

# COMMUNITY HEALTH ASSESSMENT SOMERSET COUNTY/ RWJUH SOMERSET SERVICE AREA 2018



#### **ACKNOWLEDGMENTS**

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The RWJ Barnabas Health CHNA Steering Committee oversees the 2018-2019 CHNA process to update Hospitals CHNAs and create new Implementation/Community Health Improvement Plans. The key tasks of the Steering Committee include:

- Oversight and guidance of CHNA implementation plan development
- Review facility implementation/health improvement plans and results
- Review of suggested priorities for facility implementation planning
- Share strategies and best practices

#### Members of the RWJ Barnabas Health CHNA Steering Committee include:

- Jen Velez, Executive Vice President, Community and Behavioral Health, Committee Chair
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- Adult Day Center
- Aetna Better Health of NJ
- Aflac
- AHS MMC
- Allstate
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- Anew Wellness
- Arbor Glen
- ARC Somerset
- Arthritis Foundation
- Assembly Andrew Zwicker
- Blaustein-Rutgers
- Boro SAFE
- Borough of Manville
- Borough of Watchung
- Branchburg Township
- Brandywine Living
- Brandywine Senior Care
- Brandywine Senior Living
- Bridgewater Marriot
- Bridgewater Township
- Bridgewater United Methodist Church
- Bridgeway Rehab (PESS)
- Brother International
- Cancer Support Community
- Carrier Clinic
- Center for Tourette Syndrome
- Center Path
- Center Path Wellness
- Central Jersey Family Health Consortium
- CHFHC Early Intervention
- CJFHC Central Intake
- Community in Crisis
- Community Visiting Nurse Association
- DOH
- Duke Farms
- EmPoWER Somerset
- EOS Partners
- Family & Community Health Sciences, RCE
- Feeding Hands
- Final Touch Plantscaping

- Gannett New Jersey
- Green Brook Township
- Green Brook Township Public Schools
- Healthy Families
- Healthy Vending Zone
- Hillsborough Ag Adv.
- Hillsborough BOE
- Hillsborough Township
- Horizon Blue Cross Blue Shield
- Horizon NJ Health
- HOSI
- Inventiv Health
- Jewish Family Services
- Jewish Renaissance MC
- Johnson & Johnson
- Komen North Jersey
- Kwenyan and Associates
- Literacy Volunteers of Somerset County
- Matheny
- MCS Healthcare Public Relations
- MHANJ
- Middle Earth
- Middle-Brook Regional Health Commission
- Montgomery Township
- Montgomery Township,
   Somerset County Health
   Officers Association
- MyCentralJersey.com
- NAMI
- Natural Medicine & Rehabilitation
- NJ Center for Tourette Syndrome & Associated
- NJ Department of Health
- NJ Sharing Network
- NJCTS
- Nova Spine & Pain
- Office of Youth Services
- Perkins Partnership
- Pfizer
- Prestige Medical Solutions
- Quantum Floats
- Raritan Valley Habitat for Humanity
- Regional Chronic Disease Coalition

- Ridewise, Inc.
- Robert Wood Johnson Barnabas Health
- Rock Steady Boxing
- Rutgers
- RWJ Somerset
- RWJ Somerset Security
- Safe+Sound Somerset
- Saint Peters University Hospital
- Sanofi
- SCCYC
- SCDOH
- SCLS NJ
- Senior Bridge
- Shoprite
- Snap-Ed
- Social Security
- Somerset County Office on Aging
   & Disability Services
- Somerset County Sheriffs Dept.
- Somerset County Rutgers Cooperative Extension
- Somerset County Business
   Partnership
- Somerset County Department of Health
- Somerset County Freeholders
- Somerset County Library System
- Somerset County Planning
- Somerset County Prosecutor's Office
- Somerset County YMCA
- Somerset County-Morris
   Somerset Regional Chronic
   Disease Coalition
- Somerset Hills YMCA
- Somerset County YMCA
- Steeple Chase Cancer Center -RWJUH Somerset
- Summit Medical Group
- Symrise
- The Jointure & Compassus Hospice
- United Way of Northern New Jersey
- VNA of Somerset Hills
- Wakefern Food Corporation
- Wilf Campus for Senior Living
- WWFH-NJ

| • | Food Bank Network of Somerset | • | Resource Center of Somerset | • | Zufall Health Center |
|---|-------------------------------|---|-----------------------------|---|----------------------|
| • | Franklin Township             | • | Richard Hall                |   |                      |
| • | Future Project                |   |                             |   |                      |

#### **RWJBarnabas Health STEERING COMMITTEE CONSULTANT ADVISORS**

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- New Solutions Inc. (Nancy Erickson<sup>1</sup>)

Questions regarding the Community Needs Assessments should be directed to RWJ Barnabas Health System Development/Planning at BHPLanningDept@RWJBH.org.

<sup>1</sup> The CHNA's development consultants, New Solutions, Inc., have planned and conducted numerous community needs assessments and implementation plans with multiple organizations including individual hospitals, health systems, other health care and community organizations such as consortia comprised of a wide range of participant organizations. The NSI team, of which two are Ph.D. prepared, includes: planning consultants, market researchers, epidemiologists, computer programmers and data analysts. NSI has extensive regional and local community knowledge of health issues, community services and provider resources for the community reviewed by this assessment. This expertise, as well as the methodological and technical skills of the entire staff, was brought to bear in conducting this Needs Assessment and Health Improvement Plan.

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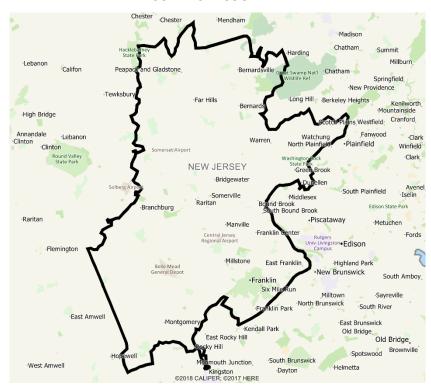
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#### **EXECUTIVE SUMMARY**

#### **Background**

The Somerset County Community Health Assessment (CHA) was designed to ensure that the Medical Center and other community stakeholders continue to effectively and efficiently serve the health needs of Somerset County residents and the by communities served the Hospital. The CHA was developed in accordance with all federal rules and statues, specifically, PL 111-148 (the Affordable Care Act) which added Section 501(r) to the Internal Revenue Code and, in accordance with New Jersey regulations N.J.A.C. 8.52 10.1-10.3 governing local boards of health. The Somerset County health assessment was undertaken in this context and developed for the

#### SOMERSET COUNTY



purpose of enhancing the health and quality of life throughout the community. This assessment builds upon the CHA conducted in 2015. The 2015 CHA Implementation Plan results are reviewed in **Appendix A**.

The CHA uses detailed health data available at state, county, and community levels, a community health survey, focus groups, key informant interviews and a survey of Somerset County public health officers, and other community stakeholders. RWJUH Somerset is a member of RWJ Barnabas Health, which convenes a multi-disciplinary, multi-facility Steering Committee that provides additional support and leadership. Also, insight and expertise from the RWJUH Somerset CHA Oversight Committee helps identify health assets, gaps, disparities, trends, and priorities. The Methodology section details the data collection process and analysis.

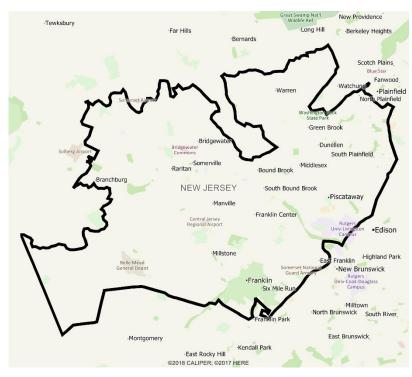
#### Service Area

The CHA focuses primarily on the health needs of Somerset County residents. Much of the data is provided at the county level, but where available city or zip code level data are provided to enhance the understanding of specific regions or populations. The county encompasses 305 square miles comprised of 21 townships and boroughs, and 46 zip codes. The county and its subdivisions are largely suburban. The county is bordered by Morris County to the north, Union County to the east, Middlesex County on the southeast, Mercer County on the south, and Hunterdon County to the west.

RWJUH Somerset is located in Somerville, New Jersey. It is the sole hospital serving residents in Somerset County. The Hospital's primary service area (PSA) consists of the following zip codes:

#### **RWJUH Somerset Service Area**

| ZIP Code | ZIP Name         |
|----------|------------------|
| 07059    | Warren           |
| 07060    | Plainfield       |
| 07080    | South Plainfield |
| 08805    | Bound Brook      |
| 08807    | Bridgewater      |
| 08812    | Dunellen         |
| 08835    | Manville         |
| 08844    | Hillsborough     |
| 08846    | Middlesex        |
| 08854    | Piscataway       |
| 08869    | Raritan          |
| 08873    | Somerset         |
| 08876    | Somerville       |
| 08880    | South Bound      |
|          | Brook            |



The service area is determined using three primary factors: patient origin,

market share, and geographic continuity/proximity. Zips representing approximately 50% of the RWJUH Somerset patient origin form the initial PSA. Added to this list is any zip code in which the Hospital has a high market share presence, any zip code with low market share is deleted from the PSA definition and becomes part of the secondary service area (SSA). Geographic proximity to create a contiguous area completes the service area determination. This area contains some zip codes from the contiguous counties of Union and Middlesex. For purposes of this CHA, Somerset County statistics were deemed to be most relevant for review.

While primarily a wealthy county, wealth is not uniform across all communities within the county. Wide disparities exist within some communities. The high cost of living and a lack of affordable housing have led to expressed concerns over a dwindling middle class. The following are examples of a few social and economic differences identified in this review.

- Somerset County's population has a slightly larger proportion of whites than residents within the state of New Jersey.
- Somerset County's Asian population is estimated to have grown by 33% between 2010 and 2018, and Hispanic and Latino populations grew 22% during the same timeframe.
  - The town of Somerset has the highest concentration of Hispanics at 27.2%.
  - Franklin Township has the largest Asian population.
- Somerset County's population grew 3.7% compared to 2% for New Jersey (between 2010 and 2018).
- The County's population distribution by age is similar to that of the State.
- The County's median household income was over \$100,000 in 2016, compared to \$73,000 in New Jersey.
  - Skillman had the highest median household income at over \$180,000.

- Manville (\$65,163), Bound Brook (\$68,857), and South Bound Brook (\$77,713) had amongst the lowest median household income.
- Somerset County's unemployment rate for 2016 was 3.7%, below the statewide rate of 5.2%.
  - Skillman had the lowest unemployment rate, (1.6%)
  - ➤ Manville (5.8%) and Bound Brook (6.2%) had unemployment rates higher than that of New Jersey.
- Poverty rates in Somerset County for families, people, children, and seniors were lower than the State rates.
  - Children in Bound Brook and Manville had among the highest rates of poverty, at 15%.
- The percent of Somerset County residents with a graduate or professional degree was 23.8% compared to 14.4% of New Jersey residents.
  - 42% of Skillman residents had a graduate or professional degree compared to only 2.9% of Manville residents.
  - ➤ 15% of Bound Brook residents failed to complete high school.
- Less than 10% of Somerset County residents are estimated to have limited English proficiency.
  - Residents of Manville, South Bound Brook, and Bound Brook had rates of low English proficiency that were over 10%.
  - ➤ 20% of Somerset County children were eligible for free school lunches.

In addition to social and demographic differences, disparities in Somerset County and RWJUH Somerset PSA residents' incidence and prevalence of illness identified in this CHA include:

- The White age-adjusted mortality rate (2007-2016) for heart disease was more than double that for Blacks.
- The rate of low birth rate babies is, and has been, higher among Blacks than for both White and Hispanic residents since 2011.
- The percent of Somerset County residents reporting high cholesterol is more than double the Healthy People 2020 target.
- The general hospital inpatient use rate in Somerset County (137.7 per 100,000) is lower than that of the State, but the zip codes of Kingston, Manville, Somerset, Raritan, and South Bound Brook all have hospital use rates well above the statewide rate.
- ED use rates for Somerset County are also below those of the State while residents of Kingston, Manville, Bound Brook, Somerset, and South Bound Brook experience rates of ED use above that of the State.
- Bound Brook and Manville have CNI scores that are among the highest in the County while Martinsville, Far Hills, Skillman, Hillsborough, and Neshanic Station have the lowest CNI scores in the County.
- The rate of persons hospitalized with a heart attack was highest in Somerville in 2016.
- Among patients who used a hospital, the rate for stroke was highest among residents of South Bound Brook.
- The highest hospital use rate of diabetes, pneumonia, COPD, substance use and mental health, obesity, heart failure/CHF, and hypertension were seen in patients from Manville.

#### **TOP HEALTH ISSUES**

The Healthier Somerset County Coalition, in conjunction with the RWJUH Somerset Data and Internal Oversight Steering Committee, considered primary and secondary data to determine the top health issues. Prioritization was based upon capacity, resources, competencies, and needs specific to the populations it serves. The selected issues are within the Coalition and Hospital's purview, competency and resources to impact in a meaningful manner and include: behavioral health; overweight, obesity and nutrition; chronic diseases; and access to care and healthy foods.

#### 1. Behavioral Health

Behavioral health refers to a constellation of mental health and substance use disorders which together affect more than 25% of Americans aged 18 and over.<sup>2</sup> These disorders are recurrent, serious and may co-occur, but they are treatable and many people recover.

Mental disorders are health conditions characterized by alterations in thinking, mood, and/or behavior associated with distress and or impaired functioning. Risk factors for mental illness include family history, stressful life situations, chronic medical conditions, brain damage, and substance abuse.

Serious mental illnesses include schizophrenia, major depression, and bi-polar disorder among others. Patients with serious mental illness are more likely to be unemployed, involved with law enforcement, and have housing insufficiency.<sup>3</sup> According to the 2015 National Survey of Drug Use & Health, an estimated 98 million adults 18 or older in the U.S. had a serious mental illness, including 2.5 million living below the poverty level.<sup>4</sup> The relationship between poverty and serious mental illness is complex. Poverty may heighten the experience of mental illness as well as increase the likelihood of the onset of mental illness. In addition, experiencing a mental illness can also increase one's chances of living below poverty level.

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Risk factors for substance abuse are similar to mental health conditions and also include poverty and drug availability. Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems.

Behavioral health disparities impact diverse groups in the U.S., including racial and ethnic groups, young adults, women, and the LGBTQIA community. There is stigma associated with mental health diagnosis and treatment, particularly among African-Americans and Latinos. Behavioral health plays a major role in one's ability to maintain good physical health. Problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

Of late, the issue of opioid misuse and addiction has captured the attention of federal and state governments, leading to the U.S. President declaring the opioid crisis a public health emergency. To help

<sup>&</sup>lt;sup>2</sup> https://www.samhsa.gov/disorders.

<sup>3</sup> Ibid.

<sup>4</sup> http://www.samhsa.gov/data/

clarify some of the reasons for this decision, the National Institute on Drug Abuse has estimated that 115 people a day die as a result of an opioid overdose. In 2014 alone, AHQR reported New Jersey had the 6<sup>th</sup> highest rate of emergency room visits for opioids (265.4/100,000 population). Between 2014 and 2016, there was a 40% rise in the number of deaths as a result of drug overdoses in the State. The majority of the victims had heroin or fentanyl in their systems.

To help combat this issue, New Jersey announced a statewide initiative to help combat the opioid crisis. One of the initiatives will include a 24-hour response team which will include first responders, mental health advocates, substance abuse counselors specially trained in dealing with addiction, and a beefedup prescription monitoring program funded by more than a million dollars in federal grants.

- In 2016, 12.5% of Somerset County residents reported a history of depression, up from 9.2% in 2012.
- In 2016, the percent of Somerset County residents reporting heavy drinking was higher than the adjacent counties of Hunterdon and Morris, as well as being higher than the statewide rate.
- In 2016, the leading reason for admission to a drug-related treatment center was alcohol, followed by heroin use.
- Between 2012 and 2016, there was an increase in the rate of ED visits for substance abuse in all Somerset County age cohorts, except those aged 0-17.
- Manville had mental health and substance abuse admission rates that were higher than the State in 2016.
- Manville and Somerville had higher mental health ED visit use rates than the State rate in 2016.
- Manville had a higher ED visit use rate for substance abuse than the State rate in 2016.

RWJUH Somerset and Carrier Clinic are two in-county providers of inpatient and outpatient (outpatient, partial and intensive outpatient) treatment for a variety of behavioral health disorders. Patients requiring inpatient involuntary commitment (STCF) beds are served by Mercer County providers Capital Health, St. Francis Medical Center, and Princeton House Behavioral Health. In addition, Robert Hall Community Mental Health Center provides a wide range of outpatient, homeless, partial care, and supported employment services. Bridgeway Rehabilitation Services provides the Psychiatric Emergency Screening Services (PESS) for this county along with supportive housing, outpatient services, and PACT services. Easter Seals Society of New Jersey provides integrated case management services (ICMS), residential services, intensive family support services, and supportive housing. Other county-based service providers include Freedom Trails Self-Help Center, and Community Hope and Alternatives (supportive housing).

#### 2. Overweight, Obesity and Nutrition

Obesity and overweight are abnormal or excessive fat accumulation that presents a health risk. A crude population measure of obesity is body mass index (BMI), a person's weight (in kilograms) divided by the square of his or her height (in meters). A person with a BMI of 30 or more is considered obese; a person with a BMI equal to or more than 25 is overweight. Once considered a problem only in high income countries, overweight and obesity rates are now increasing in low and middle-income countries, particularly in urban settings.

Being overweight or obese can have a serious impact on health. Overweight and obesity are risk factors for a number of chronic diseases, including: cardiovascular disease (mainly heart disease and stroke), type 2 diabetes, musculoskeletal disorders like osteoarthritis, and some cancers (endometrial, breast and

colon). These conditions cause premature death and disability. Onset of increased risk begins when someone is only slightly overweight, and the risk increases as weight rises. Many conditions cause long-term consequences for individuals and families. In addition, the costs of care are high. Prevention and wellness programs are necessary to address the insidious effects of excess weight.

Genetics affect the amount of body fat stored, where fat is distributed, and how efficiently the body converts food into energy. Family eating and physical activity habits play a role in the development of obesity. Prolonged inactivity can result in an imbalance of caloric metabolism, where the intake of calories is higher than the burning of calories. Often, inactivity is a result of other medical problems like arthritis or injuries. An unhealthy diet, high in calories and lacking in fruits and vegetables, is a significant contributor to weight gain. Research has linked social and economic factors to obesity. Socioeconomic factors include: not having safe areas to exercise, cultural traditions of eating unhealthy and obese family members.

Approximately 39.8% of the U.S. population, or 93.3 million adults, are affected by obesity according to the 2015-2016 National Center for Health Statistics data brief. But some groups are disproportionately impacted. For example, Hispanics (47%), non-Hispanic Blacks (46.85) had the highest age-adjusted prevalence of obesity followed by non-Hispanic Whites (37.9%) and non-Hispanic Asians (12.7%). The association between obesity and income or education level is complex and differs by age, sex and ethnicity.

- Overall, men and women with college degrees had lower obesity prevalence compared to those with less education.
- By race/ethnicity, the same obesity and education pattern was seen among non-Hispanic White, non-Hispanic Black, and Hispanic women, and also among non-Hispanic White men, although the differences were not all statistically significant. Although the difference was not statistically significant among non-Hispanic Black men, obesity prevalence increased with educational attainment. Among non-Hispanic Asian women and men, and Hispanic men there were no differences in obesity prevalence by education level.
- Among men, obesity prevalence was lower in the lowest and highest income groups compared
  with the middle income group. This pattern was seen among non-Hispanic White and Hispanic
  men. Obesity prevalence was higher in the highest income group than in the lowest income group
  among non-Hispanic Black men.
- Among women, obesity prevalence was lower in the highest income group than in the middle and lowest income groups. This pattern was observed among non-Hispanic White, non-Hispanic Asian, and Hispanic women. Among non-Hispanic Black women, there was no difference in obesity prevalence by income.<sup>5</sup>

Obesity can occur at any age, even among young children. Hormonal changes and physical inactivity in older individuals also increase risk. The amount of body muscle decreases with age, leading to a decrease in metabolism. Quitting smoking is also associated with weight gain, sometimes resulting in obesity. Structured smoking cessation programs can help mitigate the effects of weight gain associated with quitting. Not getting enough sleep or conversely getting too much sleep can cause changes in the hormones that increase appetite and contribute to weight gain.

<sup>&</sup>lt;sup>5</sup> https://www.cdc.gov/obesity/data/adult.html

Poor nutrition and a lack of a healthy diet pattern, and regular physical activity, are health behaviors that contribute to obesity. A healthy diet pattern is one that emphasizes eating whole grains, fruits, vegetables, lean protein, low fat and fat-free dairy products, and drinking water. Healthy activity patterns include 150 minutes of moderate intensity activity or 75 minutes of vigorous activity or a combination of both, along with two days of weight training per week.

- Nearly 21% of Somerset residents reported a BMI >=30 in 2016.
- 12.7/1,000 patients who used a hospital service in Somerset County had a diagnosis of obesity compared to 14.1/1,000 New Jersey residents.
  - Obesity rates were found to be amongst the highest in South Bound Brook (24.65/1,000) and Manville (29.52/1,000).
- Between 2014-2016 the percent of Somerset County residents reporting no leisure time activity trended upwards from 15.8% in 2014 to 23.6% in 2016.
- Obesity was the second highest priority health issue reported from the Workplace Wellness focus groups.
- More than half of all survey respondents claimed to have hypertension, high cholesterol or a weight problem.
- Obesity was the number 1 concern among survey respondents from Somerset County.
  - ➤ 67% of males were particularly concerned about obesity.
- One-third of survey residents indicating obesity said they were under a physician's care for the issue, while 38% were monitoring it on their own.

Obesity treatment is available in Somerset County in both inpatient and outpatient clinic settings and include obesity psychologists, Somerset obesity treatment centers and obesity counselors. Eleven obesity treatment centers and two eating disorder centers are located in the county. RWJUH Somerset offers restrictive and malabsorptive bariatric surgery for morbidly obese patients. Cooking and Nutrition classes, Life-Changing Weight Loss Seminars and Bariatric Surgery Support Groups are available through the hospital's Education Center. Private therapists and non-profit organizations offer an array of services in obesity counseling, education, personal obesity prevention planning, nutrition, healthy eating courses, and exercise programs.

Community nutrition programs are available through the Supplemental Nutrition Assistance Program (SNAP), Meals-on-Wheels through the Somerset County Division of Senior Services and other privately funded programs. Public health partnerships include coordinated school health programs, emPoWER Somerset, Food Bank Network of Somerset County, community gardens, farmers markets, the Obesity Society, Greater Somerset Public Health Partnership, Mayor's Wellness Campaign, Somerset County Business Partnership, Somerset County Park Commission, Somerset County Wellness Committee and Somerset County YMCA. A Somerset County website dedicated to obesity training focuses on prevention through education and strategies that promote health eating, active living and behavioral change: http://healthiersomerset.org/obesity.html.

#### 3. Chronic Disease

Chronic diseases are non-communicable diseases that are prolonged in duration and are rarely cured completely. These conditions include heart disease, cancer, stroke, diabetes and arthritis. Two of these chronic diseases—heart disease and cancer—together accounted for nearly 48% of all deaths in the U.S.

Arthritis is the most common cause of disability. Of the 53 million adults with a doctor diagnosis of arthritis, more than 22 million say they have trouble with their usual activities because of arthritis. Diabetes is the leading cause of kidney failure, lower-limb amputations other than those caused by injury, and new cases of blindness among adults. As previously discussed, Obesity is a serious health concern and factor affecting incidence of chronic diseases.

Chronic diseases tend to become more common with age. Eighty-nine percent of Americans over the age of 65 have at least one chronic condition, and 68% or more have two or more chronic diseases. In 2015, the ten most common chronic conditions for adults 65+ on Medicare were hypertension (58%), high cholesterol (47%), arthritis (31%), ischemic heart disease (29%), diabetes (27%), chronic kidney disease (18%), heart failure (14%), depression (14%), Alzheimer's Disease and dementia (11%), and chronic obstructive pulmonary disease (11%).

Chronic diseases and conditions are on the rise worldwide. An aging population and behavioral factors including the adoption of more sedentary lifestyles are pushing obesity rates and cases of diseases such as diabetes upwards. According to the World Health Organization, chronic disease prevalence is expected to rise 57% by the Year 2020.

Some chronic diseases are impacted by factors which are beyond an individual's control like age, family history and genetics, but many are preventable with behavioral modifications like quitting or avoiding smoking, secondhand smoke, chemical fumes and dust; exercising; eating healthy by avoiding high fats, salt, and sugar; sleeping; managing stress levels; and abstaining from excessive alcohol consumption.

- Four of the top 5 leading causes of death for Somerset County are chronic diseases: diseases of the heart, cancer, stroke, and Alzheimer's Disease.
- Somerset County's Average Annual Mortality Rate (AAMR) for heart disease deaths (169.0/100,000) was higher than the CHR benchmark of 103.4/100,000.
- The AAMR for Alzheimer's Disease increased 74% between 2007 and 2016.
- Hospitalized patients from Somerville and Manville had among the highest rates for heart failure and CHF diagnoses.
- More than a quarter (26.7%) of Somerset County residents indicated they were told they had high blood pressure.
- A third of Somerset County residents reported high cholesterol.
- Patients using a hospital service from Skillman reported the highest rate for cancer diagnosis (45.62/1,000).
- Residents of Manville had the highest rate of COPD diagnosis.
- Nearly 10% of Somerset County residents reported diabetes, higher than New Jersey residents' statewide rate and rates for residents of Hunterdon and Morris Counties.
- The percent of Somerset County residents reporting arthritis increased from 18.8% in 2013, to 22.5% in 2016.
- Chronic Disease was the top health priority selected by the Workplace Wellness focus group.
- Early on-set of chronic diseases due to sedentary lifestyle and a number of chronic diseases were among top health priorities identified by key informants.
- Somerset County male survey respondents and those over 65 were the sub-groups most concerned about cancer.
- Diabetes was a top concern among Hispanics and those with lower incomes.
- Chronic heart failure was of highest concern to those over 65.

Ample resources are available in Somerset County for treatment of chronic disease. Private physician practices and multiple urgicare centers are located throughout the county. Primary care clinics accepting Medicaid provide treatment for chronic illnesses are located at RWJUH Somerset and Zufall Health Center in Somerville. Resources available for detection of chronic disease at RWHUH Somerset include the Tobacco Quitcenter, Cancer Risk Evaluation Program, Cardiac Testing Services, CPR Classes, Community Health Programs, Health Information and Women's Services. Community-based programs are available at American Diabetes Association, Cancer Support Center of Central New Jersey, Somerset County Office on Aging and Disabilities, Regional Chronic Disease Coalition for Morris and Somerset County (RCDC), and United Way of Northern New Jersey.

#### 4. Access to Care

An individual's ability to access health services has a profound impact on every aspect of their health. Regular and reliable access to care can prevent disease and disability, detect and treat illnesses or health conditions, increase quality of life, and increase life expectancy. Access to quality preventive care may detect disease at earlier, more treatable stages.

The largest barrier to access is a lack of insurance. People without insurance are less likely to have a regular source of care and more likely to skip routine medical care due to cost. Both of these factors increase risk of serious illness and disability. Individuals with a usual source of care have better outcomes, fewer disparities, and lower costs.

Health literacy and transportation are additional barriers to health. Language, culture, and low health literacy are other barriers to high quality care. Delivering high quality care is dependent upon cultural competency and communication. Transportation impacts people living in income challenged communities and the elderly, many of whom no longer drive, most profoundly. Transportation barriers lead to rescheduled or missed appointments, delayed care, and missed or delayed medication use. These consequences may result in poorer management of chronic illness and poorer health outcomes.<sup>6</sup> Assisting elderly patients, more dependent on public transit, with navigating and access to the health care system can help ensure timely and appropriate diagnosis and treatment of disease.

In addition to financial and environmental barriers, access to healthy foods presents a barrier to maintaining one's personal health. Diets high in fruits and vegetables, whole grains and lean proteins can help us maintain healthy weight and avoid chronic diseases. Poor nutrition can also impact day-to-day life by affecting concentration, work or school performance. For children, a poor diet can impact growth and development. But for many families and individuals eating a healthy diet is not as simple as choosing to eat healthier food. Some communities or neighborhoods lack grocery stores that sell fresh fruits and vegetables, and sometimes these foods are too expensive for people to buy. In order to eat healthier, people need better access to healthy and affordable food.

Educating people about the benefits of eating healthy is important, but these efforts alone are insufficient. To change behavior and improve population level dietary habits, experts recommend a collective approach that improves the availability and affordability of healthy foods where people live, work, learn and play. Various strategies have been employed by cities and towns to do just that. For example, zoning

<sup>6</sup> http://www.ncbi.nlm.nih.gov/pubmed/23543372

and tax laws can make it easier for new grocery stores, farmer's markets and community gardens to locate in the area, schools can develop farm-to-school programs that support buying locally grown fruits and vegetables, and provide gardening experiences, and local governments can work to improve the production, distribution, and affordability of fruits and vegetables in underserved communities.

- Key informants expressed concern over (1) the lack of health equity and transportation; (2) the lack of health professionals for medically underserved populations; and (3) health literacy.
- Focus group members had similar concerns with economic and environmental barriers to access.
- More Somerset County children were using SNAP benefits than children in Hunterdon or Morris Counties.
- Approximately 20% of Somerset County children were eligible for the free school lunch program.
- Approximately 7% of Somerset County residents had limited access to healthy food.
- In 2016, nearly 7% of Somerset County residents 18-64 were uninsured.

Visiting Nurse Association of Somerset and Middlesex Counties provides home nursing, home health aide and homemaker assistance to eligible county residents based on medical and financial need. Zufall Health Center sponsors a Delta Dental mobile van. Free breast and cervical cancer prevention and treatment is available to women of low income through New Jersey Cancer Education and Early Detection (CEED) screening program.

Free or low-cost bus transportation provided by the county include SCOOT, DASH, CAT and a ride hailing service through RideWise TMA. Somerset County Transportation Para-Transit Services serves seniors (60+) and disabled. Medical transportation for Medicaid recipients is available from the county through Logisticare, Inc. Zufall Health Center, a federally qualified health center, will provide transportation services as well as outreach programs for agricultural workers, homeless persons, veterans, seniors, pregnant women and public housing residents.

Public access programs in Somerset County are offered through Somerset County Office of Human Services, Food Bank Network, Office on Aging and Disabilities as well as United Way of Northern New Jersey. The Somerset County Homelessness Trust Fund offers rental assistance, supportive services and housing assistance. SNAP food assistance is also available through the county. Community-based organizations offering access assistance include Catholic Charities, Jewish Family Services, Resource Center of Somerset County, Zerepath Christian Church and other church-based groups.

In addition to the prioritized needs discussed above, this CHA identified the following as additional health needs for the communities:

- Health concerns related to aging
- Transportation
- Awareness of services and resources
- LGBTQIA
- Health Equity
- Cancer diagnosed at late state
- Heart disease and related risk factors
- Diabetes

#### 1. INTRODUCTION

In 2018, Robert Wood Johnson University Hospital Somerset (RWJUH Somerset), in partnership with the Healthier Somerset County Coalition, undertook development of its third Community Health Assessment (CHA). The CHA was designed to ensure that the Hospital and other Somerset County public, private, and community-based organizations continue to effectively and efficiently serve the needs of their communities. The CHA was developed in accordance with all federal rules and statutes, specifically PL 111-148 (The Affordable Care Act) which added Section 501(c) to the internal revenue code and, in accordance with New Jersey regulations N.J.A.C. 8:52 10.1-10.3 governing local boards of health. The latter regulations govern: the collection, computation, interpretation, and communication of vital statistics and health status measures within one or more New Jersey counties; the identification of threats to health; the assessment of health service needs; and the analysis, communication, and publication of access, utilization, quality, and outcome of personal health issues. This needs assessment was undertaken in this context and developed for the purpose of enhancing the quality of life throughout Somerset County and the communities served by RWJUH Somerset. This assessment builds upon the CHA conducted in 2015. In accordance with rules established in 2015, the 2015 Community Health Improvement Plan (CHIP), also referred to as the Implementation Plan, results are reviewed in **Appendix A** of this document.

The CHA uses detailed secondary public health and demographic data at state, county and municipality or zip code levels, as well as primary data collected through a community health survey, a survey of public health officers and other members of the Healthier Somerset County Coalition, focus groups and key informant interviews. In addition to the input provided by the Healthier Somerset County Coalition, a consortium of public, private and community-based organizations, RWJUH Somerset is a member of RWJBH, which convenes a multidisciplinary, multi-facility Steering Committee that provides additional support and leadership. Also, insight and expertise from the RWJUH Somerset CHA Oversight Committee helps identify health assets, gaps, disparities, trends, and priorities. The Methodology Section of this CHA details the data collection process and analysis.

RWJUH Somerset, formerly Somerset Medical Center, is located in Somerville, New Jersey. RWJUH Somerset is the sole provider of inpatient acute medical care in the county. Somerset County is located in the north-central area of the State. It is the 13<sup>th</sup> most populous county in New Jersey. In 2015, Somerset County ranked 2<sup>nd</sup> in the State and 25<sup>th</sup> among counties in the United States in terms of per capita income. Most recently, Somerset County was ranked 2<sup>nd</sup> healthiest of 21 New Jersey Counties in New Jersey by the RWJ County Health Ranking. The county once largely agricultural is now made up of mainly suburban communities. RWJUH Somerset's primary service area consists of communities located in the central portion of the county and adjacent areas of Union and Middlesex Counties.

The Healthier Somerset County Coalition in its review of both primary and secondary source data, determined four top health priority areas. The priority areas were selected using criteria that considered population health impact and if actions to improve status would be within its purview, competency and resources to implement in a meaningful manner. The top four areas are: Behavioral Health; obesity, overweight and nutrition; chronic diseases; and access to care and healthy foods.

 Behavioral Health (Mental Health and Substance Use Disorders) affects people from all walks of life, all racial and ethnic groups, and all ages. It is estimated that over 18% of adults 18+ suffer

- from some form of mental illness. Approximately 8.4% of adults had a substance use disorder in the last year and of those nearly 38% had both a substance use disorder and a mental illness.<sup>7</sup>
- Obesity, overweight and nutrition impact about 93.3 million Americans and obesity was a top
  concern of nearly 50% of Somerset County survey respondents. Overweight and obesity are risk
  factors for a number of chronic diseases including heart disease, stroke, diabetes, arthritis, and
  some cancers. Poor nutrition, unhealthy eating patterns, and lack of physical activity are
  behaviors that contribute to overweight and obesity.
- Chronic Diseases. Chronic diseases are non-communicable diseases that are prolonged in duration and are rarely cured completely. These conditions include heart disease, cancer, stroke, diabetes and arthritis. Two of these chronic diseases—heart disease and cancer—together accounted for nearly 48% of all deaths.
- Access to Care and Healthy Food. An individual's ability to access health services has a profound impact on every aspect of their health. Regular and reliable access to care can prevent disease and disability, detect and treat illnesses or health conditions, increase quality of life, and increase life expectancy. Access to quality preventive care may detect disease at earlier, more treatable stages. Access is also impacted by economic factors like health insurance and having a regular source of care and by environmental factors like transportation barriers and barriers to healthy foods.

The CHA uses detailed secondary public health data at state, county, and municipality/zip code levels, from various sources including *Healthy People 2020* and the County Health Rankings, hospital discharge data, Census Bureau, and CDC, to name a few. The two benchmark sources are described below.

- Healthy People 2020 is a 10-year agenda to improve the nation's health that encompasses the
  entire continuum of prevention and care. For over three decades Healthy People has established
  benchmarks and monitored progress over time to measure the impact of prevention activities.
  Healthy People 2020 benchmarks are used throughout the report to assess the health status of
  residents.
- The County Health Rankings, published by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, rank the health of nearly all counties in the United States. The rankings look at a variety of measures that affect health such as high school graduation rates, air pollution levels, income, rates of obesity and smoking, etc. These rankings are also used throughout the report to measure the overall health of Somerset County residents. County rates are also compared to statewide rates.

The Somerset County needs assessment was undertaken and developed for the purpose of enhancing the health and quality of life throughout the community. To this end, a broad array of information both internal and external was used to understand recent health indicators and the opportunities to provide a positive impact on health and wellness. In addition to the priority areas mentioned above, other significant needs determined through this process include:

- Health concerns related to aging
- Transportation

<sup>&</sup>lt;sup>7</sup> https://www.samhsa.gov/disorder, 5/10/18.

- Awareness of services and resources
- LGBTQIA
- Health Equity
- Cancer diagnosed at late stage
- Heart disease and related risk factors
- Diabetes

#### 2. METHODOLOGY/SERVICE AREA

#### A. METHODOLOGY

RWJ Somerset and Healthy Somerset Coalition developed an evidenced-based process to determine the health needs of Somerset County and Hospital primary service area (PSA) residents. The CHA data sources include both primary and secondary data to provide qualitative and quantitative information about the communities. Data from these sources were reviewed by the Coalition and Hospital Steering Committee to identify and prioritize the top issues facing residents in the service area (see Top Health Issues section).

The flow chart below identified the CHA and CHIP process.



#### **Prioritization Process**

Following the Coalition's review of quantitative and qualitative findings, a list of 10 issues were identified as common themes of the research. These issues became the suggested priority issues and included:

- Mental Health and Substance Abuse
- Chronic Diseases
- Overweight, Obesity, Nutrition
- Health Concerns Related to Aging
- Transportation
- Awareness of Services and Resources
- Access to Care

- Heart Disease and Related Risk Factors
- Cancer Diagnosed at a Late State
- Diabetes

Through discussion the Coalition determined to add the following to the list of health priority areas:

- LGBTQIA Health
- Health Equity
- Access to Care and Healthy Foods

Coalition members voted for each priority issue using five prioritization criteria:

- The number of people impacted
- Risk of mortality and morbidity associated with the problem
- Impact of the problem on vulnerable populations
- Meaningful progress can be made within a 3-year timeframe
- Community's capability and competency to impact.

A tally of all ballots cast resulted in the top 4 priority areas being selected:

- Mental Health and Substance Abuse
- Overweight, Obesity, Nutrition
- Chronic Disease
- Access to Care and Healthy Foods

#### Secondary Data Sources

Over 100 secondary data sources are compiled in this CHA, presenting data by indicator by county and state. Sources include: The United States Census Bureau, Centers for Disease Control and Prevention (CDC), New Jersey Department of Health (NJDOH), and Behavioral Risk Factor Surveillance System (BRFSS). See **Appendix B** for a detailed list of sources.

**Appendix C** contains a detailed report of cancer incidence and mortality by cancer site for Somerset County for the years 2010-2017. In addition, hospital tumor registry data is utilized to understand stage of cancer at time of diagnosis.

#### **Health Profile**

Section 5 provides a comprehensive discussion of health outcomes, as well as the health factors that contribute to the health and well-being of Somerset County residents.

#### **Color Indicator Tables**

Throughout the Health Profile Section of this CHA, the color indicator tables compare county level data to *Healthy People 2020* targets, County Health Rankings benchmarks, and New Jersey State data. Data by race/ethnicity is compared to data for all races in the county, unless otherwise indicated. Somerset County was the midpoint value compared to a range 20% higher than the value for New Jersey, *Healthy People* 

2020, or County Health Rankings Benchmarks, or 20% lower than the value for New Jersey, *Healthy People 2020*, or County Health Rankings Benchmarks. If the county value was within the range 20% lower or 20% higher than the comparison indicator, or considered within reasonable range, the indicator will be yellow. The table will be red if the Somerset County value is more than 20% worse or lower than the indicator value. If the Somerset County value is 20% better or higher than the indicator value, the table will be green.

#### **Primary Data Sources**

#### **Community Health Needs Surveys**

On-line survey Interviews were conducted among 792 residents of Somerset County and 701 residents of RWJUH Somerset's PSA. To ensure a representative sample, on-line responses were supplemented with telephone administered surveys to an additional 37 individuals. Bruno and Ridgway Research Associates, Inc. administered the on-line and telephone surveys from April to May 2018. Survey results are incorporated into this CHA. (See Section 3)

A Community Health Survey was also undertaken of residents of RWJUH Somerset's Primary Service Area. The respondents' views largely followed those of the county. A slightly larger percentage of PSA residents identified obesity as a major concern, and a slightly higher percentage of county residents noted their health as very good or excellent. Results of the Community Health Survey of RWJUH Somerset survey respondents can be found in Appendix D.

#### **Healthier Somerset County Coalition Survey**

A survey was administered to members of the Healthier Somerset County Coalition. The survey consisted of the following questions:

- 1. Identify the top six priority health needs for municipalities in Somerset County
- 2. Identify the primary barriers to improvement for these health needs
- 3. Identify additional items to consider in the Community Health Assessment.

The top three health needs identified in the county included behavioral health, transportation, and access to care. The top three barriers to care included stigma, transportation, and access to care.

#### **Focus Group Discussions**

Three focus groups were undertaken to uncover additional information from key community groups and individuals with respect to health needs, challenges and barriers, and suggestions for improving access to health care services. A focus group was conducted with providers, advocates and peers in Behavioral Health, another was conducted agency representatives of organizations working with Medicaid and Medically Underserved residents. A third group was held with business groups to discuss the issue of workplace health.

#### **Key Informant Interviews**

The key informant interviews reached out to other community representatives to ensure that their needs and concerns were given consideration.

#### World Café Meeting

The World Café meeting was held on June 28, 2018, and brought together community representatives to discuss four issues including:

- 1. What does a healthy community look like, and what do you view as barriers to good health in Somerset County?
- 2. What is the best thing about Healthier Somerset? Why are you here today, and a year from now what will you bring back to your organization?
- 3. Based on the data you heard today, which items are most relevant to our Community Needs Assessment? What, or whose, input is missing?
- 4. For our 2015-2018 Community Health Improvement Plan implementation, what worked well? What didn't go so well? What lessons did we learn implementing the 2015 CHIP that we can do better next time? Or, what one thing do you wish we could all work together on over the next three years to make our towns healthier?

#### **Assets and Gaps**

Section 6, Assets and Gaps, summarizes the preceding components of the CHA. Assets highlight county, zip code, or RWJUH Somerset service area information indicating improvement over time, in comparison to other counties and the State, or in comparison to other races or genders. Gaps focus on disparities in Somerset County or the RWJUH Somerset service area that have a negative trend, in comparison to other counties in the State or to other races or genders.

#### Resource Inventory

A service area-specific resource inventory is included as **Appendix E**, which details health and social service resources available to residents in Somerset County. Providers' names, addresses, and phone numbers and type of services provided are contained in the inventory.

