Princeton HealthCare System Community Health Assessment

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Submitted to: Princeton HealthCare System



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PRINCETON HEATLHCARE SYSTEM COMMUNITY HEALTH ASSESSMENT

EXECUTIVE SUMMARY

Introduction

As one of the most comprehensive healthcare systems in New Jersey, Princeton HealthCare System provides a continuum of care including acute care hospital services, behavioral healthcare, acute rehabilitation, home care, hospice care, ambulatory surgery, and fitness and wellness services. In May 2012, University Medical Center of Princeton moved from its former site in Princeton to a new state-of-the-art, 231-single patient room facility in Plainsboro Township where it strives to bring together compassion, clinical expertise, and technology in providing outstanding care and value to the community. Further, Princeton HealthCare System affirms its commitment to the community by way of a dynamic curriculum and innovating health and lifestyle-related services offered through its Community Education and Outreach program. To ensure that these outreach activities and programs are meeting the health needs in the community, Princeton HealthCare System is undertaking a comprehensive community assessment effort to examine the health-related needs of Mercer, Middlesex, and Somerset Counties.

As a member to the Greater Mercer Public Health Partnership (GMPHP)—a collaborative of four community hospitals, eight local health departments, and the United Way—Princeton HealthCare system builds on the Mercer County, NJ community health assessment lead by the GMPHP, to include the larger service area comprised of parts of Middlesex and Somerset Counties as well. To that end, this report provides an overview of the key findings of the community health assessment which explores a range of health behaviors and outcomes, social and economic issues, health care access, and gaps and strengths of existing resources and services with a primary focus on Princeton HealthCare System's larger service area of Mercer, Middlesex, and Somerset Counties.

Methods

The community health assessment utilized a participatory, collaborative approach to look at health in its broadest context. The assessment process included synthesizing existing data on social, economic, and health indicators in the region as well as information from 34 focus groups conducted with community residents, 23 interviews with community stakeholders, and 1 forces of change session examining larger external factors that affect health which consisted of 6 discussion groups. Focus groups and interviews were conducted with individuals from Mercer, Middlesex, and Somerset Counties with a range of individuals representing different audiences, including youth, seniors, government officials, educational leaders, social service and health care providers, people living with disabilities and their families, as well as participants in a drug addiction recovery program. Ultimately, the qualitative research engaged over 400 individuals.

Key Findings

of residents.

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

Who Lives in Mercer, Middlesex, and Somerset Counties?
The state of NJ is comprised of 21 counties, across which there was notable variability in terms of size, growth patterns, and composition

"We have a huge mix of people here. There seems to be a change though. The population is increasing, but we are also getting older. But, then we also see a lot of young families moving in as well." — Middlesex County interview participant

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- Overall Population: While Middlesex County is the second largest county in the state by population size (N=809,858), each of the three counties have experienced rapid growth since 2000. Further, Mercer, Middlesex, and Somerset are expected to see a continuing upward trajectory in population growth over the next 20 years.
- **Age Distribution:** Focus group participants and interviewees described their communities as multiage—a combination of young families, middle age persons, empty nesters, and seniors, a situation that Census data confirm. However, the area's senior population 65+ years old is expected to increase at a faster rate in the next two decades than the population overall.
- Racial and Ethnic Diversity: The region's diversity was seen as a major strength of the area by focus group and interview participants, and quantitative data show the diversity of the region. In Middlesex County, approximately 21% of the population is Asian, while 18% is Hispanic. A similar pattern, although with slightly lower numbers, can be seen in Somerset County. In Middlesex County, 19.5% of the population is Black, while 15% is Hispanic.
- Income, Poverty, and Employment: While the area has experienced stark contrasts by income—with both very wealthy and much less affluent municipalities—pockets of residents struggling during the economic recession can be found throughout the region. As one focus group participant explained, there is "hidden poverty" even in the more affluent communities. As Figure 2 indicates,

Mercer, Middlesex, and Somerset have seen increases in unemployment in the past several years, although not to the same extent as New Jersey overall.

• Educational Attainment: The most frequently cited asset of the region by assessment participants was the quality of education. The overall proportion of the Mercer (38.2%), Middlesex (46.7%), and Somerset (35.1%) adult population with a college degree or more was higher than the state as a whole (34.6%).

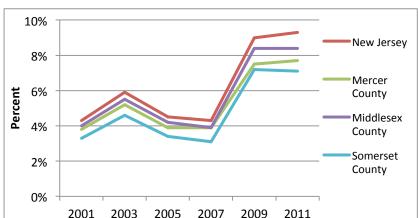


Figure 2: Trends in Unemployment by State and County, 2001 to 2011

DATA SOURCE: US Bureau of Labor Statistics, Local Area Unemployment

<u>Social and Physical Environment –What</u>
<u>is the Mercer, Middlesex, and Somerset Community Like?</u>

This section provides an overview of the larger environment to provide a greater context when discussing the community's health.

- Urbanicity: The Mercer, Middlesex, and Somerset County area was
 described as comprising small rural towns, suburban areas, and urban
 centers. While many respondents from more affluent parts of the
 area reported that they liked their communities for the beautiful
 parks and recreational facilities as well as the neighborliness of
 residents, perceptions were slightly different in less affluent areas.
- Housing: As a largely prosperous region, this area's housing is generally expensive, and residents reported that finding affordable housing is difficult, if not impossible. Data show that Mercer and Somerset reported the largest proportions of renter (40%) who spending more than a third of their income on housing. Although the

"Here in Somerset County, you have some million-dollar homes and others with apartments and other affordable housing. So it's a nice mixture of socioeconomic backgrounds, urban and rural, and generally just a combination of different types of demographics."—Somerset County interview participant

"I worry about seniors in our community, particularly the ones that can't drive and come to our senior center. They are isolated." — Middlesex County focus group participant

- economic downturn has led to a rise in foreclosures in the area, according to respondents, housing costs still prevent many new families from moving into the area.
- Transportation: Transportation emerged as a key concern for the region, with respondents describing the area as a largely car-dependent region. Residents who do drive reported that the rising cost of gasoline and heavy traffic make travel more difficult, while those who do not drive or who do not own a car cited numerous challenges to conducting everyday activities in the area. Transportation was a particular challenge for the elderly.
- **Crime and Violence:** For the most part, residents from Middlesex and Somerset County as well as the outlying Mercer County communities saw their neighborhoods as relatively peaceful and safe. While both violent crime and property crime rates are lower for Middlesex and Somerset than the state, rates are slightly higher than the state in Mercer County.
- Social Support and Cohesion: People's perceptions of the social climates in their communities were mixed. Many residents cited strong social relationships and an ethic of community activism and engagement while others reported that the fast-paced and competitive lifestyle in the area means fewer people have the time or inclination to get involved.

Risk and Protective Lifestyle Behaviors

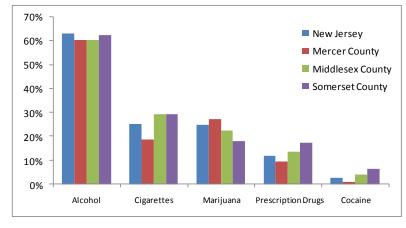
This section examines lifestyle behaviors among Mercer, Middlesex, and Somerset County residents that support or hinder health.

- Healthy Eating, Physical Activity, and Overweight/Obesity: Similar to trends nationwide, issues around obesity—particularly healthy eating and physical activity—are important health concerns in the area that are associated with prevalent chronic conditions such as heart disease and diabetes. Specifically, 25% of Mercer, 23.7% of Middlesex, and 21.6% of Somerset adults are considered obese—all lower than national rates. Limited transportation, affordability of healthy foods and recreational facilities were cited as challenges to accessing existing resources.
- Substance Use and Abuse: Substance use and abuse data reveal that this is an issue in the region, especially among youth. Discussion participants, particularly from Mercer County, believed that the social norm that alcohol, marijuana, and prescription drug use were acceptable coupled with limited youth activities contributed to the concerning rates of youth substance use. Figure 3 shows high school students' reported use of varying substances across the three counties.
- Risky Sexual Practices: While
 not the most frequently cited
 issue, consequences related to
 risky sexual behaviors were
 discussed in several focus groups
 and interviews, particularly in
 light of cut-backs in government
 funding for related services.

Health Outcomes

This section of the report provides a quantitative overview of leading health conditions in Mercer, Middlesex, and Somerset while also discussing the pressing concerns that residents and leaders identified during in-depth

Figure 3: Substance Use within the Past Year among High School Students by State and County, 2008



DATA SOURCE: New Jersey High School Risk and Protective Factor Survey, 2008.

conversations.

- Overall Leading Causes of Death: Quantitative data indicate that the top three causes of mortality in Mercer, Middlesex, and Somerset counties, as in New Jersey as a whole, are heart disease, cancer, and stroke.
- Overall Leading Causes of Hospitalization: Inpatient and emergency room visits varied by age group in the region. For children, bacterial pneumonia was the leading cause for inpatient hospitalization, while heart disease was the leading cause for adults and the elderly. For emergency room visits, leading causes by age group were fever for children, abdominal pain for adults, and fractures for elderly.
- Chronic Disease: The most cited chronic disease concerns were cancer, heart disease, diabetes, and asthma. Prevalence statistics are shown in Figure 4. Discussion participants mentioned a multitude of factors contributing to these issues from rising obesity rates to poor maintenance of conditions to premature discharge from hospitals.

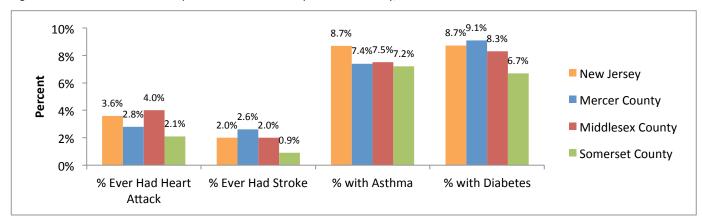


Figure 4: Percent of Adults Who Report Chronic Condition by State and County, 2009

DATA SOURCE: BRFSS, 2010

- Mental Health: Several focus group participants discussed mental health as a pressing issue.
 Focus group members and interviewees reported rising rates of depression and other mental health issues among people in the region and closely connected these to substance use, the economic downturn, and the region's achievement culture. Mental health issues particularly among the socially isolated elderly was also a key concern raised across all three counties.
- Oral Health: While oral health indicators for the region are similar to or better than statewide, oral health issues and access to services were brought up as a concern particularly when discussing the elderly or other vulnerable populations. However, approximately 78-85% of adults indicated that they visited a dentist in the past year, higher than what is seen statewide.
- Reproductive and Maternal Health: The health of children and mothers was discussed as it related to teen pregnancy and access to prenatal services and other related health care. Data show teen birth rates in Mercer and Somerset County have been decreasing slightly in the last several years. Data were not available for Middlesex County.
- Communicable Disease: Infectious and communicable disease was not discussed much in the focus groups and interviews. Of note, however, is that Mercer County has seen higher rates of the leading reported communicable diseases (Hepatitis C, Lyme disease, influenza) compared to NJ, while Somerset had the higher rates of Lyme disease and the food-borne bacteria of campylobacteriosis. Additionally, one-third of seniors in Mercer and Middlesex County report not having been vaccinated for either pneumonia or influenza in the past 12 months.

Health Care Access and Utilization

Data on health care and discussions around health care access showed a complex picture of the health care environment in the area, with excellent services but many barriers to utilizing them.

- Resources and Use of Health Care Services: The overall region is known for its high quality health care and medical services. Yet, there are growing concerns about the supply of family physicians and long-term care facilities for the region's growing and aging population.
- Challenges to Accessing Health Care Services: When asked about access
 to health care services, focus group and interview respondents
 acknowledged that while the region has many medical services, barriers
 exist, and services are not available equally to everyone. Specific
 challenges included being uninsured or underinsured, affordability of
 care, limited availability of providers, limited transportation options to
 appointments, the use of emergency room as primary care, and
 problematic provider communication.

"A concern is the lack of relationships with health care providers, and confusion around navigating the health care system. Health care facilities should provide more guidance in this area." — Middlesex County focus group participant

"Our co-pay has tripled in 5 years. My husband is reluctant to go see the doctor because he doesn't want to have to pay that. Add the endless battled with the insurance company on top of that. It's frustrating!"— Somerset County focus group participant

Community Strengths and Resources

Participants in focus groups and interviews were asked to identify their communities' strengths/assets.

- Health Care Services and Providers: Participants repeatedly cited that the region is home to a large number of prestigious health care institutions and a wide range of specialty and tertiary providers.
 Many participants also noted that these facilities often provide not only medical care, but also support community-based wellness and educational programs.
- Strong Social Service Organizations: Respondents identified their communities as largely rich in social services and were able to cite a long list of providers. They especially complimented the senior centers in the region.
- Facilities Promoting Healthy Behaviors: According to community members, the region comprises a strong infrastructure that supports health, including numerous parks, recreational facilities, golf courses, and grocery stores, although this sentiment was largely held by residents in the outlying and more affluent areas, and less so in poorer communities such as Trenton.
- **Education:** The region's "pro education" culture and access to high quality secondary education and higher education institutions were considered substantial assets by many focus group and interview participants, particularly from the more affluent areas.
- **Geography:** Participants discussed how the geographic location of the region served as an important advantage, particularly in its convenience to both Philadelphia and New York City.

Community Challenges and External Factors ("Forces of Change")

In focus groups, interviews, and larger forces of change discussion groups, participants cited a number of larger macro factors that might have a significant impact on the health of residents. Discussions around the forces of change focused mainly on Mercer County as part of the larger collaborative community health assessment for that county.

Larger Economic Forces: The issue of the future of the economy loomed large in discussions as
respondents wondered about continuing unemployment, declining disposable income, small
business closures, foreclosures, cuts to public services, and the ability of residents to continue to
maintain their lifestyles and the contributions they make to their communities.

- **Demographic Shifts:** The three-county region is also experiencing demographic shifts, particularly related to the growth of the senior population which will require new thinking about services and supports for this population. The aging population will need not only providers with medical expertise to address their concerns but also social outlets and the opportunity to remain engaged in their communities.
- **Community and Culture:** While a strong sense of civic engagement and community pride characterize many of Mercer County's municipalities, a resistance to change and an underlying "not in my town" mentality were cited as important challenges.
- Public Health and Health Care Infrastructure: Respondents in focus groups and interviewees cited
 several external political and systemic forces within the public health and health care infrastructure
 that will most likely affect future services in the community. Specifically discussed were the
 impending decision on federal health care reform (which has since been upheld), potential coverage
 for the uninsured, relocations of local health care institutions, and the shift of providers moving
 from primary to specialty care.
- **Political Environment:** By all indications, 2012 has been and will likely continue to be a tumultuous election year which may affect health care reform and funding for public services.
- Environmental Issues and Emergency Preparedness: Recent disasters, including Hurricane Irene, have created challenges locally including damage to social service agencies and raised awareness to the importance of developing effective emergency preparedness plans.

Vision for the Future

Focus group respondents and interviewees were asked about their visions and hopes for the future 3-5 years from now, in which the following key themes emerged.

- Support Services for Youth, Elderly, and Other Vulnerable Populations:
 Respondents frequently viewed the future of support services, especially
 for youth, seniors, and more vulnerable populations, as being critical for
 sustaining a healthy community.
- Engagement of the Community and Collaboration among Organizations:
 Several respondents working in social services hoped for greater communication and collaboration across agencies. Residents expressed a hope that the community and agencies could think of creative ways to use and expand upon existing resources.
- Health Care Coordination and Innovation: While substantial change in the larger health care system depends on national events, residents pointed to several actions related to coordination, collaboration, and innovation that the local community could take in addressing needs now.

"We need improvement in the economy to have more jobs and more places to get jobs."

— Mercer County Focus group participant

"We have a client who is 95

everything to do with his

able to socialize, learn

and age in place. That is

years old! I really think that has

consistent attendance at your

senior center programs. He is

information on staying healthy,

allowing him to age comfortably

in good health."—Middlesex

County interview participant

- Increasing services in substance abuse, mental health, and oral health, a formal way for coordinating multiple health care providers, and improving the cultural competency of services so they can reach more vulnerable populations were considered critical.
- Focus on Prevention: In addition to improvements on the health delivery side, respondents envisioned a greater emphasis on prevention, particularly in the areas of healthy eating, exercise, and sexual health including STDs and HIV/AIDS.
- Greater Economic Opportunities: Underlying all comments was the recognition that an improved
 economy was critical for the future health of the region. Many residents hoped that a better
 economic outlook would help reverse unemployment and foreclosures, reduce poverty and increase
 incomes, and restore decimated health care and social service agencies' budgets.

Key Overarching Themes and Conclusions

Several overarching themes emerged from this synthesis of data, including:

- Even among different population groups, affordability was a key concern across the entire spectrum. For every population group, affordability and cost issues were key concerns particularly related to high housing costs, affordability of healthy foods, high co-pays for health care services and prescription drugs even for the insured, and generally high costs for day-to-day living, factors which have a disproportionate impact on the most vulnerable.
- Residents repeatedly discussed that their communities had limited walkability and a lack of public
 transportation services, resulting in an environment which has affected some residents' quality of
 life, stress level, and ease of accessing services. Walkability is limited in most areas, and public
 transportation was discussed as being unreliable. As the region's population grows, particularly
 among the elderly, the issue of transportation will become even more critical to address.
- The elderly were identified as a vulnerable population in the community whose concerns stand to be exacerbated by the projected population growth in the region. Discussions focused on how current challenging issues in the community—specifically, lack of affordable housing, limited transportation, affordable prescription drugs, and high cost of living—disproportionately affect the senior population, who also are at greater risk in becoming socially isolated. The region's senior population is growing at a more rapid pace than the population overall, which will have a significant impact on health care and other services.
- Substance use and mental health data indicate that these are concerning issues, and one in which the current services were not necessarily addressing community needs, particularly among youth. Lack of programs for youth, social stigma in talking about substance abuse problems in the community, and complexity of addiction were all identified as reasons for contributing to this problem. Additionally, the issues of substance abuse and mental health are intricately intertwined, making addressing these issues even more challenging. Current treatment programs do exist, but the demand exceeds the services available.
- As with the rest of the country and state, issues around physical activity, healthy eating, and obesity are issues for residents across the three counties, especially as chronic condition are the leading causes of morbidity and mortality. With heart disease, cancer, and diabetes as leading causes of morbidity or mortality, these obesity-related issues are considered critical to address. Residents commented that it was critical to address obesity prevention through a comprehensive approach, in that multiple sectors, including health care, education, public works, transportation, local government, and the business community, needed to be involved and collaborate together to make an impact on current rates.
- While strong health care services exist in the region, vulnerable populations—such as the socially isolated elderly, non-English speaking residents, those living with disabilities, and the poor—encounter continued difficulties in accessing primary care services. Several challenges for these populations were identified: limited or slow public transportation options in some communities, language and cultural barriers, complexity of navigating the health care system, lack of health insurance coverage, limited urgent care options, lack of sensitivity among health care staff, and time or cost constraints. Some approaches that have been suggested to help address the numerous challenges to care include more urgent care clinics, additional patient support services, transportation programs, greater supply of primary care providers, expanded community-based services, and greater coordination across health care settings.
- Residents viewed prevention as critical, but they emphasized that the health care system focused more on clinical care and disease management than prevention. Participants repeatedly

mentioned that many health conditions, especially chronic diseases, could be avoided or minimized if services focused on disease prevention and preventive behaviors, particularly among children and adolescents. Between reimbursement barriers, provider time constraints, and a system built around a biomedical—rather than public health—model, clinical services currently emphasize secondary and tertiary care over prevention.

• Numerous organizations are currently providing services and resources in the region to try to meet the population's health and social service needs. Throughout the discussions, interview and focus group participants recognized the programs related to health in which many community-based and regional organizations are involved. However, some interviewees commented that several efforts and services in the area are fragmented, uncoordinated, and under-funded. Participants expressed a strong interest for these issues to be addressed via a more strategic, coordinated approach with multiple organizations and agencies working together.

PRINCETON HEATLHCARE SYSTEM COMMUNITY HEALTH ASSESSMENT

I. INTRODUCTION

As one of the most comprehensive healthcare systems in New Jersey, Princeton HealthCare System provides a continuum of care including acute care hospital services, behavioral healthcare, acute rehabilitation, home care, hospice care, ambulatory surgery, and fitness and wellness services. In May 2012, University Medical Center of Princeton moved from its former site in Princeton to a new state-of-the-art facility in Plainsboro Township. The new 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 a cancer, cardiac and pulmonary care, critical care, emergency, imaging and outpatient laboratory services, maternal and newborn care, neuroscience, surgery, pediatric care, and eating disorders. 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, Princeton HealthCare System established the Community Education and Outreach program to offer a dynamic curriculum of innovative health- and lifestyle-related programming, screenings, and support facilitated by its outstanding physicians, nurses, and health professionals. It also works closely with leading national organizations —the American Cancer Society, the American Heart Association, and the Susan G. Komen Breast Cancer Foundation, among others —to raise funds, heighten awareness, and bring important health programming to the community it serves. Princeton HealthCare System 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.

