

November 13, 2015

# Princeton HealthCare System 2015 Community Health Needs Assessment

Final Report



Princeton HealthCare System



### **Table of Contents**

EXECUTIVE SUMMARY	1
BACKGROUND  Overview of the Princeton HealthCare System (PHCS)	9 9 9
METHODS  Social Determinants of Health Framework	11 12 13
Qualitative Data: Focus Groups and Interviews Limitations	14
COMMUNITY SOCIAL AND ECONOMIC CONTEXT  Demographics Income, Poverty, and Employment Education Housing and Transportation Crime and Safety Environment	1 11 13
COMMUNITY HEALTH OUTCOMES AND BEHAVIORS	19
Overall Community Health Status and Health Concerns	19
Mortality and Morbidity	21
Chronic Diseases and Related Risk Factors  Healthy Eating and Physical Activity  Overweight and Obesity  Heart Disease  Diabetes  Cancer  Asthma	24 27 28 29
Behavioral Health  Mental Health  Substance Use and Abuse	35
Immunization and STIs	48
Maternal and Child Health	50
Oral Health	51

Elder Health	52
HEALTH CARE ACCESS AND UTILIZATION  Current Emergent and Non-emergent Healthcare Services  Screening and Other Health-Related Services  Provider Availability  Access to Health Care Services  Obtaining Health Insurance  Provider Availability and Service Coverage  Affordability of Health Care Services  Transportation  Influence of the Affordable Care Act on Healthcare Access	53 56 56 60 61 62
STRENGTHS AND COMMUNITY RESOURCES TO POTENTIALLY ADDRESS IDENTIFIED NEEDS  Location  Human and Economic Resources  Strong Health Care and Social Service Infrastructure  Educated Residents and Excellent Schools	64 64 64
RESPONDENTS' VISION FOR THE FUTURE  Behavioral Health Services	66 67 68 68
KEY THEMES AND CONCLUSIONS	69
PRIORIZATION OF COMMUNITY HEALTH NEEDS	72
APPENDIX C: 2015 COMMUNITY HEALTH NEEDS ASSESSMENT SURVEY RESULTS	

## Princeton HealthCare System 2015 Community Health Needs Assessment

#### **EXECUTIVE SUMMARY**

#### Introduction

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. The Princeton HealthCare System (PHCS) engaged in a community health planning process to improve the health of residents in PHCS'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.

#### **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 6 focus groups with community residents and service providers and 13 interviews with community stakeholders. Focus groups and interviews were conducted with individuals from the three counties that comprise the PCHS service region, with individuals representing public health; seniors; PHCS staff and providers; EMS providers; social service, health care, and mental health providers; and the local government. The survey was administered online and disseminated through multiple channels to individuals who either live or work in Mercer, Middlesex, and Somerset Counties. A total of 1,308 people completed the survey.

#### **Key Findings**

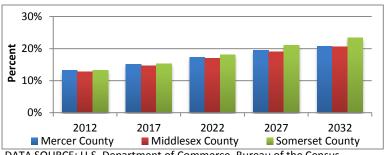
The following provides a brief overview of key findings that emerged from this assessment.

#### Community Social and Economic Context

Overall Population: In 2012, the total population of the three counties served by PHCS was over 1.5 million, about 17% of New Jersey's total population. The population has grown over the past fifteen years, with Somerset and Middlesex Counties experiencing a higher growth rate than Mercer County or the state (about 8%) between the 2000 and 2010 censuses. The population in all three counties is expected to continue to grow, with Somerset and Middlesex Counties expected to increase at a rate higher than Mercer County and the state.

Age Distribution: The age distribution for the region is similar to that of New Jersey; however, Somerset County has a slightly higher proportion of residents under the age of 18 than the other two counties and the state overall. Population projections indicate that the proportion of residents overall age 65 in the region is expected to increase substantially over the next

## Percent of Senior (65+ Years Old) Population, Current and Projected, 2010 to 2032

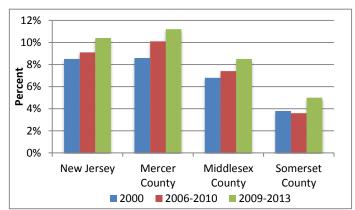


DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, Population Projections

decade, with Somerset County expected to experience the greatest increase. The proportion of residents under the age of 19 is expected to decline slightly in all three counties over the coming 20 years.

- Racial and Ethnic Diversity: Focus group and interview participants reported that the region is racially and ethnically diverse and see this as an important asset. Middlesex County is the most diverse of the three counties with the largest proportion of Asian (22.2%) and Hispanic (18.8%) residents. Mercer County has the highest proportion of black residents (19.5%) while Somerset has the highest proportion of white residents (61.3%). The proportion of residents from diverse racial and ethnic backgrounds is projected to continue to increase in the coming two decades.
- Income, Poverty, and **Employment:** The PHCS service region is largely affluent, with household incomes in each of the three counties exceeding the state median. However, the cost of living is very high, pricing some people out of the community. Residents also report that there are pockets of poverty. The poverty rate in Mercer County (11.2%) is the highest of the three counties and also higher than the state overall. Focus group members and interviewees expressed concern about income disparity in this affluent region, which they saw as

## Percent of Individuals Below Poverty, by State and County, 2000, 2006-2010 and 2009-2013



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census; 2000 Data from 2000 Census; 2006-2010 data from 2006-2010 American Community Survey 5-Year Estimates; 2009-2013 data from American Community Survey 5-Year Estimates.

• Educational Attainment: The quality of the schools was cited by many as a significant asset in the region. All three counties have a higher proportion of adult residents with a college degree or higher than the state; over half of Somerset County adults have a bachelor's degree or higher.

• Housing: As a generally affluent region, housing in the three counties is fairly expensive. Median

"Just because it is a nice town

cars." – Key Informant

doesn't mean people don't have

"Public transportation is difficult. If

you don't have a car or if you only

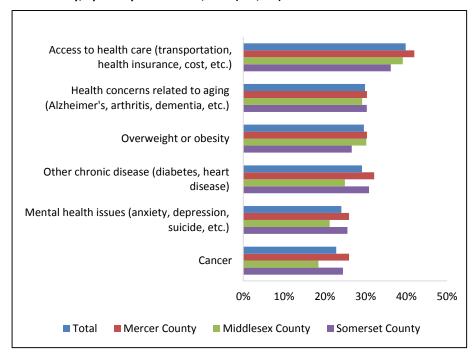
have one car, it's hard to get

- housing costs for monthly mortgages and rent exceed that of the state in Somerset County but are similar to the state in Mercer and Middlesex Counties.
- Transportation: Transportation was described as a substantial concern for the region. There are few public transportation options for transit within the region making access to health and other services more difficult for seniors and lower income residents.
- **Crime and Violence:** Overall, the region is relatively safe according to focus group members and interviewees. The overall crime rate, as well as violent and nonviolent crime, is higher in Mercer County than in the other two counties or the state overall.
- Environmental Quality: Quantitative data about air pollution indicate that the levels of air pollution are similar across the three counties and New Jersey overall, slightly over 11 micrograms per cubic meter.

Community Health Outcomes and Behaviors

Perceived health status and health needs. Data from the community health survey conducted for
this CHNA indicate that the majority of survey respondents in the three counties reported "very
good" or "excellent" health. Community survey respondents identified access to health care,
concerns related to aging, chronic disease, and obesity/ overweight as the top health issues for their
communities.

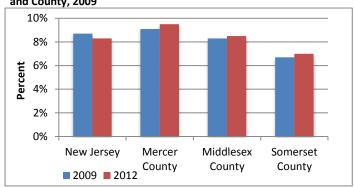
Top Health Issues Survey Respondents Perceived as Having the Biggest Impact on the Community, by County of Residence, 2015 (n=1,308)



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

- Overall Leading Causes of Death: Quantitative data indicate that the top three causes of mortality
  in the region are heart disease, cancer, and stroke. The overall age-adjusted death rate among the
  three counties was highest in Mercer County (690.4 per 100,000 population), a rate slightly higher
  than the death rate for the state overall. Somerset, with a death rate of 601.6 per 100,000
  population, had the lowest death rate of the three counties.
- Healthy Eating, Physical Activity, and Overweight/Obesity: Similar to patterns nationwide, issues around overweight and obesity particularly healthy eating and physical activity emerged as key health concerns for focus group and interview participants. Nearly one quarter of adults in Middlesex and Mercer counties was obese in 2013, a rate similar to the state overall. Over 60% of adults across the three counties and the state were overweight or obese. A comparison of obesity rates to those reported in the 2012 CHNA reveal little change in adult obesity rates. Quantitative data show that rates of obesity and overweight among New Jersey high school students have remained roughly the same between 2001 and 2013: about 14% of high school youth were overweight and 9% were obese in 2013.
- Chronic Disease: Chronic disease concerns in the region are cancer, heart disease, diabetes and asthma. Diabetes was mentioned as a substantial concern by focus group members and interviewees. A higher proportion of adults in Mercer (9.5%) and Middlesex Counties (8.5%) than in Somerset County (7%) reported that they had been diagnosed with diabetes. Rates increased slightly in all three counties between 2009 and 2012. Overall cancer incidence and mortality rates were highest in Mercer County and lowest in Middlesex County.
- Mental Health: Mental health was a major health concern raised by participants, especially rising rates of mental health issues among children and youth. Focus group and interview

Percent of Adults Who Have Doctor-Diagnosed Diabetes, State and County, 2009



DATA SOURCE: 2009: Centers for Disease Control, BRFSS Data. 2012: New Jersey Behavioral Risk Factor Survey. New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD).

- participants cited high stress jobs, financial concerns, a competitive atmosphere, excessive use of technology, and lack of downtime as contributors to mental health concerns among community members. Lack of mental health services as well as providers who do not accept insurances were identified barriers to addressing mental health concerns.
- Substance Use and Abuse: Substance use was cited as another challenge for the community and one that, according to respondents, has become more problematic in recent years. Opiate-based drugs, both prescription and heroin, and alcohol use were frequently mentioned as the biggest and most immediate concerns. Reported rates of current alcohol use (past 30 days) among middle school students in 2012 was lower in Mercer (7.0% of youth) and Somerset Counties (8.1%) than in Middlesex County (9.8%) or the state of New Jersey (9.0%). Tobacco use was not identified as a concern for the region. Arrest rates for alcohol and drug use were substantially higher in Mercer County than the other two counties.
- Communicable Diseases: Although communicable diseases were not discussed by focus group
  members and interviewees, quantitative data show that rates for reportable sexually transmitted
  infections (STIs) were substantially higher in Mercer County than in the other two counties or the
  state overall. Gonorrhea infection rates are over four times higher in Mercer County (168.7 per
  100,000 population) than in Middlesex (34.4 per 100,000 population) or Somerset Counties (27.5 per

- 100,000 population) and over twice as high as in the state overall (78.7 per 100,000 population). Chlamydia infection rates are over twice as high in Mercer County than Somerset County.
- Maternal and Child Health: Women's health concerns were discussed extensively among focus group members who were new parents, but far less so with other groups and interviewees. Concerns among these parents included the high cost of childcare and challenges with breastfeeding, infertility, and pelvic floor therapy. Timely access to prenatal care was identified as a concern by some respondents and quantitative data indicate that the proportion of women receiving prenatal care in the first trimester has increased in the state and in Middlesex and Somerset Counties between 2000 and 2011 but declined in Mercer County.
- Elder Health: The health concerns of seniors was mentioned frequently in focus groups and
  interviews and included social isolation, dementia and Alzheimer's, falls, and depression. The cost of
  health care was also an issue for some. Fortunately, residents reported, there are some excellent
  services in the region for seniors including senior housing, senior centers, and some transportation
  options. Needs include support for caregivers and more home health visits.

#### Health Care Access and Utilization

Resources and Use of Health Care Services:

Participants described health care resources in the region as a major strength, citing comprehensive services at hospitals and other resources throughout the community although there are fewer mental health and substance use services than needed. Looking ahead to an aging population and increasing health needs as well as changes in the health care provider workforce, data indicate that by 2020 more family physicians will be needed in all three counties.

"Learning what is covered or not—this is complicated. Getting people to talk with you is hard." – Focus Group Participant

"Cost of medication is a problem—my insurance doesn't pay for two of my medications." – Focus Group Participant

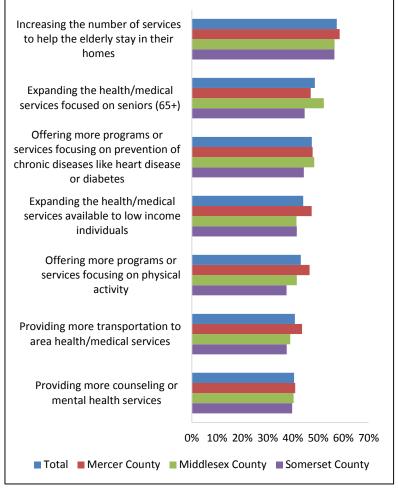
Challenges in Accessing Health Care Services: When asked about access to health care services,
participants cited challenges to obtaining health insurance, provider availability and service coverage,
cost of health care, transportation, and language access. Gaps in mental health care and affordability
of mental health services in the region emerged as major concerns cited by participants. While focus
group members and interviewees report that the Affordable Care Act has helped people to gain
insurance coverage, patients' lack of understanding about their coverage and how to effectively use
health insurance are current challenges.

#### Community Members' Perceptions of What is Needed

- Behavioral Health Services: Although the region has many mental health providers, many were
  reported to not accept Medicaid or new marketplace insurances, substantially limiting access to
  care. There is also a shortage of services for children and youth, in particular, in-patient beds for
  children. Suggestions also included doing more to educate the community and primary care
  providers and others like police and teachers about mental health and substance use issues. Several
  also suggested that mental health and substance use screenings be incorporated into health fairs
  and other community-based screening programs.
- Healthy Living and Disease Prevention: The need for patient education about healthy living was
  identified by a number of focus group members and interviewees. Suggested topics for these types
  of sessions included diabetes, wellness, and nutrition and healthy food preparation. Partnerships
  with community-based organizations and programs in other languages were seen as critical to
  reaching underserved residents. More environmental and systems-level work, including policy
  change, to improve the built environment was also suggested.

- Services for Seniors: Residents identified a need for more services for seniors including support groups, help with home care, and more education and support for caregivers. Transportation for seniors, especially for medical appointments, was also mentioned as needed.
- Enhanced Health Services and Healthcare Follow-up: Several respondents expressed the need for enhanced health services, most importantly more providers who accept Marketplace insurances and Medicaid and Medicare. Several focus group members and interviewees also believed that there was a greater need for homecare services as more surgeries, such as joint replacements, become outpatient services.
- Enhanced Collaboration and Deeper Reach into
   Communities: Although not a prominent theme, a few community organizations spoke about a desire for greater collaboration across the many

Issues Considered High Priority by Survey Respondents for Future Funding and Resources, by County of Residence, 2015 (n=1,308)



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

health and human service organizations that work in the three-county region.

- Increased Language Access for Non-English Speakers: Residents, especially those who are from the immigrant community or work with them, stated that more services to enhance language access for non-English speakers was needed. This includes interpreters, more bi-lingual providers, and more education programs for Spanish speakers.
- **Health Navigation Support**: Given the challenges in understanding and navigating the health insurance and health care systems especially with the implementation of the Affordable Care Act (ACA), several respondents suggested that more support be provided to residents around this. Suggestions included a strong navigator model to help people connect with the system.

#### Community Strengths and Resources

• Location: The three county region is located close to two very large urban areas, Philadelphia and New York City, as well as a large number of multinational corporations that contribute substantially to economic and cultural vitality of the region. The region also has many green spaces and amenities such as parks, trails, playgrounds, and game fields.

- Human and Economic Resources: The region's population is largely affluent and educated, although some groups struggle. Focus group members and interviewees reported that residents are largely committed to their communities and can be counted on to help out. Volunteerism among residents was reported to be high.
- Strong Health Care and Social Service Infrastructure: The region is known for its excellent health care facilities, including acute care hospitals and a wide range of specialty and tertiary providers. Residents reported that they have access to a range of community-based health programming, such as health fairs and screenings, as well as community wellness activities. The region also has a variety of social service organizations that work to meet the needs of local residents.
- Educated Residents and Excellent Schools: Schools were reported to be a tremendous asset and one of the reasons young families move to the region. Residents in the region tend to be more educated than in other parts of the state and have a strong "pro education" mindset and access to high-quality universities and colleges.

#### **Key Themes and Conclusions**

- While Middlesex and Somerset Counties compare favorably to the state on most measures of social and economic well-being and health, Mercer County faces some challenges. Data show that Middlesex and Somerset County residents compare favorably to the rest of the state on measures of the social determinants of health. Residents in Mercer County, by contrast, have higher rates of poverty and crime and lower rates of high school graduation than either of the other two counties and the state overall. These differences translate into differences in healthcare access and health outcomes as well. Mercer County has higher overall death rates, higher rates of doctor-diagnosed diabetes, a higher rate of asthma-related ED visits, a higher teen birthrate, higher rates of gonorrhea and chlamydia infection, and fewer women accessing prenatal care in the first trimester than the other two counties and the state overall.
- Although the region, overall, is relatively affluent, there are pockets of poverty, and some
  residents face economic challenges which can affect health. Poverty rates in Mercer County in
  2009-2013 were over twice as high as in Somerset County. Many more families fall into the
  category of "working poor." Rising income disparity in the region, as well as the high cost of living,
  were identified as concerns in focus groups and interviews. Economic constraints mean some
  residents face difficulty accessing transportation and meeting healthcare costs.
- As across the country, the three-county region will experience a growth in the number of senior residents in the coming years which will have substantial implications for the health, social service, and transportation infrastructure. The needs of seniors were mentioned frequently in conversations with focus group members and interviewees and health concerns related to aging were identified as a top health concern in the community by community survey respondents. Although excellent services for seniors were reported to currently exist, respondents saw a growing need for home health aides, support for caregivers, behavioral health services for seniors, and a more robust public transportation infrastructure.
- Behavioral health was identified as a key concern in the region today, as it was in 2012. Rising rates of mental health concerns and substance use issues are attributed to stress and modern lifestyles. Treatment admissions data show that admissions for treatment due to opiates/heroin have increased substantially in the region between 2010 and 2014. Stigma about mental illness and substance use was identified as a substantial barrier to identifying behavioral health concerns and seeking treatment. Additional barriers cited included lack of providers, particularly those willing to accept insurances or Medicaid and Medicare, and lack of awareness about behavioral health issues. Residents identified a need for more services including prevention, treatment, and education, including education of primary care providers and dentists about prescription drugs.

- Chronic diseases and related lifestyle behaviors were viewed as important community health issues. Nearly one quarter of adults in Middlesex and Mercer counties were obese in 2013, a rate similar to the state overall and little changed since the data reported in the 2012 CHNA. Diabetes was a concern among residents and quantitative data indicate that rates have increased slightly in the three counties in recent years. Rates were reported to be higher and rising among minority populations in the region, especially new immigrants. Systems and environmental change such as more sidewalks, better access to transportation, and easier access to low-cost fresh fruits and vegetables—are important for sustainable change. Assessment respondents also suggested having more patient education, including diabetes education, wellness education, and nutrition and healthy food preparation classes as well as more screenings, were identified by a number of focus group members and interviewees. Partnership with community based organizations was seen as critical to reaching underserved residents.
- The three county region has substantial health care assets, but access is a challenge for some residents. Residents reported that there are many healthcare services in the area, including primary care and specialty services. However, for some residents, especially lower income and undocumented residents, barriers exist. These include difficulty obtaining health insurance or lack of sufficient insurance coverage, high health care costs, language accessibility, and transportation. Although the Affordable Care Act (ACA) was reported to have increased access to health insurance for many, patients' lack of understanding about what is covered by different insurance products and how to effectively use health insurance remains a challenge that needs to be addressed to ensure access to health care and improved health.

#### **Prioritization of Needs**

In October 2015, HRiA led a facilitated conversation with Princeton HealthCare System's Medical Advisory Panel (MAP). This conversation included a presentation of the priorities identified by the community health needs assessment (CHNA), including the magnitude and severity of these issues and their impact on priority populations. The session including mapping current and emerging programs and initiatives against these needs. The MAP determined that all of the community needs identified in the CHNA were being addressed by the hospital and would be included in the Strategic Implementation Plan 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

All areas highlighted by the CHNA are being addressed by the 2015-2017 Strategic Implementation Plan.

## Princeton HealthCare System 2015 Community Health Needs Assessment

#### **BACKGROUND**

#### Overview of the Princeton HealthCare System (PHCS)

As one of the most comprehensive healthcare systems in New Jersey, Princeton HealthCare System (PHCS) provides a continuum of care including acute care hospital services, behavioral healthcare, acute rehabilitation, skilled nursing, home care, hospice care, ambulatory surgery, and fitness and wellness services. Since May 2012, PHCS has been located in a state-of-the-art facility in Plainsboro Township. The University Medical Center of Princeton at Plainsboro (UMCPP) is a 231-single patient room facility. The Centers for Care at UMCPP feature single-site access to services focusing on such areas as cancer, cardiac and pulmonary care, critical care, emergency, imaging and outpatient laboratory services, maternal and newborn care, neuroscience, surgery, pediatric care, and eating disorders. UMCPP also maintains partnerships with The Children's Hospital of Philadelphia (CHOP) and with Penn Medicine. As its mission, UMCPP strives to bring together compassion, clinical expertise, and technology in providing outstanding care and value to the community.

As part of its commitment to the community, PHCS 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. PHCS 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.

#### Purpose and Scope of the PHCS Community Health Needs Assessment (CHNA)

#### Purpose and Scope of 2015 CHNA

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

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 PHCS 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 PHCS, 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 PHCS.

The CHNA process included three components: a review of existing social, economic, and health data about the three counties comprising PCHS' service area; a community health survey; 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.

#### **Summary of Previous CHNA**

PHCS's previous CNHA, conducted by HRiA in 2012, utilized a methodology similar to that used to develop this report. This comprehensive community needs assessment that used a collaborative approach and focused on Mercer, Middlesex, and Somerset Counties. Data from key informant interviews, focus groups, 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 2012 CHNA included health care access, chronic disease management, healthy eating and active living, maternal and child health services, obesity prevention, reproductive health, substance abuse treatment and prevention, and transportation. PHCS and its partners have developed and implemented a range of strategies to address these identified needs.

#### **Definition of Community Served**

PHCS'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, given the breadth of services provided by the hospital to patients in this region. 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.





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

#### **METHODS**

The following section details how the data for the Princeton HealthCare System (PHCS) 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. The beginning discussion of this section describes the larger social determinants of health framework which helped guide this overarching process.

#### **Social Determinants of Health Framework**

It is important to recognize that multiple of factors have an impact on health, and there is a dynamic relationship between real 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.

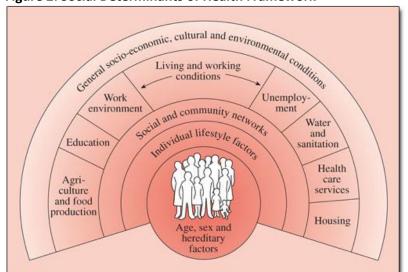


Figure 2: Social Determinants of Health Framework

Source: World Health Organization, Commission on Social Determinants of Health. (2005)

#### **Secondary Data**

The PHCS 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. Specifically, little current data about youth health behaviors is collected at the county level. 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 (2009-2013) estimates are used. Per Census recommendations, these five-year aggregates are used to yield a large enough sample size.

#### **Primary Data: Input from Community Representatives**

#### **Community Health Survey**

In order to gather quantitative data that were not provided by secondary sources and to understand public perceptions around health issues, a brief 20-item community survey was developed and administered online to residents within the three counties during five weeks from mid-May 2015 through mid-June 2015. The survey explored key health concerns of community residents as well as their primary priorities for services and programming. PHCS reviewed and provided feedback on the survey. The survey was disseminated online through the following channels: Princeton HealthCare System all-employee Listserv; Princeton HealthCare System community education database; Princeton HealthCare System fitness center membership; and South Brunswick Township School District employees.

A total of 1,308 respondents who live and/or work in Mercer, Middlesex, or Somerset County completed the survey. An additional 69 respondents who worked and lived in other counties completed the survey, but were not included in the survey analyses since they were not part of the geographic scope of this assessment.

Table 1 provides a breakdown of demographic characteristics of the survey respondents.

Table 1: Respondent Characteristics of the Mercer, Middlesex, and Somerset County Community Health Needs Assessment Survey from PHCS

	Total (N=1,308)
Age	
18-39 years old	9.7%
40-64 years old	53.9%
65 years or older	36.4%
Gender	
Male	26.6%
Female	73.2%
Transgender	0.2%
Race/Ethnicity	
White, non-Hispanic	80.3%
Black, non-Hispanic	5.2%
Hispanic, any race	2.1%
Asian, non-Hispanic	7.7%
Other race, non-Hispanic	2.0%
2 or more races	2.6%
Educational Attainment	
HS Diploma or Less	6.9%
Some College	9.7%
Associate's degree/Technical certification	7.6%
College graduate or more	75.8%

Place in which work or live		
Mercer	43.2%	
Middlesex	38.5%	
Somerset	18.3%	

Survey data were analyzed overall and by county. Analyses by other respondent characteristics are also presented where there are substantial differences among sub-groups.

#### **Qualitative Data: Focus Groups and Interviews**

From April – August 2015, focus groups and interviews were conducted with leaders from wide range of organizations in different sectors. In total, 6 focus groups and 13 key informant discussions were conducted with individuals from PHCS's service area. Focus groups were held with seniors, parents, EMTs, health officers, non-profit board members, and members of the Princeton Fitness & Wellness Center (PFWC) Medical Advisory Board. Thirteen key informant discussions were conducted with individuals including local public health officials, social service providers, health care providers, community leaders, and PHCS staff. A full list of the different sectors engaged during the focus group and interview process can be found in Appendix A.

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 6-12 participants, while interviews lasted approximately 30-60 minutes. Participants for the focus groups were recruited by PHCS, 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. 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, 2013 may be the most current year available for data, while 2009 or 2010 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 were largely not available, and in cases where such data were available, sample sizes were often small and must be interpreted with caution.

Likewise, secondary survey data based on self-reports, such as the Behavioral Risk Factor Surveillance Survey (BRFSS) and the New Jersey Student Health Survey, 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

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 PHCS, 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.

#### **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 Princeton HealthCare System (PHCS). 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**

The three counties of Mercer, Middlesex, and Somerset together comprise 1,511,327 people, about 17% of New Jersey's total population. As seen in Table 2, Middlesex County is the state's second most populous county with an estimated 817,026 persons. Somerset County, by contrast, is the 13<sup>th</sup> most populous of New Jersey's 21 counties.

