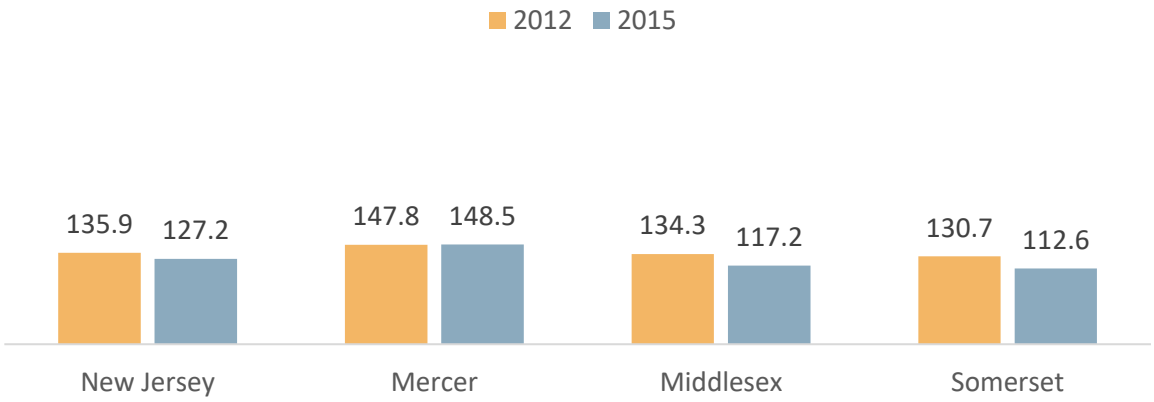
Figure 30. Age-Adjusted Cervical Cancer Incidence Rate per 100,000 Population, by County and State, 2012 and 2015



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2012 and 2015
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in May 2018. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Prostate cancer incidence rates were substantially higher in Mercer County in 2015 than in the other two counties or the state (Figure 31). While incidence rates have declined in Middlesex and Somerset Counties the state overall between 2012 and 2015, they have remained the same in Mercer County.

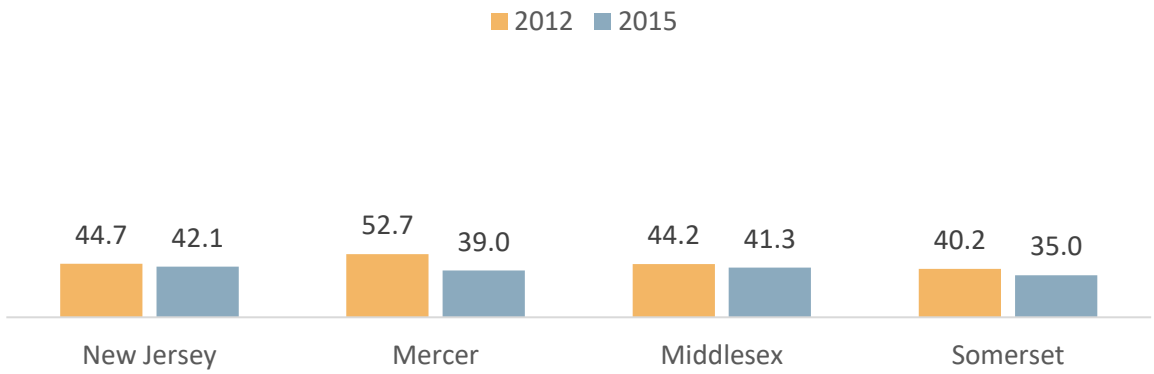
Figure 31. Age-Adjusted Prostate Cancer Incidence Rate per 100,000 Population, by County and State, 2012 and 2015



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2012 and 2015
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in May 2018. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Colorectal cancer incidence rates were lower in all three counties than the state overall in 2015, with the lowest rates in Somerset County (Figure 32). Rates across all counties and the state overall have declined between 2012 and 2015, with Mercer County experiencing the greatest decline.

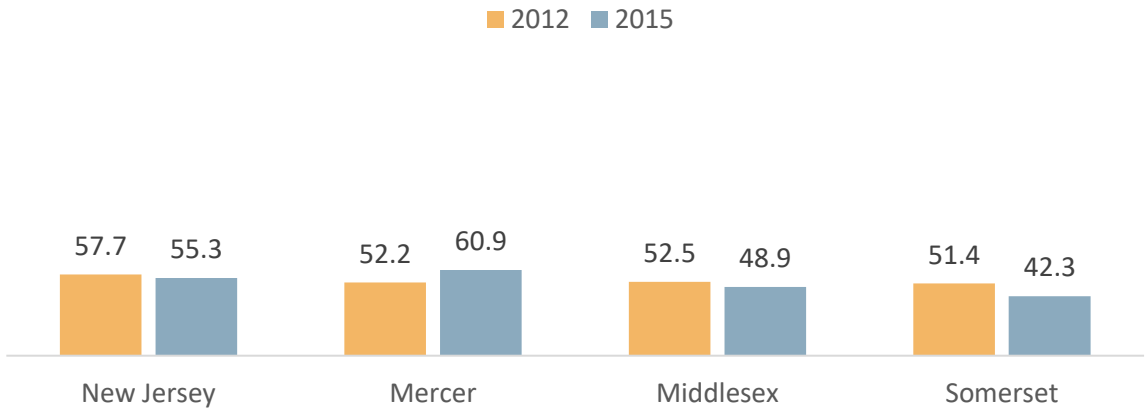
Figure 32. Age-Adjusted Colorectal Cancer Incidence Rate per 100,000 Population, by County and State, 2012 and 2015



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2012 and 2015
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in May 2018. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

Lung cancer incidence rates were highest in Mercer County in 2015 and lowest in Somerset (Figure 33). Lung cancer incidence rates in Middlesex and Somerset were substantially lower than the state overall. While lung cancer incidence rates have declined between 2012 and 2015 in the state and in Middlesex and Somerset Counties, they have risen in Mercer County.

Figure 33. Age-Adjusted Lung Cancer Incidence Rate per 100,000 Population, by County and State, 2012 and 2015



DATA SOURCE: New Jersey State Cancer Registry, New Jersey Department of Health, 2012 and 2015
NOTE: Cancer incidence rates were pulled from the New Jersey State Cancer Registry in May 2018. Reported rates pulled at one point in time may differ from rates pulled at another point in time due to data updates reflecting newly reported cases.

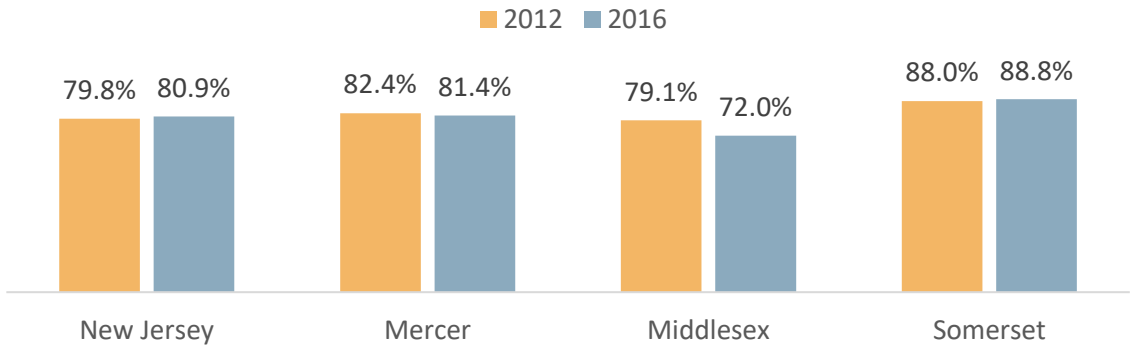
Regular screening is a critically important intervention to detect early stages of cancer. However, interviewees and focus group members expressed concern that some residents in the Princeton Health service area are not being screened. They cited multiple barriers to screenings. The ability to access screenings was cited by focus group members and interviewees as a substantial barrier for low-income adults. While the Bristol-Myers Squibb Community Health Center provides cancer screening to its

patients, other low-income groups were reported to have less access. Adults with no insurance and undocumented people were identified as a particularly vulnerable population. As one provider explained, *"the ones without insurance—who don't have doctors—are those who should be seen."* Interview and focus group participants stated that transportation is a barrier for many of these residents. They noted that screening programs that that provide transportation, such as the free prostate cancer screening program for men sponsored by Princeton Health through a partnership with local churches, are very important. As one person remarked about this program, *"the free bus was a successful model."*

Additional barriers to screenings, according to interview and focus group participants, include lack of awareness of the importance of screenings and fear and lack of time. Lack of awareness of the importance of screening and cultural considerations create barriers to screening according to some focus group members and interviewees. They reported that among some cultures, screening is not common or viewed as important. As one provider shared, *"I think there is a perception within the Southeast Asian community that Indians don't get colon cancer. They are not screened for it in India."* Additionally, cultural differences create a barrier to some screenings. Discomfort with breast or gynecological exams due to cultural mores, for example, results in some groups not accessing screenings. Fear and lack of time were also mentioned as barriers to screenings. As one provider stated, *"people tend to put things off because they're scared."* More education about cancer and screenings were seen as needed.

Quantitative data show varying patterns in cancer screening rates across the region, including a decline over time in some rates. This is consistent with perceptions shared in interviews and focus groups. Data about mammogram rates, for example, reveals that rates remained roughly the same between 2012 and 2016 in Mercer and Somerset Counties, and the state overall; however, they declined substantially in Middlesex from 79% to 72% (Figure 34). The proportion of women receiving mammograms in 2016 was highest (88.8%) in Somerset County and lowest (72.0%) in Middlesex County.

Figure 34. Percent Females Aged 50-74 Reported to Have Had a Mammogram in Past Two Years, by State and County, 2012 and 2016

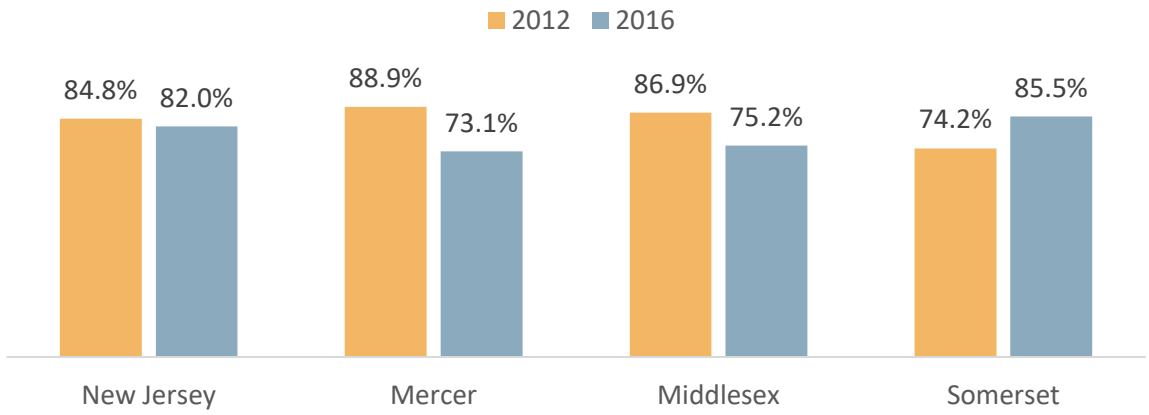


DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

Cervical cancer screening (pap test) rates also showed substantial variation across the region. The proportion of women receiving a pap test in 2016 was highest in Somerset County (85.5%) and lowest in Mercer County (73.1%) (Figure 35). Both Mercer and Middlesex Counties had pap test rates lower than the state. Between 2012 and 2016, the proportion of women receiving a pap test declined substantially

in Mercer and Middlesex Counties, and declined by a lesser amount in the state overall. By contrast, the rate increased in Somerset County.

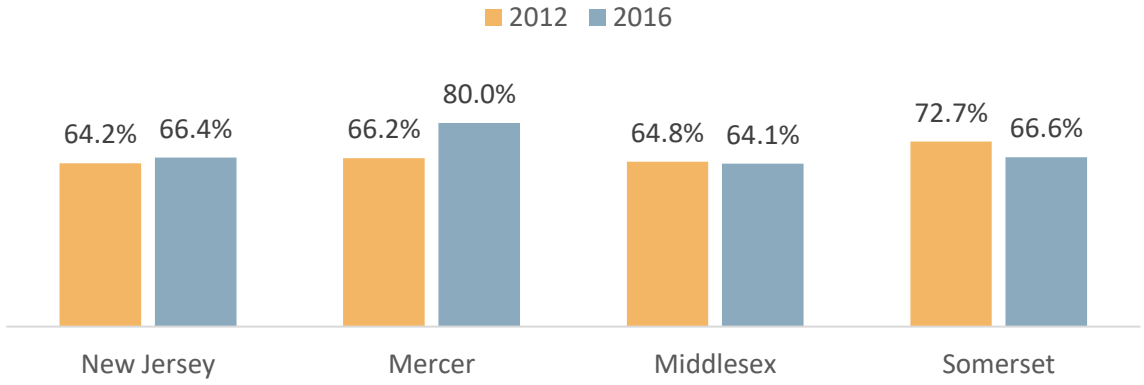
Figure 35. Percent Females Aged 21-65 Reported to Have Had a Pap Test in Past Three Years, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

Colorectal screening rates among adults in 2016 was highest in Mercer County (80%) and the rate has increased substantially from 2012 (Figure 36). The rates in the other two counties is comparable to the state overall, about 66%. The rates have remained the same between 2012 and 2016 in Middlesex and New Jersey overall, but declined in Somerset.

Figure 36. Percent Adults Aged 50-75 Reported to Have Met Colorectal Cancer Screening Guidelines, by State and County, 2012 and 2016



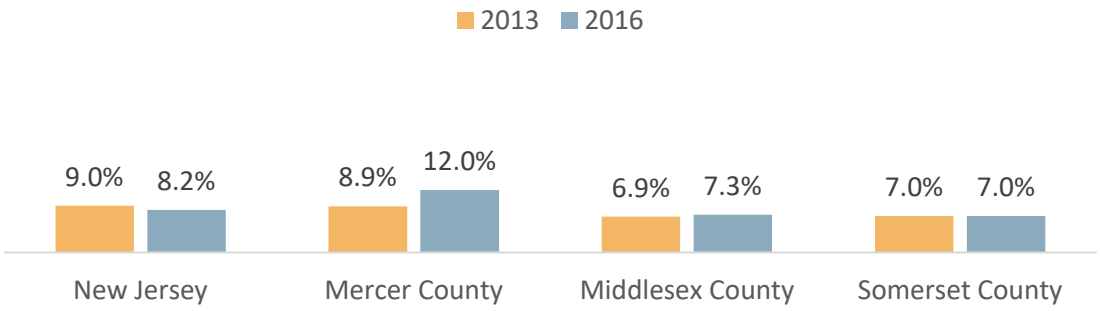
DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016
NOTE: Guidelines as defined as a history of a fecal occult blood test (FOBT) within the previous year or a sigmoidoscopy within the previous 5 years and a FOBT within the previous 3 years or a colonoscopy within the previous 10 years

The human papilloma virus (HPV) is a common virus that affects teens and adults. When untreated, the infections can cause cancer; each year, HPV causes more than 32,000 cases of cancer in the US.[3] The New Jersey Department of Health/Center for Health Statistics does not currently collect data about HPV vaccination rates at the county level. However, data collected by the Centers for Disease Control (CDC) indicate that in 2016, 50.1% of females aged 13-17 and 35.8% of males aged 13-17 were up to date with their HPV vaccination in the state of New Jersey.[4] Cancer Collaborative focus group members reported a rise in HPV and related cancers in the region and saw a need to increase vaccination rates. They noted that lack of awareness of the importance of vaccination—as well as a reluctance to talk about sex—as barriers to vaccination. As one provider stated, *"we don't talk about sex to our children. They don't talk about it. But they are doing it, and they need the shot."* More public education, including PSAs, was suggested, as was more education of primary care providers and dentists.

Asthma

Quantitative and qualitative data indicate that asthma is a concern in the region, especially in underserved communities. Self-reported rates of asthma among adults in 2016 was substantially higher for those in Mercer County than in the other two counties or the state overall (Figure 37). Mercer County also experienced a substantial increase in the proportion of adults with asthma between 2013 and 2016.

Figure 37. Percent Adults Reported Current Asthma, by State and County, 2013 and 2016



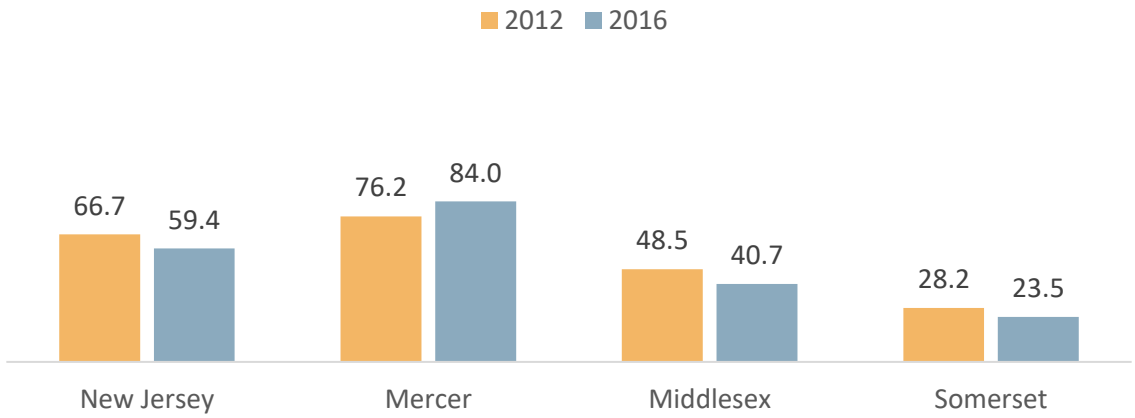
DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

The rate of age-adjusted emergency department visits for asthma in 2016 was far higher in Mercer County, 84 visits per 10,000 population, than it was in either of the other counties or the state (Figure 38). This rate was over twice as high as in Middlesex County (40.77 visits per 10,000 population) and almost four times the rate in Somerset County (23.5 visits per 10,000 population). It was also higher than the state rate. While ER visits for asthma declined between 2012 and 2016 for Middlesex and Somerset Counties and the state overall, they increased in Mercer County.

[3] https://www.cdc.gov/hpv/parents/hpv-for-boys-and-girls/index.html?s_cid=PN-NCIRD-HPV-Con-AW-HPVQs-Parent-4

[4] DATA SOURCE: National Immunization Survey-Teen (NIS-Teen), as reported by Centers for Disease Control and Prevention, TeenVaxView, Adolescent Human Papillomavirus (HPV) Vaccination Coverage Report, 2016.

Figure 38. Age-Adjusted Asthma Emergency Department Visit Rate per 10,000 Population, 2012 and 2016



DATA SOURCE: New Jersey Discharge Data Collection System, Office of Health Care Quality Assessment, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016
NOTE: Data includes ED visits where asthma was primary diagnosis

Data about asthma among children was not available. However, providers participating in focus groups and interviews noted a high prevalence of asthma in children. As one shared, *"asthma in kids is prevalent in the underserved kids."* Poor quality housing as well as other environmental triggers were identified as causes of asthma in children. Several participants in a new parent focus group noted, for example, that issues with HVAC systems in schools, including lack of air conditioning, contributes to asthma and allergy issues among students.

Healthy Eating and Physical Activity

> *"What I find most inspiring working out at the senior center is when I see people the in their 80s and 90s coming in and working out…age is just a number."*
> – Focus Group Participant

> *"Nutrition is an issue in the Hispanic community. People can't afford food and are not educated about healthy food."*
> – Key Informant

Chronic disease and associated lifestyle factors continue to be a concern in the community, as they were in 2012 and 2015. Focus group members and interviewees reported that many communities in the region offer substantial opportunities for healthy eating and physical activity. The region, according to interview and focus group participants, has many facilities for recreation and physical activity, including hiking trails and open spaces, playgrounds, and gyms. Participants reported that some communities, like Robbinsville and Princeton, are incorporating a walkable communities design. Seniors praised the role of senior centers in supporting healthy lifestyles through opportunities such as exercise programs.

While the population was largely reported to be fairly active, focus group members and interviewees also noted that long workdays, in addition to family commitments, make it difficult for residents to find time to exercise. Lower income residents face additional challenges to getting exercise according to participants. For example, not all residents have equal access to safe, open spaces for exercise and lack of transportation is a barrier for some. As one person shared, *"there is access to things outside if you can*

get there." Additionally, safety in some communities was reported to be a concern. As one focus group member stated, *"safety causes an issue with exercise– sometimes I want to run locally instead of driving to the canal, for example, but I need to think of what I would encounter."* Finally, interview and focus group participants reported, fees charged for gym memberships make it difficult for lower income individuals to exercise in the winter months.

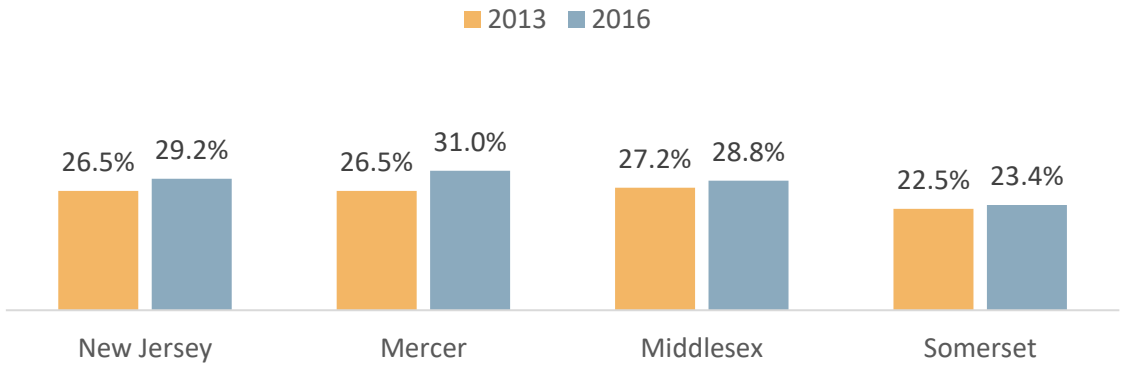
A theme in several discussions was the increasingly sedentary habits of children and youth. As one person described, *"kids are texting instead of going out and playing."* Interview and focus group participants attributed this in part as well to the focus on academics in the community which leaves students little time for recreational physical activity. While most schools have a gym requirement, school nurses and counselors noted that students often try to get out of gym class; they expressed concern that physical fitness among students is declining.

Similar to exercise, the ability of residents to access healthy foods varies. Healthy food was reported to be available in more affluent communities and more difficult to access in poorer neighborhoods. The low cost of fast food, cultural food norms, and poor education about nutrition were cited by participants as factors influencing unhealthy eating habits.

Focus group members and interviews shared that some progress is being made to promote healthier eating among residents. Schools, for example, are providing more healthy options and removing junk food. Providers reported that they are increasingly engaging patients in discussions about nutrition and connecting them to support from dieticians and nutritionists. However, they face challenges funding this type of support, especially for lower income patients. Participants saw a need for more education about healthy lifestyles and more programming to support this. Some reported that programs that engaged families were most likely to be successful. As one focus group member explained, *"the whole family really needs to get involved. We need to get families on board."*

Quantitative data from the BRFSS support the perceptions of focus group participants and interviewees. The proportion of adults who report having had no leisure time physical activity has risen between 2013 and 2016, most dramatically in Mercer County (Figure 39). Overall, adults in Mercer County were more likely than adults in the other two counties and the state to be physical inactive in 2016. Data about physical activity among children and youth are not available.

Figure 39. Percent Adults Reported to Have Had No Leisure Time Physical Activity, by State and County, 2013 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

Business data from 2015 indicate that access to recreation and fitness facilities is lower for residents of Mercer and Middlesex Counties than for Somerset County residents or the state overall (Figure 40). Somerset County, with 24 facilities per 100,000 population in 2015, had over twice as many facilities for physical activity as Mercer and Middlesex Counties (13 and 12 facilities per 100,000 population, respectively).

Figure 40. Rate of Recreation and Fitness Facilities per 100,000 Population, by State and County, 2015

DATA SOURCE: U.S. Census Bureau, County Business Patterns, analyzed by CARES, as reported by Community Commons, 2015

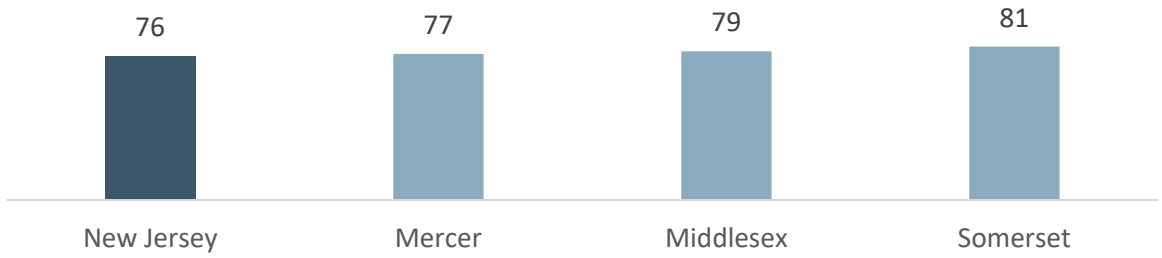
Challenges to healthy eating described by focus group members and interviewees are reflected in quantitative data as well. Low income residents in the three counties face greater challenges to accessing grocery stores than low income residents in the state overall (Figure 41). The proportion of residents who were low income and who had low access to a grocery store in 2015 was highest in Somerset County (22.8%).

Figure 41. Percent Low Income Population with Low Access to Grocery Store, by State and County, 2015

DATA SOURCE: U.S. Department of Agriculture, Economic Research Service, Food Access Research Atlas, as reported by Community Commons, 2015
NOTE: Low access is defined as living more than 1 mile (in urban areas) or more than 10 miles (in rural areas) from the nearest supermarket, supercenter, or large grocery store

The rate of fast food restaurants per 100,000 population in 2015 was similar in the state and Mercer and Middlesex Counties and slightly higher in Somerset County (Figure 42).

Figure 42. Rate of Fast Food Restaurants per 100,000 Population, by State and County, 2015



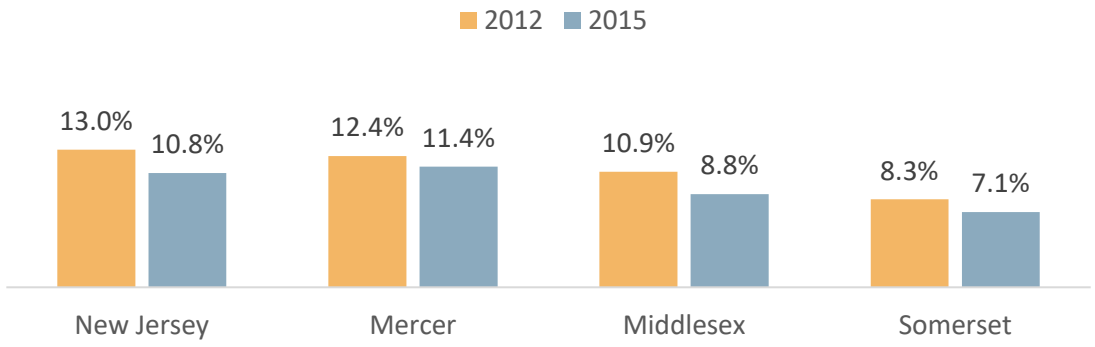
DATA SOURCE: U.S. Census Bureau, County Business Patterns, analyzed by CARES, as reported by Community Commons, 2015

Another way to look at access to healthy food is to examine statistics related to food security. The proportion of households participating in the Supplemental Nutrition Assistance Program (SNAP) was lower in all three counties than the state overall for the reporting period 2012-2016 (Figure 43). In Mercer County, almost 10% of households participated in SNAP. Mercer County also had the highest proportion of population that was food insecure in 2015, slightly over 10% (Figure 44). Overall food insecurity has declined between 2012 and 2015 in all three counties and the state.

Figure 43. Percent Households Receiving Food Stamps/SNAP, by State and County, 2012-2016

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

Figure 44. Percent Population Food Insecure, by State and County, 2012 and 2015



DATA SOURCE: Feeding America, Map the Meal Gap, 2012 and 2015

Behavioral Health

As in both 2012 and 2015, behavioral health emerged as the topic most frequently identified as a health concern in the region by focus group members and interviewees. The same specific behavioral health concerns were raised as well: growing opiate use and mental health concerns related to stress and anxiety. Pediatric providers reported seeing more patients with behavioral health concerns, and at increasingly younger ages. EMS staff reported getting more calls for people with mental health and substance use issues, including overdoses. School counselors and nurses cited rising rates of anxiety and depression among their students as well as rising prevalence of marijuana use and vaping. As shown above, mental health issues and drug / alcohol abuse were identified by community health survey respondents as top concerns for the community (Figure 19). These are health concerns in their own right, but also substantially and negatively affect long-term physical health.

Mental Health

> *"Burnout is very high, at a very young age."*
> – Focus Group Participant
>
> *"The overarching issue that we're seeing is an increase in the incidence of mental health issues [among children and youth] and the problem of finding care."*
> – Key Informant
>
> *"Because of the demographics of the community—it's educated and wealthier—there is less recognition of mental illness within families. But mental illness doesn't care about what class you are."*
> – Key Informant

Among focus group members and interviewees, mental health was cited as an issue of substantial concern for residents in the Princeton Health service area, as it was in the previous CHNAs. Interview and focus group participants reported that mental health issues exist across all age groups. High pressure jobs and a competitive environment were mentioned sources of stress for many working adults. Mental health concerns among seniors was also mentioned by several participants. This includes depression that comes from social isolation as well as cognitive issues such as dementia and Alzheimer's. A rise in hoarding behaviors among seniors was also reported. Economic concerns, language and cultural barriers, and worries associated with immigration processes were cited as reasons for high stress and anxiety among immigrant residents, especially undocumented people. A growing number of people of all ages and groups are experiencing trauma-related mental health conditions according to mental health providers. The impact of poor mental health on physical health was noted by several provider participants. As one focus group member stated, *"[those with mental health concerns] go into physical decline much faster. Physical and mental becomes intertwined."*

Mental health concerns among children and youth were mentioned in almost every focus group and interview. Excessive academic stress, overscheduling and lack of downtime, sleep deprivation, family chaos, and negative influences of social media were all mentioned as contributors to poor mental health among a growing number of children and youth in the region. Pediatric providers and school staff reported that mental health issues manifest themselves in self-harm behaviors such as cutting, eating disorders, and suicide. Interview and focus group participants reported that these issues are appearing in increasingly younger children. As one pediatrician shared, *"the biggest issue is mental health; we see that across the board and across the lifespan starting with kids at 8."* Mental health concerns among

LGBTQ (lesbian, gay, bisexual, transgender, questioning, queer) youth are also rising, according to participants. While pediatricians and school staff report that mental health screening of children and youth has increased in recent years, the challenge is finding mental health providers who can provide care to those young people who need it.

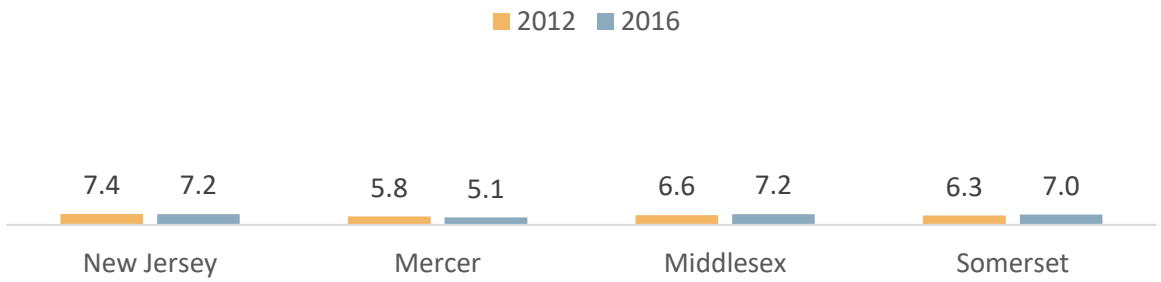
Data about mental health status of children and youth in the region are not available. However, according to the Behavioral Risk Factor Survey, the proportion of adults reporting 14 or more days of poor mental health in the past month was 11% in both Mercer County and the state overall and slightly lower in Middlesex (10%) and Somerset (9%) Counties (Figure 45).

Figure 45. Percent Adults Reported 14 or More Days of Poor Mental Health in Past Month, by State and County, 2016

DATA SOURCE: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2016

The age-adjusted suicide rate for 2016 was lowest for Mercer County at 5.1 per 100,000 population (Figure 46). The suicide rates for Middlesex and Somerset Counties and the state overall in 2016 were about 7.0 per 100,000 population. While data about youth suicide are not available, several focus group members and interviewees mentioned suicides and suicide ideation as concerns. As one interviewee involved in a local school district explained, *"there's been a number of suicides in the county…and you're seeing that in well-performing schools because of the academic stress and pressure and you're seeing it in [lower-performing schools] with pressure from the social aspect."*

Figure 46. Age-Adjusted Suicide Mortality Rate per 100,000 Population, by State and County, 2012 and 2016



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, 2012 and 2016; NOTE: Includes ICD-10 codes

Mental Health Treatment

As in both 2012 and 2015, focus group members and interviewees cited lack of sufficient mental health services as a major unmet need in the region served by Princeton Health. While Princeton House was mentioned by nearly everyone as the foremost provider of mental health services in the region, it was reported that demand exceeds the supply. A need was identified for more psychiatrists and social workers, in-patient beds, and school counselors and others skilled at addressing the needs of children and teens. More longer-term community-based programming and supports were also cited as being critical for creating a continuum of care. As one focus group participant stated, *"you need these services long term; 20 days won't be enough."*

Systemic issues, including low reimbursement, insurance-defined limits on number of visits, high workforce turnover, and aging providers further contribute to concerns. While more affluent residents were seen as having greater access to mental health services, low-income residents face substantial challenges including transportation and lack of insurance and resources to pay for services out of pocket. According to interview and focus group participants, many providers do not take Affordable Care Act (ACA) insurance or Medicaid. As one person stated, *"the quality of mental health care is so based on income. To be able to get a psychiatrist at all, but especially a good one, is nearly impossible if you're on Medicaid."*

While mental health services in general were seen as lacking in the region, services for children and youth were reported to be particularly scarce. HiTOPS in Princeton was mentioned for its work with adolescents, but in general the region was reported to have few specialists in child or youth mental health. As one school nurse stated, *"when you have a 6-year-old with a behavioral health problem, you are screwed. There is nothing out there for elementary school kids, nothing until they are 11."* A couple of participants wondered if Princeton Health's affiliation with Penn Medicine will, over time, help to attract psychiatrists to the region.

As shown in Table 7, the proportion of residents per mental health provider in 2017 is lowest in Mercer County (340 residents per provider), while the ratio is highest in Middlesex County (630 residents per provider). The ratios in Mercer and Somerset counties are lower than the state ratio of 530 residents per mental health provider.

Table 7. Ratios of Population to Mental Health Provider, by State and County

	Mental Health Provider (2017)
New Jersey	530:1
Mercer	340:1
Middlesex	630:1
Somerset	400:1

DATA SOURCE: National Provider Identification Registry, Centers for Medicare and Medicaid Services, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2017

According to focus group members and interviewees, the scarcity of mental health providers means that those who need mental health services must often wait to access them or go untreated. This is especially the case for lower income residents. An additional and costly consequence is use of hospital emergency rooms (ER) for mental health care. According to providers and EMS staff, a growing number

of people are appearing in the ER for mental health issues. ERs, according to participants, are ill-equipped to handle the health and often security issues that are related to mental health care. When As one provider summed up, *"there are patients in the hospital with physical issues that hospital can handle, but mental health it cannot."* The strain of mental health on hospital ERs has, according to a couple of interview and focus group participants, led to a practice in which some hospitals direct patients with mental health issues appearing in their ER to another hospital ER. This causes problems for both patients and hospitals to which patients are diverted.