#### B. SERVICE AREA

The CHA focuses primarily on the health needs of Somerset County residents. Much of the data is provided at the county level, but where available city or zip code level data are provided to enhance understanding of specific regions or populations. The county consists of the following zip codes:

| ZIP Code | ZIP Name       |
|----------|----------------|
| 07059    | Warren         |
| 07069    | Plainfield     |
| 07059    | Watchung       |
| 07920    | Basking Ridge  |
| 07921    | Bedminster     |
| 07924    | Bernardsville  |
| 07931    | Far Hills      |
| 07934    | Gladstone      |
| 07938    | Liberty Corner |
| 07938    | Basking Ridge  |
| 07939    | Lyons          |
| 07977    | Peapack        |
| 07978    | Pluckemin      |
| 08502    | Montgomery     |
| 08502    | Belle Mead     |
| 08504    | Blawenburg     |
| 08528    | Kingston       |
| 08553    | Rocky Hill     |
| 08558    | Montgomery     |
| 08558    | Skillman       |
| 08805    | Bound Brk      |
| 08805    | Bound Brook    |
| 08807    | Bridgewater    |

| ZIP Code | ZIP Name          |
|----------|-------------------|
| 08821    | Flagtown          |
| 08823    | Franklin Park     |
| 08835    | Manville          |
| 08836    | Martinsville      |
| 08844    | Hillsborough      |
| 08844    | Millstone         |
| 08853    | Neshanic Station  |
| 08853    | Branchburg        |
| 08869    | Raritan           |
| 08873    | Franklin Township |
| 08873    | East Millstone    |
| 08873    | Zarepath          |
| 08873    | Somerset          |
| 08873    | Middlebush        |
| 08875    | East Millstone    |
| 08875    | Somerset          |
| 08876    | Finderne          |
| 08876    | Branchburg        |
| 08876    | South Branch      |
| 08876    | Somerville        |
| 08876    | North Branch      |
| 08880    | South Bound Brook |
| 08890    | Zarepath          |
|          |                   |

RWJUH Somerset is located in Somerville, New Jersey. It is the sole hospital serving residents in Somerset County. Due to the close proximity of the Hospital to Middlesex County its service area includes towns in Middlesex County (e.g., Piscataway, Middlesex). In addition, the Primary Service Area doesn't extend into many of the wealthier northern Somerset County towns including Far Hills, Bernardsville, or to the south townships of Monroe, Belle Meade or Skillman. The Hospital's primary service area (PSA) consists of the following zip codes:

| ZIP Code | ZIP Name          |
|----------|-------------------|
| 07059    | Warren            |
| 07060    | Plainfield        |
| 07080    | South Plainfield  |
| 08805    | Bound Brook       |
| 08807    | Bridgewater       |
| 08812    | Dunellen          |
| 08835    | Manville          |
| 08844    | Hillsborough      |
| 08846    | Middlesex         |
| 08854    | Piscataway        |
| 08869    | Raritan           |
| 08873    | Somerset          |
| 08876    | Somerville        |
| 08880    | South Bound Brook |

The Hospital's service area is determined by taking into consideration three factors: patient origin, market share, and geographic

#### New Providence Tewksbury Long Hill Far Hills Berkeley Heights Bernards Scotch Plains ·Plainfield South Plainfield Bound Brook Raritan **NEW JERSEY** South Bound Brook Piscataway ·Manville Franklin Center •Edison New Brunswick ·Franklin

East Rocky Hill

©2018 CALIPER; ©2017 HERE

**RWJUH-Somerset Service Area** 

continuity/ proximity. Zips representing approximately 50% of the RWJUH Somerset patient origin form the initial PSA. Added to this list is any zip code in which the Hospital has a high market share presence, any zip code with low market share is deleted from the PSA definition and becomes part of the secondary service area (SSA). Geographic proximity to create a contiguous area completes the service area determination. This area contains some zip codes from the contiguous counties of Union and Middlesex. For purposes of this CHA, Somerset County statistics were deemed to be most relevant for review.

-Montgomery

Most of the secondary data in this report is based on county level data. City or zip code level data is provided wherever possible to enhance the understanding of the specific needs of service area residents. Data obtained from the qualitative analyses provide further insight into health issues facing the county as well as the communities served by RWJUH Somerset.

South River

#### 3. SOMERSET COUNTY COMMUNITY HEALTH SURVEY

#### A. SOMERSET COUNTY RESIDENT SURVEY SUMMARY

#### **Research Objective**

The primary objective of this research was to obtain opinions of residents within Somerset County in order to meet the government CHA requirements. Areas of focus included:

- Health issues and concerns that impact the community.
- Barriers to accessing health care.
- Strengths and weaknesses of community services offered.
- Personal health attitudes, conditions and behaviors.

#### Methodology

Interviews were conducted among residents of Somerset County. Interviews were conducted on-line and by telephone. A link to the on-line survey was displayed on hospital web pages and social media sites. Additionally, postcards were handed out at area businesses and libraries, directing residents to the online survey link. A telephone augment was conducted to capture additional interviews in specific areas and among specific ethnic groups. For the telephone portion, a representative sample of households was generated from a database of residential telephone numbers. The interview averaged 15-20 minutes in length and was conducted April 27-June 18, 2018.

#### Sample Composition Highlights

A total of 792 interviews were conducted in Somerset County among adults aged 21+. These interviews broke down among gender, age and ethnicity as follows: 548 (69%) Females, 194 (24%) Males; 208 (26%) 21-49 years of age, 302 (38%) 50-64 years of age, 232 (29%) 65+ years of age; 529 (67%) Caucasian, 52 (7%) African-American, 99 (13%) Hispanic, 44 (6%) Asian.<sup>8</sup>

#### **Executive Summary**

This Community Health Assessment study has generated learnings and insights that can be used to effectively serve the health care needs of the community.

Obesity is the #1 health concern of area residents. High levels of concern were also cited for chronic illnesses such as diabetes, cancer and heart disease.

 Obesity is a leading contributor to chronic illnesses and a major cause of death in the U.S. More than one-half of those surveyed claim to have high blood pressure, high cholesterol and/or a weight problem.

<sup>&</sup>lt;sup>8</sup> Not shown are "other" mentions and "no answer".

- Increasing outreach and developing educational programs that address nutrition and wellness, with focus on preventative lifestyle behaviors, could improve the health and overall well-being of area residents.
- Healthy eating and exercise programs in schools could aid in lowering childhood obesity and the risks associated with chronic conditions.

Additionally, high levels of concern were cited regarding mental health, substance use/abuse, health concerns related to aging and high stress lifestyles.

 The rising opioid epidemic and increased concern about mental health issues presents opportunity to increase education to both community residents and to health care professionals in an effort to help reduce the growing trend of opioid/Rx drug abuse and the stigma associated with mental health.

Regardless of age, income level or ethnicity, the key barriers to seeking medical care are insurance issues and related cost concerns.

• Addressing the economic challenges associated with access to care, including insurance issues, will serve to improve access and affordability of care to a greater proportion of the community.

Somerset County is regarded highly by most residents, with many positive services offered to the community. However, specific needs for improvement are cited in the areas of transportation services, healthy food choices in school, safe/affordable housing and interpersonal violence.

 Since access to services can be challenging for some, expanding transportation services, particularly for seniors and persons with disabilities, can improve access to care for these population groups.

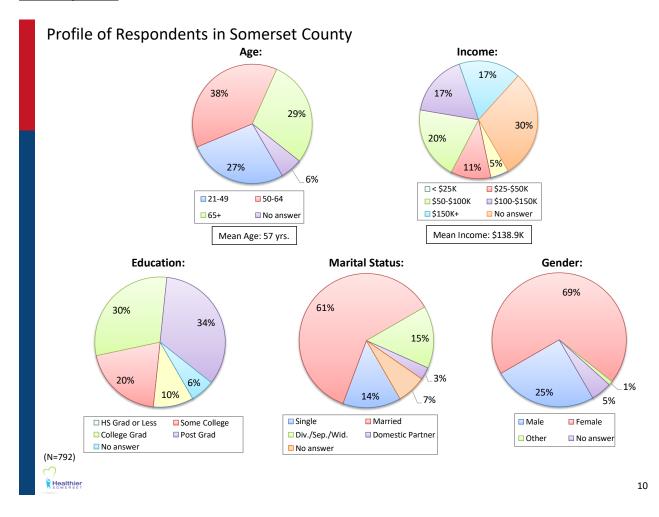
Somerset County residents describe their overall health as being good/very good and exhibit many positive health-related behaviors (healthy eating, physical activity, annual physicals and recommended screening tests). They report their children eat breakfast daily and are physically active. However, a substantial portion of residents (Hispanics, lower income, older residents) do not eat healthy, lead a sedentary lifestyle, do not get recommended screening tests, and/or suffer chronic medical conditions.

 Diagnostic screenings are crucial in the early detection, treatment and management of chronic diseases. The availability of these preventative services should be expanded to ensure they are reaching and serving minority and lower income populations in a cost-efficient manner.

In summary, survey data suggests that wellness initiatives, programs and services addressing the availability, accessibility and affordability of care would meet a significant portion of the communities' needs.

#### B. SUMMARY TABLES OF SOMERSET COUNTY RESIDENT SURVEY

#### Who Responded?



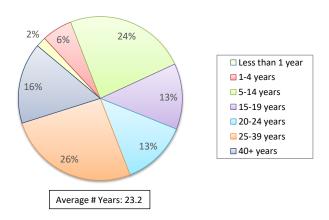
#### Profile of Respondents in Somerset County – (continued) 100% 80% 67% 60% Ethnicity\*^: 40% 20% 6% 2% 0% Black White Hispanic Asian Other 100% 80% 60% 48% Employment^: 40% 27% 20% 11% 6% 2% 2% 0% Full-Time Part-Time Retired Disabled Unemployed Student Homemaker No Answer 100% 80% 72% Health 60% Insurance^: 40% 27% 20% 6% 5% 4% 2% 0% Private Medicare Medicaid Other None No Answer

\*Quotas were established to align closely with census data.

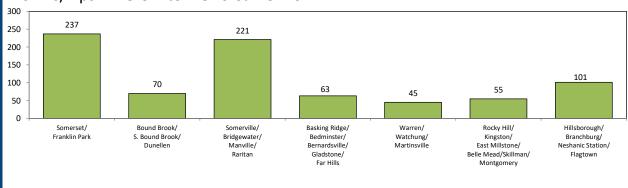
^ = Multiple mentions.

Community Health Assessment Healthier Somerset/RWJUH Somerset Service Area 11

## Length of Time in Area



## Towns/Zips Where Interviews Came From

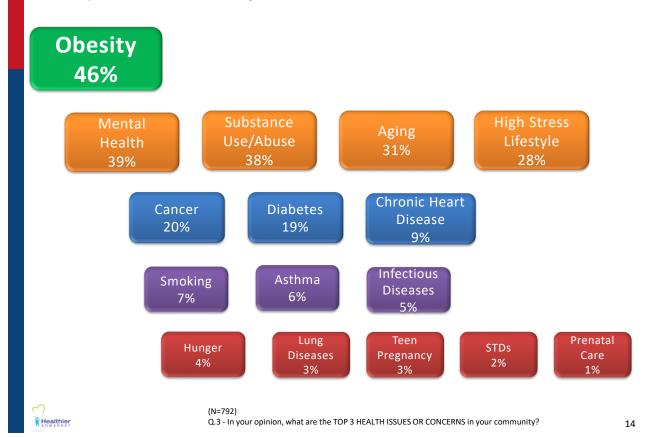


Healthier (N=792)

#### **Health-Related Concerns of Area Residents**

Major Health Concerns Among Residents in the Somerset County Community

• Obesity is the #1 health concern among area residents.



# Summary of Health Concerns by Subgroups **Obesity**

- #1 health concern among most age, gender, income, education and ethnic groups.
- Particularly high concern among males; least concern among Asians.

# Substance

Aging

## **High Stress**

- Female
- Younger (<65)</li>
- Highest income (\$150K+)
- Caucasian
- Caucasian
- Younger (<65)
- Caucasian • Older (65+)
- Asian/Hispanic
- Younger (<65)

#### Cancer

- Male
- Older (65+)

#### Diabetes

- Lower income (<\$50K)
- Hispanic

#### Chronic Heart Disease

• Older (65+)

#### Smoking

- Male
- Younger (<50)</li>
- Hispanic
- Lower income (<\$50K)

## Infectious

- Hispanic/Asian
- Lower income (<\$50K)

#### Hunger

#### Lung Disease

Older (65+)

#### Prenatal Care

- Hispanic
- Lower income (\$25-\$50K)

#### STDs

- Hispanic Lower income (<\$50K)</li>

#### Teen Pregnancy

- Hispanic
- Lower income (<\$50K)
- Younger (<50)</li>

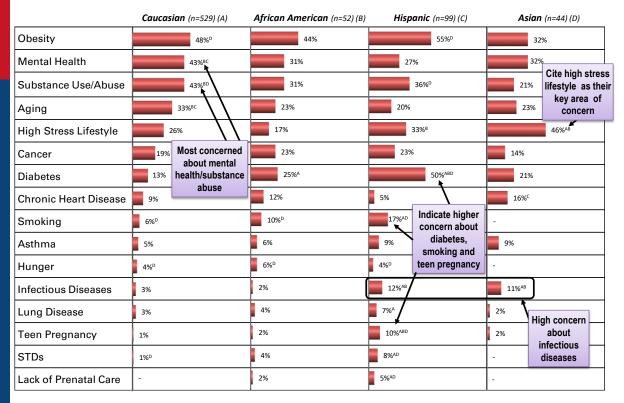


(N=792)

Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?

15

#### Community Health-Related Issues of Concern – by Ethnicity

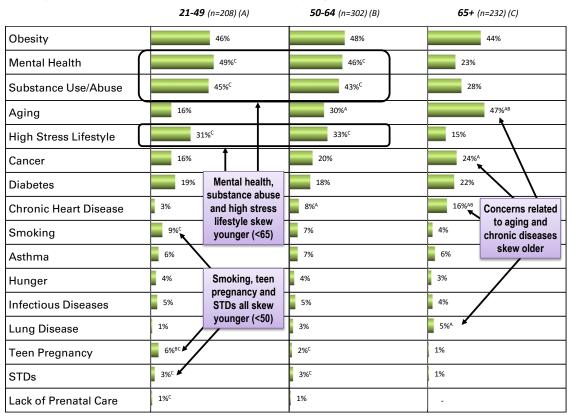




Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community? (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

16

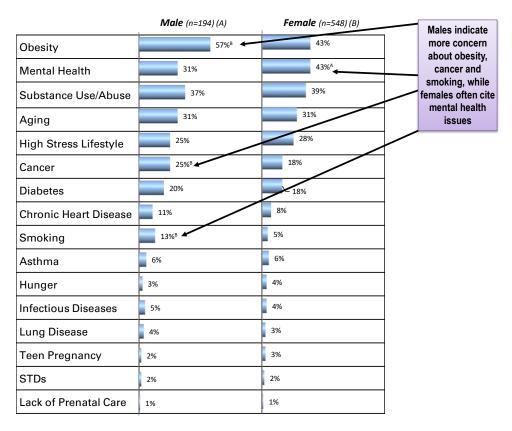
## Community Health-Related Issues of Concern – by Age





Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community? (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

#### Community Health-Related Issues of Concern – by Gender

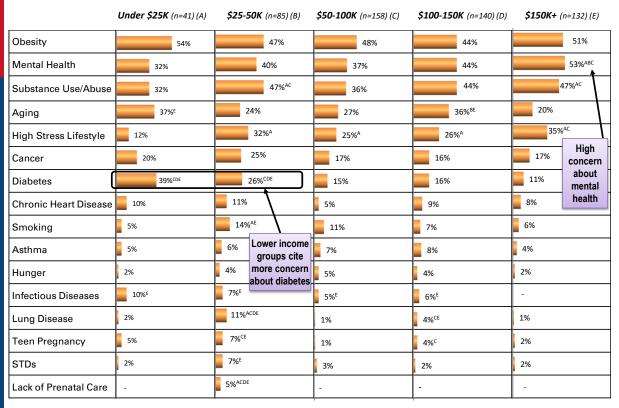




Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community? (A/B) = Significantly greater than indicated cell at the 90% confidence level.

18

#### Community Health-Related Issues of Concern – by Income





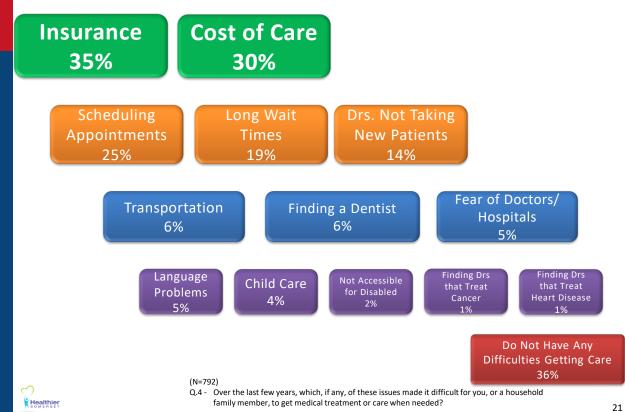
Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?  $(A/B/C/D/E) = Significantly \ greater \ than \ indicated \ cell \ at \ the 90\% \ confidence \ level.$ 

19

### **Barriers to Accessing Health Care Services**

### Major Barriers to Accessing Health Care in the Somerset County

- Insurance and cost of care are the key barriers to obtaining health care services among area residents.
- Roughly one-third of residents claim they do not experience any difficulty accessing the care they need.



## Summary of Health Care Barriers by Subgroups



# **Cost of Care**

- · Virtually all age, gender, income, education and ethnic groups cite insurance and cost of care as key issues.
- Particularly high concern among lower income residents and Hispanics.

# Scheduling Appointments

- Younger (<65)
- Female

## Long Wait Times

Younger (<65)</li>

# Doctors Not Taking New Patients

## Transportation

- Hispanic
- Lowest income(<\$25K)</li>

### Fear of Doctors/ Hospitals

- Asiar
- Lowest income (<\$25K)

#### Finding a Dentist

- Lower income (<\$50K)</li>
- Hispanic
- Younger (<50)

#### Language Problems

- Lower income (<\$50K)</li>
- Hispanic
- Younger (<50)

### Child Care

(N=792)

- Younger (<50)</li>
- Hispanic

# Not Accessible for Disabled

Hispanic

### Find Drs that Treat Cancer

 Lowest income (<\$25K)</li>

#### Find Drs that Treat Heart Disease

• Lower income (<\$50K)

# No Difficulty Getting

Care

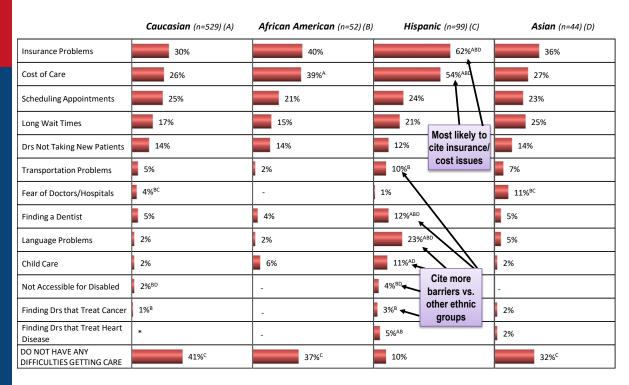
• Older (65+)

- Higher income (\$50K+)
- Least among Hispanics



Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

## Barriers to Accessing Health Care Services – by Ethnicity



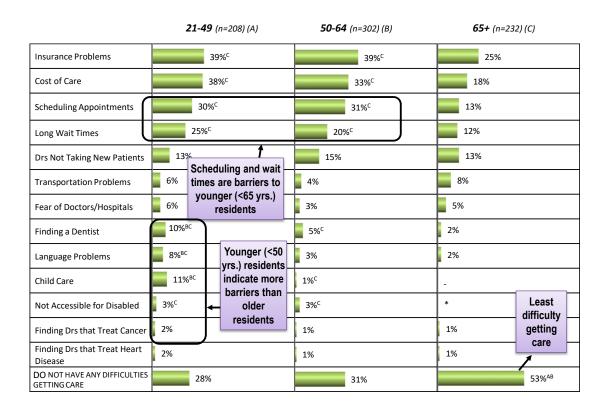
<sup>\* =</sup> Less than 0.5%.



Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

## Barriers to Accessing Health Care Services - by Age

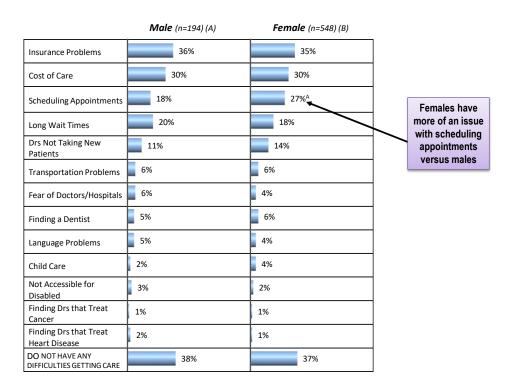




Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

## Barriers to Accessing Health Care Services – by Gender



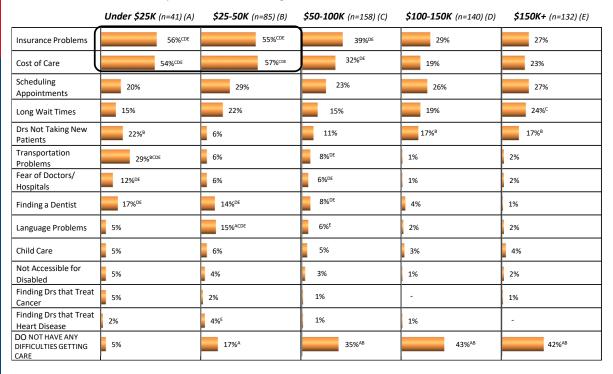


Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

(A/B) = Significantly greater than indicated cell at the 90% confidence level.

## Barriers to Accessing Health Care Services – by Income

• Lower income groups (<\$50K) have more barriers vs. higher income groups and are the most likely to encounter insurance/cost problems when seeking care.



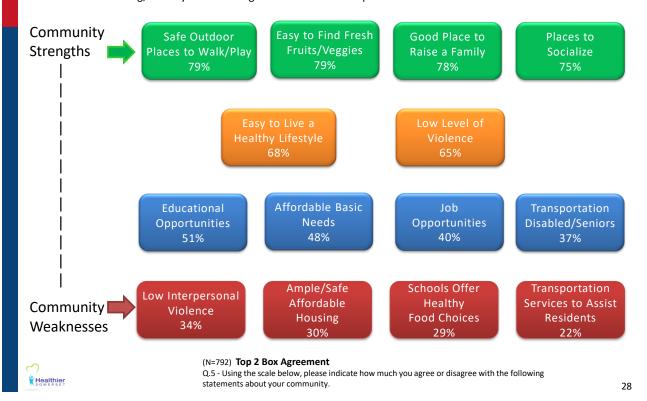


Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?
 (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

### **Community Strengths and Weaknesses**

#### Area Strengths and Weaknesses

- A large majority of residents surveyed feel their community is a good place to raise a family, with safe places to walk/play, ease of finding fresh food and ample places to socialize.
- On the other hand, the community receives relatively low scores in the areas of interpersonal violence, safe, affordable housing, healthy food offerings at schools and transportation services to assist residents.



### Summary of Community Strengths and Weaknesses by Subgroups

- · Overall, Asians tend to rate community services high, while Hispanics rate community services low versus other ethnic groups.
- Additionally, those in higher income brackets are more positive to their community services versus those in lower income
  brackets.

# Safe Outdoor Places to Walk/Play

- Asian
- Higher income (\$50K+)
- Least among Hispanic

# Easy to Find Fresh Fruits/Veggies

- Higher income (\$50K+)
- Least among Hispanic

#### Good Place to Raise a Family

- Asian
- Higher income (\$50K+)
- Least among Hispanic

# Places to

- Older (65+)
- Higher income (\$50K+)

# Easy to Live a Healthy Lifestyle

- Higher income (\$50K+)
- Older (50+)
- Least among Hispanic

#### Low Level of Violence

- Highest income (\$150K+)
- Least among Hispanic

# Educational Opportunities

- Higher income (\$50K+)
- Older (65+)
- Least among Hispanic

#### Affordable Basic Needs

- Asian
- Older (65+)
- Male
- Higher income (\$100K+)

#### Job Opportunities

- Male
- Caucasian/Asian
- Higher income (\$50K+)

# Transportation Services for Disabled/Seniors

- · African American
- Male

# Low Interpersonal Violence

- Male
- Asian

### Ample/Safe Affordable Housing

- Asian
- Higher income (\$100K+)

# Schools Offer Healthy Food Choices

- Younger (<50)</li>
- Lowest among Caucasian

# Transportation Services to Assist Residents

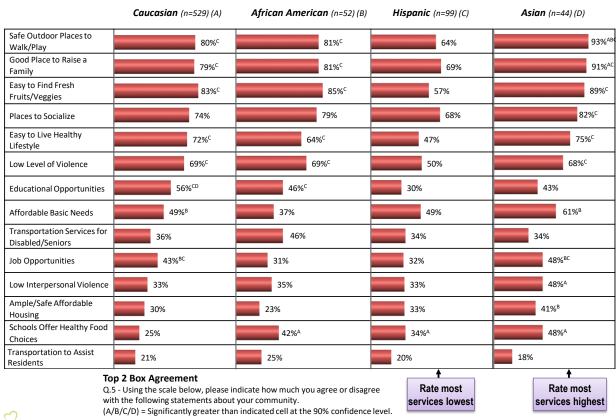
- Older (65+)
- Lower income (<\$50K)



(N=792) Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

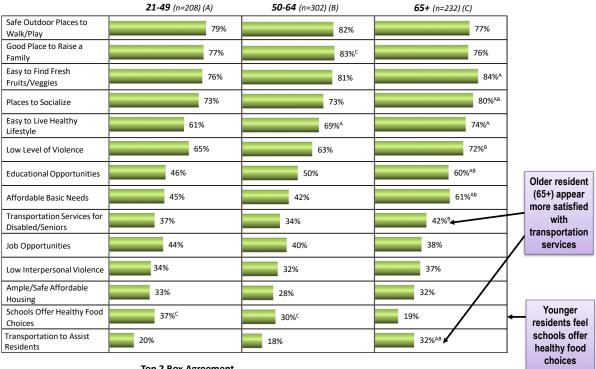
## Community Strengths and Weaknesses – by Ethnicity



Healthier

## Community Strengths and Weaknesses – by Age

Older residents (65+) are more positive towards many community services such as having places to socialize, educational opportunities and affording basic needs vs. their younger counterparts.



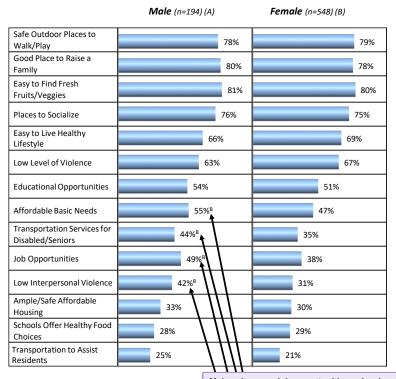


Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

## Community Strengths and Weaknesses – by Gender



#### Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

(A/B) = Significantly greater than indicated cell at the 90% confidence level.

Males cite more job opportunities, a low level of interpersonal violence, better able to afford basic needs and transportation services for seniors/disabled vs. females



## Community Strengths and Weaknesses – by Income

• In general, those in higher income brackets are more positive to their community services versus those in lower income groups.





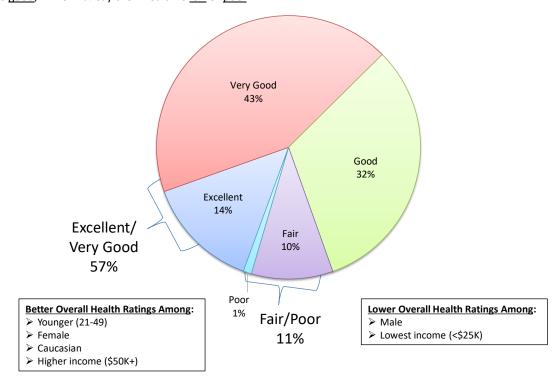
Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community. (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

## **Personal Health Habits and Practices**

## Self-Description of Overall Health

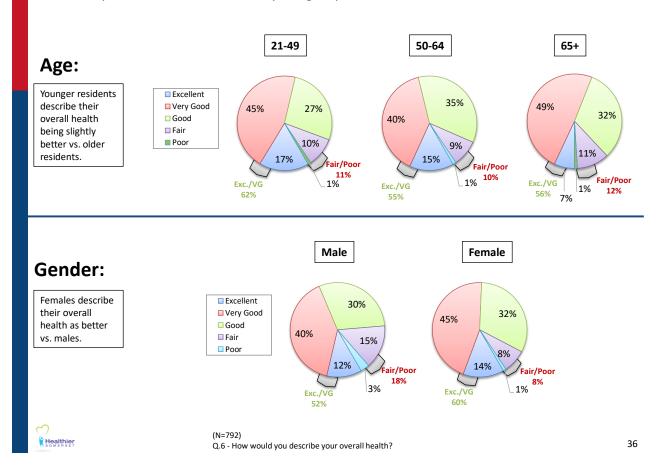
• In all, over one-half of residents describe their health as being <u>excellent</u> or <u>very good</u>; one-third describes it as <u>good</u>, while 11% say their health is <u>fair</u> or <u>poor</u>.



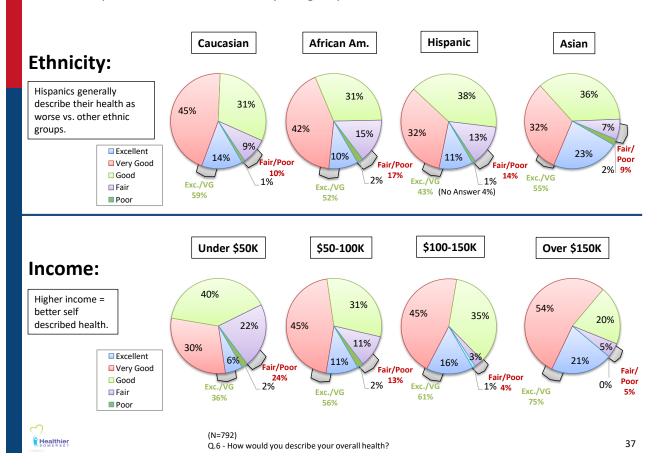
Healthie

(N=792) Q.6 - How would you describe your overall health?

## Self-Description of Overall Health – by Subgroups



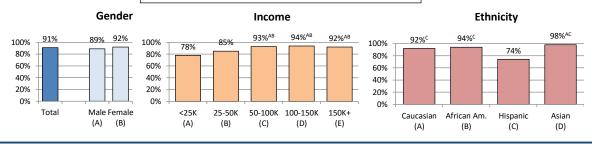
## Self-Description of Overall Health – by Subgroups – (continued)



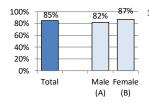
## Self-Description of Understanding and Eating Healthy

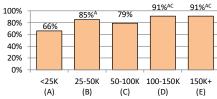
- The vast majority of residents feel they understand what food is healthy and most say they eat healthy food regularly.
- Those with higher incomes are most likely to eat healthy on a regular basis.
- While African Americans claim to understand what healthy food is, they are the least likely to eat healthy regularly.

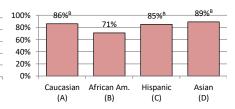
#### Have enough information to understand what food is healthy



#### Eat healthy food on a regular basis







(N=792)

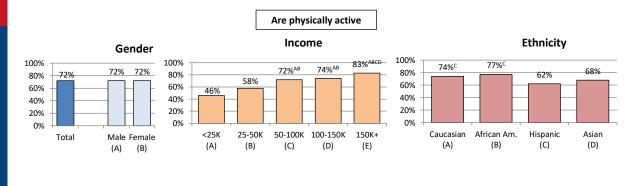
Q.11 - Do you feel that you...

Gender: (A/B) = Significantly greater than indicated cell at the 90% confidence level. Income: (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level. Ethnicity: (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.



## Self-Description of Physical Activity

- In all, 7 of 10 residents claim to be physically active; highest among the higher income brackets.
- Hispanics tend to be the least physically active.





Q.11 - Do you feel that you...

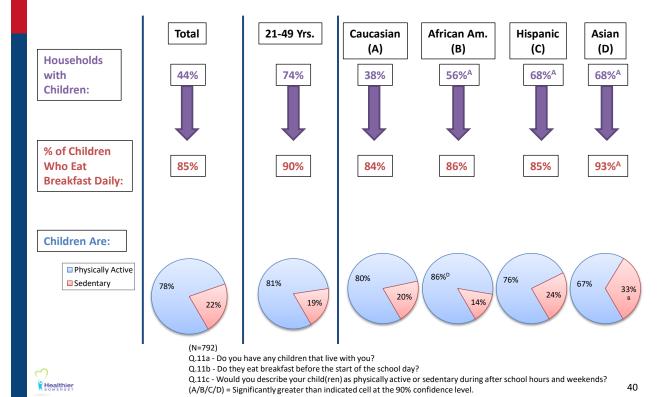
Q.11 - How often do you exercise each week?

Gender: (A/B) = Significantly greater than indicated cell at the 90% confidence level. Income: (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level. Ethnicity: (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

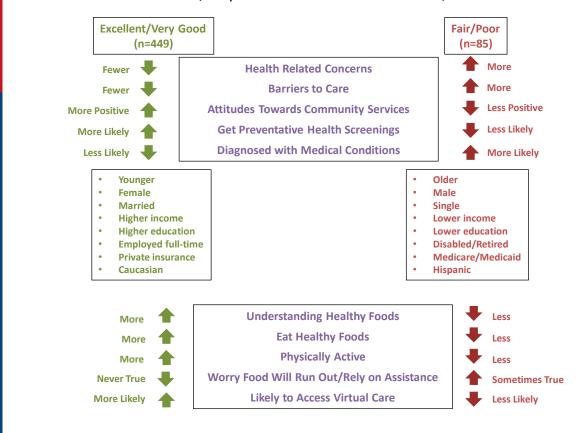


## Activity Level of Children in Household

- · In households with children, the large majority are eating breakfast daily and are physically active.
- While both Hispanics and Asians have a high level of children present in the household, they have the lowest level of physically active children.

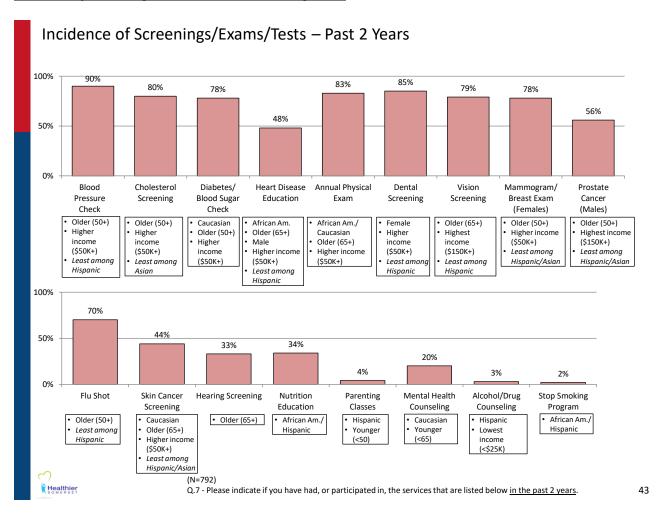


## Profile of Those in "Excellent/Very Good" Health vs. Those in "Fair/Poor" Health

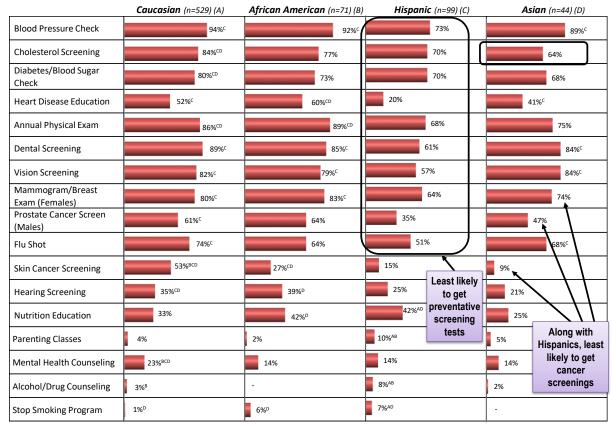


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## Incidence of Screening Tests and Conditions Diagnosed



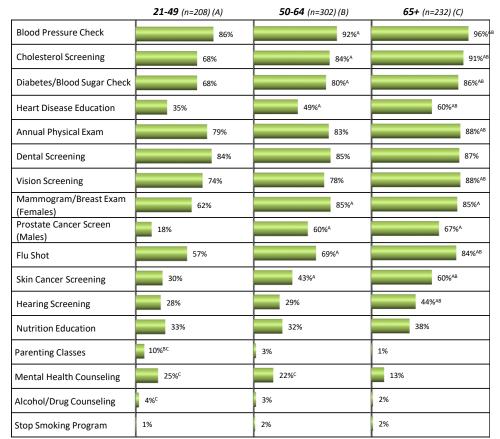
## Incidence of Screenings/Exams/Tests - by Ethnicity



Healthier

Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years. (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

## Incidence of Screenings/Exams/Tests - by Age

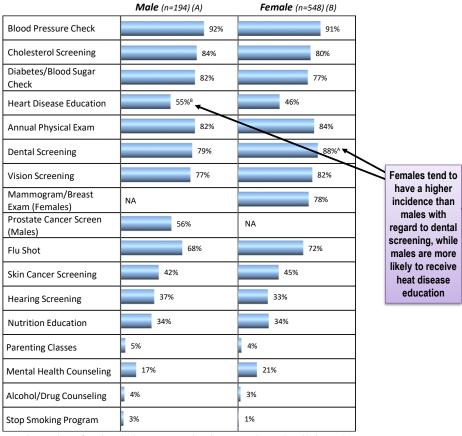


Most screening exams skew towards the older population (50+), with the exception of mental health/drug counseling and parenting classes



Q.7 - Please indicate if you have had, or participated in, the services that are listed below <u>in the past 2 years</u>. (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

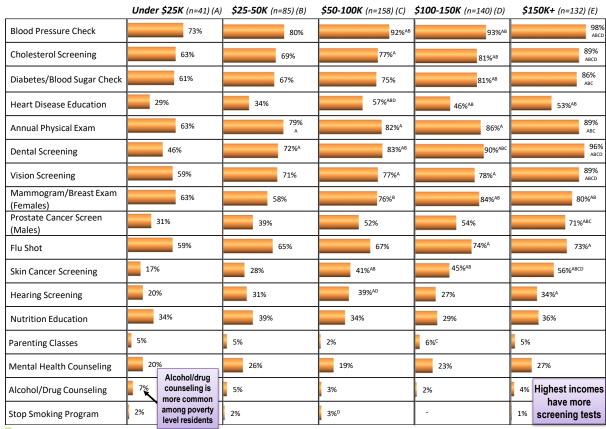
## Incidence of Screenings/Exams/Tests – by Gender





Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years. (A/B) = Significantly greater than indicated cell at the 90% confidence level. NA = Not applicable.

## Incidence of Screenings/Exams/Tests - by Income

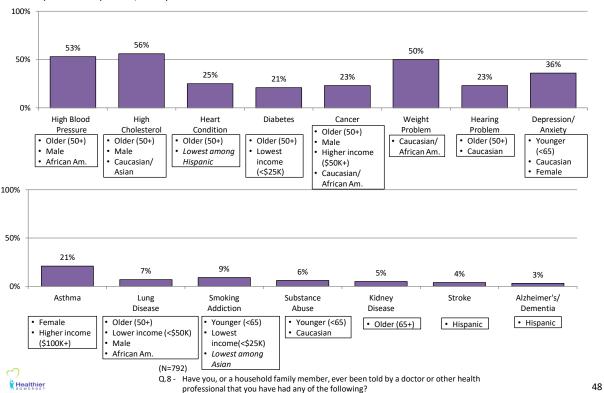


Healthier

Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years. (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

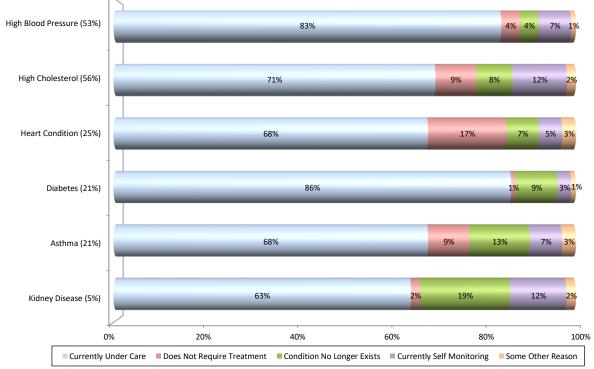
## Conditions Diagnosed by Physician (Self or Family Member)

- Older residents (50+) report being diagnosed with more conditions versus their younger counterparts, although depression/anxiety, smoking addiction and substance abuse skew towards the younger population.
- Males report somewhat higher incidence of high blood pressure, high cholesterol, cancer and lung disease, while females
  report more depression/anxiety and asthma.



## How Conditions Are Being Managed

The large majority of those reporting high blood pressure, diabetes, high cholesterol, heart conditions, asthma and kidney disease are currently under care for their conditions, with some reporting the condition no longer exists, does not require treatment or is currently being monitored on their own.



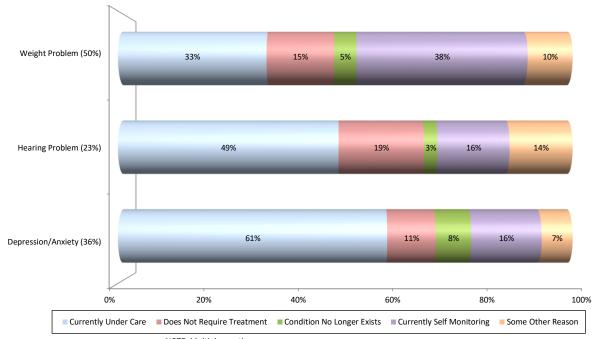
NOTE: Multiple mentions.

Q.9 - Are you/household family member currently under care for this [CONDITION]?

Q.10 - Why are you/household family member not under current care for the [CONDITION] you mentioned? Would you say it is because...

## How Conditions Are Being Managed – (continued)

- Of those reporting weight issues, one-third (33%) say they are currently under a physicians care for the condition, while over one-third (38%) say they are currently monitoring on their own; 15% say the condition does not warrant treatment and a handful say the condition no longer exists.
- While a majority of those diagnosed with depression/anxiety are currently under care, some are monitoring it on their own, say it doesn't require treatment or the condition no longer exists.



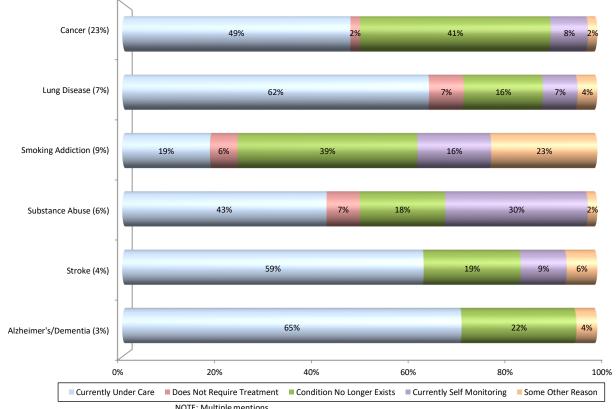
Healthier

NOTE: Multiple mentions.
Q.9 - Are you/household family member currently under care for this [CONDITION]?