Table 2: Total Population, by State and County, 2009-2013

Geography	Total Population	Population Density*
New Jersey	8,832,406	1.195.5
Mercer County	368,094	1,632.2
Middlesex County	817,026	2,621.6
Somerset County	326,207	1,071.7

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimates

The population in the region has grown over the past fifteen years, with both Somerset and Middlesex counties experiencing about an 8% population growth rate between the 2000 and 2010 censuses (Table 3). Mercer County grew at the same rate as the state (4.5%) over this time period. Population estimates of the past few years (2010 to 2014) show continuing higher population growth rates for both Middlesex and Somerset Counties when compared to Mercer County and the state.

Table 3: Population Change, by State and County, 2000 to 2014

	2000	2010	% Change 2000	% Change 2010
	Population	Population	to 2010	to 2014*
New Jersey	8,414,350	8,791,894	4.5%	1.7%
Mercer County	350,761	366,513	4.5%	1.1%
Middlesex County	750,162	809,858	8.0%	3.3%
Somerset County	297,490	323,444	8.7%	2.8%

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2000 Census and 2010 Census

The population in the three counties is expected to continue to grow in the coming decades and by 2032 the total population in the region is expected to reach 1,696,000 residents (Figure 3). The populations of Somerset and Middlesex counties are each expected to increase by about 14% between 2010 and 2032,

<sup>\*</sup>Persons per square mile, 2010 data.

<sup>\*</sup> April 1, 2010 to July 1, 2014 as reported in County QuickFacts, U.S. Department of Commerce, Bureau of the Census

exceeding the estimated growth rate for New Jersey overall (9.9%). Mercer County is expected to experience a slower population growth rate over this time period, about 8.3%.

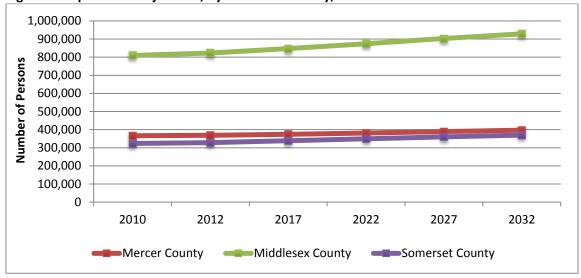


Figure 3: Population Projections, by State and County, 2010-2032

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, Population Projections

#### **Age Distribution**

"People stay for a long time." – Focus Group Participant

"My community is primarily young and middle age, working class." – Focus Group Participant

The population of the three counties largely reflects a population age distribution of the state. For every ten residents, approximately two residents are under 18 years old while one is 65 or over (Figure 4). Somerset had a slightly higher proportion of residents under the age of 18 (24.4%) than the other two counties, while Mercer and Middlesex Counties had larger proportions of 18-24 year olds, 11.0% and 10.1%, respectively. Focus group members and interviewees shared perceptions similar to the numbers: they described their communities as having a mix of age groups, with seniors, young families, and middle age persons. Several noted, however, that the population is aging, as evidenced by the many adult communities and senior centers in the region. Others reported that the high cost of living in the area, especially the cost of housing, was keeping young families from moving into the area and creating challenges for seniors to "age in place."

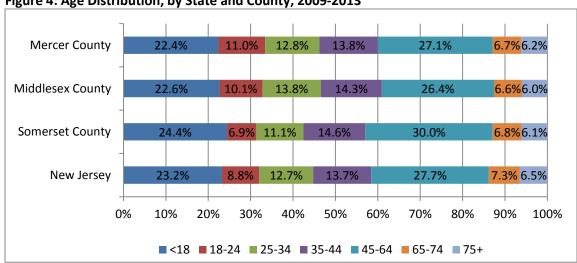


Figure 4: Age Distribution, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimates

The maps in Figure 5, Figure 6, and Figure 7 below illustrate the variation of age distribution within counties. For example, in Mercer County, the city of Trenton has a lower percentage of residents aged 65 and older, in comparison to all municipalities surrounding the city.

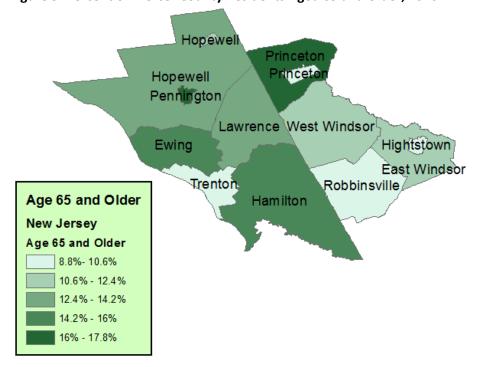


Figure 5: Percent of Mercer County Residents Aged 65 and Older, 2010

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

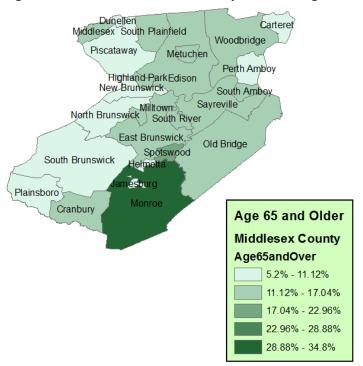


Figure 6: Percent of Middlesex County Residents Aged 65 and Older, 2010

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

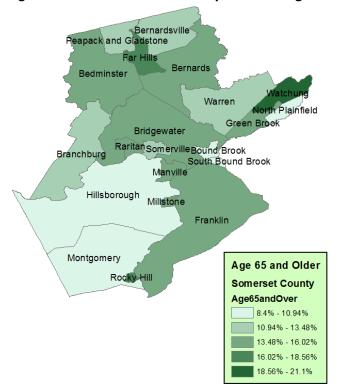


Figure 7: Percent of Mercer County Residents Aged 65 and Older, 2010

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

Population projections indicate that the proportion of residents over age 65 in the region is expected to increase substantially over the next decade (Figure 8). By 2032, over 20% of the population in each of the three counties is expected to be over age 65. Somerset County is expected to experience the greatest growth rate. The proportion of residents 75 years of age and older in Somerset County is expected to increase from about 6% of the population currently to about 10% by 2032.¹ The needs of seniors were mentioned frequently in conversations with focus group members and interviewees who noted challenges such as social isolation for seniors and caregiving for family members. As throughout the country, this demographic shift is expected to have considerable implications for social services, health care, and transportation infrastructures.

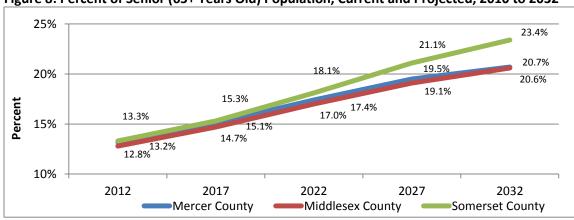


Figure 8: Percent of Senior (65+ Years Old) Population, Current and Projected, 2010 to 2032

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, Population Projections

In contrast, the proportion of the population under the age of 19 is expected to decline slightly between over the next 20 years, with the largest decline, from 26.5% of the population in 2012 to 22.4% of the population in 2032, in Somerset County (Figure 9).

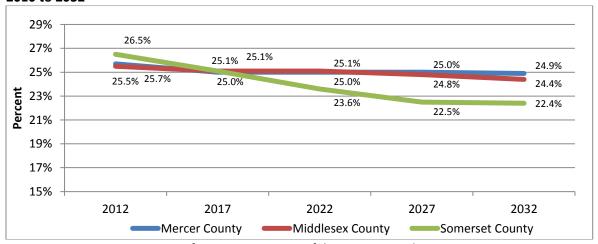


Figure 9: Percent of Youth (Ages 19 and Younger) Population, Current and Projected in County, 2010 to 2032

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, Population Projections

<sup>&</sup>lt;sup>1</sup> DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, Population Projections

#### Racial and Ethnic Diversity

"Overall it's very diverse: Spanish, Central American, African American, South Asian, Chinese, Dominican, Haitian." – Key Informant

"There is a lot of diversity. There are a lot of undocumented people." – Key Informant

Focus group members and interviewees reported that the region has substantial racial and ethnic diversity. They shared that the region, especially in Middlesex County, has many residents from Asia and South Asia, who were generally reported to be wealthier than those from other racial and ethnic groups. Participants noted that the Hispanic population is growing, especially in Princeton and Hightstown.

American Community Survey data confirm residents' perceptions that the region has substantial racial and ethnic diversity (Figure 10). Estimates from 2009-2013 show that Middlesex had the largest Asian population of the three counties, 22.2%, as well as the largest proportion of Hispanic residents, 18.8%. Mercer County had a substantially higher proportion of Black residents (19.5%) than either Middlesex or Somerset Counties. Somerset County had the largest proportion of white residents (61.3%).

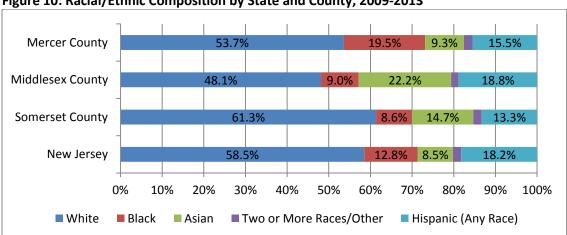


Figure 10: Racial/Ethnic Composition by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimates. White, Black, Asian, and Other include only individuals who identify as one race; Hispanic/Latino include individuals of any race.

As Figure 11 shows, the proportion of residents speaking a language other than English at home varies across the three counties. While a smaller proportion of residents in Mercer and Somerset Counties than in the state speak a language other than English at home, over 40% of Middlesex County residents reported that they speak a language other than English at home.

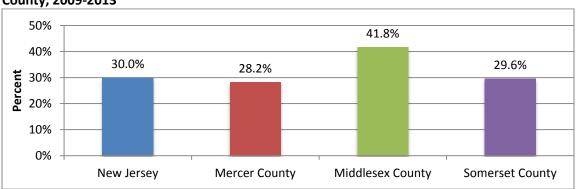


Figure 11: Percent of Population Who Speaks Language Other than English at Home, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimates

While focus group members and interviewees reported that diversity was a key asset to the region, they also noted challenges such as language and cultural barriers. In Mercer County, 13.5% of residents speak Spanish or Spanish Creole at home; in Middlesex County 15.7% do so and in Somerset County 11.6% do so. The percent of residents who speak other Indo-European languages at home is 8.6% in Mercer County, 15.1% in Middlesex County, and 10.0% in Somerset County, while the percent of residents who speak Asian and Pacific Island languages is 5.5%, 9.4%, and 7.1% in Mercer, Middlesex, and Somerset Counties, respectively<sup>2</sup>. Some health providers mentioned challenges in locating interpreters who speak the many languages of local residents. Other providers shared that culturally-informed perceptions about health and health care, was a barrier. As one health provider stated, "beliefs about health care are different in India. For example, diabetes is not considered a serious issue until you lose a leg. There is very little awareness around prevention." Several participants observed that in recent years, the region has seen an increase in the number of undocumented individuals, many of whom are employed in low-wage farming, hospitality, and manufacturing sectors. These individuals, in particular, face substantial barriers to accessing health and social services.

Population projections indicate that racial and ethnic diversity in the region is expected to continue to increase (Figure 12). The number of residents who are Hispanic (of any race) and Asian is expected to rise by over 20% across the three counties between 2010 and 2022; the number of Asian residents in Somerset County is expected to grow by over 30% over this time period. The proportion of non-Hispanic white residents is expected to decline over the coming years, across the three counties and in the state.

<sup>2</sup> U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimates

7

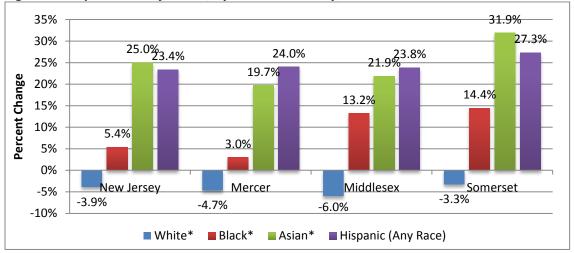


Figure 12: Population Projections, by State and County, 2010 to 2022

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, Population Projections; \*Non-Hispanic.

#### Income, Poverty, and Employment

"The community is affluent, well educated." – Focus Group Participant

"There are two subsets living in the Greater Princeton area: affluent, two-income families with college or higher degrees ...[and an]...underserved community that has little access to care and [faces] language barriers." – Key Informant

The three counties comprising PHCS's service area are very affluent but there are also communities where residents face economic challenges. Focus group members and interviewees described their communities as "upper middle class." They noted that the region has a substantial economic base: it is close to New York City and Philadelphia and is home to a number of multinational companies as well as prestigious education and health institutions. According to many respondents, the economy has improved since the economic downturn documented in the 2012 CHNA; however, the cost of living in the region remains high. One issue of concern that emerged from focus group discussions and interviews during this CHNA process was rising wealth disparity in the region.

#### Income

Focus group members and interviewees described the region as largely high, income although some families struggle. As one focus group member stated, "you have both extremes." As a wealthy region, residents reported that they enjoy substantial amenities such as nice parks and recreational areas, excellent health care resources, and cultural venues. However, some residents face economic challenges; participants spoke about the high cost of living in the area, including housing, childcare, and health care costs.

Economic data confirm the perceptions of affluence shared in focus groups and by interviewees. The median household income in each of the three counties was higher in 2013 than for New Jersey overall (Figure 13). Somerset County had the highest median household income, at almost \$100,000 annually, substantially higher than the other two counties and New Jersey overall. Somerset County is the eighth wealthiest county in the United States and the third wealthiest in New Jersey.

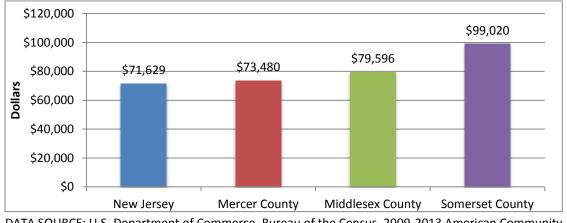


Figure 13: Median Household Income, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimates

#### Poverty

Data about poverty, like income data, show substantial differences across the three counties (Figure 14). In 2013, Mercer County had the highest poverty level, 11.2%, a rate higher than for New Jersey overall (10.4%). By contrast, the poverty rate in Somerset County (5%) was less than half of the rate for New Jersey and Mercer County. Data from 2000 through 2013 show that the proportion of residents in poverty has increased since 2000, across all three counties and in the state overall. Concerns about the very poor were shared in some focus groups and interviews. Again, undocumented workers were identified as particularly at risk for low wages and poverty.

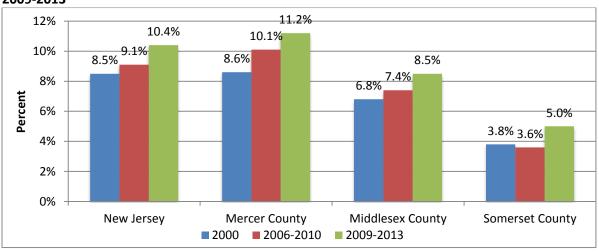


Figure 14: Percent of Individuals Below Poverty, by State and County, 2000, 2006-2010 and 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census; 2000 Data from 2000 Census; 2006-2010 data from 2006-2010 American Community Survey 5-Year Estimates; 2009-2013 data from American Community Survey 5-Year Estimates.

Rising income disparity, including a shrinking middle class and the struggles of working class families, was a theme discussed in several focus groups and by several interviewees. A recent analysis of income disparity across New Jersey found that many families in the three county region are struggling. According to this analysis, over 20% of the region's households in 2010 were defined as asset limited,

income constrained, employed (ALICE)<sup>3</sup> (Figure 15). Mercer County had the highest proportion of ALICE families, 30%. These economic challenges affect health, as those with lower incomes find it more difficult to buy healthy food or seek medical care, in addition to experiencing the stress associated with financial challenges.

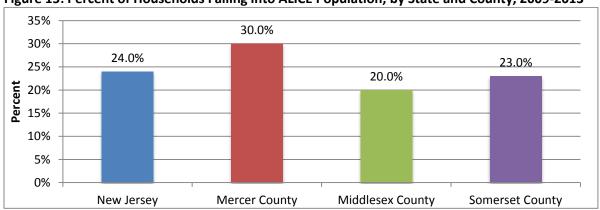


Figure 15: Percent of Households Falling into ALICE Population, by State and County, 2009-2013

DATA SOURCE: United Way of Northern New Jersey (Aug 2012). ALICE: Study of Financial Hardship in New Jersey. Asset Limited, Income Constrained, Employed (ALICE) households earn more than the official U.S. poverty level but less than the basic cost of living.

#### **Employment**

As throughout the country, the three counties experienced an increase in unemployment with the 2008 recession, at which time the unemployment rate reached between 7% and 9% (Figure 16). Even during this period, however, the unemployment rate in the three counties remained lower than the state overall, with Somerset County consistently experiencing the lowest unemployment rate among the counties. In more recent years, the unemployment rate has declined as the economy has again strengthened.

Although concerns about employment were not extensively discussed within focus groups and in interviews, several participants did express concerns about the economic future of those now entering the workforce. As one parent explained, "what my daughters earn scares me. Younger people - many are not making enough to live on their own. They are leaving with huge student debts no one even thinks about."

<sup>&</sup>lt;sup>3</sup> United Way of Northern New Jersey, Asset Limited, Income Constrained, Employed (ALICE) Study of Financial Hardship in New Jersey, August 2012. Accessed 8/12/15:

http://www.unitedwaynnj.org/documents/UWNNJ ALICE%20Report FINAL2012.pdf Asset Limited, Income Constrained, Employed (ALICE) households earn more than the official U.S. poverty level but less than the basic cost of living. This group has also been referred to as the "working poor."

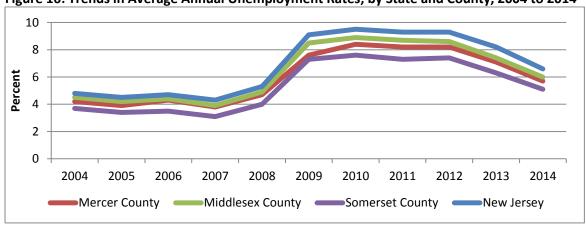


Figure 16: Trends in Average Annual Unemployment Rates, by State and County, 2004 to 2014

DATA SOURCE: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, 2004 to 2014

#### **Education**

"We have a well-educated patient population for the most part." – Key Informant

"A lot of families are coming into our town because of the school district. People come in from lower SES towns to move to the area just to get into the school district." – Focus Group Participant

Many focus group members and interviewees spoke about the high quality of education in the area noting excellent schools and access to several prestigious universities as well as local colleges. The quality of local schools and access to universities was seen as a substantial strength of the region according to residents and one of the primary reasons families move into the area. Members of a focus group of new parents described many opportunities available for parents of young children including library programs, playgroups sponsored by local organizations, and playgrounds. As one mother shared, "there is a big education focus—there are so many different programs you can take your kids to."

Figure 17 shows quantitative data about educational achievement among adults in the region ages 25 years and older. All three counties have a higher proportion of residents with a college degree or higher than the state of New Jersey. Somerset County has the highest proportion of well-educated residents: over half of Somerset County adults have a bachelor's degree or higher and less than 7% have not completed high school. Mercer County, by contrast, has a far higher proportion of adults who did not complete high school (12.7%), a rate higher than the state overall.

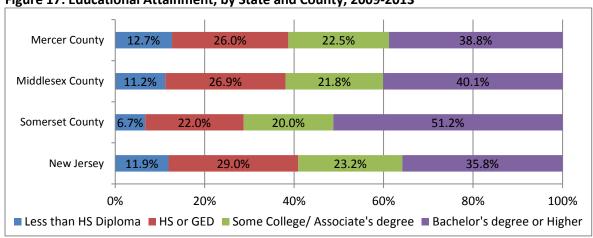


Figure 17: Educational Attainment, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimates

Student test data show that a higher proportion of students in Somerset County passed grade-level tests in 2013-2014 than students in Mercer and Middlesex Counties or the state (Table 4). Fewer students in all three grade levels in Mercer County than in the state passed these tests.

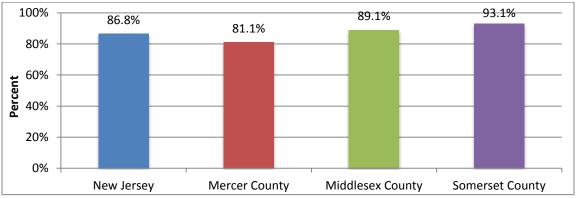
Table 4: Student Test Scores, by State and County, 2013-2014

County	% of Students Passing 4 <sup>th</sup> Grade Tests	% of Students Passing 8 <sup>th</sup> Grade Tests	% of Students Passing 11 <sup>th</sup> Grade Tests
New Jersey	74%	77%	86%
Mercer County	72%	75%	85%
Middlesex County	77%	78%	88%
Somerset County	83%	87%	92%

DATA SOURCE: NJ Department of Education as reported by Advocates for Children of New Jersey, Kids Count.

A higher proportion of high school students in Middlesex (89.1%) and Somerset Counties (93.1%) than in the state (86.8%) received their high school diplomas in four years during the school year 2011-2012 (Figure 18). A lower proportion of Mercer County high school students (81.1%) graduated on time.

Figure 18: Students Receiving their High School Diploma in Four Years, by State and County, 2011-2012



DATA SOURCE: EDFacts, U.S. Department of Education as reported by Community Commons, 2011-2012

While high educational achievement creates a vital local culture, some respondents also shared that the strong academic culture has a downside. Residents reported that the high rate of academic pressure and competitiveness among students and families in the region has contributed to high rates of anxiety and stress among young people in the community, which contributes to substance use and mental health concerns. As one key informant summed up, "academic success is huge--schools are ranked, kids are ranked. People feel they must 'keep up with the Joneses.'"

#### **Housing and Transportation**

#### **Housing**

"There are lots of knock-downs of existing houses to build mega-mansions." – Key Informant

"The [lower cost] housing here is terrible. There are basic health issues. There is mold, not enough heat, problems with smoke and carbon monoxide detectors...landlords know what they are doing and that the apartments are overcrowded and they make good money on this. Sometimes they do not follow safety requirements." – Key Informant

Lack of affordable housing and high housing costs were identified as substantial challenges in the region. The cost of housing is high, according to residents, and the recent economic downturn, although now slowly turning around, has priced many people out of the region. While some focus group members and interviewees reported that there is affordable housing, the quantity is insufficient to meet the demand. As one person shared, "youngsters can't come back to the neighborhood. They can't afford to buy here." As Figure 19 shows, while Mercer and Middlesex counties have median housing costs similar to New Jersey overall, Somerset County costs are higher.

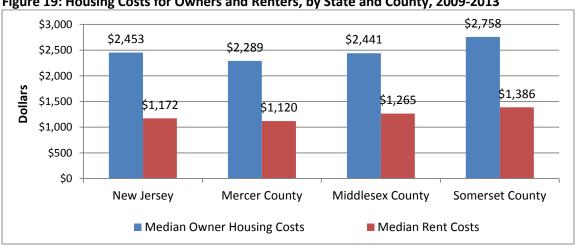


Figure 19: Housing Costs for Owners and Renters, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimate

Across the region and also the state, the proportion of residents whose housing costs are greater than 35% of household income is high; over 40% of renters contribute 35% or more of their income to housing costs, compared to about 30% for homeowners (Figure 20). The percent of residents who spend a substantial portion of their income on housing is slightly lower in the three counties than in the state overall.

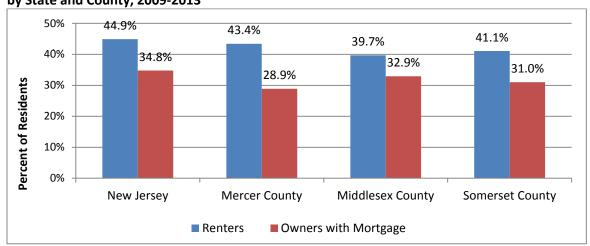


Figure 20: Percent of Residents Whose Housing Costs are 35% of more of Household Income, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimate

#### **Transportation**

"Just because it is a nice town doesn't mean people don't have cars." – Key Informant

"Public transportation is difficult. If you don't have a car or if you only have one car, it's hard to get around." – Focus Group Participant

Transportation was identified as a substantial area of concern for residents of the region during the 2012 CHNA process and continues to be in 2015. When asked about community challenges, transportation was the one most often mentioned by focus group members and interviewees. The same issues identified three years ago—lack of public transportation options, limitations on current systems, and barriers to realizing an active transportation culture—continue to be challenges today, especially for senior and low-income residents.

Residents reported that private cars are the prominent means of transportation in the three counties and those who do not have a car face substantial transportation challenges. While transportation options to Philadelphia and New York City exist, transportation options within the region are more limited. Those who do not have cars often rely on friends or family or taxis, which are expensive.

Although there are some public transit options including the Scoot and Shuttle buses, there are challenges to accessing these and some serve only certain populations, according to respondents. Ride Provide, for example, is a local demand-response service for seniors and adults who are visually impaired. Residents reported that there is a public bus system but it does not reach the communities that most need these services, for example, Hightstown. Furthermore, public transportation options were reported to have limited routes, schedules, and stops. In recent years, funding for public transportation, which comes from casino revenues, has declined significantly, substantially curtailing the availability of services. There are also a few volunteer driver programs operating in the region. According to residents, however, these services require substantial advance notice for scheduling, making it difficult to use these services for other than routinely-scheduled appointments.

Lack of transportation options is especially challenging for senior and low-income residents. One interviewee reported that recent cuts to Medicare has resulted in fewer transportation services provided to seniors. Medicaid provides some transportation through a contract with Logisticare, but this service is limited to very low income individuals. Concerns about driving among seniors were also expressed by some residents. As one person stated, "many seniors can't or shouldn't drive. But it is very hard to give up driving if there are no options. That's a big problem." Challenges are similar for workers who cannot afford cars. Some lower-wage workers, in particular undocumented individuals who cannot get licenses, use bicycles to get to work, sometimes having to travel great distances. Respondents reported that public transportation to Hightstown, where many lower income workers live, is severely limited.

Lack of transportation also creates challenges for patients who need to access medical care, especially those who require regular medical visits, such as for cancer treatments or dialysis. As one provider described, "dialysis is the single largest growing burden on community transportation right now...dialysis is provided by stand-alone organizations and they do not provide transportation."

According to some focus group members and interviewees, communities in the region are exploring more active transportation options such as biking and walking. There have been some improvements, according to residents. For example, some towns have passed Complete Streets ordinances. However, the existing infrastructure cannot easily be retrofitted to accommodate more active modes of travel. As one interviewee described, "we don't have complete streets everywhere so you literally can't get to places. Land development patterns create a barrier."

Quantitative data support perceptions that the region's residents are very car dependent. A smaller proportion of residents in the three counties than in the state have no vehicle available Figure 21). About 6% of Mercer County residents reported having no vehicle available in recent American Community surveys, while only 3% of Somerset County residents reported this. About 7% of New Jersey adults reported that they had no vehicle available.