The scarcity of mental health providers also means that primary care providers and counselors and school nurses play an increasing role in mental health care, a role for which, interview and focus group participants report, many are ill-equipped. Pediatricians in focus groups stated that they are increasingly required to intervene in mental health issues of their patients, something that they are not trained in or comfortable with. Few providers have on-site mental health counselors or psychiatric nurses. School counselors and school nurses report a similar challenge, noting that most schools lack sufficient mental health providers. An additional challenge, school staff shared, is that they are often called upon, but ill-prepared, to let families know the range of mental health services available to children and youth.

As in the past, stigma was mentioned as a barrier to better mental health. A high-pressure, competitive culture contributes to this, participants report. As one school staff member explained stated, *"I think we also have a shame factor with our parents and they are not going to reach out, they're not going to let us know what's going on."* Culture-based perceptions of mental health also affect whether residents will seek care. As one provider explained, *"some cultures don't want to share issues, especially with mental health."* As a result of stigma, participants reported, people wait until a mental health issue is very serious before seeking help. School staff reported that they are working to educate parents and students about mental health and the role academic pressure plays in this. They reported holding educational workshops for parents and mental wellness fairs for students. However, they shared, stigma is still a prevailing issue. As one counselor stated, *" 'where will you put on their transcript that my kid has a mental health issue?' That is what [parents] worry about."*

Despite the many challenges to accessing mental health services in the region, focus group members and interviewees shared some positive developments. They noted that the state of New Jersey has recently called for an additional the number of beds by over 850 through the certificate of need process, including a substantial number in Middlesex County.[5] However, challenges remain, as one person noted: *"that is a huge number. It doesn't seem off. What is problematic is reimbursement."* Local school policy changes—including later school start times, limitations on AP classes, and homework-free weekends—although not welcomed by all, were mentioned as positive steps to reducing student stress.

Substance Use and Abuse

> *"Substance abuse is rampant and mental health has been ignored so long."*
> – Focus Group Participant

> *"Opioids: I think it hits more families than we think it hits."*
> – Key Informant

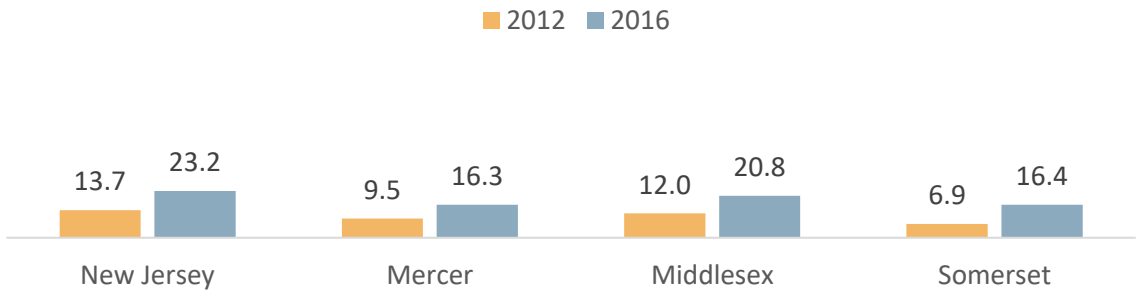
[5] http://www.nj.gov/health/legal/documents/cn_call_adult_acute_care_psych_beds.pdf

Substance use continues to be a challenge for the Princeton Health service area, as it was in 2012 and 2015. The abuse of opioids was of highest concern. As in 2015, when interview and focus group participants noted a rise in the use of opioids, focus group members and interviewees for this CHNA continued to express concern about this substance in particular. They reported a rise in overdose deaths and widespread use of Narcan over the past several years. As one EMS provider shared, *"we're forced to use Narcan a lot. We're going through it more than we can keep it on our trucks."* Additional worrisome trends mentioned by participants include use of more powerful fentanyl, bad drug batches, and polydrugging (combining drugs). School staff reported growing use of opioids among students. As one person stated, *"we're starting to see a bit of a wave and it's concerning."* Participants attributed opiate use in the region to many factors including overprescribing, doctor shopping, trauma, and mental health issues. They also reported a rise in co-occurring (mental health and substance use) disorders.

Drug Use

Quantitative data confirm insights shared from focus group members and interviewees. According to the Centers for Disease Control and Prevention, drug poisoning mortality rates increased substantially across the three counties and the state overall between 2012 and 2016 (Figure 47). Among the three counties, the mortality rate was highest in Middlesex County (20.8 per 100,000 population) and lowest in Mercer County (16.3 per 100,000 population).

Figure 47. Drug Poisoning Mortality Rate per 100,000 Population, by State and County, 2012 and 2016



DATA SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death 1999-2015 on CDC WONDER Online Database, 2012 and 2016
NOTE: Includes ICD-10 codes X40-X44, X60-X64, X85, and Y10-Y14

In 2016, 384 opioid-related deaths occurred in the three counties, accounting for 8% of all opioid-related deaths in New Jersey for that year (Table 8). Of all deaths due to opioids in the three counties, 42.9% were due to heroin and 30.2% were due to fentanyl. Of the three counties, Middlesex County had the highest number of deaths across all drug types.

Table 8. Count of Opioid Related Deaths by Drug, by State and County, 2016

	Heroin	Morphine	Fentanyl	Fentanyl Analog	Oxycodone	Methadone
New Jersey	1,347	45	818	164	349	126
Mercer	33	2	21	0	7	1
Middlesex	110	3	79	28	35	16
Somerset	22	0	16	1	7	3

DATA SOURCE: Drug Deaths for 2016, New Jersey Office of the State Medical Examiner, as reported by NJ CARES, New Jersey Office of the Attorney General, 2016

According to the NJ Office of the Attorney General, in 2017, the naloxone administration rate for the three counties was lower than for New Jersey as a whole (Figure 48). Among the three counties, Somerset had the lowest rate at 74.5 per 100,000 population while Middlesex and Mercer Counties were almost twice as high at 135 per 100,000 population.

Figure 48. Naloxone Administration Rate per 100,000 Population, by State and County, 2017

DATA SOURCE: NJ CARES, New Jersey Office of the Attorney General, 2017
NOTES: Data includes naloxone administrations by NJ law enforcement and emergency medical services; Rates calculated using U.S. Census 2017 Population Estimates

In 2017, the three counties in the Princeton Health service area accounted for about 15% of the total opioid dispensations in the state (Table 9). Mercer County had the highest rate of dispensations, followed by Somerset County.

Table 9. Count of Opioid Dispensations, by State and County, 2017

	Count
New Jersey	4,867,130
Mercer	200,533
Middlesex	371,591
Somerset	141,565

DATA SOURCE: New Jersey Prescription Monitoring Program, as reported by NJ CARES, New Jersey Office of the Attorney General, 2017

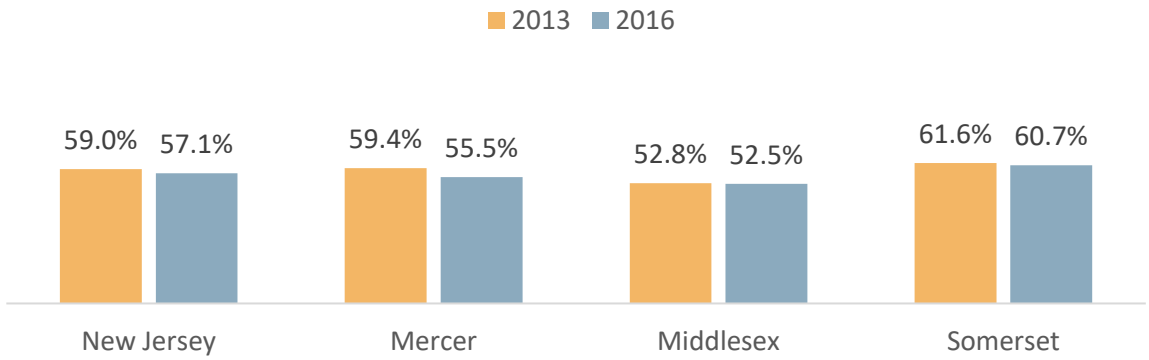
Although secondary data about substance use among children and youth are not available, focus group members and interviewees shared some perspectives about this. They expressed concerns about rising rates of marijuana and synthetic marijuana use which they attributed to legalization. As one person explained, *"I am really concerned about social acceptance that comes with legalization moving across the country. People don't see it as a big deal."* Abuse of substances to help with academics is another trend noted by interview and focus group participants. They reported that more students are using Adderall and Ritalin to help them study and get higher grades. One respondent stated, *"one thing that stood out in last two years, kids using [marijuana] are not a subgroup that struggle emotionally. I'm seeing people who perform well academically turning to marijuana to cope."* Finally, vaping among youth, which was not an issue in 2015, was identified by several participants in 2018. As one guidance counselor described, *"according to kids, they're doing it everywhere, hallway, classrooms."*

Alcohol

Alcohol was mentioned by a couple of participants but was not a prominent theme in focus groups or interviews. Self-reported data about alcohol use indicates that a higher proportion of adults in Somerset

County (60.7%) than in the other two counties or the state reported consuming any alcohol in 2016 (Figure 49). The reported use of alcohol declined in all geographies between 2013 and 2016, with Mercer County experiencing the greatest decline (59.4% to 55.5%). Data about youth are not available.

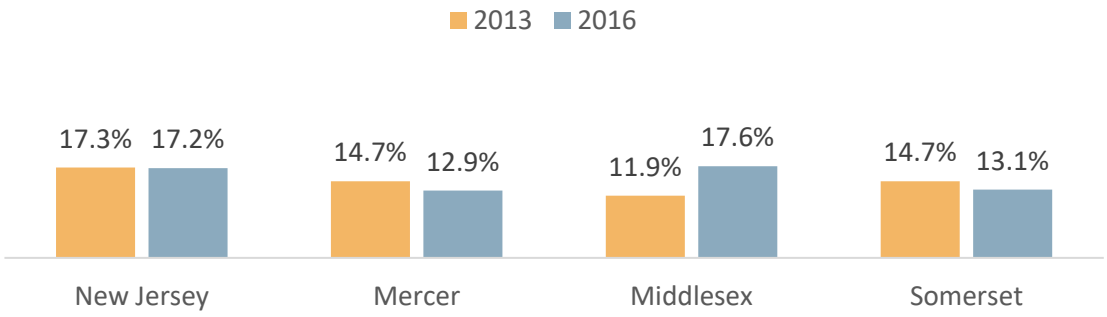
Figure 49. Percent Adults Reported to Have Consumed Any Alcohol, by State and County, 2013 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

A higher proportion of adults in Middlesex County (17.6%) reported binge drinking, a rate similar to the state overall, but higher than adults in either Mercer (12.9%) or Somerset (13.1%) Counties (Figure 50). Furthermore, binge drinking increased substantially in Middlesex County between 2013 and 2016, while it declined in Mercer and Somerset Counties.

Figure 50. Percent Adults Reported Binge Drinking, by State and County, 2013 and 2016

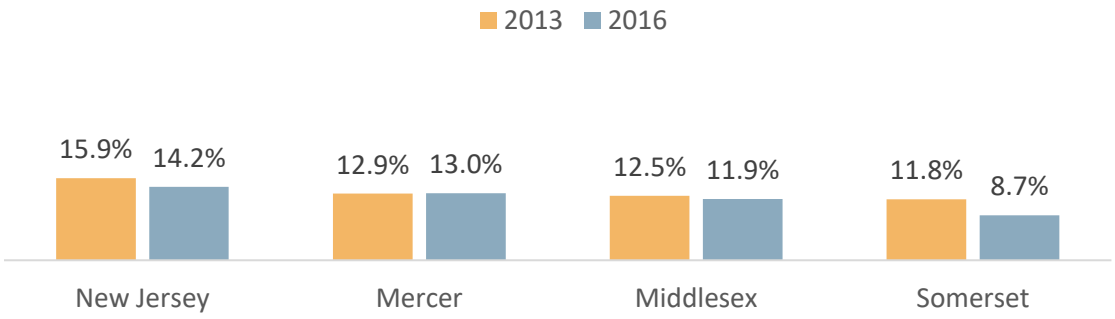


DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

Tobacco

Tobacco use was not extensively discussed in focus groups and interviews. Data about self-reported smoking in 2016 indicate that a smaller proportion of adults in the three counties than the state smoke (Figure 51). Rates are lowest for Somerset County, where rates have also declined substantially between 2013 and 2016.

Figure 51. Percent Adults Reported Current Smokers, by State and County, 2013 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

Substance Use Treatment

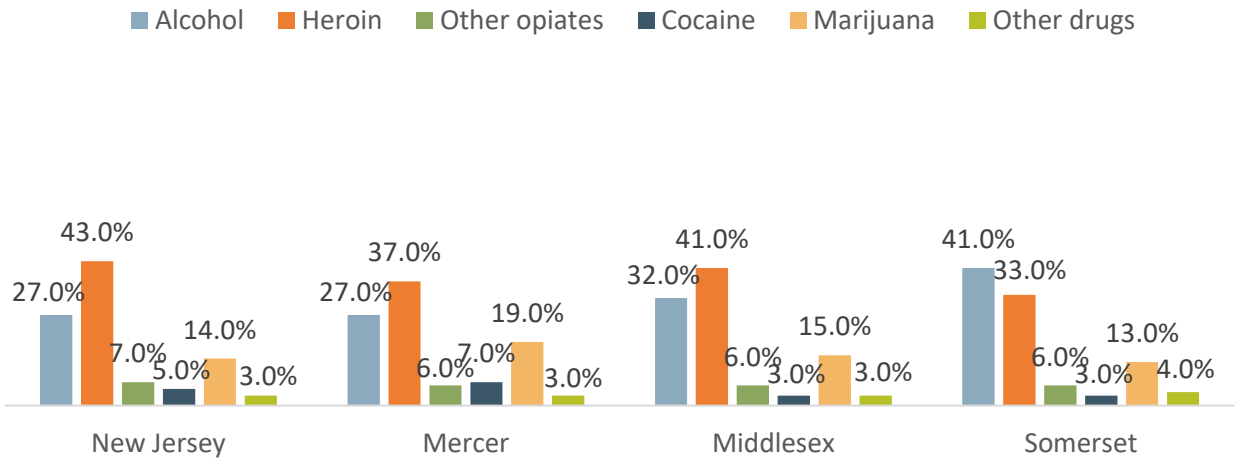
As with mental health services, focus group members and interviewees reported that the region lacks sufficient substance use services including in-patient, out-patient and those that provide medication assistive therapies. Those that exist were reported to be of short duration, with high relapse rates. Most substance use treatment services for adolescents, especially in-patient, are far away, which creates challenges for families. Community-based services, seen as essential to prevent relapse, are also lacking and generally are not reimbursed services. As one person shared, *"the gap is aftercare—what do you do after someone's been through treatment. There needs to be continued support services and those can run the gamut."* Stigma was also reported to be a barrier to treatment.

Focus group members and interviewees reported that systemic efforts to address substance use in the region are underway. Education of providers and new legislation designed to reduce opioid prescriptions were seen as having an impact. As one person explained, *"I think the laws are helping. Even if it's just the inconvenience of the reporting that you have to do if you prescribe more than a few days – stops people from prescribing more than a few days if they can avoid it."* Coverage for behavioral health treatment through the Affordable Care Act (ACA), although limited, was also seen as a step in the right direction.

Education about substance abuse was reported to be minimal. The SAFE program (formerly DARE) is provided in health class in elementary and middle schools and online alcohol awareness programs are offered at the high school level. There are grant-funded alliances within each municipality that provide substance use education, primarily around alcohol. Focus group members and interviewees reported that more education about substance use prevention, especially to children and youth, was needed.

Data about substance use treatment admissions show that treatment for alcohol and heroin addiction comprised the largest proportion of admissions in 2016 in both the state and the three counties (Figure 52). Admission for alcohol treatment was higher in Somerset County than for heroin while in the other two counties and the state, admission for heroin treatment was higher.

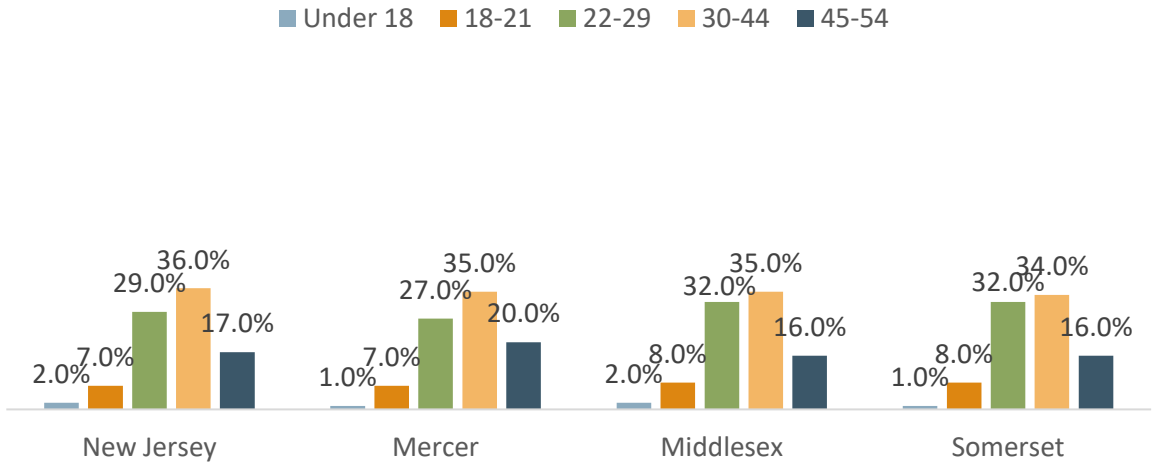
Figure 52. Percent of Substance Use Treatment Admissions by Primary Drug, by State and County, 2016



DATA SOURCE: New Jersey Department of Human Services, Division of Mental Health and Addiction Services, New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview, 2016

Across the three counties and in the state, the highest proportion of treatment admissions, over one third, are of those between the ages of 30 and 44 (Figure 53). Those under age 18 comprise the smallest proportion.

Figure 53. Percent of Substance Use Treatment Admissions by Age at Admission, by County and State, 2016

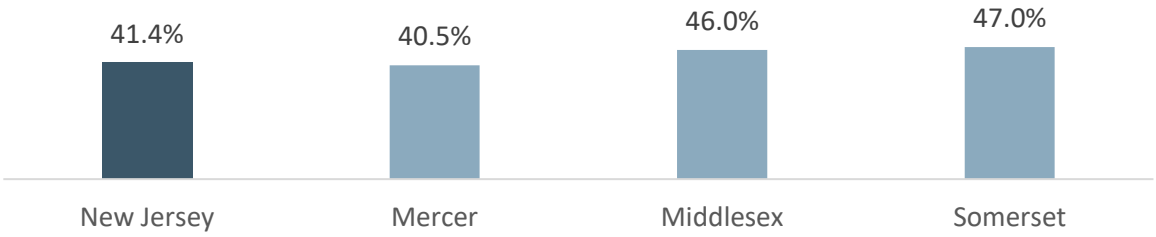


DATA SOURCE: New Jersey Department of Human Services, Division of Mental Health and Addiction Services, New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview, 2016

Quantitative data about unmet demand[6] for substance use treatment shows that unmet demand is higher in Somerset and Middlesex Counties than the state overall (Figure 54).

[6] Unmet demand are those estimated adults who did not receive treatment in the 12 months prior to the interview but who felt they needed and wanted treatment.

Figure 54. Percent of Substance Abuse Treatment Demand Unmet, by State and County, 2016



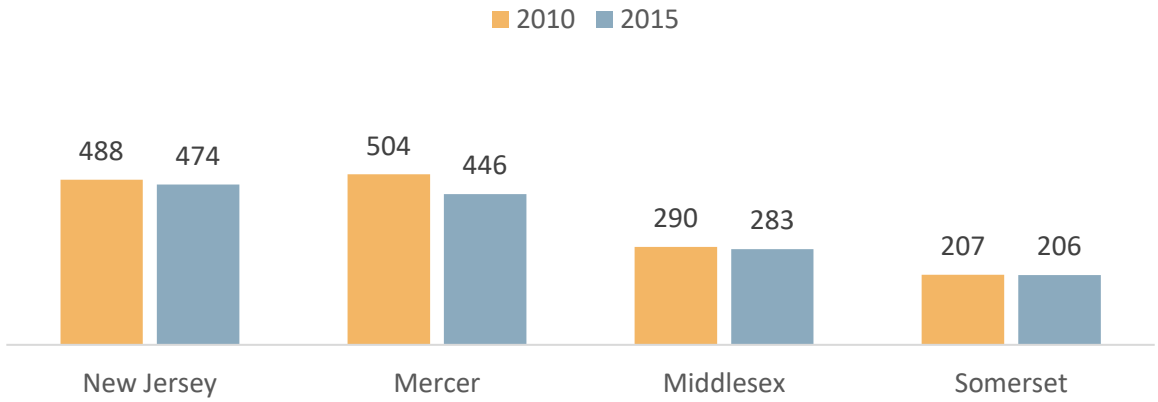
DATA SOURCE: New Jersey Department of Human Services, Division of Mental Health and Addiction Services, New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview, 2016

Immunization and STIs

Communicable diseases were not extensively discussed by focus group members or interviewees, although rising rates of Hepatitis C were mentioned by some. Providers reported that Hepatitis C rates are rising, in the region and New Jersey overall, and is largely linked to substance use. As one provider explained, *"Hep C is a hidden epidemic."* Some efforts are in place to address this, including a grant-funded program at Princeton House targeted to 18-30 year-olds. Interview and focus group participants also reported that screening rates are increasing and that drugs for this disease have become more effective and affordable. Other sexually transmitted infections (STIs) were not mentioned in focus groups or interviews. However, quantitative data reveal that Mercer County generally experiences higher rates of STIs than the other two counties or the state overall. Additionally, while the prevalence rates of some STIs are falling, the rates of others are rising.

The HIV infection rate in all three counties in 2015 was lower than for the state (Figure 55). The rate in Mercer County (446 per 100,000 population) was over twice as high as that in Somerset County (206 per 100,000 population). Between 2010 and 2015 the rate of HIV infection fell, with Mercer County experiencing the greatest decline (from 504 per 100,000 population to 446 per 100,000 population).

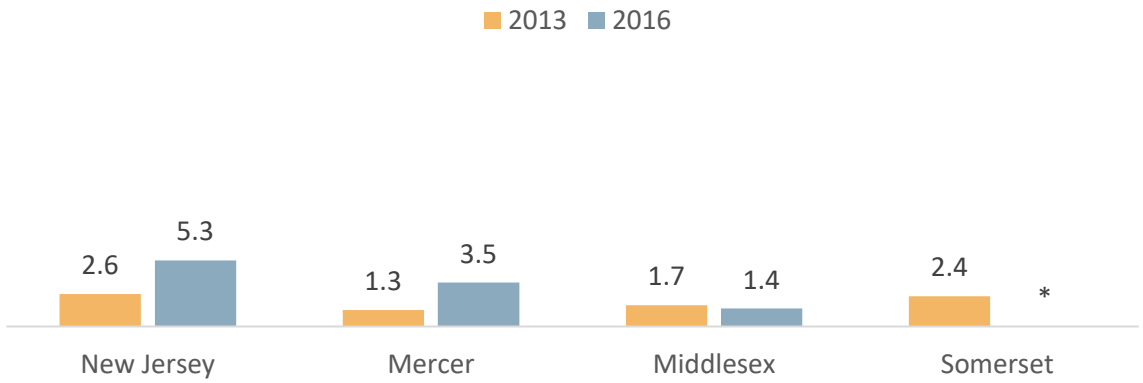
Figure 55. HIV Prevalence Rate per 100,000 Population, by State and County, 2010 and 2015



DATA SOURCE: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2010 and 2015

The syphilis infection rate was higher in the state than in Mercer or Middlesex Counties (data for Somerset are not available) (Figure 56). Infection rates rose in the state and Mercer County between 2013 and 216, but declined in Middlesex.

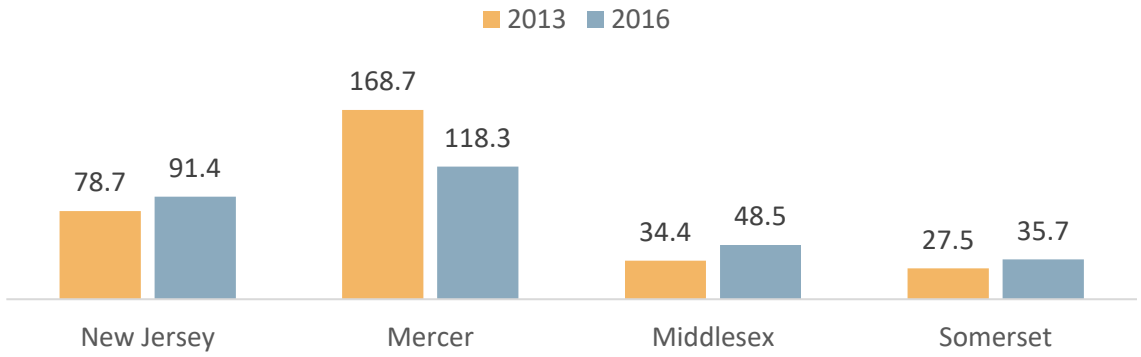
Figure 56. Syphilis Incidence Rate per 100,000 Population, by State and County, 2013 and 2016



DATA SOURCE: Communicable Disease Reporting and Surveillance System, New Jersey Department of Health, Division of HIV, STD, and TB Services, 2013 and 2016
NOTES: Data includes primary and secondary syphilis; 2013 rates are calculated using 2013 U.S. Census American Community Survey 1-Year Estimates and 2016 rates are calculated using 2016 U.S. Census American Community Survey 1-Year Estimates

Rates of gonorrhea infection were substantially higher in Mercer County in 2016 than in the other two counties or the state (Figure 57). They were over three times higher in Mercer than in Somerset and over twice as high as in Middlesex. Between 2013 and 2016 rates substantially declined in Mercer County while they rose in all of the other geographies.

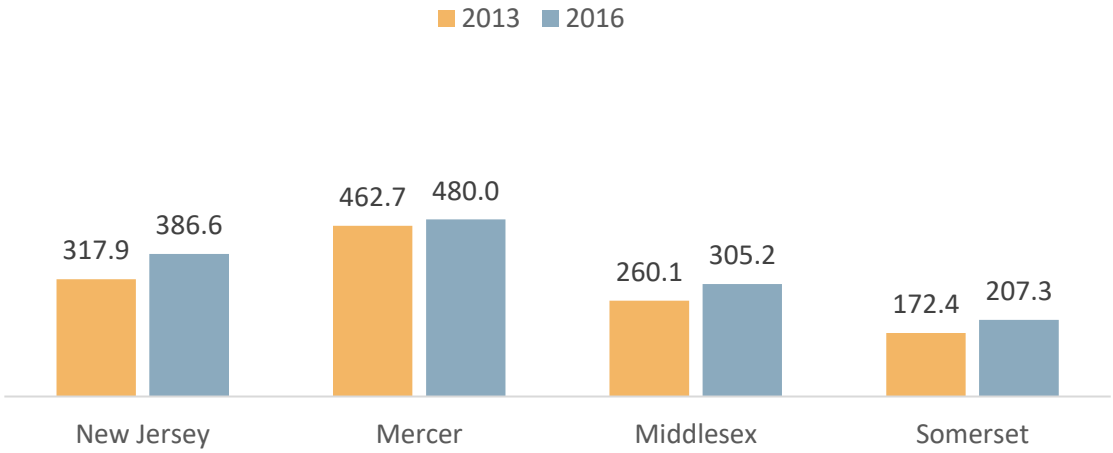
Figure 57. Gonorrhea Incidence Rate per 100,000 Population, by State and County, 2013 and 2016



DATA SOURCE: Communicable Disease Reporting and Surveillance System, New Jersey Department of Health, Division of HIV, STD, and TB Services, 2013 and 2016
NOTE: 2013 rates are calculated using 2013 U.S. Census American Community Survey 1-Year Estimates and 2016 rates are calculated using 2016 U.S. Census American Community Survey 1-Year Estimates

Mercer County also had the highest rates of chlamydia of the geographies in 2016, with infections over twice as high in this county as in Somerset (Figure 58). Chlamydia infection rates rose in all three counties and the state between 2013 and 2016.

Figure 58. Chlamydia Incidence Rate per 100,000 Population, by State and County, 2013 and 2016

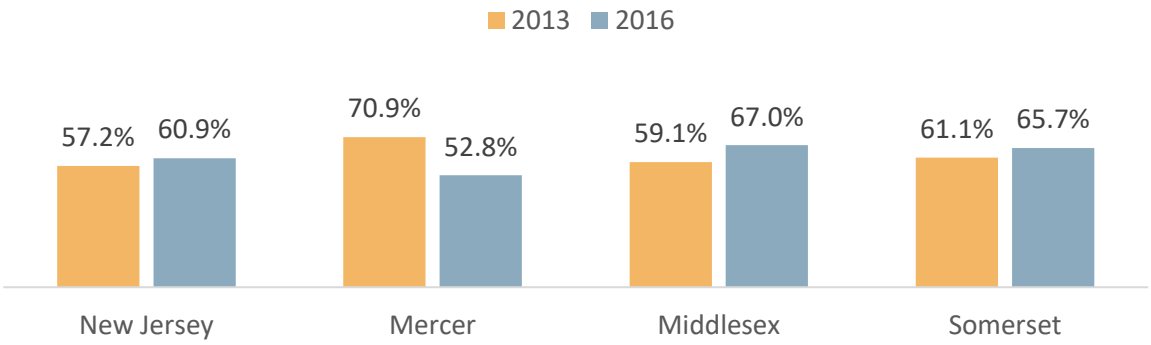


DATA SOURCE: Communicable Disease Reporting and Surveillance System, New Jersey Department of Health, Division of HIV, STD, and TB Services, 2013 and 2016
NOTE: 2013 rates are calculated using 2013 U.S. Census American Community Survey 1-Year Estimates and 2016 rates are calculated using 2016 U.S. Census American Community Survey 1-Year Estimates

Immunization was discussed briefly in a couple of focus groups and interviews. Participants shared that there have been recent outbreaks of vaccine preventable diseases among college students. School nurses explained that lack of knowledge about the importance of immunization, and misunderstanding about vaccination, creates challenges in getting students immunized. While promotion programs offered through insurances go a long way to raise immunization rates, there are still unreached groups according to participants. Particularly challenging, as one nurse explained, are undocumented students: *"[parents] don't want people to know they're here."*

Immunization rates for flu among those over age 65 were higher in Middlesex and Somerset Counties in 2016 than in Mercer County or the state overall (Figure 59). In 2013, Mercer County had the highest rate of immunization of the counties and higher than the state overall. However, in the following three years, this declined substantially, to only slightly over 50%, the lowest rate among the geographies.

Figure 59. Percent Adults Aged 65+ Reported to Have Had Flu or Influenza Vaccination in Past Year, by State and County, 2013 and 2016

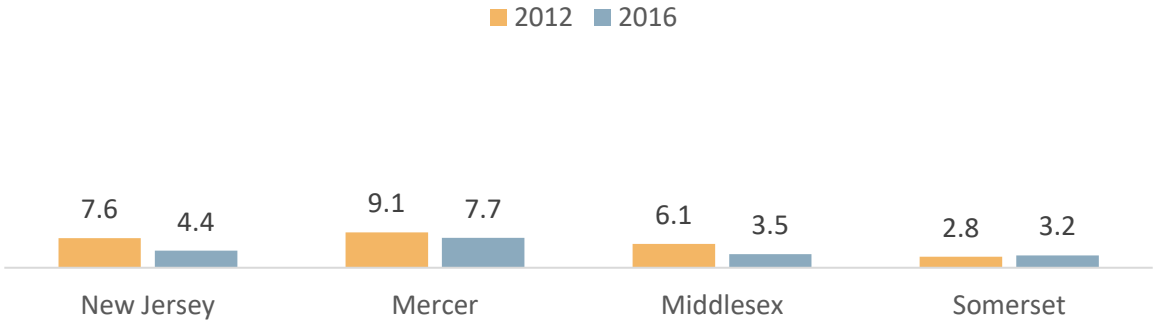


DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

Reproductive and Maternal Health (including Teen Pregnancy)

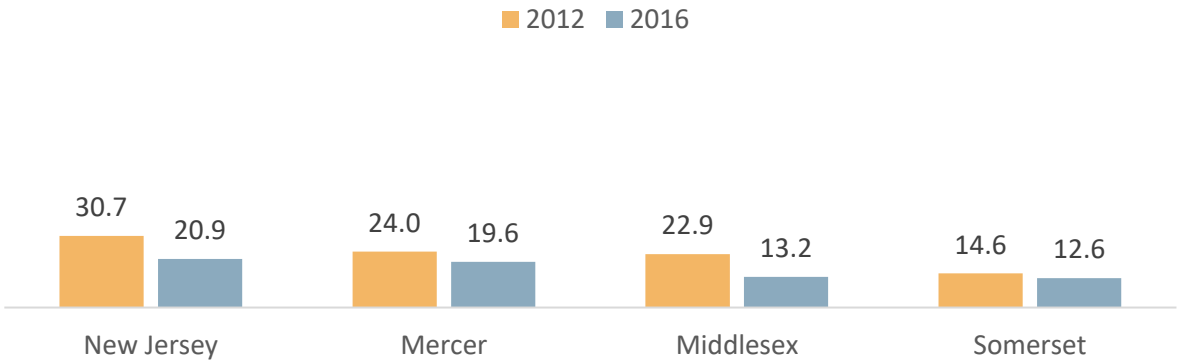
Reproductive and maternal health concerns were not discussed extensively in focus groups or interviews. Quantitative data indicate that Mercer County experiences higher adolescent birth and infant mortality rates and lower rates of prenatal care than the other two counties. Data about teenage birth rate shows that the rate of teen and adolescent births was highest in Mercer County in 2016 compared to Middlesex and Somerset Counties (Figure 60 and Figure 61). Teen birth rates across both age groups declined between 2012 and 2016 for all three counties and the state overall, with the exception of a slight increase in births to females aged 15-17 in Somerset County.