To ensure that Princeton HealthCare System's outreach activities and programs are meeting the health needs in the community, Princeton HealthCare System has partnered with Health Resources in Action (HRiA), a non-profit public health consultancy organization in Boston, to undertake a comprehensive community assessment effort to examine the health-related needs of Mercer, Middlesex, and Somerset Counties. HRiA has been working with the Greater Mercer Public Health Partnership (GMPHP) —a collaborative of four community hospitals (of which Princeton HealthCare System is one), eight local health departments, and the United Way—to conduct a community health assessment for Mercer County, NJ. To build on these efforts for Princeton HealthCare System's larger service area which includes parts of Middlesex and Somerset Counties, HRiA expanded the secondary data review, focus groups, and interviews to comprise this larger catchment area.

Purpose of the Community Health Assessment

This report builds on the work that was conducted with the GMPHP for Mercer County as well as includes additional data for Middlesex and Somerset Counties to provide Princeton HealthCare System a comprehensive portrait of the three-county area. To that end, the 2012 Princeton HealthCare System community health assessment was conducted to fulfill several overarching goals, specifically:

 To examine the current health concerns—as well as new and emerging health issues—among Mercer, Middlesex, and Somerset Counties' residents within the social context of their communities

- 2. To identify community strengths, resources, forces of change, as well as gaps in services in order to help area organizations and agencies set programming, funding, and policy priorities
- 3. To enable Princeton HealthCare System to use the quantitative and qualitative data gathered to engage the community in a health planning process
- 4. To provide a report that would fulfill the community health assessment requirement for Princeton HealthCare System per new IRS guidelines

Process, Engagement, and Advisory Structure

Princeton HealthCare System/UMCPP is one of four hospitals member to the Greater Mercer Public Health Partnership, which is focusing on the Mercer County community health assessment. That CHA process is using a participatory, collaborative approach guided by the Mobilization for Action through Planning and Partnerships (MAPP) process. MAPP, a comprehensive, community-driven planning process for improving health, recommends four different broad focus areas to examine for the community health assessment process: 1) health status, 2) community strengths and themes, 3) forces of change (external factors that have an impact health), and 4) the local public health system. Given the focus and scope of this effort, the community health assessment integrates data on the first three MAPP-recommended assessment areas.

For the Mercer County community health assessment, grant funding for this effort was spearheaded by and is currently located within the United Way of Greater Mercer County. The Greater Mercer Public Health Partnership (GMPHP) is the decision-making leadership body which is comprised of 14 area non-profit organizations, including four hospitals (Capital Health Medical Center- Hopewell, Princeton HealthCare System, Robert Wood Johnson University Hospital-Hamilton, St. Lawrence Rehabilitation Center), eight local health departments (Ewing, Hamilton, Lawrence, Hopewell, Montgomery, Princeton, East Windsor, and West Windsor), and the United Way.

To bestow input throughout the process and serve as a liaison between GMPHP and the larger community, a Mercer County Community Advisory Board (CAB) was established in January 2012. The CAB is comprised of approximately 60 individuals who represent the local community in all its diverse aspects: business, education, communications, transportation, health and wellness, faith-based groups, civic and government, vulnerable populations (disabled, seniors, etc.), and other organizations and specialized areas. To facilitate efforts and provide targeted guidance, members of the United Way, GMPHP, and CAB joined collaborative teams on Data, Communications, Outreach, and Planning to discuss more focused activities related to these areas.

The GMPHP and CAB have been reaching out to the larger community through communications and meetings to discuss the importance of this planning process. Additionally, the community has been engaged in focus groups and interviews during the comprehensive data collection effort of the community health assessment. Public events and media will further reach out to the public to broadcast and elicit feedback on the CHA findings and CHIP priorities and strategies.

¹ Advanced by the National Association of County and City Health Officials (NACCH), MAPP's vision is for communities to achieve improved health and quality of life by mobilizing partnerships and taking strategic action. Facilitated by public health leaders, this framework helps communities apply strategic thinking to prioritize public health issues and identify resources to address them. More information on MAPP can be found at: http://www.naccho.org/topics/infrastructure/mapp/

While these intensive community engagement efforts have been focused on Mercer County, additional outreach has been conducted within Middlesex and Somerset Counties for Princeton HealthCare System to ensure that there is representation within its expanded service area. Specifically, focus groups were conducted with residents and key informant interviews were conducted with community and organizational leaders in Middlesex and Somerset Counties.

Definition of Community

Princeton HealthCare System's service area spans Mercer, Middlesex, and Somerset Counties. While specific communities are considered within the hospital's primary service area and others are located in the secondary service area, this assessment examined the social, economic, and health issues countywide, given the breadth of services provided by the hospital to patients across the region. While the assessment looked at conditions across the counties, particular emphasis was given to examining issues among populations that were most at-risk, were uninsured, 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 with service providers—was conducted to identify the needs of those from the most vulnerable populations.

II. METHODS

The following section details how the data for the Princeton HealthCare System community health assessment was compiled and analyzed, as well as the broader lens used to guide this process. Specifically, the community health assessment defines health in the broadest sense and recognizes numerous factor a 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 a 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—its contours, its origins, and its implications. 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.

The following diagram 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.

ants of Health r.

cultural and environmental conditions

Unemployment

Water and sanitation

valth , socio e conomic, cial and community nerry indual lifestyle Education services Agriculture production Housing

Figure 1: Social Determinants of Health Framework

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

Quantitative Data: Reviewing Existing Secondary Data

To develop a social, economic, and health portrait of the three county area, through a social determinants of health framework, existing data were drawn from state, county, and local sources. Sources of data included, but were not limited to, the U.S. Census, U.S. Bureau of Labor Statistics, Federal Bureau of Investigation Uniform Crime Reports, State of New Jersey Department of Health and Senior Services and New Jersey Council on Teaching Hospitals. Types of data included self-report of health behaviors from large, population-based surveys such as the Behavioral Risk Factor Surveillance System (BRFSS) and the New Jersey High School Survey County Rankings, as well as vital statistics based on birth and death records. It should be noted that other than population counts and racial/ethnic distribution, other data from the U.S. Census derive from the American Community Survey which includes data from a sample of a geographic area. Per Census recommendations, aggregated data from the past five years was used for these indicators to yield a large enough sample size to look at results by municipality where appropriate and available.

It should be noted that most health data are only available at the county level. To provide consistency in reporting, social and economic factors are therefore reported at the county level as well.

Raw hospitalization discharge data for 2010 (most current year available) for University Medical Center at Princeton were obtained from the New Jersey Department of Health and Senior Services as part of the larger GMPHP focused Mercer County community health assessment. Data were analyzed for primary diagnosis for inpatient and emergency room admissions and adjusted for age and population size per the 2010 U.S. Census. As categorized on the datasets provided, hospitalization data were recoded using pre-determined categories from the ICD-9 codes (International Statistical Classification of Diseases and Related Health Problems).

Qualitative Data: Focus Groups and Interviews

From February – June 2012, focus groups and interviews were conducted with leaders from wide range of organizations in different sectors, community stakeholders, and residents to gauge their perceptions of the community, their health concerns, and what programming, services, or initiatives are most needed to address these concerns. To this end, a total of 34 focus groups, 23 interviews with community stakeholders, and 1 Forces of Change session consisting of 6 core discussion groups were conducted. Ultimately, the qualitative research amounted to participation of over 400 individuals.

Focus Groups and Interviews

In total, 34 focus groups and 23 interviews were conducted with individuals from UMCCP's service area. While the majority of the focus groups (29) and interviews (17) were conducted within Mercer County as part of the Mercer County community health assessment, 5 focus groups and 6 interviews engaged residents and leaders within Middlesex and Somerset Counties. Focus groups were with the general public, leaders and providers in specific communities, and special interest or vulnerable populations. For example, four groups were conducted with youth, one group with people living with a disability and their families, three groups with senior citizens, two groups with mothers of newborns, one group with leaders in the Indian community, and one group with participants in a drug addiction recovery program. A total of 383 individuals participated in the focus groups. Interviews were conducted with 23 individuals representing a range of sectors. These included government officials, educational leaders, social service providers, and health care providers. 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 community and social service organizations located throughout Mercer County.

Forces of Change Assessment: Mixed Group of Community Leadership and Residents

To understand the larger context in which health occurs, a forces of change session was conducted with key stakeholders and community leaders specifically to explore the larger external factors specifically in Mercer County. Approximately 60 members from the Mercer County Community Advisory Board and other community residents joined together for an event in late March 2012 to discuss these issues. Breaking into six smaller discussion groups, conversations focused on generating a list of external factors (e.g., emerging legislation, the political context, environmental issues, infrastructure, and physical geography) that are most critical to the region and identified opportunities and threats for each force. The focus groups for this component served as a brainstorming session for leaders from community-based organizations, health care institutions and hospitals, and health and social service agencies to identify these external factors, how they might impact—for better or worse—the population's health, and ways to capitalize on opportunities they provide for future initiative planning.

Analyses

The collected qualitative information was manually coded and then analyzed thematically for main categories and sub-themes. Data analysts identified key themes that emerged across all groups and interviews as well as the unique issues that were noted for specific populations. Frequency and intensity of discussions on a specific topic were key indicators used for extracting main themes. While municipality differences are noted where appropriate, analyses emphasized findings common across Mercer, Middlesex, and Somerset County. Selected paraphrased quotes – without personal identifying information – are presented in the narrative of this report to further illustrate points within topic areas.

Limitations

As with all research efforts, there are several limitations related to the assessment's research methods that should be acknowledged. For most of the secondary data analyses, county-level data could not be disaggregated into municipalities. For consistency and readability, nearly all data are provided 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, data based on self-reports 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 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 here benefit from large sample sizes and repeated administrations, enabling comparison over time.

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 community organizations, and participants were those individuals already involved in community programming. Because of this, it is possible that the responses received only provide one perspective of the issues discussed. In addition, organizations did not exclude participants if they did not live in the particular county, so participants in a specific community's focus group might not necessarily live in that area, although they did spend time there through the organization. Lastly, it is important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.

III. WHO LIVES IN MERCER, MIDDLESEX, AND SOMERSET COUNTIES?

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. Who lives in a community are 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.

Population

"We have a huge mix of people here. There seems to be a change though. The population is increasing, but we are also getting older. But, then we also see a lot of young families moving in as well." —Middlesex County interview participant

The state of New Jersey is comprised of 21 counties, across which there was notable variability in terms of size, growth patterns, and composition of residents. The second largest county in the state by population size in 2010 was Middlesex County with an estimated 809,858 persons. Though reporting substantially smaller population sizes, both Mercer (366,513 persons) and Somerset (323,444 persons) have experienced growth in the decade between 2000 and 2010. As illustrated in Table 1, Mercer County experienced a 4.5% increase in population size, consistent with the state as a whole, while Middlesex and Somerset saw more dramatic increases of 8.0% and 8.7%, respectively.

Table 1: Population Change by State and County, 2000 to 2010

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

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

When focus group and interview participants across the region were asked to describe their communities and changes that they have seen, several discussed the population growth in the region and specifically it's changing composition in terms of age and cultural backgrounds. Other participants, however, remarked that the economic downturn as well as the high cost of housing has made it more difficult for new families to move in and has forced some people to leave.

Population projections, which predict an upward trajectory of growth across the three counties, support these observations made by focus group and interview participants (Figure 2). That is, over the next 20 years it is expected that Somerset County's overall population will increase 16.2% from its present size, while Mercer County is expected to grow 9.5% and Middlesex County to grow 7.3%.

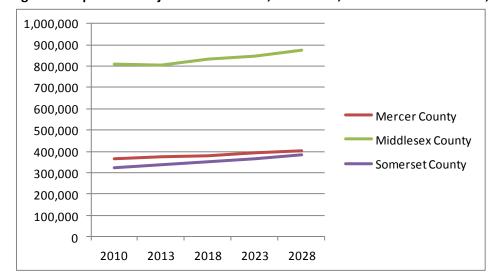


Figure 2: Population Projections in Mercer, Middlesex, and Somerset Counties, 2010 - 2028

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

Age Distribution

"There seems to be a change in terms of the older seniors getting a lot older, and going into assisted living facilities because they can't live on their own anymore. There are also younger seniors who are still working because they need that source of income and can't retire. So we have the older adult coming out to use the [senior] center, you can definitely see a changing of the quard, if you will."—Middlesex County interview participant

"It's a growing community. Since I've only been here 10 years, I have seen a lot of growth and encouraging things happening, so I want to stay here. I've noticed that even in our neighborhood, young people are starting to move in. We are seeing younger kids." —Mercer County focus group participant

"I define my community as the 'Go-Go's, the Slow-Go's, and the No-Go's.' Each of those populations is served in different ways. Challenges are different for the senior women. It's hard to reach these different populations and make sure they are all aware of the resources available —especially the Slow-Go's and the No-Go's. They need to know that there are more resources. They are isolated." —Middlesex County focus group participant

Focus group participants and interviewees described their communities as multi-age—a combination of young families, middle age persons, empty nesters, and seniors. Quantitative data confirm this (Table 2). Middlesex, Mercer, and Somerset Counties reflect a population age distribution consistent with that of the state. While approximately one-fourth of the population was less than 18 years old in each of these geographic locations, an additional 50% were adults aged 25 to 64. Seniors, aged 65 years and over, comprised between 12.3% and 13.5% of the populations, with the largest growth seen in Somerset County (up from 11.2% in 2000)¹. Meanwhile, Somerset County had a notably smaller percentage of 18 to 24 year olds in their population when compared to Mercer (10.9%) and Middlesex County (10.2%)

Table 2: Age Distribution by State and County, 2006-2010

Geography	Under 18	18 to 24	25 to 44	45 to 64	65 and over
New Jersey	23.5%	8.7%	26.7%	27.6%	13.5%
Mercer County	22.6%	10.9%	26.9%	26.9%	12.6%
Middlesex County	22.9%	10.2%	28.3%	26.3%	12.3%
Somerset County	25.0%	6.5%	26.4%	29.8%	12.4%

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

The aging of the area's population was a common theme across focus groups and interviews in all three counties. Consistent with this, several respondents reported an increase in the amount of adult-only and assisted living housing in their communities. The needs of seniors arose frequently in conversations as residents expressed a desire for seniors to "age in place" while recognizing that many face poor health and social isolation, especially if they do not have family in the area. Respondents commented that this demographic shift has substantial implications for the social services, health care, and transportation infrastructure in the area. For example, a social service provider for the elderly in Middlesex County noted, "While we have a lot of younger seniors in the area who are healthy and still active, we have many who are in the 'very aged' category. As we see this shift occur, this is going to be an even bigger strain on our current resources."

Seniors aged 65 and over are considered the fastest-growing age cohort in the three-county region. This group is expected to increase in population in the three county region by 79% from 170,111 seniors in 2010 to a projected 304,200 in 2028. More importantly, the growth in the senior population is outpacing general population growth, in that seniors are expected to encompass a larger proportion of the general population in the future, a trend expected to be mirrored nationally. As seen in Figure 3, currently seniors aged 65 or more years old make up approximately 11-12% of the population, depending on the county, whereas in 2028, they are expected to comprise 20.1% of Somerset County's population, 17.2% of Mercer County's population, and 18.0% of Middlesex County's.

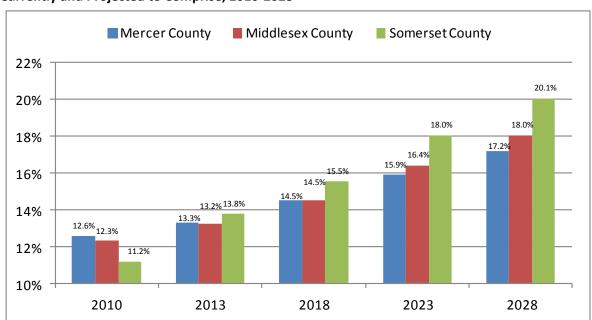


Figure 3: Percent of Population of Mercer, Middlesex, and Somerset County Seniors 65+ Years Old Currently and Projected to Comprise, 2010-2028

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

Racial and Ethnic Diversity

"We have a very culturally diverse community. In particular, there is a high Asian and Indian community. That is a real strength. However, I worry that some older folks feel isolated and that they may not be able to access services and programs because of cultural barriers."—Middlesex County interview participant

"I would say it's diverse in Mercer County. You run the gamut in terms of socioeconomic status, ethnicity, things of that nature." — Mercer County focus group participant

"Our community is diverse—Asian, Black, and White. It's very multicultural."—Somerset County focus group participant

The region's diversity was seen as a major strength of the area by focus group and interview participants, although the communities in the area, varied in the levels and types of diversity of their populations. In both Middlesex and Somerset Counties, focus group and interview participants indicated that they saw their communities as racially/ethnically diverse, with neighbors being from many different cultural backgrounds. In particular, they noted the large percentage of Asian and Indian residents in the area and viewed this diversity as an asset to the region. However, while residents from Middlesex and Somerset counties involved in the assessment described their communities as racially/ethnically diverse, they also noted that they were somewhat socio-economically homogeneous. In Mercer County, focus group and interview participants from Trenton, Ewing, and Hightstown discussed how their communities had higher Hispanic and African American populations and were also more socio-economically disadvantaged.

Table 3 illustrates a pattern of variation by racial and ethnic composition in New Jersey and across Mercer, Middlesex, and Somerset Counties. While each of these geographic locations was predominantly White in 2010, that percentage had decreased since 2000 by between 4% to almost 10% dependent on the specific geographic location. That is, in 2000 the White population comprised 72.6% of New Jersey, 68.5% of Mercer County, 68.4% of Middlesex County, and 79.3% of Somerset County.

In 2010, Middlesex had by far the largest Asian population (21.3%), though Somerset reported a notably large Asian population as well (14.1%). As compared to Middlesex and Somerset, Mercer County had the largest Black population by approximately 11 percentage points. However, a most notable trend was in the growth of the Hispanic/Latino population. In the decade between 2000 and 2010, the Hispanic population across these three counties increased by an average of 4.8%, which is consistent with the 4.4% increase recorded at the state-level.

Table 3: Racial/Ethnic Composition by State and County, 2010

Geography	White, non- Hispanic	Black, non- Hispanic	Asian, non- Hispanic	Other Race, non- Hispanic	2 or More Races, non- Hispanic	Hispanic/ Latino
New Jersey	59.3%	12.8%	8.2%	0.5%	1.5%	17.7%
Mercer County	54.5%	19.5%	8.9%	0.3%	1.7%	15.1%
Middlesex County	49.2%	8.8%	21.3%	0.6%	1.7%	18.4%
Somerset County	62.4%	8.5%	14.1%	0.3%	1.7%	13.0%

NOTE: White, Black, and Asian race may include individuals who identify as Hispanic/Latino ethnicity DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2010 Census

Figure 4 illustrates an increase in the levels of linguistic diversity across the counties and state, with the highest percentage of households speaking languages other than English reported in Middlesex County (39.5%). Though this was reported by fewer households in Mercer (26.2%) and Somerset (27.8%), those percentages were largely consistent with the state as a whole (28.7%).

45% 39.5% 40% 35% 28.7% 27.8% 30% 26.2% 25% 20% 15% 10% 5% 0% **New Jersey** Mercer County Middlesex County Somerset County

Figure 4: Language Other Than English Spoken at Home by State and County, 2006-2010

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2006-2010 American Community Survey 5-Year Estimates (Aggregated 5-yer estimates used per Census recommendations due to small sample sizes by municipality. Aggregated 5-year estimates pools 60 months of collected data together from the ACS for analysis.)

Among the three counties, the most commonly spoken language other than English was Spanish, with 14.5% of Middlesex County residents, 11.1% of Mercer County residents, and 10.9% of Somerset County residents reporting speaking it in the home. In Middlesex County, the next most common languages spoken at home were Chinese and Gujarati (both at 3.2%), while for Somerset County, it was common Chinese (3.1%) and Hindi (1.4%). For Mercer County, the next most common languages spoken were Chinese (1.9% of the population) and Polish (1.4%).

Overall, respondents viewed growing cultural and linguistic diversity as a significant asset to the region. As one resident described, "we see a change in the demographics coming in, and it's refreshing." At the same time, however, some acknowledged that these changes create challenges for communities. Focus group participants and interviewees observed that residents in largely White communities have often not interacted much with people of other races and ethnicities, and efforts may be needed to work more effectively across cultures. Those working with minority populations shared concerns about language isolation of some residents, and the barriers this creates for accessing health and social services and connecting with other communities.