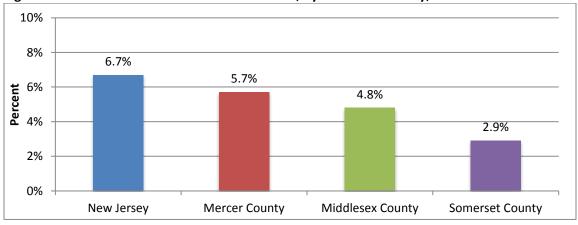


Figure 21: Households with no Vehicle Available, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimate

About 10% of Middlesex County workers reported that they used public transportation to get to work, a rate similar to the state and higher than for Mercer and Somerset Counties (Figure 22). While focus

group members and interviewees reported that there is public transportation available to get to urban centers, options more locally were far more limited.

12% 10.8% 9.8% 10% 7.6% 8% Percent 6% 4.9% 4% 2% 0% **New Jersey** Mercer County Middlesex County Somerset County

Figure 22: Proportion of Workers Using Public Transportation to Get to Work, by State and County, 2009-2013

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 American Community Survey 5-Year Estimate

#### **Crime and Safety**

Crime and safety were not a frequent topic raised in focus groups or interviews. Overall, respondents reported that their neighborhoods were relatively safe and free of crime. Crime statistics from the state of New Jersey indicate that the overall crime rate, as well as violent and nonviolent crime, is higher in Mercer County than in the other two counties or the state overall (Figure 23). A comparison of 2012-2013 crime rates to those of 2010 reported in the 2012 CHNA reveal that overall crime rates have declined in Middlesex and Somerset Counties and in the state overall during this time period, while they have remained the same in Mercer County.

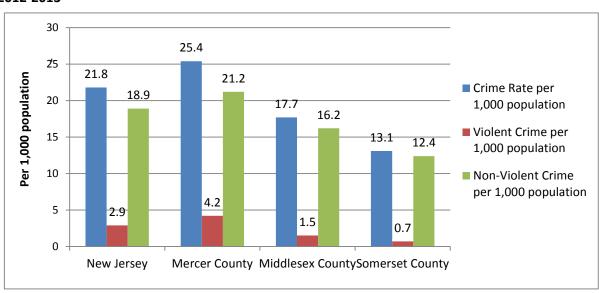


Figure 23: Offenses Known to Law Enforcement, per 1,000 population, by State and County, 2012-2013

DATA SOURCE: New Jersey State Police Uniform Crime Reporting Unit, *Crime in New Jersey for the Year Ending December 31, 2013.* 

Data about youth bullying in New Jersey indicate that about 20% of high school students surveyed in 2013 reported being bullied on school grounds and this rate has remained steady between 2009 and 2013.<sup>4</sup> The proportion of students who reported being bullied electronically declined slightly, from 17% in 2009 to 15% in 2013. County-level data are unavailable.

#### **Environment**

While a few respondents mentioned the difficulties arising from recent natural disasters (e.g., Hurricane Sandy), environmental concerns were not a prominent theme across interviews and focus groups. Quantitative data about air pollution indicate that the levels of air pollution are similar across the three counties and New Jersey overall, slightly over 11 micrograms per cubic meter (Figure 24).

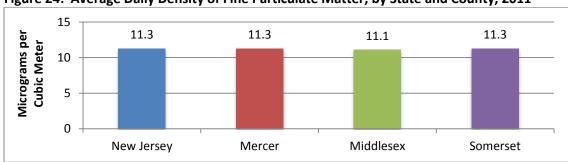


Figure 24: Average Daily Density of Fine Particulate Matter, by State and County, 2011

DATA SOURCE: CDC WONDER Environmental data, 2011, as reported in County Health Rankings, 2015

The number of days with high ozone between 2008 and 2011 fluctuated across the region, but overall, there were fewer high ozone days for Mercer and Middlesex Counties than for the state over this time period (Figure 25). According to the 2015 State of the Air Report by the American Lung Association, both Mercer and Middlesex counties received an "F" rating for high ozone days; in all, 11 of the 15 counties in New Jersey that are monitored received an "F" rating. Both counties received an "A" for particle pollution as did 9 of 13 New Jersey counties monitored. Somerset County does not have a monitoring system and thus, is not included.

<sup>&</sup>lt;sup>4</sup> DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, Division of Student Services and Career Readiness, 2013.

<sup>&</sup>lt;sup>5</sup> American Lung Association, State of the Air 2015, Report Card: New Jersey. Accessed 8/20/15: http://www.stateoftheair.org/2015/states/new-jersey/

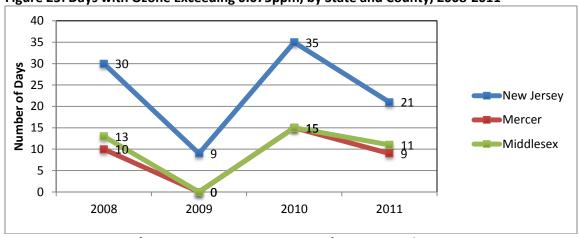
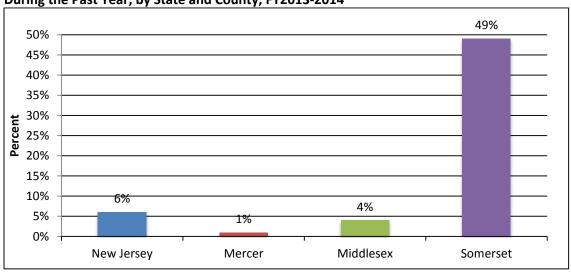


Figure 25: Days with Ozone Exceeding 0.075ppm, by State and County, 2008-2011

DATA SOURCE: Bureau of Air Monitoring, N.J. Department of Environmental Protection, 2008-2011. Data not collected for Somerset due to lack of monitoring station.

Water quality varies substantially across the region, with Somerset County reporting a high percentage of the population potentially exposed to water exceeding a violation (Figure 26).

Figure 26: Percent of Population Potentially Exposed to Water Exceeding a Violation Limit During the Past Year, by State and County, FY2013-2014



DATA SOURCE: Safe Drinking Water Information System (SDWIS) FY2013-2014, as reported in County Health Rankings & Roadmaps, 2015

#### COMMUNITY HEALTH OUTCOMES AND BEHAVIORS

This section focuses on health issues and concerns that emerged during the Princeton HealthCare System 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 2012 community health needs assessment.

# **Overall Community Health Status and Health Concerns**

Overall, quantitative data suggest that residents of the three counties are healthier compared to much of the rest of the state. The County Health Rankings system provides an overview of county-level health based on several key indicators. According to the 2015 County Health Rankings, Somerset County ranked 2<sup>nd</sup>, Middlesex County ranked 5<sup>th</sup> and Mercer County ranked 12<sup>th</sup> among New Jersey's 21 counties for health outcomes.<sup>6</sup> Within the Health Factors ratings, which assess health behaviors, clinical care, social and economic factors, and the physical environment, Somerset County ranked 3<sup>rd</sup>, Middlesex ranked 6<sup>th</sup> and Mercer ranked 8<sup>th</sup>.

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 27). A smaller proportion of respondents from Somerset County than the other two counties reported their community's health as "fair" or "poor health."

50% 45.5% 43.4% <u>|</u> 41.9%41.7% 37.6% 45% 37.4% 36.4% 40% 35% 30% 25% 20% 10.3% 13.9% 10.8% 15% 7.8% 10% 1.1% 5% .9% .7% 0% Excellent Very Good Good Fair Poor ■ Total ■ Mercer County ■ Middlesex County ■ Somerset County

Figure 27: Survey Respondents' Perceived Health Status of the Community in Which They Live, by County, 2015

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

Community survey respondents were also asked to select the top three health issues that have the biggest impact on them and their families personally, and on the community in which they live. The health concerns that survey respondents indicated had the biggest impact on themselves or their family

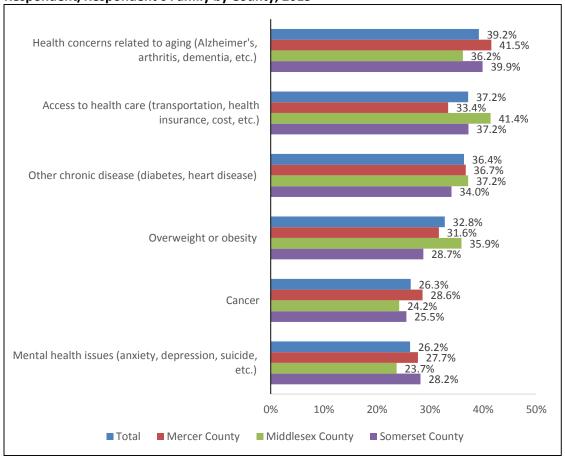
<sup>&</sup>lt;sup>6</sup> Health outcomes measure length and quality of life (<a href="http://www.countyhealthrankings.org/app/new-jersey/2015/overview">http://www.countyhealthrankings.org/app/new-jersey/2015/overview</a>)

were related to aging, access to care, and chronic disease such as diabetes or heart disease, with over one third of respondents selecting these as one of the top three health concerns (Figure 28).

Overweight/obesity, cancer, and mental health were the next most commonly cited issues as affecting respondents. Other health issues that were listed but not selected as top issues included asthma, drugs/alcohol abuse, women's health issues, community and interpersonal violence, oral health, sexually transmitted infections, teen pregnancies, infectious disease, and injuries (see Appendix C).

There were some differences across respondents from different counties. A higher proportion of Middlesex County residents than residents of the other two counties, for example, identified access to health care and overweight or obesity as a top three health concern. A higher proportion of residents from Mercer County than the other two counties reported concerns related to aging and cancer.

Figure 28: Top Health Issues Identified by Survey Respondents as Having the Biggest Impact on Respondent/Respondent's Family by County, 2015



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

Community survey respondents identified similar 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 concerns similar to those directly affecting themselves and their families: concerns related to aging, healthcare access, chronic disease, and obesity or overweight (Figure 29).

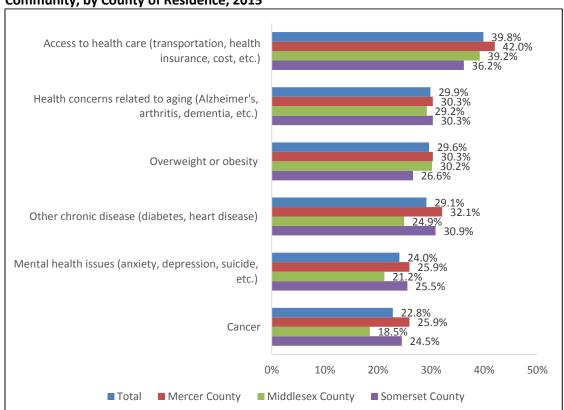


Figure 29: Top Health Issues Identified by Survey Respondents as Having the Biggest Impact on the Community, by County of Residence, 2015

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

### **Mortality and Morbidity**

Similar to trends across the state and country, heart disease and cancer were the leading causes of death in Somerset, Middlesex, and Mercer Counties (Figure 30). Mercer and Middlesex Counties have higher heart disease death rates than cancer death rates while in Somerset County, cancer death rates were higher than those attributed to heart disease. The overall age-adjusted death rate among the three counties was highest in Mercer County (690.4 per 100,000 population), a rate slightly higher than the death rate for the state overall. Somerset, with a death rate of 601.6 per 100,000 population, had the lowest death rate of the three counties.

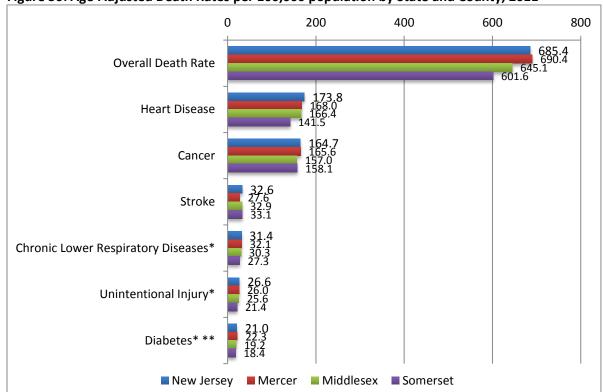


Figure 30: Age-Adjusted Death Rates per 100,000 population by State and County, 2011

DATA SOURCE: Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health and National Center for Health Statistics and U.S. Census Bureau, as reported by the New Jersey State Health Assessment Data (NJSHAD)

A comparison of mortality rates from 2000-2008 with those of 2011 show that mortality rates have declined across all disease areas and in all three counties over this time period except for chronic lower respiratory diseases and unintentional injuries in Middlesex County where rates have risen somewhat (Table 5).

Table 5: Age-Adjusted Death Rates, per 100,000 population, by County, 2000-2008 and 2011

Cause of Death	Mercer (	County	Middlesex County		Somerset	County
Cause of Death	2000-2008	2011	2000-2008	2011	2000-2008	2011
Heart Disease	221.4	168.0	224.1	166.4	183.9	141.5
Cancer	188.0	165.6	178.0	157.0	169.2	158.1
Stoke	39.9	27.6	35.5	32.9	38.6	33.1
Chronic Lower Respiratory Diseases (CLRD)	33.5	32.1*	27.8	30.3*	30.2	27.3*
Unintentional injuries	26.6	26.0*	23.8	25.6*	21.3	21.4*
Diabetes mellitus	27.3	22.3*	24.4	19.2*	24.3	18.4*

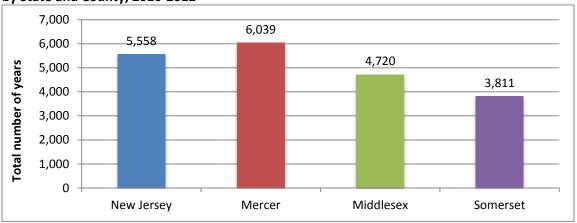
DATA SOURCE: 2000-2008: State of New Jersey Department of Health and Senior Services, New Jersey State Health Assessment Data, 2008. 2011: Death Certificate Database, Office of Vital Statistics and Registry, New Jersey

<sup>\*</sup>Data from 2009-2011 \*\*Diabetes as the underlying cause of death

Department of Health and National Center for Health Statistics and U.S. Census Bureau, as reported by the New Jersey State Health Assessment Data (NJSHAD)
\*Data from 2009-2011

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 has the highest age-adjusted rate of YPLL of the three counties (6,039), a rate higher than that of New Jersey overall (5,558 years) (Figure 31). Somerset County has a substantially lower rate (3,811 years).

Figure 31: Age-Adjusted Years of Potential Life Lost (YPLL) before age 75, per 100,000 population, by State and County, 2010-2012



DATA SOURCE: National Center for Health Statistics—Mortality Files 2010-2012, as reported in County Health Rankings, 2015.

#### **Chronic Diseases and Related Risk Factors**

When asked about the prevalence of chronic disease in the community, respondents most frequently pointed to a rise in the number of people with diabetes, which is seen as connected to today's fast-paced lifestyle, lack of healthy nutrition habits, and sedentary lifestyle. Several reported that health concerns like high blood pressure and diabetes are more prevalent among minority populations in the region. Health providers, especially those who serve lower-income patients, reported rising rates of obesity, heart disease, asthma, and diabetes in their patient populations as well as a rise in the prevalence of multiple chronic diseases.

# **Healthy Eating and Physical Activity**

"My community is active or trying to be active." – Focus Group Participant

"There is junk food everywhere. We are surrounded. It's hard to fight this." – Focus Group Participant

As nationally, residents of Mercer, Middlesex and Somerset Counties continue to be concerned, as they were in 2012, about rising rates of chronic disease and obesity and the associated lifestyle factors that contribute to these. Perceptions about the level of healthy behaviors among community residents varied. Many focus group members and interviewees reported general satisfaction with the options available for healthy eating and physical activity and reported that, in general, most residents engage in healthy behaviors. Some residents were reported to be very active, almost competitively so. They mentioned town walks and fun runs, numerous parks, playgrounds, gyms, and trails. Many youth were reported to participate in school-based sports. As one focus group member stated, "there is a lot to do if you are motivated."

Other respondents, however, reported that healthy lifestyles are not prevalent in their communities. They stated that many people face barriers to engaging in healthy behaviors, including lack of time, family commitments, transportation barriers, or lack of resources. As one focus group member observed, "if folks come home from work at 8 pm, there's not enough time to do stuff like exercise—especially if both parents work." Another resident echoed this view saying, "there are exercise clubs, lots to do, but people are not using them." Other barriers were shared as well. Lack of and poor quality sidewalks were mentioned as barriers to physical activity. Residents reported that parental concerns about children's safety has meant that fewer children ride their bicycles in neighborhoods or walk to school, which contributes to childhood obesity. There are few organized options for students to be active if they do not participate on school sports teams. Finally, several residents reported, the region lacks free spaces to exercise and play sports like soccer.

While overall, respondents reported that most residents in the County have access to healthy foods including farmer's markets, local farms and restaurants that serve healthy food options, in some communities, there is less access. Additionally for some, cost is a barrier. As one key informant stated, "access to healthy food is a challenge. The cost of healthy food is a barrier."

Perceptions about the role schools are playing to address issues obesity and underlying healthy eating behaviors were mixed across participants. Some reported that schools have adopted policies related to healthy food options, including banning junk food as a reward or for school-based parties. One prominent theme, especially among parents in the parent focus group, was the prevalence of concerns

and cautions about food allergies. Several focus group members and interviewees also observed that schools are focused on academics, leaving little time for other things. As one member of the parent focus group stated, "schools don't have lots of time to devote to nutrition education. Everything is geared to what's on the test."

According to BRFSS data from 2011-2013, a smaller proportion of adults in the three counties than in the state reported no leisure time physical activity (Figure 32). Somerset County adults were least likely to be physically inactive (19.4%) while Mercer County residents were more likely (21.9%). A comparison of recent survey results to those reported in the 2012 CHNA reveal that across the three counties, the proportion of adults reporting physical inactivity has declined with Middlesex County experiencing the largest decrease: from 27.2% in 2009 to 20.2% in 2011-2013.

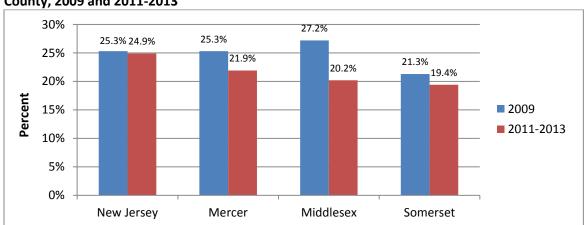


Figure 32: Percent of Adults Aged 20+ Reporting No Leisure Time Physical Activity by State and County, 2009 and 2011-2013

DATA SOURCE: 2009: Centers for Disease Control, BRFSS Data. 2011-2013: New Jersey Behavioral Risk Factor Survey (NJBRFS). New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD).

The proportion of residents who are low income and do not live close to a grocery store is similar across the three counties and the state overall, about 3-4% (Table 6). Roughly half of all restaurants in the three counties are fast-food establishments, a rate similar to the state overall. Middlesex has the highest proportion of fast-food establishments, 55%. Residents' access to recreational facilities differs substantially across the region. Somerset County residents enjoy greatest access to recreational facilities (23.1 facilities per 100,000 population), over the twice the rate for Middlesex County (10.9 facilities per 100,000 population).

Table 6: Access to Healthy Food and Recreational Facilities in State and County, 2010 and 2013

	New	Mercer	Middlesex	Somerset
	Jersey	County	County	County
% population who are low income and	4%	3%	4%	3%
do not live close to a grocery store*				
% of all restaurants that are fast-food	50%	50%	55%	48%
establishments				
# of recreational facilities per 100,000	14	14.7	10.9	23.1
population**				

DATA SOURCES: For recreational facility data: Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files, 2010 & 2013, as reported in County Health Rankings, 2015. For grocery store and fast food restaurant data: County Business Patterns data set, 2010, as cited in County Health Rankings, 2015.

\*In metro counties, "close" is less than 1 mile away. In non-metro counties, "close" is less than 10 miles away.

In another look at access to healthy food, Table 7 shows the proportion of persons participating in the Supplemental Nutrition Assistance Program (SNAP). Program enrollment increased in both Middlesex and Somerset County between 2014 and 2015, with Middlesex experiencing an increase of 8.7%, higher than the state and other counties. In contrast, Mercer County experienced a decrease in the number of SNAP participants over this time period.

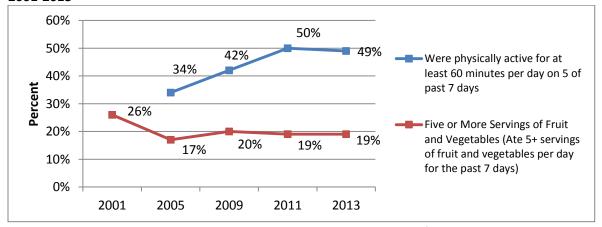
Table 7: Number of Persons Participating in NJ SNAP Program by State and County, 2015

Geography	Number of Adults	Number of Children	Total Number of Participants	% Change (1 year: January 2014 - 2015)
New Jersey	477,604	426,814	904,418	6.0%
Mercer County	17,715	15,858	33,573	-3.7%
Middlesex County	30,013	27,595	57,608	8.7%
Somerset County	6,595	6,526	13,121	4.4%

DATA SOURCE: NJ MMIS Shared Data Warehouse, January 2015, as reported in Current Program Statistics Report by NJ Department of Human Services, Division of Family Development

Trend data related to healthy eating and physical activity behaviors among New Jersey youth reveal that the proportion of high school students who reported that they were physically active increased over the past several years, from 34% in 2005 to 49% in 2013 (Figure 33). However, the proportion of high school youth who reported that they ate five or more servings of fruits and vegetables daily decreased, from 26% in 2001 to 19% in 2013. County-level data are not available.

Figure 33: Physical Activity and Fruit and Vegetable Consumption, 9<sup>th</sup>-12<sup>th</sup> Graders, New Jersey, 2001-2013



DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, 2001-2013.

<sup>\*\*</sup> Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities, featuring exercise and other active physical fitness conditioning or recreational sports activities such as swimming, skating, or racquet sports.

## **Overweight and Obesity**

"There are children who are seriously overweight. This leads to chronic disease, younger and younger." — Key Informant

"Obesity used to be associated with lower economic status, but it's not clear that is the case today." — Focus Group Participant

Although options for exercise and healthy eating exist for many in the region, residents identified obesity as an area of substantial concern for the region, especially for younger children and new immigrants. As described above, focus group members and interviewees noted several barriers to living the healthy lifestyles that contribute to a healthy weight including time to exercise and eat well, lack of access to facilities for physical activity, and lack of knowledge. A couple of respondents reported that obesity among immigrant groups is rising. As one interviewee explained, "[immigrants] are healthier but then they get American habits—they start to eat fast food, heavy fats, and sugary drinks."

As Figure 34 shows, nearly one quarter of adults in Middlesex and Mercer counties was obese in 2011-2013, a rate similar to the state overall. A smaller proportion of adults from Somerset (21.2%) was obese compared the other two counties and the state overall. Over 60% of adults across the three counties and the state were overweight or obese. A comparison of obesity rates to those reported in the 2012 CHNA reveal little change in adult obesity rates.

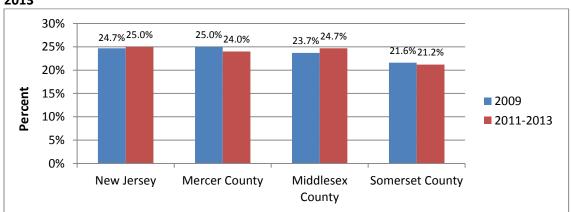


Figure 34: Percent of Adults Aged 20+ Who are Obese by State and County, 2009 and 2011-2013

DATA SOURCE: 2009: Centers for Disease Control, BRFSS, as cited in County Health Rankings, 2012. 2011-2013: New Jersey Behavioral Risk Factor Survey (NJBRFS). New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD).

Quantitative data show that rates of obesity and overweight among New Jersey high school students have remained roughly the same between 2001 and 2013: about 14% of high school youth were overweight and 9% were obese in 2013 (Figure 35). County-level data are not available.

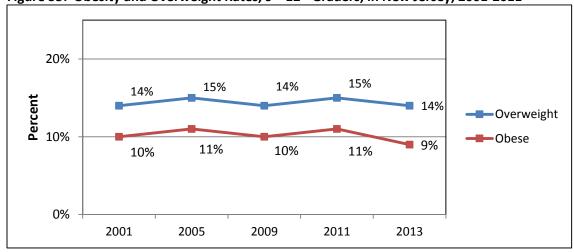


Figure 35: Obesity and Overweight Rates, 9th-12th Graders, in New Jersey, 2001-2011

DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, 2001-2013.

#### **Heart Disease**

Although heart disease was not specifically discussed by most focus group members and interviewees, they acknowledged that chronic diseases are a concern in the community and closely linked to obesity and lifestyle factors. Vital statistics data show that age-adjusted death rates due to heart disease declined from 2007 to 2011 in Middlesex and Somerset Counties as well as in the state overall (Figure 36). However, in Mercer County, they declined between 2007 and 2009 and then increased in 2011.

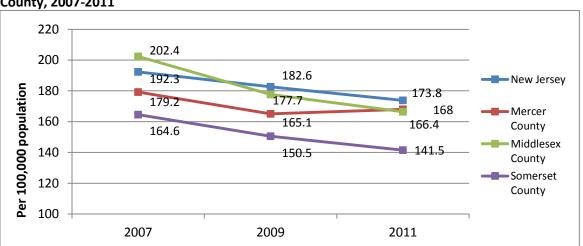


Figure 36: Age-Adjusted Death Rates due to Heart Disease, per 100,000 population, State and County, 2007-2011

DATA SOURCE: Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health and National Center for Health Statistics and U.S. Census Bureau, as reported by the New Jersey State Health Assessment Data (NJSHAD), 2007-2011.

The Behavioral Risk Factor Survey asks adults about chronic conditions. As shown in Figure 37, reported rates of heart attacks and strokes in 2012 were lower in the three counties than in the state of New Jersey. A comparison of self-reported chronic conditions in 2012 with 2009 (as reported in the 2012)

CHNA) reveals a few notable differences. The proportion of adults reporting ever having a heart attack decreased in Middlesex County from 4.0% in 2009 to 3.4% in 2012. The proportion of adults in Somerset County reporting ever having had a stroke increased from .9% in 2009 to 2.1% in 2012.

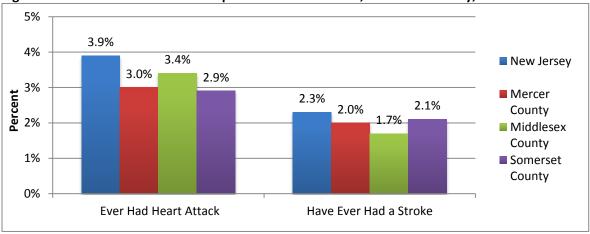


Figure 37: Percent of Adults Who Report Chronic Condition, State and County, 2012

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).