Figure 60. Adolescent Birth Rate per 1,000 Females Aged 15-17, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

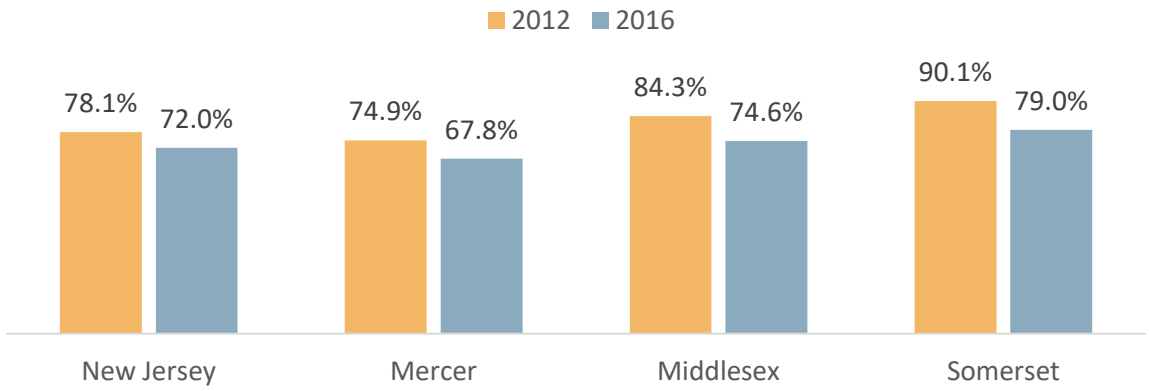
Figure 61. Adolescent Birth Rate per 1,000 Females Aged 18-19, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

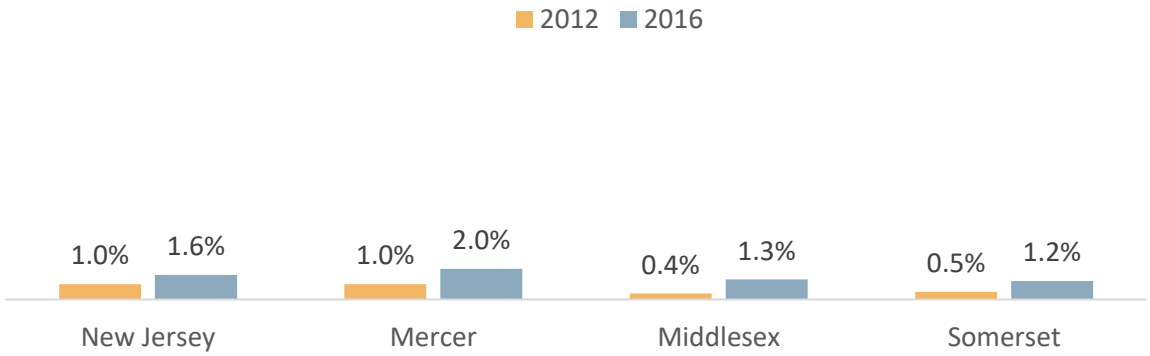
A smaller proportion of women from Mercer County (67.8%) accessed prenatal care in their first trimester in 2016 than women from Middlesex (74.6%) or Somerset (79.0%) or the state overall (72.0%) (Figure 62). The proportion of women with no prenatal care was generally similar across the three counties and the state (Figure 63). The proportion of women with no prenatal care increased slightly between 2012 and 2016 in all three counties and the state overall.

Figure 62. Percent Births with Prenatal Care in First Trimester, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

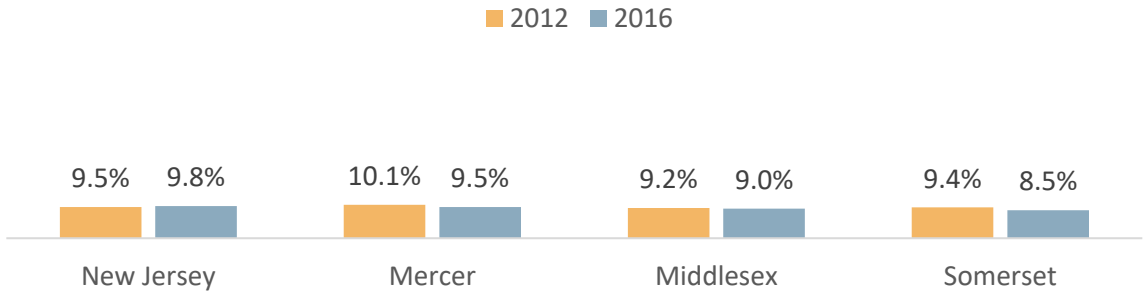
Figure 63. Percent Births with No Prenatal Care, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

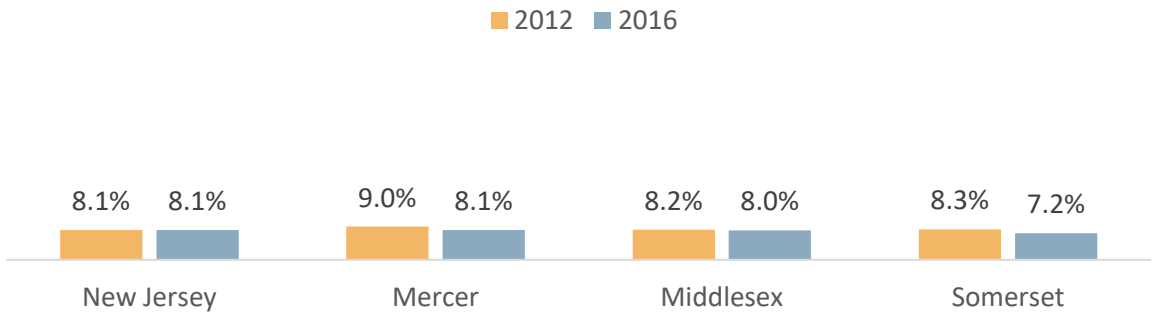
The proportion of preterm births and low birthweight babies are roughly similar across the counties and the state (Figure 64 and Figure 65). Rates for both have remained the same between 2012 and 2016.

Figure 64. Percent Preterm Births, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016
NOTE: Preterm as defined as less than 37 weeks gestation

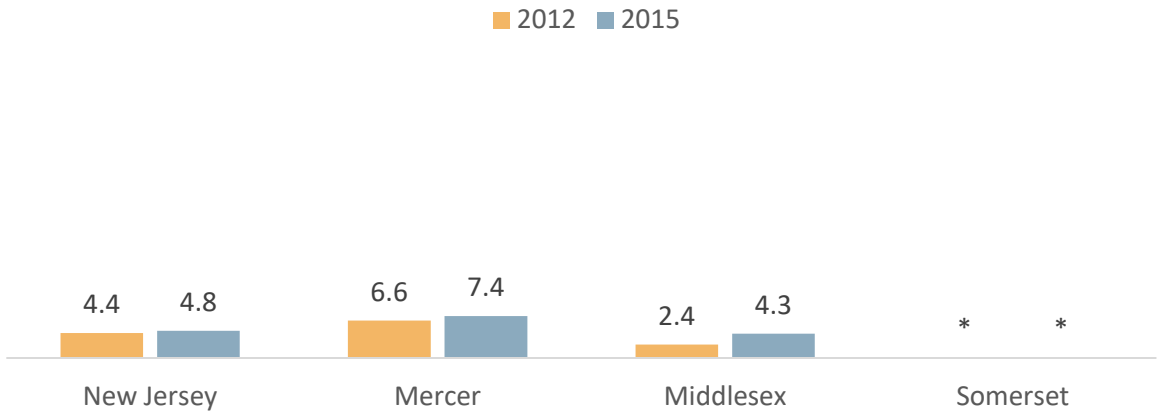
Figure 65. Percent Low Birth Weight Births, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016
NOTE: Low birth weight as defined as less than 2,500 grams

Infant mortality in 2015 was substantially higher in Mercer County than in Middlesex County or the state (data for Somerset are unavailable) (Figure 66). Infant mortality rates rose across the region and the state between 2012 and 2015.

Figure 66. Infant Mortality Rate per 1,000 Births, by State and County, 2012 and 2015

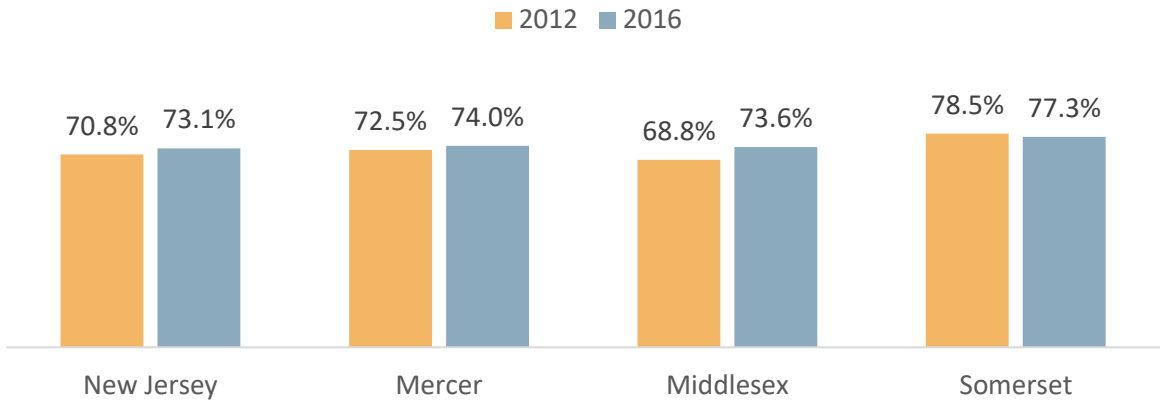


DATA SOURCE: New Jersey Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2015
NOTE: Asterisks (*) denote insufficient data to calculate reliable rate

Oral Health

Oral health was discussed by a few interview and focus group participants who reported lack of access to dentists for underserved groups. These participants noted that dental services are expensive and most are not covered by Medicaid, which makes them difficult for lower income individuals to access. Access to dental services was reported to be a particular challenge for Hispanic residents. Community health survey respondents also selected dental or oral health as a top health concern for them or their families (Figure 18). BRFSS data for 2016 indicate that a higher proportion of adults in all three counties reported that they had a dental visit in the past year than the state overall (Figure 67). The highest proportion were in Somerset County. The proportion having dental visits increased slightly between 2012 and 2016 in Middlesex and Mercer Counties and the state overall, but declined slightly in Somerset County.

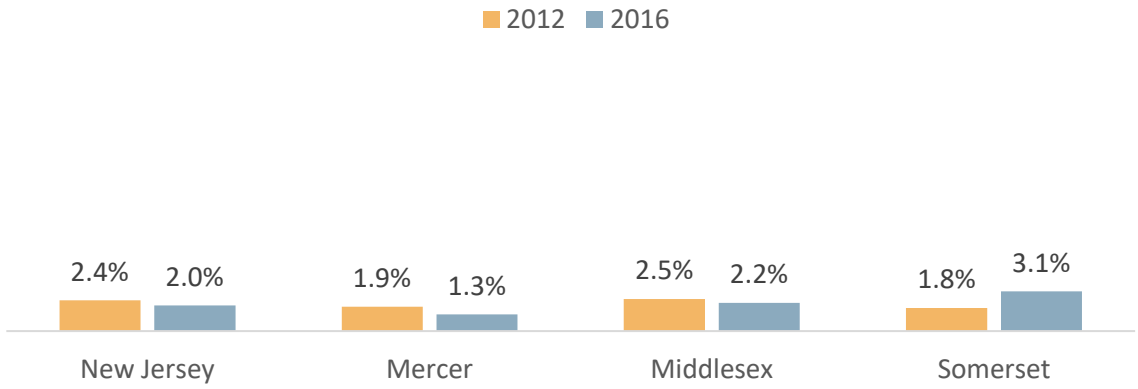
Figure 67. Percent Adults Reported to Have Had a Dental Visit in Past Year, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

A higher proportion of adults in Somerset County than in the other counties or the state reported in 2016 that they had all their natural teeth extracted (Figure 68). This was an increase from 2012.

Figure 68. Percent Adults Reported to Have Had All Natural Teeth Extracted, by State and County, 2012 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2012 and 2016

Other Health Concerns

While not prominent areas of discussion in focus groups and interviews, two other health issues were mentioned in discussions. Bedbugs was reported to be a rising concern in the region. These, interview and focus group participants reported, largely affect renters. Bedbugs in senior living was also reported, which creates additional challenges. As one person shared, *"seniors don't even realize that they have them, they can't see them, they can't pack things up."* Vector-borne diseases were also mentioned as a growing health concern in the area. Decline in deer habitats and climate change have contributed to a growth in tick-borne illness. Mosquito-related illnesses were also reported to be rising.

Health Care Access and Utilization

> *"I find urgent care to be a wonderful innovation."*
> – Focus Group Participant

> *"If there is a serious issue—cancer, heart disease or something like that—people tend to go to the New York City or Philadelphia markets."*
> – Key Informant

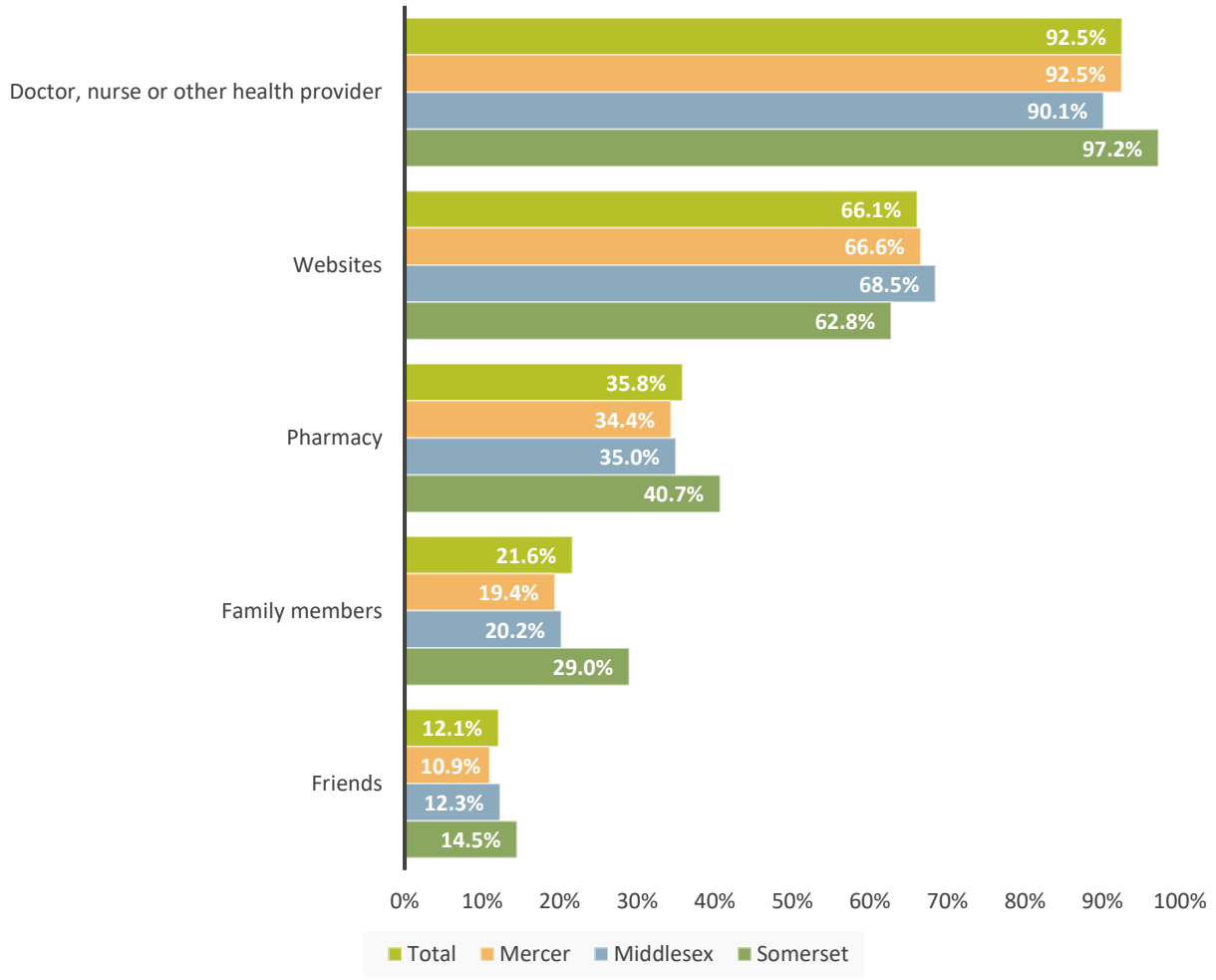
The community health survey conducted for this CHNA asked respondents a variety of questions about access to health care. This section discusses community survey data as well as feedback from interviews and focus group and secondary data to identify the level of health care utilization and resources in the community, as well as barriers residents face in accessing them.

Current Emergent and Non-Emergent Healthcare Services Including Telehealth

A majority of community health needs assessment survey respondents (91.9% in Mercer County, 90.8% in Middlesex County, and 94.6% in Somerset County) indicated that their main medical care is provided by a private doctor's office or group practices. Across all respondents, 92.8% indicated that they had accessed primary care services in the past year, while 27.2% used emergency services. When analyzed by race and ethnicity, there was some variation in use of emergency services. For example, only 13.8% of survey respondents who self-identified as East Asian / Pacific Islander reported using emergency services in the past year, while 29.3% of survey respondents who self-identified as African American / Black reported doing so (see data in Appendix D).

Similar to the 2015 CHNA survey, in 2018, when asked to indicate from which sources they get most of their health information, community health survey respondents most frequently selected a doctor, nurse or other health professional (92.5%) (Figure 69).

Figure 69: Main Sources for Health Information by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Focus group members and interviewees reported that health care services were plentiful in the Princeton Health service region and include primary care, hospitals, multi-specialty ambulatory care services, and children's services. In addition to Princeton Health, interview and focus group participants named Capital Health, St. Lawrence Rehab, St. Francis Hospital, and St. Peter's. The Bristol-Myers Squibb Community Health Center at Princeton Health was mentioned by numerous participants as a valuable health resource that provides comprehensive services, largely to underserved residents.

Capacity for cancer treatment in the region was reported to be growing. However, focus group members and interviewees stated that many residents prefer to go to "well-known" cancer treatment hospitals. As one provider stated, *"if you have a diagnosis of cancer in this area, you have a sense that 'oh, I have to go to Sloan Kettering or Philadelphia.' We have great cancer care services here."*

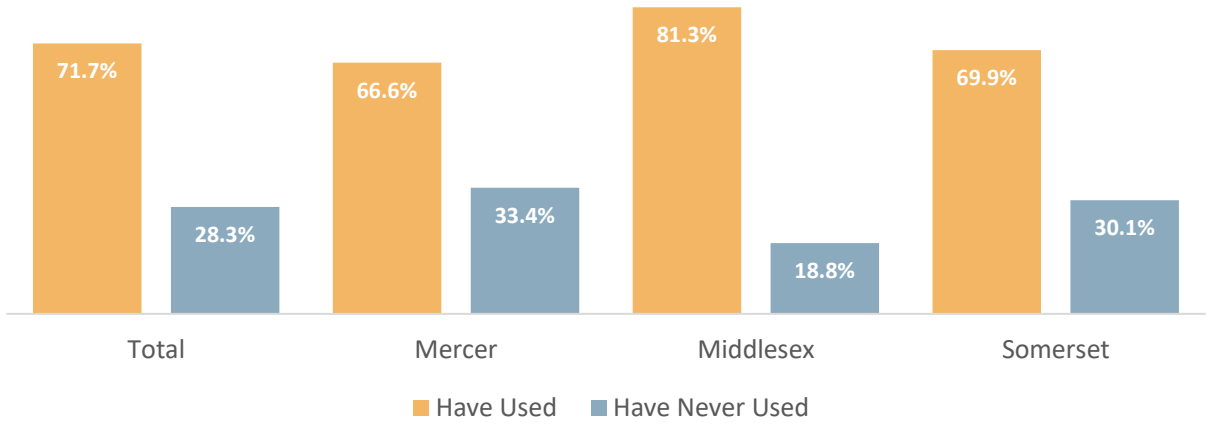
The growth of urgent care facilities was noted by numerous interview and focus group participants, and were seen to fill a critical health care gap: the ability to get a timely appointment with a doctor. As one

focus group member explained, *"I am inclined, if I have a sore throat, to go to urgent care, because you can't get an appointment with primary care."*

When asked about gaps in health care services (besides the gaps in behavioral health services described above), interview and focus group participants mentioned a need for wound care and orthopedic/sports medicine. Additional services for children with special health care needs and providers who specialize in adolescent medicine were also seen as needed. One respondent suggested that additional resources and expertise were needed to treat adults and children with emotional disorders or Down Syndrome or autism.

Technology is increasingly utilized in the delivery of healthcare. A few focus group members and interviewees shared their thoughts on telehealth, and these views varied. Few focus group and interview participants reported that they currently used on-line portals to access their personal health information. Some, in particular seniors, expressed concern about privacy of such information. Others reported that they were not aware that this technology was available. However, the majority of community health survey respondents did indicate that they have used an online portal to access medical information, with Middlesex having the highest utilization rate of 81.3% (Figure 70).

Figure 70: Use of Online Patent Portal by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018
NOTE: Don't know / Not sure responses excluded

In interviews and focus groups, perspectives on the use of technology—such as videoconferencing—to deliver healthcare and interact with providers were also mixed. Several interview and focus group participants—across age groups—reported that they communicated with their providers by email and found this beneficial. Seniors, however, were less enthusiastic about video technology. As one stated, *"healthcare delivered through video? No on that."* Senior respondents reported a preference for face-to-face interaction with their providers and some noted that many seniors are not facile with computers. By contrast, using technology to engage with providers was seen as something younger people, would adopt. New mother focus group members, for example, reported that they frequently used interactive apps to get information during pregnancy and track their children's health and development. Participants saw video-technology as most beneficial for triage: *"I think it would be helpful on an initial question and answer kind of stuff – someone that you could ask questions of and do a little back and*

forth with and then you would get a sense of 'is this I something serious that I need to get treatment now or can I wait?'". One participant stressed the need for balance by saying, *"you've got to be able to do it all, being able to serve the people that want the face-to-face and the mobile access."*

Among community health survey respondents, only 11.8% have ever used a mobile device to access health care for themselves or a family member (Figure 71). Among respondents who had not used a mobile device previously to access health care, approximately half would be interested in accessing health care in this way (through a mobile device or smartphone) (Figure 72).

Figure 71: Use of Mobile Device to Access Health Care Information by County

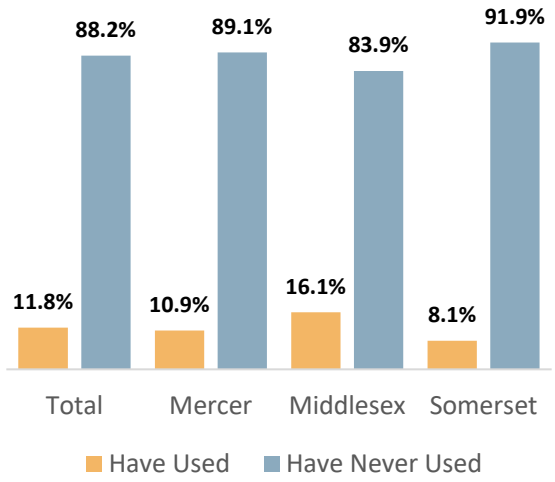
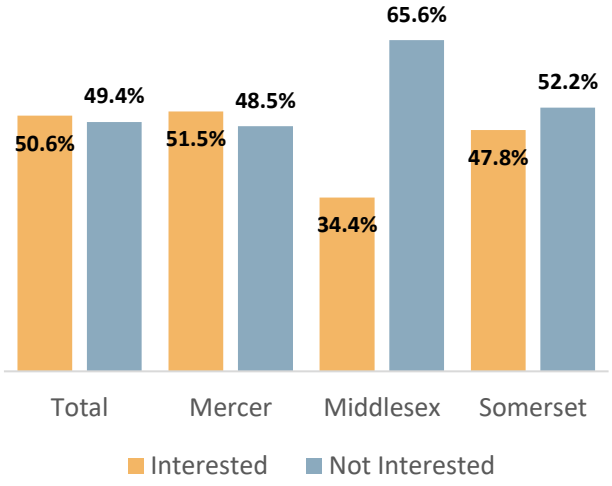


Figure 72: Among Respondents Not Currently Accessing Health Care Information through Mobile Device, Interest in Accessing Health Care Information through Mobile Device by County



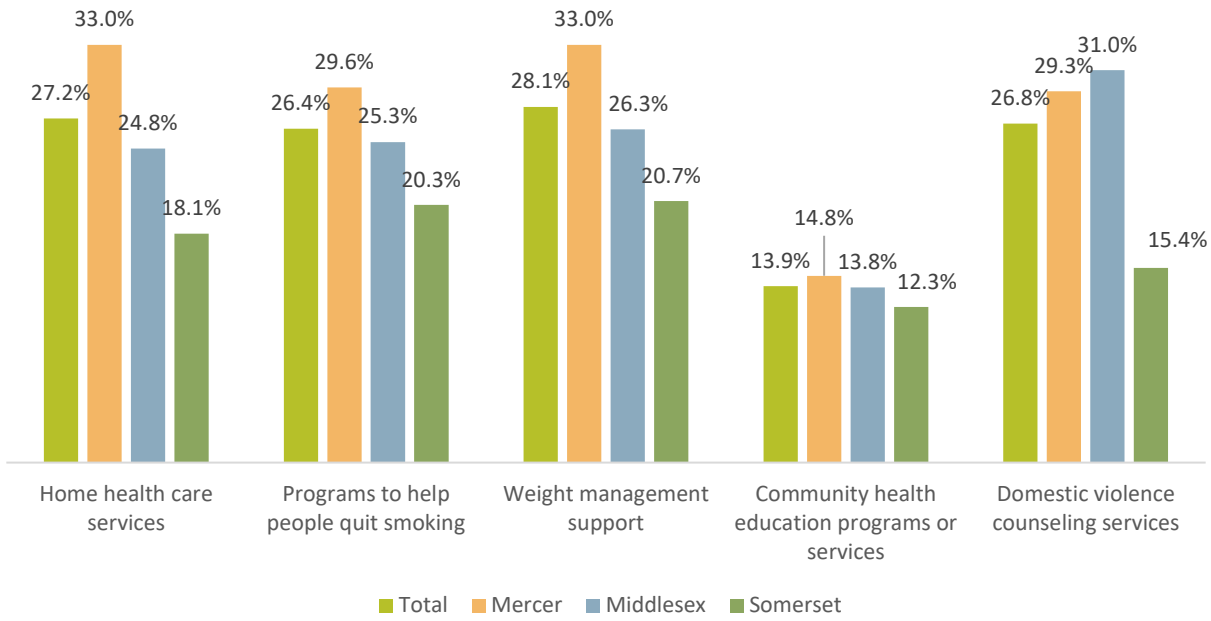
DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Screening and Other Health-Related Services

Overall, interview and focus group participants reported that screening services are prevalent in the area, although barriers exist, most notably time, transportation, and awareness. Screenings are offered through primary care providers as well as health fairs. The health clinic provides screenings and referrals to mammograms and colonoscopies to its patients. However, providers suggested, there are still some groups who are not reached. As one observed, *"screening is about getting the message out. More can be done."*

Community health survey respondents were asked to indicate how difficult it is to access specified health-related services in the community. Figure 73 below shows the percent of respondents that rated each service "hard" or "very hard" to access. In general, a larger proportion of respondents from Mercer County compared to the other two counties rated health-related services "hard" or "very hard" to access, with the exception of "domestic violence counseling services," which were rated "hard" or "very hard" to access by a larger proportion of Somerset County residents (31%).

Figure 73: Health-Related Services Rated "Hard" or "Very Hard" to Access by County



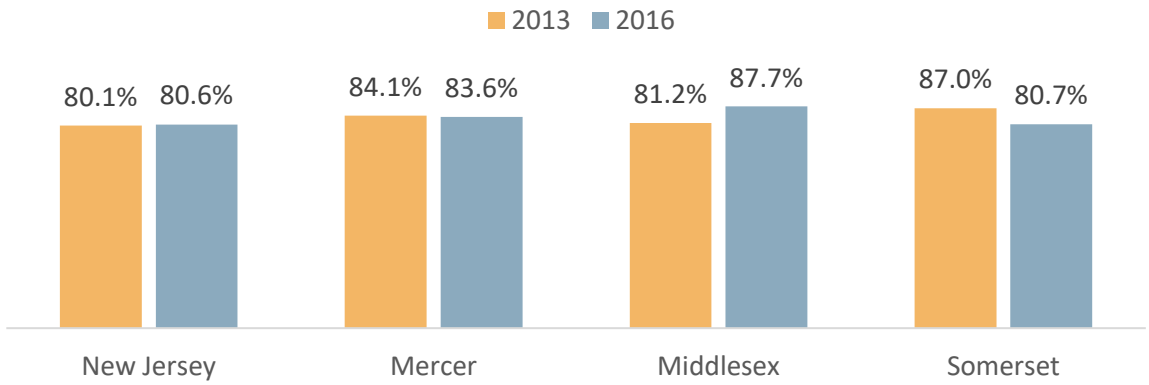
DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Provider Availability

Overall, most interview and focus group participants reported that there were sufficient numbers of general healthcare providers in the Princeton Health service region, although they noted a need for more behavioral health services. However, they also pointed to some changes in the health care landscape that they worry may constrain care. The consolidation of primary care practices has already had this effect according to some patients who noted it is more difficult to get a primary care appointment, especially with a physician. As one focus group participant explained, *"as soon as a new doctor comes in, then quite soon afterward, they are not taking any new patients."* Some reported that getting a timely appointment with a specialist is difficult. Lack of providers who accept Medicaid was noted as a particular challenge.

BRFSS data for 2016 show that over 80% of adults in the state and the three counties reported that they have a primary care provider, with the highest proportion of adults in Middlesex County reporting this (Figure 74). The proportion reporting this increased in Middlesex County between 2013 and 2016 while it declined in Somerset County and stayed the same in Mercer County and the state overall.

Figure 74. Percent Adults Reported to Have a Primary Care Provider, by State and County, 2013 and 2016



DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD), 2013 and 2016

Quantitative data show that residents' access to primary care, dental, and mental health providers varies across the three geographies (Table 10). Somerset County has the largest number of primary care providers for its population size (900 residents per PCP) while Middlesex County has the fewest (1,060 residents per PCP) in 2015. There were 1,050 residents per dentist in Somerset County in 2016, compared to 1,270 residents per dentist in Mercer County, which is higher than the state ratio of 1,190 residents per dentist. The proportion of residents per mental health provider in 2017 is lowest in Mercer County (340 residents per provider), while the ratio is highest in Middlesex County (630 residents per provider). This is higher than the state ratio of 530 residents per mental health provider. A comparison of these data with those shared in the 2015 CHNA (data not shown) reveal a slight increase in availability of all three types of providers in all three counties and the state overall, with the exception of primary care providers in Middlesex County and mental health providers in Somerset County.

Table 10. Ratios of Population to Provider, by State and County

	Primary Care Physician (2015)[1]	Dentist (2016)[2]	Mental Health Provider (2017)[3]
New Jersey	1,080:1	1,190:1	530:1
Mercer	940:1	1,270:1	340:1
Middlesex	1,060:1	1,170:1	630:1
Somerset	900:1	1,050:1	400:1

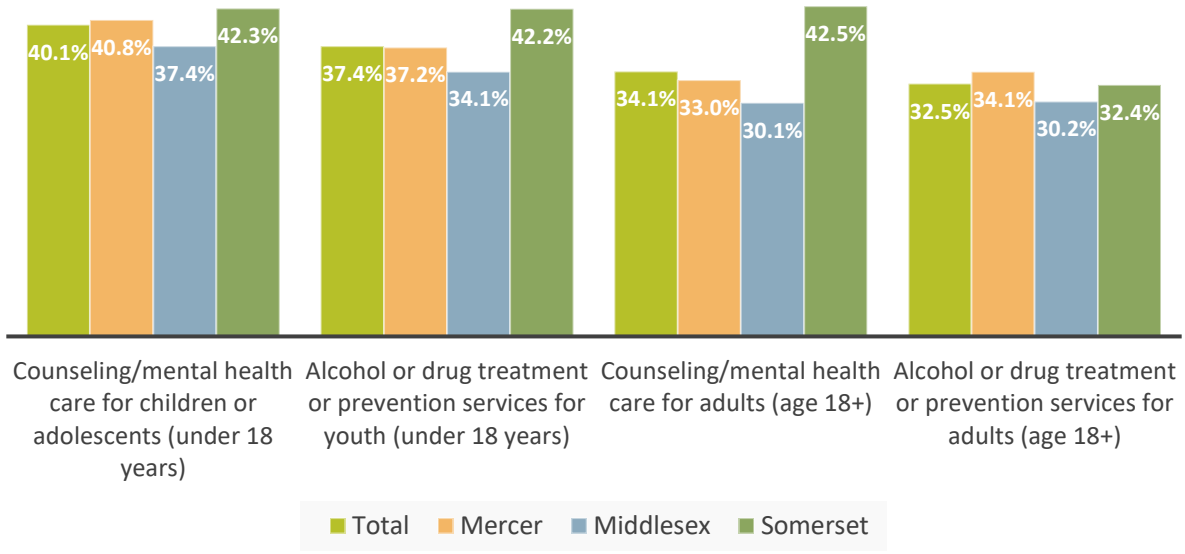
DATA SOURCES: [1] American Medical Association, Area Health Resource File, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2015; [2] National Provider Identification file, Centers for Medicare and Medicaid Services, Area Health Resource File, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2016; [3] National Provider Identification Registry, Centers for Medicare and Medicaid Services, as reported by County Health Rankings, University of Wisconsin Population Health Institute, Robert Wood Johnson Foundation, 2017

Access to Health Care Services

While the region has extensive health care services, some residents faced challenges to accessing them according to focus group members and interviewees. Lower income and undocumented residents were noted as facing the greatest challenges to accessing healthcare in the region.

Community health survey respondents were asked to rate difficulty in accessing specific health care services in the community. Figure 75 below shows the health care services that were rated as “hard” or “very hard” to access by the greatest number of respondents. All three counties marked mental health services and alcohol or drug treatment for both adults and minors as the most difficult services to access.

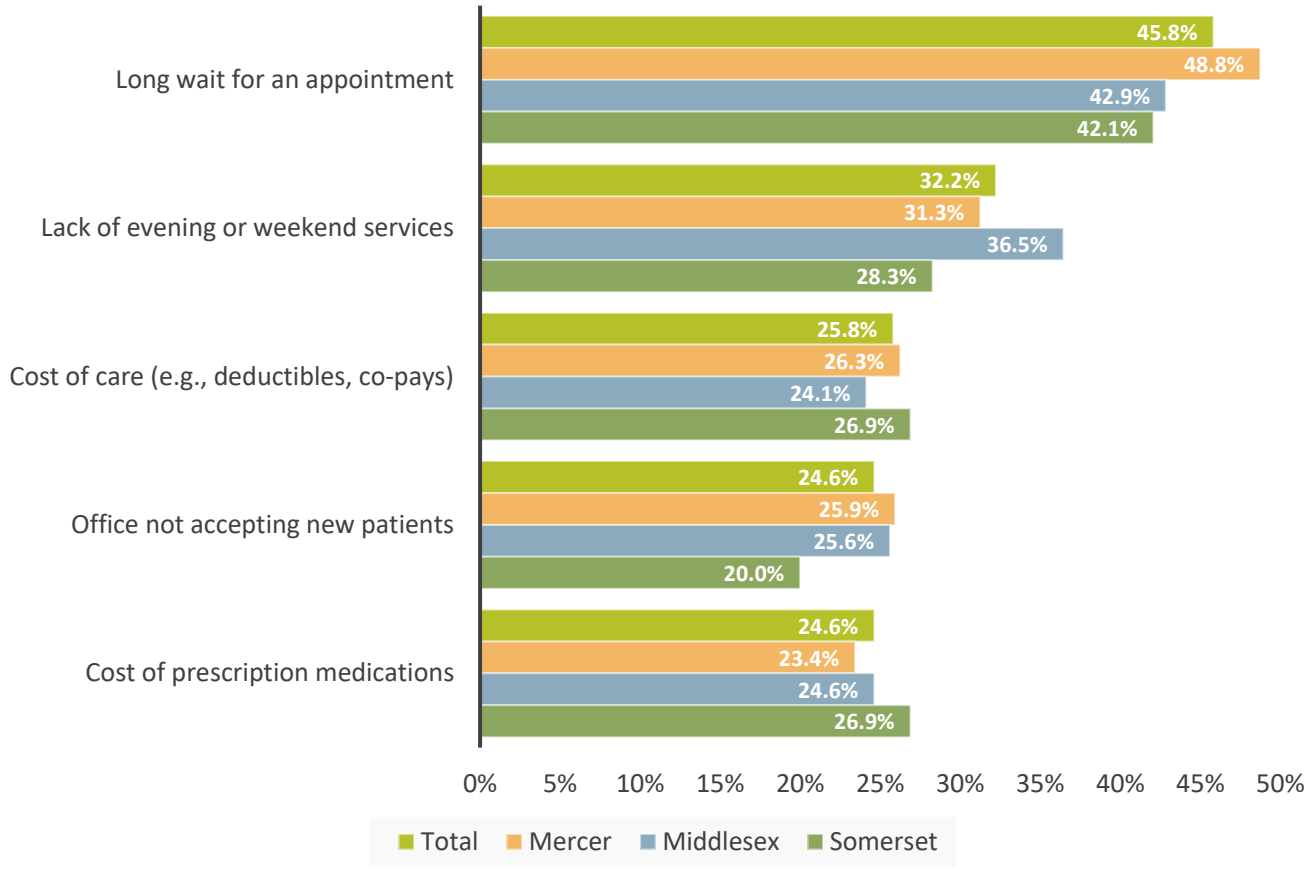
Figure 75: Health Care Services Rated Hard or Very Hard to Access in the Community by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Community health survey respondents were also asked to indicate issues that have made it difficult from them to get care over the past two years. Figure 76 presents the most frequently selected barriers for the 3 counties. Similar to the 2015 CHNA survey, the top 2 issues that made it difficult for respondents to get needed health services in the last two years were “long wait for an appointment” and “lack of evening or weekend services”.