Leaders of the Indian community in Middlesex and Somerset County area discussed their work in providing cultural sensitivity training to health care and service providers. They indicated that many older Indian adults not born in the United States may have different customs, particularly among women, related to non-verbal communication (e.g., limited eye contact, not shaking hands) which may be misconstrued by police, EMT, or other service providers. They noted that it was critical to discuss these customs during cultural exchanges, so that miscommunication about cultural differences does not escalate into a negative situation. As one Middlesex County participant noted, "There are non-verbal norms, such as women not making direct eye contact with men or it being polite to take off one's shoes before entering an Indian family's house. If not understood by both sides, this can become an issue if a police officer or social service provider comes to the house. Suspicions arise when we don't understand each other."

Income, Poverty, and Employment

"Like everywhere around the country, I think people were hurt by the recession. In the wealthier communities, people may not be in poverty, but if they lost their jobs, they are finding that times are tough." —Middlesex County interview participant

"You don't always see it. Many times, people's financial troubles are hidden, but not everyone here has the income that you might expect." —Mercer County interview participant

"I think the biggest concern here is the senior population. Many of them are on fixed incomes and this is an expensive place to live."—Somerset County interview participant

While the area has experienced stark contrasts by income—with both very wealthy and much less affluent municipalities—pockets of residents struggling during the economic recession can be found throughout the region. Overall, Middlesex, Mercer, and Somerset Counties are highly affluent, yet

there are some areas, particularly Trenton, Ewing, and Hightstown in Mercer County, where residents have much lower incomes than those in the rest of the region.

Income and Poverty

In general, focus group respondents and interviewees described the region as largely and historically affluent. As one Mercer County focus group respondent stated, "New Jersey has many strengths, and Mercer County is among one of the most resourced communities." Residents in Middlesex and Somerset Counties echoed this sentiment. Residents across all three counties pointed to expensive housing and the large number of parks and public tennis courts, basketball courts, skating rinks, and ball fields in the region. As one Middlesex County resident noted, "So many resources exist here for all ages—playgrounds for children, senior centers for older folks." Yet, respondents explained that not all communities or community members have high incomes, such as those living in Trenton and its immediate environs outside.

By the quantitative data, household median income for the region was much higher than what is seen statewide (Figure 5). Somerset County is the second wealthiest county in the state, with a median household income of \$97,440, approximately \$27,600 above the state. Middlesex County, which ranked 7th among NJ counties, had a median household income that was approximately \$7,800 above the state, whereas Mercer County residents' median income was approximately \$1,400 higher than the state. However, Mercer County in particular saw great variation in median income by municipality, ranging from \$36,601 for Trenton to \$137,625 for West Windsor. In Middlesex and Somerset Counties, variation in income is not as stark. For example, Monroe Township had a median income at \$74,202, Plainsboro Township at \$86,986, and Montgomery Township at \$146,100.

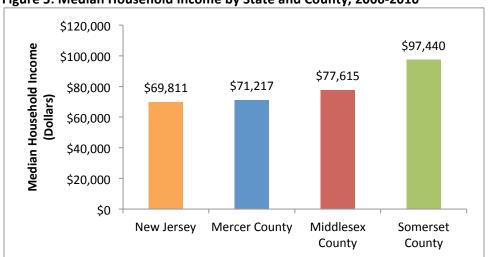


Figure 5: Median Household Income by State and County, 2006-2010

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2006-2010 American Community Survey 5-Year Estimates

The percentage of residents in poverty follows a similar pattern in reverse as median income. Somerset County, a wealthy area, has only 3.6% of its residents in poverty, similar to its rate in 2000 (Figure 6). Middlesex and Mercer Counties both saw their poverty rates slightly increase in the last several years. For Middlesex County, 7.5% of its residents were in poverty according to 2006-2010 aggregated data, compared to 6.8% in 2000. Even greater so, Mercer County saw a rise from 8.6% to 10.1% during this time. Middlesex and Somerset Counties' poverty rate also falls well below the state, while Mercer

County is slightly higher. This is most likely driven by Trenton, where almost one quarter of Trenton's residents had incomes in 2006-2010 below the federal poverty line (24.5%).² Ewing had the next highest rate at 10%.

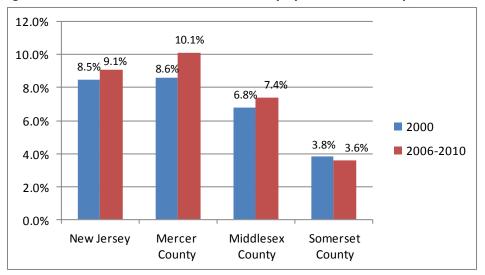


Figure 6: Percent of Individuals Below Poverty by State and County, 2000 and 2006-2010

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

NOTE: Information on income was gathered on the 2000 Decennial Census. In 2010, information on income was not collected on the 2010 Census but has been collected via the American Community Survey.

Many interviewees and focus groups noted that Trenton residents overall disproportionately were affected by a concentration of poverty. Residents there had much lower incomes, and as a whole, the perception was that the city lacked amenities—such as green space where residents felt safe and access to low cost, healthy foods—that others in the area had. One community leader remarked that ""those who can leave Trenton do" which further exacerbates the concentration of poverty in the city.

Hidden Poverty

Respondents also talked about "hidden poverty" in more affluent areas. A resident from Princeton described this phenomenon as follows: "We have a community with incredible resources. Financially, you can look out any window of this [social service] building which is one of the wealthiest cities. We have the arts, resources for the mind and spirit. And yet, downstairs in our offices which see needy clients for food and basic services, we serve hundreds of families a month that have very few resources." Rising poverty among the elderly and other vulnerable populations was particularly noted as a concern. Senior focus group respondents across Middlesex, Mercer, and Somerset Counties shared the difficulties of living on fixed incomes as costs for housing, health care, and food rose. As one senior observed, "people here might make decisions like paying their taxes so they can stay and have a place to live, rather than paying for their prescriptions." As one Middlesex County senior noted, "Social Security doesn't necessarily pay the bills when you are living in a high cost of living area like this one." Organizational

² This figure represents the percentage of individuals whose income in the past 12 months fell below the federal poverty level, which is adjusted for family size. For example, in 2010, the federal poverty level was \$14,570 for a family of two and \$22,050 for a family of four.

staff working with racial and linguistic minorities pointed to challenges of employment and the ability to access services, particularly among undocumented workers.

As elsewhere, the economic downturn has been felt in the entire region. Respondents pointed to rising unemployment, small business closures, high taxes, rising gasoline prices, and few job prospects for new graduates as economic concerns for the region. Participants enumerated multiple ways this changing economic picture has had a negative impact on communities and individuals. They reported that long-standing residents have been forced to move out of the region, individual and family stress has increased, and a growing number of people now lack health insurance or the ability to pay for health care. Stakeholders working with disadvantaged groups (e.g., veterans, minorities, disabled) pointed to the lack of employment opportunities, struggles of minimum wage jobs, and the growing economic stresses for their constituencies.

Several respondents across the entire region reported that many families in the region have experienced a decline in their standards of living as previously high-wage professionals have become unemployed or now work part-time or as consultants with less pay and no benefits. While not poverty in the true economic sense, respondents stated that these families experience hardship and substantial stress as they see their standards of living decline. One Middlesex County resident explained, "Many people around here are used to living well. But many, particularly those in the financial sector, have lost their jobs during this recession. You are used to providing for your family. You want to have your dignity, keep your house, send your kid to college. It can be tough." According to respondents, this situation has many implications for communities. Some reported less volunteerism and involvement in civic and social service events, as typically active residents struggle themselves in the declining economy. As one focus group member shared, "these people have helped to build this community, but now they do not have the resources anymore."

Employment

As elsewhere in the country, unemployment in Middlesex, Mercer, and Somerset Counties has been on the rise since 2001. Yet, the 2011 unemployment rates for Middlesex County (8.4%), Mercer County (7.7%), and Somerset County (7.1%) were all lower than for the state as a whole (9.3%) (Figure 7). Over the past 10 years, the biggest jump in unemployment in the counties and statewide occurred from 2007 to 2009. As one Middlesex County focus group remarked, "It can be a scary time for many. Employment is linked to our self worth and the security of our family. If you lose your job, you worry about losing your home, and then it can all spiral."

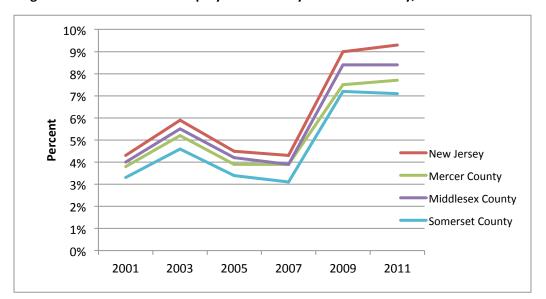


Figure 7: Trends in the Unemployment Rate by State and County, 2001 to 2011

DATA SOURCE: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, 2011

Educational Attainment

"The school system is a community strength for our younger families. There are a lot of resources available."—Middlesex County interview participant

"We have some 'blue ribbon' schools. Very high quality."—Somerset County focus group participant

The most frequently cited asset of the region by assessment participants was the quality of education. Respondents pointed to prestigious colleges and universities, "great schools," and an intellectual culture as key reasons people choose to live in the area. The Middlesex, Mercer, and Somerset County area is home to 16 colleges and universities, including Princeton University and Rutgers, the State University of New Jersey. Focus group members and interviewees additionally shared that, beyond formal institutions, there are substantial opportunities for continued learning through community educational and cultural events, many of which are free.

Quantitative results show high educational attainment across the three counties among adults ages 25 years or older (Figure 8). Further, the overall proportion of the Middlesex County (46.7%), Mercer County (38.2%), and Somerset County (35.1%) adult population with a college degree or more is higher than for the state as a whole (34.6%).

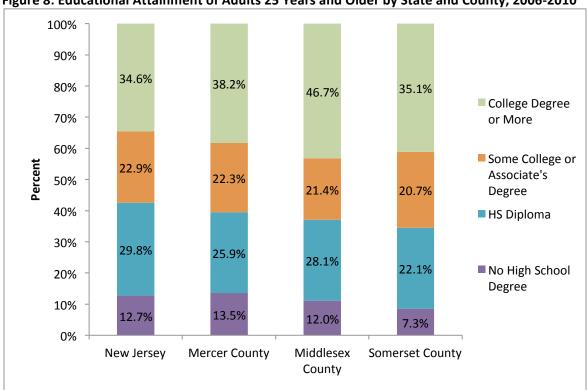


Figure 8: Educational Attainment of Adults 25 Years and Older by State and County, 2006-2010

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2006-2010 American Community Survey 5-Year Estimates (Aggregated 5-yer estimates used per Census recommendations due to small sample sizes by municipality.)

However, while quality education was seen as a tremendous asset in the region, several respondents specifically from Mercer County reported that not everyone has equal access. They commented that poorer communities lack basic supplies and poorer families in more affluent school districts cannot afford some things, such as tutors, needed to succeed in school. Several parent and youth focus group participants remarked that the system works well for "super achievers" or those "who know how to play the system", but may less effective for others.

While high educational attainment contributes substantially to individual and community success and vitality, a number of focus group respondents and interviewees from across all three counties observed that the region's strong education and achievement culture creates significant stress for families and students. Student focus group members from Mercer County reported getting little sleep, sometimes only two or three hours a night. As one student focus group member shared, "We have a Late-nighters Club on Facebook to help keep us awake for studying." Participants attributed the high use of substances among youth, in particular stimulants, in part to youth who are trying to keep up with the intense academic environment. As one Somerset County interviewee noted, "We have an excellent educational system here, but that also puts a lot of stress on kids which can have serious negative consequences."

IV. SOCIAL AND PHYSICAL ENVIRONMENT—WHAT IS THE MERCER, MIDDLESEX, AND SOMERSET COMMUNITY LIKE?

The social environment and physical environment are important contextual factors that have been shown to have an impact on the health of individuals and the community as a whole. Understanding these issues will help in identifying how they may facilitate or hinder health at a community level. For example, parks may not necessarily be utilized for physical activity if residents are fearful for their safety or healthy foods may not be accessible if the public transportation system is limited. The section below provides an overview of the larger environment around Middlesex, Mercer, and Somerset County to provide greater context when discussing the community's health.

Urbanicity

"We have grown so much in the past few decades. We used to be semi-rural and now we are suburban and somewhat sprawling. We have so many great resources, but we also have traffic and limited public transportation if you don't have a car." —Middlesex County interview participant

"One of the biggest strengths in my community is that it is accessible. I can go to New York or Philadelphia in an hour."—Somerset County focus group participant

The Middlesex, Mercer, and Somerset County area was described as comprising small rural towns, suburban areas, and urban centers. Physical geography was described as one of the region's key assets. Many respondents from more affluent parts of the region reported that they liked their communities for the beautiful parks and recreational facilities as well as the neighborliness of residents. Residents largely described their community as being like a "small town" regardless of population or size. As one focus group respondent commented, "the community is large geographically in square mileage, but it feels like a small town."

Perceptions were slightly different in less affluent areas, specifically those in Mercer County such as Trenton and Ewing. As an urban center, Trenton has a number of resources within a densely, populated, convenient location—small shops, bus lines, and health services. However, it also has the many challenges of a poorer city—higher crime, less green space, and more financially strapped facilities. Although residents were largely positive about their outlying communities, they saw some challenges to them as well. Many reported having to travel for services, health care, and shopping by car. While in urban areas, such as Trenton, services that are available are within walkable distances, but some neighborhoods were not considered accessible for pedestrians due to crime and lack of personal safety.

Some Mercer County residents perceived community policies or systems as being resistant to change, which was viewed as challenging as economic and population pressures grow. As one focus group member shared, "I go to a lot of school board meetings and about 13 years ago they were talking about water and sewer issues. And they are still talking about those issues." Others described a "not in my town" mentality and pointed to the example of a recent and contentious debate about whether to locate a methadone clinic in a more affluent community.

Housing

"Here in Somerset County, you have some million-dollar homes and others with apartments and other affordable housing. So it's a nice mixture of socioeconomic backgrounds, urban and rural, and generally just a combination of different types of demographics."—Somerset County interview participant

"We have lots of really nice houses, but it seems like we don't have much in the way of subsidized housing or affordable housing. If you have money, it's a much easier place to live. It can be tough for those on fixed incomes." —Middlesex County focus group participant

As a largely prosperous region, the area's housing is expensive, and residents reported that finding affordable housing is difficult, if not impossible. Although the economic downturn has led to a rise in foreclosures, according to focus group and interview respondents, housing costs still prevent many new families from moving into the area. As seen in Figure 9, median monthly housing costs for a mortgage or for rental units are relatively consistent across the three counties and state, though slightly higher in Somerset County. There is variation in the region on housing costs, but in general, the area was considered a costly place to live.

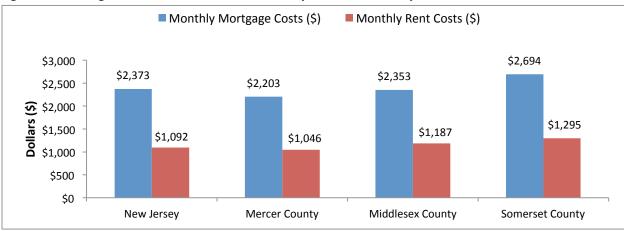


Figure 9: Housing Costs for Owners and Renters by State and County, 2010

DATA SOURCES: U.S. Department of Commerce, Bureau of the Census, 2006-2010 American Community Survey 5-Year Estimates

While absolute housing costs are telling, they do not necessarily speak to how housing prices compare to the overall cost of living. **Figure** 10 illustrates the percentage of renters and owners whose housing costs comprised 35% or more of their household income. Overall, this proportion was higher for renters than for home owners with a mortgage. Mercer County and Somerset County reported the largest proportions of renters (approximately 40%) who were spending more than a third of their income on housing.

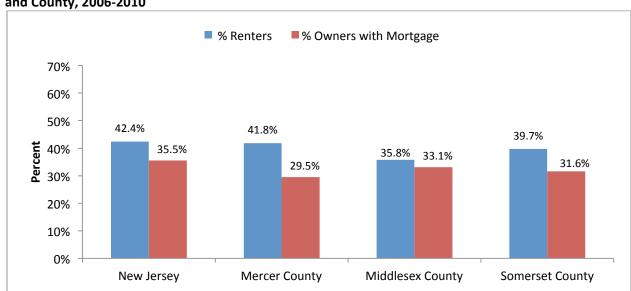


Figure 10: Percent of Residents Whose Housing Costs are 35% or more of Household Income by State and County, 2006-2010

Focus group and interview participants from social service agencies spoke about how the lack of affordable housing has seemed to have a disproportionate impact on specific populations, particularly veterans and seniors. Homelessness was identified as an issue by a couple of respondents, especially among veterans. As one person stated, "People don't like to acknowledge homelessness. This is a hidden issue for most residents." During the point in time count for the homeless population in NJ, Mercer County had the sixth highest homeless population (6.8% of the population with 574 individuals), followed directly by Middlesex County (6.7% of homeless population of NJ with 571 individuals) and then a smaller population in Somerset County (2.8% of homeless population of NJ with 234 individuals). However, it is important to note that the actual number of people who are homeless over the course of a year may be between two and four times greater than the reported number.

Transportation

"We do have county transportation, but there are always issues with it. You know, there are those seniors who take the bus and they spend quite a bit of time in transit, some even up to 2 hours because a place like Montgomery Township is very large and there's traffic."—Somerset County interview participant

"When someone is ill and no longer able to drive, the community doesn't provide transportation for them to remain active. They have to pay privately."—Middlesex County interview participant

"I feel as if people are falling through the cracks in terms of getting here [to the senior center]. This is definitely a barrier, especially for our older participants."—Middlesex County interview participant

"The transportation infrastructure is not keeping pace with growth. The infrastructure is basically the same as 40 years ago, meanwhile the size of the community has leaped and grown."—Mercer County interview participant

"It's easier to get to New York or Philly by public transportation than to get to the next town over." —Mercer County focus group participant

Transportation emerged as a key concern for the entire region, which disproportionately affects the growing senior population in all three counties. The three-county area was described as being cardependent. Those who do drive reported that the rising cost of gasoline and heavy traffic makes travel more difficult, while those who do not drive or who do not own a car cited numerous challenges to conducting everyday activities in the area. Residents from all three counties reported that there are few public transportation options and those that do exist are poorly coordinated. Several observed that it is easier to travel to New York City or Philadelphia from the region using public sources than it is to travel within the area. This creates challenges particularly for the elderly, disabled, and poor, according to respondents. As one senior focus group member stated, "I have no transportation. If it weren't for the people here [at the senior center] and others volunteering to take me, I wouldn't be able to go anywhere." Some people reported that they relied on cabs for transportation which is very expensive. One staff member at a senior center noted, "I have gotten called by seniors who need to go to the hospital for their chemo, and to take a cab costs \$100 each way."

Among the transportation resources that are available, participants mentioned Transportation Resources to Aid the Disadvantaged and Elderly (TRADE) which provides free transportation to senior citizens and persons with disabilities. Subscription and demand response services are available.³ Van or volunteer driver programs are also offered by local agencies. Senior focus group respondents remarked that eligibility for some programs was challenging, as one remarked, "Don't they know all seniors are disabled?" Many focus group and interview respondents from Middlesex, Mercer, and Somerset Counties reported that the different transportation services in the region are insufficient and, at times, unreliable. This was of particular concern for the senior population. Several shared their experiences with public transportation services, reporting that centralized bus locations make it necessary first to have transportation to get to the bus and lack of scheduling flexibility results in long wait times for rides; for some, cost of the bus was prohibitive. Those receiving car or van transportation services from social service agencies or faith-based groups commented that these can be undependable. As one senior focus group member shared, "I was left the doctor's office, and they never came back to get me. They packed up and left." Another challenge, according to respondents, is that drivers are often prohibited from providing much assistance beyond the ride, creating difficulties for those needing more help such as the elderly and disabled. One disabled focus group member explained, "They put me on the lift and they put me off the lift, but after that you are on your own."

Additionally, interview and focus group participants from Middlesex and Somerset Counties commented on the traffic congestion and quality of the streets. They noted that they need to leave a lot of time in their schedules to travel short distances, particularly during rush hour, since it takes awhile to travel through the densely populated area. Additionally, the streets did not seem to be built for the growing population and increasing traffic. Middlesex County respondents commented that some streets are too narrow to accommodate the flow of traffic, and potholes can make driving more dangerous.

³ Subscription services provide trips to employment, dialysis, nutrition sites, rehabilitation sites, radiation, etc. on an ongoing basis. Demand response services provide trips to doctors' appointments, out-patient clinics, beauty parlors, or shopping, which are provided on an as-needed basis.