Q.10 - Why are you/household family member not under current care for the [CONDITION] you mentioned? Would you say it is because...

## How Conditions Are Being Managed – (continued)

Few residents are under a physicians care for smoking addiction, with many saying the condition no longer exists.



NOTE: Multiple mentions.

 ${\sf Q.9-Are\ you/household\ family\ member\ currently\ under\ care\ for\ this\ [CONDITION]?}$ 

Q.10 - Why are you/household family member not under current care for the [CONDITION] you mentioned? Would you say it is because...

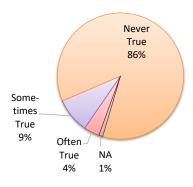
Healthier

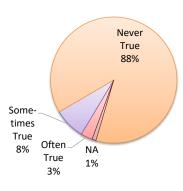
### **Additional Data**

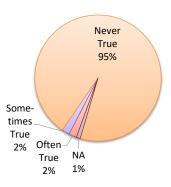
## Statements About Ample Food/Food Assistance Programs

"We worried whether our food would run out before we got money to buy more." "The food that we bought just didn't last and we didn't have money to get more."

"We rely on a community supper program, food pantry or meal assistance program to supplement our household."







Those who agree with these statements tend to be: lower income, younger, African Am. or Hispanic.

(N=792)

Q.12 - Please read the following statements that people have made about their food situation. For each one, indicate how true the statement was for your household over the last 12 months.



## **Physician Habits**

- Older and higher income residents are significantly more likely versus their younger/lower income counterparts to visit the same doctor or group every year or two for a check-up, while the younger and lower income residents are more likely to visit the doctor only when sick or need medical care.
- Hispanics tend to visit the doctor only when sick or urgent care is needed.

|  |       |                  | Age             |                  | Income           |                  |                 |                   |                    | Ethnicity        |                 |                  |                  |
|--|-------|------------------|-----------------|------------------|------------------|------------------|-----------------|-------------------|--------------------|------------------|-----------------|------------------|------------------|
|  | Total | 21-49<br>(A)     | 50-64<br>(B)    | 65+<br>(C)       | <25<br>(A)       | 25-50<br>(B)     | 50-100<br>(C)   | 100-150<br>(D)    | 150+<br>(E)        | Caucasian<br>(A) | AA<br>(B)       | Hispanic<br>(C)  | Asian<br>(D)     |
|  | %     | %                | %               | %                | %                | %                | %               | %                 | %                  | %                |                 | %                | %                |
| Go to Dr/group every year or two for check-up  | 76    | 70               | 78 <sup>A</sup> | 85 <sup>AB</sup> | 56               | 64               | 72 <sup>A</sup> | 81 <sup>ABC</sup> | 91 <sup>ABCD</sup> | 81 <sup>c</sup>  | 77 <sup>C</sup> | 58               | 71               |
|  |       |                  |                 | 1                |                  |                  |                 |                   |                    |                  |                 |                  |                  |
|  |       |                  |                 |                  |                  |                  |                 |                   |                    |                  |                 |                  |                  |
| Go to Dr/group only when sick/hurt             | 18    | 27 <sup>BC</sup> | 19 <sup>C</sup> | 11               | 22               | 31 <sup>DE</sup> | 22 <sup>E</sup> | 16                | 13                 | 17               | 15              | 23               | 30 <sup>AB</sup> |
|  |       | -                |                 |                  | _                |                  |                 |                   |                    |                  |                 |                  |                  |
| Go to Urgent Care or ER when need medical care | 10    | 17 <sup>BC</sup> | 9 <sup>c</sup>  | 4                | 20 <sup>DE</sup> | 15 <sup>DE</sup> | 9               | 7                 | 5                  | 7                | 4               | 26 <sup>AB</sup> | 16 <sup>B</sup>  |
|  |       | <del></del>      |                 |                  | <b>—</b>         |                  |                 |                   |                    |                  |                 |                  |                  |



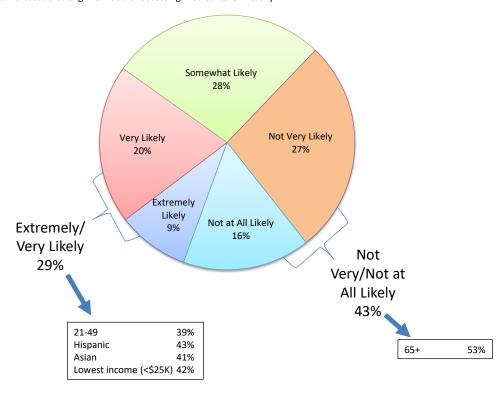
(N=792)

NOTE: Multiple mentions.

Q.13 - When you need medical care, which of the statements below best describes you? Age: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level. Income: (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level. Ethnicity: (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

## Likelihood of Accessing Medical Care Virtually

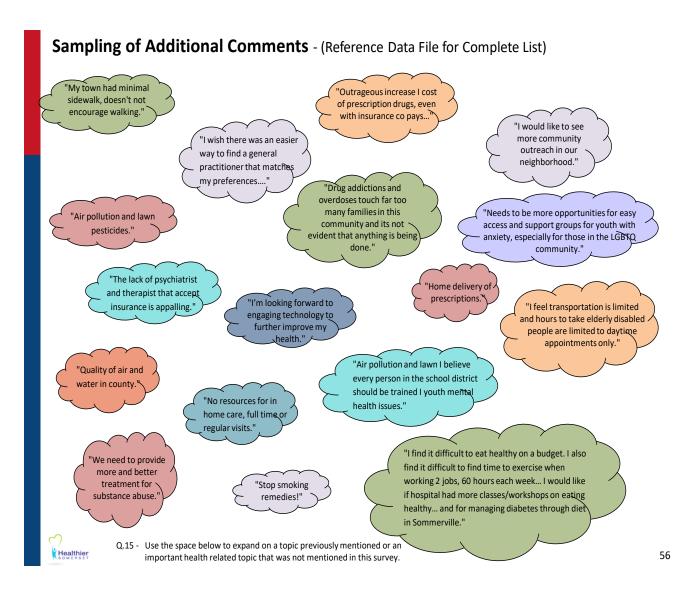
• Few residents indicated a strong likelihood of accessing medical care virtually.



Healthier

(N=792)

Q.14 - If you were able to access medical care virtually, for example, through FaceTime or Skype, how likely would you be to use this type of technology?



### 4. FOCUS GROUP DISCUSSIONS/KEY INFORMANT INTERVIEWS/WORLD CAFÉ MEETING

#### A. BEHAVIORAL HEALTH FOCUS GROUP

A focus group was held with 16 representatives from the provider, volunteer and peer communities on May 24, 2018. The areas discussed included service needs and challenges; resource availability; family and patient support; stigma; challenges and barriers; underserved consumers; and integrated care.

### **Service Needs and Challenges**

Among the issues mentioned as most problematic in Somerset County was a lack of psychiatric services (psychiatrists and nurse practitioners) for medication monitoring and evaluation. Other significant resource issues included a lack of bilingual clinicians for Latino and Hispanic populations, and provider burnout. Key comments regarding resource issues included:

- "Non-profits are constricted in what we are able to reimburse and that makes it difficult."
- "We struggle to balance the cost of a psychiatrist and making sure we are using them properly for billable hours; but there is all this documentation, so it's a constant struggle to balance out billable hours as well as making sure the documentation is completed."
- "As far as the salaries, that's probably at the top of the list that we cannot meet the salary requirements of a psychiatrist, especially one with a specialty."
- "We get a lot of juvenile justice system clients. The courts and even a lot of police departments come up with these provisions we want this child evaluated, medication monitoring, substance abuse counseling not understanding the limitation of services."
- "The burnout rate in the field for therapists, social workers I think no one talks about that but
  it's exhausting. You see the turnover in agencies; you see people not going into the field; you see
  people leaving the field because of it."

Participants also acknowledged a rise in addiction issues and of clients needing detox services and Medication Assisted Treatment (MAT), and the stigma against MAT. The stigma against MAT was characterized as so strong that even people who are treated in the ED with Narcan are refusing it because of the negative concepts about the treatment.

Others mentioned the lack of access to transportation, lack of insurance or ability to pay, and the degree to which these are exacerbated for undocumented and immigrant clients, as well as for victims of domestic violence. Young adults on the spectrum and young Muslim women who have mental health issues are also populations for whom resources were described as limited or non-existent.

The connection between traumatic experiences such as domestic violence, extreme poverty, homelessness, living in fear of deportation, depression, anxiety, PTSD, suicide, poor health outcomes, and drug and alcohol abuse was also discussed, particularly as it relates to need for trauma informed behavioral health resources.

#### **Resource Availability**

Most participants believe that services exist in the community but are outstripped by the extent of growing need. Others commented on the lack of information to help people navigate the system as well

as transportation access, lack of child care; and the confusing array and levels of service, and the wish that more people received needed services before they were in crisis.

Among the list of services people felt were missing were: recovery support services including transportation, housing, youth groups with a focus on trauma; relapse prevention; prevention and early intervention, and screening services for children; navigation services to help patients navigate the mental health system and link them to services; and re-entry services for people leaving prison.

#### <u>Stigma</u>

Participants agreed that stigma is often fueled by fear or denial or shame and cultural issues.

- "A parent looking at their child might say it's not anxiety, it's not depression, you're too young. You can't be experiencing these symptoms, you don't need mental health because you're just exhibiting adolescent behavior."
- "Another factor of stigma has to do with culture, and that has to do with a certain amount of
  competitiveness and how someone with a problem is seen as different . . . so there is a lot of
  shame around that."
- "Stigma is fairly strong in the African-American faith-based community, so it's not atypical to hear,
   'Pray on it' and reject other therapies that may be available."
- "The media causes some stigma because they are always blowing up stories of people with mental illness who commit murder while the majority of people with mental health problems are doing well."

Most believe that the only way to reduce stigma is to educate the community, parents and providers, and as a result, many have become actively involved in this pursuit, as noted in the discussion below.

### Services or Strategies That Have Yielded Success

Several people mentioned success in developing psychiatric cooperatives in which the services of a psychiatrist were shared among several providers to enhance access among service providers and another suggested training Advanced Practice Nurse Practitioners / Nurse Practitioners to work independently or in partnership with a physician to create more patient access.

A number of participants talked about the development of mental health stigma-free zones as a means of helping to link people to needed services and reducing stigma via education. Stigma-free zones are a grassroots, volunteer-led initiatives to enhance information in individual towns about mental health, services available, or to provide support outreach services to specific populations. Others talked about how programs aimed at training town councils, police and first responders, teachers or school administrators have helped to enhance awareness about mental health issues and to break down stigma.

One of the other successes mentioned was the growing interest of many schools to incorporate behavioral health education into their health curriculum as well as implementing other initiatives to educate children and adolescents. Such initiatives include offering anti-stigma clubs, mental health awareness days and health fairs, and teaching coaches and health educators how to talk with their students about behavioral health issues and how to refer them to appropriate services.

While most were pleased with the progress being made through the schools, and the increasing interest of teachers, there was some concern that at least some resources were under-utilized, like AIR (Attitudes In Reverse), Minding Your Mind and Ending the Silence. Others were concerned that while students, teachers and counselors were eager and passionate about learning and gaining skills, some of them were getting pushback from their superintendents.

- "I think a lot of time the Administrators are afraid of being sued."
- "A lot of time teachers say they don't know what to say, they don't feel equipped, they don't have the education or skills to say, 'Hey, I'm noticing a difference'."
- "The issue I hear from the guidance counselors is that they are sometimes overwhelmed by the mental health complexities and they are not equipped to deal with them, and sometimes getting a student from school to an actual referral is very difficult because of the stigma, and parents don't necessarily want to put their child into therapy outside of the school setting."
- "There are some clients that will call in for help from the Traumatic Loss Coalition whenever there
  is a tragedy and, I have some school districts that will not call, will not acknowledge a loss it's
  swept under the rug and that's it, we never talk about it."

Another participant talked about how the use of peers or peer advocates provided a low-cost way to help clients avoid crisis by linking them to others who had experienced the same issues. New Jersey Cares offers a program to help develop local access to peers.

#### **Parents and Significant Others**

Asked what parents or significant others could do for someone who shows signs of a behavioral health problem yielded a number of interesting insights. Overall, participants felt that a behavioral health diagnosis is quite overwhelming for parents and significant others.

• "They feel alone and don't know where to go, some type of navigator would be helpful."

Others felt that it would be helpful if parents or significant others were taught some de-escalation techniques and skills, to help them deal with issues until the client can see a provider, and when a more appropriate approach would be to call 911.

Still others talked about the needs parents, caregivers and significant others have for support services that are available through NAR-A-CON or AL-ANON of NAMI.

- "In our support group there are families that often are coming from the hospital."
- "... and they'll call and say, 'This is happening with my child, what can I do?'"
- "People need to know about it (NAMI) we're New Jersey's best kept secret, sometimes."

An interesting suggestion from the group was to explore the possibility of offering navigator services through social media to help link people to services they need.

#### **Integrated Care**

All participants agreed that people with behavioral health issues often have medical conditions that go unaddressed or undiagnosed and believe that a stronger link is needed between primary and behavioral

health care. Most are seeing more collaboration between agencies and groups providing primary care and mental health services.

- "We are in the third year of our grant and finding we really need to have the nurse talk with the psychiatrist or case manager. They aren't separate entities anymore and can't be considered that way."
- "We are trying to drive the primary care physician to refer to mental health providers so that the patient gets a complete continuum of services not just medication."
- "The path would be to make sure if there is medication prescribed it be done by the mental health practitioner because it's just not followed the same way if it's from the primary care physician."

Others mentioned the need to integrate wellness activities such as yoga, exercise and mindfulness into treatment.

- "When you talk about educating younger kids on mental health and addiction issues they need to
  understand there are other strategies beside medication to deal with stress be it walking, yoga,
  mindfulness that needs to become part of their life."
- "I heard about a wonderful program that's doing resiliency training, particularly targeting minority populations. Just teaching kids coping skills."

Still others brought up the problems that behavioral health clients sometimes encountered within the health care system, such as long waits in health clinics and too much stimuli in EDs, which too often exacerbates a client's mental health issue so that the provider may see only that dimension during the screening, the lack of continuity of care, and the need for better referral practices ("hand offs" to new providers), or using health care managers or nurse practitioners to provide the linkage between the behavioral health services provider and the primary care practitioner.

#### B. MEDICALLY UNDERSERVED POPULATIONS FOCUS GROUP

A focus group was held on June 26<sup>th</sup> with five representatives of agencies serving Medicaid and medically underserved populations. Their observations regarding the health needs and barriers for these populations are outlined below.

#### **Most Pressing Problems**

Navigating the complexities of the system for Medicaid and low income populations seems to be by far one of the greatest issues confronting the underinsured and uninsured. Related to this is the issue of accessing resources on a timely basis.

"Access at all levels is needed, i.e., enough providers, enough transportation and help in navigating the system. This is especially important for people on Medicaid where you can assume these people are disabled, low income and may not have the capacity to navigate a very complex system. Our concern is that it delays appropriate and preventative care for these people. The health issues are then amplified because they aren't getting the car they need when they need it and then the issue becomes catastrophic as well as expensive."

Of equal difficulty is finding a physician who takes Medicaid and dealing with the complexities of using an insurer's automated system to gain assistance, particularly for non-English speakers. Suggestions for fixing these issues included having a case manager or social worker assist people in getting appropriate services and follow-up care. Another suggested the ER connect patients to Medicaid providers they could see for follow-up/ongoing medical care.

When asked what medical services are the most difficult to access, dental services, psychiatry and neurology were mentioned.

# Successful Services

The group was in agreement about what makes for a success – that developing a relationship with a client/patient is the key to successfully serving the patient's needs.

"Where there is a relationship (consistency of use, medical memory of this person, etc.) that's where things go right."

Along with building a relationship, providers need to spend time and effort to understand the population they are serving. Understanding includes knowing what the patient's environment and circumstances are in order to ensure that follow-up care is realistic and can be delivered given the patient's circumstances.

### Missing Services and Those Needing Improvement

Participants spoke of the need for a better triage system for patients regardless of where they might enter the care or social services arena to ensure the patient/client receives the services. Participants identified the loss of community centers as central locations that could link people to services, offer low-cost recreational services, and provide other community services.

Another spoke of difficulties in working with patients who were looking for a fast cure but were unwilling to modify behaviors to avoid issues that brought about the illness. This suggests a need for better education regarding preventative care, something that is a luxury when trying to keep up with the number of people with acute medical needs of those who are medically underserved.

Missing services were characterized as information, referral and advocacy.

Asked for examples of services that worked to alleviate these problems, one mentioned managed care plans that employ case managers to check in with patients and ensure they receive necessary follow-up support. Another mentioned a health clinic service for disabled people that provides all specialties in one place. Efforts such as those required sponsorship by larger entities than local COBs but they do reduce access issues for patients.

# **Barriers or Challenges to Accessing Health Services**

In addition to the paucity of providers who accept Medicaid, most participants felt that transportation is a high barrier people face in accessing care.

"Transportation is a big issue and getting back and forth and even the logistics here are not timely and if you are disabled it makes this a bigger issue."

"Transportation could change everything in a positive way."

"The county provides some transportation but, if you have children they cannot have access to the transportation. They will not transport anyone under 18, even if the child is disabled.

In addition to the lack of transportation for regular medical care, the absence of emergency transportation services was also mentioned.

#### **Healthy Community**

Some of the issues regarding healthy community revolved around issues related to air quality, access to healthy and nutritious food.

"I think the general health of the community is a function of access and to some degree, wealth. If you have money you can buy a gym membership and eat healthy foods. If not, you eat sugar and bad food because that's what you can afford."

The absence of fresh food, vegetables and fruit, at most food banks was identified as another issue and an example of work being undertaken in Franklin Township was offered as a suggestion. They employ a model called Grow A Row which is a volunteer effort to grow food to supply area food banks.

The issue of the impact of wealth and geography on community health was also mentioned, as well as having access to safe recreational spaces.

### Populations and Communities That are Underserved

A number of towns were mentioned as being underserved including Bridgewater, Bound Brook, Manville and South Plainfield. Many of the residents living in these towns are low income or undocumented individuals who are not receiving care due to deportation issues. There were also questions raised why some of the service needs of children are not provided by schools, as was once the case (e.g., dental exams).

Other participants mentioned groups of individuals who are homeless, have mental health or substance abuse disorders, and older people without language skills having access issues.

"They cannot get to where they need to go, they don't know where to go, they don't have an advocate."

"I see 3 patients a month who end up in jail because they are not given their medication, or they are looking on the street for something they can't get from the doctor, or can't get in to see them."

Others mentioned the fact that many medical conditions go undiagnosed by providers because a person with a mental health or intellectual disability does not always present with, or are able to communicate their physical ailments leading to the medical issue being ignored or not pursued, and only the behavioral issue being addressed, leading to delayed medical care.

#### **Other Issues and Concerns**

Participants also mentioned the need for better disaster planning, and outreach and education so that community residents are aware of services that are available.

#### C. WORKPLACE WELLNESS FOCUS GROUP

The Somerset County Business Partnership (SCBP) is a Chamber of Commerce serving the businesses and residents of Somerset County. SCBP works with Healthier Somerset, a coalition of representatives from healthcare, government, business, education, non-profit organizations, and faith-based communities in Somerset County, to achieve their mutual goal of making Somerset County the healthiest county in New Jersey.

SCBP hosted a focus group for employers to contribute information and perspectives from the business community to help inform this CHA. Approximately 20 employers attended the focus group, which included sole proprietors and representatives of mid-size companies and large corporations, public education systems, and county government. Attendees were asked first to identify their greatest health issues, then to discuss how they, as employers, addressed those issues.

## **Priority Health Issues**

Attendees used the paired comparison process to prioritize the top health issues impacting the Somerset County business community. The group prioritized among these issues, which were identified as the greatest health concerns in the 2016-2019 CHIP: mental health; substance abuse; chronic disease; overweight/obesity; and health concerns related to aging.

Attendees prioritized these concerns in this order:

- 1. Chronic disease
- 2. Overweight/Obesity
- 3. Mental Health
- 4. Substance Abuse
- 5. Health Concerns Related to Aging

# **Themes**

Discussion revealed these themes:

1. Somerset County employers consider health a priority in the workplace but that is often not effectively communicated to employees. Employers see the results of poor physical and mental health in the workplace through the impact of employee absenteeism, job performance, job training and retention. Many small employers suffer from a lack of time and financial resources to prepare long-range employee health plans or to even offer one-shot health challenges or "lunch and learn" programs. Even among employers who offer substantial employee wellness programs, employees often fail to participate or become aware of the opportunities offered to them through the programs. The employers who experienced greater degrees of success found that constant messaging and providing work time for employee participation in health programs were key outcome drivers.

- 2. Somerset County employers often focus on cures rather than prevention because employees fail to maintain healthy lifestyles. Employers understand that good health is a process and that keeping employees healthy is more cost-effective and produces more positive health outcomes than treating illness or chronic disease. However, because many employees fail to effectively manage their health, employers are often faced with seriously ill employees and growing healthcare costs.
- 3. Somerset County employers understand the connection between mental health and substance abuse and see mental health as the more serious issue. Not all Somerset County employers reported dealing directly with substance abuse issues in their workplaces, but all said that they deal directly with employees' mental health issues. Stress, caused by family issues, lack of work/life balance, and job-related pressures, is the leading indicator of poor mental health in these workplaces, which results in both employee absenteeism and "presenteeism" (employees who are not fully-functioning in the workplace because of these issues). Some employers cited the New Jersey Family Leave Act as a positive factor in employee mental health but a challenge for employers.
- 4. The aging population presents both direct and indirect challenges for Somerset County employers. Employers noted that the uncertain economy and lack of retirement savings are beginning to force employees to postpone retirement and work longer than they had planned. As a result, employers are dealing with increased medical costs related to severe chronic and age-related diseases. The aging employee population also means that an increasing number of employees are dealing with both aging parents and children of their own, another source of stress for the employees.
- 5. Somerset County employers do not instinctively see the connection between a healthy Somerset County and benefits for their businesses. At the outset of the focus group, approximately half of the attendees were aware of the goal to make Somerset County the healthiest county in New Jersey. Even among those who were aware, however, there was a lack of understanding of the marketing benefits and the economic development that could accrue to the County, as well as to their employee attraction and retention efforts, if this goal were achieved.

#### **Recommendations**

As the focus group concluded, participants were asked to enumerate ways in which SCBP and Healthier Somerset could help their efforts to make health a priority in their workplaces. They identified three primary areas:

- **1. Education.** The majority of Somerset County employers said that they would welcome more information about employee health programs and about health in general. Substance abuse was cited as an area where many felt overwhelmed by their lack of knowledge.
- **2. Access to information.** Somerset County employers were not aware of available resources through Healthier Somerset or SCBP. One participant cited the need for a comprehensive list of mental health resources available to Somerset County residents, unaware that this information is on the Healthier Somerset website. Similarly, SCBP offers an annual Health and Wellness Expo, and several who had attended noted the value offered through screenings and information. Employers can also be sources of health information for employees and constituents, such as the parents in a school district.

3. Support for new and existing employee wellness programs. Somerset County employers returned to a theme from the opening of the focus group: their inability to make health a true priority in their workplaces because of lack of employee participation. This lack of participation may be direct (non-recognition of health as a personal priority) or indirect (lack of time and resources), but ultimately each employee must be motivated to maintain or achieve good health, and that motivation will be different for every individual. Employers must identify the emotional drivers that will encourage employees to manage their health as well as the "pain points" that will push employees to achieve their goals. Somerset County employers need the support of the entire community to see the benefits that can accrue from effective employee wellness programs.

#### **Conclusion**

The themes elicited from this focus group represent an important call to action. The responses indicate that Somerset County employers view health as a priority and are working to improve employee health in their workplaces. Barriers to success include lack of knowledge, lack of information, and inability of employees to participate fully. Both Healthier Somerset and SCBP have working committees and structures to provide education and information. Another opportunity exists regarding Somerset County's economic development messaging and the importance of good health to the County's brand. As Somerset County's economic development arm, SCBP plays a major role in educating the business community about the benefits of good health to their own economic success.

#### D. KEY INFORMANT INTERVIEWS

Key interviews were conducted with representatives of Healthier Somerset representing racial and ethnic groups that were not as well represented in the survey (Asian and Southeast Asians), service providers serving disabled populations, transportation and housing advocates, faith-based leaders, and public health officers, each of whom offered unique perspectives to the needs assessment. A total of 15 individuals were interviewed through the process of individual or group interviews.

#### **Healthy Community**

Most key informants believe that the most important thing is education and awareness, particularly about prevention.

Additional views considered the role of a healthy environment, access to services and resources, understanding of the value of public health, physical, mental and spiritual health for everyone, health and economic inequality among individuals, access to decent and affordable housing, access to transportation, and the ability to access, navigate and participate in essential services.

#### Improvements Encountered

Informants felt that there had been some positive changes over the last several years in that there have been efforts to raise awareness of services in the community, a greater emphasis on physical fitness and nutrition, shuttle services into Somerville, development of diverse partnerships to address issues, outreach by hospitals and hospital systems to interact with diverse ethnic groups in the community with programs to encourage people to be more involved in their health and medical care. Another perspective

was that service availability had improved because there were additional services that providers could bill.

#### Services that Declined

When queried about areas of concern that declined, nearly all mentioned various aspects of behavioral health including the stigma that prevents individuals from seeking help. Others mentioned the stress and anxiety of high-pressured jobs, the isolation of adolescents, the anxiety and pressure for adolescents to achieve academic success (mentioned specifically for Asian population, as well as generally), the lack of coping skills or ability to deal with loss among younger people, mental health issues associated with low income and homeless populations. Others commented on the lack of access to medical professionals to treat Medicaid and disabled people, high cost of housing and health care, accessing information from insurance companies, doctors and hospitals regarding coverage, obesity, early on-set of disease, increasing use of opioids and other substances, STDs, HIV and cancer were also mentioned.

### **Access to Care**

Insurance coverage issues were mentioned by some individuals, particularly being billed by providers who you were not told were not covered by your plan, finding doctors that are in your plan, and contacting insurers to find providers who are in your plan, and the delays these issues cause in obtaining treatment. Being and staying healthy are often compromised by the amount of work people have to do to provide for themselves and their families — some to make ends meet, some in pursuit of material wealth. Transportation barriers were among the most mentioned access barriers for people who do not drive (disabled, elderly, minorities), and the lack of flexibility of most government-sponsored services. Cultural and attitudinal barriers are problems faced by Asians, minorities and disabled populations.

Other challenges included housing, education, health literacy, financial access to services and providers, and the availability of evening and weekend services. Another mentioned barrier was that screening services were not as prevalent as previously.

# **Health Concerns**

Public Health Officers were concerned about the public's lack of understanding of health in all of its contexts and were concerned with the lack of resources, financial and human, that are dedicated to these pursuits.

Others were more focused on problems such as the higher rates of cancer in New Jersey, the health and mental health stigmas that prevent people (Asian and others) from seeking early and preventive services, early on-set of chronic diseases and sedentary lifestyles, heart disease, stroke, obesity, Hepatitis B, mental health and opioid use, care for the undocumented, and aging populations of disabled patients facing co-occurring chronic disease issues.

#### **Underserved Populations**

Most agreed that undocumented people are among the most underserved because of the fear of discovery and deportation. Other groups mentioned included older immigrant populations with language, transportation and cultural barriers who are dealing with loss of spouse or friends and do not know how

to cope; homeless, low income individuals, dually diagnosed and developmentally disabled populations with mental health issues were also mentioned.

# **Addressing Health Concerns**

A number of informants suggested ways to address some of the issues mentioned. For example, it was suggested that insurers have translators available who can explain coverage policies and assist clients find covered providers. It was suggested that when hospitals, health systems and other organizations conduct outreach programs these services should be in the community where people are comfortable; and a belief that outreach, particularly in terms of education and prevention, needs to be ongoing to build a relationship with immigrant populations and understand their culture. Others indicated:

- Enhancing relationships with the schools and school nurses to enhance access to health and mental health education.
- Greater emphasis on workplace health by employers.
- Recruiting and training people in the community to do outreach work and act as community health workers.
- Enhancing awareness of resources.
- Reconfiguring systems so that the money follows the person regardless of what system they are
  in.
- Training health care workers to better understand co-existing mental health and disability issues.
- Establishing the role of a Chief Health Strategist as a convenience of services to ensure nonduplicative work.
- Enhance education efforts about available services and resources.

## E. WORLD CAFÉ MEETING

The Greater Somerset Public Health Partnership, in cooperation with Healthier Somerset, held a World Café Listening Session on June 28, 2018.

Structured conversations were held in which groups of people discussed a topic area at several tables, with individuals switching tables periodically and being introduced to the previous discussion at their new table by a table host. Among the topics were, "What Does a Healthy Community Look Life?"; "Whose Voice Do We Still Need to Hear?"; and "What One Thing Do You Wish We Could All Work Together On Over The Next Three Years To Make Our Towns Healthier?" A summary of the perspectives provided by World Café participants is presented below. Please see **Appendix F** for the World Café Exercise Report.

#### What Does a Healthy Community Look Like?

- Walkable, with soft streets.
- Access to health, affordable food.
- Economic options are available.
- Where people are engaged and interacting with each other.
- Trees, gardens, clean air.
- Equity in everything.
- People can access the resources they need mental health, wellness and spiritual.

- Friendly, welcoming and stigma-free.
- Disease is prevented.

### Whose Voice Do We Still Need To Hear?

- Youth (teens and millennials).
- Faith-based.
- Insurance companies.
- LGBT, immigrant and homeless people.
- People in recovery.
- Veterans.
- Community leaders.

# What One Thing Do You Wish We Could All Work Together On Over The Next Three Years To Make Our Towns Healthier?

- Share more data.
- Help people who don't speak English.
- Primary Care Clinic and Mental Health Clinic next to the ED.
- Build a Youth Center.
- Make policies consistent across school districts.
- Focus on equity.
- Teach health care providers about mental health.

#### 5. SOMERSET COUNTY/RWJUH SOMERSET SERVICE AREA HEALTH PROFILE

The Somerset County/RWJUH Somerset Service Area(s) Health Profile provides comparative analysis of health outcomes and health factors across the region, neighboring counties, New Jersey, *Healthy People 2020* targets and County Health Rankings benchmarks. Health outcomes depict the health of a region. Health factors represent health influences within a geographic area; an evaluation of health behaviors, access to care, social, economic and cultural specific issues and behavioral health are provided. Included also are social determinants of health, factors that influence health outcomes, disparities in health, and equity in health care.

#### A. SOMERSET COUNTY OVERVIEW

Somerset County is located in the north central section of New Jersey. The county encompasses a land mass of 305 square miles with 21 townships, boroughs and 46 zip codes. The county and its subdivisions are now largely suburban. The county is home to over 300,000 residents, making it the 13<sup>th</sup> most populous county in the State. Within Somerset County, Franklin Township is the most populous place with 10,665 residents, while Hillsborough is the largest area within the county, covering 55 miles.

Somerset County is one of the oldest American counties, first settled in 1681 and named after the English county of Somerset. For much of its history, Somerset County was largely agricultural. In the late 19<sup>th</sup> century the Somerset Hills area became a popular county home for wealthy industrialists.<sup>9</sup> In the 1960s, townships that were once agricultural were transformed into suburban communities, aided in large part by the strong pharmaceutical and technology presence in the county. Somerset County is bordered by Morris County to the north, Union County to the east, Middlesex County to the southeast, Mercer County to the south, and Hunterdon County to the west.

In 2015, Somerset County ranked 2<sup>nd</sup> in the State and 25<sup>th</sup> among counties in the United States in terms of per capita income. Most recently, Somerset County was ranked 2<sup>nd</sup> of 21 New Jersey Counties, as one of the healthiest counties in New Jersey by the RWJ County Health Ranking. The county once largely agricultural is now made up of mainly suburban communities. RWJUH Somerset's primary service area consists of communities located in the central portion of the county and adjacent areas of Union and Middlesex Counties.

#### B. SOCIAL DETERMINANTS OF HEALTH

Social determinants of health include socioeconomic and environmental factors which influence health outcomes, disparities in health, equity in health care, and are important tools to assess health at the local level. *Healthy People 2020* provides a framework for assessing social determinants of health across five topic areas: economic stability; education; social and community context; health and health care; and, neighborhood and built environment. While a relatively affluent county, there are residents of Somerset County and the RWJUH Somerset Service Area that face many socioeconomic challenges that may have consequences for health and health care in the region.<sup>10</sup>

<sup>9</sup> https://wikipedia.org/somerset\_county\_newjersey

<sup>&</sup>lt;sup>10</sup> https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

#### 1. Economic Stability

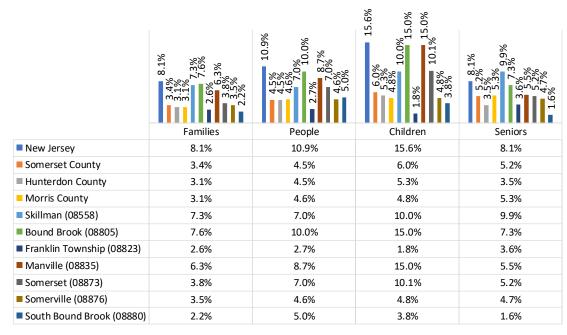
#### **Poverty**

Many believe that the Federal Poverty Level (FPL) understates true poverty and is prejudicial to New Jersey as it fails to adjust for differences in the cost of living across states.

Somerset is ranked 18<sup>th</sup> out of 21 New Jersey counties with 5.2% of residents sustaining an income below poverty.

- According to the Census, in 2016, Somerset County (4.5%) has fewer individuals living below the Federal Poverty Level than New Jersey as a whole (10.9%).
- Bound Brook and Manville have among the highest poverty rates and exceed the County rate. The 2016 ACS Survey reports 7.6% of Bound Brook families and 6.3% of Manville families are living below the FPL compared to 3.4% in Somerset County and 8.1% statewide.
- Regarding poverty, the percent of individuals living below the FPL, Somerset County ranks among the best quartile relative to all 21 New Jersey counties.

# Income Below Federal Poverty Level State and County Comparisons 2016

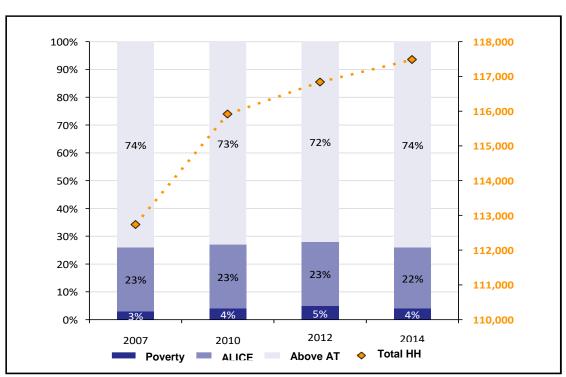


Source: United States Census 2016 5 Year ACS Estimates

To ascertain the number of household that may be struggling due to the high cost of living in New Jersey we turned to the United Way's ALICE (Asset Limited Income Constrained Employed project)<sup>11</sup> to get a better idea of the number of households that earn more than the Federal Poverty Level but less than the basic cost of living in Somerset County. As shown in the chart below, the Alice Threshold (AT) combined

<sup>11</sup> http://www.unitedwaynj.org/ourwork/aliceatnj.php

the number of households in poverty and ALICE households equals the population struggling to afford basic needs. In Somerset County, this percentage amounts to 26% (2014).



#### Household Income 2007-2014

The United Way's analysis shows ALICE households in Somerset County may earn above the Federal Poverty Level for a single adult, \$11,670, or \$23,850 for a family of four, but less than the household survival budget.

| Household Survival B | Budget. So | merset Co | ountv |
|----------------------|------------|-----------|-------|
|----------------------|------------|-----------|-------|

|                | SINGLE ADULT | 2 ADULTS, 1 INFANT,<br>1 PRESCHOOLER |
|----------------|--------------|--------------------------------------|
| Monthly Costs  |              |                                      |
| Housing        | \$928        | \$1,458                              |
| Child Care     | \$-          | \$1,907                              |
| Food           | \$202        | \$612                                |
| Transportation | \$338        | \$676                                |
| Health Care    | \$131        | \$525                                |
| Miscellaneous  | \$194        | \$607                                |
| Taxes          | \$337        | \$889                                |
| Monthly Total  | \$2,130      | \$6,674                              |
| ANNUAL TOTAL   | \$25,560     | \$80,088                             |
| Hourly Wage    | \$12.78      | \$40.04                              |

Sources: **2014 Point-in-Time Data**: American Community Survey. **ALICE Demographics**: American Community Survey; the ALICE Threshold. **Budget**: U.S. Department of Housing and Urban Development (HUD); U.S. Department of Agriculture (USDA); Bureau of Labor Statistics (BLS); Internal Revenue Service (IRS); State of New Jersey Department of the Treasury; Child Care Aware NJ (CCANJ).

There appear to be wide differences among municipalities in Somerset County in terms of the percentage of households living in poverty or at the AT. Bound Brook, Manville, South Bound Brook and Raritan are municipalities in which 40% of households are living in poverty or at the AT.

# Households Living in Poverty or at the AT Somerset County, 2014

| Somerset County, 2014 |          |                      |  |  |  |  |
|-----------------------|----------|----------------------|--|--|--|--|
| Town                  | Total HH | % ALICE<br>& Poverty |  |  |  |  |
| Bedminster            | 4,125    | 28%                  |  |  |  |  |
| Bernards              | 9,618    | 17%                  |  |  |  |  |
| Bernardsville         | 2,767    | 18%                  |  |  |  |  |
| Bound Brook           | 3,470    | 45%                  |  |  |  |  |
| Branchburg            | 5,101    | 20%                  |  |  |  |  |
| Bridgewater           | 15,276   | 21%                  |  |  |  |  |
| Far Hills             | 396      | 26%                  |  |  |  |  |
| Franklin              | 23,749   | 28%                  |  |  |  |  |
| Green Brook           | 2,318    | 17%                  |  |  |  |  |
| Hillsborough          | 13,294   | 22%                  |  |  |  |  |
| Manville              | 3,874    | 44%                  |  |  |  |  |
| Millstone             | 173      | 28%                  |  |  |  |  |
| Montgomery            | 7,408    | 16%                  |  |  |  |  |
| North Plainfield      | 7,255    | 39%                  |  |  |  |  |
| Peapack and Gladstone | 939      | 27%                  |  |  |  |  |
| Raritan               | 2,695    | 40%                  |  |  |  |  |
| Rocky Hill            | 234      | 22%                  |  |  |  |  |
| Somerville            | 4,590    | 39%                  |  |  |  |  |
| South Bound Brook     | 1,575    | 41%                  |  |  |  |  |
| Warren                | 4,999    | 17%                  |  |  |  |  |
| Watchung              | 2,085    | 25%                  |  |  |  |  |

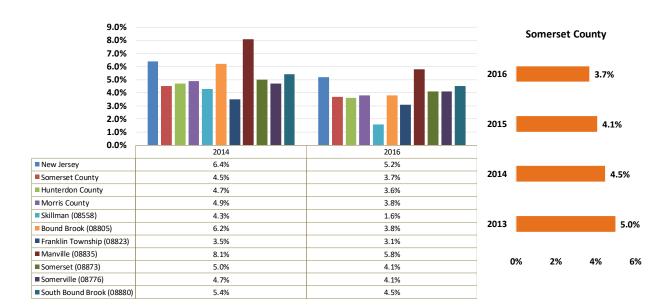
Note: Municipal-level data on this page is for Places and County Subdivisions, which include Census Designated Places (CDP). These are overlapping geographies so totals will not match county-level data.

Municipal-level data often relies on 5-year averages and is not available for the smallest towns that do not report income.

### Unemployment

Those who are unemployed face greater challenges to health and well-being, including lost income and health insurance. Unemployed individuals are 54% more likely to be in poor or fair health as compared to employed individuals. According to CHR, racial and ethnic minorities and those with less education, often already at-risk for poor health outcomes, are most likely to be unemployed. Labor statistics indicate unemployment rates peaked at the height of the recession in 2010 and began to show some improvement by 2014.

- In 2016, the Manville unemployment rate (8.1%) is more than double that of Somerset County (3.7%).
- Between 2013 and 2016, New Jersey, Somerset County, Franklin Township, Somerset and Somerville experience at least a 20% reduction in unemployment while Skillman, South Bound Brook and Manville demonstrate a 40% or more decline in the same timeframe.
- In regard to unemployment, Somerset County ranks among the top quartile relative to all New Jersey counties.



State, County and Select Zip Code Unemployment Comparisons

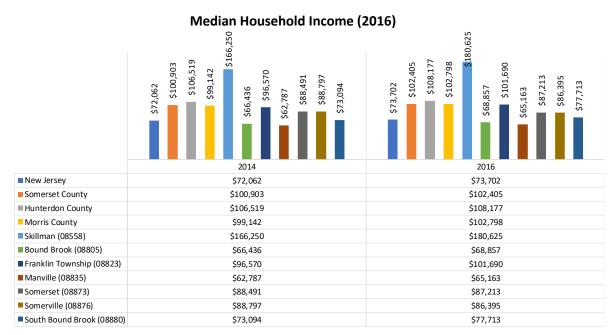
Source: United States Census 201320142016 5 Year ACS Estimates

#### Income

Income allows families and individuals to purchase health insurance and medical care, but also provides options for healthy lifestyle choices. While the starkest difference in health is between those with the highest and lowest incomes, this relationship persists throughout all income brackets.<sup>12</sup>

<sup>12</sup> www.countyhealthrankings.org/our-approach/health-factors

- The Somerset County 2016 median household income (\$102,405) exceeds the New Jersey median household income (\$73,702) by \$28,703, or 28%.
- Manville's 2016 median household income is \$65,163 (36%) less than Somerset County and \$8,539 (12%) less than New Jersey.
- Relative to all 21 counties Statewide, Somerset County ranks among the top quartile for median household income.