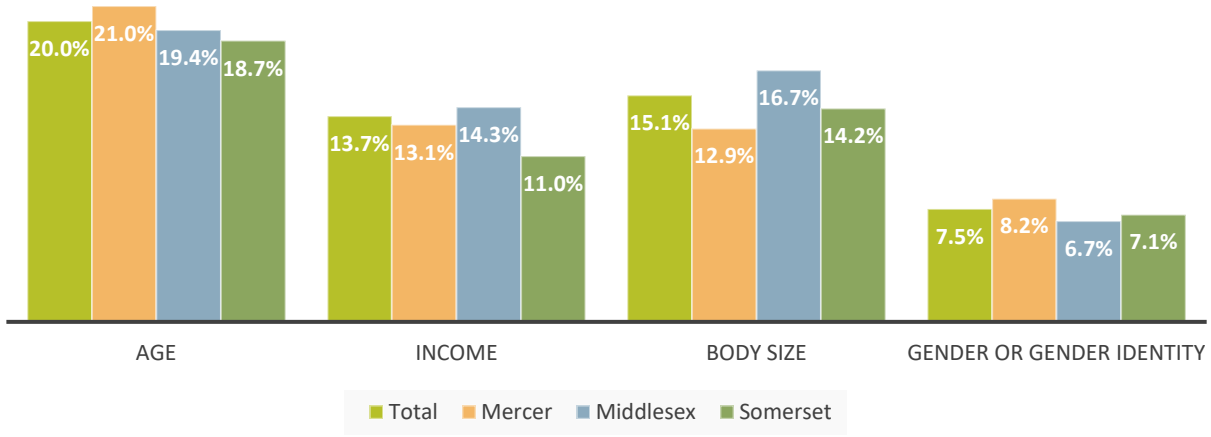
Figure 76: Issues Making It Difficult for Respondents to Get Needed Health Services within Last Two Years by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Respondents were also asked to indicate how frequently they personally felt discriminated against when trying to get medical care, based on certain characteristics. As shown in Figure 77, "age" was the characteristic most frequently selected by survey respondents as a basis for discrimination. While only 11% of respondents in total indicated they had frequently or sometimes experienced discrimination based on their race or ethnicity, 45.9% of Hispanic or Latino respondents and 40.5% of African American or Black respondents indicated they had experienced discrimination based on their race or ethnicity when seeking medical care (see data in Appendix D).

Figure 77: Characteristics on Which Respondents Were Frequently or Sometimes Discriminated Against When Seeking Medical Care by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Obtaining Health Insurance

Focus group participants and interviewees reported that, while the ACA has enhanced access to healthcare, there are still people who are uninsured or underinsured. According to respondents cost prevents some from obtaining health insurance. Lack of understanding about the importance of health insurance among newcomers was also seen as an issue. As one school nurse explained, *"what I see is a lot of families who come here without insurance; they just never get it."* Several groups that don't have insurance at all, including the undocumented and extended families from overseas who do not carry insurance but who also do not qualify for medical assistance.

One focus group member shared a concern about the underinsured: those who are insured enough to be ineligible for clinic/free services but do not have the right kind of insurance to be seen by a private practice. As one provider explained, *"there are folks who I just can't see; they are the ones who have insurance not accepted by the group, but the clinic won't take them because they do have insurance."*

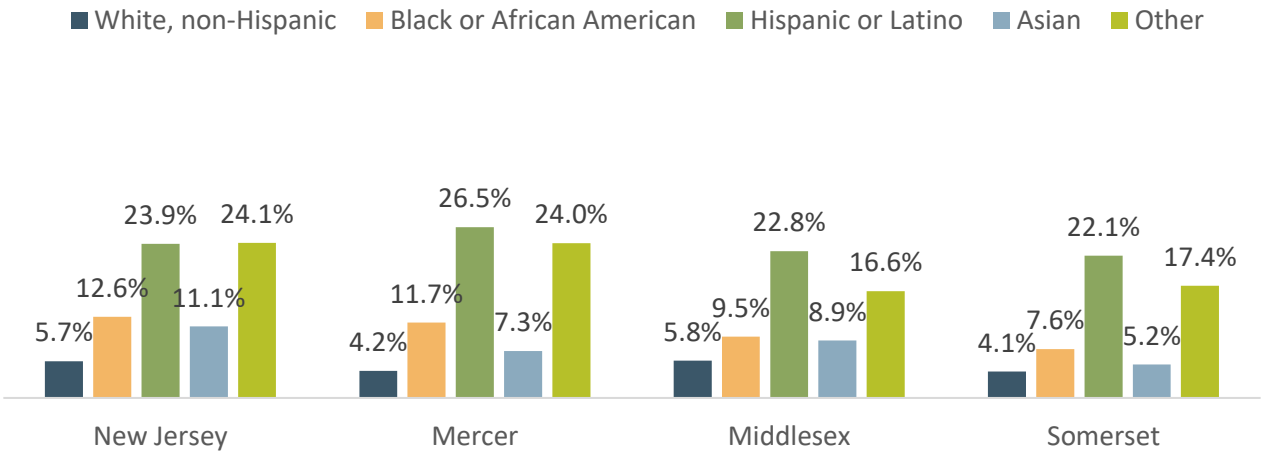
Data from the US Census in 2016 indicate that the proportion of uninsured was lower in the three counties than in the state overall (Figure 78). Somerset County had the smallest uninsured population (7.1%) while Middlesex County (10.3%) had the highest.

Figure 78. Percent Population Uninsured, by State and County, 2012-2016

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

Data about insurance levels by race and ethnicity reveal that about one quarter of Hispanics across the region did not have health insurance in 2016 (Figure 79). White, non-Hispanic residents in the region were more likely to be insured than other racial or ethnic groups.

Figure 79. Percent Population Uninsured by Race/Ethnicity, by State and County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

The proportion of uninsured over age 65 is highest in Middlesex County (11.5%) and lowest in Somerset County (8.0%) (Figure 80). The three counties have lower rates of senior uninsured than the state.

Figure 80. Percent Population 65 Years and Over Uninsured, by State and County, 2012-2016

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

Navigating Insurance Coverage

Another challenge to accessing healthcare mentioned in focus groups and interviews is the difficulty of navigating health insurance and figuring out what is covered and what is not. As one person explained, *"there is such a knowledge barrier about insurance. Even professionals are not sure about their insurance—who is their provider, what is covered, their deductible. They are completely deficient."* Interview and focus group participants reported that patients struggle understanding provider networks as well as Tier 1 and Tier 2 facilities as designated in some insurance. This is especially difficult when negotiating more complex care, such as for cancer.

As discussed earlier, some physicians, notably mental health providers, do not accept all insurances. As one interviewee stated, *"most doctors don't take Medicaid insurance so try as you might, you can't get services for people and most of our consumers—that's all they have."*

Cost of Health Care Services

The expenses associated with healthcare—including insurance premiums, deductibles and cop-pays, and medication costs—were all mentioned in focus groups and interviews as barriers to accessing healthcare.

The high cost of medication was mentioned by several people. As one person remarked, *"it's a shame that people who need medication cannot afford it."* Providers noted that medications, particularly non-generics, are very difficult to obtain for charity care patients. For example, there are now highly effective diabetes medications, but they are cost prohibitive to the uninsured. While pharmacy assistance programs are available, access to them is limited.

Cultural Barriers

Another barrier to accessing healthcare, according to focus group members and interviewees, is cultural. Cultural attitudes about health and distrust of the healthcare system can result in delayed or inadequate care. As one provider explained, *"the Southeast Asian population tends to come in later for medical care, so they come with a lot of advanced disease."* Traditions about who in the family makes medical decisions, providers report, can also affect the delivery and quality of care. Providers spoke about the tension between a desire to respect cultural norms and the need to deliver a high standard of care. Providers and others saw a need for more education of providers around cultural diversity. As one provider stated, *"I think we're very sheltered when it comes to cultures."*

Navigating Healthcare

Navigating the healthcare system is also a challenge for the region's residents, especially for those who struggle with chronic disease or serious health issues. Patients, especially seniors, spoke about challenges with understanding billing and knowing which doctors to see. A need for support in understanding billing was also seen as important. As one person said, *"there are people who cannot deal with all of this—working through bills, figuring out medication. It is hard. It is a difficult journey to fight."* Providers observed that coordinating care for seniors who suffer from memory loss often falls to family members who are ill-prepared for this responsibility. As one provider explained, *"family members get overwhelmed as the complexity of medical issues increased for their loved ones and they have to coordinate appointments, doctors, medications, piecing it together is a real challenge."*

A related issue mentioned by several interview and focus group participants is the lack of coordination of services after hospital discharge, which can result in repeat hospitalizations or visits to the ER. While discharge planning is in place for some patients, such as those with cancer, it is not available to all, according to participants. As one person explained, *"I think right now it's fragmented, and we need to coordinate the care."* Several participants spoke about the important role played by care coordinators or patient navigators and believed more services like this were needed.

Transportation

Lack of transportation creates challenges to accessing healthcare in the region as well, according to interviewees and focus group members. There are several medical transportation options. Hospitals like Princeton Health provide medical transportation for some patients or provide money for taxis. Seniors are often able to access transportation through senior communities or senior centers. Eligible Medicaid patients can receive transportation through Logisticare. However, some patients are not eligible for these services. Transportation was reported to be a substantial challenge for Hispanic residents, many of whom are not eligible for these services. In describing challenges for Hispanic residents, one

interviewee explained, *"they have no access to health care because they have no transportation and can't afford transportation."*

Additionally, some interview and focus group participants reported that the transportation options described above have waiting lists or require advance notice, and can be time consuming. As one participant stated, *"when you have to waste a half a day getting to the doctor, you may just say 'forget it, I'm not going to deal with it.'"* Those requiring more frequent treatment, such as cancer care or dialysis treatment, can find transportation especially challenging. As one cancer provider stated, *"[patients] face challenges physically and functionally to get to treatment centers and to get home and manage themselves."* According to participants, lack of transportation options can lead to calls to EMS for non-emergent medical transportation, which can be very expensive.

Community Resources and Assets
Focus group participants and interviewees were asked to identify the strengths and assets in their communities. The themes that were identified are similar to those identified in the 2015 CHNA and include amenities and location; human and economic resources; and strong health care and social services infrastructure.

Amenities and Location
Proximity to large urban centers, a large number of multinational corporations, and research and healthcare institutions all contribute to the economic success and intellectual vitality of the region. Additionally, accessibility to open spaces, beaches, trails, local events, and arts and cultural opportunities contribute to a high quality of life according to interview and focus group participants.

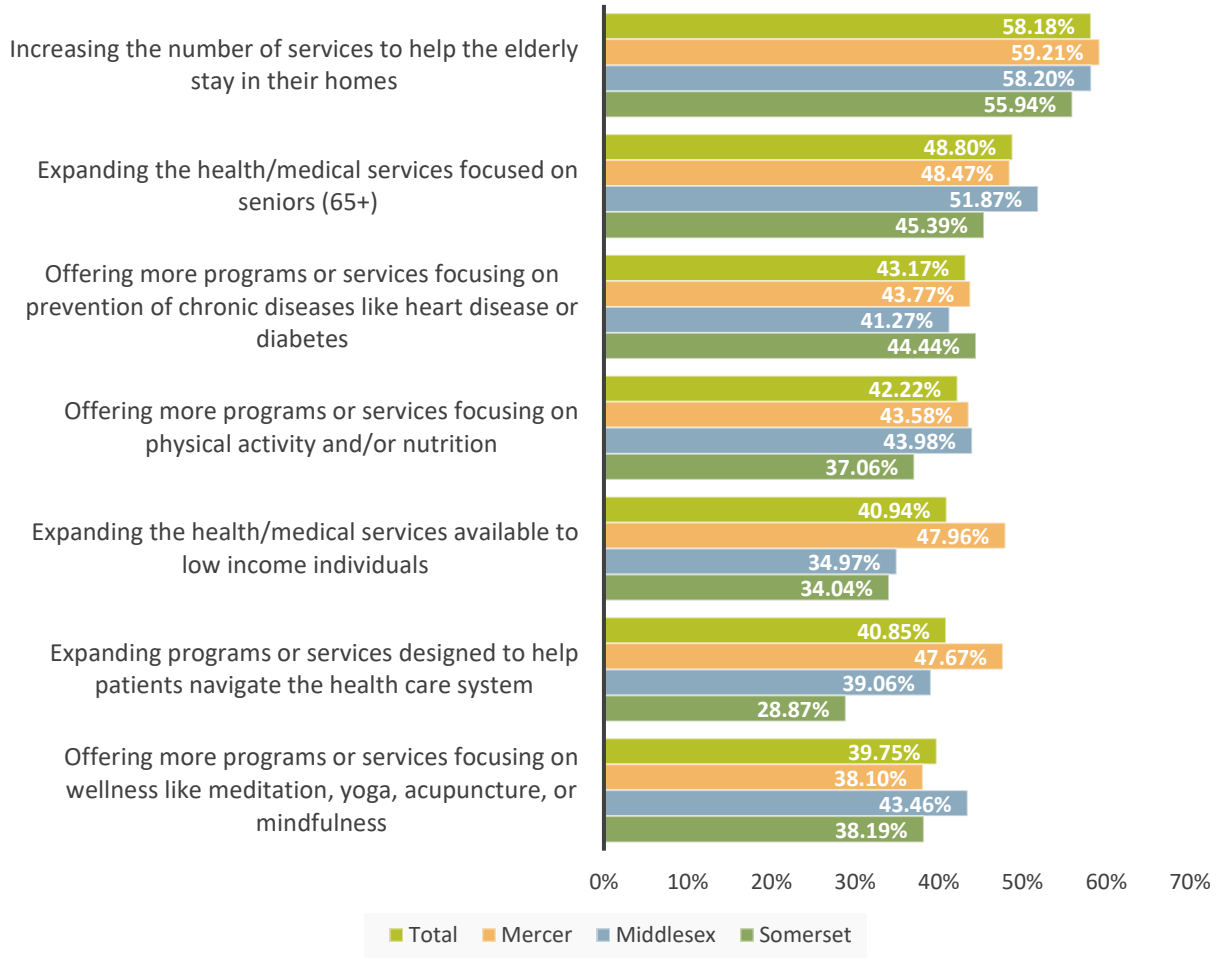
Human and Economic Resources
Educated residents and educational opportunity were seen as substantial assets in the region. Interview and focus group participants also described diversity and social cohesion as key community assets. Residents are largely affluent, although some groups struggle. Residents were also reported to be generous with their time and resources.

Health Care and Social Services Infrastructure
A key theme among key informants and focus group participants was the wide availability of health care services and the high quality of those services. The region also enjoys strong community-based programming such as screenings, although respondents suggested more could be done to expand these. Participants shared that the region also has strong faith communities.

Community Suggestions and Vision for the Future

Community health survey respondents were asked to rate a list of issues as low, medium or high priority for future funding and resources. Figure 81 below shows the issues that were selected as high priority by the greatest number of respondents (see Appendix D for the full list of issues rated). For all three counties, increasing the number of services to help the elderly stay in their homes was selected most frequently. Priority issues selected in this 2018 survey were similar to those selected in the 2015 survey. Across all respondents, the top 3 priority issues were the same in 2015 and 2018: Increasing the number of services to help the elderly stay in their homes; expanding the health/medical services focused on seniors (65+); and offering more programs or services focusing on prevention of chronic disease.

Figure 81: High Priority Issues for Future Funding and Resources by County



DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018
NOTE: "Other" responses excluded

When asked about needed programs and services, focus group members and interviewees named many of the same needs as in 2015 including more programs and services to address behavioral health, greater health education, healthy living and prevention programming, expanded collaboration with community organizations, and health care delivery enhancements around navigation and cultural competency.

Behavioral Health Services

The need for expanded services and supports for behavioral health was mentioned in almost every focus group and interview. Participants saw a need for additional providers and mental health triage, more education to address stigma, and enhanced engagement of schools, faith communities, and pediatricians and primary care providers.

- *Expand services*. Participants stated that the region needs more behavioral health services, both in-patient and out-patient, especially for children and youth. Statewide expansion of psychiatric beds was seen as a step in the right direction. Participants emphasized a need for more community-based programs to provide long-term care to those in need after discharge from detox or mental health in-patient services. Expanding the number of providers who accept Medicaid was also seen as critical. Increasing the number of providers who do medication assistive therapies was also suggested.
- *Support mental health triage*. Mental health triage—the process of early identification and coordination of appropriate treatment—was also mentioned as needed by participants. They saw triage as a way to support school staff and primary care physicians and pediatricians who are increasingly the "first line" for behavioral health issues and as a strategy to reduce ER visits for behavioral health. Princeton House was mentioned as the organization most qualified to provide this type of service. Existing pediatric mental health hubs, grant-funded entities present in each county, were seen as a potential infrastructure for this.[7]
- *Enhance educational programs*. Given the stigma and lack of awareness surrounding behavioral health, focus group members and interviewees saw a need for more education around mental health and substance use. They stressed the importance of reaching students, including young students, as well as parents. Given the stigma around these topics, participants suggested messaging is important. As one person stated, *"if you connect mental health to going to college, I am not kidding, people will come."* Education through partnerships with faith communities was also suggested as a potential strategy to reach different demographic groups. Participants suggested working with religious leaders to incorporate messaging into their sermons and sponsor workshops or speakers on behavioral health at faith institutions. Because of their close connection to young people, youth pastors/leaders were seen as particularly important allies.
- *Support community groups focused on these issues*. A few participants suggested that existing behavioral health programming could be strengthened through partnerships with behavioral health providers. One person suggested that behavioral health professionals co-lead existing group programs at schools run by counselors. A support group for Latinas experiencing DV was also suggested. Enhancing connections between mental health providers was also seen as needed. Enhancing behavioral health expertise in schools was mentioned by numerous participants. As one person stated, *"the kids are [in school] half of their waking hours, the school can recognize that a student is starting to have some issues, they could provide services there or at least recognize what's going on and get them help before it's a crisis."* While services for kids across the board were mentioned, services for LGBTQ adolescents were particularly seen as needed.
- *Engage and educate pediatricians and primary care providers*. As discussed earlier, primary care providers and pediatricians are increasingly called upon to address the behavioral health needs of their patients, which many feel ill-equipped to do. Several participants suggested that additional training and support for these providers was needed.

[7] http://njaap.org/programs/mental-health/ppc/

Expanded Prevention Services/Education

Interview and focus group participants noted that much of good health is connected to prevention and behavior change. They noted that while programs that educate exist in the community but they believed more were needed.

- *Expand education programs*. Focus group members and interviewees recognized that greater awareness and education was needed to foster the behavior changes that contribute to good health. They saw a need for enhanced programming in the following areas:
    - Healthy lifestyles. Participants saw a need for more education and support relative to healthy eating and physical activity including cooking and nutrition classes and physical activity programs. Sex education in schools was also mentioned.
    - Screenings and vaccinations. More education about vaccine-preventable diseases and the importance of immunization to some groups was mentioned. Those providing cancer services saw a need for more outreach about screenings—with a focus on hard-to-reach populations—and more education about HPV. One respondent suggested enhancing access to flu clinics.
    - Aging issues. Some participants suggested more education related to aging issues including cognitive impairment, advanced care planning, directives, palliative care, and other end of life issues, etc. They also suggested more education for families about caring for aging parents.
    - Vector-borne diseases. With the increase in mosquito and tick-related illnesses, those working in public health suggested that more public education about these.

  Participants suggested family-oriented programs and reaching people early. As one focus group member explained, *"the whole family really needs to get involved. We need to get families on board."* Participants believed that partnerships with schools, faith organizations, and workplaces could be effective. Assess the efficacy of community education was suggested by one interviewee.
- *Expand screening programs*. Beyond education, providers and community agency staff suggested that screening programs be expanded, particularly to reach those who are not connected to healthcare in any way.
- *Ensure education and screening are accessible*. Ensuring the accessibility of education and prevention services—and the need to think broadly about this—was a theme throughout focus groups and interviews. Participants suggested that education and screenings be low, or no cost. For some groups, incentives may be needed. As one person explained, *"[low income patients] are not going to come here just to come to cooking class. The cost of getting here should be figured in."* Addressing transportation barriers to accessing prevention services was critical according to participants. Some suggested providing transportation to services. However, a more successful strategy, according to focus group participants and interviewees, is providing education and screening in communities, through partnership with local institutions such as libraries, schools, workplaces, senior centers, and religious institutions. Considering cultural factors that may affect participation in prevention services was also suggested.

Healthy Living and Disease Prevention

- *Expand evidence-based chronic disease management programs*. Focus group participants and interviewees stated that evidence-based chronic disease management programs are successful and should be expanded. Programs for diabetes education were seen as particularly essential. Engaging primary care providers is critical, according to participants: *"primary providers have to refer them at time of diagnosis—they need to discuss all aspects of care, not just medication.*

Manage diabetes with more than just medicine. Patients are more receptive to it—more time that passes, they take their meds, but that works and then they don't think about prevention. Doctors have credibility."

- *Optimize the Princeton Health campus*. A couple of participants identified ways the Princeton Health campus could be enhanced to promote healthy lifestyles among patients and employees. One suggested adding distance markers and perhaps fitness stations to the walking path around the hospital as well as publicizing its availability. Another suggested planting a community garden on the grounds.

Expanded Collaboration with Community Organizations

During discussions, interviewees and focus group members frequently mentioned that community institutions are partners in efforts to improve community health. These institutions—schools, faith communities, and workplaces—are often trusted community resources that are connected to and know how to engage community residents.

- *Schools*. Partnering with schools was seen as essential to reach children and youth as well as their families. While healthcare institutions often partner with schools to offer health fairs, school-based focus group members saw many other options, including more direct work with school nurses, guidance counselors, and health teachers. As one focus group participant stated, *"come to us. We want Princeton Health to come to the schools."*
- *Workplaces*. Because time and convenience are at a premium, participants suggested enhancing screening services directly in workplaces. One also suggested connecting with physicians who are on staff at large corporations.
- *Faith Communities*. Work with local religious institutions was also seen as critical, and particularly effective when discussing sensitive topics like mental health. As one person stated, *"[many people] may have distrusting relationship with medicine or not a lot of knowledge of medicine—find them in places that they trust, like churches."*

Healthcare Navigation Support

Because navigating healthcare can be challenging, several participants suggested enhancing the care coordination/navigation workforce to ensure that patients are connected to needed health and community services during and after hospitalization. This was seen as very helpful to reduce repeat ER visits and hospitalizations. As one person shared, *"I'd like to see people that go out to the homes after they're discharged and making sure they're doing alright, that they have their medications."*

Cultural Competency

A few interview and focus group participants also suggested that more work was needed to enhance the skills of the provider workforce relative to working with people of different cultures, working with the elderly, and working with LGBTQ patients.

Other

Although not prominent themes in discussions, a few other identified needs in the community include:

- Expansion of dental services for the underserved
- Advocacy by hospitals on local issues affecting health such as community development plans, bike lane plans, issues affecting public schools.
- More education of and respite care for caregivers of the elderly.

KEY THEMES AND CONCLUSIONS

This community health needs assessment brings together quantitative and qualitative data from a variety of sources to provide an overview of the current health status of Mercer, Middlesex, and Somerset County residents, identify priority health issues, and explore community assets, resources and gaps. Overall, many of the issues identified in the 2015 CHNA continue to be pressing needs in the region. Overarching themes that emerge from this synthesis include:

- **While residents of Mercer, Middlesex, and Somerset Counties are generally highly educated and affluent, the high cost of living in the area creates challenges for some.** Median household income in the area remains higher than the state of New Jersey overall, and rates of unemployment remain low. Access to high-quality education in the area was frequently cited as an asset. However, the proportion of families living in poverty in the area has risen slightly since the last CHNA. Many participants noted that the area's high cost of living leads to a variety of challenges such as difficulty finding affordable housing and accessing transportation, and in particular affects low-income communities, young families, and seniors.

- **Diversity in the three-county region is increasing.** There is substantial racial, ethnic, and cultural diversity in the area. In particular, since the previous CHNA, the percentage of residents who self-identify as Hispanic or Latino and the percentage of residents who self-identify as Asian have increased slightly. The proportion of foreign-born residents and residents who speak a language other than English at home has also grown slightly. While in general interview and focus group participants valued this diversity, a need for additional outreach and culturally appropriate services was noted by some.

- **Overall, Mercer, Middlesex, and Somerset Counties compare favorably to the state on many health indicators. However, health concerns remain. Similar to the 2012 and 2015 CHNA, behavioral health was one of the most frequently cited health concerns.** In the community health survey, mental health and substance use issues were identified by respondents as top health issues for the community. Interview and focus group participants also described concerns related to stress and anxiety, for the population in general and specifically for children and youth. Opiate use was also frequently mentioned as it was in 2015. Concerns about use of marijuana and vaping by youth were more prominent in 2018 than in past years. While systemic efforts are underway, interview and focus group participants cited a need for increased mental health and substance use treatment.

- **Chronic disease and related issues remain important issues for the community.** Interview and focus group participants frequently shared concerns related to diabetes and weight management, and noted the relationship of these issues to lifestyle factors and barriers such as lack of exercise for both children and adults. Chronic disease including heart disease and diabetes, physical activity and nutrition, and overweight or obesity were rated by survey respondents as top issues and /or high priorities for future areas for programs and services. Heart disease and cancer remain the leading causes of death in the three-county region, though death rates from these causes are declining. While cancer incidence and screening rates are generally similar to the state overall, self-reported screening rates have declined slightly in some counties and for some cancers. Interview and focus group participants also expressed concern regarding barriers to cancer screenings, particularly for low-income and immigrant communities.

- **While the area benefits from the availability of many high-quality health care facilities, access and navigation are challenges for some residents.** Interview and focus group participants noted that there are many health care services in the three-county region, including increased access to urgent care services. However, despite this availability, barriers to accessing care and challenges navigating the health care system remain. As described above, a need for additional mental health and substance use services was noted. Additional access barriers included issues related to scheduling appointments, cost of care and insurance issues, challenges navigating and coordinating care, transportation, and cultural barriers. It was noted that access issues are particularly common for lower income residents, undocumented communities, and new immigrants.

- **A need for additional health-related services and supports for seniors and their caregivers was commonly cited.** Demographic data indicates that, while the age distribution of the three-county region is similar to the state overall, the region is aging slightly. Existing resources such as senior centers and adult communities were described as assets. However, health concerns related to aging (including musculoskeletal issues such as joint pain and arthritis) and caregiving were selected as top health issues by survey respondents, who also indicated expansion of services for elderly to stay in their homes and health / medical services for seniors as high priority issues for future funding and resources.

- **Given these identified needs, various recommendations were offered** including expanding programs and services to address behavioral health, providing more health education and healthy living and prevention programming (including screening programs), collaborating with trusted community organizations to engage and reach residents, increasing support for health system navigation, and increasing cultural competency for working with diverse cultures and elderly patients.

PRIORITY HEALTH NEEDS OF THE COMMUNITY

Process and Criteria for Prioritization
In July and August 2018, HRiA led a facilitated process with senior leaders from Penn Medicine Princeton Health. In July 2018, HRiA presented the priorities identified by the 2018 community health needs assessment (CHNA), including the magnitude and severity of these issues and their impact on priority populations. Penn Medicine Princeton Health leadership determined that all of the community needs identified in the CHNA would be included in the 2018-2020 Strategic Implementation Plan (SIP).

Prioritized Description of Significant Community Health Needs
Penn Medicine Princeton Health leadership determined that all of the community needs identified in the CHNA would be included in the 2018-2020 Strategic Implementation Plan (SIP) in the following clustered priority categories:

- Priority 1: Chronic Disease, Obesity, and Healthy Eating and Active Living (HEAL)
- Priority 2: Behavioral Health
- Priority 3: Health Care Access
- Priority 4: Maternal Child Health
- Priority 5: Elder Health

These priority needs continue from the previous CHNA-SIP process, as they are ongoing needs and several initiatives are still in progress to address them. In August 2018, HRiA led SIP planning sessions that included mapping current and emerging programs and initiatives against these needs, as well as decision-making regarding which existing programs and initiatives would be continued and what new programs or initiatives would be developed. All areas highlighted by the 2018 CHNA are being addressed by the 2018-2020 Strategic Implementation Plan.

ROBBINSVILLE ADDENDUM

2018 Penn Medicine Princeton Health Community Health Needs Assessment
Robbinsville Addendum

BACKGROUND AND PURPOSE

Overview of Penn Medicine Princeton Health

Penn Medicine Princeton Health (Princeton Health) is one of the most comprehensive healthcare systems in New Jersey. Princeton Health provides acute care hospital services through Princeton Medical Center; behavioral healthcare through Princeton House Behavioral Health; in-home nursing, rehabilitation, and hospice care through Princeton HomeCare; primary and specialty care through Princeton Medicine Physicians; ambulatory surgery and wellness services. Since May 2012, Princeton Medical Center has been located in a state-of-the-art facility in Plainsboro Township which offers services in areas such as cancer, cardiac and pulmonary care, critical care, emergency, imaging and outpatient laboratory services, maternal and newborn care, neuroscience, surgery, sleep disorders, pediatric care, and eating disorders. Princeton Health also houses the Bristol-Myers Squibb Community Health Center which provides adult and pediatric care to uninsured and underinsured residents and maintains a partnership with The Children's Hospital of Philadelphia (CHOP). In January 2018 Princeton Health and its affiliates joined the University of Pennsylvania Health System (UPHS), one of the world's leading academic medical centers.

Purpose and Scope of the Robbinsville Addendum to the Princeton Health Community Health Needs Assessment (CHNA)

Purpose and Scope of the 2018 Penn Medicine Princeton Health CHNA

To ensure that Princeton Health is achieving its mission and meeting the needs of the community, and in furtherance of its obligations under the Affordable Care Act, Princeton Health undertook a comprehensive community health needs assessment (CHNA) process in the spring of 2018. Health Resources in Action (HRiA), a non-profit public health consultancy organization, was engaged to conduct the CHNA. In addition to fulfilling the requirement by the IRS Section H/Form 990 mandate, the goals of the 2018 Princeton Health CHNA process were to examine the current health status of residents in Mercer, Middlesex, and Somerset counties, including met and unmet health needs and related assets and infrastructure, to ultimately guide future programming and areas of opportunity.

Purpose and Scope of the 2018 Robbinsville Addendum

As part of the 2018 CHNA and to guide planning efforts underway, Princeton Health requested an additional, in-depth analysis of a specific geographic region that includes the town of Robbinsville and several surrounding towns. Specifically, this analysis of the "Robbinsville area" includes the following towns: Columbus, Roosevelt, Trenton/Hamilton, Allentown, Windsor, Bordentown, Wrightstown, and Robbinsville. This analysis will inform the work of a collaboration between Princeton Health, the township of Robbinsville, New Jersey and the Hamilton Area YMCA, called the Healthy Robbinsville 2022 Collaborative, aimed at improving the health of people living in and around Robbinsville. In addition to the overall CHNA goals described above, the data collected for the Robbinsville Addendum included an emphasis on understanding how innovations in health care delivery could potentially address health needs in the Robbinsville area.

METHODS

The following section details how the data for the Robbinsville Addendum to the Penn Medicine Princeton Health (Princeton Health) 2018 CHNA was compiled and analyzed. This assessment employed an overarching social determinants of health framework, and defined health in the broadest sense, recognizing that a number of factors related to where people live, work, play, volunteer, and worship can impact the community's health. For more information about this framework and the methods used to conduct the full 2018 CHNA, please refer to the Princeton Health 2018 CHNA Report.

For the Robbinsville Addendum, the following data sources were compiled and analyzed and are described further below: secondary data; community health survey data; and qualitative data.

Secondary Data

The Robbinsville Addendum incorporates data on important social and economic health-related indicators pulled from various sources. Secondary data at the community level are limited to several sources including the American Community Survey and statistics from the New Jersey Department of Education and the New Jersey Department of Law and Public Safety. All tables and graphs note the specific data source. It should be noted that for data that derive from the American Community Survey, five-year (2012-2016) estimates are used. Per Census recommendations, these five-year aggregates are used to yield a large enough sample size. Additionally, Robbinsville data that derive from the American Community Survey are specific to the ZIP Code Tabulation Area (ZCTA) for 08691 as defined by the U.S. Census Bureau. According to the U.S. Census Bureau, ZCTAs are statistical areas that approximately correspond to the U.S. Postal Service's ZIP codes. ZCTAs have defined boundaries, unlike ZIP codes that were designed as a tool for delivering mail.

Primary Data: Input from Community Representatives

Community Health Survey

As described in the full 2018 Princeton Health CHNA report, in order to gather quantitative data that were not provided by secondary sources and to understand public perceptions around health issues, a 22-item community survey was developed and administered online and on paper to residents within the three counties during 4.5 weeks from mid-April 2018 through mid-May 2018. The survey explored key health concerns of community residents as well as their primary priorities for services and programming. Princeton Health reviewed and provided feedback on the survey during an in-person kick-off meeting and a pilot test, and also disseminated the online survey link and hard copy survey through a variety of dissemination channels including an employee Listserv, the Bristol-Myers Squibb Community Health Center, and community partner organizations.

A total of 1,037 respondents who live and/or work in Mercer, Middlesex, or Somerset County completed the survey (an additional 31 respondents who lived and worked in other counties or did not specify counties completed the survey were not included in the survey analyses). The survey was administered in both English and Spanish, online and through hard copy. A Robbinsville area sub-analysis of 269 respondents who live and/or work in and around Robbinsville was conducted and is presented in this Robbinsville Addendum. Respondents living in Columbus, Roosevelt, Trenton/Hamilton, Allentown, Windsor, Bordentown, Wrightstown, and Robbinsville were included in this analysis (zip codes: 08022, 08501, 08505, 08515, 08510, 08520, 08535, 08550, 08555, 08561, 08562, 08619, 08260, 08690, and 08691). Within this sub-analysis, 39 respondents who reported living or working in Robbinsville were included (zip code: 08691).