Crime and Violence

"I've lived here for two decades and have always felt safe. That's part of the reason I've moved here with my family. Crime is typically not a top-of-mind issue for me."—Middlesex County focus group participant

"I think it [safety] really depends where you live. I feel safe. My children play in our neighborhood. We know our neighbors. It's a really nice place."—Mercer County focus group participant

"You hear on the news about things [crimes] happening in the area. It seems like crime is increasing based on what you hear, but I don't know."—Somerset County focus group participant

For the most part, focus group and interview participants from Middlesex and Somerset Counties as well as the outlying Mercer County communities saw their neighborhoods as relatively peaceful and safe. Violence and concerns about safety rarely came up in conversations with participants in the wealthier communities of the three counties. However, some residents indicated that they perceived crime, including gun violence, in the region to be growing, although crime reports indicate that violent and property crime in the area has actually decreased over the past several years, similar to trends around the country. Mercer County residents were the participants most likely to discuss perceptions of violent crime and spoke about it in relation to gang-related activity. Several respondents remarked that they had heard about recent gang-related crime in Princeton as evidence of this. Increasing domestic violence (DV) was also mentioned by several service providers in Mercer County. Crime data do show that the DV arrest rate has increased from 2008 to 2009 from 2.54 DV arrests per 1,000 population to 2.78 per 1,000 population.

Crime reports show that overall crime rates were lower in Middlesex and Somerset Counties than in New Jersey as a whole (Table 4). Specifically, violent crime in these counties was less than 2.0 reports per 1,000 population compared to 3.1 per 1,000 population for the state. Violent and property crimes were highest in Mercer County as compared to New Jersey and the other counties. Most of this rate is driven by the crime rate in Trenton which is much higher than other municipalities in the area.

Table 4: Violent and Non-Violent Crime Rate per 1,000 Population by State and County, 2010

Geography	Violent Crime	Non-Violent/Property Crime		
New Jersey	3.1	20.9		
Mercer County	4.6	21.2		
Middlesex County	1.8	17.4		
Somerset County	0.8	13.2		

DATA SOURCE: N.J. Department of Law and Public Safety, Division of State Police, Uniform Crime Reporting Unit, 2010. Standardized to U.S. Census 2000 population

Among Mercer County residents specifically, there was a sharp contrast in conversations on safety and crime when respondents talked about Trenton rather than the outlying areas. Violence in Trenton was a concern among focus group and interview participants from the city as well as social service providers. The perceived pervasiveness of crimes related to gangs, robbery, and assault was entangled in daily life and further exacerbated the challenges of living in a more impoverished area. As one teen respondent

shared, "I have a lot of friends who live in Ewing and Trenton. Mental stress of living in their neighborhoods really affects them. They are scared of gangs." The Mercer County Gang Task Force, a coalition of organizational representatives focused on developing a comprehensive approach to gangs, has noted that several youth-based programs currently exist in the area and that a greater emphasis on positive youth-adult relationships and more economic opportunities for youth are important strategies in addressing the issue of gangs."

Youth and those who work with youth involved in the assessment also reported a concern around an increase in bullying. While data on bullying by county were not available, Figure 11 illustrates the breadth of bullying among high school students in New Jersey, where 20% indicated that they have been bullied on school property while 15.6% report being bullied electronically (cyberbullying). Residents' perspectives of the effectiveness of schools in addressing bullying were mixed. Some perceived that schools were doing a good job in raising awareness, taking action, and programming; others reported that efforts seemed insufficient especially as cyberbullying and the current outreach cannot address the growing problem.

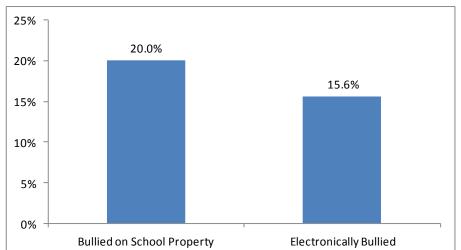


Figure 11: Percent of New Jersey High School Students Reporting Being Bullied, 2011

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *New Jersey High School Youth Risk Behavior Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

Social Support and Cohesion

"I worry about the seniors in our community, particularly the ones that can't drive and come to our senior center. They are isolated. They are not engaged in activities. We need more resources to help get them out of their house and seeing people."—Middlesex County interview participant

"I feel like the community really comes together to help each other. If there is a family in need or a community crisis, like the hurricane, people come out to support each other."—Middlesex County focus group participant

"I also think that with teenagers, they are still addicted to technology and this is making them increasingly socially inept. They just can't communicate with one another, and can't make it in

the world because everything is via texting and Facebook and things like that." —Somerset County interview participant

"When you first come to the community...kids seem to have so much. But then you uncover the layers and there are a lot of children who need so much and have needs that are not being met." —Mercer County focus group participant

People's perceptions of the social climates in their communities were mixed. Many residents across all three counties cited strong social relationships and an ethic of community activism and engagement. As one community leader described, "when you talk about social outlets, the communities are very, very healthy." However, others reported that the fast-paced and competitive lifestyle in the area means fewer people have the time or inclination to get involved. In several focus groups, participants in different communities agreed, as they noted, "people are not involved in the community" or "the community and its services are a user base, not a participatory base." Others described a growing trend toward disconnectedness as a result of technology, particularly among adolescents and young adults. In focus groups in Middlesex and Somerset Counties, adults lamented that today's youth are not necessarily gaining the social skills needed because of their "obsession" with cell phones, videogames, and social networking. Additionally, several respondents observed that the undercurrent of competitiveness and affluence in the area led to a tendency to ignore concerns or problems of other community members. As one focus group member stated, "wealth and education hide problems."

Social support networks have been identified as powerful predictors of health behaviors and health outcomes; those with poor family support, minimal contact with others, and limited involvement in community life are less likely to engage in healthy lifestyle behaviors and are at increased risk of early mortality. Results from the recent Behavioral Risk Factor Surveillance Survey indicate that 21-24% of adults in the three counties reported that they "never," "rarely," or "sometimes" get the social and emotional support they need (Figure 12). This was similar to the statewide rate.

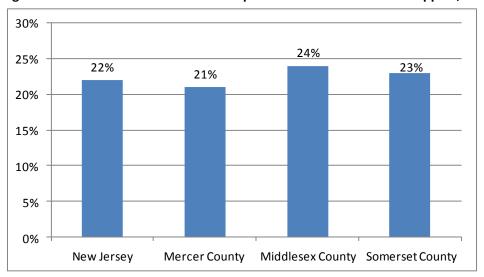


Figure 12: Percent of Adults with Inadequate Social and Emotional Support, 2006-2010

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data, 2006-2010.* Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention as cited in County Health Rankings (2012).

The elderly, those with disabilities, and non-English speakers were noted as being more socially isolated, which was of particular concern to focus group and interview participants. One senior focus group member described the growing isolation of seniors, especially those without family in the region, in this way: "My children moved me here, and I am all by myself. I call it 'social starvation'. Seniors are feeling incarcerated." This was a sentiment echoed among seniors and social service providers in all three counties. Senior respondents from across the region valued the role of senior centers in creating social connections, while at the same time noting that not all seniors have the transportation or physical ability to get there. As one Middlesex County senior noted, "I'm so lucky that I can come here [the senior center] and engage in all of these activities. But I'm healthy and active. What about those who are frail and don't have family around to drive them? Are they stuck in their house all day?" Language isolated communities were also identified as at risk.

V. RISK AND PROTECTIVE LIFESTYLE BEHAVIORS

This section examines lifestyle behaviors among residents that support or hinder health including individuals' personal health behaviors and risk factors (including physical activity, nutrition, and alcohol and substance use) that result in the leading causes of morbidity and mortality among Middlesex, Mercer, and Somerset County residents. Also included in this analysis are some measures that are tracked as part of the Healthy People 2020 (HP2020) Initiative, a 10-year agenda focused on improving the Nation's health. Where appropriate and available, county-level statistics are compared to the state as a whole as well as HP2020 targets.

Healthy Eating, Physical Activity, and Overweight/Obesity

"We do a lot of collaborative work with nearby recreational centers around sports and activities for youth. But teens are more interested in being on the computer than riding bikes." —Somerset County interview participant

"We have a lot of resources here for activity and diet. Parks, good supermarkets, basketball courts. However, issues around obesity and related practices are not something that we have come together around to tackle as a community." —Mercer County focus group participant

Similar to trends nationwide, issues around obesity—particularly healthy eating and physical activity—are important health concerns in the area that are associated with prevalent chronic conditions such as heart disease and diabetes. Yet, statistics indicate that area residents generally have similar behaviors to residents statewide. Figure 13 captures the percentage of adults who reported eating fruits and vegetables five or more times per day (the recommended guideline) and indicates that nearly one-quarter of residents in Middlesex County and 28% of those in Mercer and Somerset Counties meet the recommended guideline.

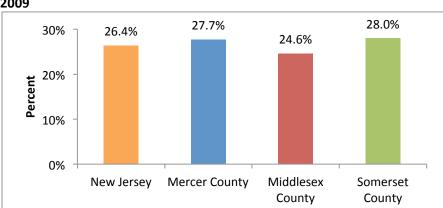


Figure 13: Percent of Adults Meeting Fruit and Vegetable Consumption Guideline by State and County, 2009

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2009

Figure 14 shows the percentage of adults reporting no leisure time activity. Middlesex County residents were the most likely to be inactive at 27.2%, whereas Somerset County residents were least likely at 21.3%. Mercer County residents demonstrated similar rates seen statewide, with 25% of adults being physically inactive. However, these rates for physical inactivity are better than the national figure (36.2%) as suggested by the Healthy People 2020 target for physical inactivity being set at 32.6%.

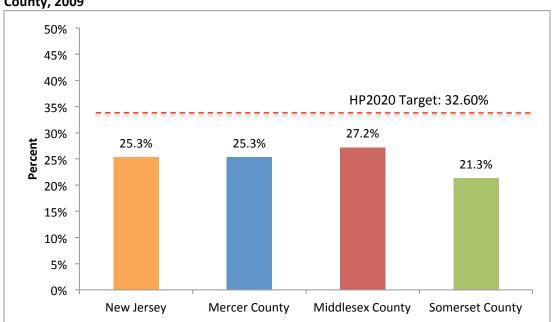


Figure 14: Percent of Adults Aged 20+ Reporting No Leisure Time Physical Activity by State and County, 2009

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2009

Community Resources for Healthy Eating and Physical Activity

Focus group members and interviewees across all three counties overwhelmingly reported that there are many healthy community resources that encourage and facilitate these behaviors. When discussing physical activity, many focus group participants remarked that the county park system, basketball and tennis courts, and ball fields are easily accessible. Perspectives on whether this contributes to greater physical activity, though, differ. For example, some respondents held the perspective that "with all the resources and knowledge here, it seems like people exercise more in this community," while others held the opposite view, noting "everyone drives – you can't walk anywhere and people are too busy to exercise." Some residents, however, reported fewer such facilities in their communities, particularly in the city of Trenton. As one Trenton focus group member shared, "there are no parks here. There's Columbus Park, but there's nothing there for kids. Not even benches to sit on." While the review of parks and recreational sources were mixed, most respondents indicated that walkability is a county wide problem.

Quantitative data indicate that more expensive healthier foods may be out of reach for some families as records show that there are numerous enrollees of both adults and children in the Supplemental Nutrition Assistance Program (SNAP) (formerly food stamps) (Figure 15) particularly in Mercer and Middlesex Counties. From December 2010 to December 2011, SNAP enrollment has increased 15.5% in Somerset County, 13.4% in Middlesex County, and 12.2% in Mercer County. Discussions on the availability of healthy food options differed across some interviewees and focus group respondents, and challenges were mainly mentioned by participants from Mercer County. Residents from more economically disadvantaged communities such as Trenton and Ewing felt healthy food was largely unavailable to them. One community leader commented, "we have food swamps and food deserts." Lack of transportation as well as cost were identified as barriers to healthier options for poorer and more vulnerable populations. Yet, residents from Middlesex and Somerset Counties as well as the wealthier sections of Mercer County generally commented that resources for healthy foods were abundant.

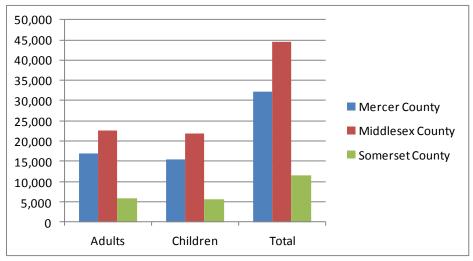


Figure 15: Number of Residents by County Receiving SNAP (Food Stamps), December 2011

DATA SOURCE: N.J. Department of Human Services, Division of Family Development, Current Program Statistics, December 2011

The Role of Schools

One area in which residents largely saw positive change was in the area of school nutrition. One adult focus group member remarked, "one thing I have seen change for the better is changing school meals. The choices have much improved." Youth in Mercer County reported positive change as well citing increased availability of items such as whole wheat bread and water. As one teen focus group member shared, "you can't buy lunch without a fruit or juice option." Youth did point out, however, that candy is still offered in some vending machines and there are coffee shops in every school.

Teen focus group members also reported that, despite healthier school meals, there were challenges to eating better. They noted that academic pressures lead students to use the lunch hour to do homework or get homework support; as a result, they rush their meals or not eat at all. Additionally, teens reported limited healthy and inexpensive food options outside of school. Eating out is a popular teen activity; however teens reported that they often opt for less expensive, but also less healthy foods. As one shared, "[name of restaurant] is keeping me from being healthy. The \$2.50 cheese fries are not health, but I eat them all the time because I don't have a lot of money." A few youth focus group participants mentioned eating disorders as a concern among their peer group, which they attributed to stress and expectations.

Overweight and Obesity

Despite physical activity and nutritious options in many Middlesex, Mercer, and Somerset communities, a number of focus group participants and interviewees reported that obesity is emerging as a community issue, especially among younger children and new immigrants. A Middlesex County interview participant attributed this shift to an increased dependency on technology over physical activity as a means of entertainment among youth. One service provider working with the Latino community also suggested that, "part of it is what they [newer immigrants] think is assimilation. They come here, and they like Burger King because they want to be American." Some parents from the Indian American community in Middlesex County also remarked that their children are more interested in eating French fries than more traditional cultural foods. Several residents noted that the emphasis on academics in schools has led to reductions in time for recess and physical activity. This, in combination with the prominence of organized team sports, has meant that those students not on teams have few opportunities to be moving. As one physician noted, "recess is only 8 ½ minutes long."

Quantitative results show that the adult obesity rates in Middlesex (23.7%) and Somerset (21.6%) Counties were lower than those seen in Mercer County (25.0%) or New Jersey (24.7%). Overall, these rates were substantially lower than the HP2020 target (30.6%) (Figure 16). (The U.S. target is higher because the national baseline of Americans currently obese is 34.0%).

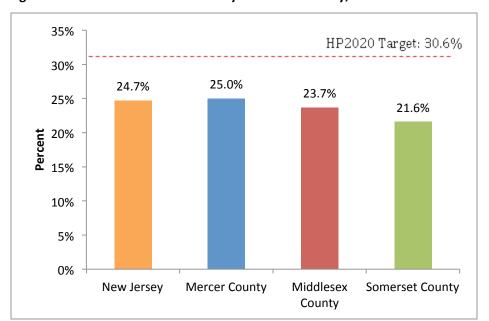


Figure 16: Percent of Obese Adults by State and County, 2009

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention as cited in County Health Rankings, 2012

However, differences have been shown across various population groups, according to older data from 2004-2006 (the only data available by racial/ethnic sub-group.) According to the NJ Center of Health Statistics report, the rate of adult obesity in 2004-2006 among non-Hispanic Blacks in all three counties was higher than for other racial/ethnic groups in the same area (Table 5). In Mercer County, 36.4% of Blacks were considered obese, while for Middlesex County it was 32.4% and Somerset County 24.8%. Particularly in Mercer and Middlesex Counties, this percentage was 12 or more percentage points greater than the proportion of Whites or Hispanics considered obese.

Table 5: Age-Adjusted Percent o	f Ad	ults O	bese	by Cou	nty and	l Race/I	Ethnicity,	2004-2006

	Non-Hispanic White	Non-Hispanic Black	Hispanic
New Jersey	21.0	33.3	23.7
Mercer County	19.2	36.4	24.4
Middlesex County	22.9	32.4	22.5
Somerset County	18.1	24.9	18.6

DATA SOURCE: NJ Center of Health Statistics. *Obesity Trends in New Jersey Counties: 1992-2006*. New Jersey Department of Health and Senior Services, Center of Health Statistics, 2008.

Childhood overweight and obesity rates for the region were not available, yet rates for New Jersey in many indicators for adults have been found to be similar to Mercer County. Thus, looking to the New Jersey High School Youth Risk Behavior Survey, 15.3% of New Jersey High School students are overweight with an additional 10.9% classified as obese (Figure 17). Figure 17 also shows that as many as 72.0% of New Jersey high school students were eating fewer that the recommended amount of vegetables per day, while 13.3% were not attending physical education classes in an average week.

Additionally, approximately one-third of students reported using computers for three or more hours per day, while another one-third reported watching television for the same amount of time.

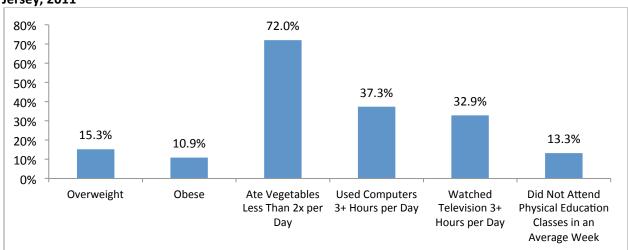


Figure 17: Overweight/Obesity and Dietary and Physical Activity Behaviors among Youth in New Jersey, 2011

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *New Jersey High School Youth Risk Behavior Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

Substance Use and Abuse (Alcohol, Tobacco, and Other Drugs)

"Cigarettes are not popular among youth anymore. 'Do you want to smoke' now means pot." — Mercer County focus group participant

"One of the biggest issues today with youth is no parental control. Parents don't want to lay down rules, and then they wonder why their teens are doing drugs or staying out until 3am."— Middlesex County focus group participant

"Doctors are too easily giving out pain medications. It is very easy to abuse drugs here. I went in with a stomach bug, explained that I was breast feeding and he was still ready to prescribe a Percocet. And opiod abuse is a really big problem in this area."—Somerset County focus group participant

Substance use and abuse was identified as a pressing concern across nearly every focus group and interview in Mercer County, while Middlesex and Somerset County participants rarely raised the issue except related to prescription drugs. It should be noted that this may be a result of the specific audiences involved in some of the Middlesex and Somerset County discussions since quantitative data in the next section show substance use rates among youth similar in all three counties. Several Mercer County residents believed that substance use was rising, especially use of alcohol and prescription drugs. One physician focus group member reported, "when I came here 16 years ago, it would be rare for us to see illnesses and diseases related to alcohol abuse, but now I see it every week. Substance abuse related hepatitis C is something I see a lot." Residents attributed the use of substances in part to the declining economy but also blame community attitudes toward substances including widespread acceptance of under-age drinking and a general reluctance to acknowledge a problem. Specifically, there

was a concern that parents and other adults were dismissive of alcohol and marijuana use among youth, while youth saw it as a social norm. Several parents and community leaders in focus groups commented that "alcohol is not seen as a big deal," and that "there is widespread acceptance of under-age drinking by parents."

Youth and Substance Use

Substance use among youth was noted as a particular concern. Respondents cited heavy use of marijuana, prescription drugs, and alcohol among area young people, but also reported increases in the use of opiates. Quantitative data reflect many of the themes discussed in focus groups and interviews (Figure 18Error! Reference source not found.). Alcohol was the substance cited as most often used by area high school students, with 62.4% of Somerset County, 60.4% of Mercer County, 60.3% of Middlesex County high school students having reported using this substance in the past year (Figure 18). While cigarette use was the second most commonly reported by high school students in Middlesex and Somerset (29.4% each), approximately two in ten Mercer high school students report smoking cigarettes (18.9%). However, in Mercer County marijuana was the second most often cited drug used by area high school students, with 27.4% reporting using this substance in the past year.

70% New Jersey 60% Mercer County 50% Middlesex County Somerset County 40% 30% 20% 10% 0% Alcohol Cigarettes Marijuana **Prescription Drugs** Cocaine

Figure 18: Substance Abuse within the Past Year among High School Students by State and County, 2008

NOTE: Sample sizes at the county level may be small, so it is important to interpret data with caution. DATA SOURCE: New Jersey High School Risk and Protective Factor Survey, 2008.