The proportion of adults reporting high blood pressure, a risk factor for heart disease, in the three counties was similar, about 26%, a lower rate than the state overall (30.6%) in 2011 (Figure 38). A higher proportion of adults in Mercer County (39.7%) reported that they had been told that they had high cholesterol than adults in the state or the other two counties.

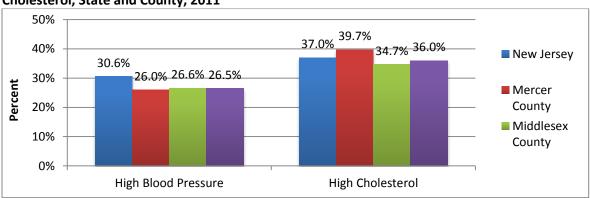


Figure 38: Percent of Adults Who Have Been Told They Have High Blood Pressure or High Cholesterol, State and County, 2011

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.

### **Diabetes**

"When you start seeing sleep apnea and diabetes in the 25 year olds, that's huge." — Focus Group Member

"Diabetes and somewhat obesity are health concerns, but primarily diabetes. [Immigrants] are initially healthier but then they get American habits. They start to eat fast food, heavy fats, and sugary drinks. Fast food is easy and cheap and has real appeal." — Key Informant

Diabetes was mentioned as a substantial concern by focus group members and interviewees. Some respondents noted higher rates of diabetes among immigrants, including Hispanics and those from South Asia. Lack of knowledge about the seriousness of the disease as well as changing lifestyle factors were identified as contributors to diabetes. As shown in Figure 39, a higher proportion of adults in Mercer (9.5%) and Middlesex Counties (8.5%) than in Somerset County (7%) reported in 2012 that they had been diagnosed with diabetes. Rates increased slightly in all three counties between 2009 and 2012. A couple of providers reported that care for diabetes has improved, especially for high-risk patients, through new team-based models and the Patient Centered Medical Home. However, a large number of patients remain undiagnosed or at risk for diabetes and are not connected to care.

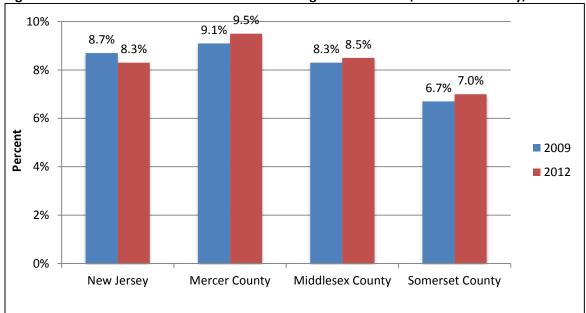


Figure 39: Percent of Adults Who Have Doctor-Diagnosed Diabetes, State and County, 2009 and 2012

DATA SOURCE: 2009: Centers for Disease Control, BRFSS Data. 2012: New Jersey Behavioral Risk Factor Survey. New Jersey Department of Health, Center for Health Statistics, New Jersey State Health Assessment Data (NJSHAD).

# Cancer

"Cancer? Now you hear about so many 'rare' forms of cancer." — Focus Group Participant

"There's increased cancer because there's more screening for it, therefore more detection." – Focus Group Participant

**Perceptions about the prevalence of cancer in the region differed among focus group members and interviewees.** Some residents reported that rates of cancer were no different in their communities than overall, and some saw it as a natural result of longer lifespans. Others saw rising cancer rates as a result of successful and comprehensive screening efforts. However, other residents reported that that they

believed cancer rates were rising, especially among younger people, and especially cancers linked to environmental factors and obesity.

Cancer is the second leading cause of death in New Jersey and in Mercer and Middlesex Counties; it is the leading cause of death in Somerset County. Quantitative data about cancer incidence in the three counties show that overall cancer rates were highest in Mercer County (555.6 per 100,000 population) and lowest in Middlesex County (493.1 per 100,000) in 2012. (Table 8) Breast cancer and cervical cancer incidence rates were highest in Somerset County (180.6 per 100,000 and 8.8 per 100,000, respectively). Prostate cancer rates were highest in Middlesex County (129.0 per 100,000) and colorectal cancer rates were highest in Mercer County (53.9 per 100,000) in 2012. Lung cancer rates were similar across the three counties. Overall cancer rates have declined in in all three counties between 2004 and 2012. Cancer rates for many sites also declined in the three counties over this time period. Exceptions to this are cervical cancer rates in Middlesex County which increased from 6.8 to 7.7 per 100,000 and almost doubled in Somerset County (from 4.5 to 8.8 per 100,000) and lung cancer incidence rates which rose in Somerset County.

Table 8: Age-Adjusted Cancer Incidence Rates, per 100,000 population, by County, 2004-2012

	2004	2006	2008	2010	2012
Mercer County	•				
All-sites	565	628.3	583.6	560.7	555.6
Breast	166.8	185.8	181.3	164.6	175.8
Cervical	8.2	8.7	4.6	4.7	5.2
Colorectal	62.0	68.9	62.0	56.3	53.8
Lung and Bronchus	68.2	71.0	57.8	55.2	51.2
Prostate	168.6	191.1	199.6	176.2	111.5
Middlesex County					
All-sites	534.8	540.7	520.4	511.2	493.1
Breast	172.8	171.1	170.3	166.9	152.2
Cervical	6.8	9.8	7.4	7.3	7.7
Colorectal	56.0	51.3	49.0	44.2	45.0
Lung and Bronchus	62.5	61.5	58.7	49.2	52.1
Prostate	146.3	147.8	147.4	144.3	129.0
Somerset County					
All-sites	548.3	541.2	545.5	525.7	526.5
Breast	186.6	173.0	182.5	183.6	180.6
Cervical	4.5	5.1	4.8	3.8	8.8
Colorectal	59.8	50.9	53.9	40.3	41.2
Lung and Bronchus	45.1	55.6	53.8	41.2	49.9
Prostate	147.1	161.9	158.4	163.7	124.3

DATA SOURCE: State of New Jersey Department of Health and Senior Services, New Jersey Cancer Registry, 2004-2012.

Cancer mortality rates were highest in Mercer County overall and for all individual sites in 2011, except for cervical cancer mortality rates where rates in Somerset County are higher (Table 9). Cancer deaths rates declined overall and across almost all sites in all three countries between 2003 and 2011. The

exception is cervical cancer death rates in Somerset County which increased from 2.8 in 2003 to 4.3 in 2011.

Table 9: Age-Adjusted Cancer Mortality Rates, per 100,000 population, by County, 2003-2011

	2003	2005	2007	2009	2011
Mercer County					
All-sites	183.3	170.5	179.5	162.9	168.9
Breast	26.9	24.6	29.9	25.2	24.7
Cervical	3.4	2.3	3.5	2.7	~
Colorectal	19.9	18.1	15.8	16.7	17.6
Lung and Bronchus	44.7	42.1	47	38.8	41.1
Prostate	24.2	19.5	22.2	19.9	24.5
Middlesex County					
All-sites	180.4	164.3	164.4	167.1	155.9
Breast	28.8	24.1	25.4	21.2	22.6
Cervical	2.6	1.4	1.7	2.8	1.9
Colorectal	19.7	16.5	15.7	17.7	13.2
Lung and Bronchus	46.1	42.9	43.1	41	37.8
Prostate	20.3	17.6	24.8	17.6	16.4
Somerset County					
All-sites	179	164.4	167.6	161.1	156.8
Breast	28.9	27.8	24	22.1	23.4
Cervical	2.8	~	~	~	4.3
Colorectal	20.1	15.2	18.7	17.8	15.2
Lung and Bronchus	43.5	32.7	43.2	39	33.6
Prostate	28.9	17.5	21.3	23.3	15.9

DATA SOURCE: State of New Jersey Department of Health and Senior Services, New Jersey Cancer Registry, 2003-2011.

Quantitative data about cancer screening rates reveals that a higher proportion of Somerset County residents received mammograms and colonoscopies in 2012 than in the other two counties and the state overall (Figure 40). The proportion of women who received a pap test was similar across the three counties and the state.

<sup>~</sup>Data suppressed due to low counts.

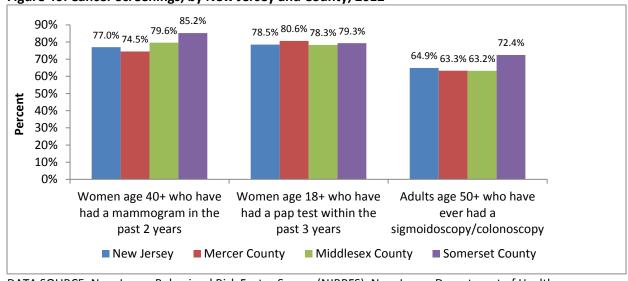


Figure 40: Cancer Screenings, by New Jersey and County, 2012

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.

### **Asthma**

Focus group members and interviewees did not identify asthma as a top health concern for the region although quantitative data point to concerns about this chronic disease among some populations. Quantitative data obtained through the Behavioral Risk Factor Survey show that rates of asthma among both adults and children in 2011-2012 were lower in the three counties than in the state of New Jersey (Figure 41). Rates of adult asthma were lowest in Somerset County (7.4%) and children's asthma rates were lowest in Middlesex County (6.0%).

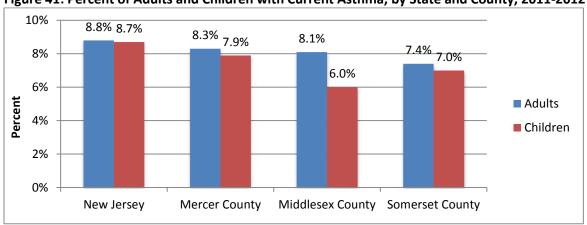


Figure 41: Percent of Adults and Children with Current Asthma, by State and County, 2011-2012

DATA SOURCE: New Jersey Behavioral Risk Factor Survey (NJBRFS), 2011-2012.

The rate of asthma emergency department visits in 2012 was substantially higher in Mercer County, 727 visits per 100,000 population (Figure 42). This was more than one and a half times the rate in Middlesex County (467 visits per 100,000 population) and almost three times the rate in Somerset County (265 visits per 100,000 population). The rate of asthma ED visits vary substantially by race and ethnicity. The rate of asthma ED visits for non-Hispanic black residents in Mercer County, for example, was 6.6 times

the rate for non-Hispanic white residents and 2.3 times the rate for Hispanic residents. In both Middlesex and Somerset Counties, the asthma ED rate for non-Hispanic blacks was 4.4 times the rate for non-Hispanic whites.<sup>7</sup>

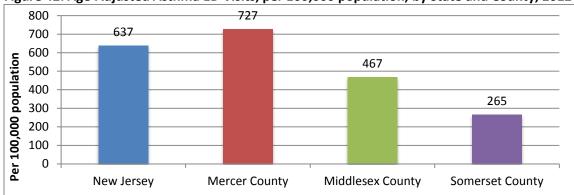


Figure 42: Age-Adjusted Asthma ED Visits, per 100,000 population, by State and County, 2012

DATA SOURCE: New Jersey ED Discharge Files, 2012.

<sup>&</sup>lt;sup>7</sup> New Jersey Department of Health. New Jersey Asthma Awareness and Education Program. *Asthma in New Jersey* 2013.

### **Behavioral Health**

Behavioral health emerged as the topic most frequently identified as a health concern in the region by focus group members and interviewees. Specific concerns were raised related to growing opiate use as well as stress and anxiety in the area. Stigma was identified as a key barrier to accessing services, as was lack of service providers.

#### **Mental Health**

"If you do a seminar on 'depression' with the Asian population here, no one will come. Need to call it 'stress.' There is stigma around this issue, in the Caucasian community, too. You pray for someone who has cancer. You wouldn't do the same for someone with mental health issues." – Key Informant

"Mental health – there's not a lot of services and people don't understand it. I don't know of any. Younger people may have anxiety or depression and don't know where to go. There's also stigma." - Focus Group Participant

Among focus group members and interviewees, mental health was cited as an issue of substantial concern for residents of all ages, as it was in the 2012 CHNA. Mental health issues were reported to affect people of all ages, however several participants reported concerns of rising mental health issues especially among young people. Behavioral health providers reported growth in demand for their services. Overall, stress and depression were identified as the most common mental health concerns in the community. High stress jobs, financial concerns, a competitive atmosphere, excessive use of technology, and lack of downtime were all identified as contributors to mental health concerns among community members. According to focus group members and interviewees, these stressors also contribute to rising rates of substance abuse, especially alcohol, and some cases, domestic violence.

Mental health concerns at younger ages was identified as a particular concern. As one focus group member explained, "we are seeing [mental illness] at a younger age. High school kids [are] stressed and need medication and mental health services." Respondents attributed this to tremendous pressure on students to do well academically, which some reported are related to cultural norms. As one interviewee shared, "if kids don't measure up, they are shaming their family." For some, technology plays a role; as one person explained, "kids are more comfortable texting rather than talking with others."

Seniors were also singled out by several respondents for mental health concerns. They noted that seniors suffer from depression that can come with the loss of loved ones and friends, lack of mobility and energy, and increasing isolation. Memory loss and associated diseases such as Alzheimer's and dementia were also mentioned as a growing concern among residents in the region by a number of focus group members and interviewees. Finally, residents shared that as family members increasingly take on caregiving responsibilities for elders, their own mental health can be negatively affected.

Stigma about mental illness was mentioned as a substantial barrier to identifying mental health concerns and seeking treatment. As one member of the EMS focus group stated, "mental health? People don't want to talk about it." Some identified especially strong stigma in certain cultural groups. As one focus group member explained, "in the Indian culture, people seem to brush it under the rug and not deal with their child who is calling out for help." Stigma about mental illness among seniors was also

reported to be prevalent, which means that few seniors seek out help. While stigma still creates substantial barriers to identifying mental health issues and obtaining treatment, some reported that they perceived that awareness about mental health has grown. As one provider stated, "it seems to be talked about more, in this community and nationally. People talk about suicide and depression now more than they did before."

There is little quantitative data available about mental health among community members. The Behavioral Risk Factor Survey is one data source and is shown in Figure 43, the number of mentally unhealthy days reported by residents in the three counties was slightly lower than for the state overall (3.3 days). These data are similar to those reported in the 2012 CHNA.

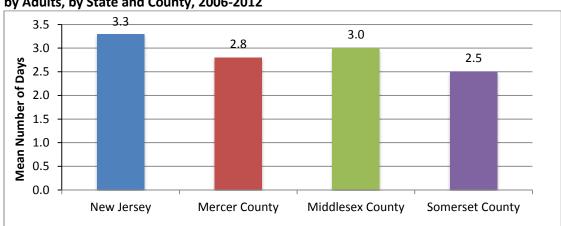


Figure 43: Mean Age-Adjusted Mentally Unhealthy Days Reported in Past Month Reported by Adults, by State and County, 2006-2012

DATA SOURCE: Behavioral Risk Factor Surveillance System, 2006 - 2012, as reported in County Health Rankings, 2015.

Figure 44 shows, the age-adjusted suicide rate in the state and counties. The rate is lowest in Somerset County (6.1 per 100,000 population) and closer to the state rate of 7.3 per 100,000 in both Mercer and Middlesex counties.

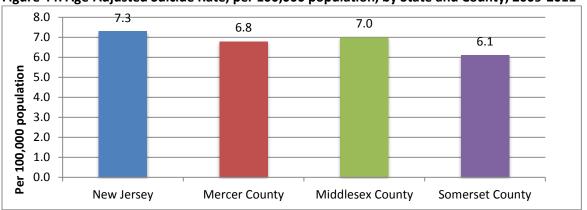


Figure 44: Age-Adjusted Suicide Rate, per 100,000 population, by State and County, 2009-2011

DATA SOURCE: Death Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health and Population Estimates, State Data Center, New Jersey Department of Labor and Workforce Development, as reported by the New Jersey State Health Assessment Data (NJSHAD), 2009-2011.

Data from the New Jersey Student Health Survey show that a higher proportion of high school youth in New Jersey reported feeling sad or hopeless and having considered or attempted suicide in 2013 than in 2011 (Figure 45). County-level data are unavailable.

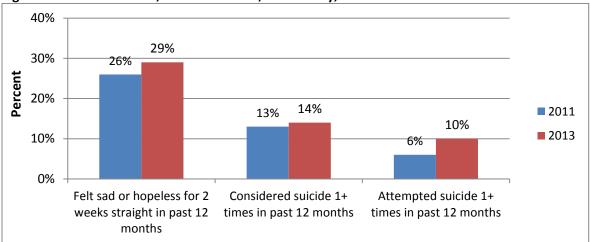


Figure 45: Mental Health, 9th-12th Graders, New Jersey, 2011 and 2013

DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, 2011 and 2013.

Lack of mental health services was identified as a concern by both providers and residents. More mental health providers was also identified as a need in the 2012 CHNA. According to focus group members and interviewees, mental health care is costly and a growing number of mental health providers do not accept any insurance. Furthermore, waitlists for lower-cost, community-based services are long, which means many who need care are not able to access it. This is particularly problematic for those with severe mental illness who are released from hospital care. As one mental health provider described, "there is a lack of support when people are released from in-patient. You can't get in front of a psychiatrist. And if you can't pay, you can't go." New parents in a focus group described challenges to obtaining early support and services for very young children and for children with autism and developmental delays. As one new parent described, "so many kids need OT and speech therapy but parents don't know how to get it or push for it. You have to educate parents about how to get these services for their kids. So many kids could benefit from OT earlier on." Finally, several focus group members reported that access to mental health services for non-English speakers is challenging because of the lack of bilingual providers.

Despite these challenges, a few provider interviewees reported that there have been some improvements in mental health service provision, for example more proactive depression screening for new mothers and more integrated behavioral and primary healthcare through the patient-centered medical home model. Some providers have enhanced their health care teams with behavioral health Advanced Practice Nurses (APNs). However, many expressed concerns about sufficient mental health capacity in the region, especially since the new ACA plans provide coverage for behavioral health services. Additionally, according to providers, there is also substantial need for education and other services related to mental health. As one provider explained, "we started a free once monthly lecture for patients on mental health topics—depression, anxiety. Two hundred people signed up for the first lecture on anxiety. This is only the tip of the iceberg."

#### **Substance Use and Abuse**

"Opiate addiction. The age of addiction is going down." – Key informant

"Drug use – illegal drugs and prescription abuse. Heroin. You mention it in our town and people say 'Shhh.' You don't mention it at all. No one wants to talk about it." – Focus Group Participant

"Recidivism has increased, especially in addiction services." – Focus Group Member

Substance use was cited as another challenge for the community and one that, according to respondents, has become more problematic in recent years. Opiate-based drugs, both prescription and heroin, were frequently mentioned as the biggest and most immediate concern as the number of heroin overdose deaths and the use of Narcan to prevent deaths is rising. Focus group members and interviewees shared several reasons for the rise in substance use in the region including mental health issues, economic stresses, accessibility, and wealth. Many opiate addictions, according to providers, start from prescriptions for pain medication. As one provider described, "we are seeing more prescription drug problems. People having surgeries and get the prescriptions and then they keep coming back for more." A behavioral health provider echoed this sentiment stating, "physician prescribing—this is an issue." Alcohol abuse was also mentioned as a key concern for the region as it has been for many years. Focus group members and interviewees shared that alcohol abuse occurs among adults as well as youth.

Providers also shared concerns about co-occurring disorders, not just mental health and substance use but also substance use and other health conditions which substantially complicate health care. As one provider explained, "a lot of our worst diabetics are also alcoholics." Additionally, as another provider observed, many with substance use issues do not seek health care, thus increasing their risk for serious illness.

Barriers to addressing substance use issues are similar to those for mental health concerns and include stigma, lack of services, and lack of awareness. Several respondents pointed to parental attitudes as contributing to alcohol use among young people in the region. As one interviewee explained, "there is a lot of underage drinking. Lots of parents are serving alcohol at parties. There is a lot of resistance from parent coalitions – they say they'd rather have the kids drinking at home." Similarly, some reported that attitudes about marijuana have changed as legalization has increased.

As with mental health services, residents reported that the need for substance use services—both prevention and treatment—exceeds the available supply. As one public health official described, "there's been a lot of saves with the Narcan but there's not enough work when people go back home." Another mentioned that Mercer County does not have a detox facility, in part because "'not in my backyard' played out when someone tried to open a facility some time ago." Additionally, some services related to substance use treatment are not covered by insurance. Finally, while substance abuse across the state has been a concern and led to the formation of a Governor's Task Force, to date, according to respondents, not much has come from this initiative.

### Alcohol

Quantitative data about alcohol use among adults shows that alcohol use is higher in Somerset County than in the other two counties (Figure 46). In particular, the proportion of adults who reported using

alcohol in the past 30 days was about 66% in Somerset County, compared to 56% in Mercer and Middlesex counties.

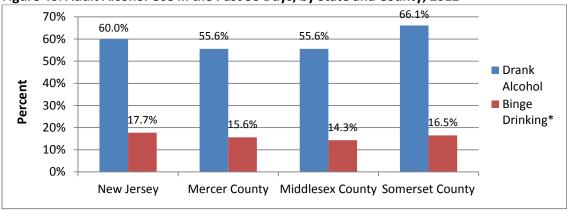


Figure 46: Adult Alcohol Use in the Past 30 Days, by State and County, 2012

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.

Data about substance use among high school youth in New Jersey show that two-thirds of New Jersey high school youth reported that they had at least one drink in their lifetime and that about one third had had at least one drink in the 30 days prior to the survey (Figure 47). However, reported lifetime and recent use of alcohol has declined among youth in New Jersey between 2001 and 2013. The prevalence of alcohol use among New Jersey high school students differs somewhat across race and ethnicity. A higher proportion of Hispanic youth (75%) reported lifetime use of alcohol than did white (69%) or black (67%) youth in 2013. Recent use of alcohol among these groups was similar, about 40%. Asian youth were least likely to report lifetime or recent alcohol use in 2013, 50% and 23%, respectively. County-level data are unavailable.

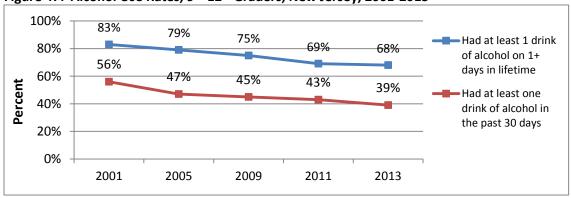


Figure 47: Alcohol Use Rates, 9th-12th Graders, New Jersey, 2001-2013

DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, 2001-2013.

Data about alcohol use among middle school students are available at the county level and comes from the New Jersey Middle School Risk and Protective Factor Survey which was conducted in 2012. As Figure 48 shows, reported rates of alcohol use among middle school students in 2012 was lower in Mercer and Somerset Counties than in Middlesex County or the state of New Jersey.

<sup>\*</sup> Binge Drinking is defined as had 5+ drinks (men) or 4+ drinks (women) on 1 or more occasions in the past 30 days.

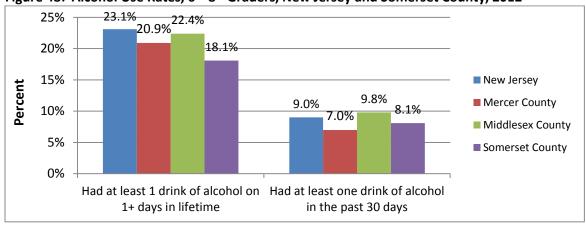


Figure 48: Alcohol Use Rates, 6th-8th Graders, New Jersey and Somerset County, 2012

DATA SOURCE: New Jersey Middle School Risk and Protective Factor Survey, New Jersey Department of Health, Division of Mental Health and Addiction Services, 2012.

The lifetime use of alcohol among middle school students declined between 2010 and 2012 in all three counties as well as the state, with Mercer County experiencing the largest decline, from 27.8% of middle school students in 2010 to 20.9% in 2012 (Figure 49).

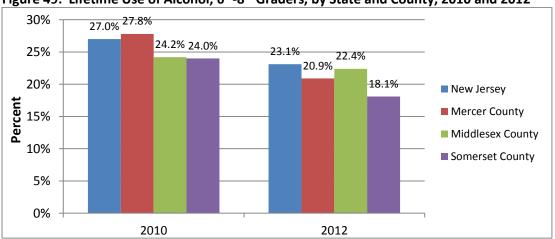


Figure 49: Lifetime Use of Alcohol, 6th-8th Graders, by State and County, 2010 and 2012

DATA SOURCE: New Jersey Middle School Risk and Protective Factor Survey, New Jersey Department of Health, Division of Mental Health and Addiction Services, 2012.

The proportion of middle school students reporting past 30 day use of alcohol between 2010 and 2012 also declined in Mercer and Somerset Counties and the state over this time period, with Mercer County again experiencing the largest decline (from 12.3% to 7.0%) (Figure 50). The proportion of middle school students reporting use of alcohol in the 30 days prior to the survey rose in Middlesex County over this time period, from 7.7% to 9.8%.

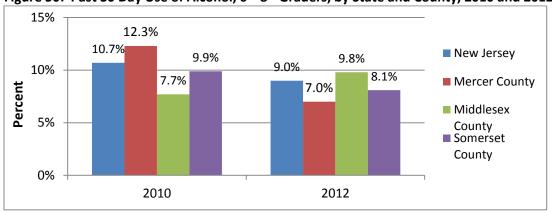


Figure 50: Past 30 Day Use of Alcohol, 6th-8th Graders, by State and County, 2010 and 2012

DATA SOURCE: New Jersey Middle School Risk and Protective Factor Survey, New Jersey Department of Health, Division of Mental Health and Addiction Services, 2012.

### Other Substances

Survey data about use of other substance among adults is unavailable. However, Student Health Survey data show that use of marijuana has declined slightly among high school students in New Jersey between 2001 and 2013 (Figure 51). Because survey questions related to prescription drug use among high school students have not been asked until recently, multi-year trend data are unavailable. However, in 2013, about 12% of high school youth in New Jersey reported that they took a prescription drug without a prescription, down from 15% in 2011. Data by race and ethnicity show that in 2013 marijuana and prescription drug use rates were lowest among Asian high school students in New Jersey. About twice as many black high school students (24%) compared to Asian students (12%) reported recent use of marijuana. Lifetime prescription drug use among middle school students in New Jersey was similar across white, black, and Hispanic youth (ranging from 11-13%) and lowest among Asian youth (8%). County-level data are unavailable.

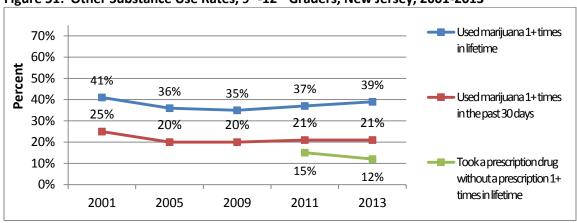


Figure 51: Other Substance Use Rates, 9th-12th Graders, New Jersey, 2001-2013

DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, 2001-2013.