Table 1 presents the demographics of the 269 survey respondents included in the Robbinsville area 15-zip code sub-analysis. The demographics of respondents from each zip code were similar, therefore in Table 1 summary demographics are presented in the aggregate. The majority (94.8%) of respondents completed the survey in English. The age of the respondents ranged from 18 to 65 or older, with 79.4% above the age of 50. The majority (77.0%) of respondents were Caucasian and English was the most frequent primary language spoken at home (83.1%). The majority (69.2%) of respondents had at least a college level education.

Table 11: Characteristics of the 2018 Community Health Needs Assessment Robbinsville Area Respondents

	%
Survey method	
Electronic	94.8%
Paper	5.2%
Language survey was administered	
English	95.5%
Spanish	4.5%
Age	
18-39 years old	12.8%
40-49 years old	7.8%
50-64 years old	34.6%
65 years or older	44.8%
Gender	
Female	72.5%
Male	27.5%
Ethnicity	
Caucasian/White, Non-Hispanic	77.0%
East Asian, Non-Hispanic	4.6%
South Asian, Non-Hispanic	2.5%
African American/Black, Non-Hispanic	3.1%
Hispanic/Latino(a)	7.7%
Other	5.1%
Primary language spoken at home	
English	83.1%
Spanish	5.1%
Other	11.8%
Highest level of education completed	
High school diploma or less	9.7%
Some college	12.0%
Associate's degree/ Technical certification	15.4%
College graduate or more	62.9%
Parent of a child under the age of 18	
Yes	22.6%
No	77.4%

DATA SOURCE: Penn Medicine Princeton Health Community Health Needs Assessment Survey, 2018

Qualitative Data: Focus Groups and Interviews

In April 2018, one focus group and four interviews were conducted with individuals in the Robbinsville/Hamilton community. The focus group included board members of the Hamilton YMCA and interviewees included school superintendents, YMCA staff, government leadership, and members of a partnering housing organization. These individuals were recommended by Princeton Health as key stakeholders who had been involved in planning efforts to date for the Healthy Robbinsville 2022 Collaborative. Therefore, their participation in this qualitative data collection allowed these key stakeholders to share their perspectives on operationalizing a vision for next steps in this work.

Focus group and interview discussions explored participants' perceptions of their communities, priority health concerns, perceptions of public health, prevention, and health care services, and suggestions for future programming and services to address these issues, specifically focusing on health care delivery innovations. A semi-structured moderator's guide was used across all discussions to ensure consistency in the topics covered. The focus group and interviews were facilitated by a trained moderator, and detailed notes were taken during conversations. On average, the focus group lasted 90 minutes, while interviews lasted approximately 30-60 minutes.

The collected qualitative data were coded and analyzed thematically, where data analysis identified themes that emerged across all discussions. Frequency and intensity of discussion on a specific topic were key indicators used for extracting main themes. Selected quotes—without personal identifying information—are presented in the report to further illustrate points within topic areas.

Limitations

As with all data collection efforts, there are several limitations related to the assessment's research methods that should be acknowledged. Years of the most current data available differ by data source. In some instances, 2017 may be the most current year available for data, while 2014 or 2015 may be the most current year for other sources. Some of the secondary data were not available at the town level.

The community health survey fielded specifically for this CHNA used a convenience sample for gathering information; while strong efforts were made to disseminate the survey to a broad cross-section of respondents from the region, results are not necessarily statistically representative of the larger population living in the Robbinsville area due to non-random sampling techniques.

Similarly, while the focus group and interviews conducted for this Addendum provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Because of this, it is possible that the responses received only provide one perspective of the issues discussed. It is also important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.

Findings

COMMUNITY SOCIAL AND ECONOMIC CONTEXT

The section below provides an overview of the population of the Robbinsville area; where possible, comparisons are made to Mercer County. Who lives in a community is significantly related to the rates of health outcomes and behaviors of that area. While age, gender, race, and ethnicity are important characteristics that have an impact on an individual's health, the distribution of these characteristics in a community may affect the number and type of services and resources available.

Demographics

> *"Some people come in from northern New Jersey to get more space – newer, nicer houses with larger properties."*
> – Key Informant

> *"Robbinsville is a young, vibrant, up and coming community."*
> – Key Informant

Population

Robbinsville and the surrounding area was described by interviewees and focus group members as a community that has experienced substantial change. Having been largely farmland as recently as two decades ago, in the past few years Robbinsville has seen substantial development and many new residents moving to the community. Interview and focus group participants shared that the community is attractive because of its open spaces, its high quality schools, and proximity to highways and larger cities. As one interviewee stated, *"there's a lot of people coming in, but they're planning well and preserving open space."* Focus group members and interviewees also noted that the community has managed to keep some of its rural feel and has a strong sense of community, qualities that long-standing as well as new residents find attractive.

American Community Survey data show that Robbinsville had 15,887 residents in 2016, about 4.3% of Mercer County's population (Table 2). The attractiveness of the community is evident in its population growth: it's population increased by 6.4% from 2011 to 2016, a rate far higher than the population growth for Mercer County overall (1.6%). Focus group members and interviewees reported that people from surrounding communities, such as Trenton, as well as from other countries have migrated to the community.

Table 12. Total Population, by Robbinsville and Mercer County, 2007-2011 and 2012-2016

	2011	2016	% change
Mercer County	365,318	371,101	1.6%
Robbinsville	14,929	15,887	6.4%

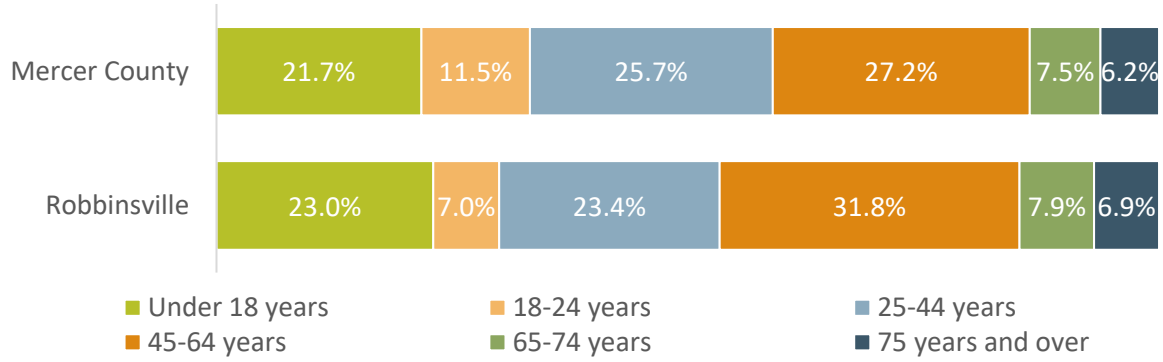
DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Age Distribution

The community of Robbinsville was described as having a growing number of young families who have come from other places. By contrast, the neighboring township of Hamilton was seen as an older and aging community. As one interviewee stated, *"people who are born [in Hamilton], stay here. I think about 75% of people born here stay here. I think it's more family-oriented."*

Quantitative data show that Robbinsville has a higher proportion of 45-64 year olds (31.8%) than Mercer County (27.2%) (Figure 82). The proportion of children under age 18 and the proportion of residents over age 65 is similar in both geographies: slightly under a quarter of residents are under age 18 and slightly over 5% are 75 years or older. The proportion of children under 18 in Robbinsville has declined since 2011 when it was 26.3%. However, the proportion of 18-24 year-olds in Robbinsville increased between 2011 and 2016, from 3.8% to 7.0%.

Figure 82. Age Distribution, by Robbinsville and Mercer County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

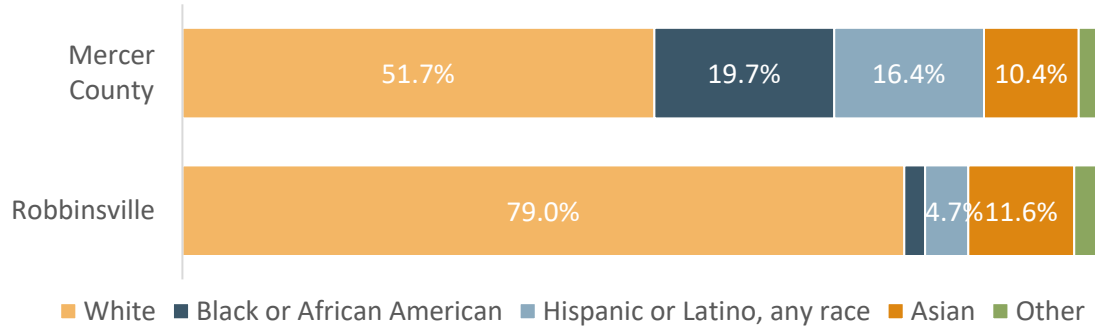
Racial and Ethnic Diversity and Country of Origin

Focus group members and interviewees described Robbinsville as a community with growing diversity. As one interviewee shared, "*"Robbinsville is a very diverse community and is getting more diverse by the day."* As in Mercer County overall, interview and focus group participants shared the perception that families from southeast Asia are moving into the Robbinsville area. Interview and focus group participants also reported that new Hispanic residents are moving into Hamilton, many of whom may be moving from Trenton. While changing demographics have contributed to the vitality of communities, participants also shared the perception that the growing diversity has created challenges as social service organizations, schools, and healthcare institutions have had to adjust to meet the needs of new communities. One focus group member pointed to broader issues, saying *"the clashing of culture – you've got old town Robbinsville, the farmers, with the Asian community coming in and the out migration from Trenton and Hamilton. All the family core values may be the same, but the priorities might be different."*

While reported to be changing, quantitative data indicate that Robbinsville is still a predominantly white community. Nearly 80% of the community identified as non-Hispanic White in 2016; by contrast, only about 50% of Mercer County residents identified as non-Hispanic White (Figure 83). Asians comprise the largest minority group in Robbinsville, 11.6% of residents, while 4.7% identify as Hispanic. The proportion of African American and Hispanic residents in Robbinsville is far lower than for Mercer

county overall. The racial and ethnic diversity of residents in Robbinsville has remained the same between 2007-2011 and 2012-2016 (data not shown).

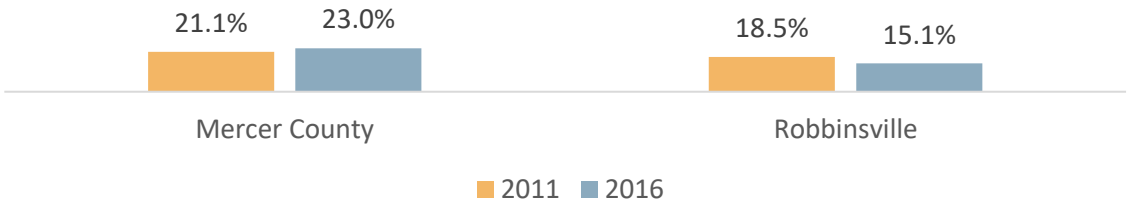
Figure 83. Racial and Ethnic Distribution, by Robbinsville and Mercer County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016
NOTE: White, Black, Asian, and Other include only individuals that identify as one race; Hispanic/Latino include individuals of any race; Other includes American Indian and Alaska Native, Native Hawaiian and other Pacific Islander, other race alone, or two or more races

Data from the U.S. Census Bureau show that 15% of Robbinsville residents are foreign born, a smaller proportion than for Mercer County (23%) (Figure 84). While the proportion of foreign-born residents increased slightly in Mercer County between 2011 and 2016, it declined slightly in Robbinsville, from 18.5% to 15.1%.

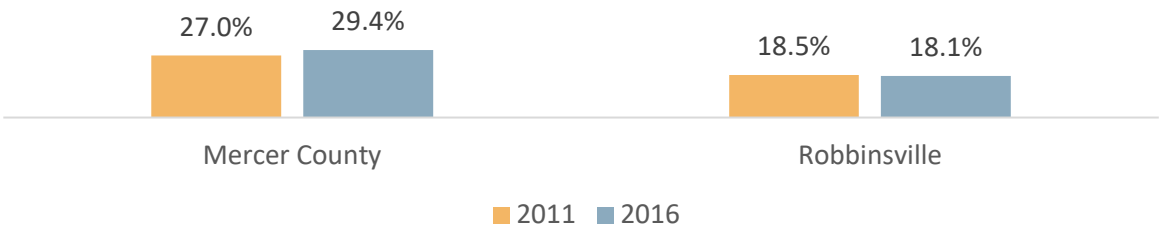
Figure 84. Percent Foreign Born Population, by Robbinsville and Mercer County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

About 18% of Robbinsville residents speak a language other than English at home, a lower rate than for Mercer County (29%) (Figure 85). The proportion of residents who speak a language other than English at home grew between 2011 and 2016 in Mercer County, while it remained the same in Robbinsville. The most common non-English language spoken at home in Robbinsville is Hindi, while Spanish is the most common non-English language spoken at home in Mercer County overall (Table 13).

Figure 85. Percent of the Population who Speak a Language Other than English at Home, by Robbinsville and Mercer County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Table 13. Top Five Languages Spoken at Home by Percent of Population, by Robbinsville and Mercer County, 2011-2015

Rank	Mercer County	Robbinsville
1	English only 71.0%	English only 84.2%
2	Spanish/Spanish Creole 13.7%	Hindi 2.5%
3	Chinese 2.5%	Other Asian languages 2.3%
4	Other Asian languages 1.5%	Spanish/Spanish Creole 2.2%
5	Hindi 1.1%	Italian 1.3%

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011-2015

Income, Poverty, and Employment

> *"It's one of the classic New Jersey farming communities that transformed and is suburban now. There is some preserved farm space but we now have mostly white-collar families."*
> – Key Informant

> *"Robbinsville used to be the community that you moved to if you wanted lower taxes. That changed."*
> – Focus Group Participant

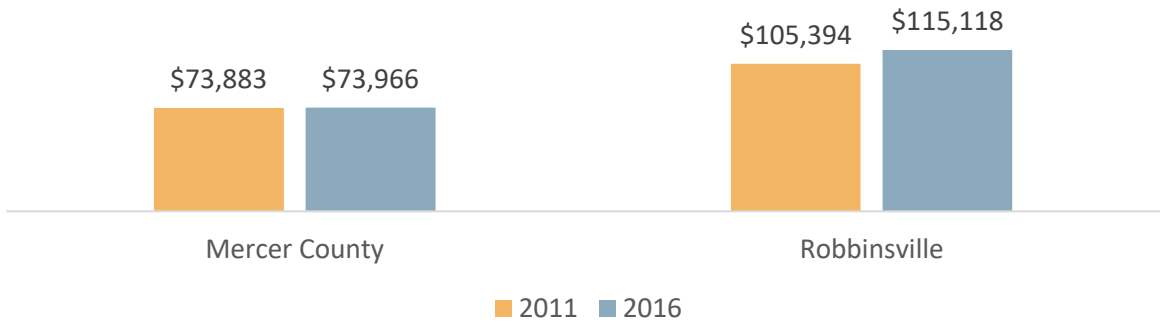
<u>Income</u>

Robbinsville families were described as white collar and affluent, with many commuting to New York City for work. Interview and focus group participants also noted that there are also many stay-at-home moms in the community. In contrast, neighboring Hamilton was described as more middle class and blue collar, with higher rates of poverty and more students receiving free or reduced lunch. As one focus group member summed up, *"the socio-economic status of Robbinsville is rising and Hamilton is flat."*

Interview and focus group participants reported that the economic base of Robbinsville has grown substantially in recent years, pointing specifically to the new town center and Warehouse Park which houses a number of Fortune 500 companies including Amazon. The economic base of Hamilton was reported to be more small business oriented.

Median household income in Robbinsville in 2016 was $115,118, substantially higher than in Mercer County ($73,966) (Figure 86). Quantitative data confirm participants' perceptions of rising affluence in the community: while median household income remained flat in Mercer County between 2011 and 2016, it rose by $10,000 in Robbinsville.

Figure 86. Median Household Income, by Robbinsville and Mercer County, 2007-2011 and 2012-2016

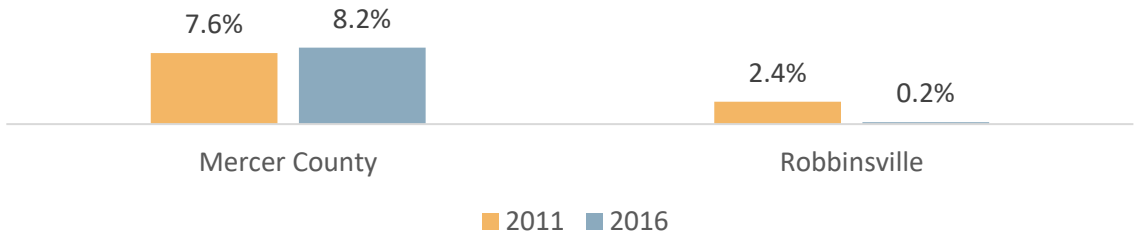


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Poverty

The proportion of families living in poverty in Robbinsville in 2016 was substantially lower than in Mercer County (Figure 87). The proportion of families living in poverty in Robbinsville fell between 2011 and 2016, while it rose slightly in Mercer County.

Figure 87. Percent Families Living Below Poverty Level, by Robbinsville and Mercer County, 2007-2011 and 2012-2016

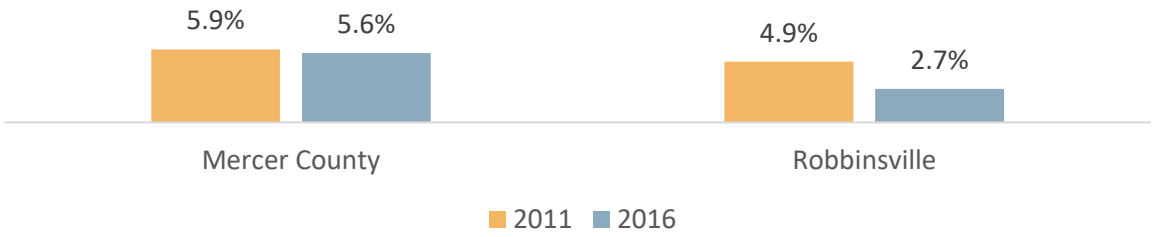


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Employment

Unemployment was lower in Robbinsville (2.7%) than Mercer County (5.6%) in 2016 (Figure 88). While the unemployment rate in the county remained the same between 2011 and 2016, it declined in Robbinsville.

Figure 88. Percent Population 16 Years and Over in the Labor Work Force Unemployed, by Robbinsville and Mercer County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

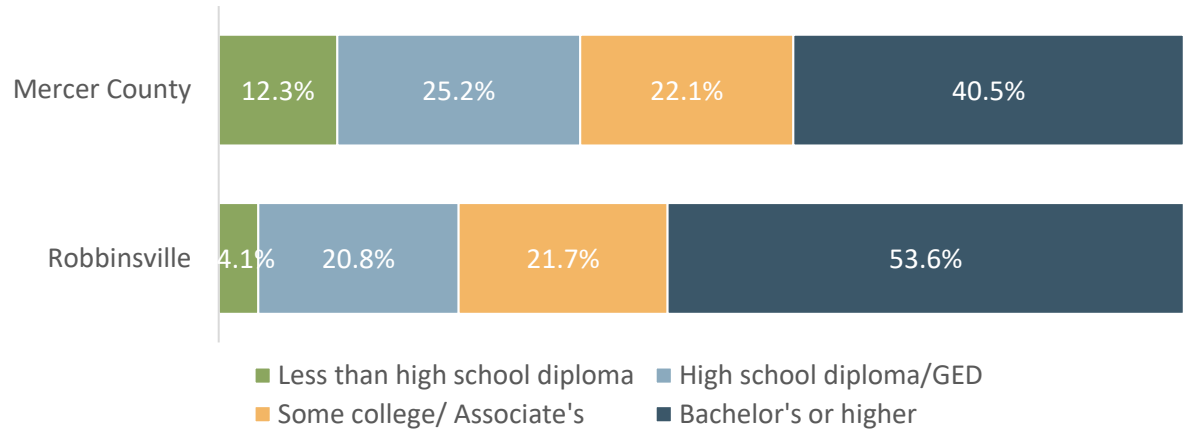
Education

> *"The young families that are moving in are professional and educated and take education very seriously. That's probably top of the list."*
> – Focus Group Participant

Focus group members and interviewees reported that schools in Robbinsville are excellent, and one of the primary reasons families move to the community. By contrast, schools in Hamilton were reported to be struggling, underperforming and underfunded. The Robbinsville high school is a technology magnet school. School enrollments in Robbinsville are high; one focus group member stated that the middle and high school are *"bursting at the seams."*

Secondary data on educational achievement in Robbinsville confirm participants perceptions. A higher proportion of adults 25 and over in Robbinsville than in Mercer County have a college degree or higher (Figure 89). Over half of adults in Robbinsville have a bachelor's degree or higher, compared to 40% of adults in Mercer County. In Robbinsville, about 4% of residents have not completed high school. By contrast, 12.1% of Mercer County adults did not complete high school. Between 2011 and 2016, the proportion of Robbinsville residents with a bachelor's degree or higher grew slightly (from 50.4% to 53.6%) while the proportion with less than a high school diploma fell slightly (from 5.8% to 4.1%, data not shown).

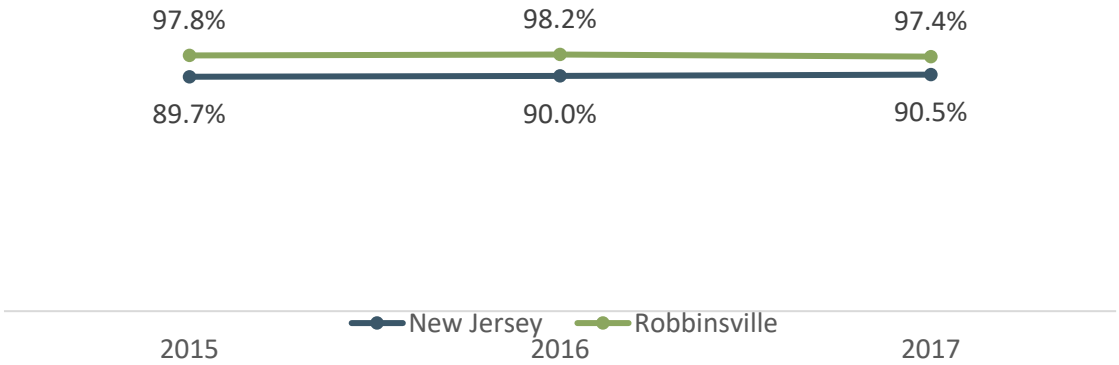
Figure 89. Education Attainment for Population 25 Years and Over, by Robbinsville and Mercer County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

High school graduation rates in Robbinsville are very high. About 97% of high school students in Robbinsville graduated on time in 2017, compared to 90% in New Jersey overall (Figure 90). On time graduation rates have remained steady in both Robbinsville and New Jersey as a whole between 2015 and 2017.

Figure 90. Four-Year Graduation Rate, by Robbinsville and New Jersey, 2015-2017



DATA SOURCE: New Jersey Department of Education, NJ SMART, NJ School Performance Report 2016-2017, 2015-2017

Housing and Transportation

"There's one large condo association and one apartment building, but otherwise it's all single-family homes."
– Key Informant

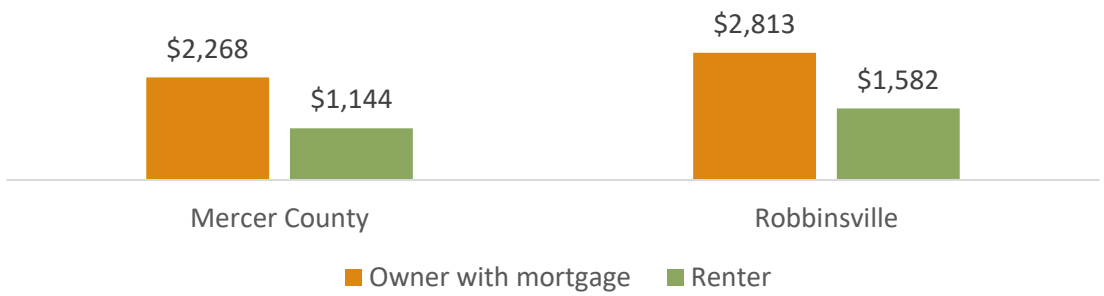
"Millennials want to be able to walk around and be close to things too. But there's no housing that they can afford."
– Key Informant

Housing

Focus group members and interviewees reported that housing in Robbinsville is expensive. Robbinsville was reported to have predominantly large, single-family homes that are out of reach for many younger families and too costly for older residents to maintain. The lack of affordable housing in Robbinsville was mentioned by a couple of participants; however, some affordable housing is being built in the area, for example through Project Freedom. The need for smaller housing was also mentioned. As one interviewee shared, *"right now we don't really have a housing stock for people that are downsizing from their house, but they don't want to leave."* Additionally, the need for senior housing close to be developed close to other amenities was noted by one interviewee, who shared, "*I'd like to see assisted living or senior development on top of retail because the number one complaint you hear is that senior development happens in the middle of nowhere and it adds to the isolation*."

Quantitative data show that housing costs in Robbinsville are higher than those in Mercer County, for both owners and renters (Figure 91). The cost of both owning and renting increased between 2011 and 2016 in both Robbinsville and Mercer County, but increased by a greater proportion for Robbinsville (data not shown).

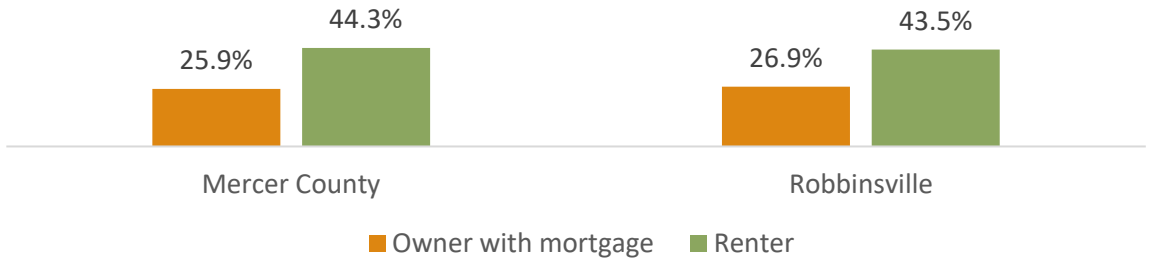
Figure 91. Median Monthly Housing Costs by Tenure, by Robbinsville and Mercer County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

A similar proportion of households in Robbinsville as households in Mercer County had housing costs equal to or greater than 35% of household income (Figure 92). In 2016, about one quarter of owners and over one third of renters in both Robbinsville and Mercer County contributed 35% or more of their household income for housing. The proportion of households paying more than 35% or more of income for housing declined in Robbinsville between 2011 and 2016: among owners, it decreased from 31.0% to 26.9% over this time period and among renters it declined from 53.2% to 43.5% (trend data not shown).

Figure 92. Percent Households where Housing Costs are 35% or More of Household Income by Tenure, by Robbinsville and Mercer County, 2012-2016

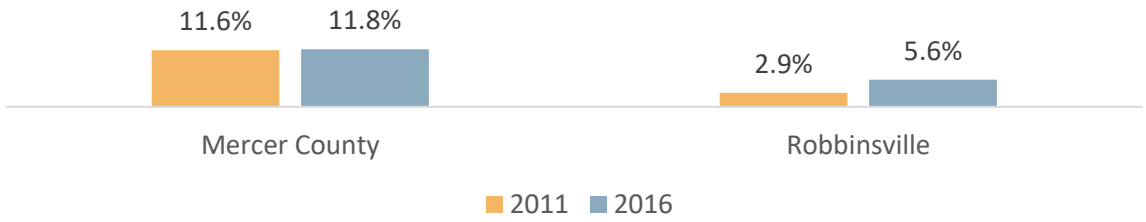


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Transportation

Few interview and focus group participants shared any challenges related to transportation in Robbinsville. However, one interviewee noted that persons with disabilities face transportation challenges, especially for medical appointments. As this person stated, *"when you have to waste half a day getting to the doctor, you may just say forget it, I'm not going to deal with that."* Data from the American Community Survey show that Robbinsville residents are very car-dependent. In 2016, a smaller proportion of Robbinsville households (5.6%) than Mercer County households (11.8%) had no vehicle available (Figure 93). While this proportion remained the same from 2011 to 2016 in Mercer County, it rose in Robbinsville.

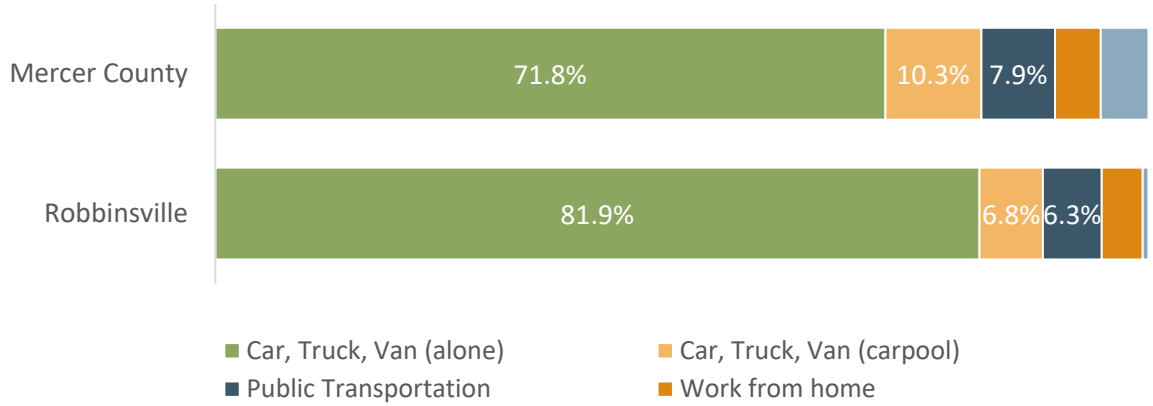
Figure 93. Percent Households with No Vehicle Available, by Robbinsville and Mercer County, 2007-2011 and 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2007-2011 and 2012-2016

Most workers in both Robbinsville and Mercer County drive alone to work (Figure 94). In Robbinsville, over 80% of workers drove to work alone in 2016, compared to 72% for Mercer County. Use of public transportation is slightly higher in Mercer County than Robbinsville. The use of public transportation to get to work has not increased substantially over the past few years.

Figure 94. Means of Transportation to Work for Workers 16 Years and Over, by Robbinsville and Mercer County, 2012-2016



DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016
NOTE: Other includes walking and other means of transportation

Crime and Safety

Crime and safety were not identified as a pressing concern in Robbinsville. Crime statistics indicate that crime, both nonviolent and violent, is substantially higher in Mercer County than in Robbinsville (Table 14). Crime rates have declined between 2013 and 2017 in both Robbinsville and Mercer County, for both violent and nonviolent crimes.

Table 14. Violent and Nonviolent Crime Rate per 100,000 Population, by Robbinsville and Mercer County, 2013 and 2017

	2013		2017	
	Violent Crime	Nonviolent Crime	Violent Crime	Nonviolent Crime
Mercer County	413.9	2,108.3	378.6	1,896.0
Robbinsville	37.8	900.1	6.3	528.7

DATA SOURCE: State of New Jersey, Department of Law and Public Safety, Uniform Crime Reporting Unit, 2017 and Uniform Crime Report, 2013; Rates calculated per U.S. Census Bureau, American Community Survey 1-Year Estimates, 2016. NOTE: Violent crime includes homicide, rape, robbery, assault and simple assault; Nonviolent crime includes burglary, larceny – theft, and motor vehicle theft

COMMUNITY HEALTH OUTCOMES AND CONCERNS

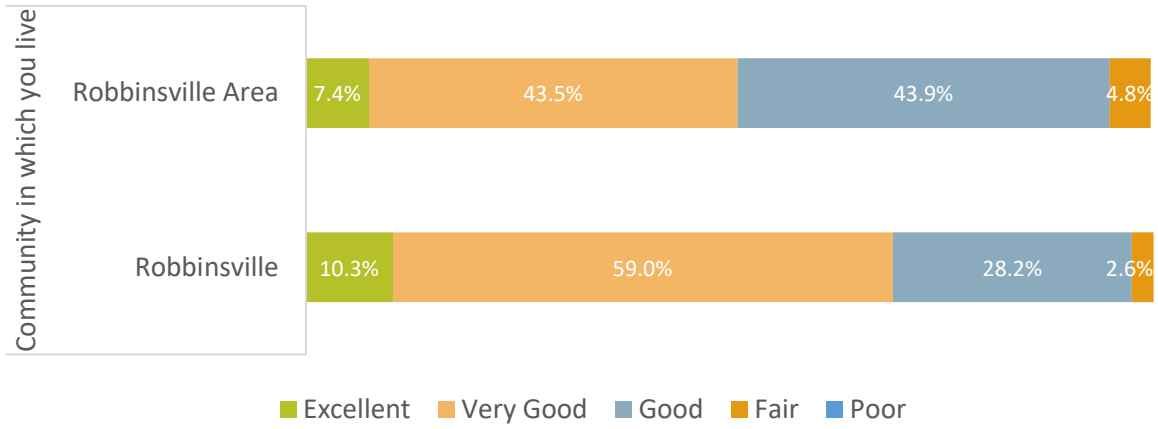
This section focuses on health issues and concerns in the Robbinsville community that emerged during the needs assessment process. Because existing quantitative data (secondary data) on health outcomes and health behaviors is limited at the community level, the data presented in this section are primarily drawn from the community health survey conducted for this CHNA, as well as from interview and focus group discussions. Community health survey data are presented here for both the Robbinsville zip code singularly (08691) and for the 15-zip code Robbinsville area.

Overall Community Health Status and Health Concerns

Overall Health

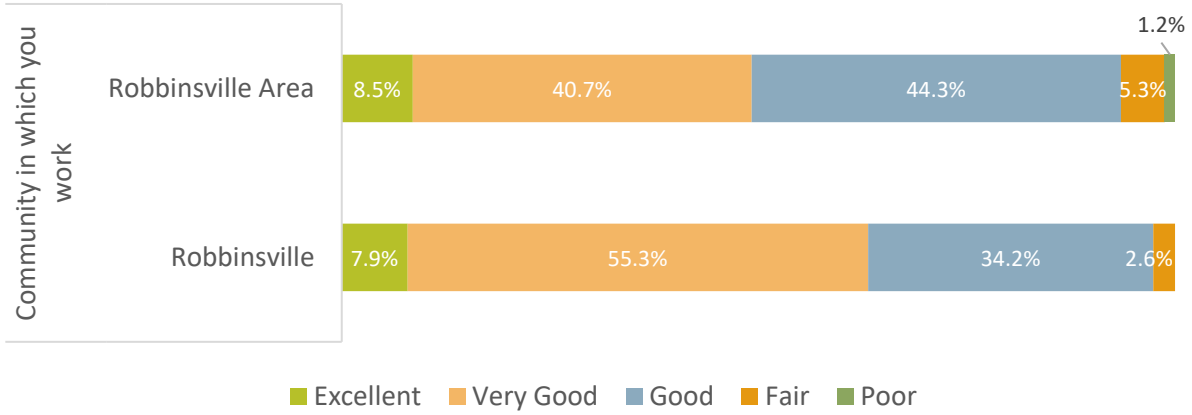
Data from the Robbinsville sub-analysis of the community health survey conducted for this CHNA indicate that the majority of respondents rate the health of both the community where they live and the community where they work, volunteer, worship, or go to school as "very good" or "excellent" (Figure 17 and Figure 96). Respondents from Robbinsville rated health higher than respondents from the Robbinsville area. For example, 69.3% of Robbinsville respondents rated their community's health as "Excellent" or "Very Good" compared to 50.9% of Robbinsville area respondents (Figure 17), and 63.2% of Robbinsville respondents rated the health of the community in which they work, volunteer, or go to school as "Excellent" or "Very Good" compared to 49.2% of Robbinsville area respondents (Figure 96).