The reasons for high youth substance abuse in the region were several, according to focus group members and interviewees. While the availability of substances was identified as part of the cause, youth focus group participants more frequently reported that substance use was a consequence of stress, the lack of alternative activities, and the prevailing belief that everyone does it. Youth reported that the intense academics lead some students to use Adderall and other stimulants to stay awake and study. The lack of other activities for youth is another cause. A focus group respondent from a treatment center observed, ""it's one of those things where it's [substance use] recreational. Because kids do not have other options. They spend their time doing these things." Finally, respondents reported that among youth, there is the view that "it is not a big deal." This is particularly the case with marijuana which is generally not perceived as an addictive drug.

Many focus group respondents and interviewees commented that their communities offer few options for youth and saw this as a concern. One focus group described her community as "a nine o'clock town." Those working with youth reported that many organized youth activities are privatized and expensive and require transportation. This leaves young people with few options and according to several, could be a contributing factor to substance use. As one teen focus group respondent explained, "popular things to do around here are eat, smoke pot, avoid parents, and hang out."

Crime Related to Substance Use

The following table reports rates of arrests due to substance use for the state and in the three counties. Among youth and adults alike, arrests due to driving under the influence were much less likely in Somerset County than Middlesex or Mercer County, the latter of which had a higher arrest rate than the state. In terms of drug abuse violations, Mercer County rates were notably higher than statewide rates, particularly among adults (11.00 per 1,000 adults in Mercer County versus 6.68 per 1,000 adults across New Jersey) (Table 6). Rates in Middlesex and Somerset Counties for drug abuse violations were considerably lower. It is unclear at this point why these rates are so different, whether they are related to greater frequency of drug-related crimes in the County or more aggressive law enforcement in their likelihood to arrest.

Table 6: Rates of Juvenile (per 1,000 children) and Adult (per 1,000 adults) Arrests due to Substance Use in New Jersey and Mercer County, 2010

	New Jersey	Mercer County	Middlesex County	Somerset County
Driving Under the Influence				
Youth (under 18 years)	0.15	0.14	0.10	0.12
Adults (18 years and older)	3.91	4.25	3.43	1.19
Drug Abuse Violations				
Youth (under 18 years)	2.40	3.30	1.20	1.79
Adults (18 years and older)	6.68	11.00	2.18	1.65

DATA SOURCE: N.J. Department of Law and Public Safety, Division of State Police, Uniform Crime Reporting Unit, 2010. Standardized to U.S. Census 2010 population.

Substance Abuse Treatment

In 2010, the rate of admissions to treatment facilities for alcohol and other drugs among these three counties was highest in Mercer County (760 per 100,000 population), followed by Somerset (579 per 100,000 population), and then Middlesex County (557 per 100,000 population). As seen in Figure 19, in Somerset County, alcohol was by far the most likely substance for treatment, comprising nearly half of its total treatment submissions. While alcohol was the leading cause of admission in Middlesex and Mercer as well, these counties demonstrated a higher percentage of heroin and other opiate-related admissions as proportion of their total admissions (approximately 31% each) as compared to Somerset County.

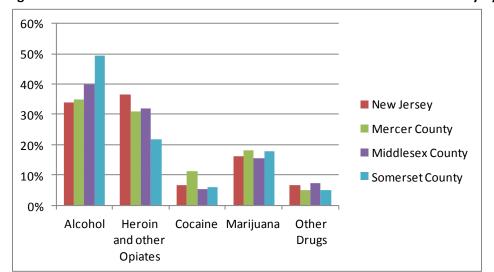


Figure 19: Percent of Substance Abuse Treatment Admissions for Each County by Primary Drug, 2010

DATA SOURCE: New Jersey Department of Human Services, Division of Addiction Services, Statistical Reports, Substance Abuse Overview, 2010

With one focus group in Mercer County comprising those who had a substance abuse problem or had a family member who did, the issue of substance abuse treatment and whether it met the current demand was a key concern in this conversation. While there did not seem to be enough beds in treatment facilities, one of the most concerning issues was that treatment programs were not long enough or insurance did not cover them for a long enough period of time. Many indicated that programs lasted 30 days, but from their experience, a much longer time period for treatment was required to remain clean. As one focus group respondent remarked, "What I see is insurance companies approve treatment centers for 30 days, but that's nowhere near long enough. I think there should be a 90-day minimum and insurance should not dictate how much time you spend in a recovery program. Medical providers should."

Tobacco Use

Tobacco use did not emerge as a pressing issue in the focus group and interview discussions, with other substances such as alcohol, marijuana, and prescription drug abuse taking precedence. However, it should be noted that tobacco use is still a major risk factor for many of the preventable deaths in the U.S. While the region's youth and adult smoking rates are lower than what is seen statewide, the adult smoking rates in Middlesex (13.6%) and Mercer County (14.3%) are still higher than the national target for 2020 (12.0%) (Figure 20).

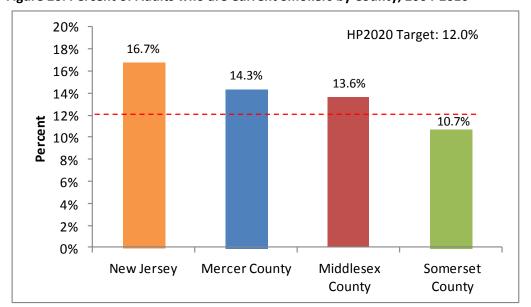


Figure 20: Percent of Adults who are Current Smokers by County, 2004-2010

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention as cited in County Health Rankings, 2012

Risky Sexual Practices

"I'm a new mom. I have lots of support and resources, and it's still really hard. I can't imagine teens out there who are getting pregnant and trying to raise a child and stay in school."—
Somerset County focus group participant

"With all of the funding cuts in the state, we'll see what happens related to pregnancies and high-risk behaviors among youth, young adults, and low income groups. Currently, services can't meet current demand. I'm afraid it's only going to get tougher."—Mercer County interview participant

While not the most frequently cited issue, consequences related to risky sexual behaviors were discussed in several focus groups and interviews, particularly in light of cut-backs in government funding for related services. Several interviewees and focus group participants specifically in Mercer County who worked with youth or in social service agencies discussed that the intersection of increases in substance use, higher stress due to the economic recession, and shortages in facilities offering family planning-related services may culminate in increased sexual risk taking and consequently greater rates of sexual transmitted infections (STIs) and unintended pregnancies.

Youth sexual behavior data at the county level were not available; however, according to the New Jersey High School Youth Risk Behavior Survey, 44.6% of New Jersey high school students reported having ever had sexual intercourse in their lifetime (Figure 21). Among those who have been sexually active, 37.4% reported that they had not used a condom, while 15.2% reported having not used any method to prevent pregnancy during their last sexual intercourse. Additionally, 22.2% of students responded that they had either consumed alcohol or used drugs prior to their last sexual intercourse.

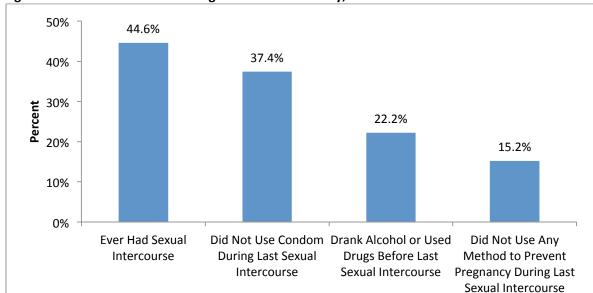


Figure 21: Sexual Behaviors among Youth in New Jersey, 2011

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *New Jersey High School Youth Risk Behavior Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

Rates for reportable sexually transmitted infections (STI) were substantially larger in Mercer County than in Middlesex, Somerset, or at the state-level. This is most likely due to the rates in Trenton, which are three times higher than Mercer County overall. The rate of Chlamydia infection per 100,000 population in Mercer County was 1.9 times larger than the Middlesex County rate, and 2.6 times larger than the Somerset County rate. Quantitative data illustrate that this difference is even larger for rates of Gonorrhea per 100,000 population where Mercer County's rate is 3.2 times larger than the Middlesex County rate, and 4.4 times larger than the Somerset County rate. This pattern is largely consistent with the syphilis rate per 100,000 population stratified by county (Table 7). For HIV/AIDS prevalence, the statewide rate per 100,000 population of individuals living with HIV/AIDS was similar to the rate in Mercer County (408.8 per 100,000 population). However, the rates reported for Middlesex County (255.1 per 100,000) and Somerset County (173.2 per 100,000) were notably lower.

Table 7: Sexually Transmitted Disease Morbidity per 100,000 Population by State and County, 2010

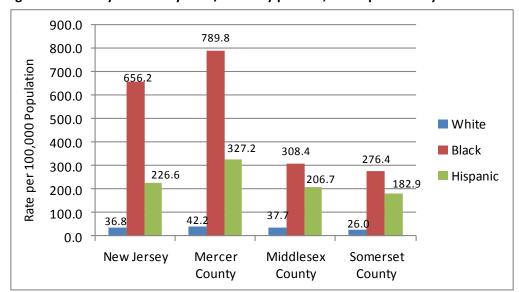
Geography	Gonorrhea	Chlamydia	Syphilis	Living with HIV/AIDS
New Jersey	66.8	297.3	10.8	409.8
Mercer County	105.9	401.4	14.5	408.8
Middlesex County	32.6	214.1	5.6	255.1
Somerset County	24.1	153.3	6.8	173.2

Rates standardized to the 2010 Census population estimates

DATA SOURCE: STI data: Communicable Disease Service, Sexually Transmitted Diseases Program, New Jersey Department of Health and Senior Services, HIV/AIDS data: HIV/AIDS, STD, and TB Services, County and Municipal Statistics, New Jersey Department of Health and Senior Services, 2010

As with other STIs, rates for Chlamydia differ dramatically by race/ethnicity in the three counties and statewide (Figure 23Figure 22). As seen below, Chlamydia rates standardized to the Census population for each race/ethnicity indicate that Blacks have a much higher rate of the condition particularly in Mercer County. However, Chlamydia rates are still higher in Blacks in Middlesex and Somerset Counties compared to Whites and Hispanics.

Figure 22: Chlamydia Rate by Race/Ethnicity per 100,000 Population by State and County, 2010



Rates standardized to the 2010 Census population estimates

DATA SOURCE: STI data: Communicable Disease Service, Sexually Transmitted Diseases Program, New Jersey Department of Health and Senior Services, HIV/AIDS data: HIV/AIDS, STD, and TB Services, County and Municipal Statistics, New Jersey Department of Health and Senior Services, 2010

VI. HEALTH OUTCOMES

This section of the report provides an overview of leading health conditions in the region from an epidemiological perspective of examining incidence, hospitalization, and mortality data as well as discussing the pressing concerns that residents and leaders identified during in-depth conversations.

Overall Leading Causes of Death

"I think we are like the rest of the country. Heart disease and diabetes. And of course, cancer. I think those are the big diseases around here." —Middlesex County focus group participant

"We see a lot of older residents, so the big issues we see are chronic diseases like heart disease and cancer. Also Alzheimer's. We see that a lot." —Somerset County focus group participant

Quantitative data indicate that the top three causes of mortality in, Middlesex, Mercer and Somerset counties, as in New Jersey as a whole, are heart disease, cancer and stroke. As seen in Figure 23, mortality rates for the counties are lower, to varying degrees, for these diseases than the state as a whole.

Heart Disease Malignat Neoplasms (Cancer) Cerebrovascular Diseases (Stroke) **Chronic Lower Respiratory** Diseases (CLRD) New Jersey Unintentional injuries Mercer County Diabetes mellitus ■ Middlesex County Septicemia ■ Somerset County Influenza and Pneumonia Kidney Disease Alzheimer's Disease Symptoms, signs and abnormal clinical and lab findings, NEC 0 50 100 150 200 250 Rate per 100,000 Population

Figure 23: Age-adjusted Mortality Rate per 100,000 Population by State and County, 2000-2008

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

Overall Leading Causes of Hospitalization

"If we could just reach people earlier through prevention, then perhaps we could reduce hospitalization of some conditions—diabetes, heart disease, asthma. If they could be prevented—or at least better maintained—that would save a lot of cost and resources."—Mercer County interview participant

Leading causes for inpatient and emergency room admissions varied by age group in the region. For the purposes of this community health assessment, 2010 hospitalization discharge data from University Medical Center at Princeton were analyzed for its primary service area. Data in this section are presented as aggregated hospitalization rates per 1,000 persons for patients living within University Medical Center's primary service area⁴ and visiting the facility in 2010. Rates are provided separately for inpatient and emergency department visits per 1,000 visits and are broken out by age group (Table 8 and Table 9).

Among inpatient admissions, bacterial pneumonia was the leading cause of hospitalization among the children with 0.75 hospitalizations per 1,000 children (less than 18 years of age), followed by dehydration (0.32 per 1,000 children) and asthma (0.27 per 1,000 children) (Table 8). For adults (aged 18-64 years), heart disease was the leading cause of inpatient hospitalization among adult patients 18-64 years old (0.91 per 1,000 population), followed by bacterial pneumonia (0.17 per 1,000 population) and asthma (0.15 per 1,000 population). Heart disease was also the leading cause of hospitalization (16.23 per 1,000) for older adults (aged 65 and older), followed by fracture (5.97 per 1,000 population) and stroke (4.41 per 1,000 population).

For emergency room (ED) visits, fever was the leading cause of visiting the ED by children (1.77 per 1,000 children), followed by asthma (0.72 per 1,000 children) and viral infections (0.65 per 1,000 children)(Table 9). For adults, abdominal pain was the leading cause of ED visits (3.64 per 1,000 population) followed by depression and mood disorders (1.15 per 1,000 population). Among the elderly, fractures accounted for the highest ED hospitalization rates (5.63 per 1,000 population), followed by heart disease (2.33 per 1,000 population).

⁴ Data were included if a patient resided in East Windsor, Hopewell, Pennington, Princeton, Princeton Junction, Mercerville, Lawrenceville, Hamilton, Robbinsville, Cranbury, Plainsboro, Dayton, Kendall Park, Monroe Township, Monmouth Junction, Belle Mead, Kingston, Rocky Hill, or Skillman.

Table 8: Rates of Leading Causes of Inpatient Hospitalizations to University Medical Center, Princeton, by Age among Residents of the Hospital's Primary Service Area, 2010

	Patients within UMCPP's Primary Service Area		
	# of cases	Rate per 1,000 Population	
Children (<18 years old)			
Asthma	21	0.27	
Bacterial Pneumonia	54	0.68	
Dehydration volume depletion	25	0.32	
Kidney/Urinary Infection	4	0.05	
Severe ENT Infections	1	0.013	
Adults (18-64 years old)			
Dehydration volume depletion	12	0.06	
Diabetes	27	0.14	
Asthma	29	0.15	
Bacterial Pneumonia	34	0.17	
Kidney/Urinary Infection	10	0.05	
Heart disease	179	0.91	
Elderly (65+)			
Heart disease	680	16.23	
Cancer	173	4.13	
Stroke (cerebrovascular disease)	185	4.41	
Pneumonia	122	2.91	
Fracture	250	5.97	

SOURCE: New Jersey Department of Health and Senior Services, Office of Health Care Quality Assessment, Data analyses conducted with 2010 Uniform Billing (UB) Hospitalization data, NJ Discharge Data Collection System (NJDDCS).

Rates standardized to U.S. Census 2010 Population for geographic area and by age
Analyses included patients residing in East Windsor, Hopewell, Pennington, Princeton, Princeton Junction,
Mercerville, Lawrenceville, Hamilton, Robbinsville, Cranbury, Plainsboro, Dayton, Kendall Park, Monroe Township,
Monmouth Junction, Belle Mead, Kingston, Rocky Hill, or Skillman who visited UMC at Princeton in 2010

Table 9: Rates of Leading Causes of Emergency Room Hospitalizations by Age for University Medical Center, Princeton, 2010

	UMCPP's Primary Service Area			
	# of cases	Rate per 1,000 Population		
Children (<18 years old)				
Otitis media and eustachian tube disorders	23	0.29		
Unspecified viral infection	51	0.65		
Asthma	57	0.72		
Fever	140	1.77		
Adults (18-64 years old)				
Alcohol dependence	39	0.20		
Anxiety disorders including PTSD	92	0.47		
Heart disease	63	0.32		
Abdominal pain, unspecified site	719	3.64		
Depression and other mood disorders	227	1.15		
Elderly (65+)				
Heart disease	98	2.33		
Cancer	6	0.14		
Stroke (cerebrovascular disease)	28	0.67		
Pneumonia	18	0.43		
Fracture	236	5.63		

SOURCE: New Jersey Department of Health and Senior Services, Office of Health Care Quality Assessment, Data analyses conducted with 2010 Uniform Billing (UB) Hospitalization data, NJ Discharge Data Collection System (NJDDCS).

Rates standardized to U.S. Census 2010 Population for geographic area and by age
Analyses included patients residing in East Windsor, Hopewell, Pennington, Princeton, Princeton Junction,
Mercerville, Lawrenceville, Hamilton, Robbinsville, Cranbury, Plainsboro, Dayton, Kendall Park, Monroe Township,
Monmouth Junction, Belle Mead, Kingston, Rocky Hill, or Skillman who visited UMC at Princeton in 2010

Chronic Disease

"Diabetes, heart disease, recurring breast cancer, prostate cancer... those seem to be the issues I hear about from people."—Middlesex County focus group participant

"I see a lot more diabetes in the area among both the young and old. In older folks, you then see diabetes together with a number of other conditions—obesity, hypertension, depression. It's like the sum is worse than the parts." Somerset County interview participant

When asked about health concerns in their communities, many focus group respondents and interviewees across all the counties cited chronic diseases, specifically cancer, heart (cardiovascular) disease, diabetes, and asthma. Physicians in Mercer County specifically reported seeing an increase in chronic disease co-morbidities, while EMT focus group respondents reported that it seemed like chronic

disease patients were being discharged prematurely from the hospital and then not managing their conditions adequately, thus being at-risk for readmittance. Numerous participants across all three counties pointed to the rising obesity epidemic as being particularly concerning to potentially increasing rates of chronic disease.

Cancer is the second leading cause of death in New Jersey as in the three counties. Below, Table 10 and Table 11 stratify the incidence and mortality data by county, year, and by cancer site. As illustrated in Table 10, the all-site cancer incidence rate in Mercer County slightly increased from 2003 to 2009 from 572.1 per 100,000 population to 589.3. While this pattern was consistent with the Somerset County all-site cancer incidence data (which also increased slightly, from 529.7 per 100,000 in 2003 to 535.0 in 2009), incidence rates in Middlesex County decreased over that same time period (from 562.0 per 100,000 in 2003 to 516.6 in 2009). Table 11 illustrates mortality rates per 100,000 indicating that there was a decrease in overall cancer mortality between the years 2000 and 2007 in each of the three counties. Cancers with the highest incidence rates include prostate and breast, while lung and prostate cancer are the leading causes of cancer deaths.

Table 10: Age-Adjusted Cancer Incidence Rates per 100,000 Population by County, 2003-2009

	2003	2005	2007	2009
Mercer County				
All-sites	572.1	553.1	578.5	589.3
Breast	92.3	87.2	92.9	107.1
Cervical	10.4	9.3	4.8	9.1
Colon	47.1	51.1	38.4	36.1
Lung and Bronchus	65.2	63.6	67.5	60.5
Prostate	186.9	166.8	205.0	186.3
Middlesex County				
All-sites	562.0	539.3	538.9	516.6
Breast	91.0	93.1	90.1	97.5
Cervical	9.8	8.3	8.5	10.1
Colon	45.6	45.0	38.6	29.5
Lung and Bronchus	67.9	64.7	61.2	56.4
Prostate	175.2	148.5	164.3	143.6
omerset County				
All-sites	529.7	531.5	576.0	535.0
Breast	94.8	100.4	99.5	101.3
Cervical	10.0	5.7	4.4	7.5
Colon	46.6	41.2	35.0	32.5
Lung and Bronchus	56.0	57.4	56.5	55.1
Prostate	172.8	114.6	205.4	151.3

DATA SOURCE: State of New Jersey Department of Health and Senior Services, New Jersey Cancer Registry, 2003-2009

Table 11: Age-Adjusted Cancer Mortality Rates per 100,000 Population by County, 2000-2007

	2000	2003	2005	2007
Mercer County				
All-sites	215.0	183.9	171.4	181.5
Breast	19.3	15.7	14.3	14.3
Cervical		3.4	2.3	3.5
Colon	18.9	17.2	15.5	13.0
Lung and Bronchus	49.2	44.9	42.3	47.4
Prostate	35.2	24.1	19.7	22.6
Middlesex County				
All-sites	193.9	181.5	165.9	166.1
Breast	17.6	16.7	13.8	14.6
Cervical	3.4	2.6	1.4	1.7
Colon	19.4	17.3	14.1	14.0
Lung and Bronchus	47.9	46.4	43.3	43.6
Prostate	27.7	20.4	17.9	25.4
omerset County				
All-sites	189.2	178.7	164.0	166.9
Breast	16.0	17.1	16.1	13.3
Cervical	3.7	2.8		
Colon	15.1	17.0	14.0	14.9
Lung and Bronchus	43.9	43.4	32.6	42.9
Prostate	23.5	28.8	17.7	21.6

⁻⁻Data not provided due to small sample size.