Data from the New Jersey Middle School Risk and Protective Factor Survey in 2013 show that marijuana use was highest among middle school students from Middlesex County (Figure 52). Nearly twice as many middle school students from Middlesex than middle school students from Somerset reported that they used marijuana once or more in their lifetimes (6.8%) and that they used marijuana one or more

times in the past month (4.4%). Among the three counties, lifetime use of prescription drugs without a prescription among middle school students was highest in Mercer County (6.3%), again, a rate substantially higher than in Somerset County.

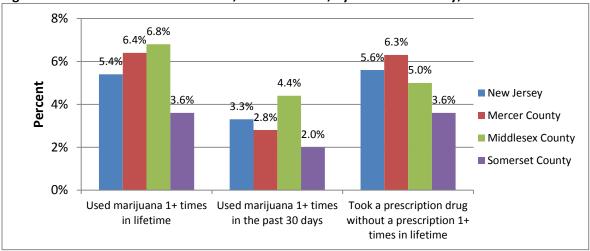


Figure 52: Other Substance Use Rates, 6<sup>th</sup>-8<sup>th</sup> Graders, by State and County, 2012

DATA SOURCE: New Jersey Middle School Risk and Protective Factor Survey, New Jersey Department of Health, Division of Mental Health and Addiction Services, 2012.

Lifetime use of marijuana among middle school students rose between 2007 and 2012, according to the Middle School Risk and Protective Factor Survey (Figure 53). Middlesex County experienced the largest increase over this time period, from 1.7% in 2007 to 6.8% in 2012. The proportion of middle school students who reported that they recently used marijuana also increased between 2007 and 2012, with Middlesex County experiencing the largest increase (from 0.9% in 2007 to 4.4% in 2012).

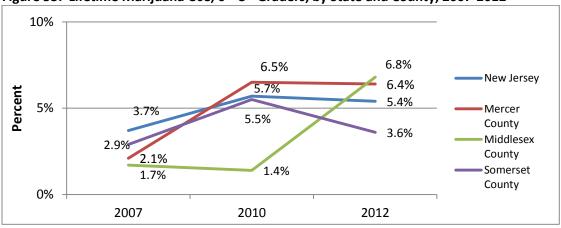


Figure 53: Lifetime Marijuana Use, 6th-8th Graders, by State and County, 2007-2012

DATA SOURCE: New Jersey Middle School Risk and Protective Factor Survey, New Jersey Department of Health, Division of Mental Health and Addiction Services, 2007-2012.

Trend data indicate that lifetime prescription drug use among middle school students between 2007 and 2012 declined slightly across all three counties and the state overall (Figure 54). Somerset County experienced the largest decline over this time period, from 6.2% in 2007 to 3.6% in 2012.

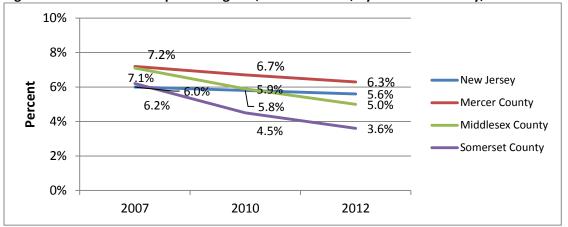


Figure 54: Lifetime Prescription Drug Use, 6th-8th Graders, by State and County, 2007-2012

DATA SOURCE: New Jersey Middle School Risk and Protective Factor Survey, New Jersey Department of Health, Division of Mental Health and Addiction Services, 2007-2012.

### Tobacco

Tobacco use was not extensively discussed by residents in focus groups and interviews. When it was mentioned, it was not identified as a concern. Quantitative data show that the proportion of adult residents who smoke in the three counties is substantially smaller than for the state overall (Figure 55). Rates of adult smoking among Somerset residents (7.5%) is less than half of rate among the adults in the state overall.

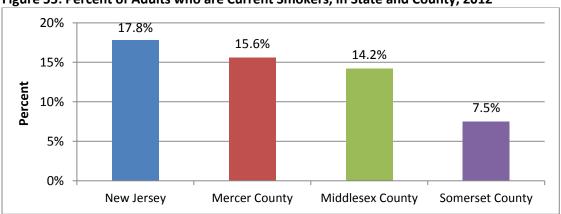


Figure 55: Percent of Adults who are Current Smokers, in State and County, 2012

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).

Data from the Youth Health Survey shows that cigarette smoking among high school youth in New Jersey has declined from 2001 to 2011 (Figure 56). The proportion of high school students in New Jersey who reported ever smoking declined from 63% in 2011 to 41% in 2011. Smoking data by race and ethnicity show that while a higher proportion of Hispanic (41.5%) and black (40.2%) high school students than white (32.4%) or Asian (22.4%) students reported in 2011 that they had tried cigarettes. Regular cigarette use rates are higher for Asian (5.5%), white (5.5%), and Hispanic (4.6%) youth and lowest for black youth (2.2%). County-level data about cigarette use among high school youth are not available.

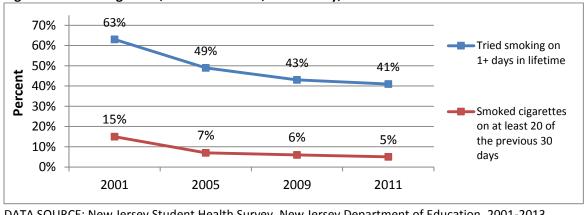


Figure 56: Smoking Rates, 9th-12th Graders, New Jersey, 2001-2013

DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, 2001-2013.

As Figure 57 shows, there are some differences across the counties relative to middle school student tobacco use. Both lifetime cigarette use and 30-day cigarette use (9.4% and 4.5%, respectively) are higher in Middlesex County than in the other two counties or the state. Rates in Somerset County are the lowest, 4.7% and 2.4%, respectively. Data about trends in lifetime cigarette use among middle school students in the region show that rates have declined in Mercer and Somerset Counties and the state, while they have increased in Middlesex County, from 7.0% to 7.6%. Trend data related to 30-day cigarette use show that rates have increased in Middlesex, remained about the same in Mercer and Somerset Counties, and declined in the state between 2007 and 2012.

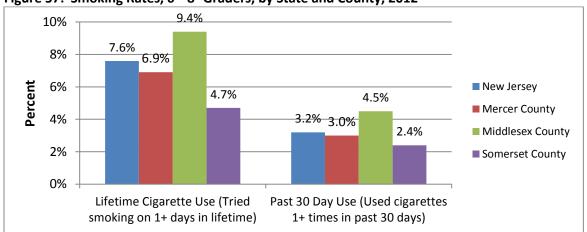


Figure 57: Smoking Rates, 6<sup>th</sup>-8<sup>h</sup> Graders, by State and County, 2012

DATA SOURCE: New Jersey Middle School Risk and Protective Factor Survey, New Jersey Department of Health, Division of Mental Health and Addiction Services, 2012.

### Substance Use Treatment

Table 10 shows data about the rate of arrests among adults and juveniles for driving under the influence in 2010. Arrest rates among both adults and juveniles were substantially lower in Somerset and Middlesex Counties than in Mercer County or the state overall. The rate of juvenile arrests was over twice as high in Mercer County (236.4 per 100,000 population) than in Middlesex (108.2 per 100,000 population) or Somerset (106.7 per 100,000 population) Counties.

Table 10: Rates of Adult and Juvenile Arrests due to Alcohol Use, per 100,000 population, by State and County, 2010

	Adults	Juvenile	Total
New Jersey	618.1	192.8	517.2
Mercer County	647.8	236.4	554.5
Middlesex County	490.2	108.2	402.8
Somerset County	498.5	106.7	400.6

DATA SOURCE: Division of Mental Health and Addiction Services, New Jersey Department of Human Services, New Jersey Chartbook of Substance Abuse Related Indicators, Somerset County, May 2013.

Data about adult and juvenile arrests due to drug abuse violations show a similar pattern to alcohol arrests: among both adults and youth, the rates of arrests in Middlesex and Somerset Counties are substantially lower than in Mercer County or the state overall (Table 11). The rate of drug arrests among Mercer County adults and juveniles was over twice as high as the Middlesex and Somerset County rates.

Table 11: Rates of Adult and Juvenile Arrests Due to Drug Use, per 100,000 population, by State and County, 2010

	Adults	Juvenile	Total
New Jersey	829.7	367.3	720.9
Mercer County	1257.6	525.2	1091.8
Middlesex County	501.2	229.5	439.0
Somerset County	423.0	300.4	392.4

DATA SOURCE: Division of Mental Health and Addiction Services, New Jersey Department of Human Services, New Jersey Chartbook of Substance Abuse Related Indicators, Somerset County, May 2013.

Data about substance use treatment admissions show some differences across the three counties. A far higher proportion of Somerset residents, 43%, than residents in the other two counties and the state were admitted for alcohol use issues in 2014 (Figure 58). Admissions for heroin were highest in Middlesex (40%) and the state overall (41%) and lowest in Mercer County (26%). In Mercer County, admissions for marijuana (25%) and cocaine (12%) were far higher than for the other two counties and the state.

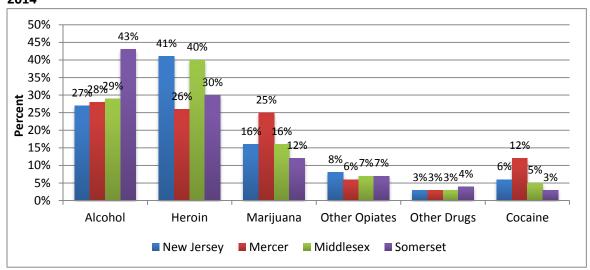


Figure 58: Percent of Substance Use Treatment Admissions by Primary Drug, by State and County, 2014

DATA SOURCE: New Jersey Substance Abuse Monitoring System (NJ-SAMS), Department of Human Services, Division for Mental Health and Addiction Services, 2014

Data about substance use treatment admissions over time confirm the perceptions of greater use of heroin and other opiates shared by focus group members and interviewees. A comparison of substance use treatment admissions in 2014 with those of 2010 as reported in the 2012 CHNA indicates that alcohol admissions declined in all three counties and the state between 2010 and 2014; however, admissions for heroin and other opiate use grew (Table 12). Both Middlesex and Somerset Counties experienced a seventeen percentage point increase in heroin and opiate admissions over this time period. Admissions for marijuana increased in Mercer County but remained the same or declined between 2010 and 2014 in Middlesex and Somerset Counties and the state.

Table 12: Percent of Substance Use Treatment Admissions, by Primary Drug, by State and County, 2010 and 2014

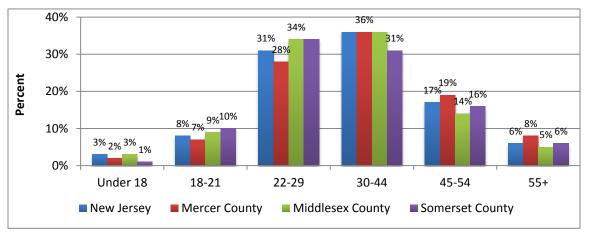
	2010	2014	% change
New Jersey			
Alcohol	34%	27%	-20.6%
Heroin & Other Opiates	37%	49%	32.4%
Marijuana	16%	16%	0%
Cocaine	7%	6%	-14.3%
Other Drugs	7%	3%	-57.1%
Mercer County			
Alcohol	35%	28%	-20.0%
Heroin & Other Opiates	31%	32%	3.2%
Marijuana	18%	25%	38.9%
Cocaine	11%	12%	9.1%
Other Drugs	5%	3%	-40.0%
Middlesex County			
Alcohol	40%	29%	-27.5%
Heroin & Other Opiates	32%	47%	46.9%

	2010	2014	% change
Marijuana	16%	16%	0%
Cocaine	5%	5%	0%
Other Drugs	7%	3%	-57.1%
Somerset County			
Alcohol	50%	43%	-14.0%
Heroin & Other Opiates	22%	37%	68.2%
Marijuana	18%	12%	-33.3%
Cocaine	6%	3%	-50%
Other Drugs	5%	4%	-20%

DATA SOURCE: 2010: New Jersey Department of Human Services, Division of Addiction Services, Statistical Reports, Substance Abuse Overview. 2014: New Jersey Substance Abuse Monitoring System (NJ-SAMS), Department of Human Services, Division for Mental Health and Addiction Services.

Data about age of admissions for substance use treatment reveals similar patterns across the region and compared to the state (Figure 59). The highest proportion of admissions are among those ages 30 to 44, followed by those ages 22 to 29. The majority of these admissions are discharged to out-patient care.

Figure 59: Substance Use Treatment Admissions, by Age at Admission, by State and County, 2014



DATA SOURCE: New Jersey Substance Abuse Monitoring System (NJ-SAMS), Department of Human Services, Division for Mental Health and Addiction Services, 2014

### **Immunization and STIs**

Communicable diseases were not discussed by focus group members or interviewees. Data about sexual behaviors among youth in New Jersey show that fewer high school youth reported ever engaging in sexual intercourse or recently engaging in sexual intercourse in 2013 than in 2011 (Figure 60). The proportion of youth reporting that they did not use a condom during their last sexual intercourse increased (from 37% to 41%). County-level data are not available.

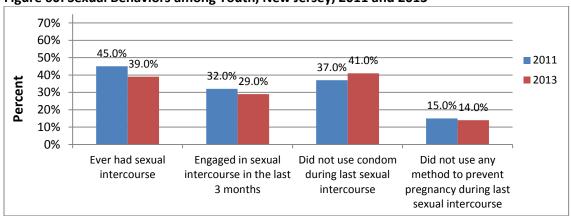


Figure 60: Sexual Behaviors among Youth, New Jersey, 2011 and 2013

DATA SOURCE: New Jersey Student Health Survey, New Jersey Department of Education, 2011 and 2013.

Data about teenage birth rate shows that the rate of teen births is highest in Mercer County (14.4 per 1,000 females), a rate substantially higher than the state (8.7 per 1,000 females) and Middlesex County (7.5 per 1,000 females) and over twice as high as the rate in Somerset County (5.2 per 1,000 females) (Figure 61).

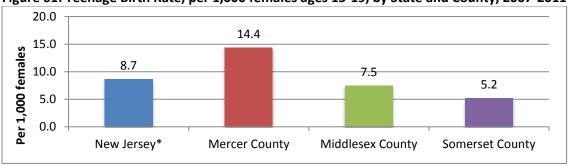


Figure 61: Teenage Birth Rate, per 1,000 females ages 15-19, by State and County, 2007-2011

DATA SOURCE: Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health and National Center for Health Statistics and U.S. Census Bureau, as reported by the New Jersey State Health Assessment Data (NJSHAD) \*2011 Only

Rates for reportable sexually transmitted infections (STIs) were substantially higher in Mercer County than in the other two counties or the state overall. The HIV infection rate was 504 per 100,000 population in Mercer County in 2010, a rate higher than the state overall and far higher than the rates in both Middlesex (290 per 100,000) and Somerset (207 per 100,000) Counties (Figure 62).

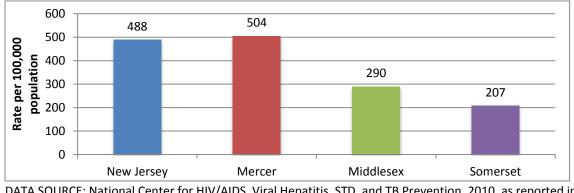


Figure 62: HIV Rate per 100,000 population, by State and County, 2010

DATA SOURCE: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2010, as reported in County Health Rankings, 2015

Gonorrhea infection rates were over four times higher in Mercer County than in Middlesex or Somerset Counties and over twice as high as in the state overall. Chlamydia infection rates were over twice as high in Mercer County than Somerset County (Table 13). The rates of STI infection in all counties have risen since the 2012 CHNA.

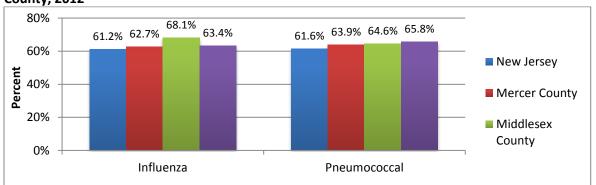
Table 13: STI Infection Rates, per 100,000 population, by State and County, 2013

	Gonorrhea Syphilis (Primary and Secondary)		Chlamydia
New Jersey	78.7	2.6	317.9
Mercer County	168.7	1.3	462.7
Middlesex County	34.4	1.7	260.1
Somerset County	27.5	2.4	172.4

DATA SOURCE: NJ Communicable Disease Reporting & Surveillance System. Rates calculated using 1-year population estimates from 2013 American Community Survey.

Immunization rates for flu and pneumonia in 2012 among those over age 65 were higher in the three counties than in the state (Figure 63). Middlesex County had the highest rate of immunization for the flu (68.1%) while Somerset County had the highest rate for pneumonia immunization (65.8%).

Figure 63: Percent of Adults Age 65+ who have had Flu and Pneumonia Vaccination, by State and County, 2012



DATA SOURCE: Behavioral Risk Factor Survey, Center for Health Statistics, New Jersey Department of Health, as reported by the New Jersey State Health Assessment Data (NJSHAD)

### **Maternal and Child Health**

"Women's health, you don't hear about it. Mothers typically are the last one to be taken care of and they don't take care of themselves. They put their health care needs off, they're worried about everyone else." – Focus Group Participant

"More support is needed for Moms. You have to reach out on your own. There should be follow up with the pediatrician and lactation consultant in the beginning and at the same time." – Focus Group Participant

Women's health concerns were discussed extensively among members of the new parent focus group but far less so with other groups and interviewees. Concerns among these parents included the high cost of childcare and challenges with breastfeeding, infertility, and pelvic floor therapy. The parents indicated that access to health care was not as much a concern given they were more financially secure. The focus group members, however, were frustrated with the overall health care system for new parents and spoke generally about the lack of follow-up support after having a baby in the U.S., especially in comparison to Europe where two focus group members were from. In particular, several women mentioned that there is limited lactation support for new mothers. As one mother stated, "after you have a baby here, you're just left. You go home and that's it." A few women shared challenges with health insurance, noting that many insurers do not pay for home births or midwife support. Others expressed concern about the increasing prevalence of cesarean births and reported what they believed to be a preference for these among obstetricians. Finally, pelvic floor issues (problems related to the muscles, ligaments, and tissues that support the bladder, uterus, vagina, and rectum) were a concern among several participants, and women shared that there is little support or information about this. As one focus group participant shared, "when I had pelvic floor issues, I was panicking and called to make an appointment. They pushed it off as normal—but didn't tell me what it was."

Several focus group respondents were concerned that lower income women lacked access to prenatal care in the community, whether due to limited information on available services or insurance issues. Data about prenatal care from the New Jersey Center for Health Statistics shows that a far smaller proportion of women from Mercer County (73.0%) accessed prenatal care in their first trimester in 2011 than women from Middlesex (86.2%) or Somerset (91.2%) or the state overall (78.6%) (Table 14). A comparison of prenatal care trends from 2008 (as reported in the 2010 CHNA) and 2011 reveals that while the proportion of women who accessed prenatal care in the first trimester increased in Middlesex and Somerset Counties and the state between 2008 and 2001, it decreased from 76.1% to 73.0% in Mercer County. About 1.0% of women in Mercer did not access prenatal care at all, a higher rate than the other two counties and the state overall (1.3%).

Table 14: Percentage of Mothers with Onset of Prenatal Care, by State and County, 2013

	First Trimester		Third Trimester		No Prenatal Care	
	2008	2011	2008	2011	2008	2011
New Jersey	75.6%	78.6%	3.1%	2.5%	1.1%	1.3%
Mercer County	76.1%	73.0%	3.6%	4.2%	1.0%	1.0%
Middlesex County	83.3%	86.2%	2.4%	1.9%	.7%	.7%
Somerset County	88.4%	91.2%	1.5%	.9%	.5%	.6%

DATA SOURCE: New Jersey Department of Health and Senior Services, Center for Health Statistics, New Jersey State Health Assessment Data, 2008 and 2013.

Data about birth outcomes show that in 2011, Somerset County had higher rates of preterm births (10.2%) than either Middlesex (9.1%) or Mercer counties (9.0%) or the state (9.5%) (Figure 64). Mercer County had a slightly higher proportion of low birth weight babies. A comparison of these rates with those reported in the 2012 CHNA reveal that rates of low birth weight births have remained largely the same while rates of premature births have declined slightly between 2008 and 2011.

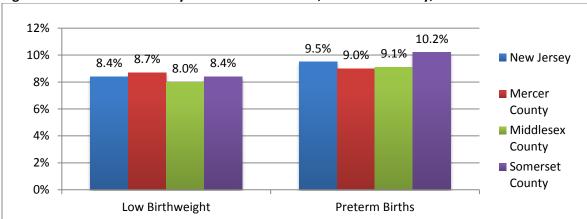


Figure 64: Percent of Births by Infant Characteristics, State and County, 2011

DATA SOURCE: Birth Certificate Database, Office of Vital Statistics and Registry, New Jersey Department of Health, as reported by the New Jersey State Health Assessment Data (NJSHAD)

### **Oral Health**

**Oral health was not discussed by focus group members or interviewees.** Quantitative data about oral health is only available at the state level. BRFSS data indicate that the proportion of adults reporting that they had a yearly visit to a dentist or a dental clinic rose slightly between 2006 and 2010 but declined in 2012 (Figure 65). The proportion of seniors who have had all their teeth extracted declined over this time period.

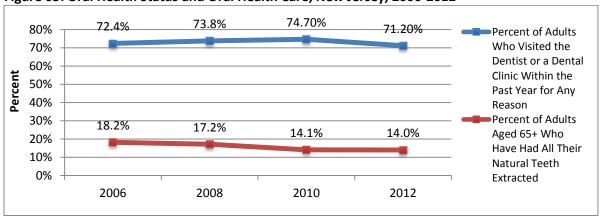


Figure 65: Oral Health Status and Oral Health Care, New Jersey, 2006-2012

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)

### **Elder Health**

"If seniors are not out and about, they experience social isolation. The leading indicator of premature death is social isolation. For that reason alone, it is so critical to get seniors out." – Key Informant

"[Seniors] don't always eat right. It is too much trouble to make it. They buy something that's quick and may not be nutritious." – Focus Group Participant

"Senior care is an issue. Cost is a real problem. You try to keep them at home where it's more affordable but it is very difficult." – Focus Group Participant

About 30% of community survey respondents identified health concerns related to aging as a health issue with the biggest impact on the community. The health concerns of seniors were also mentioned frequently in focus groups and interviews. As they age, seniors face increasing isolation, as families live further away and elders become less mobile. Seniors who do not speak English face even greater isolation. Health concerns such as dementia and Alzheimer's are increasingly common as lifespans increase and according to EMS focus group members, falls among the elderly are common. Thus, according to respondents, it is difficult for many seniors to "age in place." Several respondents shared that social isolation as well as grief contribute to mental health and substance use concerns among seniors. Others spoke about difference in perceptions between the generations, especially those from other cultures. As one person explained, "the younger generation is leaving. We don't expect our kids will care for us when we're old, but we also understand our own parents' perspectives [that we will care for them]. We're a unique generation."

Fortunately, residents reported, there are some excellent services in the region for seniors including senior housing, senior centers, and some transportation options. Somerset County, for example, has a network of seven senior centers that provide recreational, educational, social, and meals programs for seniors. Respondents also reported that there are adult day programs. However, senior focus group members reported that seniors face economic challenges, especially related to health care cost, including medicine. For some seniors this means less money to spend on food, the result being that they end up eating cheaper foods that are less healthy, which contributes to poor health. The expense to staying at home was also a concern, especially to senior focus group members. As one member stated, "there's a cost factor, for those who want to stay in their home. They don't know how long they can afford to have care at home."

Another challenge reported is that there seems to be fewer caregivers and home health aides than are needed. Caregiving, especially by family members, has been an area of focus for the United Way of Northern New Jersey. It currently sponsors a Caregiver Coalition that provides resources for caregivers of seniors as well as others, including education, monthly socialization meetings, and respite support. Home care was also identified as a substantial need in the community to both assist seniors who return to their homes after hospital stays and who want to remain in their homes as they age. While Medicaid does provide some home care, respondents saw a need for more providers who can deliver home care.

#### **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 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**

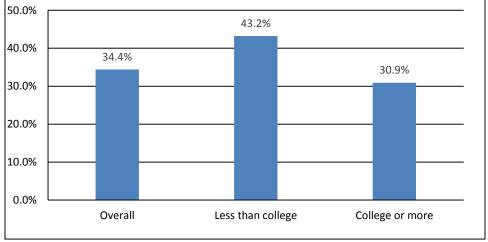
"There is a bubble for health services. People have enough disposable services and enough means that they can pay for services, cash and carry." -- Focus Group Participant

"There seems to be a confusion among people about when to go to urgent care versus the ER." -Focus Group Participant

A majority of community health needs assessment survey respondents (94.2% in Mercer County, 92.6% in Middlesex County, and 93.8% in Somerset County) indicated that their main medical care is provided by a private doctor's office or group practices. Across all respondents, 93% indicated that they had accessed primary care services in the past year, while 34.4% used emergency services. Figure 66 below shows that a higher percentage of survey respondents with less than a college degree (43.2%) had used emergency services in the past year compared to survey respondents with a college degree or higher (30.9%).

Figure 66: Percent of Survey Respondents Who Have Used Emergency Services in the Past Year, by Education, 2015

50.0%
43.2%



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

When asked about their sources for healthcare, focus group members and interviewees responded similarly to survey respondents, most often mentioning primary care providers. A few respondents noted that recent changes in hospital locations have also created challenges for some residents in the region. One person observed that the Trenton hospital has moved further South, while Princeton moved further North, meaning that "there is a bigger geographical gap for healthcare." Finally, as discussed earlier, lack of mental health and substance use providers who accept insurances was identified as a

substantial constraint. For specialty services, several respondents mentioned that they go to the larger cities and mentioned Hospital of the University of Pennsylvania and Sloan-Kettering.

For emergency services, patients reported that they go to local hospitals such as Princeton at Plainsboro and St. Peter's. Patients, particularly younger people, also increasingly use urgent care services. As one focus group member shared, "the younger generation – they're OK not having a relationship with a PCP. They run into urgent care. They don't want to wait until they can get into their doctor. My daughters don't care about the relationship." EMS focus group members noted, however, that patients can be confused about which health conditions are appropriate for urgent care and for which ER services are needed. As one EMT stated, "it's how they are advertised. They say they are an 'emergency care facility' so people go there. But that's not appropriate. They should be going to the hospital ER. We (EMTs) get a lot of calls from the urgent care center to bring people to the hospital because it's really an emergency." Figure 67 below shows that the percent of community health survey respondents who indicated they had used urgent care in the past year decreased by age, with 38% of respondents aged 18 – 39 years old using urgent care compared to only 20.9% of those 65 years and older.