Figure 95: Perceived Health Status of Community in Which Live, Robbinsville Area and Robbinsville (08691) Respondents



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Figure 96: Perceived Health Status of Community in Which Work, Volunteer, Worship or Go To School, Robbinsville Area and Robbinsville (08691) Respondents



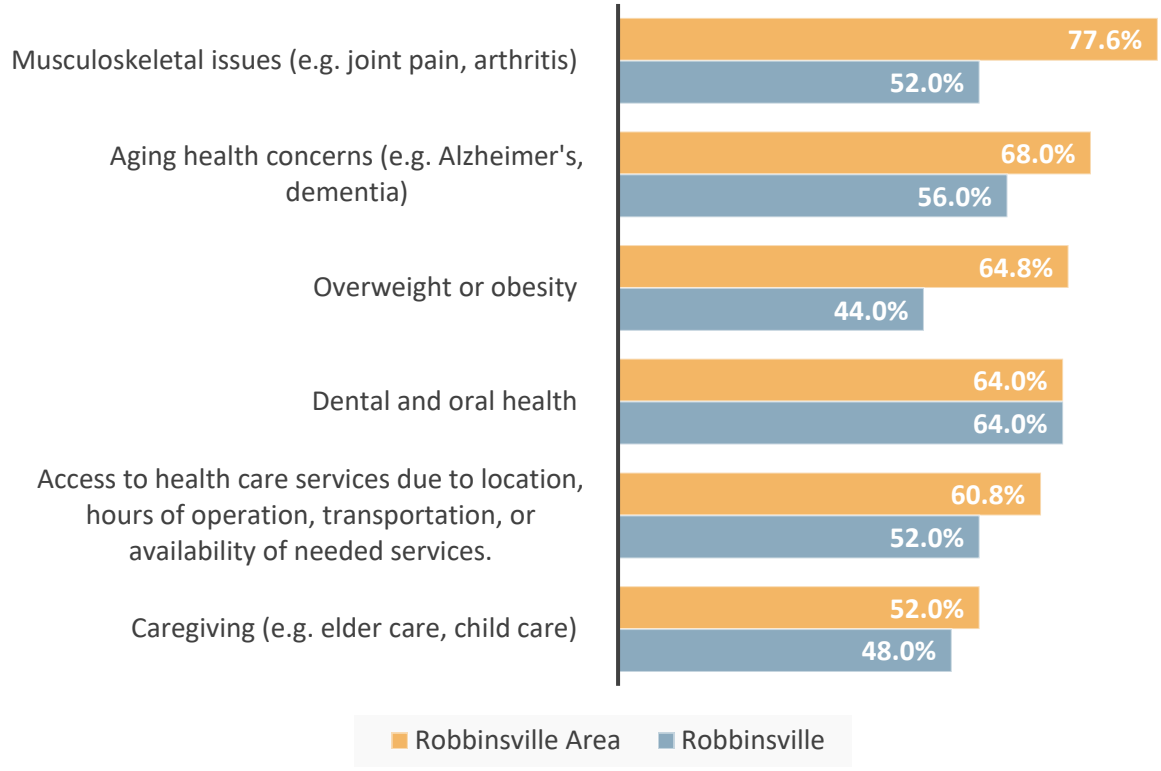
DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Health Concerns

Community survey respondents were also asked to select the top 5 health issues that have the biggest impact on them and their families personally, and the community in which they live. The health concerns that Robbinsville area survey respondents indicated had the biggest impact on themselves or their family were related to musculoskeletal issues (e.g. joint pain, arthritis), aging, and overweight or obesity, with over 60% of respondents selecting these as one of the top three health concerns (Figure 18). Dental and oral health, access to health care, and caregiving (including elder and child care) were the next most commonly cited issues as affecting respondents. It should be noted that response options for "other chronic disease" (such as diabetes, heart disease, and hypertension) and "violence in your community" were included in the hard copy survey but not the online survey.

"Dental or oral health" was selected by the highest percentage of respondents from the Robbinsville zip code (08691) as having the biggest impact on their family, while "dental and oral health" was the fourth most frequently selected health issue among Robbinsville area respondents. Nevertheless, the top health issues selected by Robbinsville zip code respondents generally align with the top health issues selected by Robbinsville area respondents. It is important to note that in the community health survey sample for the 15-zip code Robbinsville area, many respondents (44.8%) were above the age of 65 (Table 1); thus, the age-related issues that were selected as having a substantial impact on survey respondents may be of particular concern for this sample.

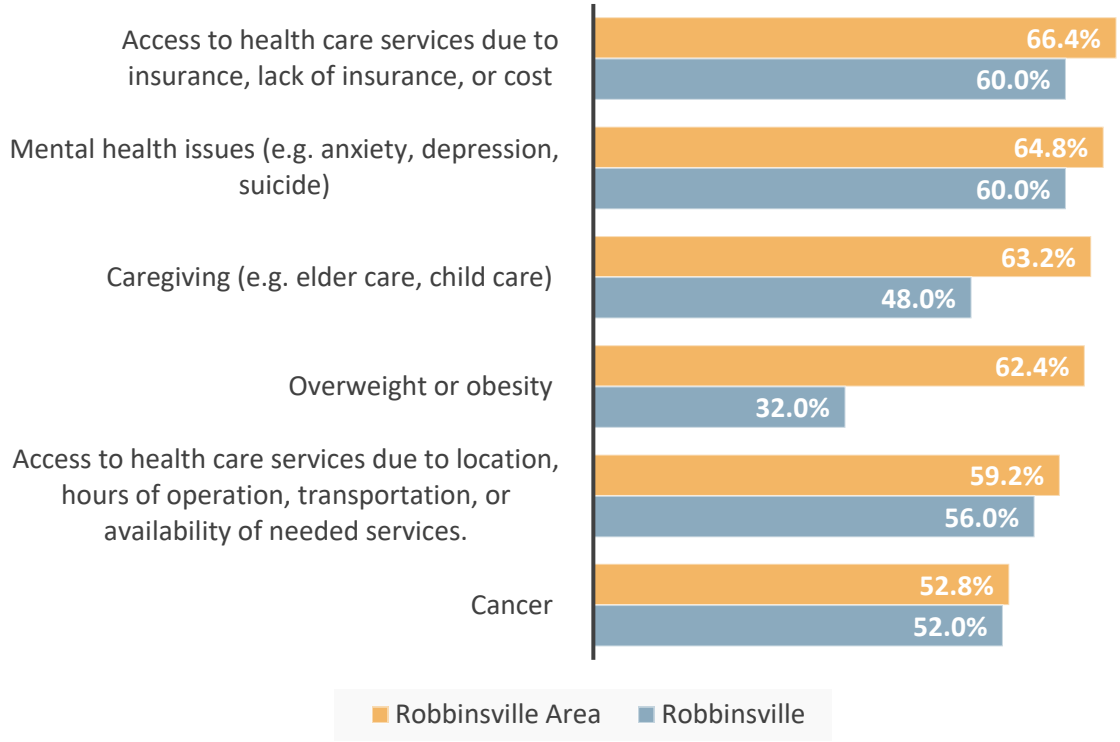
Figure 97: Top Health Issues with the Biggest Impact on Respondent/Respondent's Family, Robbinsville Area and Robbinsville (08691) Respondents



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Compared to concern for their families, respondents identified different top health concerns that they perceived as having an impact on their community overall (Figure 98). When asked about health concerns for their communities, respondents from both the Robbinsville area and the Robbinsville zip code (08691) identified the top concerns as access to health care services (due to insurance, lack of insurance, or cost) and mental health issues (e.g., anxiety, depression, suicide).

Figure 98: Top Health Issues with the Biggest Impact on the Community, Robbinsville Area and Robbinsville (08691) Respondents



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Focus group members and interviewees identified health concerns similar to those highlighted in the community health survey. They stated that top health concerns in the Robbinsville community are mental health and access to healthcare due to cost and insurance. They also identified substance use as a community health concern. Less prominent in these conversations were issues related to caregiving and obesity.

Mental Health

> *"We are finding more anxiety-ridden students, starting as young as kindergartners, coming in and struggling with being able to cope with home and school expectations."*
> – Key Informant

> *"I think we also have a shame factor with our parents (in Robbinsville), that they're not going to reach out; they're not going to let us know what's going on."*
> – Key Informant

Mental health was a substantial topic of conversation in the focus group and interviews. Participants shared that the substantial academic pressure in Robbinsville is leading to stress, anxiety and depression among students, including very young students. Certain sub-populations, such as students who reside in group homes, those close to homelessness, and the LGBTQIA population, were cited as students who in particular may be in need of additional resources and support. According to respondents, social media also plays a role in contributing to social stress issues and bullying. Suicide was reported to be rising in

the community. As one interviewee explained, *"there's been a number of suicides in the county…and you're seeing that in well-performing schools because of the academic stress and pressure and you're seeing it in [lower-performing schools] with pressure from the social aspect."* One participant shared the perception that rates of autism may be higher in the community than in others. Among adults, depression, addiction, PTSD and hoarding were reported to be issues of concern.

There are substantial challenges to addressing mental health concerns in the community according to interview and focus group participants. For example, participants noted that the community lacks sufficient mental health providers, especially for Medicaid patients, and stated that schools have too few staff with expertise to meet the mental health needs of students. High turnover in the mental health services workforce was also reported to be a challenge. Finally, stigma about mental illness is a substantial challenge according to participants. Those working in schools, for example, noted that parents are reluctant to disclose mental health concerns about their children. As one interviewee shared, *"I think [mental health] is still pretty closeted [in Robbinsville], even more so than in surrounding towns."*

Substance Use

> *"We have drug and alcohol abuse. We have some unstable families, and the home is chaos. Divorce seems pretty common."*
> – Key Informant

> *"Heroin—that's [an] epidemic everywhere. We're not spared because we're an affluent town."*
> – Key Informant

Interviewees and focus group participants described substance use as an important concern in Robbinsville. Opioid misuse was described as a growing issue for the community, particularly among young adults. Interview and focus group participants noted that deaths related to opioid overdose are rising in the community, especially in Hamilton. A couple of participants reported that they believed misuse of opioids was more prevalent in the community than acknowledged. As one interviewee stated, *"opioids – I think it hits more families than we think it hits."* Another mentioned a similar view saying, *"I think in the population, especially in suburban areas, there's still a lot stigma that this [opioid use] doesn't happen here."*

Interview and focus group participants shared that substance use concerns among students were primarily those related to alcohol and vaping. They also mentioned that academic pressure has led to misuse of ADHD medications to help students study. As one focus group member explained, *"it's not expensive enough that it's a hindrance, it's affordable enough to take it before a test."*

As with mental health services, participants reported that more substance use services were needed especially community-based supports after treatment. As one interviewee stated, *"I think if you look at the heroin epidemic as a whole, people don't have support when they get out of treatment."* They also saw the need to work more closely with schools on prevention education for students.

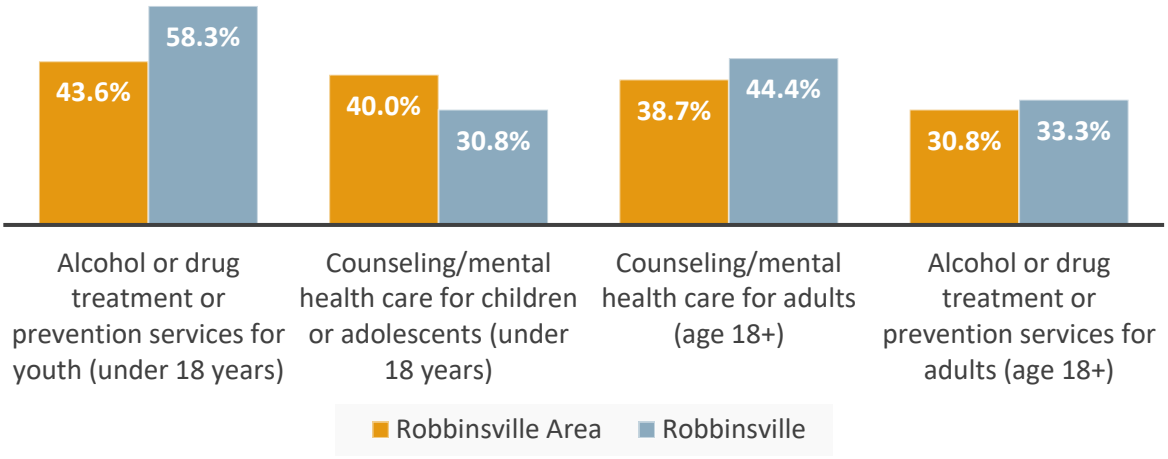
HEALTH CARE ACCESS AND UTILIZATION

The community health survey conducted for this CHNA asked respondents a variety of questions about access to health care. This section discusses community survey data for the 15-zip code Robbinsville area, feedback from interview and focus group conversations, and secondary data to identify the level of health care utilization and resources in the community, as well as barriers residents face in accessing them.

Access to Healthcare

Community health survey respondents were asked to rate difficulty in accessing specific health care services in the community. Figure 75 below shows the health care services that were rated as "hard" or "very hard" to access by the greatest number of respondents. Respondents marked mental health services and alcohol or drug treatment for both adults and minors as the most difficult services to access. For example, "alcohol or drug treatment or prevention services for children and adolescents" was indicated by 43.6% of Robbinsville area respondents and by 58.3% of respondents from the Robbinsville zip code (08691) as "hard" or "very hard" to access in the community. This difficulty in accessing services is consistent with perspectives shared by focus group participants and interviewees, described in the "Mental Health" section above.

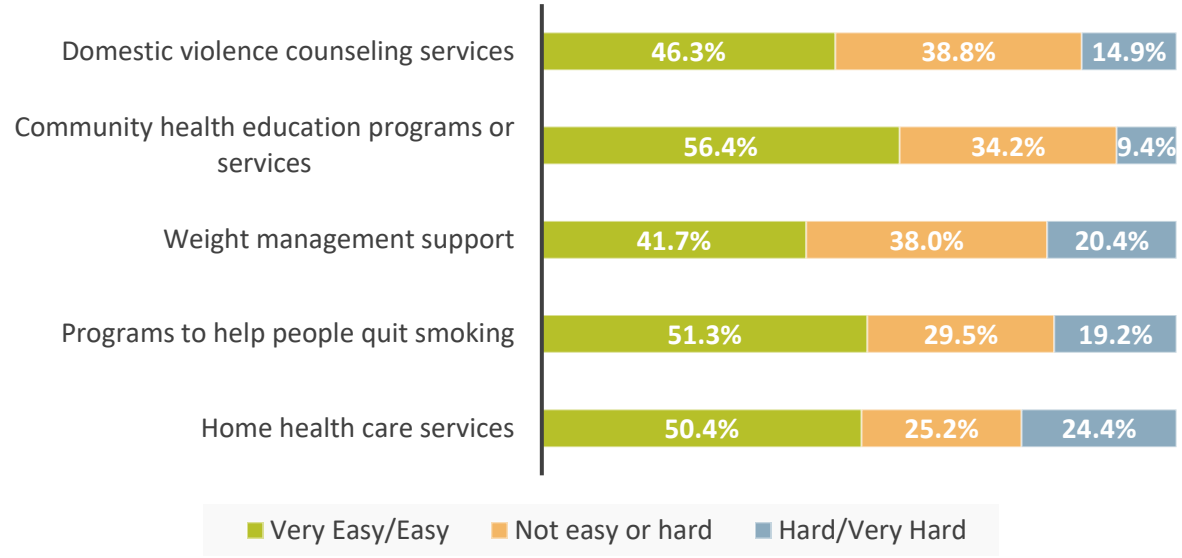
Figure 99: Health and Social Services That Are Hard or Very Hard to Access in the Community, Robbinsville Area



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Survey respondents were also asked to indicate how difficult it is to access specified health-related services in the community. Figure 100 below shows how Robbinsville area respondents rated each service. Home health care services (24.4%) and weight management support (20.4%) were most frequently listed as "hard" or "very hard" to access.

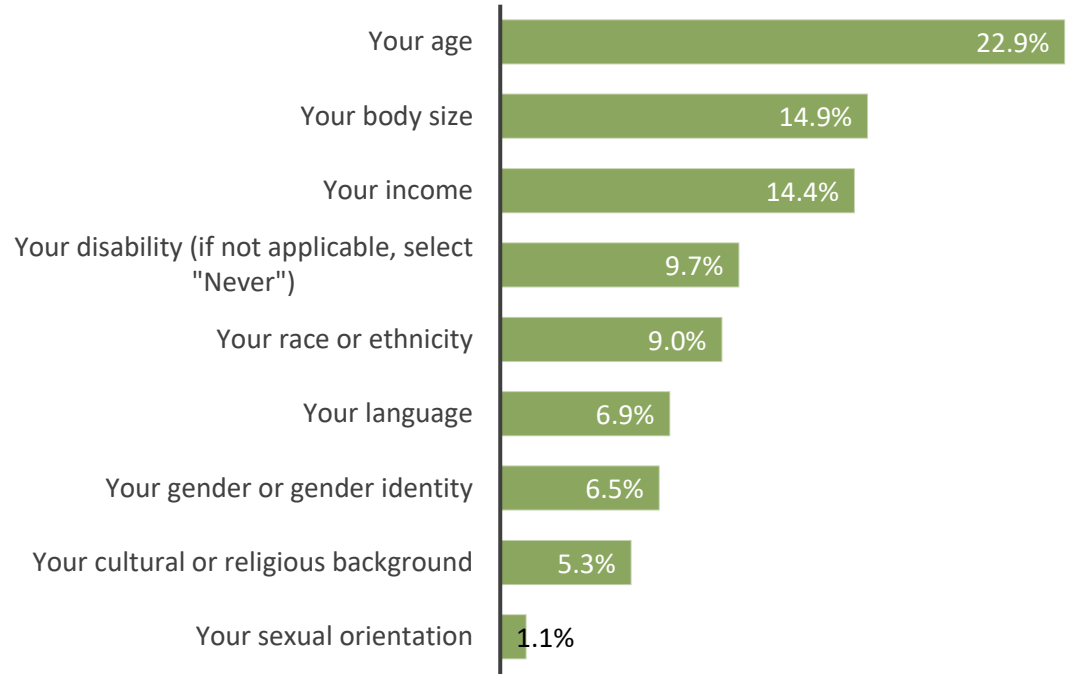
Figure 100: Health Services Access in the Community, Robbinsville Area



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Respondents were also asked to indicate how frequently they personally felt discriminated against when trying to get medical care, based on certain characteristics. As shown in Figure 101, "age" was the characteristic most frequently selected (22.9%) by Robbinsville area survey respondents as a basis for discrimination.

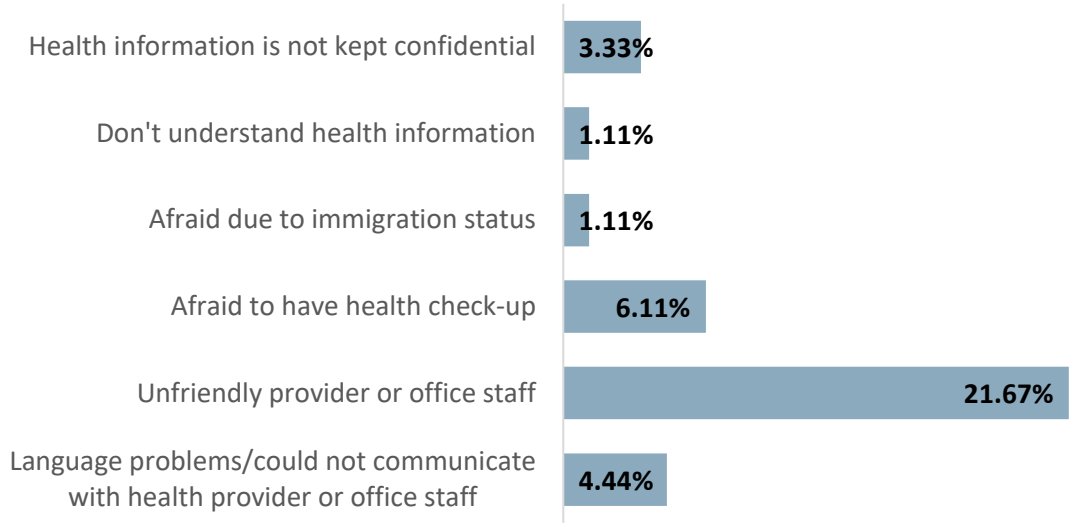
Figure 101: Discrimination Frequency by Select Characteristics, Robbinsville Area



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

The community survey also asked respondents to indicate issues that have made it difficult from them to get care over the past two years. Figure 102 presents the most frequently selected barriers. The top two issues selected by Robbinsville area respondents as making it difficult to get needed health services in the last two years were "long wait for an appointment" (46.1%) and "lack of evening or weekend services" (31.1%).

Figure 102: Issues Making it Difficult for Respondents to Get Needed Health Services within Last Two Years, Robbinsville Area



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Some focus group members and interviewees shared some similar perspectives on access to care. They noted that daytime hours offered by many health care services are not always convenient for families. Lack of providers who accept Medicaid was mentioned as a barrier by one interviewee who explained, *"most doctors don't take Medicaid insurance so try as you might you can't get services for people."* Concerns about access for undocumented immigrants was mentioned as a challenge for the Hamilton community in particular. As described earlier, those with disabilities face transportation challenges to get to medical appointments, especially those who are Medicaid recipients.

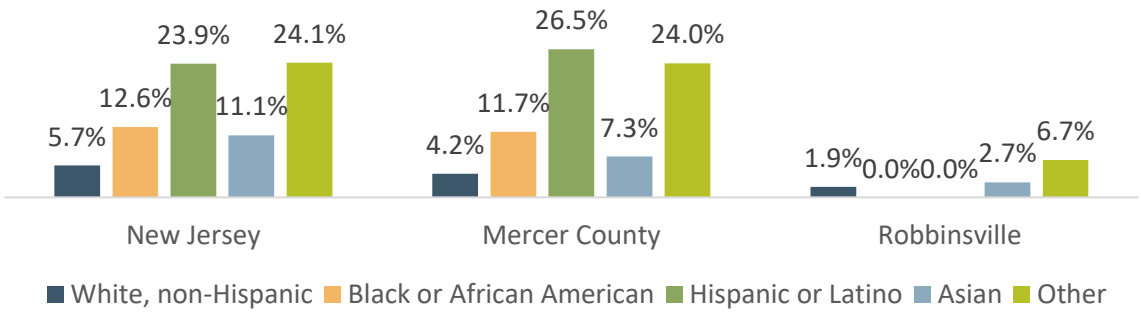
Health Insurance

Data from the US Census indicate that the proportion of the population without health insurance is lower in Robbinsville (1.9%) than in Mercer County overall (9.7%) (Figure 103). When analyzed by race and ethnicity, while rates of uninsurance in Mercer County are highest among individuals who self-identify as Hispanic, rates of uninsurance in Robbinsville are highest among individuals who self-identify as an "other" race or ethnicity (Figure 104).

Figure 103. Percent Population Uninsured, by Robbinsville and Mercer County, 2012-2016

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

Figure 104. Percent Population Uninsured by Race/Ethnicity, by Robbinsville and Mercer County, 2012-2016

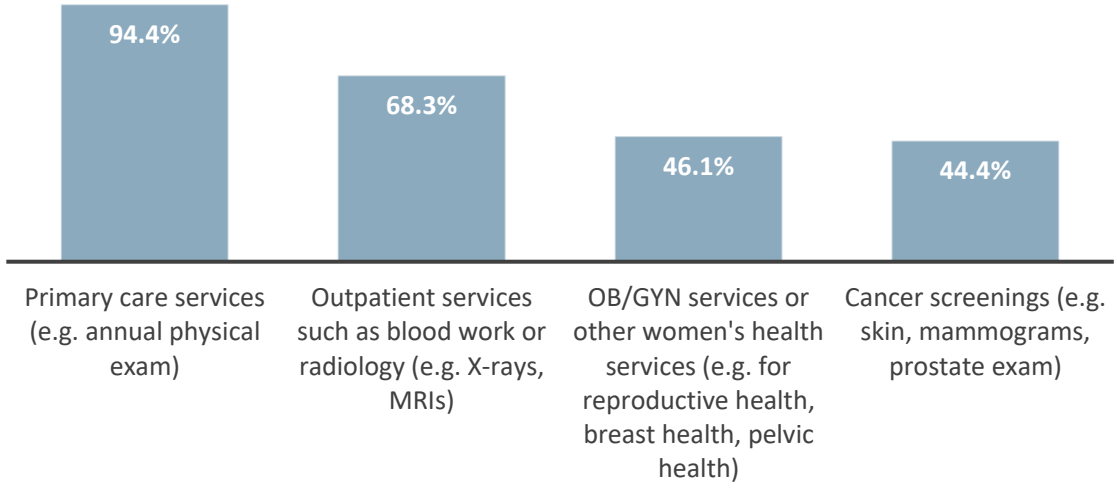


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016

Use of Healthcare Services

A majority of community health survey respondents (91.7%) in the Robbinsville area indicated that their main medical care is provided by a private doctor's office or group practices (data not shown). The majority of Robbinsville area survey respondents (94.4%) have used primary care services in the past year (Figure 105). Other health services frequently selected as used in the past year by Robbinsville area respondents include outpatient services (68.3%), OB/GYN services or other women's health services (46.1%) and cancer screenings (44.4%) (Figure 10). Only 22.8% of Robbinsville area respondents indicated that had used emergency services in the past year (data not shown).

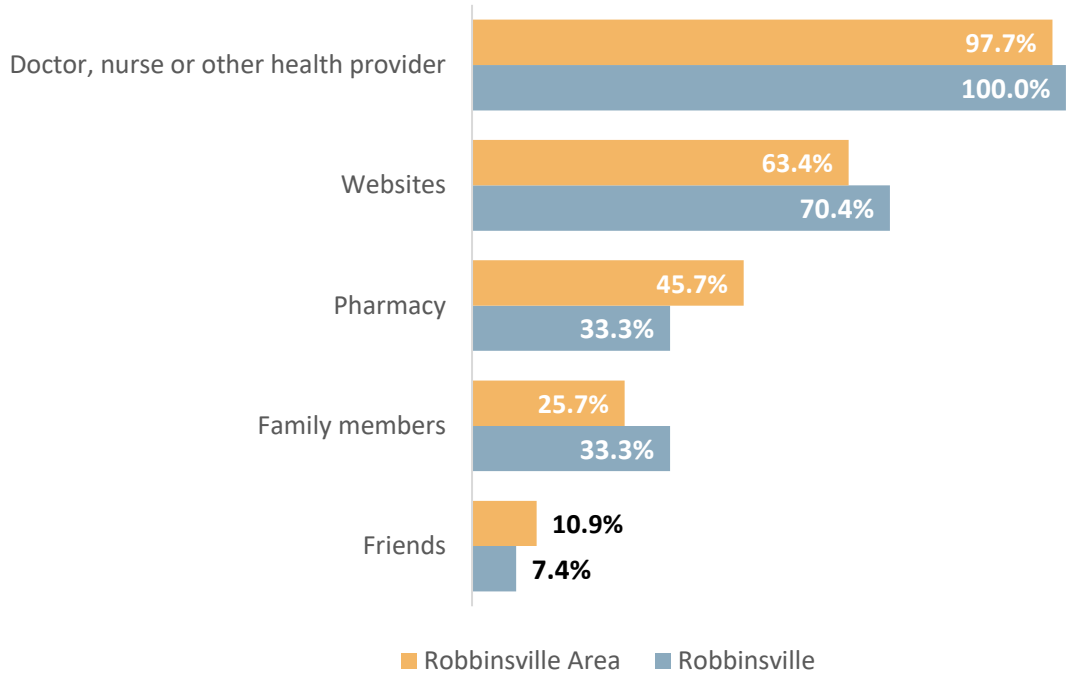
Figure 105: Health Services Used in the Past Year, Robbinsville Area



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Survey respondents were also asked to indicate from which sources they get most of their health information. Figure 106 below shows the sources that were selected by the greatest number of respondents. The most frequently selected source of health care information among both Robbinsville area respondents and respondents from the Robbinsville zip code was "doctor, nurse, or other health provider".

Figure 106: Main Sources for Health Information, Robbinsville Area

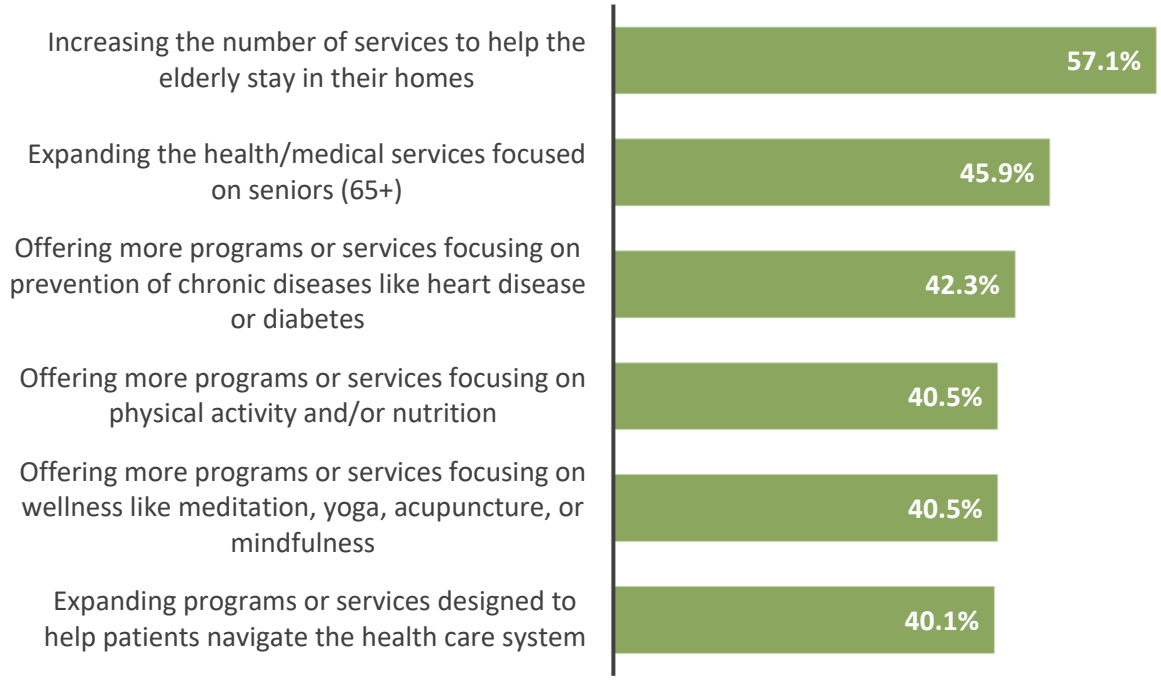


DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

PERCEPTIONS OF PRIORITY COMMUNITY HEALTH ISSUES

Respondents to the community health survey were asked to rate a list of issues as low, medium or high priority for future funding and resources. Figure 107 below shows the issues that were selected as high priority by the greatest number of Robbinsville area respondents (15-zip code area). For Robbinsville area respondents, increasing the number of services to help the elderly stay in their homes was selected most frequently, followed by expanding the health/medical services focused on seniors (65+) and offering more programs or services focusing on prevention of chronic disease. Again, it should be noted that in the community health survey sample for the 15-zip code Robbinsville area, many respondents (44.8%) were above the age of 65 (Table 1); thus, the age-related issues that were selected as priorities for future funding and resources may be of particular concern for this sample.

Figure 107: High Priority Issues for Future Funding and Resources, Robbinsville Area



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Focus group participants and interviewees identified additional priorities for future programs and services in their community:

- *Expand behavioral health services*. Interview and focus group participants stated that the region needs more behavioral health services, especially for children and youth. A few saw a need for more school-based services in particular. Ensuring that information about existing behavioral health services are available, especially to schools and parents, was also suggested.

- *Enhance behavioral health educational programs*. Given the stigma and lack of awareness surrounding behavioral health, interview and focus group participants saw a need for more parent and community education about mental health, as well as substances. They suggested more information for parents about how to recognize when a child has a mental health concern

and an emphasis specifically on reaching disengaged families. As one person stated, "*we can keep them safe and healthy during the day [at school] but even in Robbinsville they're going home to some pretty bad things so it would be nice to have a family counseling component to tie it in."* Recognizing the stress associated with academic pressures, one interviewee also suggested working with schools and families to try to address stress among school-aged children.

PERCEPTIONS OF POTENTIAL HEALTH CARE DELIVERY INNOVATIONS

Interview and focus group participants, as well as community health survey respondents, were asked to share perceptions on potential future health care delivery innovations, particularly related to use of technology and integration of services.

Use of Technology

Technology is increasingly utilized in the delivery of healthcare. Focus group members and interviewees were asked about current and potential technology use for health including the delivery of healthcare through technology (telehealth) and wearable devices that track health information. Survey respondents were asked about their current use of online patient portals including the use of portable devices to access these.

Virtual Health Care Delivery

> *"A lot of the hospitals around here have information very accessible to you through portals – that's really helpful having your information online and if you've had an exam, they'll post the results so you're not just waiting for the doctor to get around to call you."*
> – Key Informant

> ***"****People are busy and there's nothing that makes people more mad than sitting and waiting for a scheduled appointment or waiting hours to be seen at urgent care. If the technology makes that easier, I think that would be great."*
> – Focus Group Participant

Perspectives on the expanding use of technology in health care delivery were positive. Focus group members and interviewees shared perceptions of how telemedicine can benefit the patient experience. Participants praised technology in medical care, citing the ability to use technology as a tool for patients to quickly gain information about health issues and lab test results. Technology was also seen as a means for making health care more convenient. Interview and focus group participants noted that technology can help patients triage health issues and determine when an in-person visit is (and is not) needed, and can provide quick access to healthcare information. For example, as one interviewee stated, *"I think that [technology] would open up the door to more health care. I think that would really help in parts of our community where there are issues getting around."* Another interviewee saw technology as beneficial for answering questions, helping patients and providers to determine if a health issue warranted treatment in an office or not, and how soon. One interviewee shared that technology might be helpful for providing mental health care because often there is stigma associated with seeking services. As this person stated, *"[technology that allows patients] to talk to someone less visibly about getting help... I could also see teens using it to get more confidential care."* Interview and focus group participants shared that, because everyone now has smartphones, lack of access to connected devices is not a barrier to accessing telehealth.