DATA SOURCE: State of New Jersey Department of Health and Senior Services, New Jersey Cancer Registry, 2003-2009

The Behavioral Risk Factor Surveillance Survey, a telephone survey of Mercer, Middlesex, and Somerset County adult residents, asks respondents whether they ever had or currently have specific chronic conditions. Among survey respondents, diabetes and asthma were the most prevalent chronic conditions. As illustrated in Figure 24, 9.1% of Mercer County, 8.3% of Middlesex County, and 6.7% of Somerset County residents reported currently having diabetes in 2009, while approximately 7% of residents across the three counties reported having asthma. Less than 3% of residents across the three counties reported having a heart attack or stroke, except for in Middlesex County where 4.0% of adults reported having a heart attack, slightly higher than at the state-level.

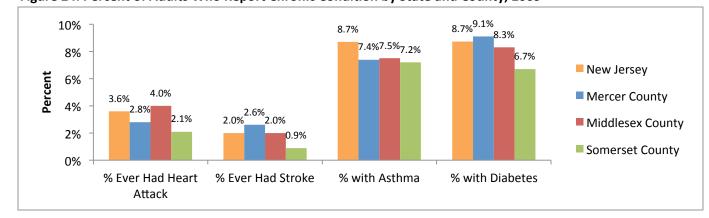


Figure 24: Percent of Adults Who Report Chronic Condition by State and County, 2009

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010.

In focus groups and interviews, diabetes was the chronic condition most frequently cited as a pressing concern. Mainly this was during discussions related to increasing obesity rates, particularly what was seen among youth. Among minority populations, diabetes was singled out as a particular issue of concern. As one focus group member observed, "there is a great need, and usually because of the lack of education about what foods to eat, especially with financial limitation around the food they need to eat." Black focus group respondents as well as Indian focus group respondents both mentioned the increasing rates of diabetes in their communities.

Mental Health

"Dementia and Alzheimer's are definitely issues in our community. As the senior population grows, it will be a struggle to ensure that there are enough resources to deal with these diseases."—Somerset County interview participant

"I don't think mental health is something people want to talk about. Depression is something a lot of people deal with, especially as more people can't find work in this economy. But, it's not something you want to talk about with your friends and neighbors."—Mercer County interview participant

Several focus group participants discussed mental health as a pressing issue. Focus group participants and interviewees, particularly those from Mercer County, reported rising rates of depression and other mental health issues among people in the region and closely connected these to substance use, the economic downturn, and the region's achievement culture. A health care provider noted, "it is amazing when patients come in and go through their medications, how many of them are on anti-anxiety medications." Focus group participants from Middlesex and Somerset Counties discussed mental health specifically as it pertains to the senior population. In addition to concerns about dementia and Alzheimer's, they worried about the mental health status of the socially isolated elderly and the connection between mental health and physical health among the older population.

While severe depression is a concern, overall mental health status encompasses a wide spectrum of issues. The County Health Rankings reports on the number of days out of the previous 30 in which

respondents indicated that their mental health was poor. The estimates are derived from responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" As illustrated in Figure 25, respondents from across Mercer, Middlesex, and Somerset County were relatively consistent in the average number of mentally unhealthy days reported in the past 30 days (approximately 3 days), all of which were slightly below the state average.

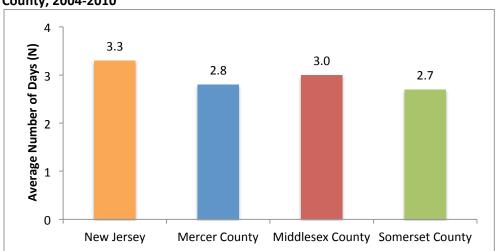


Figure 25: Mean Age-Adjusted Mentally Unhealthy Days Reported in Past 30 days by State and County, 2004-2010

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, as cited in County Health Rankings, 2012

Among youth respondents (who were from Mercer County), parental and community expectations were reported as creating substantial stress for students, leading some to abuse substances or become depressed. County-level youth mental health data were not available; however, according to the New Jersey High School Youth Risk Behavior Survey, 12.9% of students reported seriously considering attempting suicide, while 10.9% made a plan about how they would attempt suicide.⁹

The issue of depression and other mental health concerns among lesbian, gay, bisexual, and transgender (LGBT) youth in particular was raised in one or two discussions, particularly in light of a recent Rutgers University student who committed suicide after his roommate videotaped and broadcasted his relationship. While county-level health data on LGBT youth are not available, results from a state-level survey from 2009 reveal that 90% of LGBT surveyed youth in New Jersey have heard homophobic remarks in school, 86% had mean rumors or lies spread about them, 69% said they were sexually harassed, and 55% indicated that they experienced electronic or "cyberbullying." ¹⁰

Respondents from across the three counties also reported that the region lacks enough mental health providers to address the need, the result being that those who need services are unable to access them or must wait long periods to access them. Private services are very expensive and may not be covered by insurance and even then, according to respondents, the wait for an appointment can be long. A focus group member shared, "I know so many people who have waited months, even a year for an appointment."

Oral Health

"We have so many quality medical services in the area, but dental is always a big issue. Finding a dentist, and then being able to get to the dentist, it just is a challenge, particularly for us seniors. If it's not an emergency, then it's something we just as easily let go." —Middlesex County focus group participant

While oral health indicators for the region are similar to or better than statewide, oral health issues and access to services were brought up as a concern particularly when discussing the elderly or other vulnerable populations. As seen in Table 12, fewer seniors (65+ years old) in Mercer, Middlesex, and Somerset County have had teeth extracted than seniors in New Jersey, and approximately 8 in 10 adults from these three counties have visited a dentist in the past year.

Table 12: Oral Health Conditions and Utilization by State and County, 2010

Geography	Adults aged 65+ who have had all of their natural teeth extracted	Adults aged 65+ who have had any permanent teeth extracted	Adults (of all age groups) who visited dentist in the past year for any reason
New Jersey	14.1%	46.5%	76.0%
Mercer County	15.2%	39.7%	80.2%
Middlesex County	13.8%	43.4%	78.4%
Somerset County	8.0%	42.0%	85.5%

DATA SOURCES: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010.

Even though the region's rates were high regarding the percentage of adults who have seen a dentist, the issue of access to dental care services was the main focus of discussion when oral health issues came up during a conversation. The lack of affordable dental services and insurance coverage for dental care procedures beyond cleanings were significant barriers. Several commented that free or discounted dental care did not seem to be available in the region. As one focus group respondent noted, the fact that oral health is often separate from physical health creates challenges: "We don't look at teeth as an emergency, but that is really debilitating. We need some basic, safety network for dental services." Talking about the reality of the situation, one member of a focus group comprised of veterans and those who work with veterans remarked, "people are just going to have their teeth pulled...lose teeth and lose quality of life."

Reproductive and Maternal Health

"The number of phone calls seems to have hugely increased, not just for overall preventive services and birth control, but more phone calls that say, 'I have a problem.'"—Mercer County interview participant

"I think one of the big issues here in Central Jersey is infertility. That seems to be really high around here." –Somerset County focus group participant

The health of children and mothers was discussed in focus groups and interviews particularly as it related to teen pregnancy and access to prenatal services and other related health care. In discussions

with focus group residents and leaders from more affluent communities, the issue of reproductive health was not a prominent concern. For the wealthier participants, particularly in Middlesex and Somerset County, some of the issues discussed were infertility among women, concerns about chemicals and pesticides in foods fed to children, and experiences of costly medical bills for maternal health. When participants, particularly those in less affluent areas of Mercer County, spoke about reproductive health issues, they discussed them in relation to the consequences of increased substance abuse and other risk behaviors among teens and the importance of having comprehensive services and education available, especially in this era of budget cuts. In interviews and focus groups with members from Trenton and other less affluent areas, participants were particularly concerned about teen pregnancy.

Overall, Mercer County had slightly poorer birth outcomes than the other two counties and the state of New Jersey as a whole. In 2008, the infant mortality rate in Mercer County (7.4 per 1,000 live births) was almost two-times higher than the rate for Middlesex County (3.8 per 1,000 live births) and for New Jersey as a whole (5.1 per 1,000 live births) (Infant mortality data for Somerset County were not available as the figure did not meet standards of reliability or precision based on fewer than 20 cases overall). Further, while only between 0.5% and 1% of births in the three counties and New Jersey were from mothers who had received no prenatal care, 3.6% of Mercer County mothers waited until the 3rd trimester of pregnancy to receive prenatal care (Table 13), compared to 2.4% of Middlesex County mothers and 1.5% of Somerset County mothers.

Table 13: Percentage of Mothers with Onset of Prenatal Care by State and County, 2008

		•	•
Geography	First Trimester	Third Trimester	No Prenatal Care
New Jersey	75.6%	3.1%	1.1%
Mercer County	76.1%	3.6%	1.0%
Middlesex County	83.3%	2.4%	0.7%
Somerset County	88.4%	1.5%	0.5%

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

Risky birth outcomes of low birth weight (less than 2,500 grams) were slightly higher in Mercer County and Somerset County, and slightly lower in Middlesex County as compared to New Jersey as a whole (Figure 26). While the percentage of infants born preterm (before 37 weeks gestation) to mothers from Mercer County and New Jersey was approximately 10% in 2008, rates were slightly higher in Somerset County (11.3%) and slightly lower in Middlesex County (9.4%).

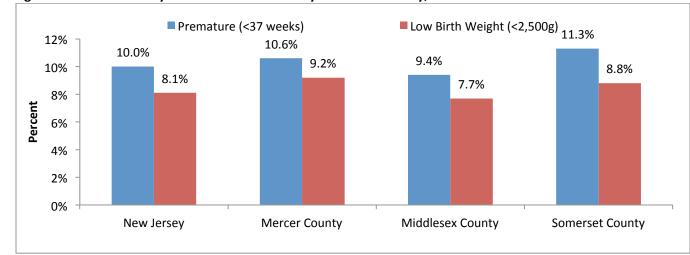


Figure 26: Total Births by Infant Characteristics by State and County, 2008

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

The most current quantitative data indicate that in 2008, the teen birth rate among 18-19 year olds in Mercer County (38.6 per 100,000 female population) was slightly higher than in Somerset County (23.7 per 1,000 female population) and in New Jersey as a whole (26 per 100,000 female population). However, the teen birth rate differs substantially by race/ethnicity with a higher rate of births among Hispanic and non-Hispanic Black females as compared to non-Hispanic White females. Table 14 shows the breakdown of adolescent births among older teens by race/ethnicity stratified by county. These tables also indicate that as compared to data recorded in 2000, teen birth rates in 2008 have decreased for Mercer and Somerset County as a whole. Data for Middlesex County were not available. Further, between 2000 and 2008, teen birth rates for each racial/ethnic group have decreased, except among Hispanics in Mercer and Somerset County.

Table 14: Trend in Adolescent Births per 1,000 Female Population Aged 18-19 by Race/Ethnicity, State, and County, 2000, 2004, 2006, and 2008

	2000	2004	2006	2008
Mercer County	46.2	37.5		38.6
White, non-Hispanic	13.7	6.6	7.1	8.3
Black, non-Hispanic	133.8	95.8	111.2	98.1
Hispanic, of all races	106.4	142.2	116.7	111.6
Asian, non-Hispanic				
Middlesex County				
White, non-Hispanic	13.2	11.2	10.1	11.1
Black, non-Hispanic	59.0	34.8	34.8	29.6
Hispanic, of all races	104.5	116.1	92.0	95.6
Asian, non-Hispanic				
Somerset County	32.5	29.3	27.0	23.7
White, non-Hispanic	17.1			
Black, non-Hispanic				
Hispanic, of all races	85.6	136.5	117.4	94.4
Asian, non-Hispanic				

⁻⁻ Indicates that figure does not meet standards of reliability or precision; based on fewer than 20 cases in the numerator and/or denominator.

DATA SOURCE: New Jersey Department of Health and Senior Services, Center for Health Statistics, New Jersey State Health Assessment Data, 2000-2008

Communicable Diseases

"We're always concerned about the elderly, especially those that don't have family around. Do they get preventive services? Are they getting their flu shot? That's important."—Mercer County focus group participant

Infectious and communicable disease was not a topic discussed much in the focus groups and interviews, although the rates of several reported infectious diseases are slightly higher in certain areas of the region than those reported statewide. Table 15 presents rates per 100,000 population for the five leading reported infectious diseases in the region, which shows Hepatitis C as the most commonly reported infectious disease across the state as well as in each of the three counties. To note, Mercer County has a rate double that of New Jersey (141.3 per 100,000 population compared to 79.6 per 100,000 population) for Hepatitis C, while Middlesex and Somerset Counties had much lower rates in 2010 at 49.9 and 40.5 per 100,000 population respectively. Among other diseases, Somerset County had higher rates of Lyme disease and the food-borne bacteria of Campylobacteriosis than the other counties or the state.

Table 15: Top 5 Leading Reported Infectious Diseases Rate per 100,000 Population, 2010

	New	Mercer	Middlesex	Somerset
	Jersey	County	County	County
Hepatitis C	79.6	141.3	49.9	40.5
Lyme disease	42.2	43.1	16.5	63.1
Influenza	3.2	3.8	3.7	3.7
Salmonellosis	14.1	18.0	15.6	14.5
Strep Pneumonia	8.6	9.8	8.5	9.3
Campylobacteriosis (foodborne				
bacteria)	10.7	13.9	8.1	16.7

Standardized to 2010 Population as reported by the US Census Bureau

DATA SOURCE: NJ Department of Health and Senior Services, Division of Communicable Disease Service, 2010.

Higher rates for influenza and strep pneumonia are especially concerning given their debilitating effects on a growing senior population in the region. However, the Behavioral Risk Factor Surveillance Survey responses indicate that seniors (65+ years old) in the region are slightly more likely as those in the state to receive an influenza or pneumococcal vaccination; however, approximately one-third of seniors in Middlesex and Mercer Counties reported not receiving either of these vaccinations in the past 12 months.¹³

Table 16: Percent of Older Adults (65+ Years Old) Who Received Vaccination in Past 12 Months, 2010

	New	Mercer	Middlesex	Somerset	
	Jersey	County	County	County	
Influenza vaccine	65.7%	67.4%	69.2%	70.9%	
Pneumonia vaccine	64.3%	64.4%	76.1%	67.9%	

DATA SOURCE: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (2010).

A few focus group respondents reported that childhood immunization rates in the region seemed to be declining from anecdotal evidence. Specifically, low immunization rates in Trenton were cited as a concern by a social service provider who attributed this to lack of awareness and access. Another reported that immunization in outlying areas seemed to also be declining and in this case, by parental choice. As a provider shared, "In Trenton, a lot of kids aren't properly immunized because of difficulty with getting services....and then in Princeton, you have people who elect not to have their children immunized."

VII. HEALTH CARE ACCESS AND UTILIZATION

Resources and Use of Health Care Services

"This region is really known for its medical care. We have so many quality facilities. Things are not always the most efficient or there are long waiting times, but the quality itself that you receive is the highest in the state."—Middlesex County focus group participant

"I feel like I've received excellent care. I visited an ER a bit ago and was seen quickly and was very pleased with the care. There are also large doctors' groups in the area, so a doctor is always available, but not the same person all the time."—Somerset County focus group participant

"We have some of the best medical facilities right here in our backyard. I think the big question is whether everyone can access those resources. But quality-wise, the care is top-notch."— Mercer County focus group participant

The overall region is known for its high quality health care and medical services. Focus group participants and interviewees from across the region mentioned the high quality health care for which the area is known. With UMCPP's move to Plainsboro, Mercer County now has four acute care hospitals, while Middlesex County now houses six facilities, and Somerset County has one acute care facility. According to the New Jersey Hospital Association, the three counties also include a total of six psychiatric facilities and four rehabilitation centers. There are three federally qualified health centers, with a number of satellite facilities. Additionally, there are over 30 assisted living facilities in the three county area and nearly 60 long-term care facilities. When asked about health care services in the region, focus group participants and interviewees across all three counties largely reported that there were many excellent services. Respondents reported that these facilities often provided not only health care but also supported community-based wellness and educational programs.

Respondents commented that that while the region has a large number of specialists and "boutique" physician practices, there seems to be a shortage of general practitioners (GP). As one focus group respondent observed, "the money is in the specialties." Participants shared that this has made it difficult to find a primary care physician as well as led to long wait times for an appointment with one. One Middlesex County resident noted, "I feel like my doctor does a good job, but it takes so long to see him. I wait three weeks for an appointment and then I wait three hours once I'm there." Additionally, physicians observed a lack of integrated care across specialties and sub-specialties. As one physician focus group member from Mercer County reported, "[there is] no one location with multi-specialties."

Focus group respondents and service providers working with seniors across all three counties noted the importance of health care facilities and residential areas catering to the growing elderly population. While there are numerous long-term care and assisted living residences in the region, focus group and interview participants in all three counties only saw the demand for these services as growing, especially with the increase in the senior population projected in the coming years. Residents were skeptical that current long-term care services could meet this clear demand. As one Middlesex County interview participant noted, "More people are aging and moving into that 'older adult' population. We have senior centers, we have assisted living, but will it be enough? Can we meet the growing demand?"

While focus group and interview participants commented on the perceived short supply for primary care providers, quantitative data indicated that both Middlesex County and Mercer County generally had higher rates of all types of physicians –primary and secondary –than at the state-level (Table 17). That is, Middlesex County had a higher rate per 100,000 population for all types of physicians except family medicine and psychiatrists than the state, andMercer County had a higher rate per 100,000 population for all types of physicians except general pediatrics, obstetrics/gynecology, and emergency medicine than the state. Somerset County, however, was slightly below the state rate on several occasions. That is, Somerset had a higher rate per 100,000 population for all types of physicians except general internal medicine, general pediatrics, obstetrics/gynecology, geriatrics, general surgery, and surgery specialties.

Table 17: Rate of Physician Supply and Distribution per 100,000 Population by State and County, 2008

Population	New Jersey	Mercer County	Middlesex County	Somerset County
Primary Care	92.9	118.3	107.9	99.4
Family Medicine	21.1	21.1 21.3		30.7
Internal medicine -General	43.2	69	52.7	41.4
Pediatrics -General	28.7	28	34.9	27.3
OB/Gyn	15.3	18	17.8	14.4
Internal Medicine Specialties	34.1	42	38.9	42.4
Cardiology	11.4	12.4	12	14.7
Geriatrics	1	1.3	1.6	0.9
Oncology	1.3	1.6	1.4	1.5
Pulmonary Disease	3.6	4.3	5.1	4.9
Surgery -General	7	12.1	8.1	5.8
Surgery Specialties	30.3	39.3	31.9	26.4
Facility Based*	30.6	34.5	31.4	31
Psychiatrists	16.2	34.2	15.5	19.6
Emergency Medicine	8.8	8.6	7.8	4.6

^{*}i.e., anesthesiology, pathology, radiology

DATA SOURCE: NJ Council on Teaching Hospitals. NJ Physician Task Force Report, 2010.

Despite these higher rates, however, like the rest of the state in 2010, Middlesex and Mercer County had a current shortage of family physicians and this is predicted to increase by 2020 given the projected growth in population and expectation of fewer physicians going into family medicine (Table 18). A recent study by the NJ Council on Teaching Hospitals indicated Mercer County had a current unmet demand of 19.4 more family physicians per 100,000 population. For Middlesex County, that unmet need was even higher at 49.1 per 100,000. Only in Somerset County was there a sufficient supply of family physicians per 100,000 population. However, looking to the future and applying the gold standard recommendation of the American Academy of Family Physicians (AAFP) of 41.6 family physicians per 100,000 population, the study estimated a growing deficiency across the three counties and at the state-level. The study predicted that in 2020, Middlesex County would be deficient 169.6 family physicians per 100,000 population, while Mercer County would be deficient 75.4 family physicians, and Somerset County would be deficient 35.5 family physicians per 100,000 population.

Table 18: Estimated Unmet Need of Family Physicians by State and County, 2010

	Number of Family Physicians	Rate per 100,000 Population	Current Estimated Unmet Need per 100,000 Population	Projected Estimated Need in 2020 per 100,000 Population
New Jersey	79	21.3	-480.6	-1,816.70
Mercer County	1,869	21.1	-19.4	-75.4
Middlesex County	163	20.4	-49.1	-169.6
Somerset County	100	30.7	+13.6	-35.5

DATA SOURCE: NJ Council on Teaching Hospitals. NJ Physician Task Force Report, 2010.