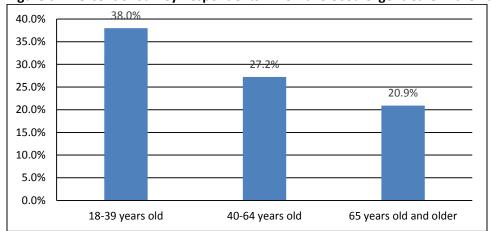


Figure 67: Percent of Survey Respondents Who Have Used Urgent Care in the Past Year, by Age, 2015

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

Survey respondents were asked how likely they were to obtain specific health care services from Princeton HealthCare System in the future. The highest number of respondents indicated that they were very likely to obtain acute care hospital services (54.2%), urgent care services (51.6%), and cancer screenings (48.8%) from PHCS (see Appendix C for data on other health care services).

Survey respondents were asked to indicate from which sources they get most of their health information. Figure 68 below show the sources that were selected by the greatest number of respondents.

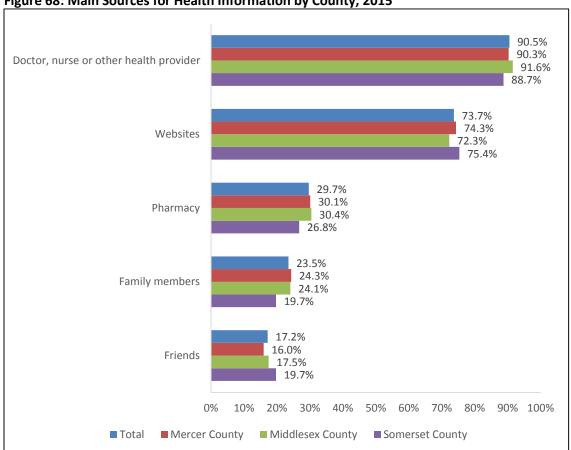


Figure 68: Main Sources for Health Information by County, 2015

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

Community survey respondents were asked which factors were most important to them when seeking medical services (Figure 69). Across all three counties, respondents identified the reputation of quality of care as most important. In Somerset County, similar proportions of respondents reported that reputation about quality of care and acceptance of insurance as the most important factors. A higher proportion of Somerset County respondents (18.5%) than those from Mercer (10.3%) or Middlesex Counties (15.0%) reported that a good relationship with health care providers is important.

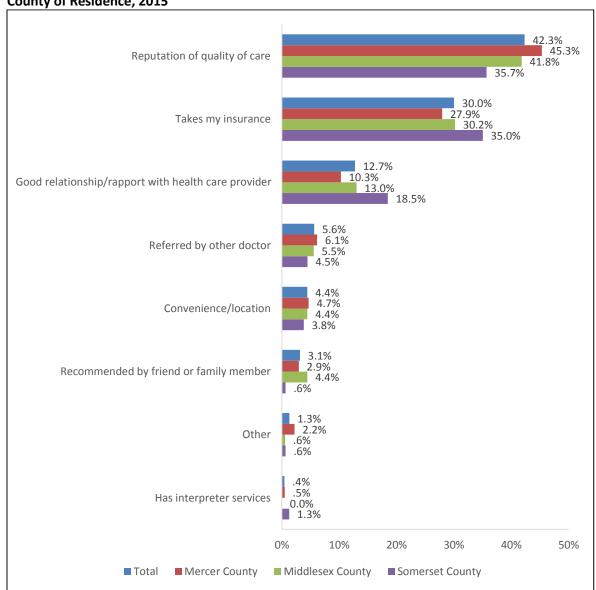


Figure 69: Most Important Factors Survey Respondents Consider When Seeking Medical Services, by County of Residence, 2015

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

## **Screening and Other Health-Related Services**

In general, focus group members and interviewees reported that the region has many opportunities for screening services. For screening services, many respondents reported that they go to their PCP and some reported that they go to health fairs offered through partnerships with local health providers and hospitals and community-based organizations.

## **Provider Availability**

Many respondents reported that there were sufficient numbers of general healthcare providers in the region. A few, however, stated that they thought some important health services were lacking. Several seniors, for example, mentioned that more specialists were needed. Many respondents reported that

there were fewer behavioral health providers in the region than are needed. Quantitative data indicate that residents in the three counties have good access to healthcare. The percentage of adults who reported in 2013 that they have one or more persons they think of as their health provider was higher in the three counties than in the state overall, with the highest proportion or residents in Somerset County reporting this (86.6%) (Figure 70).

100% 82.5% 82.7% 83.5% 86.6% 86.6% 80% 40% 20% New Jersey Mercer Middlesex Somerset

Figure 70: Percent of Adults Reporting Having One or More Persons They Think of as Their Personal Doctor or Health Care Provider, by State and County, 2011-2013

DATA SOURCE: Behavioral Risk Factor Surveillance Survey, 2011-2013, as reported by the New Jersey State Health Assessment Data (NJSHAD)

Data about the quantity of residents per provider shows that overall, Somerset County residents have the greatest number of providers for its population size (Table 15). There were 934 residents per primary care provider in Somerset County in 2012, compared to 1,168 residents per primary care physician in New Jersey, indicating fewer people per provider. Mercer and Middlesex Counties also have a smaller number of people per provider than the state. The proportion of residents per mental health provider is lowest in Mercer County (375 residents per provider), while the ratio is highest in Middlesex County (673 residents per provider), where the ratio exceeds the state ratio (623 residents per provider).

Table 15: Population per Provider, in State and County, 2012

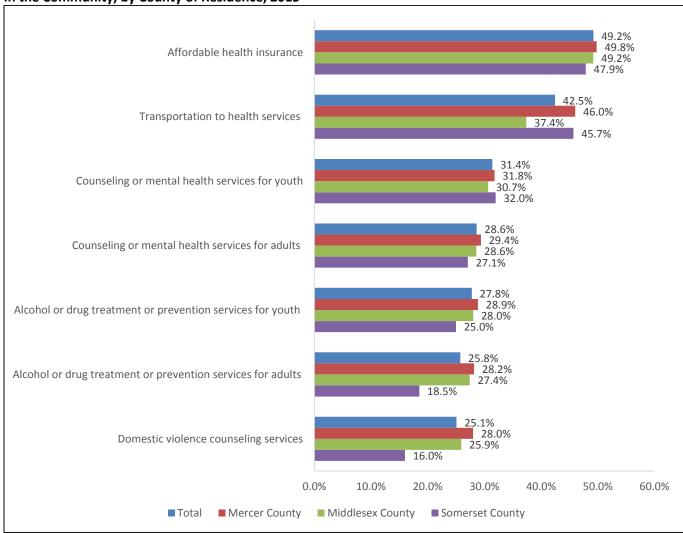
	Primary Care Physicians	Dentists	Mental Health Providers
New Jersey	1,168 : 1	1,240 : 1	623 : 1
Mercer County	964 : 1	1,323 : 1	375 : 1
Middlesex County	1,054 : 1	1,237 : 1	673 : 1
Somerset County	934 : 1	1,102 : 1	439 : 1

DATA SOURCE: Area Health Resource File/American Medical Association, 2012, as reported in County Health Rankings & Roadmaps 2015.

#### **Access to Health Care Services**

Although there are many health care facilities in the Somerset County region, focus group members and interviewees reported that some face challenges to accessing health care services, especially lower-income and undocumented individuals. Community survey respondents were asked to indicate how difficult it is to access specified health and social services in the community (see Appendix C for the full list of specified health and social services). Figure 71 shows the health and social services that were indicated as "hard" or "very hard" to access by the greatest number of respondents. About half of respondents across the three counties reported that affordable health insurance was hard or very hard to access. As discussed earlier in this report, lack of transportation is an issue in the region and over 40% of community survey respondents indicated that transportation to health services was hard or very hard to access. Over a quarter of respondents across the three counties reported that mental health services and substance use treatment services—for both adults and youth—were hard or very hard to access.

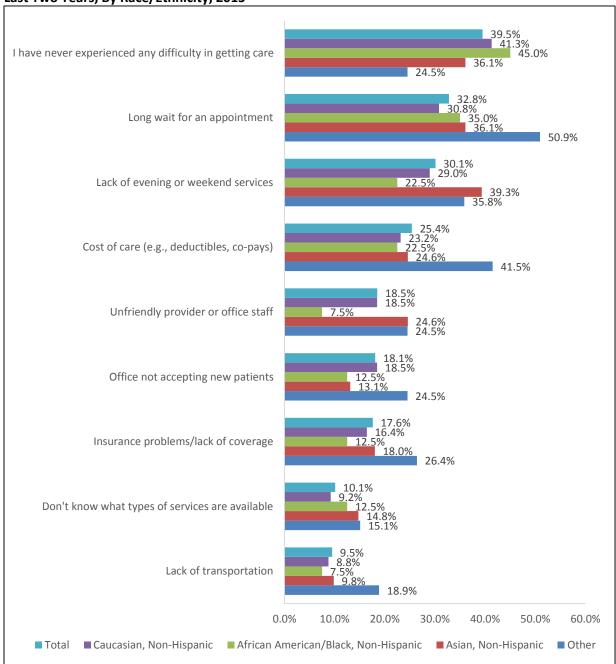
Figure 71: Health and Social Services That Survey Respondents Consider Hard or Very Hard to Access in the Community, by County of Residence, 2015



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015 NOTE: "Don't Know" responses excluded

Community survey respondents were also asked to identify barriers they experienced in getting health services over the two years prior to the survey (Figure 72). Over a third of respondents reported that they did not experience any difficulty in getting care. Among those who did face challenges, the most often cited was difficulty getting an appointment, lack of weekend or evening hours, and cost of care. Survey analysis by race/ethnicity shows that higher percentages of certain groups reported specific barriers. For example, among respondents of Other races (Hispanic/Latino, other race non-Hispanic, or two or more races), 50.9% experienced long waits for appointments (compared to 32.8% of all respondents), and 18.9% faced a lack of transportation (compared to 9.5% of all respondents).

Figure 72: Issues that Made it Difficult for Survey Respondents to Get Needed Health Services within Last Two Years, By Race/Ethnicity, 2015



DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015 NOTE: Other includes individuals who identify as Hispanic, any race; other race, non-Hispanic; and two or more races, non-Hispanic

Figure 73 shows that, while overall 9.5% of survey respondents indicated a lack of transportation made it difficult to get needed health services within the last two years, 13.6% of respondents aged 18-39 and 11.5% of respondents aged 65 and older encountered transportation difficulties.

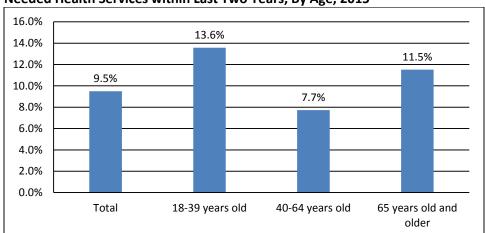


Figure 73: Percent of Survey Respondents Indicating Lack of Transportation Made it Difficult to Get Needed Health Services within Last Two Years, By Age, 2015

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

Among survey respondents aged 18-39, the most often cited challenges were a lack of evening or weekend services (53.1%), insurance problems / lack of coverage (44.4%), and not knowing what types of services are available (44.4%).

#### **Obtaining Health Insurance**

"Patients change doctors because their plans change, which makes for fragmented care." – Focus Group Participant

Although residents acknowledged that the Affordable Care Act (ACA) has helped to enhance access to health insurance, challenges remain. Overall, about half of community survey respondents indicated that finding affordable health insurance was "hard" or "very hard"; however, 57.7% of African American/ Black non-Hispanic respondents and 53.7% of Asian, non-Hispanic respondents indicated that this was "hard" or "very hard". Community survey respondents were asked about their insurance coverage. A majority of community health needs assessment survey respondents overall indicated that they currently have health insurance: only 1.1% of survey respondents stated that they were currently uninsured. However, there are disparities in health insurance coverage by race/ethnicity: 22.2% of Hispanic/Latino survey respondents were uninsured, compared to 2.3% of African American / Black non-Hispanic residents, 0.6% of Caucasian/White non-Hispanic residents, and 0% of other race/ethnicities. These results are similar to observations by focus group members and interviewees who reported that non-English speaking residents face substantial challenges to accessing health insurance. It can also be costly, especially for small businesses or those who are self-employed. This disproportionately affects some immigrant groups as well. As one key informant interviewee indicated, "Many Koreans are self-

employed or own small businesses. There is a big financial barrier to obtaining insurance. Obamacare helps. More people still need to sign up."

## **Provider Availability and Service Coverage**

"Learning what's covered or not – this is complicated. Getting people to talk with you is hard." – Focus Group Participant

"Most psychiatrists in this area don't concern themselves with getting involved in insurances. People are paying out of pocket around \$400 an hour." – Focus Group Participant

"A lot of people are in high-deductible plans, or they have a network that is narrow. Co-pays are higher. There are so many plans, half the time we don't even know if we are in their plans." — Focus Group Participant

"Insurance completely dictates where we go." – Focus Group Participant

Length and quality of coverage are additional challenges related to accessing health care according to residents. About 18% of community survey respondents indicated that they had faced challenges with insurance coverage in the past two years. Interviewees and focus group members expressed similar concerns citing disagreements with insurance companies over what is and is not covered, erroneous billing statements, and general difficulty learning from insurance companies what plans do and do not cover. A number of respondents noted that a growing number of physicians, especially specialists and mental health providers, do not accept many types of insurance. The most frequently-mentioned challenge was coverage for services like mental health and substance use treatment where the number and type of visits is often limited by health insurance companies. As a result, residents reported, a growing number of private mental health providers no longer take insurance or no longer treat patients once their insurance coverage runs out.

Health care providers also shared challenges with health insurance including substantial paperwork and slow reimbursement. As one provider stated, "[we] often don't know if care will be covered. Or, insurance companies make mistakes. Paperwork piles up." As a result, some residents noted, fewer providers are accepting Medicaid and Medicare, thereby further limiting healthcare access for lower income residents and seniors. One consequence of limited availability of healthcare services is increased use of the hospital emergency room for care. As one interviewee observed, "[some] are using the ER more frequently, a small but growing subset of the community."

## **Affordability of Health Care Services**

"Cost of medications is a problem –my insurance doesn't pay for two of my medications." – Focus Group Participant

"I once saw a guy having a heart attack during the day who called a taxi to bring him to the hospital instead of the ambulance because it was cheaper." – Focus Group Participant

"Insurance is a bigger issue, even people who have commercial insurance. They are electing not to come here because of co-pays, high deductibles, Plans have changed insured person has more skin in

the game. People are covered but they can't afford to come because of their plans. This has been a trend for the past couple of years." – Focus Group Participant

Cost was also reported to be a challenge to accessing healthcare. About 25% of community survey respondents reported that the cost of healthcare had made it difficult for them to access needed health services within the past two years. Focus group members and interviewees reported that high deductibles and co-pays prevent some from accessing needed care. Further, a few residents commented that this appears to have increased since ACA as people have shopped around for low cost premiums sometimes without realizing that that they will pay more at the doctor's office or in deductibles. As a result, one provider explained, "some are putting off tests if there are out-of-pocket costs." Another provider echoed this observation saying, "ACA and expansion of Medicaid have helped the uninsured, but there is still a significant co-pay burden. Having insurance just doesn't answer all things." A couple of respondents also mentioned that cost of other health services—like dental and vision care—is expensive and often not covered by insurance.

A related challenge is the cost of medication, some of which are not covered by insurance. While residents reported that there are medication assistance programs, these are insufficient to meet the needs of some patients. One interviewee also reported that prescription assistance programs generally cannot pay for medications for undocumented persons, creating a further barrier for those individuals.

## **Transportation**

As discussed earlier, transportation is seen as one of the greatest challenges for the region for those who do not have private vehicles. Community survey respondents were asked whether they agreed or disagreed with various statements related to access to care; across all counties, 56.4% of respondents agreed with the statement "It is hard to use public transportation to get to medical/dental services" (see Appendix C for additional statements and responses).

Lack of transportation, according to respondents, substantially affects access to healthcare for some people. Often, focus group members and interviewees reported, patients without cars must rely on friends or family to get to health appointments or must take taxis, which can be costly. While some transportation options do exist, appointments need to be made ahead of time which creates difficulty for those who have emergent or more immediate healthcare needs.

#### Influence of the Affordable Care Act on Healthcare Access

"People are not getting a lot of help on the CAC [Certified Application Counselor] side. The CAC does not help once patients try to utilize the product. We registered over 1,000 citizens for these products. After application, then there is not a lot of help. But that is when people have problems. Help with utilizing the product is not there—they are on their own. The CACs are not trained to teach people how to use the insurance." – Key Informant

"It is hard for someone to be educated in all the health plans but that is part of the problem. There are 31 on the Exchange and then there are the employer plans. People are not sure what is covered, they don't know how to check if it is covered, so people don't get preventive care." – Key informant

"The health care system in general – it's an onerous process." – Key Informant

Focus group members and interviewees were asked about the influence of the Affordable Care Act (ACA) on healthcare access. While respondents reported that the ACA has resulted in increased access to health insurance for many, challenges remain. Many recognized, however, that the ACA is still in its early stages. Several reported that there is now greater access, especially for services like behavioral health. Healthcare providers reported seeing more Medicaid patients coming in for care, which they noted is a good thing. The ACA has also helped younger people who have had difficulty finding jobs with insurance, according to a couple of focus group members. As one parent explained, "the younger generation is having harder time finding jobs with insurance. Obamacare allowed my daughter to have care. COBRA is astronomical, they couldn't pay that."

One of the most significant challenges has been patients' lack of understanding about what is covered by different insurance products. This is especially challenging, respondents reported, for those who have never had insurance coverage and are inexperienced in how insurance works and how to effectively utilize it. Additionally, there are few resources to help people with this. While Certified Application Counselors have been available enroll patients in the health insurance marketplace, there are few inperson supports to help people navigate it once they are insured. This responsibility has fallen, according to respondents, to hospitals and other medical provider offices. One consequence of lack of education, according to respondents, has been that patients have selected insurance with lower premiums but high deductibles and co-pays. As a result, some people have not been accessing preventative care because they don't want to pay the out-of-pocket expenses. For cost reasons some have also been switching between insurances, creating substantial challenges for providers. As one provider explained, "people go in and out of insurance. They bought their product and then they can't pay for it, so they get off of it." Another challenge, according to focus group members and interviewees, is finding providers who accept these insurances. As one interviewee stated, "specialist and mental health doctors are not taking a lot of these plans."

Finally, although the ACA has increased access to health insurance and thus, health services for some, undocumented individuals are not eligible and still face substantial barriers to access health care. As one interviewee described, "the ACA does not address the needs [of undocumented individuals]. Nothing good has been happening for these people."

#### STRENGTHS AND COMMUNITY RESOURCES TO POTENTIALLY ADDRESS IDENTIFIED NEEDS

"[This is a] culturally diverse area with a focus on schools, the arts, and community engagement." – Key informant interview participant

Participants in focus groups and interviews were asked to identify the strengths and assets in their communities. Several themes emerged that has been discussed in this report. This section briefly summarizes these.

#### Location

The three county region is located close to two very large urban areas, Philadelphia and New York City, which contribute substantially to economic and cultural vitality of the region. The region is also home to headquarters of a number of large multi-national corporations and research and health care institutions, which also contribute to the local economy and intellectual life of residents. Finally, while residents reported that more could be done to enhance biking and walking infrastructure in the area, they valued the region's many green spaces and amenities such as parks, trails, playgrounds, and game fields.

### **Human and Economic Resources**

The region has tremendous human and economic resources. The region's population is largely affluent and educated, although some groups struggle. Focus group members and interviewees reported that residents are largely committed to their communities and can be counted on to help out. Volunteerism among residents was reported to be high. The region has the means to make change.

## **Strong Health Care and Social Service Infrastructure**

The region is known for its excellent health care facilities, including acute care hospitals and a wide range of specialty and tertiary providers. While challenges to accessing health care exist, especially for lower income residents, focus group members and interviewees praised the variety and quality of health care services in the region. Additionally, residents reported that they have access to a range of community-based health programming, such as health fairs and screenings, as well as community wellness activities.

Focus group members and interviewees also reported that the region has a variety of social service organizations that work to meet the needs of local residents. Community-based organizations were described as collaborative by respondents.

### **Educated Residents and Excellent Schools**

Schools were reported to be a tremendous asset and one of the reasons young families move to the region. Residents in the region tend to be more educated than in other parts of the state and have a strong "pro education" mindset. Additionally, access to high-quality universities and colleges further contribute to the vibrancy and intellectual life of the region.

#### **RESPONDENTS' VISION FOR THE FUTURE**

Survey respondents were asked to rate a list of issues as low, medium or high priority for future funding and resources. Figure 74 below shows the issues that were selected as high priority by the greatest number of respondents (see Appendix C for the full list of issues rated). Services for seniors, including services to help seniors stay in their homes and health/medical services, were identified as a high priority need by over half of respondents. Programs and services to prevent chronic disease and expanding health services to low income individuals were identified as a high priority issue for slightly less than half of the survey respondents. About 40% of respondents identified transportation to health care and mental health services as priority issues for future funding.

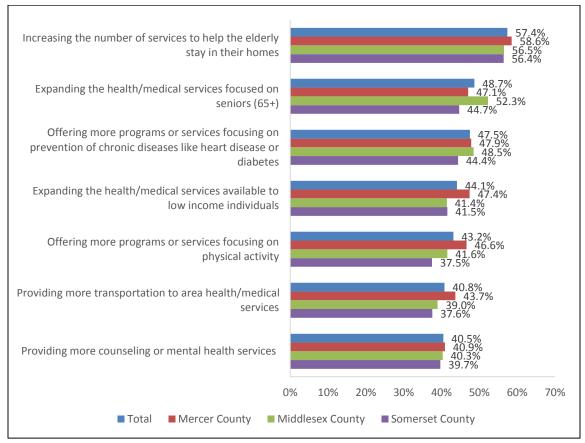


Figure 74: High Priority Issues for Future Funding and Resources by County, 2015

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

Table 16 presents, the issues rated as high priority by the greatest number of respondents overall broken down by race/ethnicity. Compared to respondents overall, a higher percentage of African American/Black non-Hispanic respondents rated all health issues as being of high priority. For example, 79.1% of African American/Black non-Hispanic respondents indicated that offering more programs or services focused on chronic disease prevention is a high priority for future funding and resources, compared to 47.5% of respondents overall.

Table 16: High Priority Issues for Future Funding and Resources by Race/Ethnicity, 2015

		Caucasian,	African	Asian,	
		Non-	American/ Black,	Non-	
	Total	Hispanic	Non-Hispanic	Hispanic	Other
Increasing the number of services to help the elderly stay in their homes	57.4%	58.8%	72.1%	50.8%	38.9%
Expanding the health/medical services focused on seniors (65+)	48.7%	47.1%	76.7%	51.7%	39.3%
Offering more programs or services focusing on prevention of chronic diseases like heart disease or diabetes	47.5%	44.8%	79.1%	60.0%	35.2%
Expanding the health/medical services available to low income individuals	44.1%	40.2%	79.1%	47.4%	51.9%
Offering more programs or services focusing on physical activity	43.2%	40.9%	55.8%	56.9%	38.5%
Providing more transportation to area health/medical services	40.8%	40.3%	53.5%	35.1%	42.6%
Providing more counseling or mental health services	40.5%	38.7%	61.0%	29.3%	51.9%

DATA SOURCE: Princeton HealthCare System Community Health Needs Assessment Survey, 2015

When asked what they viewed as current service gaps and health needs of residents, focus group members and interviewees identified several of the same issues as survey respondents. For these individuals, however, behavioral health services—mental health and substance use—was one of the greatest priority areas. Programs to address chronic disease and promote healthy behaviors were also seen as a substantial need by focus group members and interviewees. Additional needs identified by these residents were services for seniors, enhanced health services and health care navigation support, and enhanced collaboration and partnerships across organizations.

#### **Behavioral Health Services**

"When you look at resources at mental health care, it's pitiful. We have hardly any resources for mental health." – Focus Group Participant

"Psychiatric need is biggest need. It's a void. I don't know where to tell them to go." - Key Informant

"Behavioral health screening does not go on in the community health fairs. Issue is finding someone to do it, and then having someone to refer to. Substance abuse screening could be done in the community but then also, where do we send them?" – Key Informant

Of all needed services, mental health services and substance abuse services were cited as most important. Although the region has many mental health providers, assessment respondents reported that several do not accept Medicaid or new marketplace insurances, substantially limiting access to care. There also was seen to be a shortage of behavioral health services for children and youth, in particular, in-patient beds for children.

Suggestions also included doing more to educate the community about mental health, which would help to reduce the stigma. This included parenting programs, programs that educate about suicide, and school-based programs. Several respondents also thought more should be done to educate health and

social service providers about mental health issues. This included training primary care providers, police officers, and teachers. Several also suggested that mental health and substance use screenings be incorporated into health fairs and other community-based screening programs.

Some respondents stressed that more work needs to be done with primary care providers and dentists to educate them about behavioral health issues, especially relative to prescriptions for opiates. Finally, respondents suggested policy changes such as banning cigarettes on campus and eliminating alcohol advertising on television.

## **Healthy Living and Disease Prevention**

"Programs that educate people are good; we need more of them, especially around diabetes." – Key Informant

"Need to do more around diabetes. We need to understand this better. We need to know the level of prevalence in our community. Need to do more around prevention like exercise, rest, and diet." – Key Informant

The need for patient education about healthy living was identified by a number of focus group members and interviewees. Suggestions included diabetes education, wellness education, and nutrition and healthy food preparation classes. Several participants mentioned the need to especially reach underserved people, which requires greater outreach to the community and partnership with community-based organizations such as schools, faith communities, and ethnically-based organizations, as well as options in languages other than English. Critical to reaching underserved minority residents, according to respondents, is working with local leaders who have both influence in local communities. As one person suggested, "it is important to work with individuals in the community who people trust."

Doctors were also seen as key partners to sharing the message about wellness. As one person stressed, "people listen to their doctors, so you need to engage them. We need to have doctors and the hospitals support the message [of healthy lifestyles]."

A couple of respondents also spoke about the need for more screenings, especially in underserved community locations. As one person reflected, "public screenings (for diabetes, prostate, etc.) used to be frequent in community institutions like churches. We've lost this. The partnership connection is lost. Need more educations and screenings in the community rather than at the hospital."

Several participants also suggested doing more around the built environment to encourage healthy behaviors. Suggestions included being more proactive around complete streets implementation as well as policies relative to developing and maintaining bike and pedestrian-friendly streets.

## **Services for Seniors**

"Caregiver support is needed – nothing is currently available." – Key Informant

More support for seniors was also suggested by focus group members and interviewees. This includes support groups, help with home care, and more education and support for caregivers including around topics such as dementia and Alzheimer's. Transportation for seniors, especially for medical appointments was also mentioned as needed; one person suggested a voucher system. A couple of

respondents stressed the need for more home health services after hospital stays for seniors to keep down hospital readmission rates.