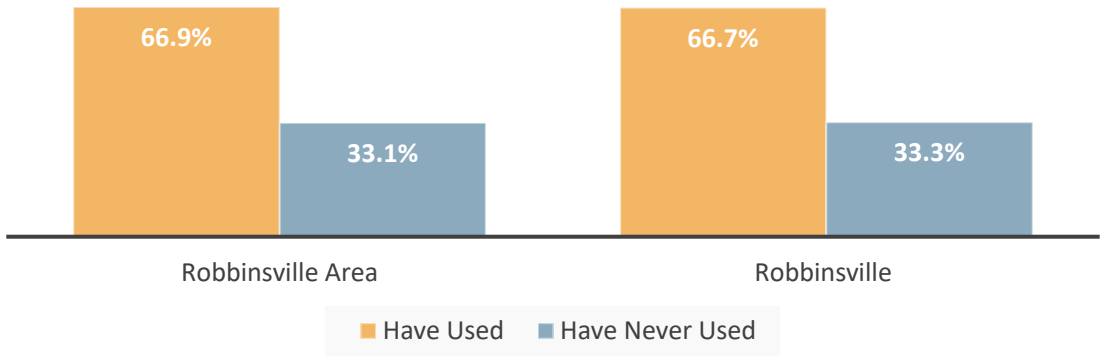
A few participants also noted that technology can facilitate communication among health care providers, and provide access to high-quality specialty care. For example, one focus group participant noted that primary care and specialty providers can use technology to communicate directly and coordinate care. Additionally, technology was seen as potentially expanding access to care from specialists who may be located far away in urban areas such as Philadelphia. As one focus group

participant stated, "*There's individuals here that can do the follow-up work under the guide of the specialist that's based in Philadelphia so that you don't have to schlep out there once or twice a week*."

Interview and focus group participants did not mention concerns about security or privacy of information. Participants cautioned, however, that telehealth options not entirely replace in person office visits. Some participants noted that the younger generation in particular may want "*better access to telemedicine"* where they can *"see their doctors on their phone."* However, as one focus group member stated, *"you've got to be able to do it all. Being able to serve the people that want the face-to-face and the mobile access."*

When asked about use of online portals to access medical information, the majority of Robbinsville area respondents (66.9%) and respondents from the Robbinsville zip code (66.7%) indicated that they do use online portals (Figure 108).

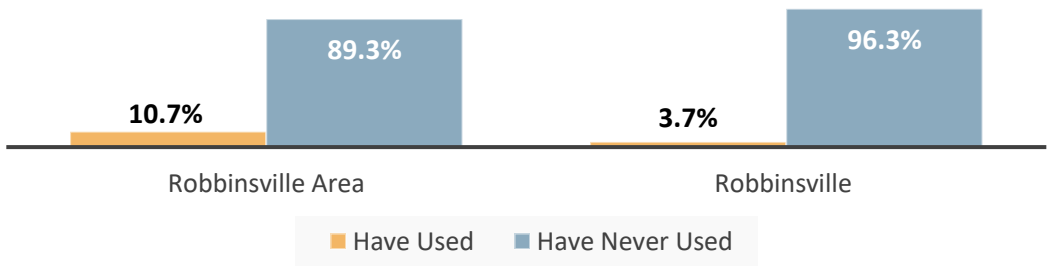
Figure 108: Use of Online Patient Portal, Robbinsville Area and Robbinsville (08691) Respondents



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

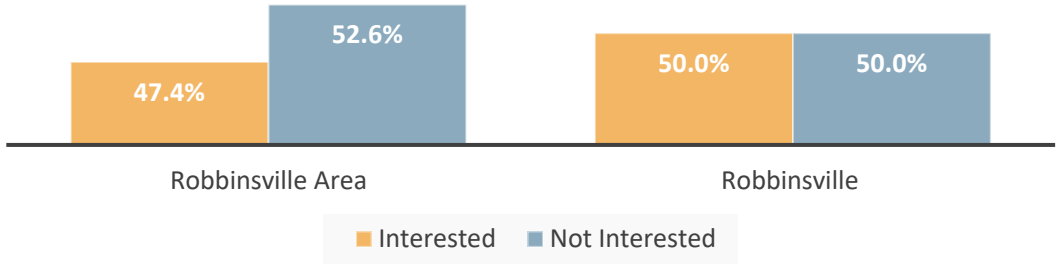
However, only 10.7% of Robbinsville area respondents and 3.7% of respondents from the Robbinsville zip code have ever used a mobile device to access health care for themselves or a family member (Figure 109). Among respondents who had not used a mobile device previously to access health care, approximately half would be interested in accessing health care in this way (for example, through a mobile device or smartphone) (Figure 110).

Figure 109: Use of Mobile Device to Access Health Care Information, Robbinsville Area and Robbinsville (08691) Respondents



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Figure 110: Among Respondents Not Currently Accessing Health Care Information through Mobile Device, Interest in Accessing Health Care Information through Mobile Device by County, Robbinsville Area and Robbinsville (08691) Respondents



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2018

Use of Sensors and Wearables

Another technological innovation in health care is the use of sensors or health wearables that help individuals track things such as their weight, blood pressure, or stress levels. Focus group members and interviewees were asked for their perceptions on how likely residents of Robbinsville would be to utilize these types of sensors or wearables. Initially, interview and focus group participants were unsure about articulating opinions on this; however, when given specific examples (e.g., Fitbits, Apple watches), some respondents noted that millennials and young families may find these tools to be helpful. As one interviewee shared, *"to me it would be [helpful for] just overall health and maintaining your health. You have the people [who] are maintaining their health and then the younger people who would want to just do it because it's new."* It was noted that the older generation may not be interested in adopting this technology, particularly in early stages of roll-out.

Co-Location of Health Care and Wellness Services

> *"Residents want convenience, everything should be under one roof. As soon as you start dispersing care a little bit, you start losing them."*
> -- Focus Group Participant

> *"Primary care, chiropractor, weight management and gym… if you could [have] all that in one place…"*
> -- Key Informant

Focus group members and interviewees were also asked for their perceptions of whether and how to co-locate medical and wellness services. Participants favored integrating housing, wellness, and medical services. Convenience and proximity to where families live were seen as important. For example, one focus group member noted the convenience of being able to access services, *"where you're not getting in your car to go off somewhere else."* A couple of participants also shared the perspective that a more holistic approach to health may help bring down healthcare costs.

Health Care Services

Focus group members and interviewees had numerous suggestions for the types of healthcare services they would like to see in an integrated facility. These included pediatric care in particular (connecting to CHOP was suggested), as well as urgent care, physical therapy, mental health services, occupational

health services, and chiropractic services. Offering after hours health services were seen as critical. As one interviewee stressed, *"the people [should be able to] go there anytime they need it, maybe it's not 24/7, but it's certainly beyond 5 o'clock, and Saturday and Sunday."* Several respondents suggested a co-located pharmacy would add additional convenience. Respondents also stated the importance of high quality care to the success of the facility, including linkages to the larger Princeton/Penn health system. As one person stated, *"I would hope that if Penn Medicine is putting their name on a building, they're also bringing that care."* Language accessibility and transportation services were also mentioned.

Wellness Programming

Focus group members and interviewees were also very receptive to co-locating wellness programming with medical services, and provided numerous suggestions for the types of programs that would benefit the community. They suggested nutrition education programs, exercise classes (including access to a pool), and general health education (about diseases, medications, etc.). Additional ideas included financial literacy and parenting classes, and mentoring programs for children and teens. For residents with disabilities, accessible/wheelchair exercise classes and socialization activities were mentioned, as were respite services for caregivers. Ensuring that programs are available to lower income residents, through low cost or free options, was also mentioned as critical.

The importance of care coordination was mentioned by several respondents to ensure that patients are given a "warm handoff" to wellness from a health care provider. As one interviewee explained, *"if you make it more personal to people, they're going to be more engaged to do it."* For example, if a patient receives a new diagnosis of diabetes from a health care provider, they could then be connected directly to an on-site nutritionist. As one interviewee noted, "*the doctor can you send you to the next person to help – it's almost like one stop shopping."* The need to navigate HIPPA concerns in setting up systems for warm hand-offs was also noted.

Community Use of Services

One concern that arose in interview and focus group conversations was whether residents of Robbinsville would be receptive to Hamilton residents accessing an integrated medical and wellness facility in the Robbinsville community. One focus group member explained the dynamics of the two communities as follows: *"folks in Hamilton look at Robbinsville as 'Snobbinsville' and people at Robbinsville look at Hamilton as 'Hamilitrash'."* While some participants expressed concern that this could be challenging, others were more positive. One interviewee shared an example of a recent mall renovation that was seen as successful in bridging the two communities. A few respondents felt that the association with Princeton Health and UPenn would also go a long way. As one focus group member shared, *"just having the name associated with it will help bring people in and accept it."* Several noted, however, that if this type of integrated facility were to be developed, it must be welcoming to everyone. This includes providing language services and addressing barriers such as transportation and cost. Ensuring that provider staff are of diverse backgrounds was also seen as important. As one focus group member stated, *"make sure that it matches the community that they're serving because if you don't, then there are barriers."*

KEY THEMES AND CONCLUSIONS

This Robbinsville Addendum brings together quantitative and qualitative data from a variety of sources to provide an overview of the current health status of Robbinsville area residents, identify priority health issues, and explore how innovations in health care delivery could potentially address health-related needs. Overarching themes that emerge from this synthesis include:

- **While residents of Robbinsville are highly educated and affluent, the high cost of housing in the community creates challenges for some.** Median household income in the area remains higher than Mercer County. The community has excellent schools which make it attractive to many. Challenges, however, include the high cost of housing. Although respondents report growing racial, ethnic and linguistic diversity, Robbinsville is still a predominantly white community, in contrast to nearby Hamilton.

- **Mental health and access to healthcare are top health concerns in the community.** Community health survey respondents and focus group and interview participants identified both mental health and access to healthcare as critical community health concerns. Survey respondents additionally identified caregiving (elder care, childcare) and obesity as concerns, while focus group members and interviewees noted that rising rates of substance use in the community warrant attention.

- **Services for youth and families and seniors were identified as priorities for future health-related programming.** Community health survey respondents, many of whom were themselves over the age of 65, prioritized services to help the elderly stay in their homes, expanding the health/medical services focused on seniors (65+), and offering more programs or services focusing on prevention of chronic disease. Focus group members and interviewees suggested an emphasis on enhancing behavioral health services, particularly for youth, and expanding education related to behavioral health needs, particularly focusing on youth and families.

- **Technological approaches to delivering healthcare and health information were viewed favorably.** Current use of online portals to access medical information is high among community health survey respondents. Focus group members and interviewees shared positive perspectives on telehealth technology, citing convenience as a key benefit. While some participants perceived a benefit to expanding use of sensors and wearables among certain populations, additional pilot and usability testing, particularly with millennials and younger residents, may be beneficial before expanding or launching new initiatives.

- **An integrated healthcare facility, with co-located medical and wellness services, was viewed as something that would benefit the residents of Robbinsville and surrounding communities.** Focus group members and interviewees reported that co-located services would be beneficial to addressing the healthcare needs of the community, especially when linked to larger healthcare systems. The linkage to wellness was also seen as an important factor. Accessibility of the facility to a wide range of community residents was also seen as critical.

APPENDICES

APPENDIX A. Penn Medicine Princeton Health 2018 Review of Initiatives

As a result of their 2015 Community Health Needs Assessment, Penn Medicine Princeton Health developed a plan to address identified key health needs and issues. Since the 2015 Needs Assessment, Penn Medicine Princeton Health has provided a variety of services and programming (Strategic Initiatives) to address the identified key needs and issues. **The table below summarizes the status of Strategic Initiatives for which data were available as of August 2018.**

Strategic Initiatives	Outcomes		
	FY 2016	FY 2017	FY 2018 Q1/2
Priority Area 1: Chronic Disease, Obesity, and Healthy Eating Active Living (HEAL) **GOAL: Promote optimal health, including optimized body weight, to reduce the impact of chronic disease and obesity, and enhance overall outcomes and quality of life.**			
Add a medically supervised Metabolic Weight Management Program (non-surgical component) to the Bariatric Program (surgical component) for outpatient and BMS clinic patients.	**Bariatric Program** had 235 new patients in Qtr 1. *(No data Qtr 2, 3, 4)* **BMS** had 10 new patients in Qtr 1 & 2) *(No data Qtr 3 & 4)*	**Bariatric program** had 1,800 new patients (estimate, data not confirmed). **BMS** - no new patients.	**Bariatric program** had 11 new patients. **BMS** – No data available as of 8/18
Consolidate and expand the bariatric program in the new Center for Bariatric Surgery and Metabolic Medicine consisting of surgeons, dietary, social work, psychologist, and nurse practitioner, and including physical fitness pre and post op.	No data provided.	210 new patients	No data available as of 8/18
Enhance the partnership between the Center for Bariatric Surgery and Metabolic Medicine and the Joint Center of Excellence to improve outcomes.	22 referrals	69 referrals	42 referrals YTD (8/3/18)
Conduct community events to build awareness and reach out to families to address obesity.	Provided 50 programs and reached 709 attendees.	Provided 48 programs and reached 661 attendees.	No data available as of 8/18
Conduct ongoing nutrition and physical exercise programs, health fair screenings, etc. for children and adults.	Reached 4,722 attendees.	Reached 7,889 attendees.	No data available as of 8/18
Continue to utilize partnerships with the fitness centers to identify special population needs and collaborate around programming. In consultation with the new medical advisory board (2016-2019), develop and enhance programs for specialty populations (e.g., MS, Parkinson's, orthopedics, cardiac rehab, bariatrics, cancer, diabetes, etc.).	No data provided	Approximately 54 participants.	No data available as of 8/18
Continue Oncology Nurse Navigation Program to identify and address barriers to care, including access, transportation, healthy lifestyles, stress reduction, weight loss, language, etc. and expand the program	• 1,078 referrals for resolution to barriers (No data in Qtr 2*)*	• 525 referrals for resolution to barriers. (No data in Qtr 2&3)	• 513 referrals for resolution to barriers.

Strategic Initiatives	Outcomes		
	FY 2016	FY 2017	FY 2018 Q1/2
by developing tumor specific pathways for breast, lung, and colorectal cancer patients.			
Expand Cancer Survivorship Program (Treatment Summary (TS) and Survivorship Care Plan (SCP)) to promote good self-care, reduce risk of further health issues, and understand the impact cancer can have on health by offering TS/SCP to 75% of Stage I-III UMCP cancer patients by 2018.	114 Treatment Summary/ Survivorship Visits in Qtr 1 & 3 *(No data provided in Qtr 2 & 4).*	No data provided.	87 Treatment Summary/ Survivorship visits
Expand current Psycho-social Distress Screening to include survivorship population for UMCP cancer patients. Develop on-site support group for cancer caregivers and/or cancer patients with children.	9 participants attending support group.	27 participants attending support group.	5 participants attending support group.
Expand the Cancer Program Support Services to enhance the patient-centered model of care, by hiring an oncology registered dietitian and oncology social worker.	• 750 patients referred to Social Work. • 635 referred to Dietitian.	• 156 patients referred to Social Work. • 124 referred to Dietitian.	• 335 patients referred to Social Work. • # referred to Dietitian not available as of 8/18
Continue to provide community-based screenings for prostate, skin, and lung cancers.	**190 total** 24 for Lung Cancer 126 Skin Cancer 40 Prostate Cancer	**195 total** 22 Lung Cancer 56 Skin Cancer 57 Prostate Cancer	**TBD total** 33 Lung Cancer 83 Skin Cancer TBD Prostate
Conduct Cancer Survivors Day event annually in the community.	750 attendees for annual cancer survivor's day event.	783 attendees for annual cancer survivor's day event.	No event hosted to date in 2018.
Continue to offer community education events to raise cancer awareness.	16 programs to raise cancer awareness with 1,257 attendees.	16 programs and 1,383 attendees.	5 programs and 128 attendees.
Conduct annual Kids Marathon for children K-8, including pre-race offerings of cooking classes, nutrition classes, exercise, and gardening.	9 programs and 272 children reached including Kids Marathon Event.	8 programs and 261 children reached including Kids Marathon Event.	9 programs and 500 children reached including Kids Marathon Event.
Develop a Pre-diabetes Education Program.	Department restructuring	Program development Prep/post tests distributed to all class participants. 85-90% increase on subject matter reported.	Finalizing program details. Implementation Qtr 1 in 2019. Prep/post tests distributed to all class participants. 85-90% increase on subject matter reported.
Priority Area 2: Behavioral Health **GOAL: Integrate behavioral health principles and practices into medical-based treatment and practices**			
Continue inpatient HepC Program at Princeton House, including full-time social worker for community follow up.	-180 patients assessed -16 patients referred	-165 patients assessed -226 patients referred	-67 patients assessed -53 patients assessed

Strategic Initiatives	Outcomes		
	FY 2016	FY 2017	FY 2018 Q1/2
	(No data Q4)		
Continue inpatient program to address behavioral health stressors among first responders (police, fire, EMS, corrections officers, etc.).		-221 new patients admitted -25 referral sources	-91 new patients admitted -14 referral sources
Provide inpatient medical detoxification and intensive outpatient aftercare for primary addictions in adults and young adults.		-1,233 detox patients discharged -1,360 patients admitted	-355 detox patients discharged -374 patients admitted
Provide transportation at no additional cost via a fleet of vehicles to reduce the barrier to treatment for those who are eligible.	13,385 rides provided in Q1+3	13,161 rides provided in Q1	21,552 rides provided
Offer psych appointments for available outpatient care within 2-3 days to address access needs.	% of evaluation appointments offered. -67% Q1 within 2 days -76% Q2 within 3 days	% of evaluation appointments offered 3 days or less. -64% Q1	% of evaluation appointments offered 3 days or less. -66% Q1 -58% Q2
Provide behavioral health Community Education programs to educate and raise awareness of mental health services available to the community.	6 behavioral mental health programs with 677 attendees were held in 2016.	12 behavioral mental health programs with 220 attendees were held in 2017.	16 behavioral mental health programs with 839 attendees were held in 2018.
Provide services that meet the unique needs of the populations in the community. a. New location for Women's Specialized Services (specialized treatment for women who have experiences trauma in their lives). Note: Opened new center in Monmouth County. b. New Men's Trauma Program in North Brunswick. c. Teen Girls Trauma Program (family violence, sexual abuse).	A. 132 patients admitted Q1+3 B. 30 patients admitted Q1+3 C. 55patients admitted Q1+3	A. 72 patients admitted Q1 B. 13 patients admitted Q1 C. 36 patients admitted Q1	A. 138 patients admitted (opened May 2015) B. 26 patients admitted C. 69 patients admitted
Maintain the dedicated behavioral health specialty area within the emergency department.		-771 referrals to PH inpatient -2,179 ED psych admissions *(No data for QTR 4).*	Not data available as of 8/18
Maintain integrated medical and behavioral health Eating Disorders Unit.		177 patients served *(No data for QTR 4).*	87 patients admitted Q2
Continue the Community Alliance on Medication Safety (CAMS) program in schools, troops, churches, senior centers, and other community venues which provides targeted presentations on medication safety.	17 CAMS programs were held in schools, troops, churches, senior centers and other venues with 2,003 attendees total in 2016.	1 CAMS event with 236 attendees was held in 2017. The initiative was only held through the first quarter of this year.	0 events, 0 attendees as of 8/18
Provide behavioral health Community Education programs to educate and raise awareness of substance abuse services available to the community.	5 events behavioral health programs with 679 attendees were held in 2016.	1 behavioral health program with 9 attendees was held in 2017.	2 behavioral health programs with 24 attendees were held in 2018.

Strategic Initiatives	Outcomes		
	FY 2016	FY 2017	FY 2018 Q1/2
Priority Area 3: Health Care Access **GOAL: Identify and overcome barriers for patients getting appropriate, high quality, and cost effective care when they need and where they need it.**			
Expand primary care practice hours and expand practices to additional locations.	The number of new patients in primary care practices was 4,222 in fiscal 2016.	The number of new patients in primary care practices was 4,163 in fiscal 2017.	The number of new patients in primary care practices was 2,122 in the first two quarters of fiscal 2018.
Continue to serve as a site for Certified Application Counselors to assist people in securing ACA health insurance.	The open enrollment period for 2016 benefit coverage under the ACA began November 1, 2015. Individuals could also apply for 2016 coverage after close of open enrollment if they qualified for a Special Enrollment Period. PHCS assisted 156 taxable households in applying for insurance for the 2016 calendar year.	The open enrollment period for 2017 benefit coverage under the ACA began November 1, 2016. Individuals could also apply for 2017 coverage after close of open enrollment if they qualified for a Special Enrollment Period. PHCS assisted 75 taxable households in applying for insurance for the 2017 calendar year.	The open enrollment period for 2018 benefit coverage under the ACA began November 1, 2017. Individuals could also apply for 2018 coverage after close of open enrollment if they qualified for a Special Enrollment Period. PHCS assisted 140 taxable households in applying for insurance for the first 2 quarters of the 2018 calendar year.
Expand access to care coordinators at Princeton Health Care primary care practices to provide a direct line of communication between high risk patients and RN, navigating system and identifying and addressing barriers.	In 2016, there were 6 full-time RN care coordinators and 1 part-time RN care coordinator. 49,000 patients were covered by care coordinators. 49,000 patients were covered by care coordinators. In the clinic, there were an additional 88 care coordinators.	In 2017, there were 7 full-time RN care coordinators and 1 part-time RN care coordinator. 2 LPN partners were added in June. 49,000 patients were covered by care coordinators. In the clinic, there were an additional 136 care coordinators.	In the first half of 2018, there were 7 full-time RN care coordinators, 1 part-time RN care coordinator and 2 LPN partners. 1 Certified Medical Assistant was added in February. 49,000 patients were covered by care coordinators. In the clinic, there were an additional 119 care coordinators.
Provide centralized access to outpatient services in behavioral health, triaging, and redirecting throughout the state through the appropriate screening process.	11,925 outpatient contacts occurred in fiscal 2016	11,998 outpatient contacts occurred in fiscal 2017	5,903 outpatient contacts occurred in the first 2 quarters of fiscal 2018
Continue to utilize and expand the use of translators/bilingual staff, and the language line to facilitate access for all patients.	There were 10,676 calls, for a total of 116,580 minutes, in fiscal 2016.	There were 12,851 calls, for a total of 144, 710 minutes, in fiscal 2017.	During the first half of fiscal 2018, there were 6,659 calls, for a total of 69,898 minutes.

Strategic Initiatives	Outcomes		
	FY 2016	FY 2017	FY 2018 Q1/2
Explore becoming a subcontractor for Logisticare to improve the quality and safety of outpatient transportation for Princeton House patients.	N/A	Princeton House Behavioral Health Outpatient (PHBH OP) contracted with Logisticare in late 2017. In process of having all PHBH OP drivers get CDL, which will permit them to do the transportation, per contract. Ride service has been tested with about 10 patients; will be expanding in early fall.	See 2017 explanation
Provide community education outreach and screenings in multiple languages to areas of the community with limited or no access to the hospital.	PHCS provided multiple screenings throughout the year to all members of the community, some of which have limited access to the hospital. One example is the Community Health Fair held at St Anthony of Padua Church in Hightstown (with 230 people attending).	PHCS provided multiple screenings throughout the year to all members of the community, some of which have limited access to the hospital. One example is the Community Health Fair held at St Anthony of Padua Church in Hightstown (with 100 people attending and 73 people screened).	PHCS provided multiple screenings throughout the year to all members of the community, some of which have limited access to the hospital. One example is the Community Health Fair held at St Anthony of Padua Church in Hightstown (with 50 people attending and 35 people screened).
Expand the availability of and access to religious ministries programs to provide support for patients, families, and staff.	6,810 chaplain visits occurred in 2016, a 12.3% increase from the prior fiscal year and a 120.8% increase from 5 years earlier.	8,312 chaplain visits occurred in 2017, a 22.1% from the prior fiscal year and a 266% increase from 5 years earlier.	No data available as of 8/18
Priority Area 4: Maternal and Child Health **GOAL: Enhance the level of care for mothers, babies, and their families before, during, and after delivery. (family system, family unit)**			
Launch a Pelvic Wellness Program utilizing a nurse navigator to provide a variety of treatments to increase the quality of life throughout a woman's lifespan.	49 participants; 5 men; 44 women	558 participants; 29 men; 522 women	362 participants; 21 men; 341 women
Pilot & launch Total Control Programs® to provide low-impact exercise-based classes to women of all ages experiencing incontinence	14 TC programs (196 classes) 107 attendees. Maintenance launched 9/16; 6 classes, 8 attendees	4 TC programs (56 classes) 40 attendees. Maintenance (53 classes) 103 attendees	2 TC programs – 15 attendees. 26 Maintenance classes; 46 attendees
Launch a Pelvic Floor Wellness Support Group for women of all ages.	12 support groups; 5 attendees	12 support groups; 0 attendees	Canceled due to low enrollment

Strategic Initiatives	Outcomes		
	FY 2016	FY 2017	FY 2018 Q1/2
Continue to conduct prenatal breastfeeding classes.	13 classes; 277 attendees	13 classes; 239 attendees	6 classes; 101 attendees
Continue the Breastfeeding Support Group twice weekly.	104 sessions; 701 attendees	113 sessions; 701 attendees	69 sessions; 274 attendees
Continue to provide follow up phone calls to all mother baby discharged patients by certified lactation consultants to discuss lactation and postpartum care.	1,674 calls	1,892 calls	900 calls
Continue the 24-hour hot line number for community members who have lactation questions.	133 calls	156 calls	87 calls
Continue Postpartum Adjustment Support Group to provide a discussion forum for women experiencing difficulty or who have questions post – delivery.	25 programs; 10 attendees	25 programs; 51 attendees	13 programs; 25 attendees
Continue to provide Outpatient lactation visits for those who require or request a visit with a lactation consultant.	0	2	1
Continue weekly Bright Beginnings Group to provide support to families post- delivery to 6 months.	50 programs; 852 attendees	47 programs; 880 attendees	24 programs; 240 attendees
Continue Daddy Boot Camp Class offerings that provide men with information to men-only and is designed for fathers-to-be to gain knowledge in parenting skills and to develop hands-on skills for caring for their newborns as well as the importance of parental teamwork.	9 programs; 74 fathers	6 programs; 76 fathers	3 classes; 28 fathers
Provide opportunity for patients to purchase or rent breast feeding pumps, lactation pillows and maternity items via the hospital retail shop.	16 pumps, 2 pillows; 10 items	13 pumps, 2 pillows; 10 items	5 pumps; 2 pillows; 6 items
Offer appointments weekly to provide free car seat safety inspections by certified child safety seat inspectors.	346	465	152
Level 3 NICU opening. Phase in admission of infants starting at 31 weeks gestation and dropping down to 28 weeks gestation. Develop procedures, guidelines and competencies related to gestational ages on unit, acquire appropriate health care providers specializing in the care of these infants	CHOP provides continuing care; Jan 2016 NICU Level 3 opened. 346 patients	363 patients	137 patients
Continue to develop partnership w/Children's Hospital of Philadelphia at new outpatient site on Princeton HealthCare System campus	Continued partnership	Continued partnership	Opened April 2015
Begin new prenatal classes: a. early pregnancy b. those expecting multiples c. c-section class	Early Pregnancy; 3 classes – 6 attendees Multiples; 4 classes – 18 attendees C/S; 4 classes – 0 attendees	Early Pregnancy; 4 classes – 4 attendees Multiples; 6 classes – 24 attendees C/S; 4 classes – 3 attendees	Early Pregnancy = 0 classes; Multiples = 2 classes – 8 attendees C/S; 1 class – 2 attendees

Strategic Initiatives	Outcomes		
	FY 2016	FY 2017	FY 2018 Q1/2
Priority Area 5: Elder Care **GOAL: Address the physical health, mental health, and safety needs of the most vulnerable seniors in the hospital, during transitions of care and in the home.**			
Provide clinician and community education directed toward senior care issues such as palliative care, caregiver stressors, end of life, transitions in care, medication safety, fall safety, etc.	Community Wellness provides education for approximately 50 senior facilities and 7 libraries. Programs include memory, diabetes, falls, medication safety, palliative care, stroke and vision. 22 senior programs with 477 participants were provided in 2016.	Community Wellness provides education for approximately 50 senior facilities and 7 libraries. Programs include memory, diabetes, falls, medication safety, palliative care, stroke and vision. 11 senior programs with 219 participants were provided in 2017.	Community Wellness provides education for approximately 50 senior facilities and 7 libraries. Programs include memory, diabetes, falls, medication safety, palliative care, stroke and vision. 48 senior programs with 800 participants were provided in the first and second quarters of 2018.
Maintain the dedicated Senior Care specialty area within the emergency department.	Repurposed rooms to holding for main hospital.	Repurposed rooms to holding for main hospital.	Repurposed rooms to holding for main hospital.
Continue to provide Homecare and private duty supports through Home Healthcare Division.	Homecare sees over 90,000 patients in 4 counties each year. Have stayed about the same in the last few years but growing	Homecare sees over 90,000 patients in 4 counties each year. Stayed about the same in the last few years but are growing	Homecare sees over 90,000 patients in 4 counties each year. Stayed about the same the last few years but growing
Continue continuity of care via onsite visits and relationship cultivation with site directors at long-term care facilities.	This is ongoing.	This is ongoing.	This is ongoing.
Provide education to families and patients on end-of-life care, including Hospice benefits.	6 end of life care programs were provided at senior facilities and places of worship.	10 end of life care programs were provided at senior facilities and places of worship.	5 end of life care programs were provided at senior facilities and places of worship.
Continue community education outreach efforts to senior centers, libraries, places of worship, etc. covering topics related to senior health and safety.	Community Wellness provides education for approximately 50 senior facilities and 7 libraries. Programs include memory, diabetes, falls, medication safety, palliative care, stroke and vision. 87 senior programs were provided in 2016.	Community Wellness provides education for approximately 50 senior facilities and 7 libraries. Programs include memory, diabetes, falls, medication safety, palliative care, stroke and vision. 83 senior programs were provided in 2017.	Community Wellness provides education for approximately 50 senior facilities and 7 libraries. Programs include memory, diabetes, falls, medication safety, palliative care, stroke and vision. 40 senior programs were provided in 2018 with 616 participants.

APPENDIX B. Stakeholder Engagement: Full List of Focus Group and Interview Sectors

Organizations involved in focus group (n = 85 participants) recruitment:

1. Hamilton Area YMCA (11 participants)
2. Local Public Health Officers (participants recruited by Penn Medicine Princeton Health) (7 participants)
3. Local School Nurses and Guidance Counselors (participants recruited by Penn Medicine Princeton Health) (6 participants)
4. Monroe Township Senior Center (11 participants)
5. EMS Providers (participants recruited by Penn Medicine Princeton Health) (10 participants)
6. Princeton Fitness & Wellness Center Bright Beginnings Program (12 participants)
7. Penn Medicine Princeton Health Medical Advisory Board (6 participants)
8. Penn Medicine Princeton Health Cancer Committee (14 participants)
9. Penn Medicine Princeton Health Staff (participants recruited by Penn Medicine Princeton Health) (8 participants)

Key stakeholders (n = 23) representing the following institutions were interviewed:

1. Local YMCA Leadership (2 participants)
2. Local School District Superintendents (2 participants)
3. Governmental Leadership – Robbinsville, NJ
4. Project Freedom (housing services) (3 participants)
5. St. Anthony of Padua Catholic Church (Latino community)
6. Bristol-Myers Squibb Community Health Center (2 participants)
7. Princeton House Behavioral Health Leaders (3 participants)
8. Penn Medicine Princeton Health Leadership (President and CEO)
9. Penn Medicine Princeton Health Leadership (Department of Medicine Chair)
10. Penn Medicine Princeton Health Religious Ministries (2 participants)
11. Penn Medicine Princeton Health Human Resources
12. Penn Medicine Princeton Health – Pediatrics (2 participants)
13. Penn Medicine Princeton Health – Emergency Department
14. Penn Medicine Princeton Health – Nursing Leadership

APPENDIX C. 2018 Community Health Needs Assessment Survey Instrument (English; also offered in Spanish)

1. **What is the zip code where you live?** __ __ __ __ __

2. **What is the zip code where you work, volunteer, worship, or go to school (if applicable)? (If more than one applies, then indicate the zip code where you work.)** __ __ __ __ __

Community Health

3. **In general, how would you describe the overall health of the following?**

	Excellent	Very Good	Good	Fair	Poor
The community in which you live	☐	☐	☐	☐	☐
The community in which you work, volunteer, worship, or go to school (if applicable)	☐	☐	☐	☐	☐

4. **Please select the <u>TOP 5 HEALTH ISSUES</u> impacting you or your family personally and the community in which you live. Please select 5 health issues FOR EACH column below. You can select the same or different issues for each.**

	You/Your family	Community where you live
Access to health care services due to insurance, lack of insurance, or cost	☐	☐
Access to health care services due to location, hours of operation, transportation, or availability of needed services	☐	☐
Aging health concerns (e.g. Alzheimer's, dementia)	☐	☐
Asthma	☐	☐
Cancer	☐	☐
Caregiving (e.g. elder care, child care)	☐	☐
Children's health concerns	☐	☐
Chronic disease (e.g. diabetes, heart disease, hypertension)	☐	☐
Community violence (e.g. gangs, street crime)	☐	☐
Dental and oral health	☐	☐
Drugs/alcohol abuse	☐	☐
Infectious/contagious disease (e.g. tuberculosis, pertussis, pneumonia, flu)	☐	☐
Injuries (e.g. car accidents, falls, concussion)	☐	☐
Interpersonal violence (e.g. domestic violence, sexual violence, bullying)	☐	☐
LGBTQ health concerns	☐	☐
Mental health issues (e.g. anxiety, depression, suicide)	☐	☐
Musculoskeletal issues (e.g. joint pain, arthritis)	☐	☐
Neuroscience issues (e.g. epilepsy, seizures)	☐	☐
Overweight or obesity	☐	☐
Sexually transmitted infections (e.g. HIV/AIDS, chlamydia, gonorrhea)	☐	☐
Teen pregnancy	☐	☐
Women's health issues (e.g., reproductive health, etc.)	☐	☐
Other (please specify): _____	☐	☐

Access to Services

5. Please think about the different <u>health care services</u> in your community. How easy or hard is it to access the following health care services in your community?

	Very easy	Easy	Not easy or hard	Hard	Very hard	Don't know
Primary care physicians	☐	☐	☐	☐	☐	☐
Dental or oral health services	☐	☐	☐	☐	☐	☐
Vision services	☐	☐	☐	☐	☐	☐
Immunizations	☐	☐	☐	☐	☐	☐
Outpatient services such as lab work or radiology (e.g. X-rays, MRIs)	☐	☐	☐	☐	☐	☐
Hospital services	☐	☐	☐	☐	☐	☐
Urgent care services	☐	☐	☐	☐	☐	☐
Emergency department services	☐	☐	☐	☐	☐	☐
Cancer screening	☐	☐	☐	☐	☐	☐
Cancer care/treatment	☐	☐	☐	☐	☐	☐
Occupational therapy	☐	☐	☐	☐	☐	☐
Physical therapy	☐	☐	☐	☐	☐	☐
Specialty care (e.g. gastroenterologist, cardiologist, endocrinologist, nephrologist, neurologist, etc.)	☐	☐	☐	☐	☐	☐
Health or medical services for children or adolescents (under 18 years)	☐	☐	☐	☐	☐	☐
Health or medical services for women (e.g. reproductive health, pregnancy, breast health, pelvic health)	☐	☐	☐	☐	☐	☐
Health or medical services for seniors (age 65+)	☐	☐	☐	☐	☐	☐
Counseling/mental health care for children or adolescents (under 18 years)	☐	☐	☐	☐	☐	☐
Counseling/mental health care for adults (age 18+)	☐	☐	☐	☐	☐	☐
Alcohol or drug treatment or prevention services for youth (under 18 years)	☐	☐	☐	☐	☐	☐
Alcohol or drug treatment or prevention services for adults (age 18+)	☐	☐	☐	☐	☐	☐

6. Please think about the different <u>health-related programs and services</u> in your community. How easy or hard is it to access the following health-related programs and services in your community?