Source: United States Census 2016 5 Year ACS Estimates

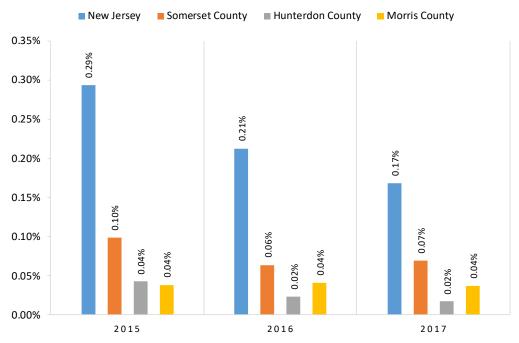
| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| Unemployment Percent of Labor Force Unemployed                                  | N.A                           |  |               |
| Income<br>Median Household  | N.A                           |  |               |
| Income in the Past Year Below Federal Poverty Level Percent of Total Population | N.A                           | N.A                                    |               |
| Income in the Past Year Below Federal Poverty Level Percent of Families         | N.A.                          | N.A                                    |               |
| Income in the Past Year Below Federal Poverty Level Percent of Children         | N.A                           | N.A.                                   |               |
| Income in the Past Year Below Federal Poverty Level Percent of Seniors          | N.A                           | N.A                                    |               |

# **Temporary Assistance Needy Families (TANF)**

In order to qualify for TANF in New Jersey, applicants must comply with all requirements of Work First New Jersey. This includes signing over rights of child support payments, helping to establish paternity of children, cooperating with work requirements and applying for all assistance programs for which a household may be eligible. Additionally, eligible applicants must meet income and resource guidelines.<sup>13</sup>

- As of December 2017, 0.54% of Somerset County children are receiving Work First NJ/TANF benefits, 61% fewer than statewide (1.39%); Somerset County ranks in the top quartile in New Jersey.
- As of December 2017, 0.1% of Somerset adults are receiving Work First NJ/TANF benefits, fewer than statewide (.29%).
- Between 2015 and 2017, the percentage of adults and children receiving WFNJ/TANF benefits declines by 40% and 25%, respectively.

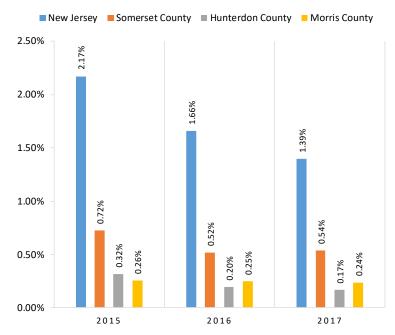
# Temporary Assistance to Needy Families State & County Comparisons Adults 2015 - 2017



Source: http://www.nj.gov/humanservices/dfd/news/cps\_dec17.pdf

 $<sup>^{\</sup>rm 13}\ http://www.tanfprogram.com/new-jersey-tanf-eligibility$ 

# Temporary Assistance to Needy Families State & County Comparisons Children 2015 - 2017



Source: http://www.nj.gov/humanservices/dfd/news/cps\_dec17.pdf

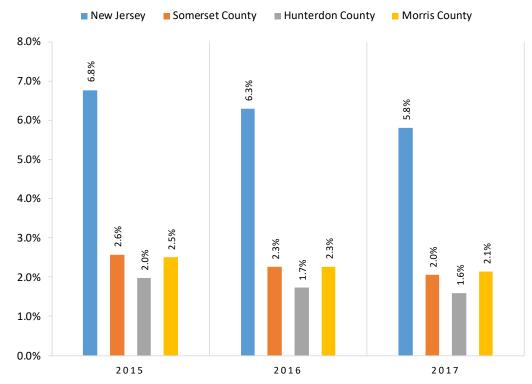
#### Supplemental Nutrition Assistance Program (SNAP)

SNAP offers nutrition assistance to millions of eligible, low-income individuals and families. The Food and Nutrition Service works with State agencies, nutrition educators and neighborhood and faith-based organizations to ensure that those eligible for nutrition assistance make informed decisions and access benefits.<sup>14</sup>

- In 2017, 63.5% fewer Somerset County children (6.78%) use SNAP benefits than children Statewide (18.60%).
- In 2017, 65.5% fewer Somerset County adults (2.0%) use SNAP benefits than throughout the State (5.8%).
- Between 2015 and 2017, Somerset County experienced a 23.07% decline in the percentage of adults and a 16.6% decline in the percentage of children receiving SNAP benefits.
- The percentage of Somerset County children and adults receiving SNAP benefits ranks in the top performing quartile among all counties.

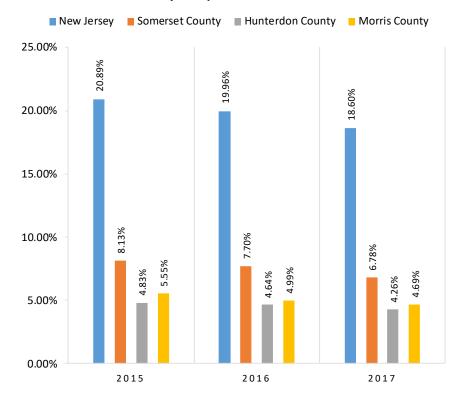
<sup>&</sup>lt;sup>14</sup> http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap

# Supplemental Nutrition Assistance Program (SNAP) State & County Comparisons Adults 2015 - 2017



Source: http://www.nj.gov/humanservices/dfd/news/cps\_dec17.pdf

# Supplemental Nutrition Assistance Program (SNAP) State & County Comparisons Children 2015 - 2017



Source: http://www.nj.gov/humanservices/dfd/news/cps\_dec17.pdf

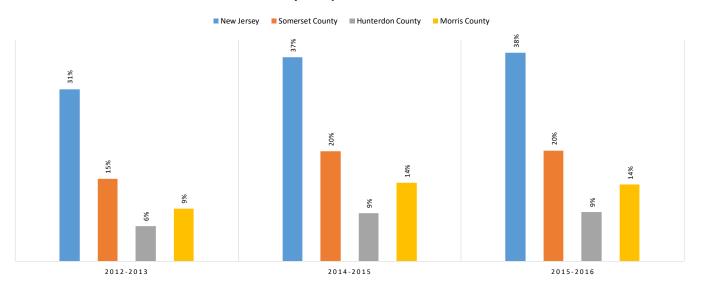
# Children Eligible for Free Lunch

Public schools nationwide and across New Jersey have free lunch programs for children living at or near poverty. New Jersey requires public schools serve school lunches meeting at least one-third of recommended dietary allowances. According to the National School Lunch Program, the objective is "to provide a nutritious, well-balanced lunch for children in order to promote sound eating habits, to foster good health and academic achievement and to reinforce the nutrition education taught in the classroom."<sup>15</sup>

- The percentage of children eligible for free lunch increased throughout New Jersey, Somerset, Hunterdon and Morris counties between 2012-2013 and 2015-2016.
- Somerset County reported a 5 percentage point increase in students eligible for free lunch from 15% during the 2012-2013 school years to 20% in 2015-2016 school years.
- Somerset County is within the lowest quartile compared to of all New Jersey counties for free school lunch eligibility.

<sup>&</sup>lt;sup>15</sup> http://www.nj.gov/agriculture/divisions/fn/childadult/school\_lunch.html

# Children Eligible for Free Lunch State & County Comparisons 2012 - 2016



Source: http://www.nj.gov/humanservices/dfd/news/cps\_dec17.pdf

| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| Children Eligible for Free Lunch  | N.A                           |  |               |
| SNAP (Supplemental Nutrition Assistance Program) Percent of Population Receiving SNAP | N.A                           | N.A.                                   |               |
| SNAP- Children Percent of Children Receiving SNAP                                     | N.A                           | N.A                                    |               |
| WFNJ/TANF (Supplemental Nutrition Assistance Program)  Percent of Population          | N.A                           | N.A.                                   |               |
| WFNJ/TANF- Children Percent of Children   | N.A                           | N.A                                    |               |

# 2. Education

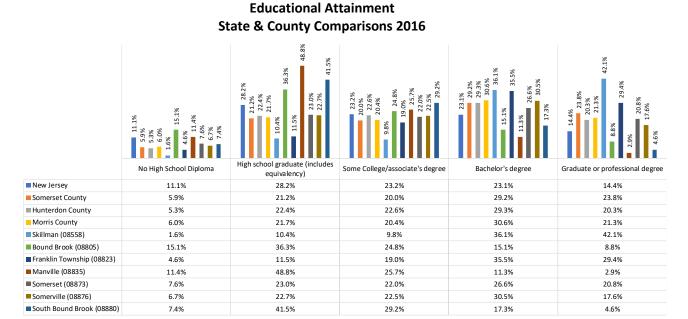
### **Educational Attainment**

Higher levels of education are linked to better health, healthier lifestyle decisions and fewer chronic conditions. <sup>16</sup> Lower levels of educational attainment often signals issues of health literacy and inability to follow medical advice.

- New Jersey and Somerset County residents have a higher percentage of individuals who did not complete a high school education than the *Healthy People 2020* target of 2.1%.
- In 2016, 5.9% of the Somerset County population did not earn a high school diploma, compared to 11.1% in New Jersey.

<sup>16</sup> www.countyhealthrankings.org/our-approach/health-factors

- In 2016, approximately 15.1% of Bound Brook residents reported not completing high school.
- The percent of Somerset County residents (23.8%) with a graduate or professional degree in 2016 is 37% higher than the State (14.4%).
  - o In 2016, Bound Brook (15.1%) had nearly three times the number of residents with less than a high school education than Somerset County (5.9%).
- In 2016, nearly one-third of Somerset County residents earned a Bachelor's degree, exceeding the State (23.1%) by over 6 percentage points.
  - Manville (2.9%) has less than four times the number of residents with a graduate or professional degree than the State (14.4%).



Source: United States Census 2016 5 Year ACS Estimates



Baseline: 89.0 % Target: 97.9%

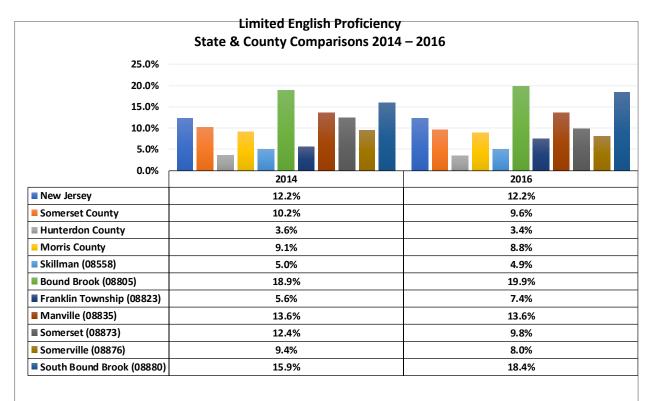
Somerset County 2016: 94.0%

## Limited English Proficiency

The lack of English proficiency can negatively impact one's ability to understand and follow medical directions. Somerset County residents experienced a decrease in the percentage of the population over age 5 with limited English proficiency.

• In 2016, according to the U.S. Census, 9.6% of Somerset County residents over age 5 report speaking English as "less than very well" compared to 12.2% of New Jersey residents.

- Somerset County experiences a 0.6 percentage point decrease in the population that reports limited English proficiency between 2014 (10.2%) and 2016 (9.6%).
- Somerset County ranks in the middle quartile, relative to all NJ counties.



Source: United States Census 2014 2016 ACS 5 Year Estimates; Persons Age 5+ reporting speaking English "less than well".

## 3. <u>Social and Community Context</u>

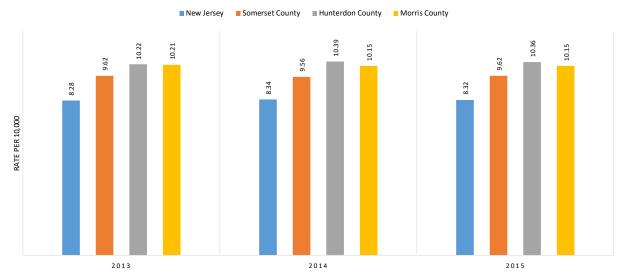
#### **Social Associations**

Social isolation can negatively impact health outcomes. Having a strong social network is associated with healthy lifestyle choices, positive health status, and reduced morbidity and mortality. Participation in community organizations can enhance social trust and a sense of belonging.<sup>17</sup> Social associations include structured membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, business and professional associations.

- Between 2013 and 2015, Somerset County had higher membership association rates than New Jersey, but lower than the comparison counties of Hunterdon and Morris.
- The membership association rate for Somerset County falls within the middle performing quartile compared to all 21 counties statewide.

<sup>&</sup>lt;sup>17</sup> http://www.countyhealthrankings.org/app/new-jersey/2015/measure/factors/140/description

# **Number of Membership Organizations**



Source: County Health Rankings, CDC Wonder Mortality Data, 2010 - 2016

County Health Rankings & Roadmaps Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

National Benchmark: 22.1 Somerset County 2016: 9.6

| Indicator  | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|--|-------------------------------|--|---------------|
| Educational Attainment: No High School Diploma Percent of Population (Age 25+) |                               | N.A.                                   |               |
| Limited English Proficiency (LEP) Percent of Population (Age 5+)               | N.A                           | N.A                                    |               |
| Membership Organizations   | N.A                           |  |               |

#### 4. Health and Health Care

Access to affordable quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care, but does not ensure access. It is also necessary for providers to offer affordable care, be available to treat patients and be near patients.<sup>18</sup>

#### Health Insurance

The expansion of Medicaid coverage and the Affordable Care Act's (ACA) coverage provisions, which began taking effect in 2010, helped decrease the nation's uninsured rate by 7.2 percentage points, from 16 percent in 2016. That translates into 20.4 million fewer people who lacked health insurance in 2016 compared to 2010. The uninsured rate is estimated to have increased to 15.5% in the first quarter of 2018, meaning another 4 million lost coverage since 2016 due to changes in health policy and insurance offerings. The uninsured are less likely to have primary care providers than the insured; they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling. Those without insurance are often diagnosed at later, less treatable disease stages than those with insurance and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.

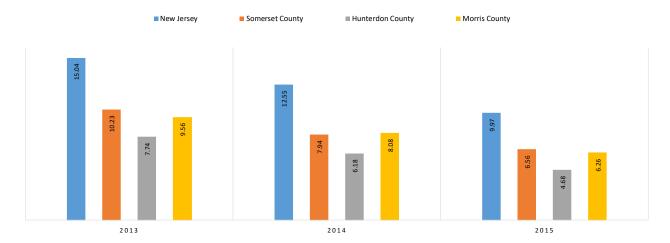
Neighborhoods with low health insurance rates often have fewer providers, hospital beds and emergency resources than areas with higher rates. Even the insured have more difficulty getting care in these areas.

Cost can be a barrier to care even for those who have insurance. Lack of insurance creates barriers to timely access to care for patients and financial burdens to the providers who care for them.

- In 2013, 10.2% of Somerset County and 15% of New Jersey non-elderly residents reported not having health coverage.
- Coverage for Somerset County residents improved from 10.2% without insurance in 2013 to 6.6% in 2015
- In 2015, Somerset County (6.6%) was higher than the ambitious *Healthy People 2020* target of no person without health coverage. Somerset County also had a higher percentage of individuals without insurance than the CHR Benchmark.

<sup>18</sup> http://www.countyhealthrankings.org/our-approach/health-factors/access-care

# Non-elderly Population Without Health Insurance State & County Comparisons 2013 - 2015



Source: Healthy People 2020 - CDC Behavioral Risk Factor Surveillance System

County Health Rankings - US Census Bureau's Small Area Health Insurance Estimates (SAHIE)

Source: Sara R. Collins et al., First Look at Health Insurance Coverage in 2018 Finds ACA Gains Beginning and Reserve. Findings

from the Commonwealth Fund Affordable Care Act Tracking Survey, Feb.-March 2018



Baseline: 10.0% Target: 0.0%

Somerset County 2016: 6.6%

County Health Rankings & Roadmaps Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

National Benchmark: 6.0% Somerset County 2016: 6.6%

#### **Access to Care**

Access to affordable quality health care is important to ensuring physical, social, and mental health. Health insurance assists individuals and families to obtain primary care, specialists, and emergency care, but does not ensure access. Access to care goes beyond just insurance, it is also necessary for providers to offer affordable care, be available to treat patients and be near patients.<sup>19</sup>

#### **Primary Care Physicians**

Nationally, many areas lack sufficient providers to meet patient needs; as of June 2014, there are about 7,200 primary care, 5,000 mental health and 5,900 dental federally designated Health Professional Shortage Areas in the US. Having a usual primary care provider is associated with a higher likelihood of appropriate care and better outcomes. In 2017, 88% of Americans had a usual source of care, but those with low incomes are less likely to than those with higher incomes, and the uninsured are twice as likely as the insured to lack a usual care source.<sup>20</sup>, <sup>21</sup>

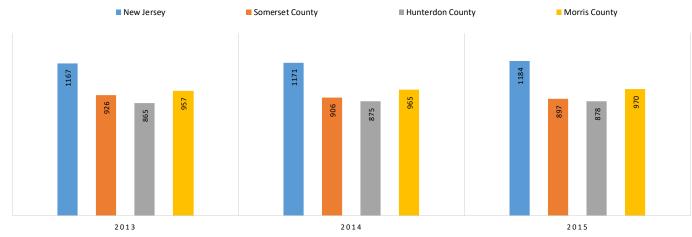
 $<sup>^{19}\,</sup>http://www.countyhealthrankings.org/our-approach/health-factors/access-care$ 

<sup>&</sup>lt;sup>20</sup> http://www.countyhealthrankings.org/our-approach/health-factors/access-care

<sup>&</sup>lt;sup>21</sup> http://www.cdc.gov/fastfactsaccesstohealthcare.htm

- Between 2013 and 2015, the ratio of population to physicians in Somerset County decreased from 926:1 to 897:1.
- In 2015, the Somerset County (897:1) ratio for primary care providers was better than the CHR national benchmark.
- Somerset County performs in the top quartile of all New Jersey counties for the ratio of primary care physicians to population.

# Ratio of Population to Physician State & County Comparisons 2013 - 2015



Source: County Health Rankings – HRSA Area Resource File

County Health
Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

National Benchmark: 1030 Somerset County 2016: 897

| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| Primary Care Physicians Rate/ 100000 Population                                       | N.A                           |  |               |
| Non-elderly Population Without Health Insurance Do You Have Any Kind of Coverage % No |                               |  |               |

# Community Need Index 22

The Community Need Index (CNI), jointly developed by Dignity Health and Truven Health in 2004, is strongly linked to variations in community healthcare needs and is a strong indicator of a community's demand for services.

Based on a wide array of demographic and economic statistics, the CNI provides a score for every populated ZIP Code in the United States. A score of 1.0 indicates a ZIP Code with the least need and a score of 5.0 represents a ZIP Code with the most need. The CNI is useful as part of a larger community health needs assessment to pinpoint specific areas with greater need than others.

The CNI score is an average of five barrier scores that measure socio-economic indicators of each community using 2017 source data. The five barriers are:

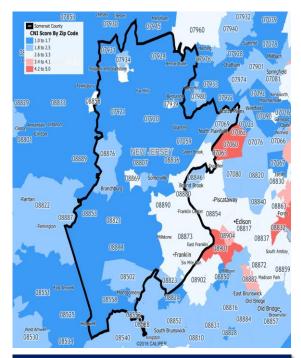
#### 1. Income Barrier

- Percentage of households below poverty line, with head of household age 65 or older
- Percentage of families with children under 18 below poverty line
- Percentage of single female-headed families with children under 18 below poverty line

#### 2. Cultural Barrier

- Percentage of population that is minority (including Hispanic ethnicity)
- Percentage of population over age 5 that speaks English poorly or not at all
- 3. Education Barrier
  - Percentage of population over 25 without a high school diploma
- 4. Insurance Barrier
  - Percentage of population in the labor force, aged 16 or more, without employment
  - Percentage of population without health insurance
- 5. Housing Barrier
  - Percentage of households renting their home

A comparison of CNI scores and hospital utilization reveals a strong correlation between need and use. Communities with low CNI scores can be expected to have high hospital utilization. There is a causal relationship between CNI scores and preventable hospitalizations and ED visits for manageable conditions. Communities with high CNI scores may have more hospitalization and ED visits that could have been avoided with improved healthy community structures and appropriate outpatient and primary care.



COMMUNITY NEED INDEX (Dignity Health)

Darker Red Areas Indicate A Higher CNI Score (Higher Need)

<sup>&</sup>lt;sup>22</sup> Truven Health Analytics, 2017; Insurance Coverage Estimates, 2017; Claritas 2017; and Community Need Index, 2017. http://cni.chw-interactive.org/

#### **Community Needs Index**

| omerse                | County                                 | ZIP Code     | ZIP Code<br>Description | CNI Score                               |
|-----------------------|--|--------------|-------------------------|---|
|                       | Somerset                               | 08805        | Bound Brook             | 3.2                                     |
| Highest               | Somerset                               | 08835        | Manville                | 3                                       |
| CNI Score<br>(Highest | Somerset                               | 08869        | Raritan                 | 2.8                                     |
| Need)                 | Somerset                               | 08880        | South Bound Brook       | 2.8                                     |
|                       | Somerset                               | 08873        | Somerset                | 2.6                                     |
|                       | × ************************************ | ************ |                         | 200000000000000000000000000000000000000 |
|                       | Somerset                               | 07931        | Far Hills               | 1.6                                     |
| Lowest                | Somerset                               | 08558        | Skillman                | 1.6                                     |
| CNI Score<br>(Lowest  | Somerset                               | 08844        | Hillsborough            | 1.6                                     |
| Need)                 | Somerset                               | 08853        | Neshanic Station        | 1.6<br>1.6<br>1.6<br>1.6                |
|                       | Somerset                               | 08836        | Martinsville            |   |

Source: 2017 Dignity Health, Truven Health Analytics, 2016; Insurance Coverage Estimates, 2016; Claritas 2016; and Community Need Index, 2016.

Bound Brook's CNI score (3.2) indicates highest need in the County, followed by Manville (3.0), Raritan (2.8), South Bound Brook (2.8) and Somerset (2.6). Conversely, Martinsville's score (1.4) represents the lowest CNI score in the County followed by Far Hills, Skillman, Hillsborough, and Neshanic Station (the latter all at a score of 1.6).

# Timeliness of Service

A key indicator of the timeliness of service is emergency department (ED) utilization for conditions that could have been treated in a primary care setting.

Reasons for accessing the ED instead of a more appropriate, lower acuity level of care include:

- No regular source of primary care
- Lack of health insurance
- Cost
- Transportation
- Office hours
- Citizenship status

#### **ED Utilization for Ambulatory Care Sensitive Conditions**

Ambulatory Care Sensitive Conditions (ACSC) are potentially preventable medical conditions that are treated in the ED although more appropriate care should have been provided in a non-emergent outpatient primary care setting. ED utilization rates may be reduced by addressing primary care access issues.

- In 2016, Somerset County's ACSC ED visit rate (at 30.51/1,000) was 47.6% lower than the statewide rate (58.22/1,000).
- Somerset County had the second lowest ACSC ED visit rate of the 21 Counties in 2016; at 30.51/1,000, this was a 14.9% decrease from the 2013 rate.

Total ACSC ED Visits Rate/1,000 Population

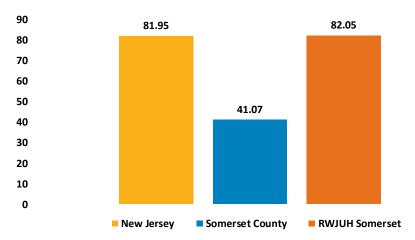
| ACSC - ED Rate/1000 |         |         | ACS            | C - ED Rat | e/1000  |         |                |
|---------------------|---------|---------|----------------|------------|---------|---------|----------------|
| COUNTY              | NJ 2013 | NJ 2016 | Change '13-'16 | COUNTY     | NJ 2013 | NJ 2016 | Change '13-'16 |
| CUMBERLAND          | 82.08   | 89.34   | 7.26           | GLOUCESTER | 53.34   | 53.60   | 0.27           |
| CAMDEN              | 92.53   | 87.44   | (5.09)         | моммоитн   | 52.97   | 52.52   | (0.46)         |
| ESSEX               | 81.43   | 85.99   | 4.56           | BURLINGTON | 53.85   | 48.54   | (5.31)         |
| ATLANTIC            | 85.64   | 84.99   | (0.65)         | MIDDLESEX  | 48.46   | 47.45   | (1.01)         |
| SALEM               | 77.56   | 75.01   | (2.55)         | WARREN     | 36.90   | 41.28   | 4.38           |
| MERCER              | 73.13   | 74.33   | 1.20           | SUSSEX     | 25.76   | 36.14   | 10.38          |
| PASSAIC             | 70.77   | 72.95   | 2.18           | MORRIS     | 30.40   | 32.96   | 2.56           |
| CAPE MAY            | 71.68   | 66.41   | (5.27)         | BERGEN     | 31.74   | 31.49   | (0.25)         |
| UNION               | 61.98   | 64.24   | 2.26           | SOMERSET   | 30.77   | 30.51   | (0.26)         |
| HUDSON              | 58.01   | 63.83   | 5.81           | HUNTERDON  | 23.72   | 26.62   | 2.90           |
| OCEAN               | 62.11   | 59.29   | (2.83)         | STATEWIDE  | 57.56   | 58.22   | 0.65           |

Source: NJDHSS 2013/2016 UB-04 Data – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

# <u>Children</u>

- In 2016, Somerset County's ACSC ED visits for children age 0-17 (at 45.04/1,000) was 44.3% less than the statewide rate (80.36/1,000).
- The 2016 ACSC visit rate among children was also lower than the rate in the RWJUH Somerset Hospital Service Area.
- The towns with the highest ACSC ED visit rate were Manville, Bound Brook, Somerset, South Bound Brook, and Raritan.

Total ACSC ED Visits for Children (Age 0-17): Rate/1,000 Population



Source: UB-04 2016 Discharges

- The 2016 pediatric ED ACSC rate in RWJUH Somerset's hospital service area (78.20/1,000) is higher than the county and only slightly lower than New Jersey rate.
- The ED utilization rate for children in Somerset County is significantly lower than that experienced in New Jersey or the RWJUH Somerset service area.
- The towns of Manville, Somerset and Bridgewater all had pediatric ACSC ED visit rates that were higher than the county.
- These towns had pediatric ED visit rates that exceed those of the State.

ED ACSC VOLUME: TOP 5 BY SERVICE AREA ZIP CODES – Pediatric (AGE 0-17)
Rate / 1,000 Population

| GEOGRAPHIC<br>AREA | RATE  | HIGHEST SERVICE AREA RATES |        |  |
|--------------------|-------|----------------------------|--------|--|
| Somerset County    | 45.04 | 8873 SOMERSET              | 177.01 |  |
| New Jersey         | 81.95 | 8835 MANVILLE              | 175.63 |  |
| RWJUH Somerset     | 82.05 | 8807 BRIDGEWATER           | 84.02  |  |
|                    |       | 8880 BERNARDSVILLE         | 58.51  |  |
|                    |       | 8844 HILLSBOROUGH          | 55.63  |  |

Source: UB-04 2016 Discharges

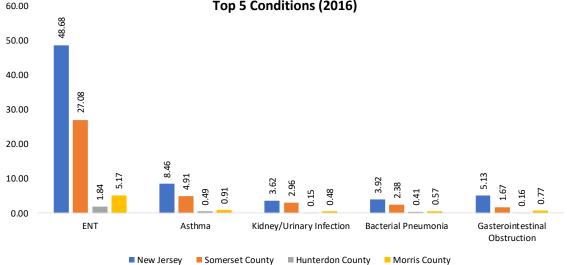
- There was a total of 6,194 ACSC ED visits for children from Somerset County in 2016.
- ENT is the most common ACSC that resulted in an ED visit for children, followed by asthma, kidney/urinary infection, bacterial pneumonia and gastrointestinal obstruction.
- In 2016, Somerset County children's ED visit rate for ENT conditions was 38% less than the statewide rate.

ACSC ED Volume: Top 5 by Service Area – Pediatric (Age 0-17)



Source: UB-04 2016 Discharges

Total ACSC ED Visits for Children (Age 0-17): Rate/1,000 Population Top 5 Conditions (2016)

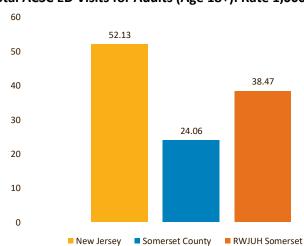


| ED ACSC (2016) Pediatrics (Age 0-17) |       |       |                 |        |  |
|--------------------------------------|-------|-------|-----------------|--------|--|
| Geographic Area                      | Rate  | G     | Geographic Area |        |  |
| Somerset County                      | 45.04 | 08873 | SOMERSET        | 177.01 |  |
| New Jersey                           | 81.95 | 08835 | MANVILLE        | 175.63 |  |
| RWJUH Somerset                       | 82.05 | 08807 | BRIDGEWATER     | 84.02  |  |
|                                      |       | 08880 | BERNARDSVILLE   | 58.51  |  |
|                                      |       | 08844 | HILLSBOROUGH    | 55.63  |  |

Source: UB-04 2016 Discharges

# <u>Adults</u>

- The 2016 Somerset County adult ED ACSC rate (24.06/1,000) is less than half the statewide rate (52.13).
- Somerset County adult ED ACSC rate is also lower than the RWJUH Somerset hospital service area rate.



Total ACSC ED Visits for Adults (Age 18+): Rate 1,000 Population

Source: UB-04 2016 Discharges

- The 2016 adult ED ACSC rate in New Jersey (52.13/1,000) is more than double the Somerset County rate (24.06/1,000).
- The 2016 Manville (102.39/1,000) adult ED ACSC rate was nearly twice the State rate (52.92/1,000).

ACSC ED 2016 – Adults (Age 18+)
Rate / 1,000 Population

GEOGRAPHIC
AREA
RATE
TOP 5 ZIP CODES

| GEOGRAPHIC<br>AREA | RATE  | то    | TOP 5 ZIP CODES |        |  |
|--------------------|-------|-------|-----------------|--------|--|
| Somerset<br>County | 24.06 | 08835 | MANVILLE        | 102.39 |  |
| New Jersey         | 52.13 | 08873 | SOMERSET        | 72.68  |  |
| RWJUH<br>Somerset  | 38.47 | 08807 | BRIDGEWATER     | 57.71  |  |
|                    |       | 08876 | SOMERVILLE      | 35.48  |  |
|                    |       | 08844 | HILLSBOROUGH    | 34.64  |  |

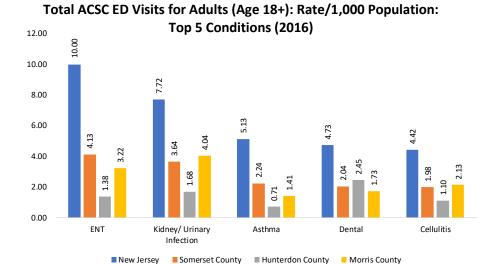
\*Source: UB-04 2016 Discharges

There was a total of 9,824 adult ED ACSC visits in 2016.

| EMERGENCY DEPARTMENT (2016) – AGE 18+ |                                      |                  |  |  |  |
|---------------------------------------|--------------------------------------|------------------|--|--|--|
| Service area                          | ACSC Description<br>(Top 5 Combined) | TOTAL<br>IN AREA |  |  |  |
|                                       | ENT                                  | 1,903            |  |  |  |
|                                       | Kidney/Urinary Inf.                  | 1,593            |  |  |  |
| RWJUH                                 | Dental Conditions                    | 894              |  |  |  |
| KWJOH                                 | Asthma                               | 890              |  |  |  |
|                                       | Cellulitis                           | 688              |  |  |  |
|                                       | All Others                           | 3,856            |  |  |  |
|                                       | TOTAL RWJUH SOM AREA                 | 9,824            |  |  |  |

Source: UB-04 2016 Discharges

- In 2016, ENT was the leading cause of adult ED ACSC followed by kidney/urinary infection, dental conditions, asthma, and cellulitis in Somerset County.
- In 2016, Somerset County adults (4.13/1,000) had a lower ED visit rate for ENT ACSC than the State (10.00/1,000).



ED ACSC (2016) Adults 18+ Geographic Area Rate Geographic Area Rate Somerset County 24.06 08835 MANVILLE 102.39 New Jersey 52.13 08873 SOMERSET 72.68 RWJUH Somerset 38.47 08807 BRIDGEWATER 57.71 08876 SOMERVILLE 35.48 HILLSBOROUGH 08844 34.64

Source: UB-04 2016 Discharges

# Inpatient Utilization for Ambulatory Care Sensitive Conditions

Individuals may be admitted to the hospital due to an ACSC; higher rates of ACSC conditions among inpatients indicate primary care access issues, poor preventive care and barriers related to socioeconomic status.

- Somerset County ranks 18/21 counties with 13.09/1,000 ACSC Inpatient admissions in 2016, a (0.95%) decrease from 2013.
- In 2016, Somerset County (13.09/1,000) had fewer ACSC Inpatient admissions than the State (16.79/1,000).

# Total Ambulatory Care Sensitive Conditions (ACSCs) Inpatient Admissions, per 1,000 Population

| ACSC - IP Rate/1000 |         | ACSC - IP Rate/1000 |                |           |         |         |                |
|---------------------|---------|---------------------|----------------|-----------|---------|---------|----------------|
| COUNTY              | NJ 2013 | NJ 2016             | Change '13-'16 | COUNTY    | NJ 2013 | NJ 2016 | Change '13-'16 |
| SALEM               | 26.07   | 27.81               | 1.75           | моммоитн  | 19.07   | 16.69   | (2.38)         |
| CUMBERLAND          | 24.18   | 24.88               | 0.69           | MERCER    | 20.17   | 16.60   | (3.57)         |
| CAPE MAY            | 20.71   | 22.11               | 1.40           | MIDDLESEX | 17.07   | 15.36   | (1.71)         |
| CAMDEN              | 22.87   | 21.04               | (1.83)         | UNION     | 16.18   | 14.62   | (1.55)         |
| OCEAN               | 24.79   | 20.38               | (4.42)         | MORRIS    | 15.04   | 14.03   | (1.01)         |
| ESSEX               | 21.61   | 19.69               | (1.92)         | HUNTERDON | 13.81   | 13.21   | (0.60)         |
| ATLANTIC            | 23.63   | 19.27               | (4.36)         | SUSSEX    | 15.34   | 13.05   | (2.28)         |
| BURLINGTON          | 18.91   | 18.03               | (0.88)         | WARREN    | 15.94   | 12.98   | (2.96)         |
| HUDSON              | 20.58   | 17.39               | (3.20)         | SOMERSET  | 14.04   | 13.09   | (0.95)         |
| PASSAIC             | 20.78   | 16.88               | (3.89)         | BERGEN    | 15.20   | 12.17   | (3.04)         |
| GLOUCESTER          | 19.84   | 16.86               | (2.97)         | STATEWIDE | 19.13   | 16.79   | (2.34)         |

Source: NJDHSS 2013/2016 UB-04 Data — NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, Manville (44.56/1,000) has the highest inpatient admissions due to ACSC followed by Bridgewater (39.77/1,000) and Somerset (32.57/1,000).
- The 2016 Inpatient ACSC for Manville (44.56/1,000) was higher than the State rate (16.79/1,000).
- The 2016 inpatient ACSC rate for Somerset County (13.09/1,000) was lower than New Jersey (16.79/1,000).

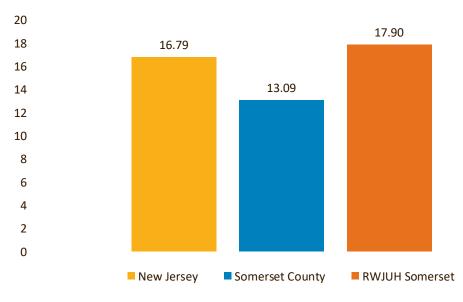
Total ACSC Inpatient Admissions – Rate/1,000 Population All Ages 2016

| GEOGRAPHIC AREA | RATE  | HIGHEST SERVICE AREA RATES |
|-----------------|-------|----------------------------|
| New Jersey      | 16.79 | 08835 Manville 44.56       |
| Somerset County | 13.09 | 08807 Bridgewater 39.77    |
| RWJUH Somerset  | 17.90 | 08873 Somerset 32.37       |
|                 |       | 08844 Hillsborough 23.77   |
|                 |       | 07920 Basking Ridge 18.13  |

Source: UB-04 2016 Discharges

• In 2016, the RWJUH Somerset Service Area inpatient use rate for ACSC was higher than Somerset County.

Total ACSC Inpatient Admissions All Ages per 1,000 Population, 2016



Source: UB-04 2016 Discharges

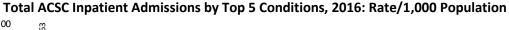
• In 2016, there were a total of 5,687 ACSC admissions from the Service Area from Somerset County.

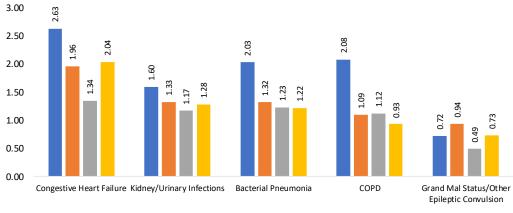
| INPATIENT (2016) – ALL AGES |                                      |                  |  |  |
|-----------------------------|--------------------------------------|------------------|--|--|
| SERVICE<br>AREA             | ACSC Description<br>(Top 5 Combined) | TOTAL<br>IN AREA |  |  |
|                             | Congestive Heart Failure             | 809              |  |  |
|                             | Kidney/Urinary Infection             | 515              |  |  |
| RWJUH<br>Somerset           | Bacterial Pneumonia                  | 547              |  |  |
|                             | COPD                                 | 508              |  |  |
|                             | Grand Mal/Epileptic Convulsions      | 427              |  |  |
|                             | All Others                           | 2,881            |  |  |
|                             | TOTAL RWJUH SOMERSET                 | 5,687            |  |  |

Source: UB-04 2016 Discharges

New Jersey

- In 2016, congestive heart failure was the leading cause of inpatient ACSC admissions in New Jersey and Somerset County followed by kidney and urinary infection, bacterial pneumonia, COPD and grand mal status.
- The 2016 Somerset County inpatient ACSC rates for 4 of the top 5 conditions were equal to or lower than State rates. ACSC use rates for grand mal status was higher than the State.





| - non-security - non-security |       |                 |              |       |  |
|-------------------------------|-------|-----------------|--------------|-------|--|
| IP ACSC (2016) All Ages       |       |                 |              |       |  |
| Geographic Area               | Rate  | Geographic Area |              | Rate  |  |
| Somerset County               | 13.09 | 08835           | MANVILLE     | 44.56 |  |
| New Jersey                    | 16.79 | 08807           | BRIDGEWATER  | 39.77 |  |
| RWJUH Somerset                | 17.90 | 08873           | SOMERSET     | 32.37 |  |
|                               |       | 08844           | HILLSBOROUGH | 23.77 |  |
|                               |       | 07920           | BASKIN RIDGE | 18.13 |  |

■ Hunterdon County

Somerset County

Source: UB-04 2016 Discharges

Additional information regarding Ambulatory Care Sensitive Conditions may be found in **Appendix G**: Discharges and Population 18-64 for Ambulatory Care Sensitive Conditions.

# 5. <u>Neighborhood and Built Environment</u>

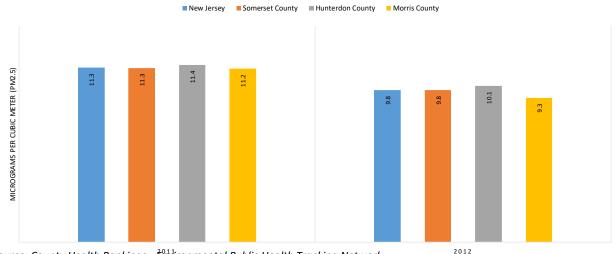
The neighborhood and built environment contribute to health in a variety of ways. Pollution, crime, and access to healthy food and water are environmental and neighborhood factors that may be hazardous to a community's health<sup>23</sup>.

#### **Air Quality**

Outdoor air quality has improved since the 1990, but many challenges remain in protecting Americans from air quality problems. Air pollution may make it harder for people with asthma and other respiratory diseases to breathe.<sup>24</sup> County level data masks ZIP Code level analysis that may reveal higher concentrations of air pollution, particularly in industrialized areas of a county.

- In 2012, the daily measure of fine particle matter in Somerset County (9.8 PM2.5) is equivalent to the State (9.8 PM2.5). Compared to all 21 counties, Somerset County ranks in the middle quartile.
- Somerset County experienced a 13.3% reduction in fine particulate matter in between 2011 (11.3 per cubic meter) and 2012 (9.8 per cubic meter).
- In 2012, Somerset County (9.8 PM2.5) average daily measure of fine particles is 0.3 percentage
  point greater than the CHR national benchmark (9.5 PM2.5) and placing it in the in the second
  quartile.

# Average Daily Density of Fine Particulate Matter State & County Comparisons 2011 - 2012



Source: County Health Rankings - Environmental Public Health Tracking Network

County Health
Rankings & Roadmaps
Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

<sup>&</sup>lt;sup>23</sup> Source: Commission to Build a Healthier America, Robert Wood Johnson Foundation <a href="http://www.commissiononhealth.org/PDF/888f4a18-eb90-45be-a2f8-159e84a55a4c/Issue%20Brief%203%20Sept%2008%20-%20Neighborhoods%20and%20Health.pdf">http://www.commissiononhealth.org/PDF/888f4a18-eb90-45be-a2f8-159e84a55a4c/Issue%20Brief%203%20Sept%2008%20-%20Neighborhoods%20and%20Health.pdf</a>

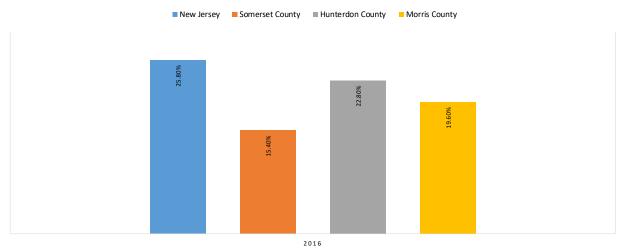
<sup>&</sup>lt;sup>24</sup> http://www.cdc.gov/air/default.htm

## Housing Built before 1950

The potential for exposure to lead based paint in housing units built before 1950 is high. A main source of lead exposure is found in household dust with lead-based paint. Children are highly vulnerable to exposure to lead because of its adverse effects on the developing brain and nervous system.<sup>25</sup>

- In 2016, 15.4% of Somerset County housing units were built before 1950, more than 10 percentage points fewer than New Jersey overall at 25.8%.
- Somerset County had the second lowest percentage of housing units built before 1950. Among all counties in New Jersey, Somerset County ranks in the best performing quartile.

# Housing Built Before 1950 With Possible Lead-Based Paint Hazard State & County Comparisons 2016



Source: https://www26.state.nj.us/doh-shad/indicator/view/pre1950home.percent.html

#### **Lead Hazards**

The Centers for Disease Control and Prevention (CDC) defines lead poisoning in children as a blood lead level of 10 micrograms per deciliter ( $\mu g/dL$ ) or above. Young children can be exposed by swallowing lead dust or soil that gets on their hands or objects they put into their mouths such as toys; swallowing leaded paint chips; breathing leaded dust or lead contaminated air and eating food or drinking water that is contaminated with lead.

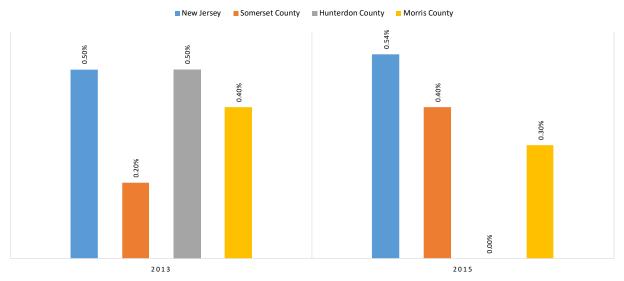
Very high levels of lead can cause seizures, brain damage, developmental or intellectual disabilities, coma and even death. Exposure to lead, even at low levels, has been associated with decrease hearing, lower intelligence, hyperactivity, attention deficit, and developmental problems.<sup>26</sup> County level analysis cannot reveal individual town disparities in blood lead levels particularly in towns with housing stock built before 1950.