#### **Enhanced Health Services and Healthcare Follow-up**

Several respondents expressed the need for enhanced health services, most importantly more providers who accept Marketplace insurances and Medicaid and Medicare. Several focus group members and interviewees also believed that there was a greater need for homecare services as more surgeries, such as joint replacements, become outpatient services. As one health department official stated: "chronic disease and screenings, there's room for collaboration for health screenings in the area."

Several respondents specifically mentioned increasing screenings in the community through partnerships with community-based organizations. As one provider shared, "I think [improving community health] goes back to the different screening events to point people in the right direction to get care. Screenings are the new doctor appointments." As discussed above, expanding the screenings that are conducted to include mental health and substance use was also recommended by a couple of respondents.

## **Enhanced Collaboration and Deeper Reach into Communities**

Although not a prominent theme broadly, a few community organizations spoke about a desire for greater collaboration across the many health and human service organizations that work in the three-county region. This related to both the provision of services, and greater coordination of health care for patients. As one person stated, "connecting the dots between the town, the schools, and the community. People have access to things but working together providing effective support, following up to make changes."

## **Increased Language Access for Non-English Speakers**

Residents, especially those who are from the immigrant community or work with them, stated that more services to enhance language access for non-English speakers was needed. This includes interpreters, more bi-lingual providers, and more education programs for Spanish speakers.

## **Health Navigation Support**

"Whether you're rich or poor, it doesn't matter – you need a health care navigator." – Key Informant

"It's the navigation piece. You have to be an expert, know the process, juggle multiple demands." – Focus Group Member

Given the challenges in understanding and navigating the health insurance and health care systems especially with the implementation of ACA, several respondents suggested that more support be provided to residents around this. Suggestions included a strong navigator model to help people connect with the system. As one physician interviewee observed, "we have navigators throughout the system but they tend to be clinical navigators...we need some assistance to teach people how to use the new plans, in person or over the phone." An interviewee who works with immigrants in the community also stated that having "health ambassadors" who speak a patient's language and help navigate both health insurance and the health system would be very valuable and lead to improved health.

#### **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 Middlesex, Mercer, and Somerset County residents, identify priority health issues, and explore community assets, resources and gaps. Overall, many of the issues identified in the 2012 CHNA continue to be pressing needs in the region. Overarching themes that emerge from this synthesis include:

- While Middlesex and Somerset Counties compare favorably to the state on most measures of social and economic well-being and health, Mercer County faces some challenges. Data about some key social determinants of health—including median household income, levels of poverty, unemployment, crime rates, and educational attainment—show that Middlesex and Somerset County residents compare favorably to the rest of the state. Somerset County, in particular, is an area of substantial wealth with a highly educated population. Residents in Mercer County, by contrast, have higher rates of poverty and crime and lower rates of high school graduation than either of the other two counties and the state overall. These differences translate into differences in healthcare access and health outcomes as well. Mercer County has higher overall death rates, higher rates of doctor-diagnosed diabetes, a higher rate of asthma-related ED visits, a higher teen birthrate, higher rates of gonorrhea and chlamydia infection, and fewer women accessing prenatal care in the first trimester than the other two counties and the state overall.
- Although the region, overall, is relatively affluent, there are pockets of poverty and some residents face economic challenges which can affect health. Median household income varies substantially across the region, with Somerset County residents earning, on average, substantially more than those in Mercer and Middlesex Counties. Poverty rates in Mercer County in 2009-2013 were over twice as high as in Somerset County. Many more families fall into the category of "working poor." Rising income disparity in the region, as well as the high cost of living, were identified as concerns in focus groups and interviews. Economic constraints mean some residents face difficulty accessing transportation and meeting healthcare costs.
- As across the country, the three-county region will experience a growth in the number of senior residents in the coming years which will have substantial implications for the health, social service, and transportation infrastructure. By 2032, over 20% of the population in each of the three counties is expected to be over age 65, with Somerset County experiencing the greatest growth rate. The needs of seniors were mentioned frequently in conversations with focus group members and interviewees and health concerns related to aging were identified as a top health concern in the community by community survey respondents. Although excellent services for seniors were reported to currently exist, respondents saw a growing need for home health aides, support for caregivers, behavioral health services for seniors, and a more robust public transportation infrastructure.
- Behavioral health was identified as a key concern in the region today, as it was in 2012. Rising rates of mental health concerns and substance use issues are attributed to stress and modern lifestyles. Additionally, wealth and accessibility were seen as factors affecting the rate of substance use. Opiate use—heroin and prescription drugs—were mentioned as a particular concern for the community, as for the state and nation. Treatment admissions data show that admissions for treatment due to opiates/heroin have increased substantially in the region between 2010 and 2014. Data also indicate that rates of alcohol misuse are high among Somerset County adults. While

residents reported that behavioral health issues affected residents of all ages, they expressed concern about children and youth. Stigma about mental illness and substance use was identified as a substantial barrier to identifying behavioral health concerns and seeking treatment. Additional barriers included lack of providers, particularly those willing to accept insurances or Medicaid and Medicare, and lack of awareness about behavioral health issues. Residents identified a need for more services including prevention, treatment, and education, including education of primary care providers and dentists about prescription drugs.

- Chronic diseases and related lifestyle behaviors were viewed as important community health issues, and programming is needed at the individual, community and policy levels. Similar to patterns nationwide, issues around overweight and obesity particularly healthy eating and physical activity emerged as key health concerns for focus group and interview participants. Nearly one quarter of adults in Middlesex and Mercer counties was obese in 2013, a rate similar to the state overall and little changed from the 2012 CHNA. Over 60% of adults across the three counties and the state were overweight or obese. Diabetes was a concern among residents and quantitative data indicate that rates have increased slightly in the three counties in recent years. Rates were reported to be higher and rising among minority populations in the region, especially new immigrants. The need for patient education, including diabetes education, wellness education, and nutrition and healthy food preparation classes as well as more screenings, were identified by a number of focus group members and interviewees. Stakeholders also noted that changes to the built environment, for example making streets more bicycle and pedestrian-friendly by implementing Complete Streets policies, would be beneficial to the community's health. Partnership with community based organizations were also seen as critical to reaching underserved residents.
- residents. Residents reported that there are many healthcare services in the area, including primary care and specialty services. However, for some residents, especially lower income and undocumented residents, barriers exist. These include difficulty obtaining health insurance or lack of sufficient insurance coverage, high health care costs, and language accessibility. Transportation to health services was identified as a substantial concern, especially for seniors and lower income residents, as there are few public transportation options in the region. Lack of behavioral health providers who accept insurances was also reported to be a concern, contributing to lack of access to these services for some. Finally, although the Affordable Care Act (ACA) was reported to have increased access to health insurance for many, patients' lack of understanding about what is covered by different insurance products and how to effectively use health insurance remains a challenge that needs to be addressed to ensure access to health care and improved health.

#### PRIORIZATION OF COMMUNITY HEALTH NEEDS

In October 2015, HRiA led a facilitated conversation with Princeton HealthCare System's Medical Advisory Panel (MAP). This conversation included a presentation of the priorities identified by the community health needs assessment (CHNA), including the magnitude and severity of these issues and their impact on priority populations. The session including mapping current and emerging programs and initiatives against these needs. The MAP determined that all of the community needs identified in the CHNA were being addressed by the hospital and would be included in the Strategic Implementation Plan 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

All areas highlighted by the CHNA are being addressed by the 2015-2017 Strategic Implementation Plan.

## APPENDIX A. FULL LIST OF FOCUS GROUP AND INTERVIEW SECTORS

## **Organizations involved in focus group recruitment:**

- 1. Princeton Fitness & Wellness Center Bright Beginnings Program (Focus group conducted 4/15/15)
- 2. Hamilton Area YMCA (Focus group conducted 4/16/15)
- 3. Monroe Township Senior Center (Focus group conducted on 4/16/15)
- 4. EMS Providers (Focus group conducted 4/16/15; participants recruited by Princeton HealthCare System)
- 5. Princeton Fitness & Wellness Center Advisory Board (Focus group conducted 4/30/15)
- 6. Princeton Health Department (Focus group conducted 5/26/15)

## List of Key Informant Interviewee Organizations and Dates of Interviews:

Organiz	ration	Date of Interview
1.	Princeton HealthCare System – Internal Medicine	4/15/15
2.	Princeton HealthCare System – Pediatrics	4/15/15
3.	University Medical Center of Princeton Leadership	4/15/15
4.	Korean Community Center of Greater Princeton (KCCP)	4/15/15
5.	St. Anthony of Padua Catholic Church (Latino community)	4/15/15
6.	Middlesex County Office of Health Services	4/16/15
7.	Princeton HealthCare System Leadership	4/16/15
8.	Community Leaders (African American community)	4/16/15
9.	Princeton HealthCare System – Bristol-Myers Squibb	4/17/15
	Community Health Center and Continuum of Care Services	
10.	Greater Mercer Transportation Management Association	4/17/15
11.	Princeton HealthCare System – Princeton House Behavioral	4/17/15
	Health	
12.	Princeton HealthCare System Board	4/17/15
13.	Middlesex County Office of Health Services	8/6/15

# APPENDIX B. 2015 COMMUNITY HEALTH NEEDS ASSESSMENT SURVEY INSTRUMENT

1. What is the zip code where you live?

<ol> <li>Where is the zip code where you work, vol indicate the zip code where you work.)</li> </ol>	unteer, or go	to school (if ap	plicable)? (If r	nore than	one applies, th	hen
Community Health						
s. In general, how would you describe the he	alth of the fol	lowing?				
	Excellent	Very Good	Good	Fair	Poor	
The community in which you live						
The community in which you work,						
volunteer, or go to school (if applicable)						
			You/You	ır family	Community where you liv	
Access to health care (transportation, health	insurance, cos	t, etc.)				
Asthma						
Cancer						
Other chronic disease (diabetes, heart disease	e)					
Overweight or obesity						
Mental health issues (anxiety, depression, sui	icide, etc.)					
Drugs/alcohol abuse				7		
Women's health issues (e.g., reproductive he						
Community violence (gangs, street, etc.)	alth, etc.)					
Interpersonal violence (domestic violence, se		bullying, cyber				
Interpersonal violence (domestic violence, se bullying, etc.)		bullying, cyber	. [	]		
Interpersonal violence (domestic violence, se bullying, etc.)  Oral or dental health	xual violence,			]		
Interpersonal violence (domestic violence, se bullying, etc.) Oral or dental health Health concerns related to aging (Alzheimer's	xual violence, s, arthritis, den		·			
Interpersonal violence (domestic violence, se bullying, etc.) Oral or dental health Health concerns related to aging (Alzheimer's Sexually transmitted infections (HIV/AIDS, ch	xual violence, s, arthritis, den					
Interpersonal violence (domestic violence, se bullying, etc.) Oral or dental health Health concerns related to aging (Alzheimer's	xual violence, s, arthritis, den lamydia, etc.)	nentia, etc.)				

		Community
	You/Your family	where you live
Other (please specify):		

# **Access to Services**

5. Please think about the different health and social services in your community. How easy or hard is it to access the following services in your community?

	Very		Not easy		Very	Don't
Harrital and inco	easy	Easy	or hard	Hard	hard	know
Hospital services						
Community health center services						
Urgent care services						
Primary care physicians						
Health or medical services for seniors (>65 years old)						
Health or medical services for youth/pediatric care (<21 years old)						
Cancer care/treatment						
Outpatient services such as lab work or radiology (e.g., X-rays, MRIs)						
Women's health services (e.g., reproductive health, pregnancy health)						
Home health care						
Alcohol or drug treatment or prevention services for adults						
Alcohol or drug treatment or prevention services for youth						
Community health education services or programs						
Counseling or mental health services for youth						
Counseling or mental health services for adults						
Transportation to health services						
Dental or oral health services						
Domestic violence counseling services						
Programs to help people quit smoking						
Affordable health insurance						
Health or medical providers that accept your insurance						
Health providers that speak your language or available interpreter services						
Specialty care (please specify):						

# 6. Based on your experience, do you agree or disagree with the following:

				Agree	Disagree	Not applicable
If	l ne	eed medical services, I know where to go to receive them.				
		eed dental services, I know where to go to receive them.				
_		eed mental health services, I know where to go to receive the	nem.			
	's h	ard to use public transportation to get to medical/dental ces.				
		nealth or social services in my community should focus more	e on			
		omeone in my household has not received care needed bed ost was too high.	ause			
		n trying to get medical care, I have had a negative experience the office staff.	ce			
		n trying to get medical care, I have felt discriminated agains use of my race, ethnicity or language.				
		n trying to get medical care, I have felt discriminated agains use of my gender, age or sexual orientation.				
		n trying to get medical care, I have felt discriminated agains use of my income.	t			
		Lack all that apply.)  Lack of transportation  Have no regular source of health care (primary care physician or clinic)		Unfriendly provi	ed against	aff
		Cost of care (e.g., deductibles, co-pays)		Afraid to get car Don't know wha	t types of servi	ces are available
		Lack of specialists		No provider ava		
		Lack of providers who accept Medicaid  Lack of evening or weekend services		Long wait for an		
		Insurance problems/lack of coverage		Office not accep		
		Language problems/could not communicate		Health informati	•	
		with health provider or office staff		I have never exp getting care	eriericed arry d	inicuity in
8.	Wh	iich health services have you used in the past year? (Check	all t	hat apply.)		
		Primary care services		Cancer care or to	reatment	
		Emergency services (ER at a hospital)		Cancer screening	gs (e.g., mamm	ograms)
		Urgent care		Outpatient servi		od work or
		OB/GYN services or other women's health		radiology (e.g., >		
		services (e.g., for reproductive health, breast		Home health car	e	
		health, pelvic health)		Other specialty of	care:	

9. What is the most important factor that you consider when se	eking medical service	s?		
<ul> <li>□ Reputation of quality of care</li> <li>□ Convenience/location</li> <li>□ Takes my insurance</li> <li>□ Referred by other doctor</li> </ul>	<ul><li>☐ Good relationsh provider</li><li>☐ Has interpreter</li><li>☐ Other (please specified)</li></ul>	services	rt with heal	th care
<ul> <li>□ Referred by other doctor</li> <li>□ Recommended by friend or family member</li> </ul>	□ Other (please sp	Jecny)		
Community Priorities				
<ol> <li>Please check whether you consider these issues to be low, m resources.</li> </ol>	edium, or high priorit	y for futu	re funding a	and
	-	Low	Medium	High
Offering more programs or services focusing on obesity/weight of	control			
Offering more programs or services to help people quit smoking				
Providing more transportation to area health/medical services				
Increasing the health/medical services that are close by and easy	· ·			
Offering more programs or services focusing on prevention of ch heart disease or diabetes	ronic diseases like			
Expanding the health/medical services available to low income in	ndividuals			
Expanding the health/medical services focused on seniors (65+)				
Expanding cancer care services for cancer treatment				
Expanding specialty care in women's health issues (e.g., pregnan health)	cy, well-visits, pelvic			
Expanding other specialty care services				
Providing more urgent care services				
Providing more outpatient services such as for blood work or rad	iology (X-rays, MRIs)			
Increasing the number of services to help the elderly stay in their	homes			
Increasing the number of oral health/dental providers in the com	nmunity			
Offering more programs or services focusing on physical activity				
Providing more counseling or mental health services				
Providing more alcohol or drug prevention and treatment service	es			
Increasing the number of staff at area health/medical services will language	ho speak another			
Other (please specify):			П	

Health, Prince specialists). If	ton Fitness and Wellness Center, and I you needed these services, how likely n HealthCare system?	Princeton Med	licine (network of p	rimary care pl	nysicians and
			Not at all likely	Somewhat likely	Very likely
Primary care					
-	tal services (e.g., cardiac/heart care)				
Urgent care	-				
Cancer care/trea	tment				
Cancer screening	s (e.g., mammography, colonoscopy)				
Outpatient service	ces such as lab work or radiology (e.g., )	(-rays, MRIs)			
Women's health	services (e.g., reproductive health, pelv	vic health)			
Home health car	e				
Mental health se	rvices				
Health education	programming/services				
Other (please spe	ecify):				
☐ Yes, Media☐ Yes, Media☐ Yes, other	e insurance (through employer/spouse care caid or other public insurance insurance (not listed above) nce, uninsured	's employer/pa	arents or buy your o	own)	
☐ Private do☐ Communit☐ Walk-in m	nedical care provided by: (Please check ctor's office or group practice by health center edical clinic/urgent care center cal program	☐ Em	ergency Room teran's Administrati ner (please specify):		
<ul><li>□ Doctor, nu</li><li>□ Pharmacy</li><li>□ Family me</li><li>□ Friends</li><li>□ Neighbors</li><li>□ School</li></ul>		☐ Lib ☐ Tel ☐ Loc ☐ Rac ☐ Ma	rary evision cal newspaper dio gazine ebsites	from? (Please	e check 3.)
☐ Religious o	or spiritual advisor	☐ Soc	cial Media		

☐ Employer

11. Princeton Healthcare System is a comprehensive healthcare system in Central New Jersey. Some of the facilities within the system include University Medical Center of Princeton at Plainsboro, Princeton House Behavioral

☐ Other (please specify): \_\_\_\_\_

# **Demographic Information**

	□ Un □ 18- □ 30-	category best describes your age? der 18 years old -29 years old -39 years old -49 years old		50-64 years old 65-74 years old 75 years old or older
	□ Ma	is your gender? ale male ansgender		
17.		African American/Black East Asian/Pacific Islander (e.g., Chinese, Filipino, Vietnamese) South Asian (e.g., Indian, Bangladeshi) Caucasian/White	Plea	se check all that apply.)  Hispanic/Latino(a)  Middle Eastern  American Indian/Native American  Other (please specify):
18.		s the primary language you speak at home? English Spanish Chinese Italian		<ul><li>□ Polish</li><li>□ Gujarathi</li><li>□ Hindi</li><li>□ Other (please specify):</li></ul>
		Is the highest level of education that you have compound 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	lete	d?
	_	Yes  \text{No}		

# APPENDIX C: 2015 COMMUNITY HEALTH NEEDS ASSESSMENT SURVEY RESULTS

Table 1. COMMUNITY HEALTH

	Overall	Mercer County	Middlesex County	Somerset County
	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)
3. In general, how would you describe the	nealth of the community in which y	ou live?		
Community in which you live				
Excellent	10.8%	10.0%	10.3%	13.9%
Very good	43.4%	45.5%	41.9%	41.7%
Good	37.6%	36.4%	38.9%	37.4%
Fair	7.3%	7.4%	7.8%	6.1%
Poor	0.9%	0.7%	1.1%	0.9%
Community in which you work, volunteer, o	r go to school			
Excellent	9.4%	8.6%	10.5%	9.0%
Very good	39.2%	39.5%	37.0%	42.9%
Good	40.1%	41.3%	40.1%	37.6%
Fair	9.3%	8.6%	10.3%	9.0%
Poor	2.0%	2.0%	2.1%	1.6%
4. TOP 3 HEALTH ISSUES that have the bigg	est impact on you or your family po	ersonally and the comm	nunity in which you live	
Access to health care (transportation, health	n insurance, cost, etc.)			
You/Your family	37.2%	33.4%	41.4%	37.2%
Community where you live	39.8%	42.0%	39.2%	36.2%
Asthma				
You/Your family	12.2%	10.8%	13.2%	13.3%
Community where you live	5.7%	6.4%	5.0%	5.9%
Cancer				
You/Your family	26.3%	28.6%	24.2%	25.5%
Community where you live	22.8%	25.9%	18.5%	24.5%
Other chronic disease (diabetes, heart disea	se)			
You/Your family	36.4%	36.7%	37.2%	34.0%
Community where you live	29.1%	32.1%	24.9%	30.9%
Overweight or obesity	·			
You/Your family	32.8%	31.6%	35.9%	28.7%
Community where you live	29.6%	30.3%	30.2%	26.6%
Mental health issues (anxiety, depression, s	uicide. etc.)	•	•	

	Overall	Mercer County	Middlesex County	Somerset County
	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)
You/Your family	26.2%	27.7%	23.7%	28.2%
Community where you live	24.0%	25.9%	21.2%	25.5%
Drugs/alcohol abuse				
You/Your family	5.8%	4.8%	6.2%	7.4%
Community where you live	19.3%	18.2%	18.2%	24.5%
Women's health issues (e.g., reproductive health, etc.)				
You/Your family	11.6%	11.2%	10.2%	15.4%
Community where you live	8.0%	9.7%	5.5%	9.0%
Community violence (gangs, street, etc.)				
You/Your family	1.3%	1.1%	1.7%	1.1%
Community where you live	5.7%	5.3%	6.5%	5.3%
Interpersonal violence (domestic violence, sexual violence	e, bullying, cyber-bully	/ing, etc.)		
You/Your family	1.9%	2.0%	1.5%	2.7%
Community where you live	6.7%	6.6%	6.0%	8.5%
Oral or dental health				
You/Your family	21.0%	22.0%	20.7%	19.1%
Community where you live	7.2%	6.6%	7.7%	7.4%
Health concerns related to aging (Alzheimer's, arthritis, de	ementia, etc.)			
You/Your family	39.2%	41.5%	36.2%	39.9%
Community where you live	29.9%	30.3%	29.2%	30.3%
Sexually transmitted infections (HIV/AIDS, chlamydia, etc.	.)			
You/Your family	0.6%	0.4%	0.5%	1.1%
Community where you live	3.1%	3.3%	1.7%	5.3%
Teen pregnancy				
You/Your family	0.6%	0.4%	0.7%	0.5%
Community where you live	3.6%	3.7%	3.0%	4.8%
Infectious/contagious disease (tuberculosis, pneumonia, f	flu, etc.)			
You/Your family	7.6%	6.8%	7.7%	9.0%
Community where you live	10.1%	11.0%	8.2%	11.7%
Injuries (e.g., car accidents, falls)				
You/Your family	18.3%	15.4%	20.7%	20.2%
Community where you live	15.1%	13.6%	16.7%	15.4%

	Overall (n = 1,308)	Mercer County (n = 565)	Middlesex County (n = 503)	Somerset County (n = 240)
Other				
You/Your family	6.9%	6.8%	6.5%	8.0%
Community where you live	3.4%	3.1%	4.0%	3.2%

# **Table 217. ACCESS TO SERVICES**

	Overall (n = 1,308)	Mercer County (n = 565)	Middlesex County (n = 503)	Somerset County (n = 240)
5. How easy or hard is it to access the following services		(11 – 303)	(11 – 505)	(11 – 240)
Hospital services	m your community.			
Easy/Very easy	78.3%	77.2%	81.4%	74.2%
Not easy or hard	16.4%	18.3%	14.1%	16.6%
Hard/Very hard	5.3%	4.5%	4.4%	9.2%
Community health center services				
Easy/Very easy	54.4%	49.7%	56.5%	60.5%
Not easy or hard	28.9%	30.8%	28.3%	25.8%
Hard/Very hard	16.8%	19.6%	15.2%	13.7%
Urgent care services				
Easy/Very easy	70.5%	65.2%	71.3%	80.7%
Not easy or hard	16.9%	19.8%	15.8%	12.4%
Hard/Very hard	12.6%	14.9%	12.8%	6.8%
Primary care physicians				
Easy/Very easy	70.0%	68.4%	70.3%	73.3%
Not easy or hard	19.6%	20.6%	20.0%	16.4%
Hard/Very hard	10.4%	10.9%	9.7%	10.3%
Health or medical services for seniors (>65 years old)				
Easy/Very easy	60.8%	58.2%	62.1%	64.5%
Not easy or hard	23.7%	25.6%	21.1%	25.2%
Hard/Very hard	15.4%	16.1%	16.9%	10.3%
Health or medical services for youth/pediatric care (<21 y	ears old)			
Easy/Very easy	71.6%	73.5%	68.6%	72.8%
Not easy or hard	19.3%	19.8%	20.0%	16.5%
Hard/Very hard	9.1%	6.6%	11.4%	10.7%

	Overall	Mercer County	Middlesex County	Somerset County
	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)
Cancer care/treatment				
Easy/Very easy	59.6%	58.2%	61.0%	60.0%
Not easy or hard	27.7%	28.7%	26.8%	27.3%
Hard/Very hard	12.7%	13.1%	12.2%	12.7%
Outpatient services such as lab work or radiology (e	e.g., X-rays, MRIs)			
Easy/Very easy	74.9%	74.4%	75.9%	73.9%
Not easy or hard	18.1%	20.1%	16.8%	16.1%
Hard/Very hard	7.0%	5.5%	7.2%	9.9%
Women's health services (e.g., reproductive health,	pregnancy health)	•		
Easy/Very easy	71.5%	73.0%	67.9%	74.7%
Not easy or hard	20.5%	19.5%	23.0%	18.1%
Hard/Very hard	8.0%	7.4%	9.1%	7.2%
Home health care				
Easy/Very easy	48.1%	45.8%	46.1%	58.0%
Not easy or hard	27.6%	26.3%	29.5%	25.9%
Hard/Very hard	24.4%	27.9%	24.4%	16.0%
Alcohol or drug treatment or prevention services fo	r adults			
Easy/Very easy	39.7%	39.6%	34.8%	48.1%
Not easy or hard	34.5%	32.2%	37.8%	33.3%
Hard/Very hard	25.8%	28.2%	27.4%	18.5%
Alcohol or drug treatment or prevention services fo	r youth			
Easy/Very easy	39.2%	38.7%	38.6%	41.2%
Not easy or hard	33.0%	32.4%	33.3%	33.8%
Hard/Very hard	27.8%	28.9%	28.0%	25.0%
Community health education services or programs				
Easy/Very easy	51.6%	50.8%	52.4%	51.9%
Not easy or hard	33.0%	36.5%	31.2%	28.3%
Hard/Very hard	15.4%	12.7%	16.5%	19.8%
Counseling or mental health services for youth	·			
Easy/Very easy	35.9%	36.4%	38.0%	30.7%
Not easy or hard	32.7%	31.8%	31.3%	37.3%
Hard/Very hard	31.4%	31.8%	30.7%	32.0%
Counseling or mental health services for adults	·			