	Very easy	Easy	Not easy or hard	Hard	Very hard	Don't know
Home health care services	☐	☐	☐	☐	☐	☐
Programs to help people quit smoking	☐	☐	☐	☐	☐	☐
Weight management support	☐	☐	☐	☐	☐	☐
Community health education programs or services	☐	☐	☐	☐	☐	☐
Domestic violence counseling services	☐	☐	☐	☐	☐	☐

7. When trying to get medical care, how often have YOU PERSONALLY felt discriminated against based on any of the following characteristics:

	Frequently	Sometimes	Never
Your race or ethnicity	☐	☐	☐
Your cultural or religious background	☐	☐	☐
Your language	☐	☐	☐
Your age	☐	☐	☐
Your income	☐	☐	☐
Your body size	☐	☐	☐
Your sexual orientation	☐	☐	☐
Your gender or gender identity	☐	☐	☐
Your disability (if not applicable, select "Never")	☐	☐	☐

8. Have any of these issues made it difficult for you to get needed health services within the last two years? (Please check all that apply.)

- ☐ Lack of transportation
- ☐ No provider available near me
- ☐ Have no regular source of health care (primary care physician or clinic)
- ☐ Don't know what types of services are available
- ☐ Office not accepting new patients
- ☐ Lack of evening or weekend services
- ☐ Long wait for an appointment
- ☐ Lack of specialists/specialty care services
- ☐ Insurance problems/lack of coverage
- ☐ Lack of providers who accept Medicaid
- ☐ Cost of care (e.g., deductibles, co-pays)
- ☐ Cost of prescription medications
- ☐ Language problems/could not communicate with health provider or office staff
- ☐ Unfriendly provider or office staff
- ☐ Afraid to have health check-up
- ☐ Afraid due to immigration status
- ☐ Don't understand health information
- ☐ Health information is not kept confidential
- ☐ I have never experienced any difficulty in getting care

Community Priorities

9. Please check whether you consider these issues to be low, medium, or high priority for future funding and resources in your community.

	Low	Medium	High
Increasing transportation to area health/medical services	☐	☐	☐
Increasing the health/medical services that are close by and easy to get to	☐	☐	☐
Providing more language interpretation services	☐	☐	☐
Increasing the number of providers/staff that speak languages other than English	☐	☐	☐
Expanding programs or services designed to help patients navigate the health care system	☐	☐	☐
Increasing the number of oral health/dental providers in the community	☐	☐	☐
Providing more outpatient services such as for blood work or radiology (e.g. X-rays, MRIs)	☐	☐	☐
Providing more urgent care services	☐	☐	☐
Providing more counseling or mental health services	☐	☐	☐
Providing more alcohol or drug prevention and treatment services	☐	☐	☐
Expanding cancer screening, diagnostics, and treatment services	☐	☐	☐
Expanding specialty care services	☐	☐	☐
Expanding the health/medical services focused on seniors (65+)	☐	☐	☐
Increasing the number of services to help the elderly stay in their homes	☐	☐	☐
Expanding the health/medical services focused on children and adolescents (under 18 years)	☐	☐	☐
Expanding the health/medical services focused on women's health issues (e.g., pregnancy, well-visits, pelvic health)	☐	☐	☐
Expanding the health/medical services available to low income individuals	☐	☐	☐
Expanding access to technology that can help me to monitor and maintain my health (e.g., health apps for smartphones)	☐	☐	☐
Offering more programs or services focusing on physical activity and/or nutrition	☐	☐	☐
Offering more programs or services focusing on obesity/weight control	☐	☐	☐
Offering more programs or services focusing on prevention of chronic diseases like heart disease or diabetes	☐	☐	☐
Offering more programs or services focusing on wellness like meditation, yoga, acupuncture, or mindfulness	☐	☐	☐
Offering more programs or services to help people quit smoking	☐	☐	☐
Other (please specify): _____	☐	☐	☐

Health Coverage and Information

10. Are you personally currently covered by any of the following types of health insurance or health coverage plans? (Check all that apply)

- ☐ Insurance through a current or former employer or union (yours or another family member's)
- ☐ Insurance purchased directly from an insurance company (by you or another family member) including coverage purchased through a healthcare exchange or marketplace such as Healthcare.gov, otherwise called 'Obamacare'
- ☐ Medicare, for people age 65 and older, or people with certain disabilities
- ☐ Medicaid, Medical Assistance (MA), the Children's Health Insurance Program (CHIP) or any kind of state or government-sponsored assistance plan based on income or a disability. You may know this type of coverage as 'NJ Family Care'
- ☐ Tricare or other military health care, including Veteran's Administration health care
- ☐ Any other type of health insurance coverage or health coverage plan
- ☐ No insurance, uninsured

11. Which health services have you personally used in the past year? (Check all that apply)

- ☐ Primary care services (e.g. annual physical exam)
- ☐ Community health center services (i.e. Clinic)
- ☐ Emergency services (i.e. Emergency room at a hospital)
- ☐ Urgent care
- ☐ OB/GYN services or other women's health services (e.g., for reproductive health, breast health, pelvic health)
- ☐ Cancer screenings (e.g. skin, mammograms, prostate exam)
- ☐ Cancer care or treatment
- ☐ Outpatient services such as blood work or radiology (e.g., X-rays, MRIs)
- ☐ Home health care
- ☐ Mental health care
- ☐ Alcohol/substance abuse treatment
- ☐ Tele-health or tele-medicine services (i.e. health services or consultations delivered via remote video link)
- ☐ Did not use health services in the past year

12. What is your MAIN SOURCE of medical care? (Please check one.)

- ☐ Private doctor's office or group practice
- ☐ Community health center (i.e. Clinic)
- ☐ Emergency Room at a hospital
- ☐ Walk-in medical clinic/urgent care center
- ☐ Free medical program
- ☐ Veteran's Administration facility
- ☐ Tele-health or tele-medicine services (i.e. health services or consultations delivered via remote video link)
- ☐ Do not have a main source of medical care
- ☐ Other (please specify): _____

13. Have you ever used an online patient portal (like Princeton HealthConnect) to securely access your own or a family member's medical record, lab or radiology reports, medication lists, or other information about health care services received?

- ☐ Yes
- ☐ No
- ☐ Don't know/Not sure

14. Have you ever used your mobile device (e.g., smartphone) to access health care for yourself or a family member, for example by video-conferencing or virtually chatting with your health care provider?

- ☐ Yes (GO TO Q16)
- ☐ No
- ☐ Don't know/Not sure

15. (IF YOU ANSWERED "YES" IN Q14, SKIP TO Q16) Would you be interested in accessing health care for yourself or a family member through your mobile device or smartphone (for example, video-conferencing or virtually chatting with your health care provider)?

- ☐ Yes
- ☐ No

16. Of the following sources, which are your 3 MAIN SOURCES of health information? (Please check 3)

- ☐ Doctor, nurse or other health provider
- ☐ Pharmacy
- ☐ Family members
- ☐ Friends
- ☐ Neighbors
- ☐ School
- ☐ Religious or spiritual advisor
- ☐ Employer
- ☐ Library
- ☐ Television
- ☐ Local newspaper
- ☐ Radio
- ☐ Magazine
- ☐ Websites
- ☐ Healthcare apps on mobile devices (e.g., smartphones)
- ☐ Social media
- ☐ Other (please specify): _____

Demographic Information

These few last questions are so we can see the range of people who will be answering this survey. Like your other answers, these answers will remain anonymous.

17. What category best describes your age?

- ☐ Under 18 years old
- ☐ 18-29 years old
- ☐ 30-39 years old
- ☐ 40-49 years old
- ☐ 50-64 years old
- ☐ 65-74 years old
- ☐ 75 years old or older

18. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Gender neutral
- ☐ Other

19. How would you describe your ethnic/racial background? (Please check all that apply.)

- ☐ African American/Black
- ☐ East Asian/Pacific Islander (e.g., Chinese, Filipino, Vietnamese, Korean)
- ☐ South Asian (e.g., Indian, Bangladeshi)
- ☐ Caucasian/White
- ☐ Hispanic/Latino(a)
- ☐ Middle Eastern
- ☐ American Indian/Native American
- ☐ Other (please specify): _____

20. What is the primary language you speak at home?

- ☐ English
- ☐ Spanish
- ☐ Chinese
- ☐ Tagalog/Filipino
- ☐ Gujarati
- ☐ Hindi
- ☐ Telugu
- ☐ Nepali/Marathi/Konkani
- ☐ Polish
- ☐ Urdu
- ☐ Arabic
- ☐ Korean
- ☐ Russian
- ☐ Other (please specify): _____

21. What is the highest level of education that you have completed?

- ☐ Primary or middle school
- ☐ Some high school
- ☐ High school graduate or GED
- ☐ Some college
- ☐ Associate or technical degree/certification
- ☐ College graduate
- ☐ Graduate or professional degree

22. Are you the parent of a child under the age of 18?

- ☐ Yes
- ☐ No

APPENDIX D: 2018 Community Health Needs Assessment Survey Results

	Overall (n = 1,037)	Mercer County (n = 494)	Middlesex County (n = 309)	Somerset County (n = 234)
In which county do you live or work?	100.0%	47.6%	29.8%	22.6%

Table 1. COMMUNITY HEALTH

3. In general, how would you describe the health of the following:				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Community in which you live				
Excellent	8.9%	10.5%	8.22%	8.9%
Very good	45.5%	46.2%	40.8%	45.5%
Good	37.9%	37%	42.1%	37.9%
Fair	6.9%	5.5%	7.9%	6.9%
Poor	0.8%	0.8%	1.0%	0.8%
Community in which you work, volunteer, or go to school				
Excellent	9.3%	9.5%	9.8%	8.2%
Very good	43.6%	45.0%	38.7%	47.0%
Good	38.6%	36.6%	43.6%	36.1%
Fair	7.1%	7.1%	7.3%	6.8%
Poor	1.5%	1.8%	0.7%	1.8%
4. TOP 5 HEALTH ISSUES that have the biggest impact on you or your family personally and the community in which you live				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Access to health care (transportation, health insurance, cost, etc.)				
You/Your family	32.9%	31.2%	36.7%	34.5%
Community where you live	40.5%	44.3%	37.2%	39.9%
Access to health care services due to location, hours of operation, transportation, or availability of needed services.				
You/Your family	33.6%	33.4%	38.1%	31.0%
Community where you live	33.8%	35.9%	33.0%	32.7%
Aging health concerns (e.g. Alzheimer's, dementia)				
You/Your family	45.1%	43.5%	46.3%	51.2%
Community where you live	39.2%	40.9%	43.1%	33.9%
Asthma				
You/Your family	14.5%	15.0%	11.9%	17.9%
Community where you live	11.4%	11.7%	11.5%	11.9%

Cancer				
You/Your family	31.4%	31.5%	31.7%	33.9%
Community where you live	30.5%	27.6%	34.9%	33.9%
Caregiving (e.g. elder care, child care)				
You/Your family	31.2%	29.8%	32.1%	35.7%
Community where you live	35.8%	35.9%	38.1%	35.7%
Children's health concerns				
You/Your family	14.3%	13.4%	15.6%	16.1%
Community where you live	20.8%	24.2%	16.5%	20.8%
Dental and oral health				
You/Your family	37.0%	34.3%	44.0%	36.9%
Community where you live	17.5%	17.3%	22.0%	13.7%
Drug/alcohol abuse				
You/Your family	7.6%	5.8%	10.1%	8.9%
Community where you live	33.4%	31.8%	34.4%	38.7%
Infectious/contagious disease (e.g. tuberculosis, pertussis, pneumonia, flu)				
You/Your family	12.2%	11.1%	14.7%	12.5%
Community where you live	16.7%	17.5%	17.9%	14.9%
Injuries (e.g. car accidents, falls, concussion)				
You/Your family	22.1%	21.2%	26.6%	20.2%
Community where you live	21.2%	17.3%	27.5%	32.6%
Interpersonal violence (e.g. domestic violence, sexual violence, bullying)				
You/Your family	2.9%	1.4%	4.1%	4.8%
Community where you live	16.8%	16.7%	16.1%	19.0%
LGBTQ health concerns				
You/Your family	2.5%	2.5%	3.7%	1.2%
Community where you live	13.2%	13.9%	13.8%	11.3%
Mental health issues (e.g. anxiety, depression, suicide)				
You/Your family	28.7%	26.5%	32.6%	31.0%
Community where you live	40.3%	40.1%	41.7%	41.7%
Musculoskeletal issues (e.g. joint pain, arthritis)				
You/Your family	48.3%	44.6%	53.7%	53.6%
Community where you live	22.9%	20.3%	31.2%	19.6%
Neuroscience issues (e.g. epilepsy, seizures)				
You/Your family	8.2%	7.2%	9.6%	8.9%

Community where you live	10.4%	10.6%	10.6%	10.7%
Overweight or obesity				
You/Your family	38.6%	35.4%	45.9%	39.3%
Community where you live	35.8%	39.0%	34.4%	33.9%
Sexually transmitted infections (e.g. HIV/AIDS, chlamydia, gonorrhea)				
You/Your family	2.6%	2.8%	3.7%	1.2%
Community where you live	11.2%	9.7%	14.2%	11.3%
Teen Pregnancy				
You/Your family	1.6%	2.2%	1.4%	0.6%
Community where you live	12.6%	13.1%	12.4%	13.1%
Women's health issues (e.g. reproductive health, etc.)				
You/Your family	18.6%	17.3%	20.2%	20.8%
Community where you live	18.6%	20.1%	21.6%	13.1%
Chronic Disease (e.g. hypertension, diabetes, heart disease)*				
You/Your family	23.1%	22.2%	33.3%	0.0%
Community where you live	34.6%	44.4%	0.0%	50.0%
Violence in your community (e.g. street violence, gangs)*				
You/Your family	7.7%	11.1%	0.0%	0.0%
Community where you live	26.9%	27.8%	16.7%	50.0%
Other				
You/Your family	10.5%	11.1%	9.2%	11.9%
Community where you live	5.8%	6.4%	5.0%	6.0%

*These responses were only available in the hard copy version of the survey. Frequencies were calculated among hard copy respondents only (n = 26).

Table 215. ACCESS TO SERVICES

5. Please think about the different health care services in your community. How easy or hard is it to access the following health care services in your community?				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Primary care physicians				
Easy/Very Easy	70.4%	67.1%	71.9%	75.5%
Not Easy or Hard	19.5%	21.6%	18.0%	17.4%
Hard/Very Hard	10.1%	11.4%	10.1%	7.1%
Dental or oral health services				
Easy/Very Easy	72.5%	71.2%	71.8%	76.1%

Not Easy or Hard	18.2%	18.5%	21.1%	13.5%
Hard/Very Hard	9.3%	10.3%	7.0%	10.3%
Vision services				
Easy/Very Easy	73.1%	71.6%	71.4%	78.7%
Not Easy or Hard	18.6%	18.7%	21.2%	14.7%
Hard/Very Hard	8.3%	9.7%	7.4%	6.7%
Immunizations				
Easy/Very Easy	82.3%	80.9%	82.8%	84.8%
Not Easy or Hard	14.7%	17.2%	14.2%	9.7%
Hard/Very Hard	3.0%	1.9%	2.9%	5.5%
Outpatient services such as lab work or radiology (e.g. X-rays, MRIs)				
Easy/Very Easy	75.0%	72.6%	75.6%	79.4%
Not Easy or Hard	18.5%	21.4%	16.6%	14.8%
Hard/Very Hard	6.5%	6.0%	7.8%	5.8%
Hospital services				
Easy/Very Easy	75.7%	72.3%	78.3%	79.2%
Not Easy or Hard	18.6%	20.7%	16.5%	16.8%
Hard/Very Hard	5.8%	7.0%	5.2%	4.0%
Urgent care services				
Easy/Very Easy	67.1%	55.5%	73.3%	73.9%
Not Easy or Hard	24.0%	27.0%	21.4%	17.6%
Hard/Very Hard	8.9%	10.6%	5.3%	8.5%
Emergency department services				
Easy/Very Easy	74.4%	74.2%	75.0%	73.9%
Not Easy or Hard	18.7%	18.5%	17.2%	20.9%
Hard/Very Hard	7.0%	7.3%	7.8%	5.2%
Cancer screening				
Easy/Very Easy	61.0%	57.3%	62.0%	67.6%
Not Easy or Hard	30.1%	36.0%	25.9%	23.1%
Hard/Very Hard	8.9%	6.7%	12.0%	9.3%
Cancer care/treatment				
Easy/Very Easy	55.9%	53.6%	55.1%	62.5%
Not Easy or Hard	29.7%	30.9%	29.0%	28.1%
Hard/Very Hard	14.3%	15.5%	15.9%	9.4%

Occupational therapy				
Easy/Very Easy	58.1%	49.1%	67.2%	65.3%
Not Easy or Hard	29.7%	37.7%	25.5%	17.9%
Hard/Very Hard	12.2%	13.2%	7.3%	16.8%
Physical therapy				
Easy/Very Easy	69.9%	64.3%	75.6%	73.8%
Not Easy or Hard	22.2%	26.7%	18.1%	18.4%
Hard/Very Hard	7.9%	9.0%	6.2%	7.8%
Specialty care (e.g. gastroenterologist, cardiologist, endocrinologist, nephrologist, neurologist, etc.)				
Easy/Very Easy	62.4%	60.1%	65.0%	63.4%
Not Easy or Hard	25.0%	27.6%	21.8%	23.9%
Hard/Very Hard	12.6%	12.3%	13.1%	12.7%
Health or medical services for children or adolescents (under 18 years)				
Easy/Very Easy	67.7%	66.0%	68.8%	70.0%
Not Easy or Hard	23.7%	24.6%	22.4%	23.3%
Hard/Very Hard	8.6%	9.4%	8.8%	6.7%
Health or medical services for women (e.g. reproductive health, pregnancy, breast health, pelvic health)				
Easy/Very Easy	63.3%	58.8%	66.9%	68.3%
Not Easy or Hard	27.2%	31.4%	23.8%	22.8%
Hard/Very Hard	9.5%	9.9%	9.4%	8.9%
Health or medical services for seniors (age 65+)				
Easy/Very Easy	57.6%	51.6%	66.3%	57.8%
Not Easy or Hard	27.6%	30.3%	24.1%	26.6%
Hard/Very Hard	14.8%	18.0%	9.6%	15.6%
Counseling/mental health care for children or adolescents (under 18 years)				
Easy/Very Easy	30.7%	28.0%	34.1%	32.4%
Not Easy or Hard	29.2%	31.2%	28.6%	25.4%
Hard/Very Hard	40.1%	40.8%	37.4%	42.3%
Counseling/mental health care for adults (age 18+)				
Easy/Very Easy	34.1%	32.5%	35.8%	35.6%
Not Easy or Hard	31.8%	34.4%	34.1%	21.8%
Hard/Very Hard	34.1%	33.0%	30.1%	42.5%
Alcohol or drug treatment or prevention services for youth (under 18 years)				
Easy/Very Easy	31.0%	27.1%	35.2%	32.8%

Not Easy or Hard	31.7%	35.7%	30.7%	25.0%
Hard/Very Hard	37.4%	37.2%	34.1%	42.2%
Alcohol or drug treatment or prevention services for adults (age 18+)				
Easy/Very Easy	33.9%	28.9%	39.5%	36.6%
Not Easy or Hard	33.6%	37.0%	30.2%	31.0%
Hard/Very Hard	32.5%	34.1%	30.2%	32.4%
6. Please think about the different health-related programs and services in your community. How easy or hard is it to access the following health-related programs and services in your community?				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Home health care services				
Easy/Very Easy	43.4%	39.1%	47.1%	47.9%
Not Easy or Hard	29.4%	27.9%	28.1%	34.0%
Hard/Very Hard	27.2%	33.0%	24.8%	18.1%
Programs to help people quit smoking				
Easy/Very Easy	41.4%	40.0%	38.0%	49.2%
Not Easy or Hard	32.2%	30.4%	36.7%	30.5%
Hard/Very Hard	26.4%	29.6%	25.3%	20.3%
Weight management support				
Easy/Very Easy	41.9%	39.9%	42.1%	45.7%
Not Easy or Hard	30.0%	27.1%	31.6%	33.7%
Hard/Very Hard	28.1%	33.0%	26.3%	20.7%
Community health education programs or services				
Easy/Very Easy	53.8%	49.6%	58.5%	56.1%
Not Easy or Hard	32.3%	35.7%	27.7%	31.6%
Hard/Very Hard	13.9%	14.8%	13.8%	12.3%
Domestic violence counseling services				
Easy/Very Easy	37.7%	34.5%	38.0%	44.2%
Not Easy or Hard	35.6%	36.2%	31.0%	40.4%
Hard/Very Hard	26.8%	29.3%	31.0%	15.4%
7. When trying to get medical care, how often have YOU PERSONALLY felt discriminated against based on any of the following characteristics:				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Your race or ethnicity				
Frequently	1.9%	1.5%	1.9%	2.5%

Sometimes	9.1%	9.3%	10.9%	6.5%
Never	89.0%	89.2%	87.2%	91.0%
Your cultural or religious background				
Frequently	1.4%	1.5%	1.4%	1.3%
Sometimes	5.4%	5.4%	7.6%	2.6%
Never	93.1%	93.1%	91.0%	96.1%
Your language				
Frequently	1.9%	2.1%	2.4%	0.7%
Sometimes	4.4%	3.6%	5.7%	4.5%
Never	93.7%	94.3%	91.9%	94.8%
Your age				
Frequently	2.1%	1.5%	2.4%	3.2%
Sometimes	17.9%	19.5%	17.1%	15.5%
Never	80.0%	79.0%	80.6%	81.3%
Your income				
Frequently	2.3%	1.3%	2.86%	3.3%
Sometimes	11.4%	11.7%	11.43%	7.7%
Never	86.3%	87.0%	85.71%	89.0%
Your body size				
Frequently	4.2%	3.5%	5.7%	2.6%
Sometimes	10.9%	9.4%	11.0%	11.6%
Never	84.9%	87.1%	83.3%	85.8%
Your sexual orientation				
Frequently	0.4%	0.6%	0.00%	1.9%
Sometimes	1.6%	1.2%	3.4%	0.00%
Never	98.0%	98.2%	96.6%	98.1%
Your gender or gender identity				
Frequently	1.2%	1.2%	1.0%	1.3%
Sometimes	6.3%	6.0%	5.7%	5.8%
Never	92.5%	92.8%	93.3%	92.9%
Your disability (if not applicable, select "Never")				
Frequently	2.2%	1.2%	3.4%	2.6%
Sometimes	4.9%	4.9%	6.2%	3.3%
Never	92.9%	93.9%	90.4%	94.1%

8. Have any of these issues made it difficult for you to get needed health services within the last two years? (Please check all that apply.)				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Lack of transportation	12.1%	13.8%	11.3%	7.6%
No provider available near me	11.5%	11.3%	13.3%	9.0%
Have no regular source of health care (primary care physician or clinic)	3.7%	3.4%	3.9%	3.5%
Don't know what types of services are available	13.9%	13.4%	13.8%	13.8%
Office not accepting new patients	24.6%	25.9%	25.6%	20.0%
Lack of evening or weekend services	32.2%	31.3%	36.5%	28.3%
Long wait for an appointment	45.8%	48.8%	42.9%	42.1%
Lack of specialists/specialty care services	13.1%	12.8%	12.8%	13.8%
Insurance problems/lack of coverage	18.5%	18.4%	16.8%	21.4%
Lack of providers who accept Medicaid	6.7%	7.2%	5.9%	6.9%
Cost of care (e.g., deductibles, co-pays)	25.8%	26.3%	24.1%	26.9%
Cost of prescription medications	24.6%	23.4%	24.6%	26.9%
Language problems/could not communicate with health provider or office staff	2.8%	3.8%	1.0%	2.1%
Unfriendly provider or office staff	20.2%	22.5%	19.2%	16.6%
Afraid to have health check-up	5.5%	5.9%	4.9%	5.5%
Afraid due to immigration status	1.2%	1.9%	0.00%	0.00%
Don't understand health information	1.0%	1.9%	0.5%	0.7%
Health information is not kept confidential	2.1%	1.6%	2.5%	2.8%
I have never experienced any difficulty in getting care	29.6%	26.6%	29.1%	37.2%

Table 3. COMMUNITY PRIORITIES

9. Please check whether you consider these issues to be low, medium, or high priority for future funding and resources in your community.				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Increasing transportation to area health/medical services				
Low Priority	23.0%	19.6%	21.0%	32.9%
Medium Priority	41.9%	41.8%	42.1%	41.8%
High Priority	35.1%	38.6%	36.9%	25.3%
Increasing the health/medical services that are close by and easy to get to				
Low Priority	25.4%	24.0%	25.9%	27.6%

Medium Priority	40.7%	38.8%	37.8%	48.3%
High Priority	34.0%	37.2%	36.3%	24.1%
Providing more language interpretation services				
Low Priority	49.1%	37.6%	60.3%	58.3%
Medium Priority	35.5%	42.4%	27.5%	31.7%
High Priority	15.4%	20.0%	12.2%	10.1%
Increasing the number of providers/staff that speak languages other than English				
Low Priority	49.8%	40.7%	56.6%	59.7%
Medium Priority	34.3%	38.3%	32.3%	28.8%
High Priority	15.9%	21.0%	11.1%	11.5%
Expanding programs or services designed to help patients navigate the health care system				
Low Priority	18.3%	16.0%	19.3%	21.8%
Medium Priority	40.9%	36.3%	41.7%	49.3%
High Priority	40.9%	47.7%	39.1%	28.9%
Increasing the number of oral health/dental providers in the community				
Low Priority	39.6%	36.1%	38.7%	48.3%
Medium Priority	40.6%	44.4%	37.2%	37.1%
High Priority	19.8%	19.5%	24.1%	14.7%
Providing more outpatients services such as for blood work or radiology (e.g. X-rays, MRIs)				
Low Priority	40.9%	41.2%	39.4%	42.4%
Medium Priority	38.4%	41.6%	34.7%	36.8%
High Priority	20.7%	17.2%	25.9%	20.8%
Providing more urgent care services				
Low Priority	34.5%	32.4%	32.5%	41.4%
Medium Priority	41.8%	41.8%	42.3%	41.4%
High Priority	23.7%	25.8%	25.3%	17.2%
Providing more counseling or mental health services				
Low Priority	21.2%	18.5%	23.2%	24.1%
Medium Priority	41.5%	41.6%	40.5%	42.8%
High Priority	37.3%	39.9%	36.3%	33.1%
Providing more alcohol or drug prevention and treatment services				
Low Priority	28.7%	24.4%	34.4%	30.0%
Medium Priority	38.6%	40.9%	32.3%	42.1%
High Priority	32.7%	34.7%	33.3%	27.9%

Expanding cancer screening, diagnostics, and treatment services				
Low Priority	22.8%	23.3%	19.6%	26.2%
Medium Priority	46.1%	46.2%	46.6%	45.4%
High Priority	31.0%	30.5%	33.9%	28.4%
Expanding specialty care services				
Low Priority	25.8%	25.6%	22.2%	31.2%
Medium Priority	48.3%	51.2%	49.7%	40.4%
High Priority	25.8%	23.2%	28.0%	28.4%
Expanding the health/medical services focused on seniors (65+)				
Low Priority	14.4%	13.2%	14.4%	17.0%
Medium Priority	36.8%	38.3%	33.7%	37.6%
High Priority	48.8%	48.5%	51.9%	45.4%
Increasing the number of services to help the elderly stay in their homes				
Low Priority	11.0%	11.5%	8.5%	13.3%
Medium Priority	30.8%	29.3%	33.3%	30.8%
High Priority	58.2%	59.2%	58.2%	55.9%
Expanding the health/medical services focused on children and adolescents (under 18 years)				
Low Priority	31.8%	27.8%	34.4%	36.4%
Medium Priority	47.1%	46.9%	47.5%	47.1%
High Priority	21.1%	25.3%	18.0%	16.4%
Expanding the health/medical services focused on women's health issues (e.g., pregnancy, well-visits, pelvic health)				
Low Priority	27.1%	22.9%	26.9%	36.2%
Medium Priority	48.4%	48.8%	50.5%	44.7%
High Priority	24.5%	28.3%	22.6%	19.1%
Expanding the health/medical services available to low income individuals				
Low Priority	23.1%	18.0%	27.9%	27.7%
Medium Priority	35.9%	34.0%	37.2%	38.3%
High Priority	40.9%	48.0%	35.0%	34.0%
Expanding access to technology that can help me monitor and maintain my health (e.g., health apps for smartphones)				
Low Priority	31.1%	30.7%	28.0%	36.0%
Medium Priority	42.8%	44.4%	46.0%	35.3%
High Priority	26.1%	24.9%	25.9%	28.8%
Offering more programs or services focusing on physical activity and/or nutrition				
Low Priority	16.0%	14.9%	15.2%	19.6%

Medium Priority	41.7%	41.6%	40.8%	43.4%
High Priority	42.2%	43.6%	44.0%	37.1%
Offering more programs or services focusing on obesity/weight control				
Low Priority	18.2%	15.0%	20.3%	22.1%
Medium Priority	42.9%	45.6%	40.1%	41.4%
High Priority	38.8%	39.5%	39.6%	36.6%
Offering more programs or services focusing on prevention of chronic diseases like heart disease or diabetes				
Low Priority	15.9%	15.8%	14.8%	17.4%
Medium Priority	41.0%	40.4%	43.9%	38.2%
High Priority	43.2%	43.8%	41.3%	44.4%
Offering more programs or services focusing on wellness like meditation, yoga, acupuncture, or mindfulness				
Low Priority	22.6%	25.2%	17.3%	24.3%
Medium Priority	37.7%	36.7%	39.3%	37.5%
High Priority	39.7%	38.1%	43.5%	38.2%
Offering more programs or services to help people quit smoking				
Low Priority	34.1%	23.1%	35.2%	43.1%
Medium Priority	39.5%	33.0%	41.8%	32.1%
High Priority	26.4%	23.1%	23.1%	24.8%
Other (please specify)				
Low Priority	32.5%	31.0%	29.2%	41.2%
Medium Priority	21.7%	19.0%	25.0%	23.5%
High Priority	45.8%	50.0%	45.8%	35.3%

Table 4. HEALTH COVERAGE AND INFORMATION

10. Are you personally currently covered by any of the following types of health insurance or health coverage plans? (Check all that apply)				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Insurance through a current or former employer or union (yours or another family member's)	69.9%	68.1%	70.4%	73.8%
Insurance purchased directly from an insurance company (by you or another family member) including coverage purchased through a healthcare exchange or marketplace such as Healthcare.gov, otherwise called 'Obamacare'	9.9%	9.7%	7.9%	13.1%

Medicare, for people age 65 and older, or people with certain disabilities	39.4%	42.2%	35.5%	39.3%
Medicaid, Medical Assistance (MA), the Children's Health Insurance Program (CHIP) or any kind of state or government-sponsored assistance plan based on income or a disability. You may know this type of coverage as 'NJ Family Care'	3.7%	5.3%	1.5%	3.4%
Tricare or other military health care, including Veteran's Administration health care	1.9%	1.9%	1.5%	2.8%
Any other type of health insurance coverage or health coverage plan	7.6%	6.9%	7.4%	9.7%
No insurance, uninsured	1.2%	0.9%	1.0%	0.0%
11. Which health services have you personally used in the past year? (Check all that apply)				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Primary care services (e.g. annual physical exam)	92.8%	90.9%	93.6%	97.2%
Community health center services (i.e. Clinic)	5.5%	7.5%	4.9%	2.1%
Emergency services (i.e. Emergency room at a hospital)	27.2%	28.1%	29.6%	22.1%
Urgent care	24.3%	18.4%	31.0%	28.3%
OB/GYN services or other women's health services (e.g. for reproductive health, breast health, pelvic health)	42.5%	43.1%	40.4%	44.8%
Cancer screenings (e.g. skin, mammograms, prostate exam)	44.5%	44.4%	41.9%	49.7%
Cancer care or treatment	8.2%	9.1%	5.9%	9.7%
Outpatient services such as blood work or radiology (e.g. X-rays, MRIs)	67.9%	69.1%	70.4%	62.8%
Home health care	4.6%	5.3%	3.9%	4.1%
Mental health care	10.9%	11.9%	11.8%	7.6%
Alcohol/substance abuse treatment	0.6%	0.6%	0.5%	0.7%
Tele-health or tele-medicine services (i.e. health services or consultations delivered via remote video link)	2.7%	2.5%	3.9%	1.4%
Did not use health services in the past year	1.8%	3.1%	1.0%	0.0%
12. What is your MAIN SOURCE of medical care? (Please check one)				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Private doctor's office or group practice	92.2%	91.9%	90.8%	94.6%
Community health center (i.e. Clinic)	2.2%	3.2%	1.5%	0.7%
Emergency Room at a hospital	0.5%	0.3%	0.5%	0.7%
Walk-in medical clinic/urgent care center	2.9%	1.9%	4.6%	2.7%

Free medical program	0.0%	0.0%	0.0%	0.0%
Veteran's Administration facility	0.0%	0.0%	0.0%	0.0%
Tele-health or tele-medicine services (i.e. health services or consultations delivered via remote video link)	0.0%	0.0%	0.0%	0.0%
Do not have a main source of medical care	1.2%	1.9%	0.5%	0.7%
Other (please specify):	1.1%	0.7%	2.1%	0.7%
13. Have you ever used an online patient portal (like Princeton HealthConnect) to securely access your own or a family member's medical record, lab or radiology reports, medication lists, or other information about health care services received?				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Yes	69.4%	64.2%	78.8%	68.0%
No	27.4%	32.3%	18.2%	29.3%
Don't Know / Not Sure	3.2%	3.5%	3.0%	2.7%
14. Have you ever used your mobile device (e.g. smartphone) to access health care for yourself or a family member, for example by video-conferencing or virtually chatting with your health care provider?				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Yes	11.6%	10.8%	15.6%	8.0%
No	86.9%	88.3%	81.4%	91.3%
Don't Know / Not Sure	1.5%	1.0%	3.0%	0.7%
15. Would you be interested in accessing health care for yourself or a family member through your mobile device or smartphone (for example, video-conferencing or virtually chatting with your health care provider)? (among respondents who answered "No" or "Don't Know/Not Sure" in Q14)				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Yes	50.6%	51.5%	34.4%	47.8%
No	49.4%	48.5%	65.6%	52.2%
16. Of the following sources, which are your 3 MAIN SOURCES of health information? (Please check 3.)				
	Overall	**Mercer County**	**Middlesex County**	**Somerset County**
Doctor, nurse or other health provider	92.5%	92.5%	90.2%	97.2%
Pharmacy	35.8%	34.4%	35.0%	40.7%
Family members	21.6%	19.4%	20.2%	29.0%
Friends	12.1%	10.9%	12.3%	14.5%
Neighbors	1.2%	1.9%	1.0%	0.0%
School	0.8%	1.6%	0.0%	0.0%
Religious or spiritual advisor	0.0%	0.0%	0.0%	0.0%
Employer	7.6%	9.7%	6.9%	4.1%
Library	3.1%	4.4%	3.0%	0.7%
Television	9.1%	7.8%	11.8%	8.3%

Local newspaper	3.7%	4.4%	3.0%	3.5%
Radio	0.9%	0.9%	1.0%	0.7%
Magazine	6.4%	5.6%	7.4%	6.9%
Websites	66.1%	66.6%	68.5%	62.8%
Healthcare apps on mobile devices (e.g. smartphones)	11.3%	10.9%	14.3%	8.3%
Social Media	6.3%	6.6%	6.9%	4.8%
Other (please specify)	8.2%	9.7%	4.9%	9.7%