<sup>&</sup>lt;sup>25</sup> Report On the National Survey of Lead-Based Paint in Housing, https://www.epa.gov/sites/production/files/documents/r95-003.pdf

<sup>&</sup>lt;sup>26</sup> http://www.nj.gov/ health/fhs/newborn/ lead.shtml

- In 2015, 0.4% of Somerset County children had elevated blood lead levels compared to 0.54% statewide.
- Somerset County reported an increase in children with elevated blood lead levels from 2013 (0.2%) to 2015 (0.4%). In 2015, Somerset County ranked among the middle quartile among all counties statewide (0.4%).

## **Children with Elevated Blood Levels** State & County Comparisons 2013 - 2015



Source: https://www.cdc.gov/nceh/lead/data/state/njdata.htm

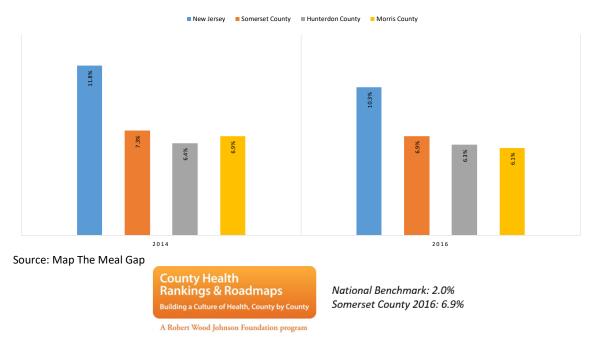
### Access to Healthy Foods

Choices about food and diet are influenced by accessibility and affordability of retailers. Specifically, travel time to shopping, availability of healthy foods and food prices are key to decision making. Low-income families face greater barriers in accessing healthy and affordable food retailers, which in turn negatively affect diet and food security.<sup>27</sup>

- In 2016, 10.3% of New Jersey and 6.9% of Somerset County residents suffered from food insecurity.
- Between 2014 and 2016, the percent of Somerset County residents with food insecurity declined from 7.3% to 6.9%.

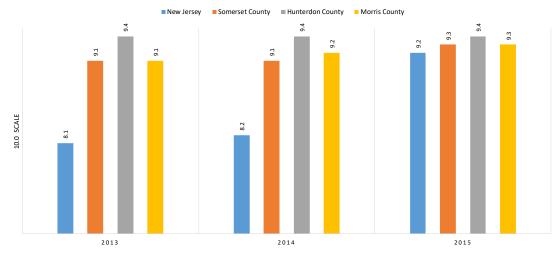
<sup>&</sup>lt;sup>27</sup> https://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas/

## Limited Access to Healthy Foods State & County Comparisons 2014 - 2016



• In 2015, Somerset County had a rate of 9.3 out of 10 on the food environment index which is an indicator of access to healthy foods.

#### **Food Environment Index 2015**



Source: USDA Food Environment Atlas, Map the Meal Gap from Feeding America, County Health Rankings



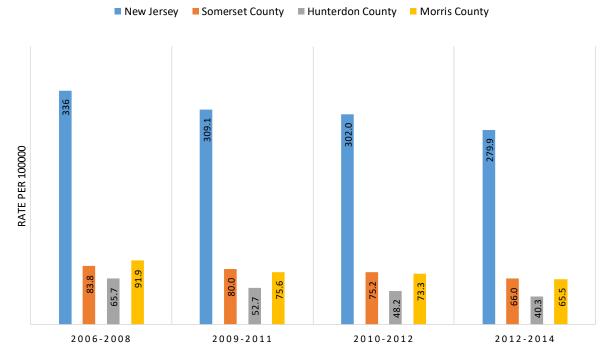
| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| Food Environment Index Index of factors that contribute to a healthy food environment | N.A.                          |  |               |
| Annual Number of Unhealthy Air Quality Days  Due to Fine Particulate Matter           | N.A                           |  |               |
| Housing Built Before 1950 with Possible Lead-Based Paint Hazard                       | N.A                           | N.A.                                   |               |
| Percent of Children With Elevated Blood Lead Levels  Percent of Children              | N.A.                          | N.A.                                   |               |
| Limited Access to Healthy Foods   | N.A.                          |  |               |
| Food Environment Index Index of factors that contribute to a healthy food environment | N.A.                          |  |               |

### **Injury and Crime Prevention**

Injuries and violence are widespread. Most events resulting in injury, disability or death are predictable and preventable. Individual behaviors, physical environment, access to health services and the social environment affect the risk of unintentional injury and violence. Violent crime, burglaries and motor vehicle crash deaths in Somerset County have seen steady decreases and are lower than rates Statewide.

- The 2012-2014 violent crime rate in Somerset County (66/100,000) is 76.2% lower than the State crime rate (279.9/100,000).
- The violent crime rate in Somerset County decreases 21% from 2006-2008 (83.8/100,000) to 2012-2014 (66/100,000).
- From 2012-2014, the New Jersey (279.9/100,000) violent crime rate was more than 4 times greater than the Somerset County rate.
- Compared to all 21 counties statewide, and the County Health Rankings Benchmark, Somerset County's violent crime rate ranks in the best performing quartile.

# Violent Crime State & County Comparisons 2014 - 2016

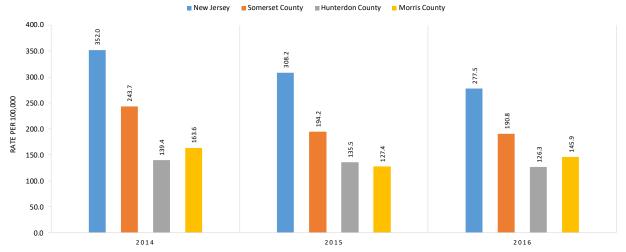


Source: County Health Rankings - The Uniform Crime Reporting (UCR) Program



- Somerset County (190.8/100,000) had 31.2% fewer burglaries than New Jersey (277.5/100,000) in 2016.
- The Somerset County burglary rate decreased 21.7% from 243.7/100,000 in 2014 to 190.8/100,000 in 2016.
- Somerset County's violent crime rate ranks in the middle quartile of New Jersey counties.

# Burglary Rate State and County Comparison – 2014-2016



Source: http://www.njsp.org/ucr/2015/pdf/2015a\_sect\_7.pdf

County Health Rankings & Roadmaps Building a Culture of Health, County by County

National Benchmark: 62 Somerset County 2016: 66

A Robert Wood Johnson Foundation program

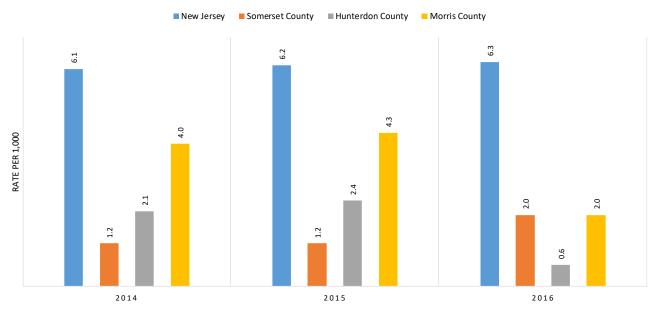
- In 2010-2016, Somerset County (5.46/100,000) had 13.7% fewer motor vehicle crash deaths than New Jersey (6.59/100,000).
- Deaths due to motor vehicle accidents decrease 2.8% in Somerset County between 2009-2015 (5.62/1,000) and 2010-2016 (5.46/1,000).
- 2010-2016 Somerset County (5.46/1,000) car accident related deaths occurred 55.9% less often than the *Healthy People 2020* target (12.4/1,000).

## **Domestic Violence Offenses**

Domestic violence can negatively impact a victim's health beyond the domestic violence incident. Victims of domestic violence exhibit physical and emotional problems including, but not limited to, chronic pain, depression, anxiety, eating disorders, and post-traumatic stress disorder.<sup>28</sup>

- Compared to New Jersey (6.3/1,000), Somerset County (2.0/1,000) had a lower rate of arrests due to domestic violence in 2016.
- Between 2014 and 2016, the rate of domestic violence arrests in Somerset County increased 6.7%.
- Somerset County is within the middle quartile compared to all New Jersey counties for arrests due to domestic violence.

# Domestic Violence Arrests State & County Comparisons 2014 - 2016

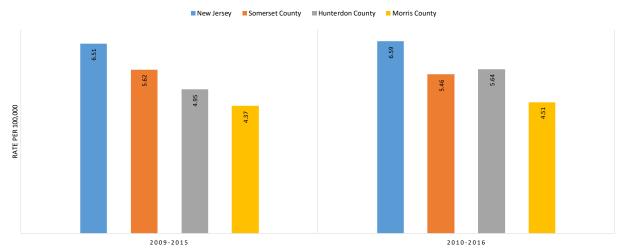


Source: County Health Rankings - The Uniform Crime Reporting (UCR) Program

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<sup>&</sup>lt;sup>28</sup> http://www.stopvaw.org/health effects of domestic violence

## Number of Motor Vehicle Crash Deaths State and County Comparisons – 2009-2016

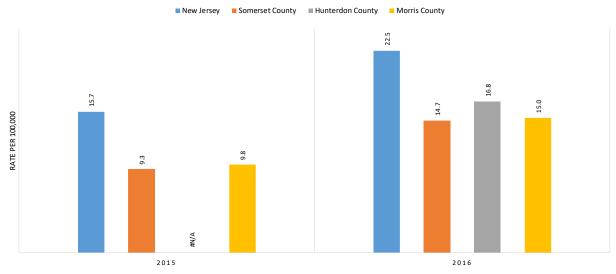


Source: County Health Rankings, CDC Wonder Mortality Data, 2010 - 2016



- In 2016, Somerset County (14.7/100,000) had 53.1% fewer deaths due to accidental poisoning and exposure to noxious substances than statewide (22.5/100,000).
- Somerset County had more deaths due to accidental poisoning and exposure to noxious substances in 2016 than in 2015.
- Somerset County ranks in the best quartile in New Jersey, and in the Middle Quartile *Healthy People 2020* target.

## Deaths Due to Accidental Poisoning and Exposure to Noxious Substances State and County Comparisons – 2015-2016



SOURCE: NJ SHAD

| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| Violent Crime Rate/ 100000 Population                     | N.A                           |  |               |
| Burglary Rate/ 1000 Population                            | N.A                           | N.A.                                   |               |
| Domestic Violence Arrests Rate/ 1000 Population           | N.A                           | N.A                                    |               |
| Deaths Due to Motor Vehicle Crashes Rate/ 1000 Population | N.A.                          |  |               |
| Deaths Due to Poisoning Rate/ 1000 Population             |                               | N.A                                    |               |

#### C. HEALTH FACTORS

Health factors represent the influences that impact one's health. These include demographic, social, environmental, economic, and individual behaviors as well as clinical care and access to services. Social determinants are described in Section B following Health Factors.

### 1. Demographics

### Age

Health disparities exist in all age groups. The Centers for Disease Control and Prevention reports that although life expectancy and overall health has improved for most Americans, older adults are not benefitting equally due to economic status, race and gender. The overall proportion of older adults in Somerset County population is slightly smaller than New Jersey. From 2018 to 2023, the population aged over 65 in Somerset County is projected to increase at a higher rate (2.7%) than the statewide increase projected of 2.4%.

- Between 2018 and 2023, New Jersey is projected to have a 1% decline among 0-17 year olds. Skillman, however, anticipates a 3.8% decline in this age cohort.
- Skillman's overall projected population growth (3.4%), between 2018 and 2023, is more than double that of the State (1.3%).
- Women of child-bearing age (15-44) comprise 19.7% of Somerset County's 2018 population and are projected to decrease -0.52% by 2023. Similarly, women aged 15-44 comprise 18.5% of the Manville population but are projected to decrease -4.3%, in line with the State.

Population Distribution and Projected Percent Change 2018-2023

| GEOGRAPHIC AREA  |                    |            |          |                         |          |              |               |
|------------------|--------------------|------------|----------|-------------------------|----------|--------------|---------------|
| AGE COHORT       | Somerset<br>County | Somerville | Skillman | South<br>Bound<br>Brook | Manville | RWJBH<br>SOM | New<br>Jersey |
| 0-17             | 68592              | 4775       | 1508     | 1079                    | 2108     | 76,339       | 1,924,86      |
| % of Total       | 20.05%             | 21.1%      | 19.3%    | 21.9%                   | 20.8%    | 20.74%       | 19.80%        |
| % Change '18-'23 | -5.33%             | -3.03%     | -13.48%  | 3.35%                   | 0.05%    | -2.38%       | -1.86%        |
| 18-44            | 108452             | 7558       | 2387     | 1743                    | 3351     | 126,615      | 3,063,17      |
| % of Total       | 31.70%             | 33.3%      | 30.6%    | 35.4%                   | 33.1%    | 34.4%        | 32.50%        |
| % Change '18-'23 | 1.69%              | -3.58%     | 18.40%   | -6.14%                  | -6.63%   | -1.50%       | -0.71%        |
| 45-64            | 101,604            | 6684       | 2485     | 1354                    | 2864     | 102,773      | 2,440,028     |
| % of Total       | 29.70%             | 29.5%      | 31.8%    | 27.5%                   | 28.3%    | 27.92%       | 27.90%        |
| % Change '18-'23 | -1.58%             | -0.45%     | -6.40%   | 5.12%                   | -0.56%   | 0.37%        | -1.87%        |
| 65+              | 63,444             | 3654       | 1425     | 743                     | 1801     | 62,380       | 1,656,782     |
| % of Total       | 18.55%             | 16.1%      | 18.3%    | 15.1%                   | 17.8%    | 16.95%       | 14.80%        |
| % Change '18-'23 | 19.48%             | 17.87%     | 25.66%   | 24.46%                  | 12.49%   | 18.74%       | 15.44%        |
| All Ages         | 342,092            | 22671      | 7805     | 4919                    | 10124    | 368,107      | 9,084,84      |
| % of Total       | 100.0%             | 100.0%     | 100%     | 100%                    | 100%     | 100.0%       | 100%          |
| % Change '18-'23 | 1.98%              | 0.42%      | 3.40%    | 2.78%                   | -0.52%   | 1.78%        | 1.30%         |
| Female 15-44     | 60,908             | 3,978      | 1,429    | 926                     | 1,798    | 68,580       | 1,677,712     |
| % of Total       | 19.73%             | 17.55%     | 18.31%   | 18.82%                  | 17.76%   | 18.63%       | 18.48%        |
| % Change '18-'23 | 0.52%              | -3.16%     | 11.21%   | -3.64%                  | -4.31%   | -1.50%       | -1.20%        |

Source: Claritas Population Estimates 2018, 2023

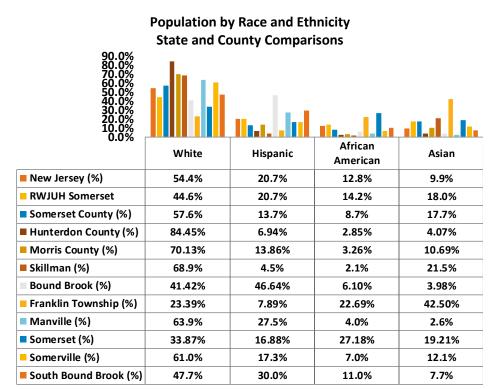
## Race and Ethnicity

Despite notable progress in the overall health of the Nation, there remain morbidity and mortality disparities by race and ethnicity. The population cohorts which historically have experienced poorer health status are anticipated to grow; therefore, the future health of America can be influenced by improving the health of these select groups. In Somerset County, the percentage of Black, Asian and Hispanic populations increased while the percentage of White residents has declined, heightening the vital need for addressing disparities in health and care among more vulnerable minority groups.<sup>29</sup>

• According to 2018 population estimates, 57.6% of Somerset County, 68.9% of Skillman and 23.3% of Franklin Township residents are White as compared to 54.4% statewide.

<sup>&</sup>lt;sup>29</sup> http://www.cdc.gov/omhd/AMH/AMH.htm

- In 2018, 20.7% of New Jersey residents are Hispanic, while nearly 50% of Bound Brook (46.64%) residents are Hispanic.
- The Hispanic population in Somerset County increased 22.2% from 2010 through 2018.
- In 2018, 17.7% of Somerset County residents are Asian, nearly twice as many as New Jersey (9.9%).
- The Asian population in Somerset County increased 33.1% between 2010 and 2018.



Source: Claritas 2018 Population Estimate

## **Population Change by Race and Ethnicity**

| Somerset County   |         |         |             |  |
|---|---------|---------|-------------|--|
| RACE / ETHNICITY  | 2010    | 2018    | %<br>Change |  |
| White (alone)   | 201,849 | 184,647 | -8.5%       |  |
| Black / African<br>American (alone)                           | 27,480  | 31,079  | 13.1%       |  |
| Asian<br>(alone)  | 45,473  | 60,507  | 33.1%       |  |
| Native American /<br>Pacific Islander /<br>Other Race (alone) | 280     | 268     | -4.3%       |  |
| Two or More Races<br>(alone)                                  | 1259    | 1096    | -12.9%      |  |
| Hispanic / Latino<br>(of Any Race)                            | 42,091  | 51,443  | 22.2%       |  |

Source: Claritas 2018 Population Estimate

## 2. Clinical Care Measures

## Inpatient and ED Utilization

Factors impacting hospital utilization may include policy change, advances in technology, practice patterns and demographics. Many federal and state health care payment reforms, including the Affordable Care Act (ACA), were designed to improve care transitions, coordination of care, enhance ambulatory care and improve access to primary care. The anticipatory result would include improved coordinated care and declines in inpatient and ED utilization.

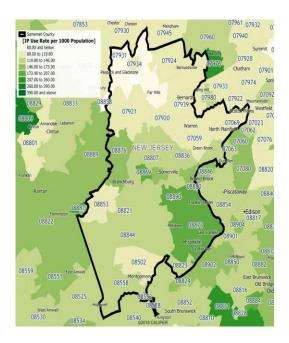
#### **Inpatient**

- Somerset County's 2016 inpatient utilization rate (137.73/1,000) was 14.0% lower than the State (160.22/1,000).
- RWJUH Somerset Service Area's inpatient rate (149.38/1,000) was 7.9% higher than Somerset County (137.73/1,000), and 6.8% lower than the State (160.22/1,000) rate in 2016.
- Kingston (320.44/1,000) had the highest inpatient use rate in the RWJUH Somerset Service Area.

Inpatient Use Rates per 1,000 Population 2016

| GEOGRAPHIC AREA         | RATE   |
|-------------------------|--------|
| New Jersey              | 160.22 |
| Somerset County         | 137.73 |
| RWJUH Somerset          | 149.38 |
| TOP 5 BY ZIP CODE       |        |
| 08528 Kingston          | 320.44 |
| 08835 Manville          | 190.49 |
| 08873 Somerset          | 180.70 |
| 08869 Raritan           | 177.29 |
| 08880 South Bound Brook | 165.85 |

Source: UB-04 2016 Discharges Includes Inpatient & Same Day Stay, Excludes Normal Newborn; Population –Claritas 2016 Estimate



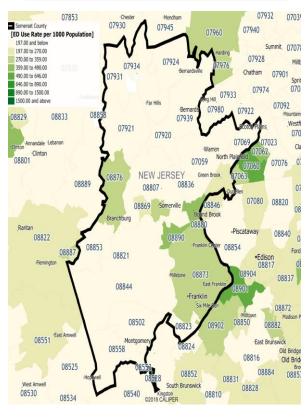
Source: UB-04 2016 Discharges Includes Inpatient & Same Day Stay, Excludes Normal Newborn; Population –Claritas 2016 Estimate

## **Emergency Department**

- Somerset County's 2016 ED visit rate (215.14/1,000) was 39% less than State rate (352.20/1,000).
- RWJUH Somerset's 2016 Service Area (275.64/1,000) ED use rate exceeded Somerset County rate (215.14/1,000) by 22%.
- In 2016, Kingston's ED visit rate (597.51/1,000) was more than twice as large as the RWJUH Somerset Service Area visit rate (215.14/1,000).
- In 2016, the ED visit rates of Manville, Bound Brook, Somerset, and South Bound Brook were greater than Somerset County.

## ED Use Rate per 1,000 Population 2016

| GEOGRAPHIC AREA         | RATE   |
|-------------------------|--------|
| New Jersey              | 352.20 |
| Somerset County         | 215.14 |
| RWJUH Somerset          | 275.64 |
| TOP 5 BY ZIP CODE       |        |
| 08528 Kingston          | 597.51 |
| 08835 Manville          | 370.45 |
| 08805 Bound Brook       | 323.57 |
| 08873 Somerset          | 293.21 |
| 08880 South Bound Brook | 279.36 |



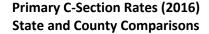
Source: UB-04 2016 ED Discharges; Claritas 2016 Estimate

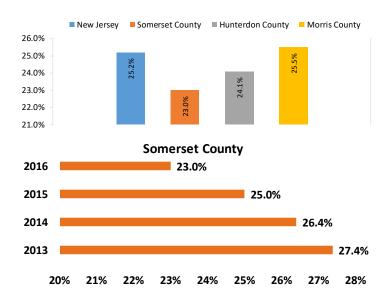
<sup>\*\*</sup> Emergency Room Use Among Adults Aged 18–64: Early Release of Estimates From the National Health Interview Survey, January–June 2011; http://www.cdc.gov/nchs/data/nhis/earlyrelease/emergency\_room\_use\_january-june\_2011.pdf

#### Cesarean Section

A Cesarean Section (C-section) is a major surgical procedure performed because of health problems in the mother, position of the baby, and/or distress in the infant.<sup>30</sup> The U.S. cesarean delivery rate reached a high of 32.9% of all births in 2009, rising 60% from 1996 (20.7%). Recently, the American College of Obstetricians and Gynecologists developed clinical guidelines for reducing the occurrence of non-medically indicated cesarean delivery and labor induction prior to 39 weeks. Efforts to reduce such births include initiatives to improve perinatal care quality, and changes in hospital policy to disallow elective delivery prior to 39 weeks and education of the public.<sup>31</sup>

- Somerset County's 2016 primary C-section rate (23.0%) is lower to the State rate (25.2%).
- The 2016 Somerset County primary C-section rate (23.0%) was lower than the Hunterdon (24.1%) and Morris (25.5%) County rates.
- In 2016, the Somerset primary C-section rate was in the middle quartile of New Jersey counties, and was similar to the *Healthy People 2020* target.
- County-wide, women with a primary C-section trended downward from 2013 through 2016, decreasing from 27.4% in 2013, to 23.0% in 2016.





Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database http://www4.state.nj.us/dhss-shad/query/result/birth/BirthCnty/Count.html

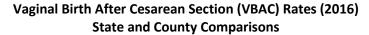


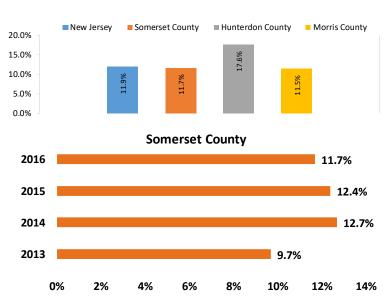
<sup>&</sup>lt;sup>30</sup> http://www.nlm.nih.gov/medlineplus/cesareansection.html

<sup>31</sup> http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63\_01.pdf

## Vaginal Birth After C-Section (VBAC)

- Somerset County's 2016 VBAC rate (11.7%) is similar to the State rate (11.9%). Somerset County ranks in the middle performing quartile of all 21 New Jersey counties.
- County-wide women with a VBAC trended upward from 2013 through 2016, increasing from 9.7% in 2013 to 11.7% in 2016.





Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database http://www4.state.nj.us/dhss-shad/query/result/birth/BirthBirthCnty/Count.html



## 3. <u>Health Behaviors</u>

#### Maternal / Fetal Health

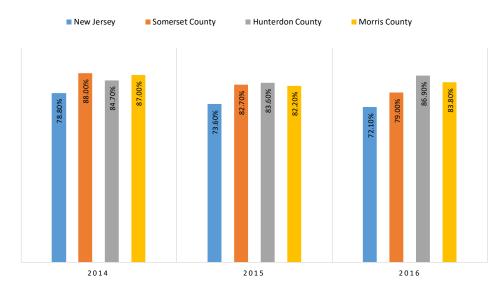
#### Prenatal Care

The medical care a woman receives during pregnancy monitors her health and the developing fetus. Lowrisk pregnancies should visit a prenatal provider every four or six weeks through 28 weeks, then every two or three weeks from weeks 28-36, and finally every week in the ninth month until delivery. A high-risk pregnancy requires additional visits.<sup>32</sup> Pregnant women who do not receive adequate prenatal care risk undetected complications and an increased possibility of adverse outcomes.

Early and regular prenatal care is a strategy to improve health outcomes for mothers and infants. Two significant benefits are improved birth weight and decreased preterm delivery. Infants born to mothers who receive no prenatal care have an infant mortality rate five times higher than mothers who receive appropriate prenatal care in the first trimester of pregnancy. Enrollment in care during the first trimester of pregnancy reflects timely initiation of prenatal care.<sup>33</sup>

- In 2016, 79.0% of Somerset County women entered prenatal care in the first trimester compared to 72.1% in New Jersey. As compared to other New Jersey counties, Somerset County ranks in the middle quartile.
- Somerset County women enrolled in first trimester prenatal care declined 9.6% between 2014 and 2016, from 87.4% to 79.0%.
- In 2016, Somerset County performed in the top quartile of the *Healthy People 2020* target of 77.9% women enrolled in first trimester care.

## Percentage of Live Births with First Trimester Prenatal Care State and County Comparisons 2014-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database Note: Percentages are based on Total Number of Live Births for County and State

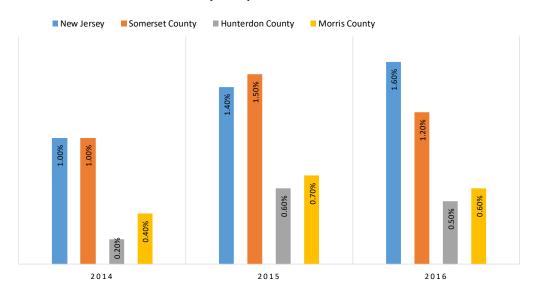


<sup>32</sup> http://www.plannedparenthood.org/health-info/pregnancy/prenatal-care

<sup>&</sup>lt;sup>33</sup> http://www.hrsa.gov/quality/toolbox/measures/prenatalfirsttrimester/index.html

- The percent of Somerset County women without prenatal care trended upward from 1.0% in 2014, to 1.2% in 2016.
- The 2016 Somerset County rate for no prenatal care is slightly lower than the State rate of 1.6% and performs in the middle quartile. Increases such as these are concerning and should be monitored.

## Percentage of Live Births with No Prenatal Care State and County Comparisons 2014-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database Note: Percentages are based on Total Number of Live Births for County and State

| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| First Trimester Prenatal Care Percentage of Live Births |                               | N.A.                                   |               |
| No Prenatal Care Percentage of Live Births              | N.A                           | N.A.                                   |               |

## **High Risk Sexual Behaviors**

## Teen Pregnancy

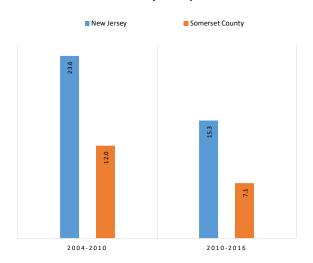
In 2016, there were 20.3 births/1,000 American adolescent females aged 15-19 years; approximately 209,809 babies were born to teens, with nearly eighty-nine percent of these births occurring outside of marriage. The national teen birth rate has trended downward over the past 20 years. In 1991, the U.S. teen birth rate was 61.8 births/1,000 adolescent females. However, the U.S. teen birth rate remains higher than that of many other developed countries, including Canada and the United Kingdom.<sup>34</sup> Pregnant teens are less likely than older women to receive recommended prenatal care and are more likely to have pre-

<sup>34</sup> http://www.hhs.gov/ash/oah/adolescent-health-topics/reproductive-health/teen-pregnancy/trends.html

term or low birth weight babies. Teen mothers are often at increased risk for STIs and repeat pregnancies, are less likely than their peers to complete high school and more likely to live below the poverty level and rely on public assistance. Risky sexual behaviors can have high economic costs for communities and individuals.<sup>35</sup>

- The 2010-2016 Somerset County (7.1/1,000) birth rate among teens aged 15-19 was 53.6%, lower than the State rate (15.3/1,000) and in the top performing quartile statewide.
- The birth rate among Somerset County teens aged 15-17 decreased from 5.2/1,000 in 2007-2011 to 3.0/1,000 in 2012-2016 and is in the top performing quartile statewide.
- For both age cohorts, 15-17 and 15-19, the percent of Somerset County teen births is consistently lower than statewide rates.

Teen Births Age 15-19, Rate 1,000 Female Population State and County Comparisons



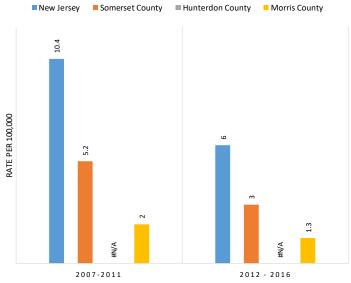
Source: NJDOH Center for Health Statistics State Health Assessment Data

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National Benchmark: 15 Somerset County 2016: 7.1

<sup>35</sup> http://www.countyhealthrankings.org/our-approach/health-factors/sexual-activity

# Teen Births Age 15-17 1,000 Female Population State and County Comparisons



Source: NJDOH Center for Health Statistics State Health Assessment Data



In a 2016 CDC Teen Pregnancy Statistics data brief, *State Disparities in Teenage Birth Rates in the United States*, based upon 2014 data, New Jersey is one of 10 states with the lowest teen birth rates (<20/1,000) compared to National figures (41.5/1,000). However, the New Jersey rate shows tremendous variability when examined by town.

• The Somerset zip code 2016 birth rate to teens aged 15-19 (25.3/1,000) is five times the Somerset County rate (5.7/1,000).

Teen Birth Rates 2016 - Deliveries Among 15-19 Year Olds

| GEOGRAPHIC AREA     | RATE  |
|---------------------|-------|
| New Jersey          | 11.16 |
| Somerset County     | 5.73  |
| RWJUH Somerset      | 13.06 |
| TOP 5 BY ZIP CODE   |       |
| 08873 Somerset      | 25.30 |
| 08805 Bound Brook   | 21.08 |
| 07924 Bernardsville | 11.97 |
| 08823 Franklin Park | 5.10  |
| 08807 Bridgewater   | 2.97  |

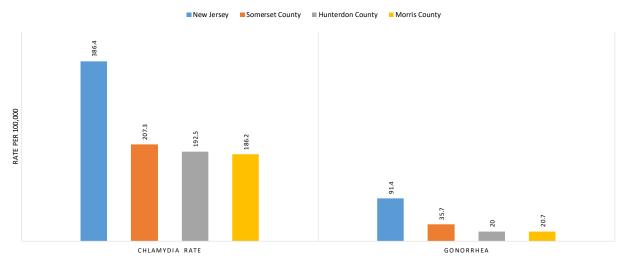
Source: UB-04 2016 Discharges – All Deliveries To Mothers Age 15-19; Claritas Population Estimate

### Sexually Transmitted Infection

Sexually transmitted infections (STI) are caused by bacteria, parasites and viruses contracted through relations with an infected individual. There are more than 20 types of STIs, including Chlamydia, Gonorrhea, Genital herpes, HIV/AIDS, HPV, Syphilis and Trichomoniasis. Most STIs affect both men and women, but in many cases health problems may be more severe for women. If pregnant, a STI can cause serious health complications for the baby.<sup>36</sup>

- Chlamydia is the most prevalent STI. In 2016, Somerset County (207.3/1,000) had 26.4% fewer cases of chlamydia than New Jersey (386.4/1,000) and performed in the top quartile statewide.
- The rate of chlamydia in Somerset County (207.3/1,000) is higher the CHR national benchmark (145.1/1,000).
- In 2016, Somerset County (35.7/100,000) has 61.0% fewer cases of gonorrhea than New Jersey (91.4/100,000).
- Somerset County ranks in the top quartile of New Jersey counties with regard to gonorrhea rates.

## Sexually Transmitted Diseases: Rate / 100,000 Population Chlamydia and Gonorrhea Rates State and County Comparisons 2016



Source: NJ SHAD

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National Benchmark: 145.1 Somerset County 2016: 207.3

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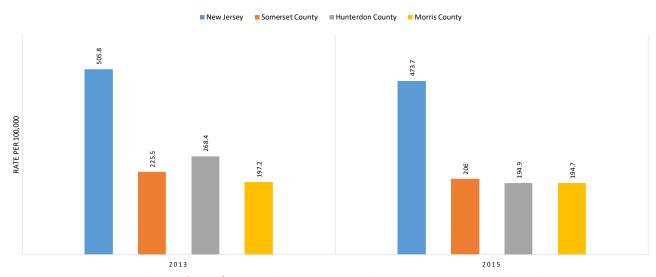
 $<sup>^{36}\,</sup>http://www.nlm.nih.gov/medlineplus/sexually transmitted diseases.html$ 

## **HIV/AIDS**

Human immunodeficiency virus (HIV) is spread mainly by having sex with someone infected with HIV or sharing needles with someone positive. Approximately 50,000 new HIV infections occur in the United States each year.

- County-wide HIV/AIDS prevalence rates declined between 2013 (225.5/100,000) and 2015 (206.0/100,000).
- In 2015, HIV/AIDS was 56.5% less prevalent in Somerset County (260.0/100,000) than in New Jersey (473.7/100,000). Somerset County is in the top performing quartile statewide.
- Somerset County has more HIV/AIDS cases than neighboring Hunterdon and Morris Counties.
- The prevalence rate is below the CHR benchmark of 362/100,000.

# HIV Rates 2013-2015 State and County Comparisons



Source: National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, County Health Rankings

| Indicator  | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|--|-------------------------------|--|---------------|
| Teen Births Ages 15-19 Rate per 100,000 Female Population  | N.A.                          |  |               |
| Teen Births Ages 15-17 Rate per 100,000 Female Population  |                               | N.A.                                   |               |
| STDs: Chlamydia Rate per 100,000 Population                | N.A.                          |  |               |
| STDs: Gonorrhea Rate per 100,000 Population                | N.A.                          | N.A.                                   |               |
| HIV/AIDS: Prevalence                                       | N.A                           |  |               |
| RED: Poorest Performing Quartile  Yellow: Middle Quartiles |                               |  |               |
| Green: Best Performing Quartile                            |                               |  |               |

#### Individual Behavior

A CDC report indicates that people can live longer if they practice one or more healthy lifestyle behaviors including: eating a healthy diet, not smoking, regular exercise and limiting alcohol consumption. People who engage in all of these behaviors are 66 percent less likely to die early from cancer, 65 percent less likely to die early from cardiovascular disease and 57 percent less likely to die early from other causes compared to those who do not engage in any of these behaviors.<sup>37</sup>

## Tobacco Use

Tobacco use is the leading cause of preventable death in the United States. Smoking leads to disease and disability, and harms nearly every organ in the body, and causes cancer, heart disease, stroke, diabetes, and lung diseases such as emphysema, bronchitis, and chronic airway obstruction. Exposure to secondhand smoke can lead to lung cancer and heart disease. Each year, smoking kills approximately 480,000 Americans, including 41,000 from secondhand smoke. On average, smokers die 10 years earlier than nonsmokers.

About 15% of U.S. adults smoke. Each day, nearly 3,200 youth smoke their first cigarette, and 2,100 people transition from occasional to daily smokers. Smokeless tobacco also leads to various cancers, gum and teeth problems, and nicotine addiction. Almost 6% of young adults use smokeless tobacco and half of new users are younger than 18.<sup>38</sup>, <sup>39</sup>

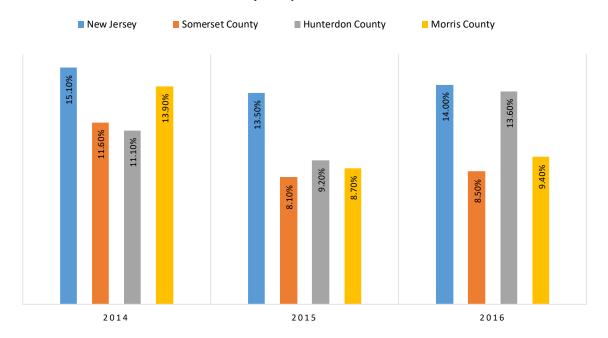
- Somerset County smokers decreased from 11.6% in 2014, to 8.5% in 2016.
- In 2016, there were 39.0% fewer smokers in Somerset County (8.5%) than New Jersey (14.69%). Somerset County had fewer adult smokers than neighboring Hunterdon (15.6%) and Morris (9.4%) Counties. Somerset County performs in the top quartile statewide.
- In 2016, Somerset County performed better than the *Healthy People 2020* target of 12% of adults that smoke.
- In 2016, Somerset County was in the top performing County Health Rankings Benchmark.

<sup>&</sup>lt;sup>37</sup> http://www.cdc.gov/features/livelonger/

<sup>38</sup> http://www.countyhealthrankings.org/our-approach/health-factors/tobacco-use

<sup>39</sup> http://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/index.htm

# Adults Who Are Current Smokers State and County Comparisons 2014-2016



Source: CDC New Jersey Behavioral Risk Factor Surveillance System (NJBRFS)



Baseline: 20.6% Target: 12.0% Somerset County 2016: 11.0% County Health
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National Benchmark: 14.0% Somerset County 2016: 11.0%

### Alcohol Use

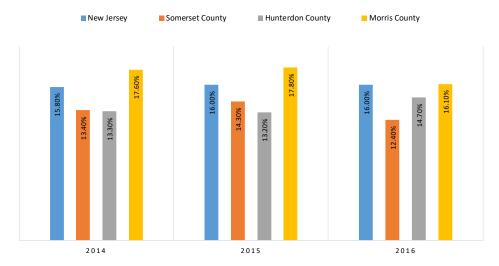
Although moderate alcohol use is associated with reduced risk of heart disease and diabetes, excessive consumption is the third leading cause of preventable death nationally. Excessive consumption considers both the amount and the frequency of drinking. Short-term, excessive drinking is linked to alcohol poisoning, intimate partner violence, risky sexual behaviors, failure to fulfill responsibilities and motor vehicle crashes. Over time, excessive alcohol consumption is a risk factor for hypertension, acute myocardial infarction, fetal alcohol syndrome, liver disease and certain cancers.<sup>40</sup>

- Binge drinkers, those men that consume more than 5 drinks and women that consume more than 4 drinks in one occasion, decreased from 13.4% in 2014, to 12.4% in 2016.
- In 2016, 12.4% of Somerset County residents were binge drinkers compared to 16% statewide. Somerset County had fewer binge drinkers than surrounding Hunterdon and Morris Counties. Statewide, Somerset County performs in the top quartile.

<sup>40</sup> http://www.countyhealthrankings.org/our-approach/health-factors/alcohol-drug-use

- The 2015 percent of Somerset County (14.5%) residents who drank excessively is 25% higher than the CHR national benchmark (12%).
- Heavy drinking is defined as a male who consumes at least 60 drinks a month or a female who consumes 30 in that time frame. Somerset County heavy drinkers remained consistent between 2014 (5.5%) and 2016.
- In 2016, 5.5% of Somerset County residents are heavy drinkers compared to 4.4% statewide, 2.1% in Hunterdon County and 4.4% in Morris County.
- Alcohol deaths in Somerset County were 18%, 5 percentage points higher than the CHR benchmark of 13%.

# Adults Reporting Binge Drinking State and County Comparisons 2014-2016

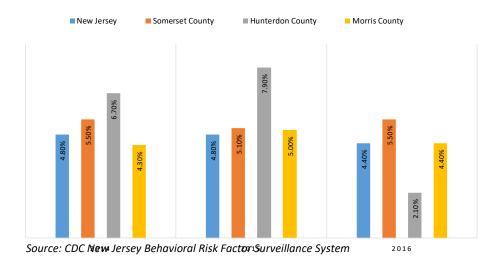


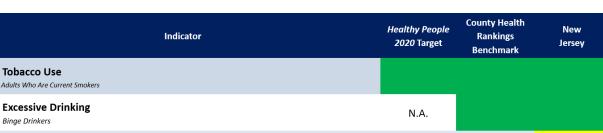
Source: CDC New Jersey Behavioral Risk Factor Surveillance System

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National Benchmark: 13.0% Somerset County 2016: 12.4%

## **Adults Reporting Heavy Drinking** State and County Comparisons 2014-2016





**Excessive Drinking** N.A. N.A. Heavy Drinkers **Alcohol Impaired Driving Deaths** N.A.

#### Diet

Binge Drinkers

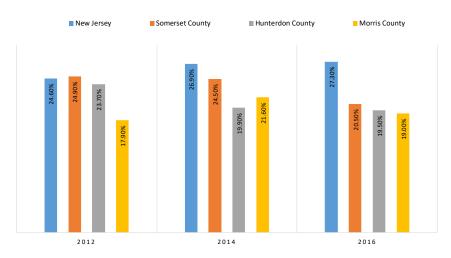
Healthy food is a key component to good health; insufficient nutrition hinders growth and development. As of 2016, 41 million Americans struggled with hunger in the U.S. A household that is food insecure has limited or uncertain access to enough food to support a healthy life. Obesity among food insecure people, as well as low income individuals, occurs in part because they are often subject to the same challenges as other Americans (more sedentary lifestyles, increased portion size) and because they face unique challenges in adopting and maintaining healthy behaviors, including limited resources and lack of access to affordable healthy food, cycles of food deprivation and overeating, high levels of stress and anxiety, fewer opportunities for physical activity, greater exposure to marketing of obesity promoting products, and limited access to health care.41

- The percent of Somerset County residents with a Body Mass Index (BMI) >=30 trended down from 24.9% in 2012, to 20.5% in 2016.
- In 2016, Somerset County (20.5%), Hunterdon County (19.5%) and Morris County (19.0%) had similar percentages of residents with a BMI>=30.

<sup>41</sup> http://www.frac.org

- In 2016, less Somerset County residents (20.5%) are obese than the *Healthy People 2020* target (30.6%)
- In 2016, Somerset County residents with a BMI>=30 ranked in the first quartile in New Jersey and with regard to the County Health Ranking, it ranks in the top quartile.

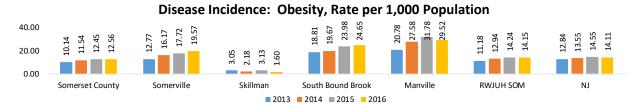
# Reported BMI>=30 State and County Comparisons 2012-2016



Source: CDC Behavioral Risk Factor Surveillance System



- In 2016, a higher rate of patients hospitalized from Manville had a diagnosis of obesity (29.52/1,000) as compared to Somerset County (12.56/1,000).
- Between 2013 and 2016, patients hospitalized from RWJUH Somerset Service Area had higher rates of obesity than hospitalized residents of Somerset County.