While the region has substantial health services, focus group respondents and interviewees shared several concerns. They noted that the region's health centers, which seemed overcrowded and stretched, especially as the economic decline has brought more demand. According to one Mercer County service provider, "the safety net is torn apart. There are big gaps in the net." The lack of a clinic that provides services after hours was cited as a concern by several health care providers and residents in Mercer, Middlesex, and Somerset Counties. A focus group member from an agency serving minorities pointed out that due to work schedules or juggling multiple jobs, more vulnerable populations are not able to access health services when they are open: "that's why they go to the emergency room, because that is the only thing that is open."

Specific Needs for Specialists

A number of focus group participants, particularly those in Mercer County, expressed concerns about the region's shortage of services for substance use and mental health services. Respondents reported that while Trenton has several services, the outlying communities largely lack services such as detox treatment, halfway houses, and public mental health services. Even when facilities did exist, many believed that there was not sufficient available space or beds for those who were interested. Also, those who need services are often unwilling to go to Trenton due to distance and safety concerns.

Residents across all three counties also reported that those who need mental health services often find they are expensive and not always covered by insurance. As one focus group member stated, "this [mental health services] is a situation where regardless of if you have insurance or not, you will struggle here." In addition, the wait for an appointment can be long. A focus group member shared, "I know so many people who have waited months, even a year for an appointment." Several respondents noted specifically that autism services in the region were not sufficient to meet the need.

Long-term care availability and affordability was raised as a concern by several respondents who see the aging trend in their communities, and this was seen as a particular concern among Middlesex and Somerset Counties. Respondents expressed hope that seniors could "age in place" and noted the growth of assisted living and adult communities in their towns; they also reported that many did not have family in the area or were home-bound and needed services. Service providers noted that funding for these types of services have been cut back in recent years. One Middlesex County social service provider noted, "We are seeing more and more need for senior services in the region. The population is growing and aging, yet financially we are seeing cuts left and right. How is this going to match up?"

Challenges to Accessing Health Care Services

"Our co-pay has tripled in 5 years. My husband is reluctant to go see the doctor because he doesn't want to have to pay that. Add the endless battles with the insurance company on top of that. It's frustrating!" —Somerset County focus group participant

"I think it's gotten worse for people on Medicaid and Medicare. And don't get me started on the issues for people with no insurance. Doctors aren't seeing them. They are saying 'no new patients.' It seemed like there were a lot more options years ago, but those are mainly gone now." —Middlesex County focus group participant

"A concern is the lack of relationships with health care providers, and confusion around navigating the health care system. Health care facilities should provide more guidance in this area." —Middlesex County focus group participant

"You have to go to a specialist for everything. The older generation is used to 1 general physician who can tell you what to do. Now, people have to go to 2-3 doctors." —Somerset County focus group participant

"To save on costs, seniors either take expired medications or they change their dosage. And they continue to take old medications to save it before they take the new." — Mercer County interview participant

"People need good advocates –some don't have advocates to help with medical complexities." —Middlesex County focus group participant

When asked about access to health care services, respondents acknowledged that while the region has many medical services, barriers exist, and services are not available equally to everyone. One focus group member from the faith community summed this up by saying, "there is this huge spectrum in this community; there are some people who can be air lifted to get any medical attention they need because they can afford it... then we have the middle class, and we still hear horror stories." A physician held a similar view, saying, "half the people that come to my office don't need to come in and probably another half that need to come to my office don't come." Those working with more vulnerable populations painted a more serious picture reporting that their constituencies faced substantial challenges to accessing quality health care. As one senior focus group respondent noted, "I go to the free health screenings offered by the hospital. When I get the results they tell me to go to my primary care physician. But, I don't have a physician because I don't have insurance and can't afford to see a doctor." These sentiments were reiterated throughout the discussions in Mercer, Middlesex, and Somerset Counties.

Lack of Insurance Coverage

Lack of insurance and underinsurance are well-documented barriers to accessing health care. In 2009 (the most recent year data were available), Mercer, Middlesex, and Somerset County had lower rates of uninsurance than New Jersey as a whole; however, rates of uninsurance were notably lower in Somerset County (9.3%) than in Middlesex (14.1%) and Mercer County (13.0%) (Figure 27).

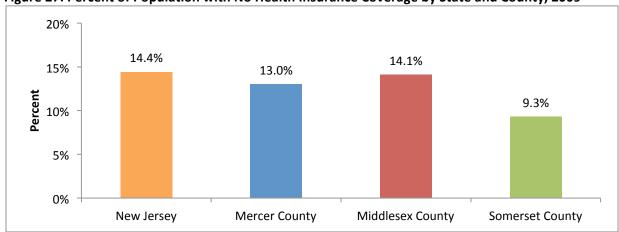


Figure 27: Percent of Population with No Health Insurance Coverage by State and County, 2009

DATA SOURCE: The Small Area Health Insurance Estimates from the U.S. Census Bureau as reported by County Health Rankings, 2009

Focus group and interview participants discussed that when patients are from a traditionally disadvantaged group such as immigrants, the disabled, and those with low income, that not having insurance meant that they only sought medical help for absolute emergencies and not smaller problems or preventive care. But even for emergencies, residents without insurance were skeptical about the care they would receive. As one focus group member explained, "if you don't have insurance, people won't care for you." While the poor have always struggled to obtain health care coverage, the recent economic changes have meant more middle class families have lost insurance or had their coverage reduced. One focus group member shared, "a friend of mine who was unemployed had to have some serious heart surgery. And he ended up in charity care down by the shore, because he just couldn't afford the care he needed." Seniors reported that although they are covered by Medicare, if they don't have the supplement, health care is expensive.

Focus group residents from Middlesex and Somerset Counties were more likely than Mercer County assessment participants to be more affluent and did not consider lack of insurance as significant barrier to accessing health care for them. However, they did note issues related to underinsurance, the cost of co-pays and deductibles, and the difficulties of finding a provider that would take their insurance. As one Middlesex County resident, "I'm insured but it doesn't cover everything. There are co-pays, which increase every year, and a high deductible. I still feel like I'm paying so much out of my own pocket even with insurance."

Affordability of Health Care Services

Affordability of health care was considered a significant concern to resident across the region. The ability to pay co-pays was reported to be a growing issue. As one Mercer County physician reported, "we consider this to be a nice, well-off community and everything else, but my patients are coming into the office and they say they can't pay their co-pay." Seniors and their service providers from Somerset and Middlesex Counties also discussed the issue of co-pays and the financial challenges that seniors can encounter when they are living on a fixed income.

A closely-related challenge is the ability to pay for prescriptions. Some participants, particularly seniors, reported that their insurance did not cover medications, which are often expensive. Others reported

that they had to pay for vitamins/supplements and over-the-counter medicines as well which were not covered by insurance. The cost of prescriptions was an especially important concern among those who tended to have more prescriptions, such as the elderly and disabled. One staff member of a senior center reported, "we have seen a growth in seniors that have started filling out PAAD [Pharmaceutical Assistance to the Aged and Disabled] applications with the economy how it is." A number of seniors in the focus groups shared their difficulties in paying for prescriptions. As one senior reported, "I have friends who want to retire but they can't retire...they are just working to make sure they can afford their medications." A disabled participant echoed this by saying, "I'm not taking medication for my condition because I can't afford the one I need and the alternative makes me sicker." The cost of prescription medication for seniors was a concern raised in groups across all three counties.

Provider Availability and Service Coverage

Finding physicians who take a patient's specific insurance is another challenge to health care accessibility. One focus group participant reported, "you call doctors and facilities, and they turn you away when they see what kind of insurance you have. I was literally chased out of two doctors' offices because of the insurance that I had." Other respondents shared stories of the frustrations of having to locate new physicians because of insurance changes. A focus group member explained the situation as follows: "they [the doctors] drop your insurance because they don't want it anymore, then your insurance emails you and says, 'Well, here is your new doctor.' And you have been building your rapport. And now you have to go chase this new doctor." Another respondent reported "I have a pediatric allergist, but they recently stopped taking our insurance so my son no longer qualifies for it. So we keep getting shuffled around because of the insurance." Physician interviewees and focus group members acknowledged this challenge as well from their perspective, noting low reimbursement rates and extensive paperwork by some insurance companies and the government which causes a financial loss for their services. As one mental health provider explained, "we don't take managed care. We have people pay out of pocket. If we work with managed care, it's so time consuming and mess for us."

Service coverage—the length and scope of services covered—was another common challenge to accessing health care, according to respondents. Physician focus group members reported that insurance companies seemed to play a substantial role in making decisions about care. One member reported, "the gatekeepers for insurance make things very difficult and sometimes block care." A number of focus group participants shared how limits in coverage affected them. One focus group member seeking mental health services reported, "I was trying to get a therapist and they told me to talk to the nursing line of my insurance company and tell them I was planning on hurting myself in order to get it covered. They wanted me to lie." Those recovering from addiction reported that insurance typically covers only a short time in treatment (7-30 days)—far shorter than the time they believed was needed for full recovery. Disabled participants from Mercer County shared stories of declined coverage for equipment such as new wheelchairs, replacement parts for chairs, and head rests.

Transportation

Lack of transportation also creates barriers to accessing health care according to respondents. One focus group member observed that the growing "campus" model of the hospital which has led many to locate outside the center of town, creates challenges for those without private transportation. The issue of transportation was brought up in discussions across all three counties; however, it was a concern that especially resonated among the senior population both from a logistical perspective as well as a loss of independence. As one Middlesex County senior indicated, "What happens to me once I get to the point when I can't drive anymore? I hate relying on people. How am I going to get to my appointments?"

The relocation of University Medical Center of Princeton further out of town has led some to wonder about health care access for those without private transportation. As one focus group member questioned prior to the May 2012 hospital move, "Is there a bus line out to get to that new hospital?" It should be noted that in May 2012, NJ Transit did initiate a new bus line that services the new UMCPP facility.

Stigma in Seeking Specific Services

Stigma associated with seeking treatment is a substantial barrier to accessing mental health and substance use services. Respondents attributed this largely to the situation of wanting to keep individual and community problems "hidden." As one provider explained, "for things like mental health and drug abuse, there is a lot of denial, the 'we don't have that problem here.'" As a result, those needing services either do not seek treatment or leave the area for treatment. This is especially the case with youth. Mercer County participants in particular spoke of parents who actively resist identification of their children as emotionally disturbed and who "ship" their children to treatment facilities out of state.

Emergency Room as Primary Care

One key indicator of challenges in accessing health care is the pattern in the use of hospital emergency rooms (ER). Health care and social service providers reported high and increased use of the ER for health services that are not emergent. Respondents from across the counties offered various reasons for this including fewer people with insurance, a rise in substance use and mental health issues in the community, and no urgent care facility or after-hours clinic. For some, lack of other available options and lack of insurance leaves the ER as the source of health care even for non-emergent needs. As one focus group member shared, "I cannot tell you how many people [in my church] will say 'I have to run to the ER for this or that'..and I ask if they have a doctor and they say they cannot afford one or can't get to one." Members of the Emergency Medical Technician (EMT) focus group as well as service providers working in substance treatment services believed that patients are being released too early from hospitals or treatment and detox clinics, resulting in repeat visits to the ER. One focus group member shared, "the ER is how many of the people get into the [mental health] system for their needed care."

Provider Communication and Cultural Competency

While the overall quality of medical care was viewed as excellent, some focus group and interview participants were concerned about the sensitivity levels and cultural competency of health care providers. Themes during these discussions related to providers' and support staff's competency in working with populations with greater need or more significant health issues. Those from the disabled group provided several examples of insensitivity of the health care providers to their needs. As one disabled focus group member shared, "[when you are disabled] immediately there is a suspicion about your intellectual capacity...[we are in] a box of assumptions that we have to fight out of to take control of our medical care." Quality of services for poorer populations in less advantaged communities, particularly in Trenton, was also of concern. "I think quality is a huge issue, when you live in an environment where the population is poor, for some reason the correlation is that the quality of service can be poor too." Cultural competency within the mental health system was also cited as an important issue by some providers.

In addition to the barriers described above, immigrant groups face unique challenges to accessing health care according to respondents. For patients whose first language was not English, navigating the complex health system and getting appropriate information about their diagnoses that they could understand were challenging. Patient advocates and interpreter services were not always readily available. As one Spanish-speaking focus group member shared, "doctors don't give us explanations

about the medication or diagnosis that they give." Undocumented workers are at particular risk according to several participants. As one service provider commented, "there is such fear around deportation that they don't even seek out services. And that is a huge issue we deal with."

Focus group participants from the Indian American community in Middlesex and Somerset Counties discussed the need for sensitivity around cultural norms of patients from different cultures. For example, it was difficult for some immigrant women to discuss sensitive issues with male physicians. Additionally, it is common in Indian culture for people to take herbal medicines or participate in alternative therapies. Respondents indicated that they hoped health care providers would be sensitive to this holistic view of medicine as well as be aware to ask about herbal supplements to ensure there are no contra-indications with current medications. As one Indian American respondent mentioned, "We think about health slightly differently. It's about the whole body. We highly value science, but we are also interested in alternative therapies. I hope providers are sensitive to that and make sure to ask their patients questions as well." Translation services and help navigating the health care system were also important services that immigrants would need.

VIII. COMMUNITY STRENGTHS AND RESOURCES

Participants in focus groups and interviews were asked to identify their communities' strengths and assets. Several themes emerged as discussed throughout this report. This section briefly highlights some of the key community strengths which focus group and interview participants highlighted.

Health Care Services and Providers

As discussed in the previous section, the region is an area known for its excellent health care facilities.

The three county region is home to a large number of prestigious health care institutions, including numerous acute care hospitals, and a wide range of specialty and tertiary providers. Even though focus group and interview participants recognized that there were challenges related to access to care with insurance and high costs of medications, the quality and breadth of care available in the region was described as exemplary. Additionally, many participants noted that these facilities often provide not only medical care, but also support community-based wellness and educational programs. Several focus group participants from Middlesex and Somerset County specifically noted that Princeton HealthCare was known for their outreach and programming in the community.

Strong Social Service Organizations

Respondents identified their communities as largely rich in social services. When asked about social services in the area, respondents were often able to cite a long list including Meals on Wheels, health screenings at the local library, a community choir, numerous parks, recreational programs at the YMCA, and so on. Seniors from all three counties were particularly glowing about the role of senior centers in their lives. One Middlesex County focus group resident remarked, "We are very lucky with the resources in our area. We have so many services. The only issue is making sure people know about them."

Several focus group respondents singled out services for special needs, especially children, as an especially important asset in the area, particularly in Mercer County. Several residents with special needs family reported that area's services were one reason they moved to the area. As one focus group member shared, "My family moved here from a very rural area in upstate New York, and we have a child

with some mental health issues and there are a lot of services here that we are grateful for. Not all of them we can afford, but there is an incredible sliding scale."

Facilities Promoting Healthy Behaviors

According to community members, the region comprises a strong infrastructure that supports health.

Focus group members and interviewees spoke positively about their surroundings, citing the large number of city-run golf courses, walking and bike trails, tennis and basketball courts, and local and state parks in the region. As one member described, as have "lots of parks, ball fields, tennis courts, ice skating rink, we have it all. It is beautiful." It should be noted that this sentiment was largely held by residents in the outlying and more affluent areas in Mercer, Middlesex, and Somerset Counties, and less so in poorer communities such as Trenton.

As Table 19 shows, many facilities abound that promote healthy eating and physical activity, indicated that it is most likely not proximity to facilities but cost and other access issues. Data reveal that, as few as 3% to 4% of low income residents did not live near a grocery store across the three counties. Further, the rate of recreational facilities per 100,000 population ranged from 11.3 in Middlesex County to 22.3 in Somerset County.

Table 19: Access to Healthy Food and Recreational Facilities by State and County, 2006 and 2009

	New	Mercer	Middlesex	Somerset
	Jersey	County	County	County
% of population who are low income and do not live close to a grocery store (2006)*	4.4%	3.0%	3.0%	3.8%
% of all restaurants that are fast-food establishments (2009)*	58.1%	50.2%	53.9%	48.6%
# of recreational facilities per 100,000 population (2009)**	15	16.9	11.3	22.3

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

DATA SOURCES: For grocery store and recreational facility data: United States Department of Agriculture (USDA) Food Environment Atlas, as cited in County Health Rankings, 2012.

For fast food restaurant data: County Business Patterns data set, as cited in County Health Rankings, 2012.

Education

The region's "pro education" culture and access to high quality secondary education and higher education institutions were considered substantial assets by many focus group and interview participants, particularly from the more affluent areas. Residents and leaders from, Middlesex, Mercer and Somerset Counties commented about the quality of the educational system in the region, particularly in the more affluent towns. For many, it was a significant reason of why they moved or stayed in the area. Community member also noted that there are substantial opportunities for continued learning through community educational and cultural events, many of which are free. Focus group respondents and interviewees frequently cited the high quality education in the region as a key asset. As one focus group member shared, "a new family just said the reason they came here is 3-fold: the schools, the schools, the schools."

^{**} 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.

Geography

In a few conversations, participants discussed how the geographic location of the region served as an important advantage. The area itself was beautiful and allowed for many communities to have green space and parks. Being in Central New Jersey also made it convenient for travel among those who drive. Lying between Philadelphia and New York City, residents from all three counties benefitted from the professional opportunities and educational and cultural life these metropolitan areas offer.

IX. COMMUNITY CHALLENGES AND EXTERNAL FACTORS ("FORCES OF CHANGE")

In focus groups, interviews, and the larger forces of change discussion groups, participants cited a number of larger macro factors that might have a significant impact on the health of residents. Discussions around the forces of change focused mainly on Mercer County as part of the larger collaborative community health assessment since these discussions took place during a Mercer County-specific community event.

Larger Economic Forces

As elsewhere, the region is affected by larger economic shifts in the nation. Across focus groups and interviews in Mercer County and some discussions in Middlesex and Somerset Counties, the issue of the future of the economy loomed large. Respondents wondered about continuing unemployment, declining disposable income, small business closures, foreclosures, cuts to public services, and the ability of residents to continue to maintain their lifestyles and the contributions they make to their communities. Additional stressors include rising energy prices and taxes. Residents pointed to concerns about a shrinking middle class in the region and rising income disparities. They worried that people will be priced out of the area, further exacerbating the existing gap between the "haves and have nots." One focus group member commented, "no pensions, no long-term careers with one firm, manufacturing jobs gone, middle class is shrinking, college is expensive, it is very hard to save. The American dream is very hard to see right now."

Focus group respondents noted reduced public sector investment in essential services such as transportation, education, police, and social services and expressed concerns about the long-term implications of this. They pointed to the weakened safety net and cuts to social services, in particular those focusing on prevention, and expressed concern about the effect of these on the health and well-being of community members. Social service providers in Middlesex and Somerset Counties mentioned the cuts in funding and how they particularly have affected services for the growing elderly population.

The lack of both affordable housing and a strong public transportation system in the region creates substantial constraints to greater economic diversity. Residents reported that without affordable housing, fewer middle class families may be able to move into the region and current residents, especially seniors, will be forced to move out. Residents had a dim view of the future of affordable housing in the region, especially in the near future. A Middlesex County interviewee noted that "affordable housing is really difficult to find here. There are apartments and condos, not just houses, but those apartments are still a lot more money per month than what others pay for a 3-bedroom house in another part of the country." Transportation is an equally challenging issue. As one focus group member explained, funding for transportation comes from the Casino Fund and "if people don't play in the casinos, there is less money."

Demographic Shifts

The region is also experiencing demographic shifts, particularly related to the growth of the senior population. Respondents from all three counties acknowledged that the aging of the population will require new thinking about services and supports for this population. As one focus group member shared, "there are a lot of people who are stuck at home all day—they are home-bound. Their place is a mess, no food in the fridge and their houses aren't clean. This is mainly older people who are incredibly socially isolated." Several residents articulated a vision of "aging in place" but worry about the possibility of this, especially for those elders suffering economically and with no family in the area.

The aging population will also bring new health issues and challenges to the health care system, including a rise in the number of people with Alzheimer's and Parkinson's Disease. Some respondents worried that the region does not have enough providers with geriatric experience or long-term care facilities to provide services to the elderly. The aging population will need not just providers with medical expertise to address their concerns but also social outlets and the opportunity to remain engaged in their communities. Social services, such as senior centers, will be increasingly important. The rise in immigrant populations in the area will require thinking about creative ways to reach these populations to ensure they are not isolated and are served in culturally appropriate ways.