Sasy/Very easy   38.7%   39.8%   39.2%   35.4%     Not easy or hard   32.7%   30.8%   32.3%   37.5%     Sasy/Very hard   28.6%   29.4%   28.6%   27.1%     Fransportation to health services     Sasy/Very easy   28.9%   25.4%   33.3%   26.7%     Not easy or hard   28.7%   28.6%   29.3%   27.6%     Sasy/Very easy   28.9%   25.4%   33.3%   26.7%     Not easy or hard   42.5%   46.0%   37.4%   45.7%     Sasy/Very easy   63.4%   62.4%   64.3%   64.2%     Sasy/Very easy   63.4%   62.4%   64.3%   64.2%     Sasy/Very easy   63.4%   62.4%   64.3%   64.2%     Sasy/Very easy   63.4%   62.4%   64.3%   62.2%     Sasy/Very easy   34.6%   33.6%   32.4%   23.0%     Sasy/Very easy   34.6%   33.6%   32.4%   42.0%     Sasy/Very easy   34.6%   33.6%   32.4%   42.0%     Sasy/Very easy   46.2%   48.3%   41.7%   42.0%     Sasy/Very easy   46.2%   48.3%   41.0%   51.6%     Sasy/Very easy   21.2%   21.3%   22.1%   22.0%     Sasy/Very easy   21.2%   21.3%   21.1%   21.0%     Sasy/Very easy   21.2%   21.3%   21.1%   21.0%     Sasy/Very easy   54.0%   53.7%   55.4%   51.7%     Sasy/Very e		Overall (n = 1,308)	Mercer County (n = 565)	Middlesex County (n = 503)	Somerset County (n = 240)
Transportation to health services  Transport to the service to the services  Transport to the service to the services  Transport to the service to the servi	Easy/Very easy	38.7%	39.8%		
Fransportation to health services  Tasy/Very easy  28.9%  25.4%  33.3%  26.7%  Not easy or hard  28.7%  28.6%  29.3%  27.6%  44.7%  Dental or oral health services  Tasy/Very easy  63.4%  62.4%  64.3%  64.3%  64.2%  Adoress or hard  23.9%  24.8%  23.4%  23.0%  12.8%  Dental or oral health services  Tasy/Very easy  63.4%  62.4%  64.3%  64.3%  64.2%  64.3%  12.8%  12	Not easy or hard	32.7%	30.8%	32.3%	37.5%
Easy/Very easy 28.9% 25.4% 33.3% 26.7% Not easy or hard 28.7% 28.6% 29.3% 27.6% 45.7% 28.6% 29.3% 27.6% 46.0% 37.4% 45.7% 20.0% 46.0% 37.4% 45.7% 20.0% 46.0% 37.4% 45.7% 20.0% 46.0% 37.4% 45.7% 20.0% 46.0% 37.4% 45.7% 20.0% 46.0% 46.0% 37.4% 45.7% 20.0% 46.0	Hard/Very hard	28.6%	29.4%	28.6%	27.1%
Not easy or hard 28.7% 28.6% 29.3% 27.6% Alard/Very hard 42.5% 46.0% 37.4% 45.7% 26.2% 29.3% 27.6% 27.6% 29.3% 27.6% 29.3% 27.6% 29.3% 27.6% 29.3% 27.6% 29.3% 27.6% 29.3% 27.6% 29.3% 27.6% 29.2% 29.3% 27.6% 29.2% 29.3% 27.6% 29.2% 29.3% 27.6% 29.2% 29.	Transportation to health services	·			
Hard/Very hard   Hard	Easy/Very easy	28.9%	25.4%	33.3%	26.7%
Dental or oral health services  Easy/Very easy	Not easy or hard	28.7%	28.6%	29.3%	27.6%
Easy/Very easy 63.4% 62.4% 64.3% 64.2% Not easy or hard 23.9% 24.8% 23.4% 23.0% 12.8% 12.3% 12.4% 12.0% 12.8% 12.3% 12.4% 12.0% 12.8% 12.3% 12.3% 12.4% 12.0% 12.8% 12.3	Hard/Very hard	42.5%	46.0%	37.4%	45.7%
Not easy or hard 23.9% 24.8% 23.4% 23.0% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.3% 12.8% 12.8% 12.8% 12.8% 12.3% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.8% 12.9% 16.0% 12.8% 12.8% 12.9% 12.9% 12.9% 12.9% 12.8% 1	Dental or oral health services				
Tard/Very hard   12.6%   12.8%   12.3%   12.8%   12.	Easy/Very easy	63.4%	62.4%	64.3%	64.2%
Seasy/Very easy   34.6%   33.6%   32.4%   42.0%	Not easy or hard	23.9%	24.8%	23.4%	23.0%
State   Stat	Hard/Very hard	12.6%	12.8%	12.3%	12.8%
Not easy or hard 40.3% 38.4% 41.7% 42.0% dard/Very hard 25.1% 28.0% 25.9% 16.0% 25.9% 16.0% 25.1% 28.0% 25.9% 16.0% 25.9% 16.0% 25.9% 25.9% 25.9% 16.0% 25.9	Domestic violence counseling services				
Hard/Very hard 25.1% 28.0% 25.9% 16.0% Programs to help people quit smoking 46.2% 48.3% 41.0% 51.6% Not easy or hard 31.0% 27.6% 36.1% 29.0% Hard/Very hard 22.8% 24.1% 23.0% 19.4% Affordable health insurance Easy/Very easy 21.2% 21.3% 21.1% 21.0% Not easy or hard 29.6% 28.9% 29.7% 31.1% Hard/Very hard 49.2% 49.8% 49.2% 47.9% Health or medical providers that accept your insurance Easy/Very easy 54.0% 53.7% 55.4% 51.7% Not easy or hard 26.4% 26.5% 25.1% 29.3% Hard/Very hard 19.6% 19.8% 19.6% 19.0% Health providers that speak your language or available interpreter services Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Easy/Very easy	34.6%	33.6%	32.4%	42.0%
Programs to help people quit smoking  Easy/Very easy 46.2% 48.3% 41.0% 51.6%  Not easy or hard 31.0% 27.6% 36.1% 29.0%  Hard/Very hard 22.8% 24.1% 23.0% 19.4%  Affordable health insurance  Easy/Very easy 21.2% 21.3% 21.1% 21.0%  Not easy or hard 29.6% 28.9% 29.7% 31.1%  Hard/Very hard 49.2% 49.8% 49.2% 47.9%  Health or medical providers that accept your insurance  Easy/Very easy 54.0% 53.7% 55.4% 51.7%  Not easy or hard 26.4% 26.5% 25.1% 29.3%  Hard/Very hard 19.6% 19.8% 19.6% 19.0%  Health providers that speak your language or available interpreter services  Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Not easy or hard	40.3%	38.4%	41.7%	42.0%
A6.2%	Hard/Very hard	25.1%	28.0%	25.9%	16.0%
Not easy or hard   31.0%   27.6%   36.1%   29.0%     Hard/Very hard   22.8%   24.1%   23.0%   19.4%     Affordable health insurance	Programs to help people quit smoking				
Affordable health insurance  Easy/Very easy  21.2%  21.3%  21.1%  21.0%  Not easy or hard  29.6%  28.9%  29.7%  31.1%  Health or medical providers that accept your insurance  Easy/Very easy  54.0%  53.7%  55.4%  51.7%  Not easy or hard  26.4%  26.5%  27.5%  19.6%  19.6%  19.6%  19.6%  19.6%  19.6%  75.2%  76.7%	Easy/Very easy	46.2%	48.3%	41.0%	51.6%
Affordable health insurance Easy/Very easy 21.2% 21.3% 21.1% 21.0% Not easy or hard 29.6% 28.9% 29.7% 31.1% Hard/Very hard 49.2% 49.8% 49.2% 47.9% Health or medical providers that accept your insurance Easy/Very easy 54.0% 53.7% 55.4% 51.7% Not easy or hard 26.4% 26.5% 25.1% 29.3% Hard/Very hard 19.6% 19.8% 19.6% 19.0% Health providers that speak your language or available interpreter services Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Not easy or hard	31.0%	27.6%	36.1%	29.0%
Easy/Very easy Not easy or hard 29.6% 28.9% 29.7% 31.1% Hard/Very hard 49.2% 49.8% 49.2% 47.9% Health or medical providers that accept your insurance Easy/Very easy 54.0% 53.7% 55.4% 51.7% Not easy or hard 26.4% 26.5% 25.1% 29.3% Hard/Very hard 19.6% 19.8% 19.6% 19.0% Health providers that speak your language or available interpreter services Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Hard/Very hard	22.8%	24.1%	23.0%	19.4%
Not easy or hard 29.6% 28.9% 29.7% 31.1% Hard/Very hard 49.2% 49.8% 49.2% 47.9% 49.8% 49.2% 47.9% 49.8% 53.7% 55.4% 51.7% Not easy or hard 26.4% 26.5% 25.1% 29.3% Hard/Very hard 19.6% 19.8% 19.6% 19.0% 49.8% 19.6% 75.2% 76.7%	Affordable health insurance				
Hard/Very hard 49.2% 49.8% 49.2% 47.9% Health or medical providers that accept your insurance Easy/Very easy 54.0% 53.7% 55.4% 51.7% Not easy or hard 26.4% 26.5% 25.1% 29.3% Hard/Very hard 19.6% 19.8% 19.6% 19.0% Health providers that speak your language or available interpreter services Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Easy/Very easy	21.2%	21.3%	21.1%	21.0%
Health or medical providers that accept your insurance   Easy/Very easy   54.0%   53.7%   55.4%   51.7%     Not easy or hard   26.4%   26.5%   25.1%   29.3%     Hard/Very hard   19.6%   19.8%   19.6%   19.0%     Health providers that speak your language or available interpreter services     Easy/Very easy   76.9%   78.6%   75.2%   76.7%     The service of the se	Not easy or hard	29.6%	28.9%	29.7%	31.1%
Easy/Very easy 54.0% 53.7% 55.4% 51.7% Not easy or hard 26.4% 26.5% 25.1% 29.3% Hard/Very hard 19.6% 19.8% 19.6% 19.0% Health providers that speak your language or available interpreter services Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Hard/Very hard	49.2%	49.8%	49.2%	47.9%
Not easy or hard         26.4%         26.5%         25.1%         29.3%           Hard/Very hard         19.6%         19.8%         19.6%         19.0%           Health providers that speak your language or available interpreter services         76.9%         78.6%         75.2%         76.7%	Health or medical providers that accept your insurance	e			
Hard/Very hard 19.6% 19.8% 19.6% 19.0% Health providers that speak your language or available interpreter services Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Easy/Very easy	54.0%	53.7%	55.4%	51.7%
Health providers that speak your language or available interpreter services Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Not easy or hard	26.4%	26.5%	25.1%	29.3%
Easy/Very easy 76.9% 78.6% 75.2% 76.7%	Hard/Very hard	19.6%	19.8%	19.6%	19.0%
<i>11</i> 1 1	Health providers that speak your language or available	interpreter services			
Not easy or hard 15.6% 13.3% 17.7% 16.4%	Easy/Very easy	76.9%	78.6%	75.2%	76.7%
	Not easy or hard	15.6%	13.3%	17.7%	16.4%
Hard/Very hard 7.5% 8.1% 7.1% 6.9%	Hard/Very hard	7.5%	8.1%	7.1%	6.9%
Specialty care	Specialty care				
Easy/Very easy 56.1% 58.2% 54.8% 54.6%	Easy/Very easy	56.1%	58.2%	54.8%	54.6%

	Overall (n = 1,308)	Mercer County (n = 565)	Middlesex County (n = 503)	Somerset County (n = 240)
Not easy or hard	26.6%	23.2%	29.0%	28.7%
Hard/Very hard	17.3%	18.6%	16.2%	16.7%
6. Based on your experience, do you agree or disagree	with the following stat	ements?		
If I need medical services, I know where to go to receive				
Agree	94.9%	95.4%	94.8%	93.9%
Disagree	4.5%	3.9%	4.4%	6.1%
Not applicable	0.6%	0.7%	0.8%	0.0%
If I need dental services, I know where to go to receive	them.			
Agree	92.6%	92.4%	92.5%	93.3%
Disagree	6.5%	6.6%	6.6%	6.1%
Not applicable	0.9%	1.0%	0.8%	0.6%
If I need mental health services, I know where to go to	receive them.			
Agree	46.1%	47.6%	43.1%	48.8%
Disagree	29.3%	30.3%	29.3%	27.2%
Not applicable	24.6%	22.1%	27.6%	24.1%
It's hard to use public transportation to get to medical/	dental services.			
Agree	56.4%	53.4%	59.8%	56.1%
Disagree	8.2%	6.9%	10.8%	5.5%
Not applicable	35.4%	39.7%	29.4%	38.4%
The health or social services in my community should for	ocus more on prevention	n of diseases or health c	onditions.	
Agree	68.0%	70.3%	64.7%	69.9%
Disagree	11.3%	10.4%	11.9%	12.2%
Not applicable	20.7%	19.3%	23.4%	17.9%
I or someone in my household has not received care ne	eded because the cost v	vas too high.		
Agree	26.1%	21.2%	27.4%	35.8%
Disagree	51.3%	58.8%	47.5%	40.9%
Not applicable	22.6%	20.0%	25.1%	23.3%
When trying to get medical care, I have had a negative	experience with the offi	ce staff.		
Agree	36.1%	35.6%	34.9%	39.9%
Disagree	53.1%	57.0%	51.8%	46.2%
Not applicable	10.8%	7.4%	13.3%	13.9%
When trying to get medical care, I have felt discriminate	ed against because of m	y race, ethnicity or lang	uage.	
Agree	4.6%	3.7%	6.1%	3.8%

	Overall	Mercer County	Middlesex County	Somerset County
	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)
Disagree	76.1%	82.1%	71.4%	71.5%
Not applicable	19.2%	14.3%	22.5%	24.7%
When trying to get medical care, I have felt discriminated	against because of m	y gender, age or sexual	orientation.	
Agree	8.4%	8.9%	8.1%	7.6%
Disagree	76.7%	81.9%	73.3%	70.7%
Not applicable	15.0%	9.2%	18.6%	21.7%
When trying to get medical care, I have felt discriminated	against because of m	y income.		
Agree	9.0%	8.4%	9.8%	8.9%
Disagree	73.6%	80.0%	70.9%	63.3%
Not applicable	17.4%	11.6%	19.3%	27.8%
7. Have any of these issues made it difficult for you to ge				<u> </u>
Lack of transportation	9.5%	9.9%	9.1%	9.3%
Have no regular source of health care (primary care physician or clinic)	5.5%	4.9%	6.2%	5.3%
Cost of care (e.g., deductibles, co-pays)	25.4%	24.5%	24.7%	29.1%
Lack of specialists	8.5%	7.0%	10.3%	7.9%
Lack of providers who accept Medicaid	5.3%	4.4%	5.6%	6.6%
Lack of evening or weekend services	30.1%	29.7%	30.9%	29.1%
Insurance problems/lack of coverage	17.6%	15.6%	18.8%	19.9%
Language problems/could not communicate with health provider or office staff	2.3%	2.1%	1.8%	4.0%
Unfriendly provider or office staff	18.5%	20.1%	17.9%	15.9%
Felt discriminated against	2.9%	3.4%	2.6%	2.0%
Afraid to get care	5.0%	4.2%	5.3%	6.6%
Don't know what types of services are available	10.1%	9.1%	11.8%	8.6%
No provider available near me	7.0%	7.8%	5.9%	7.3%
Long wait for an appointment	32.8%	33.3%	33.8%	29.1%
Office not accepting new patients	18.1%	18.8%	18.2%	15.9%
Health information is not kept confidential	2.9%	2.1%	2.9%	4.6%
I have never experienced any difficulty in getting care	39.5%	38.8%	39.7%	41.1%

	Overall (n = 1,308)	Mercer County (n = 565)	Middlesex County (n = 503)	Somerset County (n = 240)
8. Which health services have you used in the past	(,555)	( 555)	( 555)	( =)
year?				
Primary care services	93.0%	93.3%	92.1%	94.3%
Emergency services (ER at a hospital)	34.4%	31.9%	35.7%	37.7%
Urgent care	26.0%	19.0%	30.9%	32.7%
OB/GYN services or other women's health services (e.g., for reproductive health, breast health, pelvic health)	57.5%	60.6%	53.0%	59.4%
Cancer care or treatment	7.9%	6.5%	8.7%	9.4%
Cancer screenings (e.g., mammograms)	31.2%	34.9%	29.2%	26.4%
Outpatient services such as blood work or radiology (e.g., X-rays, MRIs)	76.6%	77.3%	76.4%	75.5%
Home health care	6.6%	5.5%	7.6%	6.9%
Other specialty care	12.6%	15.0%	11.0%	10.1%
9. What is the most important factor that you consider	when seeking medical	services?		
Reputation of quality of care	42.3%	45.3%	41.8%	35.7%
Convenience/location	4.4%	4.7%	4.4%	3.8%
Takes my insurance	30.0%	27.9%	30.2%	35.0%
Referred by other doctor	5.6%	6.1%	5.5%	4.5%
Recommended by friend or family member	3.1%	2.9%	4.4%	0.6%
Good relationship/rapport with health care provider	12.7%	10.3%	13.0%	18.5%
Has interpreter services	0.4%	0.5%	0.0%	1.3%
Other	1.3%	2.2%	0.6%	0.6%

**Table 318. COMMUNITY PRIORITIES** 

	Overall	Mercer County	Middlesex County	Somerset County	
	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)	
10. Please check whether you consider these issues to be low, medium, or high priority for future funding and resources.					
Offering more programs or services focusing on obesity/v	veight control				
Low priority 20.7% 20.3% 22.0% 18.4%					
Medium priority	39.3%	37.7%	39.5%	43.3%	

	Overall (n = 1,308)	Mercer County (n = 565)	Middlesex County (n = 503)	Somerset County (n = 240)
High priority	40.0%	42.0%	38.6%	38.3%
Offering more programs or services to help people quit sr	noking			
Low priority	33.9%	32.5%	35.1%	34.8%
Medium priority	35.6%	35.2%	34.2%	39.7%
High priority	30.6%	32.3%	30.8%	25.5%
Providing more transportation to area health/medical ser	vices			
Low priority	19.3%	17.5%	19.0%	24.8%
Medium priority	39.9%	38.8%	42.0%	37.6%
High priority	40.8%	43.7%	39.0%	37.6%
Increasing the health/medical services that are close by a	nd easy to get to			
Low priority	18.9%	18.4%	17.3%	24.1%
Medium priority	45.1%	45.7%	45.1%	44.0%
High priority	35.9%	35.9%	37.7%	31.9%
Offering more programs or services focusing on prevention	on of chronic diseases I	ike heart disease or dia	betes	
Low priority	12.2%	11.0%	12.8%	14.1%
Medium priority	40.3%	41.2%	38.7%	41.5%
High priority	47.5%	47.9%	48.5%	44.4%
Expanding the health/medical services available to low in	come individuals			
Low priority	17.6%	14.9%	20.9%	16.9%
Medium priority	38.4%	37.7%	37.7%	41.5%
High priority	44.1%	47.4%	41.4%	41.5%
Expanding the health/medical services focused on seniors	s (65+)			
Low priority	12.0%	10.7%	10.9%	17.7%
Medium priority	39.3%	42.2%	36.8%	37.6%
High priority	48.7%	47.1%	52.3%	44.7%
Expanding cancer care services for cancer treatment				
Low priority	14.0%	14.9%	11.9%	16.2%
Medium priority	48.5%	48.1%	48.1%	50.7%
High priority	37.5%	37.0%	39.9%	33.1%
Expanding specialty care in women's health issues (e.g., p	regnancy, well-visits, p	pelvic health)		
Low priority	23.2%	23.5%	21.3%	27.2%
Medium priority	50.4%	49.5%	52.5%	47.8%
High priority	26.4%	27.0%	26.3%	25.0%

	Overall	Mercer County	Middlesex County	Somerset County
	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)
Expanding other specialty care services				
Low priority	30.6%	33.6%	25.9%	33.3%
Medium priority	48.6%	47.5%	49.7%	48.9%
High priority	20.8%	18.9%	24.4%	17.8%
Providing more urgent care services				
Low priority	27.4%	28.8%	23.8%	31.6%
Medium priority	46.3%	44.8%	45.5%	52.2%
High priority	26.4%	26.4%	30.7%	16.2%
Providing more outpatient services such as fo	r blood work or radiology (X-rays,	MRIs)		
Low priority	35.1%	34.5%	34.1%	39.1%
Medium priority	45.1%	46.6%	44.4%	42.8%
High priority	19.8%	18.9%	21.6%	18.1%
Increasing the number of services to help the	elderly stay in their homes			
Low priority	10.8%	11.0%	10.3%	11.4%
Medium priority	31.8%	30.5%	33.1%	32.1%
High priority	57.4%	58.6%	56.5%	56.4%
Increasing the number of oral health/dental p	roviders in the community			
Low priority	40.5%	38.0%	40.5%	47.4%
Medium priority	41.7%	42.9%	42.1%	37.8%
High priority	17.8%	19.1%	17.4%	14.8%
Offering more programs or services focusing of	on physical activity			
Low priority	17.6%	14.6%	21.6%	16.2%
Medium priority	39.3%	38.8%	36.9%	46.3%
High priority	43.2%	46.6%	41.6%	37.5%
Providing more counseling or mental health s	ervices			
Low priority	17.0%	15.7%	18.1%	17.6%
Medium priority	42.6%	43.4%	41.6%	42.6%
High priority	40.5%	40.9%	40.3%	39.7%
Providing more alcohol or drug prevention an	d treatment services			
Low priority	28.3%	26.3%	29.6%	30.7%
Medium priority	44.9%	47.9%	43.1%	40.9%
High priority	26.8%	25.8%	27.4%	28.5%
Increasing the number of staff at area health/	medical services who speak anoth	ner language		

	Overall	Mercer County	Middlesex County	Somerset County
	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)
Low priority	45.9%	42.1%	49.2%	48.5%
Medium priority	38.6%	40.1%	37.4%	37.5%
High priority	15.5%	17.8%	13.4%	14.0%
Other				
Low priority	47.9%	50.0%	45.5%	48.0%
Medium priority	25.4%	14.1%	33.3%	40.0%
High priority	26.6%	35.9%	21.2%	12.0%
11. If you needed these services, how likely would yo	u be in the future to obt	ain the following servic	es from Princeton Health	Care system?
Primary care				
Not at all likely	21.9%	22.1%	21.3%	23.0%
Somewhat likely	33.5%	31.4%	36.4%	32.4%
Very likely	44.6%	46.5%	42.3%	44.6%
Acute care hospital services (e.g., cardiac/heart care)				
Not at all likely	15.9%	14.5%	16.6%	18.1%
Somewhat likely	29.9%	29.8%	27.9%	34.8%
Very likely	54.2%	55.6%	55.5%	47.1%
Urgent care				
Not at all likely	18.8%	15.3%	19.7%	25.9%
Somewhat likely	29.7%	30.3%	25.6%	37.4%
Very likely	51.6%	54.4%	54.7%	36.7%
Cancer care/treatment				
Not at all likely	26.0%	26.8%	24.4%	27.8%
Somewhat likely	39.3%	41.0%	38.1%	37.6%
Very likely	34.6%	32.2%	37.5%	34.6%
Cancer screenings (e.g., mammography, colonoscopy)				
Not at all likely	20.0%	20.3%	18.9%	21.6%
Somewhat likely	31.2%	31.2%	29.6%	35.1%
Very likely	48.8%	48.5%	51.6%	43.3%
Outpatient services such as lab work or radiology (e.g.,	X-rays, MRIs)			
Not at all likely	20.3%	18.8%	20.1%	25.0%
Somewhat likely	31.8%	32.5%	28.2%	38.2%
Very likely	47.9%	48.7%	51.7%	36.8%

	Overall	Mercer County	Middlesex County	Somerset County
Women's health services (e.g., reproductive health, pel	(n = 1,308)	(n = 565)	(n = 503)	(n = 240)
· · · · · · · · · · · · · · · · · ·				25.00/
Not at all likely	29.0%	31.0%	28.1%	25.8%
Somewhat likely	33.1%	31.3%	33.0%	38.1%
Very likely	37.9%	37.7%	38.9%	36.1%
Home health care				
Not at all likely	30.5%	29.6%	31.2%	31.3%
Somewhat likely	38.6%	41.1%	35.7%	38.9%
Very likely	30.9%	29.3%	33.1%	29.8%
Mental health services				
Not at all likely	37.4%	39.0%	35.8%	37.2%
Somewhat likely	34.6%	35.1%	32.3%	38.8%
Very likely	28.0%	25.9%	32.0%	24.0%
Health education programming/services				
Not at all likely	27.8%	29.7%	25.6%	28.2%
Somewhat likely	39.2%	39.4%	39.4%	38.2%
Very likely	32.9%	30.8%	35.0%	33.6%
Other				
Not at all likely	46.1%	50.0%	42.3%	45.5%
Somewhat likely	25.0%	25.9%	25.0%	22.7%
Very likely	28.9%	24.1%	32.7%	31.8%

## Table 4. HEALTH COVERAGE AND INFORMATION

	Overall (n = 1,308)	Mercer County (n = 565)	Middlesex County (n = 503)	Somerset County (n = 240)		
12. Do you have any kind of health care insurance, including private insurance, HMOs, Medicaid or Medicare?						
Yes, private insurance (through employer/spouse's employer/parents or buy your own)	76.7%	77.6%	76.1%	75.5%		
Yes, Medicare	34.9%	37.9%	34.8%	27.3%		
Yes, Medicaid or other public insurance	4.2%	3.2%	4.2%	7.0%		
Yes, other insurance (not listed above)	7.0%	6.6%	8.8%	4.2%		
No insurance, uninsured	1.1%	0.8%	0.6%	2.8%		
13. Is your main medical care provided by?						
Private doctor's office or group practice	93.5%	94.2%	92.6%	93.8%		

Community health center	1.8%	1.6%	1.5%	2.8%		
Walk-in medical clinic/urgent care center	1.5%	1.3%	1.8%	1.4%		
Free medical program	0.2%	0.3%	0.3%	0.0%		
Emergency Room	1.3%	0.8%	1.8%	1.4%		
Veteran's Administration facility	0.1%	0.3%	0.0%	0.0%		
Other	1.5%	1.6%	1.8%	0.7%		
14. Of the following sources, which 3 sources do you get most of your health information from?						
Doctor, nurse or other health provider	90.5%	90.3%	91.6%	88.7%		
Pharmacy	29.7%	30.1%	30.4%	26.8%		
Family members	23.5%	24.3%	24.1%	19.7%		
Friends	17.2%	16.0%	17.5%	19.7%		
Neighbors	1.9%	1.6%	1.5%	3.5%		
School	1.1%	0.3%	0.9%	3.5%		
Religious or spiritual advisor	0.6%	0.8%	0.3%	0.7%		
Employer	8.3%	9.7%	8.1%	4.9%		
Library	5.4%	5.8%	6.0%	2.8%		
Television	11.4%	11.5%	11.4%	11.3%		
Local newspaper	6.9%	6.0%	7.5%	7.7%		
Radio	1.9%	2.4%	1.5%	1.4%		
Magazine	8.5%	8.9%	8.1%	8.5%		
Websites	73.7%	74.3%	72.3%	75.4%		
Social Media	6.0%	5.5%	5.1%	9.2%		
Other	6.3%	7.3%	6.0%	4.2%		