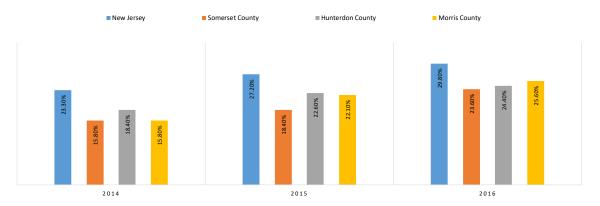
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes 278.00 or 278.01 (Appearing Anywhere In First 13 DX Codes On Patient Record)

### Exercise

Inadequate physical activity contributes to increased risk of coronary heart disease, diabetes and some cancers. Nationally, half of adults and nearly three-quarters of high school students do not meet the CDC's recommended physical activity levels.<sup>42</sup>

- Within Somerset County, the percent of individuals reporting no leisure time physical activity trended upward from 15.8% in 2014, to 23.6% in 2016.
- In 2016, a similar percentage of Somerset County adults (23.6%) and adults in Hunterdon County (24.4%) report no leisure-time physical activity. A higher percentage of Morris County residents report a lack of leisure time and activities.
- Compared to all counties statewide, Somerset County performs in the top quartile.
- Somerset County performs in the middle quartile compared to the County Health Rankings Benchmark.

## Percent of Adults Age 20+ Reporting No Leisure-Time Physical Activity State and County Comparison 2014-2016



Source: County Health Rankings – National Center For Chronic Disease Prevention and Health Promotion CDC Behavioral Risk Factor Surveillance System

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National Benchmark: 20.0% Somerset County 2016: 23.6%

<sup>42</sup> http://www.county healthrankings.org/our-approach/health-factors/diet-and-exercise

| Indicator  | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|--|-------------------------------|--|---------------|
| Obesity Percent With Reported BMI >= 30  |                               |  |               |
| Exercise: Adults Percent of Adults Age 20+ Reporting No Leisure-Time Physical Activity | N.A.                          |  |               |

### **Health Screenings**

Screening tests can detect disease and conditions in early stages, when they may be easier to treat.

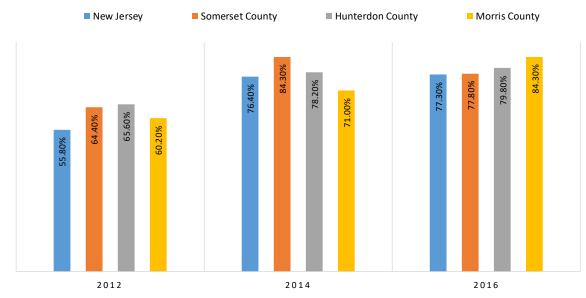
## **Cancer Screening**

## **Breast Cancer (mammography)**

According to the American Cancer Association, women ages 40 to 44 should have the choice to start annual breast cancer screening with mammograms (x-rays of the breast) if they wish to do so. Women age 45 to 54 should get mammograms every year. Women 55 and older should switch to mammograms every 2 years, or can continue yearly screening. Screening should continue as long as a woman is in good health and is expected to live 10 more years or longer. Women should also know how their breasts normally look and feel and report any breast changes to a health care provider right away. Some women – because of their family history, a genetic tendency, or certain other factors – should be screened with MRIs along with mammograms. The number of women who fall into this category is very small.

- In 2016, nearly 78% of Somerset County women over age 40 had a mammography within the past two years, similar to 77% of women statewide. Compared to all counties statewide, Somerset County performs in the middle quartile.
- In 2016, Somerset County performed in the top quartile in terms of the County Health Ranking Benchmark and *Healthy People 2020* target.

# Women Age 50+ Who Had A Mammogram Within Past 2 Years State and County Comparisons 2012-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

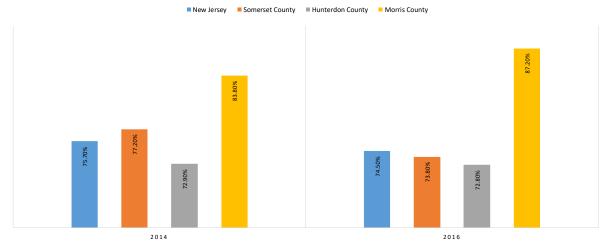


### Cervical Cancer (pap smear)

According to the American Cancer Association, cervical cancer testing should start at age 21. Women between the ages of 21 and 29 should have a Pap test done every 3 years. Women between the ages of 30 and 65 should have a Pap test plus an HPV test (called "co-testing") done every 5 years. Women over age 65 who have regular cervical cancer testing in the past 10 years with normal results should not be tested for cervical cancer. Women with a history of a serious cervical pre-cancer should continue to be tested for at least 20 years after that diagnosis, even if testing goes past age 65. Some women – because of their health history (HIV infection, organ transplant, DES exposure, etc.) – may need a different screening schedule for cervical cancer.

- In 2014, 77.2% of Somerset County women over age 18 had a pap smear within the past three years as compared to 75.7% of New Jersey women 18+. Fewer Somerset County women over age 18 had a pap test within 3 years than in comparative Morris (83.8%) and Monmouth (87.6%). Compared to the State overall, Somerset County performs in the top quartile.
- Between 2014 and 2016, Somerset County women who had a pap test within the past three years declined over 3 percentage points from 77.2% to 73.8%.

# Women How Had Received a Pap Test State and County Comparisons



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

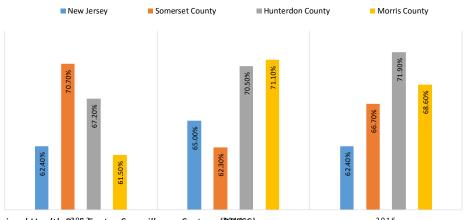


#### Colon-rectal Cancer (sigmoidoscopy or colonoscopy)

According to the American Cancer Association, starting at age 50, both men and women should follow one of these testing plans: colonoscopy every 10 years, CT colonography (virtual colonoscopy) every 5 years, flexible sigmoidoscopy every 5 years, or double-contrast barium enema every 5 years.

- In 2016, more Somerset County adults over age 50 (66.7%) participated in colon-rectal screening than adults statewide (62.4%). Compared to all New Jersey counties, Somerset County performs in the top quartile.
- In 2016, fewer Somerset County adults (66.7%) over age 50 had a colonoscopy/sigmoidoscopy than in 2012 (70.7%). Somerset County is below the *Healthy People 2020* target of 70.5% of adults (50+) ever having colon-rectal screening in 2014, but within 25% of the target.
- As noted in the tables which appear in Appendix C, Cancer Incidence Mortality and Cancer Registry data, there is a high percentage of colon cancer cases detected that are late stage, which may be related to this low incidence of screening.

# Adults Age 50+ Who Ever Had a Colonoscopy or Sigmoidoscopy State and County Comparisons, 2012-2016

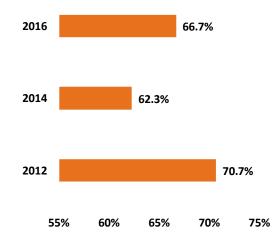


Source: CDC Behavioral Health Right Factor Surveillance System (BRFSS)



# Colonoscopy or Sigmoidoscopy Adults Age 50+ Who Ever Had One: Trend

## **Somerset County**

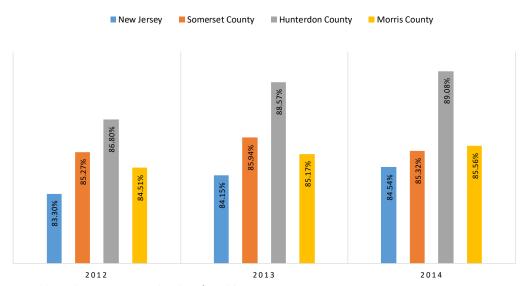


#### Diabetes

There are several ways to diagnose diabetes including A1C, Fasting Plasma Glucose (FPG), Oral Glucose Tolerance Test (OGTT) and Random (Casual) Plasma Glucose Test. Diabetes screenings are an effective means of diagnosing and managing illness.

- In 2014, 85% of Somerset County diabetic Medicare enrollees received HbA1c screening, similar to the State and Morris County. As compared to all New Jersey counties, Somerset performs in the middle quartile.
- The percent of Somerset County diabetic Medicare enrollees receiving HbA1c screening has been relatively constant since 2012.
- In 2014, fewer Somerset County diabetic Medicare enrollees (85%) were screened than the CHR national benchmark (91%). Somerset County was lower than the CHR benchmark, but within an established 25% margin.

## Diabetic Medicare Enrollees That Received Screening State and County Comparisons 2012-2014



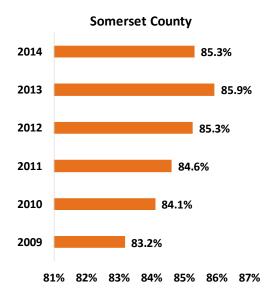
Source: County Health Rankings - Dartmouth Atlas of Health Care

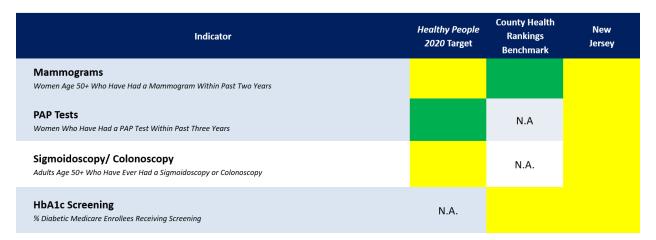
County Health Rankings & Roadmaps Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

National Benchmark: 91.0% Somerset County 2016: 85.0%

## Diabetic Medicare Enrollees That Received Screening: Trend





## **Immunizations**

It is better to prevent disease than to treat it after it occurs; vaccines prevent disease and save millions of lives. Vaccines introduce the antigens that cause diseases. Immunity, the body's means to preventing disease, recognizes germs and produces antibodies to fight them. Even after many years, the immune system continues to produce antibodies to thwart disease from recurring. Through vaccination we can develop immunity without suffering from disease. Evidenced – based; CDC guidelines, public health benefit – individual and herd

## Childhood Immunizations: DPT, polio, MMR & Hib (aged 19-35 months)

Young children are readily susceptible to disease and the consequences can be serious or life-threatening. Childhood immunizations minimize impact of vaccine preventable diseases. Combined 4

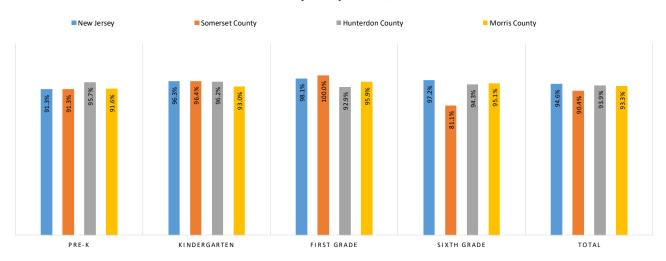
<sup>43</sup> http://www.cdc.gov/vaccines/vac-gen/howvpd.htm#why

vaccine series (4:3:1:3) refers to 4 or more doses of DTP/DT, 3 or more doses of poliovirus vaccine, 1 or more doses of MCV and 3 or more doses of Hib.<sup>44</sup> Conflicting information in the news and on the internet about children's immunizations may cause vaccine hesitancy among select parents. Health care providers have been encouraged to use interventions to overcome vaccine non-compliance, including parental counseling, increasing access to vaccinations, offering combination vaccines, public education, and reminder recall strategies.

Childhood immunization is an evidenced-based strategy, which is known to reduce the incidence, prevalence and mortality of many communicable diseases in many Western Countries including the U.S.

• The percent of all Somerset County children meeting all vaccine requirements in 2016 was 90%, compared to 94.6% statewide.

# Childhood Immunization: Percent of Children Meeting All Immunization Requirements State and County Comparisons, 2016



Source: NJDOH Annual Immunization Status Report http://www.nj.gov/health/cd/documents/status\_report/2016/all\_schools\_vac.pdf Data are the most current County-Level figures available.

### Adult Flu

Immunizations are not just for children. As we age, the immune system weakens putting us at higher risk for certain diseases. Greater than 60 percent of seasonal flu-related hospitalizations occur in people 65 and older. The single best way to protect against the flu is an annual vaccination.<sup>45</sup>

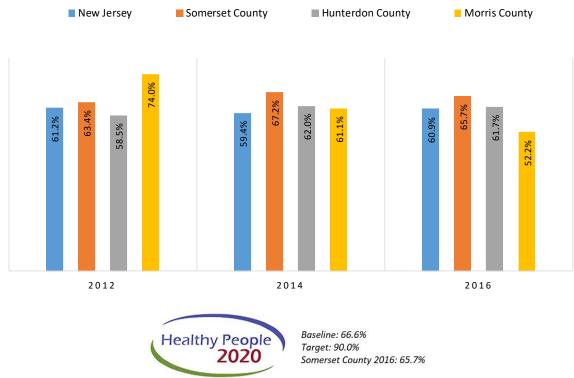
- The percent of Somerset County adults who had received a flu shot in the past year varied between 63.4% and 65.1% from 2012 to 2015.
- Since 2012, the percent of Somerset County adults who received a flu shot in the past year was higher than statewide percent. As compared to all counties statewide, Somerset County performs in the top quartile.

<sup>44</sup> http://www.cdc.gov/vaccines/imz-managers/coverage/nis/child/tech-notes.html)

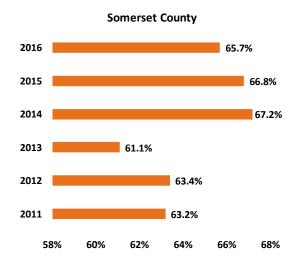
<sup>45</sup> http://www.cdc.gov/vaccines/adults/rec-vac/index.html)

• The percent of 2015 Somerset County adults who received the flu shot in the past year is lower than the *Healthy People 2020* target of 90.0%. Somerset County performs in the lowest *Healthy People 2020* quartile.





Adults Age 65+ Who Had a Flu Shot in the Past Year: Trend



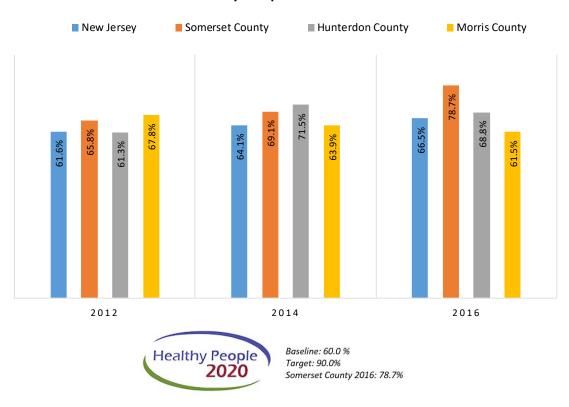
Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

## Adult Pneumonia

The pneumococcal vaccine protects us against some of the 90 types of pneumococcal bacteria. Pneumococcal vaccine is recommended for all adults 65 years or older.<sup>46</sup>

- The percent of Somerset County adults age 65+ who had a pneumonia vaccine increased from 2012 through 2016.
- In 2016, the percent of Somerset County (78.7%) adults that have never had a pneumonia vaccine is higher than statewide (66.5%) and less than the *Healthy People 2020* target (90.0%). As compared to all counties statewide, Somerset County performs in the top quartile. Somerset County performs in the middle quartile in the *Healthy People 2020* target

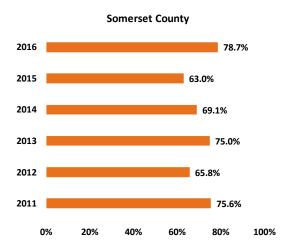
# Adults Age 65+ Who Had a Pneumonia Vaccination State and County Comparisons 2012-2016



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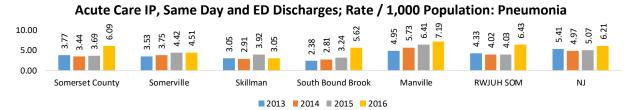
<sup>46</sup> http://www.cdc.gov/pneumococcal/about/prevention.html

## Adults Age 65+ Who Had a Pneumonia Vaccination: Trend



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

In 2016, Manville patients who used a hospital service had the highest rate of patients with a
diagnosis of pneumonia (7.19/1,000) and Skillman at 3.05/1,000 was the lowest as compared to
all geographies.



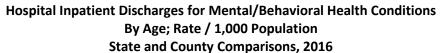
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census Definition: Inpatient, Same Day Stay and ED Discharges – For MS-DRGs 177, 178, 179, 193, 194, 195

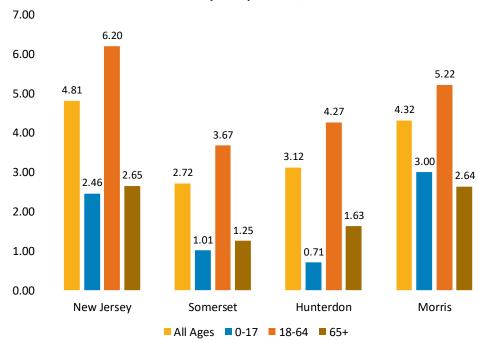
| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| <b>Flu Shot</b> Adults Age 65+ Who Have NOT Had a Flu Shot in the Past Year %No           |                               | N.A                                    |               |
| Pneumonia Vaccination Adults Age 65+ Who Have NOT Ever Had a Pneumonia Vaccination %Never |                               | N.A.                                   |               |
| Children Meeting All Immunization Requirements  | N.A.                          | N.A.                                   |               |

#### 4. Behavioral Health Utilization

#### Mental Health

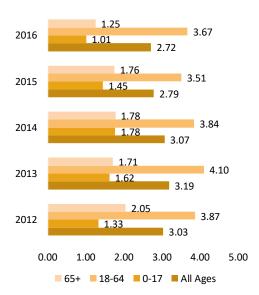
- In 2016, Somerset County (2.72/1,000) had 43% fewer patients hospitalized for mental health conditions than the State (4.81/1,000).
- Within Somerset County, by age cohort in 2016, adults 18-64 (3.67/1,000) had the highest rate of mental/behavioral health inpatient hospital admissions compared to older adults 65+ (1.25/1,000) and children (1.01/1,000).
- Somerset County had fewer patient hospitalizations for mental/behavioral health conditions in 2016 (2.72/1,000) than in 2012 (3.03/1,000).





Source: NJDHSS 2010 - 2015 UB-04 Data MDC 19 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

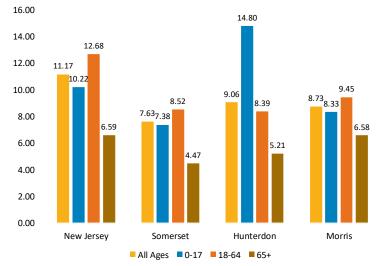
## **Somerset County**



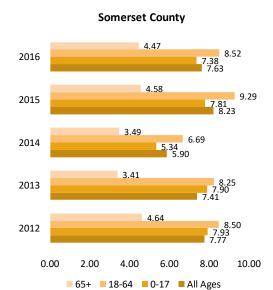
Source: NJDHSS 2010 - 2015 UB-04 Data MDC 19 — NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, Somerset County (7.63/1,000) had 36.9% fewer ED visits for mental health conditions than the State (11.7/1,000).
- In 2016, Somerset County adults 18-64 (8.52/1,000) had the highest rate of ED visits compared to children (7.38/1,000) and older adults 65+ (4.42/1,000).
- Somerset County ED visits for mental/behavioral health conditions remained fairly stable between 2012 (7.77/1,000) and 2016 (7.63/1,000).

ED Visits for Mental/Behavioral Health Conditions (2016): By Age; Rate / 1,000 Population State and County Comparisons 2016

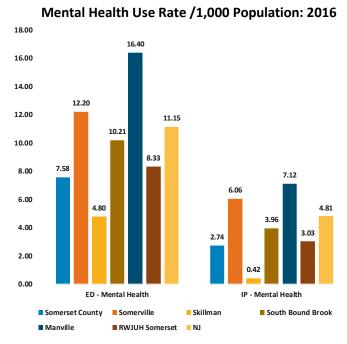


Source: NJDHSS 20101- 2015 UB-04 Data MDC 19 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate



Source: NJDHSS 20101- 2015 UB-04 Data MDC 19 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, inpatient hospitalizations for mental/behavioral health in Manville (7.12/1,000) exceeded the New Jersey rate (4.81/1,000) and Somerset County rates (2.74/1,000).
- In 2016, the emergency department rate for mental/behavioral health in Manville (16.4/1,000) was greater than Somerset County (7.58/1,000) and greater than New Jersey (11.15/1,000).
- In 2016, the emergency department rate for mental health in Skillman (4.8/1,000) was less than the New Jersey rate (11.15/1,000) and less than the Somerset County rate (7.58/1,000).



\*Source: UB-04 2015 Discharges; Claritas Population Estimate

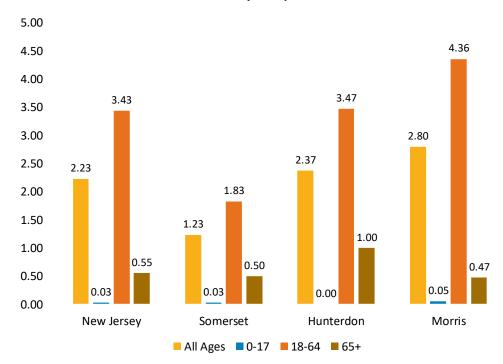
<sup>\*\*</sup> Mental Health Defined As MDC 19, Substance Abuse Defined As MDC 20

#### Substance Abuse

Substance abuse has a major impact on individuals, families and communities. In 2005, an estimated 22 million Americans struggled with a drug or alcohol problem. Almost 95 percent of people with substance use problems are considered unaware of their problem. These estimates highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.<sup>47</sup>

- Across all age cohorts county-wide, there is an increase in inpatient admissions for substance abuse from 2012 through 2016.
- Compared to Statewide, in 2016, Somerset County has fewer residents with an inpatient admission for substance abuse for persons across all age groups except those 0-17 where rates are the same statewide and in the County.

Inpatient Substance Abuse Treatment Discharges: Rate / 1,000 Population State and County Comparisons 2016

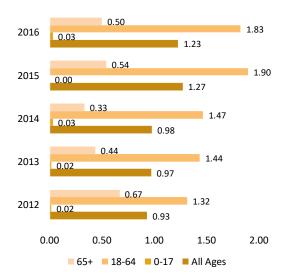


Source: NJDHSS 2010 - 2015 UB-04 Data MDC 20 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

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<sup>&</sup>lt;sup>47</sup> http://www.healthypeople.gov/2020/topics-objectives/topic/substance-abuse

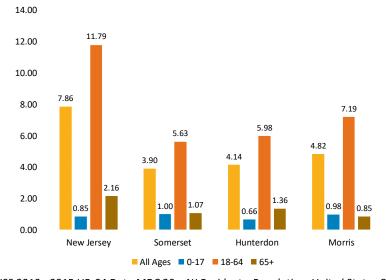
#### **Somerset County**



Source: NJDHSS 2010 - 2015 UB-04 Data MDC 20 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

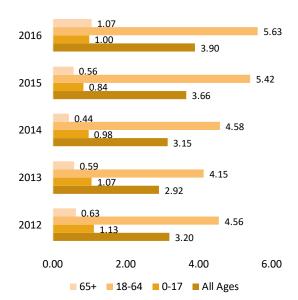
- In 2016, Somerset County (3.90/1,000) has 50% fewer residents ED visits for substance abuse than the State (7.86/1,000).
- Between 2012 and 2016, ED visits for substance abuse in Somerset County increased slightly from 3.2/1,000 to 3.90/1,000.
- In 2016, Somerset County residents aged 18-64 have the highest rate of ED visits among age cohort for substance abuse (5.65/1,000).

ED Visits for Substance Abuse: By Age; Rate / 1,000 Population County and State Comparisons 2016



Source: NJDHSS 2010 - 2015 UB-04 Data MDC 20 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

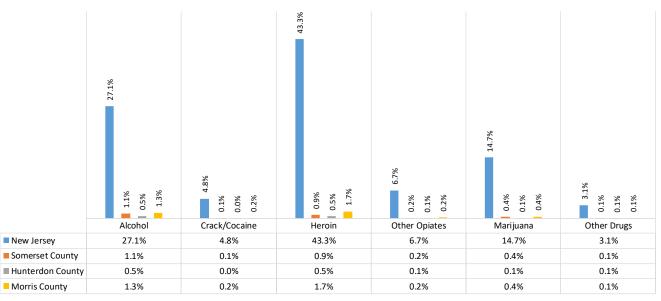
#### **Somerset County**



Source: NJDHSS 2010 - 2015 UB-04 Data MDC 20 – NJ Residents; Population: United States Census American Community Survey 5yr Estimate

- In 2016, alcohol was the leading reason for admission to a drug treatment center followed by heroin for Somerset County residents.
- Admissions from the tri-county area for substance abuse treatment are far below the rates statewide.



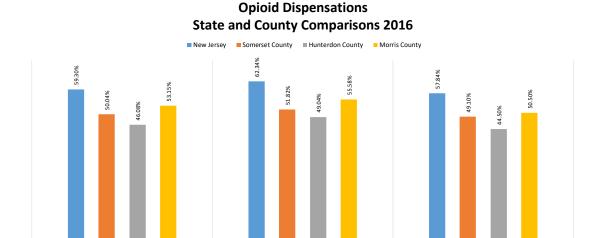


Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/ Substance%20Abuse%20Overview/2016/statewide.pdf Between 2014-2016 the number of drug dispention went down across the State and in Somerset the comparative counties of Hunterdon and Morris Counties.

- In 2014 the number of drug dispensions reached slightly more than 50% of the counties population.
- By 2016 the county's rate of drug dispention was 49.1% lower than the statewide rate of 57.8%.

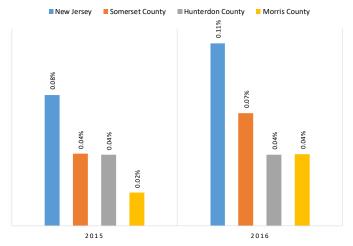
Naloxone is a FDA approved medication to prevent overdose by opiods such as herion, morphine and oxycodone. It blocks opiod receptor sites revising the toxic effects of overdose.

• Between 2015-2016 the number of Naloxone administrations increased statewide; and in Somerset, Morris and Hunterdon County's rate for Naloxone administrations increased from 138 administrations to 217.

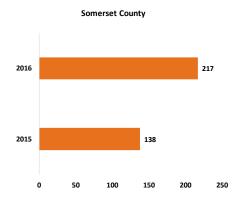


Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf





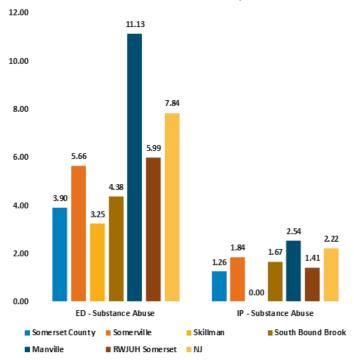
Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf



Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf

- Inpatient hospitalization to general hospitals for substance abuse in the RWJUH Somerset Service Area (1.41/1,000) are above County rate (1.26/1,000) but lower than the State (2.22/1,000).
- Manville's (2.54/1,000) inpatient hospitalization for substance abuse is higher than Somerset County (1.26/1,000).
- In 2016, emergency department visits for substance abuse in Manville (11.13/1,000) was higher than the Somerset County rate (3.9/1,000) and greater than the New Jersey rate (7.84/1,000).
- In 2016, emergency department utilization rates for substance abuse in the RWJUH Somerset Service Area (5.99/1,000) was higher than the Somerset County rate (3.90/1,000).

#### Substance Abuse Use Rate 1,000 Population: 2016



Source: UB-04 2015 Discharges; Claritas Population Estimate

| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| Treatment Admissions for Alcohol Percentage of Total Treatment Admissions       | N.A                           | N.A.                                   |               |
| Treatment Admissions for Cocaine/Crack Percentage of Total Treatment Admissions | N.A                           | N.A                                    |               |
| Treatment Admissions for Heroin Percentage of Total Treatment Admissions        | N.A.                          | N.A                                    |               |
| Treatment Admissions for Other Opiates Percentage of Total Treatment Admissions | N.A                           | N.A.                                   |               |
| Treatment Admissions for Marijuana Percentage of Total Treatment Admissions     | N.A                           | N.A                                    |               |
| Treatment Admissions for Other Drugs Percentage of Total Treatment Admissions   | N.A                           | N.A                                    |               |
| Total Substance Abuse Treatment Admissions  Rate/ 100000 Population             | N.A                           | N.A                                    |               |
| Opioid Dispensations  | N.A                           | N.A                                    |               |
| Naloxone Administrations  | N.A                           | N.A                                    |               |

#### D. HEALTH OUTCOMES

Disease-specific mortality, health status and morbidity are among the outcomes presented. Indicators of general health and mental health measures are also discussed in this section.

## 1. Mortality - Leading Cause of Death

According to the CDC, mortality statistics are one of few data sets comparable for small geographic areas, available for long time periods and appropriate as a primary source for public health planning.

- Between 2013 and 2016, Somerset County age-adjusted mortality rates (AAMR) improved (decreased) for Diabetes disease (-28.4%), cancer (-7.7%), stroke (-6.6%), nephritis (-3.1%) and chronic lower respiratory disease (-2.8%)
- Between 2013 and 2016, five of the top 10 leading causes of death for Somerset County increased including: Alzheimer disease (58.4%), septicemia (14.1%), heart disease (9.5%), influenza and pneumonia (3.4%), and unintentional injuries (0.3%).
  - The AAMR for diabetes demonstrated greatest improvement.
- Despite decreases in incidence from 2013 to 2016, cancer (156.7/100,000) remains a far more prevalent causes of death than the third leading cause, stroke (33.9/100,000).

Top 10 Causes of Death in Somerset County
Age-Adjusted Rate/100,000 Population 2008-2015

| CAUSE                                       | 2008  | 2013  | 2016  | %<br>Change<br>'13-'16 |
|---|-------|-------|-------|------------------------|
| Diseases of heart                           | 153.5 | 154.4 | 169   | 9.5%                   |
| Cancer (malignant neoplasms)                | 148.8 | 169.8 | 156.7 | -7.7%                  |
| Stroke (cerebrovascular diseases)           | 27.8  | 36.3  | 33.9  | -6.6%                  |
| Unintentional injuries                      | 17.3  | 31.1  | 31.2  | 0.3%                   |
| Alzheimer's disease                         | 16.4  | 17.8  | 28.2  | 58.4%                  |
| Chronic lower respiratory diseases (CLRD)   | 35.6  | 28.7  | 27.9  | -2.8%                  |
| Septicemia                                  | 14.8  | 14.2  | 16.2  | 14.1%                  |
| Diabetes mellitus                           | 20.7  | 21.8  | 15.6  | -28.4%                 |
| Influenza and pneumonia                     | 13    | 14.8  | 15.3  | 3.4%                   |
| Nephritis, nephrotic syndrome and nephrosis | 16.7  | 13    | 12.6  | -3.1%                  |

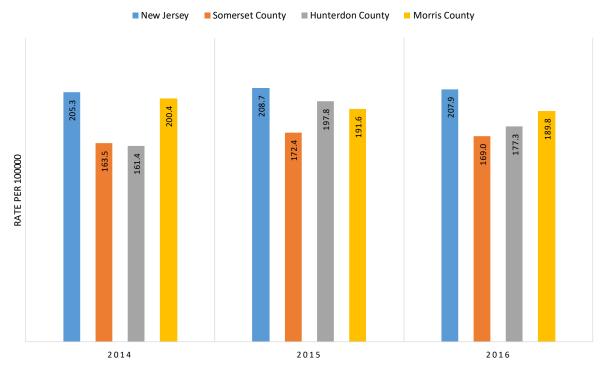
Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2015 is rnost recent year available.

## Heart Disease (1)

Heart disease includes several conditions, most commonly, coronary artery disease, angina, heart failure and arrhythmias. Nationally, statewide and in Somerset County, heart disease remains the leading cause of death. Responsible for 1 in every 4 deaths, approximately 610,000 people die of heart disease in the United States each year.

- Despite an increase between 2014 (163.5/100,000) and 2016 (169.0/100,000), Somerset County's
  AAMR for heart disease ranks in the top 25% statewide. But, deaths due to heart disease
  performed lower than the *Healthy People 2020* target (103.4/100,000).
- The 2016 Somerset County mortality rate due to heart disease (169.0/100,000) was 18.7% lower than Statewide (207.9/100,000).
- In 2016, across the County, Whites (253.0/100,000) had the highest heart disease mortality rate as compared to Blacks (107.8/100,000).

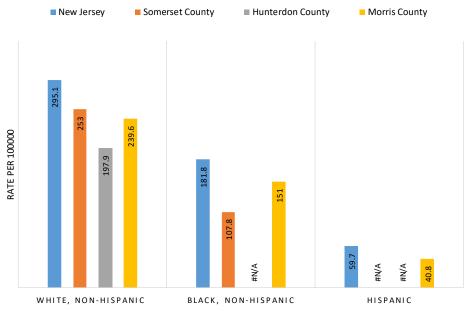
# Deaths Due to Diseases of the Heart: Age-Adjusted Rate/100,000 Population State and County Comparisons 2014-2016



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.



# Deaths Due to Diseases of the Heart by Race/Ethnicity Somerset County Age-Adjusted Rate/100,000 population



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

## Cancer (2)

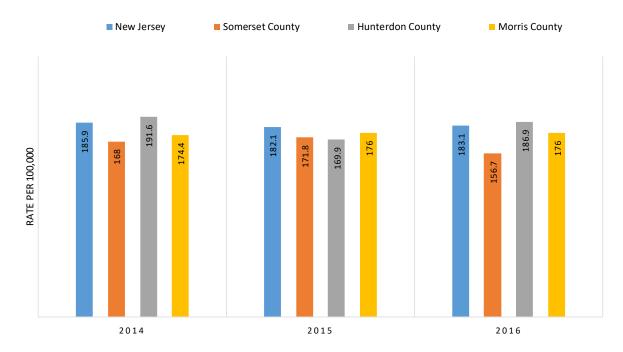
Although there are many types of cancer, all originate from abnormal cells with untreated disease.<sup>48</sup> Approximately half of American men and one-third of women will develop some form of cancer throughout their lifetimes. Cancer risk may be reduced by basic lifestyle modifications including limiting or avoiding tobacco, sun protection, being physically active and eating healthy foods. Early detection greatly improves positive outcomes. Cancer is the second leading cause of death in the United States, New Jersey and Somerset County.<sup>49</sup>

- Somerset County deaths due to cancer declined 6.7% from 2014 (168.0/100,000) to 2016 (156.7/100,000). The 2016 County mortality rate was 14.4% lower than New Jersey (183.1/100,000) and ranks in the top performing quartile statewide. The 2016 Somerset County AAMR was lower than surrounding Hunterdon and Morris Counties.
- The 2016 Somerset County cancer AAMR (156.7/100,000) performed better than the *Healthy People 2020* target of 156.7/100,000.

<sup>48</sup> http://www.cancer.org/cancer/cancerbasics/what-is-cancer

<sup>49</sup> http://www.cancer.org/cancer/cancerbasics/questions-people-ask-about-cancer

# Deaths Due to Malignant Neoplasms (Cancer): Age-Adjusted Rate/100,000 Population State and County Comparisons 2014-2016



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

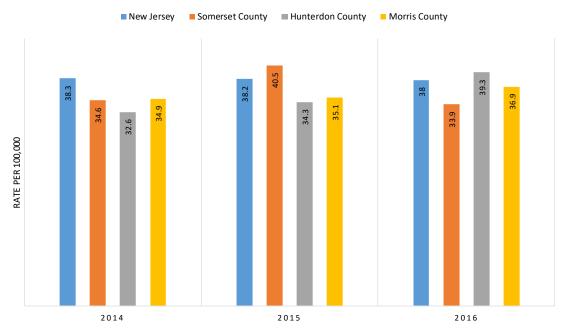


## Stroke (Cerebrovascular Diseases) (3)

A stroke occurs when a clot blocks blood supply to the brain or if a blood vessel within the brain bursts.

- The Somerset County stroke AAMR decreased 2.0% from 2014 (34.6/100,000) to 2016 (33.9/100,000). In 2016, the County AAMR was 2.6% lower than the *Healthy People 2020* target (34.8/100,000).
- The 2016 Somerset County stroke AAMR (33.9/100,000) was 10.7% lower than the State (34.0/100,000) and ranks in the top quartile statewide, outperforming neighboring Hunterdon and Morris Counties.
- By race/ethnicity, 2014-2016, Whites (52.1/100,000) had the highest death rate due to stroke compared to Blacks (27.7/100,000).
  - The 2014-2016 Somerset County death rate for strokes for Whites (52.1/100,000) was 46.8% greater than the rate for Blacks (27.7/100,000).

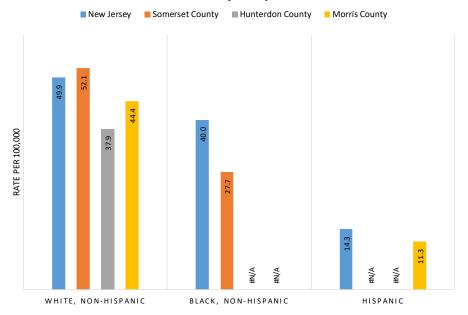
# Deaths Due to Stroke: Age-Adjusted Rate/100,000 Population State and County Comparisons 2014-2016



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.



# Deaths Due to Stroke by Race/Ethnicity Age-Adjusted Rate/100,000 Population State and County Comparisons 2014-2016



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

## **Unintentional Injuries (4)**

The majority of unintentional injuries are preventable and predictable. Deaths due to unintentional injury often occur as a result of motor vehicle accidents, falls, firearms, drownings, suffocations, bites, stings, sports/recreational activities, natural disasters, fires, burns and poisonings. Public Health prevention strategies including minimum age drinking requirements, seatbelt and helmet laws, smoke alarms, exercise programs and other safety awareness campaigns reduce unintentional injury and death.<sup>50</sup>

- The unintentional injury death rate remained fairly constant between 2014 and 2016 in Somerset County. Somerset County ranked in the top performing quartile among New Jersey counties.
- The 2016 Somerset County unintentional injury AAMR is 27.3% lower than the statewide rate.
- The mortality rate for unintentional injuries performed better than the *Healthy People 2020* target.

## Alzheimer's Disease (5)

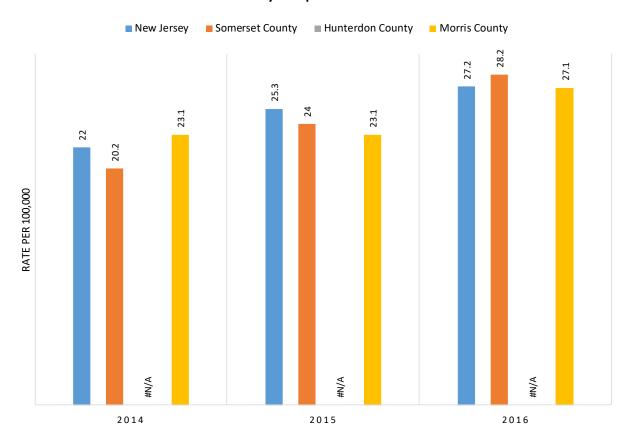
Alzheimer's disease is a progressive illness that begins with mild memory loss leading to loss of ability to carry a conversation or respond to the environment. The disease involves parts of the brain that control thought, memory and language. In 2013, an estimated 5 million people living in the U.S. were living with Alzheimer's disease. By 2050, this number is projected to increase to 14 million people.<sup>51</sup>

- In 2016, the AAMR due to Alzheimer's disease in Somerset County was somewhat higher than the rate in Morris County, as well as the statewide rate.
- Since 2014, the AAMR for Alzheimer's disease has increased 74%.

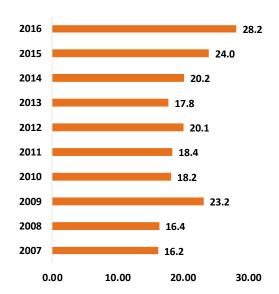
<sup>50</sup> http://www.cdph.ca.gov/programs/ohir/Pages/UnInjury2010Background.aspx

<sup>51</sup> https://www.cdc.gov/aging/agencyinfo/alzheimers.htm

# Alzheimer's Disease State and County Comparison 2014-2016



# **Somerset County**



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2016 is most recent year available.

| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| Deaths Due to Diseases of The Heart  Age-Adjusted Rate/100000 Population                              |                               | N.A.                                   |               |
| Deaths Due to Diseases of The Heart (Black, Non-Hispanic)  Age-Adjusted Rate/100000 Population        | N.A.                          | N.A.                                   |               |
| Deaths Due to Malignant Neoplasms (Cancer)  Age-Adjusted Rate/100000 Population                       |                               | N.A.                                   |               |
| Deaths Due to Malignant Neoplasms (Cancer) (Black, Non-Hispanic)  Age-Adjusted Rate/100000 Population | N.A.                          | N.A.                                   |               |
| Deaths Due to Unintentional Injuries  Age-Adjusted Rate/100000 Population                             |                               | N.A.                                   |               |
| Alzheimer's Disease Age-Adjusted Rate/100000 Population   | N.A                           | N.A.                                   |               |

**RED:** Poorest Performing Quartile

Yellow: Middle Quartiles

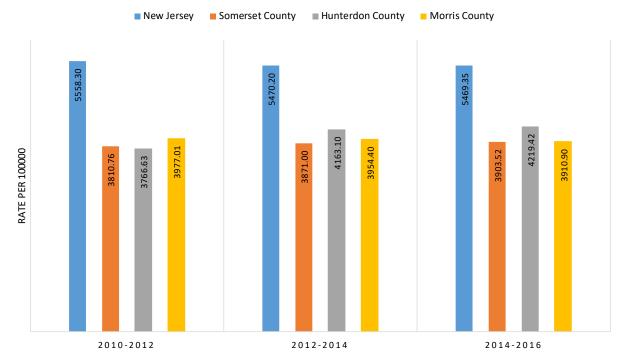
**Green: Best Performing Quartile** 

## 2. <u>Premature Deaths</u>

An alternate method to reviewing crude or age-adjusted death rates as a measure of premature mortality is assessing Years of Potential Life Lost (YPLL). YPLL calculate the number of years of potential life lost for each death occurring before a predetermined end point, in this case, age 75 per 100,000 population. Premature deaths are reviewed to highlight potentially preventable adverse outcomes.

- The Somerset County YPLL increased from 3,810.76/100,000 for the period 2010-2012, to 3,903.52/100,000 for the period from 2014-2016. The Somerset County YPLL (3,903.52/100,000) was lower than statewide rate (5,469.35/100,000), and ranks in the top performing statewide quartile.
- The 2014-2016 Somerset County YPLL (3,903.5/100,000) outperformed the County Health Ranking Benchmark (5,300/100,000).