Community and Culture

While a strong sense of civic engagement and community pride characterize much of the area, some Mercer County residents in particular commented on people's resistance to change and an underlying "not in my town" mentality creates challenges. As one community leader explained, "people's support for keeping 'those' people out of their neighborhood leads to no place for people to congregate, no centers or facilities to address issues like substance abuse." Many residents specifically from Mercer County also worry about increasing violence, including rising gang violence. As one focus group member remarked, "we used to be a community, now we lock our doors."

Public Health and Health Care Infrastructure

Respondents in focus groups and interviewees cited several external political and systemic forces within the public health and health care infrastructure that will most likely affect future services in the community. During the time period of the discussions, the pending decision of the Supreme Court on the Affordable Care Act (ACA) was looming large. (It has since been upheld except for the Medicaid expansion.) The issue of the uninsured and underinsured is a substantial external force affecting health care coverage and cost, with important implications for health.

More locally, respondents expressed uncertainty about whether recent relocations of health care institutions would create better health care or reduce access. At the same time, some pointed to a decreasing primary care workforce in favor of specialists and an aging of the medical workforce generally and worried whether the supply of health care providers will be able to keep up with the demand.

A prevailing theme across focus group respondents and interviewees was the lack of focus on prevention within the health care system. In part, this is a larger, systemic issue nationally. As one physician remarked, "health care rewards illness" rather than focuses on prevention. Other physicians

shared their challenges with reimbursement structure which creates disincentives to focusing on prevention. As one physician focus group member described, "if I were to spend a half an hour counseling a patient with diet and exercise and try to submit that, the reimbursement does not necessarily go with the amount of time that I spent with the patient…you would not be reimbursed for the amount of time put in. Reimbursement is a weakness." Additionally, the economic decline has meant substantial cuts to educational programs, screening, and early intervention services in recent years, according to respondents.

To many community leaders, the result of cuts in clinical intervention and prevention has resulted in a rise in preventable health issues. As one focus group member who works with young children from lower income communities reported, "one of the common things I saw in the screenings for vision and dental were that these young kids already had so many issues. They weren't getting access to preventive services, so these problems were advancing quickly at early stages in the child's life." Another reported similar perspective, noting that cuts in prevention services have contributed to the rise in ER visits which has substantial cost: "a big issue is people going to the ER. They have stomach pains and they get an ultrasound and find out they are pregnant...if we had more services available, that woman could have gotten screened early with a very inexpensive pregnancy test." Similarly, some health and social service providers suggested that if more social workers and case managers were involved with patients during the intake process during each visit, then there might be more continuity and coordination of care.

Among public health and health care leaders, some other concerns arose as well. Several were worried about the growing number of people with co-morbidities as well as rising numbers of people with substance use and mental health issues, increasingly more serious ones. Some respondents expressed concern about the ability of the region to effectively address a pandemic should one occur, while those working in women's health expressed concern about recent efforts to cut back on these services.

Many other community leaders specifically from Mercer County worried about coordination among existing social service resources. The respondents pointed to a culture of "home rule" that led to competition among agencies and duplication of services. As some focus group members reported, "I do not think we are using the resources we have in an adequate way" and "In Mercer County, there seems to be a lot of competition among non-profit organizations rather than cooperation." However, others stated that there was substantial coordination and collaboration across agencies. As another focus group member stated, "Mercer County provides a lot of support systems that are inter-linked."

More positively, both patient and provider respondents across all three counties reported that trends in technology provide opportunities to both enhance individuals' knowledge about health issues and ownership of their health care and to enhance exchange of health information across providers in improve coordinated, quality care. One Somerset County interviewee noted, "I think several of the facilities around here are starting to use electronic medical records. That is not just going to be more efficient, but also help improve patients' quality of care among their numerous providers." Several reported that they believed the rise in health care innovation potentially offers the possibility of enhancing health through new models.

Political Environment

By all indications, 2012 has been and will likely to continue to be a tumultuous election year. Many public health and health care leaders were concerned about how the political and legislative environment might affect the field. At the time of the discussions, the future of health care reform was

uncertain since the Supreme Court had not yet made a decision on the Affordable Care Act (ACA). Many respondents indicated that the ACA would have substantial implications for the delivery of health care and prevention services. Additionally, many commented on recent statewide cuts to some public health services such as family planning and were concerned about how the 2012 state legislative election cycle and 2013 gubernatorial election might further affect funding for similar or other public health services. Additionally, the nature of current politics has also caused concern among leaders and community members. Focus group respondents reported that increased polarity in political debate and on political issues is worrisome. As one focus group member noted, "it is impossible to have a civil conversation about some issues."

Environmental Issues and Emergency Preparedness

Several community leaders reported that larger environmental issues in the County could potentially threaten future progress. Recent local disasters, including Hurricane Irene, have created local challenges including damage to social service agencies and the importance of developing effective emergency preparedness plans. On these issues, several respondents expressed concerns about the region's ability to effectively respond to emergencies. As one focus group member noted, "if there was an emergency, where people needed to get out of this town, it would be a disaster." On the positive side, one focus group member noted that communities "rallied" during these crises, demonstrating that Mercer County residents can come together to address problems collaboratively.

X. VISION FOR THE FUTURE

Focus group respondents and interviewees were asked about their visions and hopes for the future 3-5 years from now. This section discusses the overarching themes that emerged from these conversations.

Support Services for Youth, Elderly, and Other Vulnerable Populations

Respondents frequently viewed the future of support services, especially for youth, seniors and more vulnerable populations, as being critical for sustaining a healthy community. Youth and those working with youth specifically in Mercer County reported several areas that they hoped would be addressed in the future. Having more places for youth to go in their spare time was frequently cited. Suggestions included more youth sports programs, as well as physical activities such as opportunities to skate, bowl, and play laser tag. Given that a common pastime for youth in the area is to eat out, youth suggested more reasonably-priced but healthy food options in their towns.

Schools play an important role in child and youth well-being, and while youth and adults in the area believed the schools were doing a generally good job in this area, they also noted that more could be done. Suggestions included more recess for students and more health education overall. Several respondents observed the decline in the family and noted more family support and parenting education would be helpful. As one physician focus group member shared, we need to "connect the family with information." Youth also expressed a desire for their stress levels to decrease. As one suggested, "everyone would benefit if teens' stress level went down." Along this line, greater access to mental health services, for all populations but especially youth, was identified by many residents as a vision for the future. As one physician explained, "addressing mental health issue is really important. Mentally unhealthy people are also not physically healthy." Suggestions included more teachers trained to recognize depression in students and more school-based counselors to address substance use and mental health issues. As one student stated, "I wish we had someone in school we could talk with."

Residents also hoped for more supports for the aging population as well as the disabled. They would like to see more services such as adult day care, home supports, and high quality aides for those wishing to be able to stay in their homes but who need support. More recreational opportunities for these groups were also identified as future services they would like to see. Some residents expressed hope that there would be greater openness of community members to recognizing that there are concerns in the community. As one interviewee shared, we need to be "more open about our needs as a community." Another concurred, suggesting "more public exchanges where people can talk frankly and openly about these issues."

Suggestions specific to the aging population included: more hospital services that specialize in geriatric care, more transportation and shuttles to bring seniors to health care services and other appointments, more preventive programs at senior centers on issues such as nutrition, cooking, physical activity, yoga, and other wellness issues, more health care services brought to the senior centers so seniors did not have to travel for appointments, and continuation or expansion of community education and screening services that are focused on seniors.

Overall, many respondents reported that they felt the region had many resources but that information about them was hard to obtain. As one focus group member reported, "many people are not aware of the resources that are available." They expressed hope that there could be greater documentation and dissemination of this information. One Middlesex County senior focus group member suggested "a hotline so you can hear about all the other hotlines and other services that are available." Several reported that a web-based tool for this would be desirable. Those working with more vulnerable populations such as language minorities hoped for greater outreach to these communities with information and support in accessing health and social supports.

Engagement of the Community and Collaboration among Organizations

Several respondents working in social services hoped for greater communication and collaboration across agencies. As one focus group member shared, "we need that collaboration across organizations and agencies to work together." However, respondents pointed to several examples where this was already happening. One mentioned a public health nurse who travels with the Meals on Wheels program to check in on seniors' health. Another respondent mentioned a new partnership between her church and local police. Respondents stated, however, that more was needed. Residents expressed a hope that the community and agencies could think creatively about the use of existing resources, such as keeping schools open after the end of the school day for community-based activities or enhancing the use of libraries. Numerous organizational staff from across the region noted that it would be helpful and more strategic if organizations collaborated more and coordinated their efforts.

The role of the faith community was also acknowledged in many focus groups and interviews, and those from this community were seen as important agents of change. As one interviewee explained, "the first resource that comes to mind for me is the religious community. The people trust and respect the church n my community, and it is where they turn to when you need help." Focus group respondents from faith organizations as well as social service providers identified the many ways the faith community provides services and hoped for more collaboration. However, as one focus group member who was a leader in the religious community cautioned, "they are expecting congregations to help with such needs but meanwhile the congregations are struggling to pay their bills."

Health Care Coordination and Innovation

While substantial change in the larger health care system depends on national events, focus group respondents and interviewees pointed to several actions related to coordination, collaboration, and innovation that the local community could take in addressing needs now. Related to the expansion of services, participants hoped for more services in general for particular issues, specifically substance abuse, mental health, and oral health. Residents also expressed hope for greater access to health care including more flexible delivery hours and an urgent care clinic. They also envisioned more coordinated care and individuals who could help more vulnerable groups navigate the complex health care system, thereby improving both health care access as well as health. Currently, patients get frustrated and lost as they seek out numerous specialists. One senior focus group respondent remarked, "I have to see one doctor for my leg, another one for my eyes, another for my blood pressure. Why can't I see one doctor for everything?" As a physician explained, "if doctors could coordinate care or an access coordinator existed, then we could really follow patients and make sure they had access to the other services and had their needs met."

Many residents were not sure which specific services existed and suggested a directory of those resources. Currently, there is a 211 telephone information and referral service available that provides information on a number of social service and health care agencies, but it did not appear that the residents engaged in the assessment were aware of this resource.

Another component of the desire for greater coordination among providers included recommendations for more co-location of specialty practices. "I think a continuum of care, spanning a single day, pulling together all of that expertise, in terms of preventive, maintenance, and treatment, a comprehensive disciplinary program that spans the continuum but in the course of a day." Several respondents within the health care field sensed that growth in use of electronic records may help with this, as care starts to seem more seamless.

Others envisioned more efforts to engage language isolated communities and reported that they would like to see more culturally competent care for those from racial, ethnic and linguistic backgrounds and the disabled. As one member of the disabled community shared, "make sure they [providers] have experience with people with disabilities."

Specific recommendations that focus group participants had in this area were: more outpatient clients and urgent care services, satellite offices/annexes of hospitals within the community, more transportation provided by health care institutions, expanded hours and greater timeliness in for scheduling appointments, more interpreter services, more cultural sensitivity training for health care providers, increased case managers or patient advocates to help patients with navigating the health care system or dealing with billing issues related to their health insurance, providing bills and medical reports in lay language, greater use of electronic medical records, more coordination of care, and expansion of community programming, screening services, and support groups.

Focus on Prevention

In addition to improvements on the health delivery side, respondents envisioned a greater emphasis on prevention. As discussed earlier, perceptions were that the health care system focuses much more on treatment than prevention. If efforts were implemented earlier on and at a population level, then prevention or delay of many conditions would ease the cost burden on the health care system and the region overall. However, there seemed to be several challenges to focusing on prevention at a community level. As one physician focus group member commented, "the biggest thing is that people come to us and they want everything to be a quick fix. They just ask for medication or for a gel to put on their shoulder..." Another interviewee concurred saying, "I find mostly I am fixing problems. How do we be more proactive? How do we teach our children to eat properly and exercise?" "The youth know all the lyrics of all the pop songs, yet do not know how to make healthy choices." Residents would like to see more comprehensive prevention-related efforts in areas such as healthy eating, exercise, and sexual health including STDs and HIV/AIDS.

Greater Economic Opportunities

Underlying all comments was the recognition that an improved economy was critical for the future health of the region. Many focus group participants hoped that a better economic outlook would help reverse unemployment and foreclosures, reduce poverty and increase incomes, and restore decimated health care and social service agencies' budgets. While many of the health and social issues discussed existed before the economic recession, the economic situation has exacerbated them and dulled hope for some residents. One respondent summed up the thoughts of many by stating, "we need improvement in the economy to have more jobs and more places to get jobs." Within this context more affordable housing and more easily accessible public transportation were also mentioned frequently as hopes for the future in Mercer County. However, respondents noted that these changes were not likely to take place until the economy improves.

XI. KEY OVERARCHING THEMES AND CONCLUSIONS

Through a review of the secondary social, economic, and epidemiological data in the region as well as discussions with community residents and leaders, this assessment report provides an overview of the social and economic environment of Middlesex, Mercer, and Somerset Counties, the health conditions and behaviors that most affect the population, and the perceptions on strengths and gaps in the current public health and health care environment. Several overarching themes emerged from this synthesis:

- Even among different population groups, affordability was a key concern across the entire spectrum. Regardless of population group, affordability and cost issues were key concerns that were discussed in nearly every conversation. For many, the region is a fairly expensive place to live especially during the economic recession. High housing costs, affordability of healthy foods, high copays for health care services and prescription drugs even for those with insurance, and generally high costs for day-to-day living had a disproportionate impact on the most vulnerable (e.g., very low income, immigrant groups, socially isolated elderly), but were also top-of-mind of those in the middle and higher ends of the spectrum.
- Residents repeatedly discussed that their communities had limited walkability and a lack of public transportation services, resulting in an environment which has affected some residents' quality of

life, stress level, and ease of accessing services. In many focus groups and interviews, transportation or walkability was discussed as a critical issue in the community. Middlesex and Somerset Counties as well as the outlying areas of Mercer County are lower density areas where residents are reliant on their cars. For those who do not have a car, it is difficult to walk to services and retail due to distance and lack of infrastructure for pedestrians. Public transportation was discussed as being unreliable and limited. For vulnerable populations such as the elderly and lower income, these limited transportation options have a severe impact on their time, ease of getting to employment, appointments, or going about their daily lives such as going to the grocery store. These discussions repeatedly identified the interconnections between transportation and its challenges to maintaining good health. As the population grows, particularly among the elderly, the issue of transportation will become even more critical to address.

- The elderly were identified as a vulnerable population in the community whose concerns stand to be exacerbated by the projected population growth in the region. In many interviews and focus groups, across all three counties and particularly those in Middlesex and Somerset Counties, concerns around the senior population were top-of-mind among residents across the adult population. Discussions focused on how current challenging issues in the community—specifically, lack of affordable housing, limited transportation, affordable prescription drugs, and high cost of living—disproportionately affect the senior population. While there are many senior centers in the region that provide an abundance of activities and social interaction for seniors, for those who do not have transportation to the senior center, are too feeble to attend, or who do not have family or a strong support system, there is the risk that they will become socially isolated. In addition to social isolation among seniors, the region is likely to see absolute increases in chronic conditions as the community ages. The senior population is growing at a more rapid pace than the population overall, which will have a significant impact on health care and other services as a larger proportion of the community is at higher risk for multiple health problems.
- Substance use and mental health data indicate that these are concerning issues, and one in which the current services were not necessarily addressing community needs, particularly among youth. While Middlesex and Somerset County participants did not cite substance use and mental health as the most top-of-mind issues, quantitative data show that substance use among youth is a cause of concern in this area. Mercer County participants did discuss these issues at length in conversations. They indicated that the social norm was that some substances such as marijuana, alcohol, and prescription drugs were not considered dangerous among youth and thus becoming more popular. The lack of programs for youth and concerned loved ones, social stigma in talking about substance abuse problems in the community, and complexity of addiction were all identified as reasons for contributing to this problem. Additionally, in conversations with interview and focus group participants, many noted that the issues of substance abuse and mental health are intricately intertwined. This situation makes addressing these issues even more challenging. Current treatment programs do exist, but the demand exceeds the number of providers or even number of beds currently available or some families from outlying communities do not want to access existing programs which are located in Trenton.
- As with the rest of the country and state, issues around physical activity, healthy eating, and
 obesity are issues for residents across the three counties, especially as chronic conditions such as
 heart disease, cancer, and diabetes are the leading causes of morbidity and mortality. The three
 county's rates related to physical activity, nutrition, and obesity are better than what is seen
 statewide, yet with heart disease, cancer, and diabetes as top issues in relation to morbidity and

mortality, these issues are considered critical to address. Of particular concern was the anecdotal evidence related to the increase in childhood obesity—an issue that will have even more severe health and cost repercussions in the future as the younger generation transitions to adulthood. While the region has many grocery stores, parks, and recreational facilities, concerns were related to the accessibility and affordability of these outlets. The high cost of healthier foods, limited transportation to services, fees for recreational facilities, and difficulty around walking within some communities due to traffic and lack of sidewalks were cited as challenges related to these issues. While several facilities and programs around these issues exist, some interviewees and focus group participants commented that it was critical to address this issue through a comprehensive approach, in that multiple sectors, including health care, education, public works, transportation, local government, and the business community, needed to be involved and collaborate together to make an impact on current rates.

- While strong health care services exist in the region, vulnerable populations— such as the socially isolated elderly, non-English speaking residents, those living with disabilities, and the poor— encounter continued difficulties in accessing primary care services. Numerous challenges for these populations were identified during the focus groups and interviews: limited or slow public transportation options in some communities, language and cultural barriers, complexity of navigating the health care system, lack of health insurance coverage, limited urgent care options, lack of sensitivity among health care staff, and time or cost constraints (e.g., no sick time provided at work, limited hours of operation of health care services). Several respondents commented that for the most vulnerable populations, it was critical for services to recognize these constraints and use different approaches to accommodate the challenges that many residents face. Further, it is unclear how the move of hospital may affect accessibility of care for some populations. Some approaches that have been suggested to help address the numerous challenges to care include more urgent care clinics, additional patient support services, transportation programs, greater supply of primary care providers, expanded community-based services, and greater coordination across health care settings.
- Residents viewed prevention as critical, but they emphasized that the health care system focused more on clinical care and disease management than prevention. Discussions with community residents and social and health service providers consistently revolved around the issue of prevention. Participants repeatedly mentioned that many health conditions, especially chronic diseases, could be avoided or minimized if programs and services focused on disease prevention and preventive behaviors, particularly among children and adolescents. However, the current health care system is not set up in this manner. Between reimbursement barriers, provider time constraints, and a system built around a biomedical— rather than public health—model, clinical services currently emphasize secondary and tertiary care and not prevention. There was consensus among those involved in the assessment discussions that prevention needed to be more in the forefront of health care services and programs. Additionally, the current model which an emphasis on technology and treatment is a predominant factor driving up the health care costs across the nation, where approximately \$25-\$50 billion is estimated to be spent nationally on preventable conditions. 14
- Numerous organizations are currently providing services and resources in the region to try to meet the population's health and social service needs. Throughout the discussions, interview and focus group participants recognized the programs related to health in which many community-based and regional organizations are involved. Government agencies and community-based

organizations provide support to vulnerable populations such as the elderly, undocumented, homeless, and addicted, as well as ensure that services and infrastructure run smoothly for the larger population. Additionally, the hospitals and health care institutions in the region are known for their excellent, high quality care and their work in the community. However, some interviewees, particularly organizational leaders, commented that several efforts and services in the area are fragmented, uncoordinated, and under-funded. Participants expressed strong interest for these issues to be addressed via a more strategic, coordinated approach with multiple organizations and agencies working together. Overall, participants were hopeful for the future and saw that the discussions occurring in the region would create momentum for moving forward with innovative, collaborative approaches towards health.

APPENDIX A. FULL LIST OF FOCUS GROUP AND INTERVIEW SECTORS

Focus	Group Sectors/Special Interest Areas	Interv	view Sectors/Special Interest Areas
3	Medical Advisory Board	5	County freeholders
1	Emergency medical technicians (EMT)	1	Physician
1	Interfaith leaders from different	3	Senior citizen leader/organizational staff
	religious sectors	1	Mental health leadership
1	Church based group	1	School superintendent
4	High school students – juniors and seniors	3	Reproductive & sexual health care
5	Senior citizens/older adults	3	Veterans
1	Mix of Mercer County residents	1	Health information exchange leadership
3	Public health and health care providers	1	Health clinic leadership
2	Parents	2	Recreation and community services
1	Spanish-speaking residents	1	Social service provider
1	Leaders and providers in the Latino		
	community		
1	Childcare providers		
1	Recovery addicts and their families		
6	Community leaders		
1	Disabled and their families		
1	Mothers with newborns		
1	Leaders/members of the Indian American		
	community		
34	Total Focus Groups (383 people)	23	Total Interviews (23 people)

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