# Premature Death: Years of Potential Life Lost Before Age 75: Age-Adjusted Rate/100,000 Population State and County Comparisons 2010-2016



Source: County Health Rankings; National Vital Statistics System

Note: Every death occurring before the age of 75 contributes to the total number of years of potential life lost

County Health
Rankings & Roadmaps
Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

National Benchmark: 5300 Somerset County 2014-2016: 3904

| Indicator  | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|--|-------------------------------|--|---------------|
| Premature Death: Years of Potential Life Lost Before Age 75  Age-Adjusted Rate/100000 Population |                               | N.A.                                   |               |
| RED: Poorest Performing Quartile   |                               |  |               |
| Yellow: Middle Quartiles   |                               |  |               |

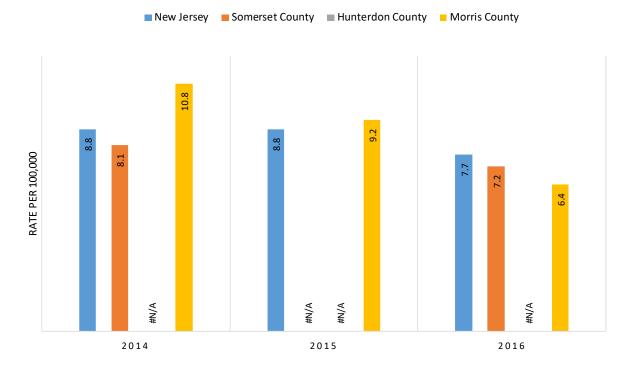
Green: Best Performing Quartile

## 3. <u>Behavioral Health-Related Deaths</u>

Mental health is a state of well-being in which an individual realizes his or her own abilities, copes with normal life stresses, works productively, and is able to contribute to his or her community. Mental illness is diagnosable mental disorders or health conditions characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning. Depression, the most common type of mental illness, is associated with higher rates of chronic disease, increased health care utilization, and impaired functioning. However, rates of mental illness treatment remain low, and often the treatment received is inadequate.

- Statewide deaths due to suicide decreased from 2014 (8.8/100,000) to 2016 (7.7/100,000), or 11%. Displaying a similar trend, the Somerset County's suicide rate decreased from 8.1/100,000 to 7.2/100,000 for the same periods. Deaths due to suicide also decreased in Hunterdon and Morris Counties.
- Somerset County's 2016 suicide rate is slightly lower than the rate statewide and ranks in the top performing quartile statewide.
- The 2016 Somerset County suicide rate (7.2/100,000) is 29.4% lower than the *Healthy People 2020* target (10.2/100,000).





Source: NJDOH Center for Health Statistics; NJ State Health Assessment Data



| Indicator   | Healthy Peopl<br>2020 Target | Rankings | New<br>Jersey |
|---|------------------------------|----------|---------------|
| Deaths Due to Suicide  Age-Adjusted Rate/100,000 Population                                 |                              | N.A      |               |
| RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Best Performing Quartile |                              |          |               |

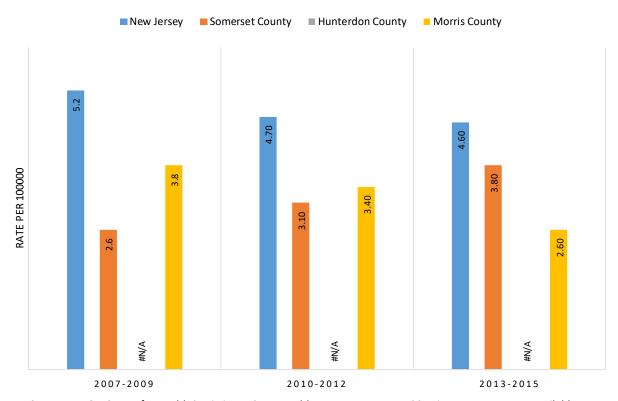
#### 4. Infant Mortality

Infant mortality, the death of a baby prior to his or her first birthday, is traditionally used as an indicator of the health and well-being of a nation. Infant mortality is calculated as the number of infant deaths under age 1 per 1,000 live births. Great disparities exist in infant mortality by age, race, and ethnicity. Most frequent causes are serious birth defect, preterm birth / low birth weight, Sudden Infant Death Syndrome (SIDS), maternal complications of pregnancy, and injury.<sup>52</sup>

- The overall infant mortality rate declined statewide 11.5% from the period 2007-2009 (5.2/100,000), to 2013-2015 (4/100,000); this compares to an infant mortality rate increase experienced in Somerset County from (2.6/100,000) to (3.8/100,000) for the same time periods. Similar to the State, Morris County also experienced a decline.
- Somerset County ranks in the middle performing quartile among New Jersey counties for overall infant mortality in 2012-2014 and outperforms the *Healthy People 2020* target of 6.0/1,000.

<sup>&</sup>lt;sup>52</sup> http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm

# Infant Mortality Rate: Rate of Infant (Under 1 Year) Deaths/1,000 Live Births State and County Comparisons 2007-2013



Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2015 is most recent year available.



## 5. Low and Very Low Birth Weight Infants

Birth weight is the most important factor affecting neonatal mortality and a significant determinant of post neonatal mortality. Low birth weight infants (less than 2,500 grams) are at an increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders.<sup>53</sup> Racial disparities in low birth weight babies persist; nationally, non-Hispanic Black infants continue to die at nearly twice the rate of non-Hispanic Whites.

#### Low Birth Weight

- In 2016, Somerset County had a higher percentage of low birth weight babies (7.2%) than Morris County (6.7%) and Hunterdon County (6.3%). This was lower than the State (8.1%).
- The 2016 percent of Somerset County low birth weight babies was better than the *Healthy People* 2020 target of 7.8%.
- The percentage of Somerset County low birthweight babies increased among Whites and Hispanics between 2011 and 2016.
  - o In 2016, Hispanics had the smallest percentage (7.0%) of low birth weight babies as compared to Whites (8.2%) and Blacks (11.5%) in Somerset County.
  - The Somerset County 2016 percent of Black low birth weight babies was 28.7% higher than Whites.

Very low birth weight babies (less than 1,500 grams) are at greater risk of adverse outcomes than low birth weight babies.

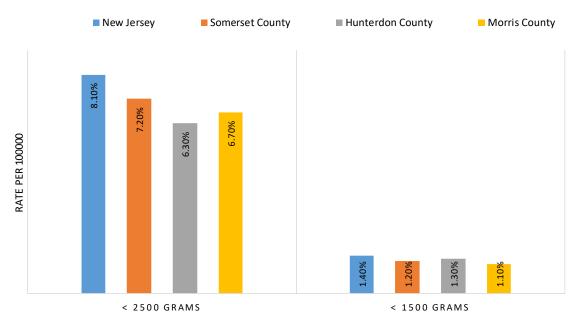
#### **Very Low Birth Weight**

- In 2016, 1.2% of Somerset County babies are very low birth weight as compared to 1.4% statewide; the County ranks within the middle quartile compared to all New Jersey counties.
- The 2016 percent of very low birth weight babies in Somerset County is better than the *Healthy People 2020* target of 1.4%.
- By race, between 2011 and 2016, the percentage of very low birthweight babies: increased for Whites from 0.9% to 1.3%: decreased from 3.7% to 1.9% for Blacks; and decreased slightly from 1.1% to 0.9% for Hispanics.
  - o In 2016, Somerset County Whites had the smallest percentage (1.3%) of very low birth weight babies as compared to Blacks (1.9%) and Hispanics (0.9%).

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<sup>53</sup> http://www.cdc.gov/PEDNSS/how\_to/interpret\_data/case\_studies/low\_birthweight/what.htm

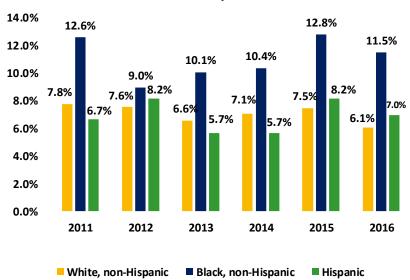
# Birth Weight: Percent of Live Births with Low and Very Low Birth Weight State and County Comparisons 2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database Note: Percentages are based on the total number of live births for the County and State

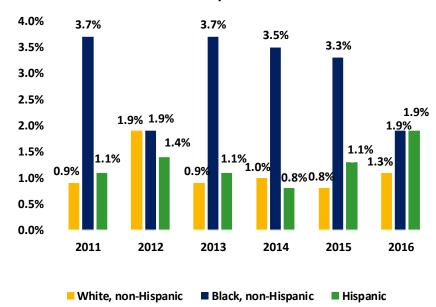


Low Birth Weight: By Mother's Race/Ethnicity; Percent of Live Births with Low Birth Weight
Somerset County 2011-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: \*Percentages are based on the total number of Low or Very Low Birth Weight Births / Live births for the County and State

Very Low Birth Weight: By Mother's Race/Ethnicity: Percent of Live Births with Very Low Birth Weight
Somerset County 2011-2016



Source: NJDOH Bureau of Vital Statistics and Registration NJ Birth Certificate Database
Note: \*Percentages are based on the total number of Low or Very Low Birth Weight Births / Live births for the County and State

| Indicator  | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|--|-------------------------------|--|---------------|
| Infant Mortality Rate Rate of Infant (Under 1 Year) Deaths/1000 Live Births        |                               | N.A.                                   |               |
| Low Birthweight (<2500 Grams) Percentage of Live Births                            |                               | N.A.                                   |               |
| Low Birthweight (<2500 Grams) (Black Non-Hispanic) Percentage of Live Births       | N.A.                          | N.A.                                   |               |
| Very Low Birthweight (<1500 Grams) Percentage of Live Births                       |                               | N.A.                                   |               |
| Very Low Birthweight (<1500 Grams) (Black Non-Hispanic)  Percentage of Live Births | N.A.                          | N.A.                                   |               |

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

#### 6. Health Status and Behavioral Health Status

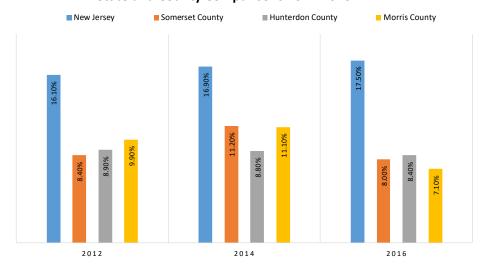
Health status and behavioral health status are broad multidimensional concepts including self-report measures of physical and mental health.

Behavioral Risk Factor Surveillance System (BRFSS), the nation's premier system of health-related telephone surveys, collects data about U.S. residents regarding health-related risk behaviors, chronic health conditions and use of preventive services. In 1984, the survey began collecting data in 15 states and is currently conducted in all states including Washington D.C. and three United States territories. The most recent data available are for the year 2016.

#### **General Health Status**

- Between 2012 and 2016, BRFSS data reports a small decrease in the percent of Somerset County residents who indicate their health as "poor or fair," from 8.4% to 8.0%.
- In 2016, 17.5% of New Jersey respondents report that their health is "fair or poor," higher than the rate among Somerset, Hunterdon and Morris County residents.
- As compared to all New Jersey counties, Somerset residents with "poor or fair" health ranks in the top performing quartile.
- Compared to the County Health Ranking, fewer Somerset County residents report "fair or poor" health than the benchmark.
- NJBRFSS reports that the number of Somerset County adults with 14 or more physically unhealthy days (in the last 30 days) decreased nearly 3 percentage points between 2012 (7.5%) and 2016 (4.6%).
- As compared to New Jersey, Somerset County residents with 14+/30 days in poor physical health ranks in the top quartile.

# Percent of Respondents Reporting Their Health as "Fair or Poor" State and County Comparisons 2012-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

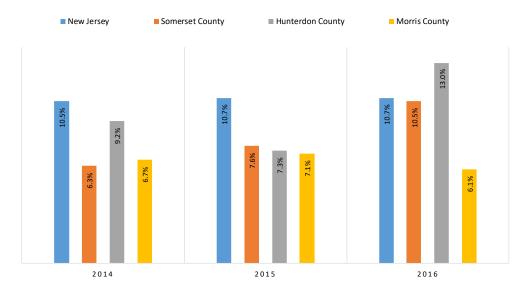


National Benchmark: 12% Somerset County 2016: 8.0%

#### **Behavioral Health Status**

- County-wide, adults who report 14 or more of the past 30 days with "not good" mental health status increased from 6.3% in 2014, to 10.5% in 2016. The 2016 Somerset County report of 14+/30days with "not good" mental health is similar to New Jersey at 10.7%.
- As compared to all New Jersey counties, Somerset County residents with 14+/30 days in poor physical health ranks in the middle quartile.
- As compared to County Health Ranking Benchmark (3 days). Somerset County ranks in the middle quartile.

# Frequent Mental Distress Percent Reporting 14 or More of the Past 30 Days Mental Health Not Good State & County Comparisons 2014-2016



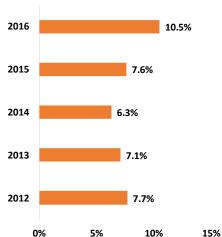
Source: New Jersey Behavioral Risk Factor Survey

Note: The frequent mental distress health measure is based on response to the question: "Now 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?"



National Benchmark: 3.0 Somerset County 2016: 10.5



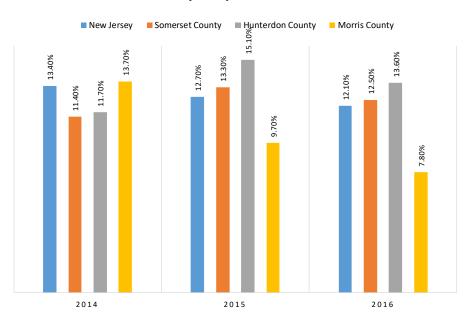


Source: New Jersey Behavioral Risk Factor Survey

Note: The frequent mental distress health measure is based on response to the question: "Now 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?"

- Between 2012 and 2016, the percent of Somerset County reporting a history of depression increased from 11.4% to 12.5%.
- The Somerset County rate for history of depression was slightly higher than the statewide rate.

# History of Diagnosed Depression State & County Comparisons 2014-2016

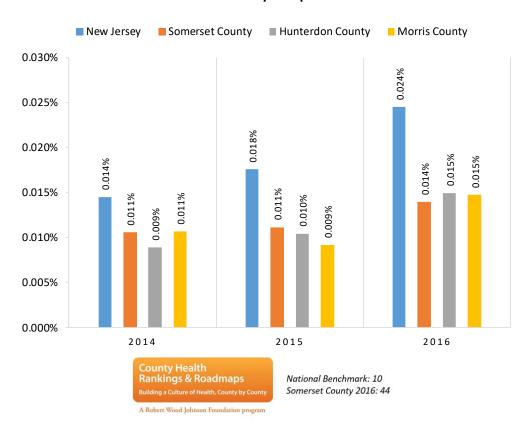


Source: New Jersey Behavioral Risk Factor Survey

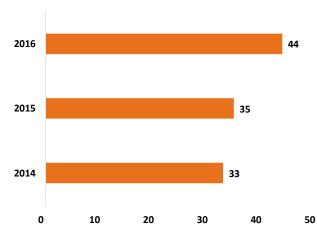
Note: The frequent mental distress health measure is based on response to the question: "Now thinking about your mental health which includes stress depression and problems with emotions for how many days during the past 30 days was your mental health not good?"

- Between 2014 and 2016, the percent of drug overdose deaths increased from 0.01% of the State's population to 0.02% statewide.
- Drug overdose deaths in Somerset County increased from 33 to 44 or by nearly one-third.

# Drug Overdose Deaths State and County Comparisons 2016



#### **Somerset County**



Source: http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20Abuse%20Overview/2016/statewide.pdf

| Indicator  | Healthy<br>People 2020<br>Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|--|----------------------------------|--|---------------|
| Reported "Fair" or "Poor" Health Percentage of Respondents                       | N.A.                             |  |               |
| Mentally Unhealthy Days Reported in the Past 30 Days Average Age-Adjusted Number | N.A.                             |  |               |
| History of Diagnosed Depression  | N.A.                             | N.A.                                   |               |
| Drug overdose deaths Age-Adjusted Rate/100,000 Population                        | N.A.                             |  |               |

RED: Poorest Performing Quartile
Yellow: Middle Quartiles
Green: Best Performing Quartile

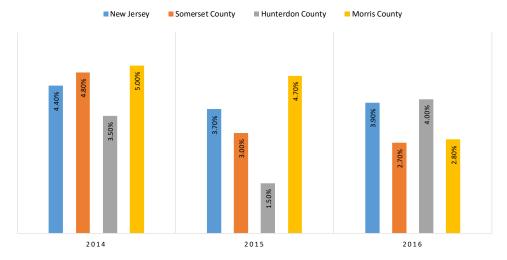
## 7. Morbidity

Morbidity, the rate of disease incidence, is a measure of quality of life and how healthy a population is in terms of being disease free.

#### **Heart Disease**

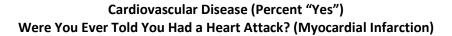
- According to BRFSS, the percent of Somerset County residents told they have angina or coronary heart disease decreased from 4.8% in 2014, to 2.7% in 2016. In 2016, BRFSS indicates 3.9% of New Jersey respondents have angina or coronary heart disease.
- As compared to New Jersey, Somerset County residents reporting angina or coronary heart disease ranks in the best performing quartile.

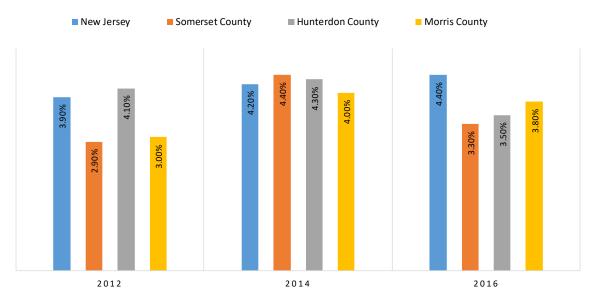
Cardiovascular Disease (Percent "Yes")
Were You Ever Told You Has Angina or Coronary Heart Disease?
State and County Comparisons 2014-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

- According to BRFSS, the percent of Somerset County residents told they have had a heart attack increased 0.4 percentage points from 2.9% in 2012 to 3.3% in 2016. In 2016, BRFSS indicated 4.4% of New Jersey respondents were told they had a heart attack.
- Somerset County ranks in the best performing quartile compared to all 21 New Jersey counties for residents who had a heart attack.



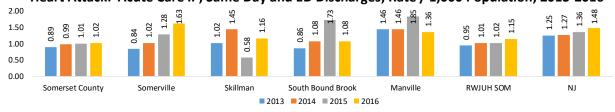


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

## Heart Disease Hospital Use Rates for County, RWJUH Somerset Service Area, and Selected Towns

- The rate of Somerset County residents hospitalized with a heart attack diagnosis (2013-2016) was lower than those in the hospital Service Area.
- In 2016, Somerville residents exhibited the highest rate for patients hospitalized with a diagnosis
  of heart attacks at 1.63/1,000 and South Bound Brook residents reported the lowest rate of
  1.08/1,000.

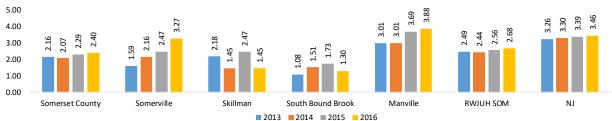
Heart Attack: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 280-285

- Between 2013 and 2016, the rate of patients hospitalized with a diagnosis of heart failure in Somerset County was lower than the hospital Service Area, Somerville and Manville.
- In 2016, Manville residents exhibited the highest rate of patients hospitalized with a diagnosis of heart failure/CHF at 3.88/1,000 and South Bound Brook residents had the lowest rate of 1.30/1,000.



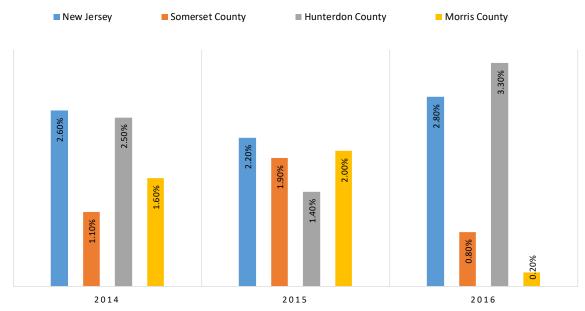


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 291-293

#### Stroke

- In 2016 BRFSS reports 0.8% of Somerset County respondents indicated they had a stroke.
- In 2016, Somerset County (0.8%) reported fewer strokes than the State (2.8%) and Hunterdon County.
- Somerset County ranks in the top quartile of New Jersey counties for percentage of the population that had a stroke.

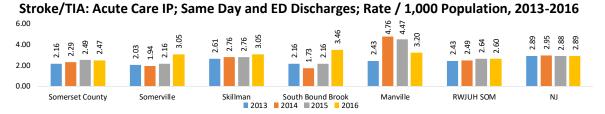
# Cardiovascular Disease (Percent "Yes"): Have You Ever Been Told You Had a Stroke? State and County Comparisons 2014-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

## Stroke Hospital Use Rates for County, RWJUH Somerset Service Area, and Selected Towns

• In 2016, South Bound Brook (3.46/1,000) had the highest rate for patients hospitalized for stroke/TIA diagnosis in the region, and Somerset County (2.47/1,000) had the lowest.



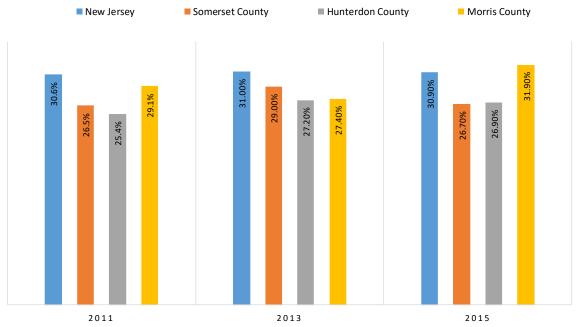
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges for MS-DRGs 061-069

## **Hypertension and High Cholesterol**

According to the American Heart Association, risk factors associated with developing cardiovascular disease include: high blood pressure, high cholesterol, cigarette smoking, physical inactivity, poor diet, overweight and obesity and Diabetes.

- In 2015 BRFSS respondents, 26.7% of Somerset County adults were aware that they suffered from hypertension, slightly less than New Jersey adults (30.9%). As compared to all New Jersey counties, Somerset performs in the middle quartile.
- Between 2011 and 2015, Somerset County adults who were told they had high blood pressure remained fairly consistent.
- In 2015, Somerset County (26.7%) was lower than the *Healthy People 2020* target (26.9%) for adults with high blood pressure.

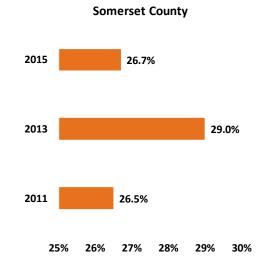
### Adults Who Have Been Told They Have Hypertension State and County Comparisons 2011-2015



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)



### Adults Who Have Been Told They Have Hypertension: Trend

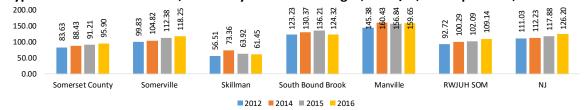


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

### Hypertension Hospital Use Rates for County, RWJUH Somerset Service Area, and Selected Towns

- Manville had the highest rate of patients using a hospital service with a diagnosis of hypertension for each year from 2013 through 2016.
- In 2016, RWJUH Somerset Service Area (109.14/1,000) had a higher rate of patients using a hospital service with a hypertension diagnosis than Somerset County (95.90/1,000).



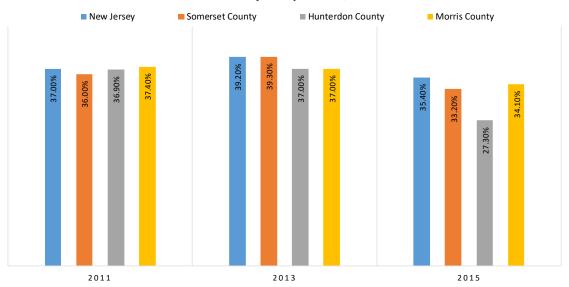


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes in Range 401-405.99 (Appearing Anywhere In First 13 DX Codes On Patient Record)

### **Cholesterol**

- In the BRFSS 2015, 33.2% of Somerset County adults who had their cholesterol checked and were told it was high, similar to New Jersey adults (35.4%).
- The percent of Somerset County adults reporting high cholesterol trended downward from 2011 (36.7%) through 2015 (33.2%), decreasing 9.5%
- The 2015 Somerset County percent of adults who had their cholesterol checked and were told it
  was high was more than double the *Healthy People 2020* target of 13.5%. Somerset County is in
  the lowest performing quartile for *Healthy People 2020*.

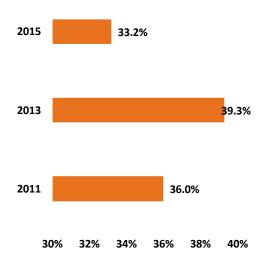
### Adults Who Have Had Their Cholesterol Checked and Told It Was High State and County Comparisons, 2011-2015



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)



### Adults Who Have Had Their Cholesterol Checked and Told It Was High: Trend Somerset County

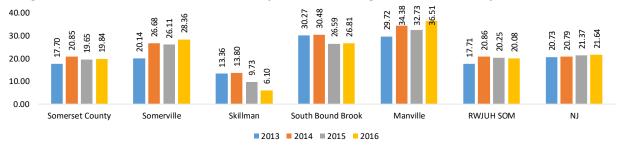


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

### High Cholesterol Hospital Use Rates for County, RWJUH Somerset Service Area, and Selected Towns

- The rate of patients using a hospital service with a diagnosis of high cholesterol was highest in Manville in 2016.
- In 2016, the rate of patients using a hospital service with a diagnosis of high cholesterol was lowest in Skillman (6.10/1,000).

### High Cholesterol: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016

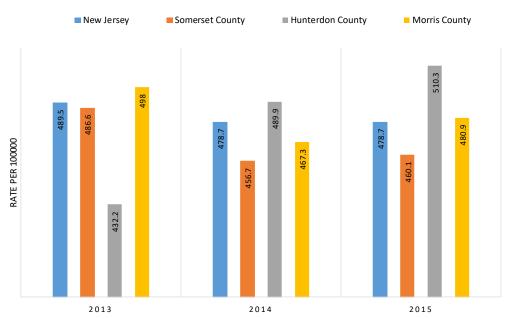


Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes 272.0 or 272.2 (Appearing Anywhere In First 13 DX Codes On Patient Record)

#### Cancer

- Incidence of overall invasive cancer in Somerset County decreased 5.4% from 486.6/100,000 in 2013, to 460.1/100,000 in 2015.
- In 2015, the overall incidence of cancer in Somerset County was lower than the State and comparison counties.

### Overall Invasive Cancer Incidence: Age-Adjusted Rate / 100,000 Population State and County Comparisons 2013-2015



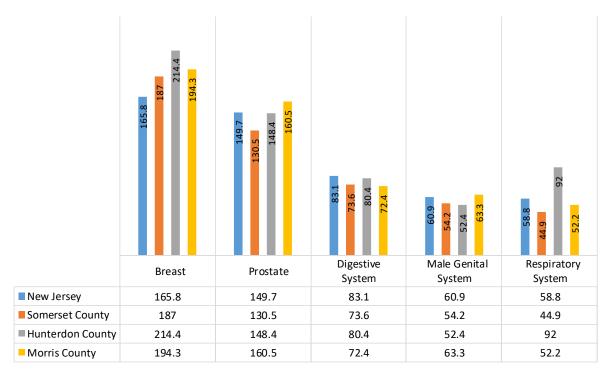
Source: NJDOH New Jersey Cancer Registry

Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate / 100,000 for Breast Cancer is based on Females

### Incidence by Site

- In Somerset County, breast (187.0/100,000) and prostate (130.5/100,000) cancers had the highest incidence rates among the top five cancers, followed by digestive system (83.1/100,000), male genital system (54.2/100,000), and lung (44.9/100,000).
- In 2015, prostate cancer, lung cancer, digestive system, and male genital system rates in Somerset County were lower than New Jersey.
- Between 2008 and 2015, incidence trends for Somerset County by site were:
  - Breast increased 17.8%
  - Digestive System decreased 2.9%
  - Prostate declined 17%
  - Male Genital System decreased 67%
  - Respiratory System decreased 5.8%
- Prostate, breast, digestive system, respiratory, and male genital system cancer incidence for Somerset County perform in the middle quartile in comparison to all 21 New Jersey counties. However, prostate cancer incidence in Somerset County performs in the top 25% statewide.

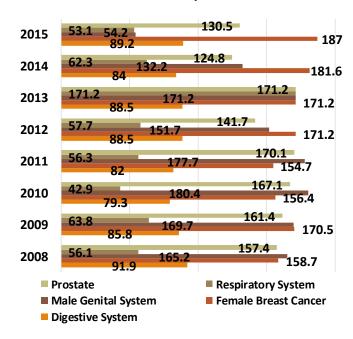
### Invasive Cancer Incidence by Site: Age-Adjusted Rate / 100,000 Population State and County Comparisons 2015



Source: NJDOH New Jersey Cancer Registry

Note: The Rate / 100,000 for Prostate Cancer is based on Males and the Rate / 100,000 for Breast Cancer is based on Females

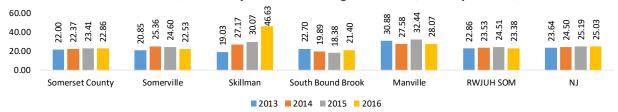
### Invasive Cancer Incidence by Site 2008-2015: Age-Adjusted Rate / 100,000 Population Somerset County Trend



### Cancer Hospital Use Rates for County, RWJUH Somerset Service Area, and Selected Towns

- The 2016 rate of patients using a hospital service with a cancer diagnosis per 1,000 population was highest in Skillman.
- In 2016, the rate for patients discharged with a cancer diagnosis/1,000 population was slightly lower in the County (22.86/1,000) than in the RWJUH Somerset Service Area (23.38/1,000).

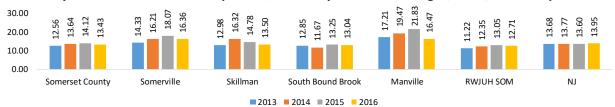
Cancer: Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2012 – 2015), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census Definition: Inpatient, Same Day Stay and ED Discharges – New Solution's Inc. Oncology Product Line (includes History of Cancer)

- The 2016 rates of residents using a hospital service that had a history of cancer diagnosis was lower in the RWJUH Somerset Service Area (12.71/1,000) than in the County (13.43/1,000).
- In 2016, the rate of patients hospitalized with a history of cancer diagnosis/1,000 population was higher in Manville (16.47/1,000) and lowest in Somerset County (12.71/1,000).

### History of Cancer: Acute Care Inpatient, Same Day and ED Discharges; Rate / 1,000 Population



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2012 – 2015), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census

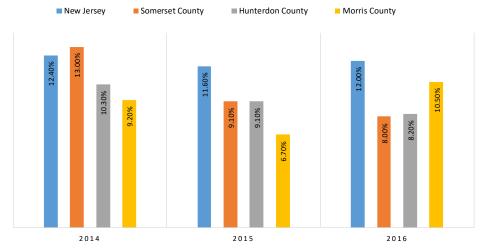
Definition: Inpatient, Same Day Stay and ED Discharges – New Solution's Inc. Oncology Product Line (History of Cancer Only)

### **Asthma**

Asthma, a chronic lung disease often with childhood onset, inflames and narrows airways and causes recurring periods of wheezing, chest tightness, shortness of breath and coughing.<sup>54</sup> The exact cause of asthma is unknown; however, researchers believe genetic and environmental factors are involved. Factors may include: atopy, parents with asthma, certain respiratory infections during childhood and contact with some airborne allergens or exposure to some viral infections in infancy or in early childhood when the immune system is developing.<sup>55</sup>

- According to the 2016 BRFSS survey, 8.0% of Somerset County adults reported ever being told they have asthma. This was down 13% from 2014.
- The percent of Somerset County residents with asthma (8.0%) is lower than the State (12.0%), and the comparative counties. Compared to all 21 New Jersey counties, Somerset County was in the top quartile.

Asthma (Percent "Yes"): Adults Who Have Ever Been Told They Have Asthma State and County Comparisons 2014-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

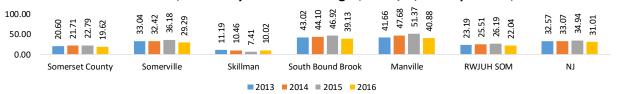
<sup>54</sup> http://www.nhlbi.nih.gov/health/health-topics/topics/asthma

<sup>55</sup> ibid

### Asthma Hospital Use Rates for County, RWJUH Somerset Service Area, and Selected Towns

- Rates of residents using a hospital service with a diagnosis of asthma were highest in Manville in 2016.
- In 2016, the rate of Manville (40.88/1,000) patients using a hospital service with a diagnosis of asthma exceeded the Somerset County (19.62/1,000) rate by a factor of 2. Rates were lowest in Skillman at 10.02/1,000.





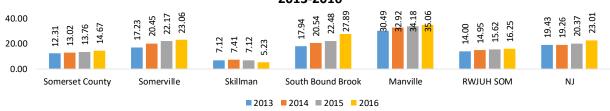
Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011
Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In the Range 493-493.9 (Appearing Anywhere In First 13 DX Codes On Patient Record)

### **COPD** (excluding Asthma)

Chronic Obstructive Pulmonary Disease (COPD) is a group of diseases that cause airflow blockage and breathing-related problems including emphysema, chronic bronchitis. In the United States, tobacco smoke is a key factor in the development and progression of COPD, although exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play roles.

- Rates of residents hospitalized with a diagnosis of COPD were greatest in Manville from 2013 through 2016.
- In 2016, the rate of hospitalization for patients with a diagnosis of COPD was highest in Manville (35.06/1,000) and lowest in Skillman (5.23/1,000).

### COPD (excluding Asthma): Acute Care IP, Same Day and ED Discharges; Rate / 1,000 Population, 2013-2016



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In the Ranges 490-492 & 494-496 (Appearing Anywhere In First 13 DX Codes On Patient Record)

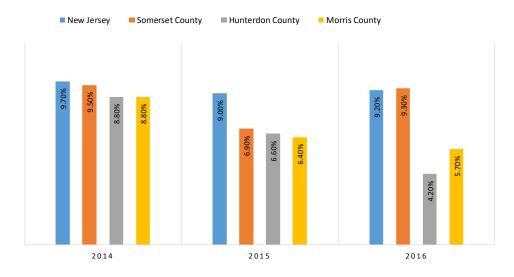
### **Diabetes**

Diabetes is indicated by high levels of blood glucose as a result of problems in insulin production, effectiveness, or a combination of both. The three most common types of diabetes are Type 1, Type 2 and Gestational. Individuals with diabetes may develop serious health complications including heart disease, stroke, kidney failure, blindness, amputation and premature death.

Type 1 develops when insulin producing cells located in the pancreas are destroyed. There is no known way to prevent Type 1 diabetes. In order to survive, Type 1 diabetics must have insulin delivered by injection or pump. Type 2 primarily onsets with insulin resistance disorder in which cells within the muscles, liver, and fat tissue are unable to properly use insulin. Higher risk for developing Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity, and race/ethnicity. African Americans, Hispanics/Latinos, American Indians, some Asians, and Native Hawaiians or other Pacific Islanders are at particularly high risk for Type 2. Gestational diabetes is a form of glucose intolerance diagnosed during the second or third trimester of pregnancy. The risk factors for gestational Diabetes are similar to those for type 2 diabetes.<sup>56</sup>

- Diabetes is increasing among Somerset County residents. Between 2014 (7.5%) and 2016 (9.3%), the rate increased by nearly 2 percentage points.
- In 2016, Somerset County had the highest percentage of patients reporting diabetes among comparison counties. Somerset County is in the middle performing quartile for diabetes as compared to all 21 counties statewide.

Diabetes (Percent "Yes"): Have You Ever Been Told by A Doctor That You Have Diabetes? 2014-2016

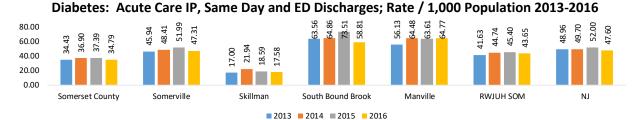


Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)



<sup>56</sup> http://www.cdc.gov/diabetes/pdfs/data/2014-report-generalinformation.pdf

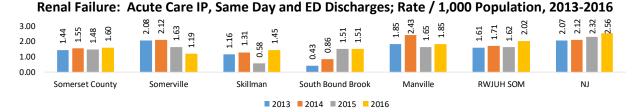
- Manville had the highest rate of residents using a hospital service with a diabetes diagnosis (64.77/1,000) in 2016. Rates in South Bound Brook were higher than the County and the state.
- In 2016, the rate of patients using a hospital service with diabetes diagnosis was higher in the RWJUH Somerset Service Area (43.65/1,000) than in the County (34.79/1,000).



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges – ICD-9 DX Codes In The Range 249.00-250.03 (Appearing Anywhere In First 13 DX Codes On Patient Record)

Diabetes is a contributing factor to renal failure. More than 35% of U.S. adults with diabetes have chronic kidney disease. High blood sugar and high blood pressure increase the risk that chronic kidney disease will eventually lead to kidney failure.<sup>57</sup>

- In 2016, the rate of Somerset County residents using a hospital service with diagnosis of renal failure was highest in Manville (1.85/1,000) and lowest in Somerville (1.19/1,000).
- The 2016 rate of New Jersey residents using a hospital service with diagnosis of renal failure was highest among all comparative areas.



Source: NJ UB-04 Acute Care IP, Same Day Stay, ER Discharges (2013 – 2016), Population: 2010, 2016 Claritas/HCDA, 2011 Straight Line Value Based on 2000 and 2010 Census; Definition: Inpatient, Same Day Stay and ED Discharges For MS-DRGs In the Range 682-685

#### **Arthritis**

Arthritis affects more than 1 in 5 adults and is the nation's most common cause of disability. Arthritis describes more than 100 rheumatic diseases and conditions that affect joints, the tissues which surround the joint and other connective tissue. The pattern, severity and location of symptoms vary depending on the specific form of the disease. Typically, rheumatic conditions are characterized by pain and stiffness in and around one or more joints. The symptoms can develop gradually or suddenly.<sup>58</sup>

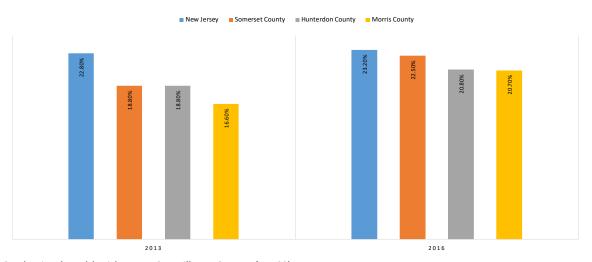
 Between 2013 and 2016, the percentage of Somerset County residents reporting arthritis increased from 18.8% to 22.5%.

<sup>57</sup> http://www.cdc.gov/Features/WorldKidneyDay

<sup>58</sup> http://www.cdc.gov/arthritis/basics.htm

 The percentage of Somerset County residents reporting arthritis was slightly lower than the State (23.2%) and comparison counties between 2013 and 2016. As compared to 21 counties statewide, Somerset County ranks in the middle quartile.

Arthritis (Percent "Yes"): Adults Who Have Ever Been Told They Have Arthritis
State and County Comparison 2013-2016



Source: CDC Behavioral Health Risk Factor Surveillance System (BRFSS)

| Indicator   | Healthy People<br>2020 Target | County Health<br>Rankings<br>Benchmark | New<br>Jersey |
|---|-------------------------------|--|---------------|
| CARDIOVASCULAR DISEASE<br>Were You Ever Told You Had Angina or Coronary Heart Disease?<br>% Yes | N.A.                          | N.A.                                   |               |
| CARDIOVASCULAR DISEASE<br><i>Were You Ever Told You Had a Heart Attack?</i><br>% Yes            | N.A.                          | N.A.                                   |               |
| HYPERTENSION AWARENESS<br>Adults Who Have Been Told They Have High Blood Pressure               |                               | N.A.                                   |               |
| CHOLESTEROL AWARENESS<br>Adults Who Have Had Their Cholesterol Checked and Told it Was High     |                               | N.A.                                   |               |
| STROKE<br>Were You Ever Told You Had a Stroke?<br><sub>% Yes</sub>                              | N.A.                          | N.A.                                   |               |
| ASTHMA<br>Adults Who Have Ever Been Told They Have Asthma<br>% Yes                              | N.A                           | N.A.                                   |               |
| DIABETES<br>Have You Ever Been Told by a Doctor That You Have Diabetes<br>% Yes                 | N.A.                          |  |               |
| ARTHRITIS<br>Adults Who Have Ever Been Told They Have Arthritis<br><sup>% Yes</sup>             | N.A.                          | N.A.                                   |               |
| RED: Poorest Performing Quartile  Yellow: Middle Quartiles  Green: Best Performing Quartile     |                               |  |               |

### 6. ASSETS AND GAPS ANALYSIS

The Assets and Gaps Analysis summarizes and highlights each component of the CHA. Assets highlight Somerset County or RWJUH Somerset's Service Area information indicating improvement over time in comparison to other counties and the State or in comparison to other races and genders. Gaps focus on disparities in Somerset County or in the RWJUH Somerset Service Area that have a negative trend, in comparison to other counties and the State or in comparison to other races or genders.

### A. HEALTH DISPARITIES

### **Economic Status**

### <u>ASSETS</u>

- Somerset County's percent of poverty for families, people, children and seniors is below that of the State.
- The rate of unemployment in Somerset County decreased between 2013 and 2016.
- Median household income in Somerset County increased between 2014 and 2016.
- The percent of Somerset County adults and children receiving TANF benefits was lower than the rate statewide.
- The percent of Somerset County adults and children receiving SNAP benefits was lower than the rate statewide.
- The percent of Somerset County residents with a graduate or professional degree was 37% higher than the statewide rate, and higher than the rate in Morris or Hunterdon Counties.
- Between 2014 and 2016, the percentage of people who speak English less than very well declined from 10.2% to 9.6%.

### **GAPS**

- Bound Brook, Manville, South Bound Brook, and Raritan are municipalities in which 40% of households are living in poverty, or at the ALICE threshold.
- Median household income in Manville is lower than the State and County.
- Two Somerset County towns experienced a decrease in median household income between 2014 and 2016, Somerset and Somerville.
- Between 2014 and 2016, the percentage of children eligible for the free school lunch program increased from 15% to 20%.

### **Social Context**

### GAPS

- Somerset County had lower membership association rates than its comparison counties.
- Domestic violence arrests increased 6.7% between 2014 and 2016.

### **Health and Health Care**

### **ASSETS**

- Insurance coverage for Somerset County residents improved from 10.2% without health insurance in 2013 to 6.6% in 2015.
- Somerset County ratio of physicians to population was higher than the ratio statewide.
- Somerset County adults saw a 14.9% decrease in ED visits for Ambulatory Care Sensitive Conditions (ACSC).
- Somerset County children's ACSC ED visit rate was 44.3% lower than the State.
- The Somerset County adult ED ACSC use rate (24.06/1,000) was less than half the statewide rate in 2016.
- Somerset County had the second lowest rate of utilization for ACSC.

### GAPS

- Bound Brook and Manville had higher CNI scores suggesting that they will have had higher hospital utilization rates.
- Manville, Bound Brook, Somerset and South Bound Brook had pediatric ED visit rates that were higher than the State and County.
- Manville, South Bound Brook, Bound Brook, Somerset and Kingston all had adult ED visit rates for ACSC that exceeded those of the County.
- Manville, Raritan and South Bound Brook had inpatient use rates for ACSC that were higher than the County.

### **Neighborhood and Built Environment**

### **ASSETS**

- In 2016, 15.4% of Somerset County housing units were built before 1950, more than 10 percentage points lower than New Jersey at 25.8%.
- Between 2014 and 2016, the percent of Somerset County residents with food insecurity declined from 7.3% to 6.9%.
- The violent crime rate in Somerset County decreased 21% between 2006-2008, and 2012-2014.
- Between 2014 and 2016, the Somerset County burglary rate dropped 21.7%.
- Deaths due to motor vehicles dropped 2.8% between 2009-2015, and 2010-2016.

### **GAPS**

- Somerset County reported an increase in children with elevated blood levels between 2013 and 2015.
- The rate of deaths due to accidental poisoning and exposure to noxious substances increased from 9.3/100,000 to 14.7/100,000 between 2015 and 2016.

### B. HEALTH FACTORS

### **Clinical Care Measures**

### **ASSETS**

- Somerset County's 2016 inpatient use rate was 14% lower than the rate statewide.
- Somerset County's 2016 ED visit rate was 39% less than the State rate.
- C-section rates trended downward from 2013 to 2016.
- Women with vaginal birth after C-section trended upward from 2013 to 2016.

### **Health Behaviors**

### **ASSETS**

• The teen birth rate among Somerset County teens aged 15-17 decreased from 5.2/1,000 in 2007-2011 to 3.0/1,000 in 2010-2016.

### **GAPS**

- The percent of women enrolled in first trimester prenatal care decreased from 87.4% in 2014 to 79.0% in 2016.
- High teen (aged 15-19) pregnancy rates were noted in Somerset (25.3/1,000) and Bound Brook than county-wide.
- The chlamydia rate in Somerset County (207.3/1,000) is higher than the CHR benchmark (145.1/1,000).

### **Individual Behaviors**

### **ASSETS**

- Somerset County smokers decreased from 11.6% in 2014 to 8.5% in 2016.
- Binge drinking in Somerset County decreased from 13.4% in 2014 to 12.4% in 2016.
- The percent of Somerset County residents with BMI >=30 trended down from 24.9% in 2012 to 20.5% in 2016.

### **GAPS**

Individuals with no leisure time activity trended up from 15.8% in 2014 to 23.6% in 2016.

### **Health Screening**

### <u>ASSETS</u>

- The percentage of women who had a mammogram in the last two years increased from 64.4% in 2012 to 77.8% in 2016.
- The percent of Somerset County residents reporting high cholesterol declined from 36% in 2011 to 33.2% in 2015.
- The percent of Somerset County adults over 65 who had a pneumonia vaccine increased from 2012 to 216.

### GAPS

- The percentage of Somerset County women who had a pap smear within three years decreased from 77.2% in 2014 to 73.8% in 2016.
- Fewer Somerset County residents were screened for colon cancer in 2016 (66.7%) than in 2012 (70.7%).
- The percent of Somerset County adults who received a flu shot (65.7%) was lower than the *Healthy People 2020* target of 90%.

### Mental Health and Substance Use Utilization

### **ASSETS**

- Somerset County inpatient and ED utilization rates for mental health diagnoses were lower than the statewide rate.
- Opioid dispensations decreased slightly between 2014 and 2016.

### **GAPS**

- Mental Health inpatient hospitalization and ED visit rates for Manville residents exceeded those
  of the State.
- There was an increase in substance use inpatient admissions and ED visits from 2012 to 2016.
- Between 2015 and 2016, there was an uptick in naloxone administration.
- The Emergency Department visit rate for substance use in Manville was higher than the County and statewide rates.

### C. HEALTH OUTCOMES

### **Mortality**

### <u>ASSETS</u>

 Between 2013 and 2016, Somerset County age-adjusted mortality rates improved for diabetes, stroke, nephritis, and chronic lower respiratory disease.

- Deaths due to cancer declined 6.7% between 2014 and 2016.
- The AAMR for intentional injuries was 27.3% lower than the statewide rate.
- The 2014-2016 YPLL (3,903.5/100,000) outperformed the County Health Rankings target of 5,300/100,000.
- Deaths due to suicide decreased between 2014 and 2016.

### GAPS

- Between 2013 and 2016, five of the 10 leading causes of death increased including Alzheimer's Disease, septicemia, heart disease, influenza and pneumonia, and unintentional injuries.
- Whites had higher death rates due to heart disease than Blacks.
- Since 2014, the AAMR for Alzheimer's Disease has increased 74.0%.

### Maternal and Child Health

### <u>ASSETS</u>

• The percentage of very low birth weight babies among Blacks decreased from 3.7% to 1.9% between 2011 and 2016.

### **GAPS**

- Infant mortality increased in Somerset County between 2007 and 2009 (2.6/100,000) to (3.8/100,000) between 2013 and 2015.
- The percentage of low birth rate babies increased among Whites and Hispanics.
- The percent of very low birth weight infants increased among Whites and Hispanics.

### Health and Behavioral Health Status

### **ASSETS**

• Compared to County Health Rankings few Somerset County residents report fair to poor health than the benchmark.

### **GAPS**

- The percent of people who report not good mental health status in Somerset County increased between 2014 and 2016.
- Between 2012 and 2016, the percent of Somerset County residents reporting a history of depression increased from 9.2% to 12.5%.
- Drug overdose deaths increased from 33 in 2014 to 44 in 2016.

### **Morbidity**

### **ASSETS**

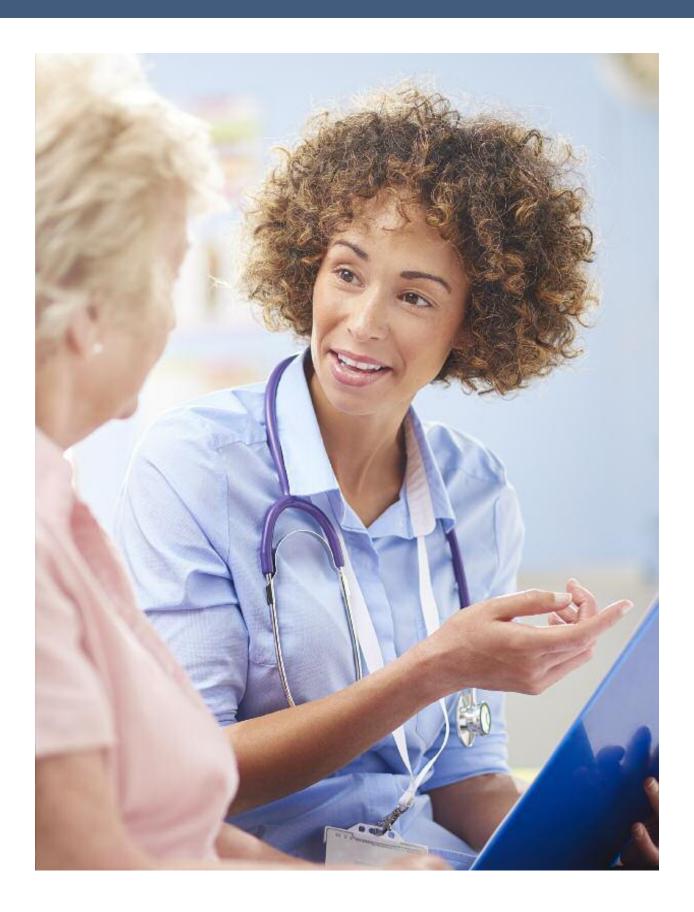
- The percent of patients with coronary artery disease or angina decreased from 4.8% in 2014 to 2.7% in 2016.
- Patients reporting heart disease also declined.
- The percent of Somerset County residents reporting a stroke declined and was <1%.
- The 2015 percent of Somerset County residents reporting high blood pressure was lower than the *Healthy People 2020* target.
- Invasive cancer incidence decreased 5.4% between 2013 and 2015.
- Invasive cancer rates for digestive system, prostate, male genital system, and respiratory system all decreased between 2008 and 2015.
- Eight percent of Somerset County residents reported asthma in 2016, down from 13% in 2014.

### **GAPS**

- The percent of Somerset County residents with high cholesterol is more than double the *Healthy People 2020* target of 13.5%.
- The invasive breast cancer rate increased 17.8% between 2008 and 2015.
- Diabetes increased in Somerset County from 7.5% in 2014 to 9.3% in 2016.
- Between 2013 and 2016, the percentage of Somerset County residents reporting arthritis increased from 18.8% to 22.5%.

**APPENDICES** 

# Community Health Needs **Assessment** Robert Wood Johnson University Hospital Somerset Let's be healthy together.



### Introduction



In 2015, Robert Wood Johnson University Hospital Somerset (RWJUH Somerset) conducted and adopted its Community Health Needs Assessment (CHNA) which consisted of a community needs survey of residents in our service area, a detailed review of secondary source data, a survey and meetings with local health officials and Healthier Somerset Coalition made up of county public health officers and community representatives. The Plan can be accessed at https://www.rwjbh.org/rwj-university-hospital-somerset/about/community-health-needs-assessment/

Through the CHNA process, health need priorities were chosen based on the Medical Center's capacity, resources, competencies, and the needs specific to the population it serves. The Implementation Plan addresses the manner in

which RWJUH Somerset will address each priority need and the expected outcome for the evaluation of its efforts. The implementation plan which follows is based on the four selected priority areas\*:

- Mental Health and Substance Abuse
- Obesity
- Chronic Disease
- · Access to Care

To develop a shared vision, plan for improved community health, and help sustain implementation efforts, the Healthier Somerset Coalition assessment and planning process engaged hospital leaders, local public health partners, and community-based organizations through different avenues. The Healthier Somerset Coalition, a broadly representative stakeholder group of nearly 50 organizations that included health department leaders, hospital representatives, and community-based organization leaders, was responsible for guiding, participating in, and providing feedback on all aspects of assessment and planning. Coalition members participated in at least one of the key engagement efforts below:

- a. The Data Committee, comprised of health department and hospital leadership, was responsible for overseeing and providing input to the community health needs assessment
- b. The Planning Committee, comprised of additional health department leaders and hospital representatives, was responsible for overseeing, providing input and developing goals and strategies in collaboration with the broader coalition for the community health improvement plan, including outreach to potential participants; feedback on planning agendas; and feedback on draft components.
- c. The Robert Wood Johnson University Hospital Somerset management team and staff were responsible for convening meetings, reviewing documents and providing overall project management and oversight.
- d. The CHIP Workgroups, representing subsets of the broader Healthier Somerset Coalition organized around each health priority area, were responsible for strategies to achieve the goals, objectives and strategies for the CHIP.
- e. The Healthier Somerset Advisory Board, comprised of 13 community representatives from Somerset County, represented diverse sectors including government, non-profit organizations and coalitions, business and industry, health, education, and community services and provided overall strategic leadership for the Coalition.

All residents of Somerset County have an equal opportunity to pursue healthy lifestyles and achieve social, emotional, physical, and spiritual well-being. The Community Health Assessment will provide a clear plan that empowers all who live, work, and play in Somerset County to:

- Achieve a complete, deeper, and broader understanding of the health status of Somerset County's population
- Direct their own health and access community resources to support healthy choices
- Engage as educated, knowledgeable participants in policy, advocacy, and decision-making activities that support the advancement of the community's health

\* The four focus areas do not represent the full extent of the Medical Center's community benefit activities or its support of the community's health needs. Other needs identified through the CHNA may be better addressed by other agencies/organizations or deferred to another timeframe.

ROBERT WOOD JOHNSON UNIVERSITY HOSPITAL SOMERSET | COMMUNITY HEALTH NEEDS ASSESSMENT | 1

## Goals #1: Improve comprehensive services for mental health and/or substance abuse through timely, affordable and appropriate access for all residents

#### **Key CHNA Findings:**

- Mental health concerns emerged as one of the most significant health concerns in the Somerset area, according to interviewees and focus group members.
- Somerset County lacks mental health and substance abuse providers and increasing number do not accept insurance resulting in treatment being out of reach for all but the most affluent patients.
- Provider respondents share observations of rising rates of trauma among those with mental health issues, often attributed to past sexual abuse and for recent immigrants, traumatic events in the country of origin.
- The leading cause of inpatient hospitalizations at RWJUH Somerset among adult
  patients who are Somerset County residents is "major depressive affective disorder".
- Approximately 31 percent of respondents to the community survey reported that their doctor or provider had ever talked to them about mental health.
- One of the barriers to addressing mental health concerns, according to respondents, is stigma. There are several efforts underway to enhance understanding of mental health issues. Several reported that they have been trained in Mental Health First Aid, a national program that teaches community members and first responders how to help people from developing a mental illness or in crisis.

### Strategy/Initiative 1.1

Increase the total number of trainers able to educate the community on Mental Health First Aid, a national program to teach the skills to respond to the signs of mental illness and substance abuse, by 2017.

### Indicator/Metric

- · Collect and analyze data and determine a baseline for successive annual comparisons
- Identify and secure possible funding sources for Mental Health First Aid trainers and participants
- Recruit potential trainers from community-based organizations working with underserved populations (Senior Centers, Multi-Cultural, etc.)

### Tracking/Outcome

2015 Baseline: Two trainers in Somerset County

2016 Results: Three additional trainers were educated

2017 Results: Total of five trainers able to educate the community of Mental Health First Aid



### Strategy/Initiative 12

Increase the number of people trained by Mental Health First Aid by 5% by 2020.

### Indicator/Metric

- Collect and analyze data and determine a baseline for successive annual comparisons
- Design and conduct promotion and outreach to increase awareness and enrollment in training
- Identify and secure funding to support participation in training



### Tracking/Outcome

2015 Baseline: 176 individuals trained 2016-2018 Results: To date, over 198 new individuals trained, for a total of 374 individuals trained, a 200% increase

### Strategy/Initiative 1.3

Increase awareness among primary care physicians (PCPs) of mental health/substance abuse issues by 10% by 2020.

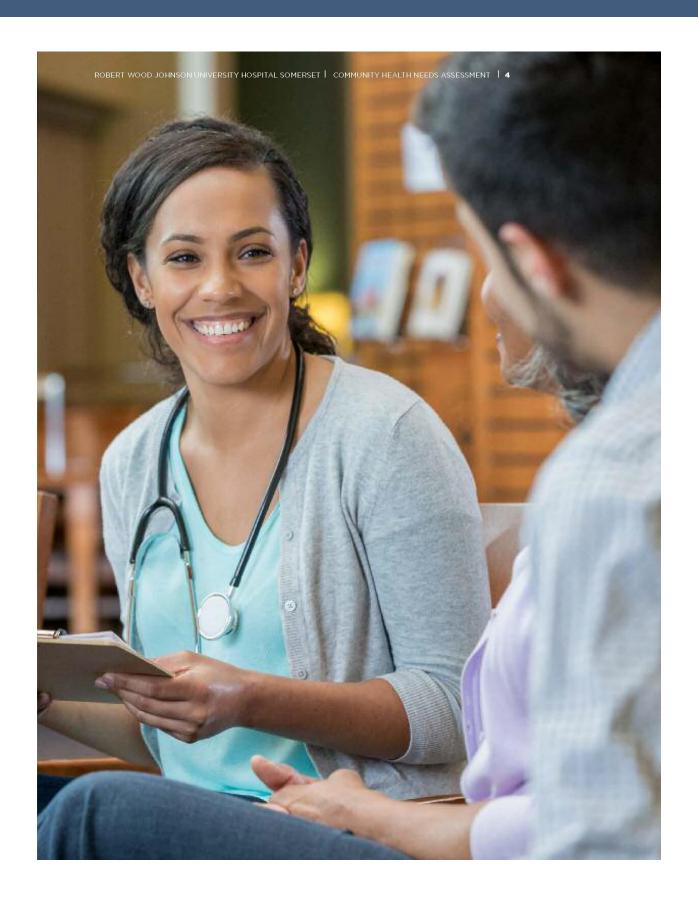
### Indicator/Metric

- Collect and analyze data and determine a baseline for successive annual comparisons
- Provide education through grand rounds and 'Do No Harm' symposiums
- Provide PCPs with local resources and referrals for Mental Health/Substance Abuse
- Design and conduct outreach and education to medical schools on Mental Health/Substance Abuse
- Establish and promote use of a consistent Mental Health/Substance Abuse evidence-based screening tool

### Tracking/Outcome

2015 Baseline: Zero out of 218 PCPs assessed for mental health/substance abuse
2016 Results: Mental Health and Substance Abuse Working Group sent an evidence-based
mental health and substance abuse screening tool and directory of services to all RWUS
affiliated PCPs. After campaign, 218 PCPs routinely used the assessment tool.

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### Strategy/Initiative 1.4

Enhance municipal/health alliances to advocate for the integration of Mental Health/Substance Abuse and Primary Care by 2020.

### Indicator/Metric

- · Collect and analyze data and determine a baseline for successive annual comparisons
- Increase outreach to Mental Health/Substance Abuse/Primary Care to attend established alliances; convene quarterly 'think tank' meetings
- Identify and apply for grant funding that is based on collaborative partnerships
- Promote collaborative Mental Health/Substance Abuse/Primary Care best practices
- Establish advocacy work groups to promote and secure funding

### **Tracking/Outcome**

2015 Baseline: O municipal/health alliances engaged 2017 Results: 11 municipal/health alliances now engaged

### Strategy/Initiative 1.5

Increase awareness of Mental Health/Substance Abuse services, wellness programs, and resources in Somerset County by 2017.

### Indicator/Metric

- · Collect and analyze data and determine a baseline for successive annual comparisons
- Design and conduct outreach to Parent Teacher Organizations (PTO) in Somerset County
- Establish collaboration/integration of 'No More Whispers' campaign
- Establish promote and distribute signs and symptoms poster campaign in multiple languages to multiple community-based venues/sites
- Print and distribute Mental Health/Substance Abuse resources and services in multiple languages
- Promote synergy of mind, body wellness as a prevention mechanism

### **Tracking/Outcome**

2016 Baseline: Survey of indicated that there was no awareness of depression campaign 2017-2018 Results: Over 600 posters were distributed and articles appeared monthly in *The Courier News* 

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### Goal # 2 Prevent and reduce the severity of obesity through education and strategies that promote healthy eating, active living, and behavioral change.

### **Key CHNA Findings:**

- While the percent of adults who were overweight or obese in Somerset County in 2012 (61.9%) was similar to the percent of overweight or obese adults in 2016 in New Jersey as a whole (62.9%) and nationwide (64.8%), several barriers to improving physical wellness exist specific to Somerset County.
- The percent of individuals consuming no servings of green or orange vegetable has significantly risen from 2006 (2.1%) to 2011 (4.3%) to 2015 (4.5%).
- Fifty percent of restaurants in Somerset County are fast food establishments which is slightly higher than the 48 percent of restaurants in New Jersey statewide.
- Lack of public transportation to parks, golf courses, hiking and biking trails, and other
  recreational facilities affects those who do not drive. An increase in access in needed
  to maximize utilization of both public and private recreational facilities.
- The rate of Somerset County residents who participate in any physical activity or exercise (71.3%) has declined from 2011 (77.3%) and 2006 (86.3%), and is slightly lower than 2013 rates for New Jersey (73.2%) and the U.S. (74.7%).
- Students not participating in competitive sports have limited opportunities to be physically active, in part due to lack of transportation to fitness centers.

### Strategy/Initiative 2.1

By 2017, increase by 10% the pounds of fresh fruit and vegetables available in food banks, food pantries and co-ops through partnerships with local producers and community gardens.

### Indicator/Metric

- Create a master list of all food pantries in Somerset County
- Design and execute a survey to ascertain the current fresh food distribution per month Survey (1) food banks, food pantries and co-ops; and (2) local producers and community gardens
- Recruit public health interns to provide support around conducting survey and interviews and developing and implementing the distribution plan
- Conduct interviews with food banks, food pantries and/or co-op staff and local producers to learn more about barriers to fresh food distribution (e.g. transportation, weight, perishability, etc.)
- Develop strategies for a distribution plan from vendors to food banks/pantries/co-ops, and from food banks/pantries/co-ops to individuals, as well as prioritize barriers that will be addressed and define scope of distribution plan

### **Tracking/Outcome**

2015 Baseline: 47,603 pounds of produce is produced monthly 2016-2017 Results: After produce donation launched in Bound Brook in 2017, food banks/pantries receive 50,803 pounds of produce monthly. GSPHP donated 500 pounds of produce to the food pantry in Hillsborough in 2016 and in 2017.

### Strategy/Initiative 2.2

Increase the percentage of youth and adults who are getting the daily recommended serving of fruits and vegetables by 2019.

### Indicator/Metric

- Promote the inclusion of increased fresh fruits and vegetables at food pantries
- Identify farmers markets for advertising/social media/vouchers
- Conduct community-based classes to demonstrate uses for unfamiliar fruits and vegetables
- Promote school and community gardens, farm to school, and offer more food tastings at school
- Include health information with food sources
- Encourage physicians to write prescriptions for fruits and vegetables and provide vouchers for purchase

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### **Tracking/Outcome**

2017 Results: One hundred children were educated on the inclusion of fresh fruits and vegetables into their diets; voucher program to Farmers Markets and donation of produce made annually to Food Pantry increased adult consumption resulting in an increase of 30 percent of adults getting daily recommended servings

### Strategy/Initiative 2.3

By 2019, increase by 5% the number of people reached by educational initiatives on healthy food choices, preparation and eating.

### Indicator/Metric

- Collect and analyze data and determine a baseline for successive annual comparisons
- Identify and document partners (e.g. SNAP-Ed at Rutgers Cooperative, etc.) and resources for print and digital communication (e.g. newspapers, newsletters, etc.)
- Develop a plan to coordinate sharing and tracking of information. Start with a pilot.
- Identify opportunities for increasing reach of and sharing information about existing educational initiatives and develop a communications plan

### **Tracking/Outcome**

2015 Baseline: 23,000 individuals attended educational programs and 10,000 received newsletter

2016 Results: 30,000 individuals attended educational seminars; 60,000 individuals received e-newsletter; approximately 10,000 received mailings annually and RWJS website averaged 1,235,804 visits combined with the average of 2,000 monthly visitors to the Healthier Somerset Web site

2017 Results: 45,000 individuals attended educational seminars; 60,000 individuals received e-newsletter; approximately 10,000 received mailings annually and RWJS website averaged 1,083,871 visits combined with the average of 2,000 monthly visitors to the Healthier Somerset Web site

### Strategy/Initiative 2.4

By 2019, increase by 3% the respondents in Somerset County who participate in any physical activity.

### Indicator/Metric

- Identify existing resources for worksite wellness
- Tap into Somerset County Business Partnership and New Jersey Development of Health. Resources/suggestions for worksite wellness might include nominating employee captains and implementing "Big Sister" mentoring (where large business would mentor a small business around worksite wellness). Frame around cost savings.



 Collect and deploy existing information on simple tips for exercise and movement. For example, collect information about helpful apps (on drinking water, stretching, etc.) and distribute the information via Pinterest and local recreation departments.







2016 and 2017 Results: Through the introduction of several physical activity opportunities such as a walking challenge, Fun N Fit, etc., annual participation increased to 4,320, a 10% increase. With the inclusion of external organizations, this percent increases. For instance, Somerset County also offered a variety of exercise classes in which 786 individuals participated and annual participation increased to 5,106 which represents approximately a 30% increase.

### Goal # 3 Reduce the impact of chronic disease through prevention, management, and education to improve quality of life

### Key CHNA Findings:

- The leading causes of death in Somerset County in 2011 (the most recent year for which data is available) were cancer (25.8%) and heart disease (23.9%).
- The leading causes of inpatient hospitalizations at RWUUH Somerset for Somerset County children (excluding births as a leading cause), adults, and seniors

are anorexia, major depressive disorders, and septicemia, respectively.

 Health providers, especially those who serve lower-income patients, reported rising rates of obesity, heart disease, asthma, and diabetes in their patient populations as well as a rise in the prevalence of multiple chronic diseases.



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- Nearly eight percent of adults in Somerset have been diagnosed with diabetes, and
   3.1% have angina or coronary heart disease. Rates of diabetes diagnosis were higher for Black, non-Hispanic respondents (9.6%) and white, non-Hispanic respondents (7.1%).
- Among survey respondents who have diabetes, only 27.6% reported having ever taken
  a course on how to manage diabetes.
- While the death rate due to cancer in Somerset County (158.1) is lower than cancer death rates statewide (164.7), the cancer incidence rate (528) is higher than the rate in New Jersey (495.8).

### Strategy/Initiative 3.1

Increase the number of family caregivers connected to resources/support.

### Indicator/Metric

- · Collect and analyze data and determine a baseline for successive annual comparisons
- Educate general population on Caregivers Coalition (especially groups within Healthier Somerset)
- Inventory and disseminate educational materials at multiple gatherings and settings in the community
- Provide information cards for healthcare providers to give to patients
- · Add link on hospital website
- Develop and conduct public service announcements and promote through the general media
- Develop a larger campaign to get into doctors' offices
- Engage the faith-based community in promotion and support efforts

### **Tracking/Outcome**

2015 Baseline: No family caregivers were connected to any resources or forms of support 2016 Results: 1,450 caregivers were connected to resources; 200 people were educated on caregiver coalition; 500 educational materials were disseminated including 712 information cards and 40 faith-based organizations were engaged

### Strategy/Initiative 3.2

Increase the number of participants in educational and supportive programs by 2018.

#### Indicator/Metric

- · Collect and analyze data and determine a baseline for successive annual comparisons
- Identify criteria for selecting and evaluating potential educational and support programs to recommend (support groups, self-management, employee wellness, referrals to prevention alternatives)

- Select six (6) high impact programs and promote them (strategies will differ by program)
- Identify referral sources that channel people to those programs (doctors' offices, work sites, faith-based organizations)
- Identify organizations for preventative care and promote
- Raise awareness where do people get info, referrals and self-referral: web/social media, office of aging, disabilities, senior centers, libraries, schools
- Look at existing app/websites for conditions
- Work with programs to gather information about referrals and selection/contact (i.e. ask how did you hear about us?)
- Include information about programs via 211

### Tracking/Outcome

2015 Results:

6,850 particiants in support groups

996 employees in wellness programs (i.e. flu shots, etc.)

46 participants in self-management groups

397 prevention programs

56 alternative programs

2016 Results:

10,857 participants in support groups

1,096 employees in wellness programs (i.e. flu shots, etc.)

96 participants in self-management groups

741 prevention programs offered, utilizing a variety of services including exercise programs (8 distinct programs), support groups (covering 28 areas), speaking events (106 events addressing over 40 health topics), screenings, health fairs (RWJS hosted/participated in 30 health fairs), classes (60 classes covered 8 health topics), and other educational events (76 sessions)

168 referrals to alternative methods

2017 Results:

12,321 participants in support groups

2,147 employees in wellness programs (i.e. flu shots, etc.)

180 participants in self-management groups, an 87% increase

769 prevention programs offered utilizing a variety of services including exercise programs (8 distinct programs), support groups (covering 28 areas), speaking events (106 events addressing over 40 health topics), screenings, health fairs (RWJS

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hosted/participated in 30 health fairs), classes (60 classes covered 8 health topics), and other educational events (76 sessions)

272 referrals to alternative methods

### Strategy/Initiative 3.3

Increase the number of people who are screened for Chronic Disease risk factors and referred as appropriate.

### Indicator/Metric

- · Collect and analyze data and determine a baseline for successive annual comparisons
- Increase connections/collaborations between community settings/groups and the hospitals who do the screening (funding as a part of it)
- Hold annual wellness event and/or added screening to existing events.
- Educate primary care physicians on importance of pre-"condition" results and recommending action to address them
- Develop and conduct a social media campaign to encourage people to get tested for chronic disease factors
- Collaborate with Medical Associations to get doctors to be available for referrals from community screenings

### Tracking/Outcome

Number of people screened for hypertension

2015 Baseline: 150 individuals screened for hypertension 2016 Results: 464 individuals screened for hypertension

2017 Results: 743 individuals screened for hypertension, a 430% increase over 2015

baseline

Number of people screened for diabetes

2015 Baseline: 275 individuals screened for diabetes 2016 Results: 281 individuals screened for diabetes 2017 Results: 267 individuals screened for diabetes

Number of people screened for cholesterol

2015 Baseline: 100 individuals screened for cholesterol

2016 Results: 332 individuals screened for cholesterol, a 300% increase over 2015

baseline

2017 Results: 413 individuals screened for cholesterol, a 400% increase over 2015

baseline



### Strategy/Initiative 3.4

Increase healthcare providers' awareness of cultural sensitivity and diversity (beyond language).

### Indicator/Metric

- Collect and analyze data and determine baseline for successive annual comparisons
- Identify which agencies/organizations work with diverse populations
- Develop and conduct webinars for target audiences, provide incentives for providers
- Add presentations on cultural sensitivity to existing conferences and assign/grant CEUs that are recognized
- Work with community college, residency programs and internship programs to train diversity on students on cultural sensitivity
- Target pockets of "minority" populations to increase awareness of chronic disease in their communities

### **Tracking/Outcome**

Tracking/Outcome

2015 Baseline: Program began in 2016

2016 Results: 1,096 providers trained/attended and accessed resource list 2017 Results: 2,147 providers trained/attended and accessed resource list

# Goal # 4 Improve the access to and awareness of health care services for those living and working in Somerset County, including underserved populations

### **Key CHNA Findings:**

- Barriers to accessing health care facilities is especially pronounced for Hispanic respondents, 56.8% of whom indicated insurance issues were a barrier and 47.5 of whom indicated cost issues were a barrier.
- Overall, problems with insurance and cost highly affect the Somerset County
  population (29.9% of respondents cite insurance problems and 22.3% of respondents
  cite cost problems).
- Several respondents reported that they increasingly use drugstore-based clinics, like the Minute Clinic at CVS, for their medical needs.

### Strategy/Initiative 4.1

Increase the utilization of existing primary care services in Somerset County by 10%.

### Indicator/Metric

- · Work with Primary Care sites to access and analyze transportation patterns and existing transportation resources (look at patient satisfaction surveys)
- Train primary care physician site staff on available transportation resources
- · Educate at the community level by giving up to date transportation and health services information to 211

### **Tracking/Outcome**

2016 Baseline: Only 16,720 individuals were uninsured and are assumed to not have a primary care provider and 266,290 individuals have ongoing care (US Census Bureau)

### Strategy/Initiative 4.2

Create a network of Community Health Workers who represent the diverse populations in our community.

### Indicator/Metric

- Define Community Health Worker title and job description
- Assess existing community health workers (CHWs) including volunteer, lay health workers, etc. for coverage, satisfaction level, training needs, etc.
- Identify gaps in services and geographic areas
- · Identify partners
- Identify funding to support development of network

### **Tracking/Outcome**

Number of Community Health Workers:

2015 Baseline: O (according to NJ Bureau of Labor and Statistics)

2016 Results: 155 (according to Quarterly Census of Employment and Wages of NJ) 2017 Results: 161 (according to Quarterly Census of Employment and Wages of NJ)

Diversity of Community Health Workers:

The baseline number of diverse Community Health Workers in Somerset County was zero. It is neither reported by the NJ Bureau of Labor and Statistics nor the Quarterly Census of Employment and Wages of NJ. As part of a comprehensive report developed by Sanofi in conjunction with Healthier Somerset, the report identifies 14 different types of community health workers. This statistic highlights the diverse roles that community health workers can play.

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#### Strategy/Initiative 4.3

Increase opportunities to address barriers to health insurance navigation for underserved community members.

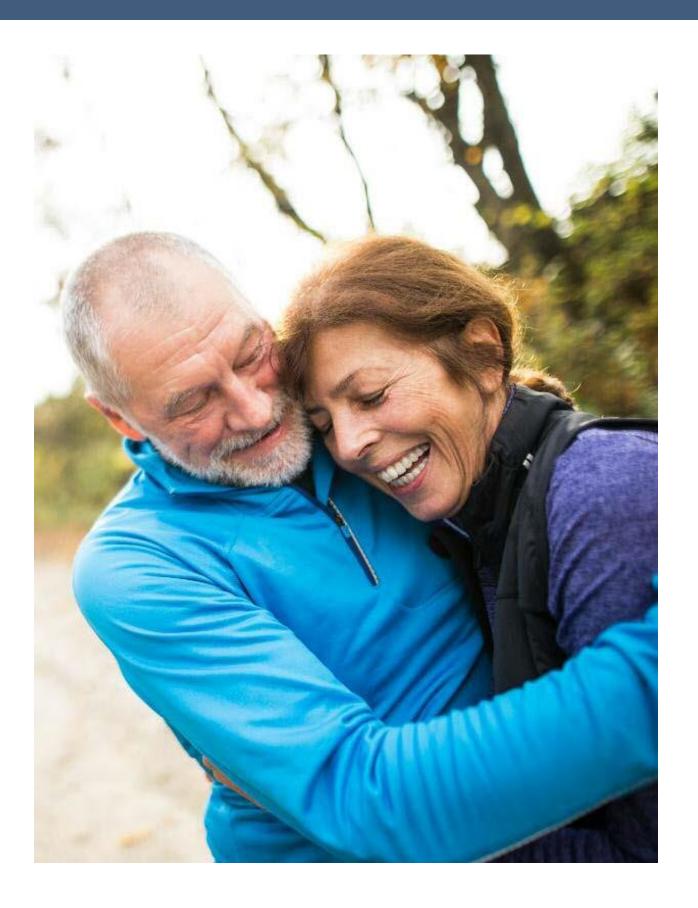
#### Indicator/Metric

- · Collect and analyze data and determine a baseline for successive annual comparisons
- Identify key barriers to health insurance navigation for targeted populations (focus groups, survey, other)
- Educate community members on resources and supports
- Conduct marketing promotion/media (radio, billboards, and social media)
- Identify funding opportunities and grants
- Identify key policy and system barriers; form advocacy group(s) to address them

#### Tracking/Outcome

2016 Baseline: Five resources to improve health insurance navigation for underserved community members (i.e. Social Services, Zufall, RWJUH Somerset and EmPoWER Somerset)

2017 Results: Over 10 resources to improve health insurance navigation for underserved community members (i.e. Social Services, Family Network Services, Zufall, RWJUH Somerset and EmPoWER Somerset, Zarepath, SHIP, RSVP, United Way, Aetna, Blue Cross/Blue Shield, etc.)



Robert Wood Johnson University Hospital Somerset

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### **APPENDIX B: SECONDARY DATA SOURCES**

| Source   |  |
|--|--|
| Advocates for Children of New Jersey   | http://acnj.org                            |
| Agency for Healthcare Research and Quality   | http://www.ahrq.gov                        |
| Alcohol Retail Density and Demographic Predictors of Health Disparities: A Geographic Analysis | http://www.ncbi.nlm.nih.gov/               |
| American Cancer Society Guidelines for Early Detection of Cancer                               | http://www.cancer.org                      |
| American Nutrition Association   | http://americannutritionassociation.org    |
| Annals of Family Medicine, Inc.  | http://www.annfammed.org                   |
| Asthma and Allergy Foundation of America   | www.aafa.org                               |
| BRFSS and Youth BRFSS  | www.aara.org<br>www.cdc.gov                |
| Bruno and Ridgway Community Health Assessment Study  | www.cuc.gov                                |
| Bureau of Labor Statistics   | http://data.bls.gov                        |
| CDC  | http://www.cdc.gov                         |
| CDC Community Health Indicators Service  | http://www.cdc.gov/CommunityHealth         |
| CDC Division of Nutrition, Physical Activity, and Obesity                                      | http://www.cdc.gov/obesity                 |
| CDC National Center for Environmental Health   | http://www.cdc.gov/obesity                 |
| CDC National Center for Health Statistics  | http://www.cdc.gov/ncen/                   |
| CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB                                 |  |
| Prevention   | https://www.cdc.gov/std                    |
| CDC NCIRD  | http://www.cdc.gov/vaccines                |
| CDC Preventing Chronic Disease   | http://www.cdc.gov/pcd                     |
| CDC WONDER   | http://wonder.cdc.gov                      |
| Centers for Medicare and Medicaid Services (CMS)   | https://www.cms.gov                        |
| Child Trends   | http://www.childtrends.org                 |
| County Health Rankings   | http://www.countyhealthrankings.org        |
| Department of Numbers  | http://www.deptofnumbers.com               |
| Do Something   | https://www.dosomething.org                |
| Enroll America   | https://www.enrollamerica.org              |
| Free Clinic Directory  | http://freeclinicdirectory.org             |
| Gallup   | http://www.gallup.com                      |
| Health Care Decision Analyst   | New Solutions, Inc.                        |
| Healthgrades   | https://www.healthgrades.com               |
| Health Grove   | http://www.healthgrove.com                 |
| Health Indicators Warehouse (BRFSS)  | www.healthindicators.gov                   |
| Health Resources and Services Administration Data Warehouse                                    | https://datawarehouse.hrsa.gov             |
| Healthy People 2020  | https://www.healthypeople.gov              |
| Home Facts   | http://www.homefacts.com                   |
| Institute of Medicine  | http://www.nap.edu                         |
| Kaiser Family Foundation   | http://kff.org                             |
| Kaiser Health News   | http://khn.org                             |
| Kids Count   | http://www.datacenter.kidscount.org        |
| March of Dimes   | http://www.marchofdimes.org                |
| NJ Department Human Services, Division of Addiction Services, New                              | http://www.state.nj.us/humanservices/dmhas |
| Jersey Drug and Alcohol Abuse Treatment  | /home/                                     |
| NJ Department of Health and Senior Services, Center for Health                                 | http://www.nj.gov/health/chs/              |
| National Association for Convenience and Fuel Retailing  | http://www.nacsonline.com                  |
| National Center for Biotechnology Information  | http://www.ncbi.nlm.nih.gov                |
| National Center for Health Statistics CDC  | http://www.cdc.gov/nchs/data               |

| Source  |  |  |  |  |  |
|---|--|--|--|--|--|
| National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; http://www.cdc.gov/hiv                                   |  |  |  |  |  |
| Division of HIV/AIDS Prevention   | http://www.cdc.gov/hiv                             |  |  |  |  |
| National Highway Traffic Safety Administration  | http://www-nrd.nhtsa.dot.gov                       |  |  |  |  |
| National Institute for Mental Illness   | http://www.nami.org                                |  |  |  |  |
| National Institute of Diabetes, Digestive & Kidney Diseases   | http://www.niddk.nih.gov                           |  |  |  |  |
| National Institutes of Health Medline Plus Health Screening   | https://www.nlm.nih.gov/medlineplus                |  |  |  |  |
| National Poverty Center University of Michigan  | http://www.npc.umich.edu                           |  |  |  |  |
| Neighborhood Scout  | http://www.neighborhoodscout.com/nj/crime/         |  |  |  |  |
| New Jersey Council of Teaching Hospitals  | http://njcth.org                                   |  |  |  |  |
| New Jersey Death Certificate Database, Office of Vital Statistics and   |  |  |  |  |  |
| Registry  | http://www.nj.gov/health/vital/                    |  |  |  |  |
| New Jersey State Health Assessment Data Complete Indicator Profile of Risk Factor for Childhood Lead Exposure: Pre-1950 Housing | https://www26.state.nj.us/doh-shad                 |  |  |  |  |
| NIH Medline Plus  | https://www.nlm.nih.gov/medlineplus                |  |  |  |  |
| NJ Department of Education  | http://www.state.nj.us/education                   |  |  |  |  |
| NJ DOH Family Health  | http://www.nj.gov/health/fhs                       |  |  |  |  |
| NJ DOH, Division of Communicable Disease Services   | http://www.nj.gov/health/cd/                       |  |  |  |  |
| NJ DOH, New Jersey Cancer Registry  | http://www.cancer-rates.info/nj/                   |  |  |  |  |
| NJ DOH Division of HIV, STD, and TB Services  | http://www.nj.gov/health/hivstdtb/                 |  |  |  |  |
| NJ Department of Labor and Workforce Development  | http://lwd.dol.state.nj.us/labor                   |  |  |  |  |
| NJ Department of Law and Public Safety, Uniform Crime Reporting   | http://www.njsp.org/ucr/crime-reports.shtml        |  |  |  |  |
| Unit, US Census Bureau, American Community Survey   | Tittp://www.njsp.org/der/enme-reports.sittin       |  |  |  |  |
| NJ State Police Uniform Crime Reporting Unit  | http://www.njcedv.org                              |  |  |  |  |
| NJ Substance Abuse Monitoring System  | https://njsams.rutgers.edu/njsams                  |  |  |  |  |
| NJ.Com  | http://www.nj.com                                  |  |  |  |  |
| NJ State Health Assessment Data (SHAD)  | https://www26.state.nj.us/doh-                     |  |  |  |  |
|   | shad/home/Welcome.html                             |  |  |  |  |
| Pro Publica   | https://propublica.org                             |  |  |  |  |
| Rutgers Center for Health Policy  | http://www.cshp.rutgers.edu                        |  |  |  |  |
| Substance Abuse and Mental Health Services Administration   | http://www.samhsa.gov                              |  |  |  |  |
| The Annie E. Casey Foundation Kids Count Data Center Children Receiving TANF (Welfare)  | http://www.datacenter.kidscount.org                |  |  |  |  |
| United States Department of Agriculture Economic Research Service   | http://www.ers.usda.gov                            |  |  |  |  |
| United States Department of Health and Human Services   | http://www.hhs.gov/healthcare                      |  |  |  |  |
| United States Department of Health and Human Services, Agency for   |  |  |  |  |  |
| Healthcare Research and Quality Understanding Quality   | http://www.ahrq.gov                                |  |  |  |  |
| Measurement 2016  |  |  |  |  |  |
| United Way  | http://www.unitedwaynj.org/ourwork/alicenj.<br>php |  |  |  |  |
| University of Nevada  | https://www.unce.unr.edu                           |  |  |  |  |
| US Department of Education  | http://www.ed.gov                                  |  |  |  |  |
| US Department of Health and Human Services, Maternal and Child  |  |  |  |  |  |
| Health Bureau   | http://mchb.hrsa.gov                               |  |  |  |  |
| US DHHS Administration for Children and Families  | http://www.acf.hhs.gov                             |  |  |  |  |
| Washington Post   | https://www.washingtonpost.com                     |  |  |  |  |
| World Health Organization   | http://www.who.int                                 |  |  |  |  |

# APPENDIX C1: CANCER INCIDENCE RATE REPORT: CANCER PATIENT ORIGIN SOMERSET COUNTY 2017

Seventy-nine and six-tenths percent of RWJ Somerset's cancer inpatients and 78.5% of cancer outpatients resided in the hospital's Primary Service Area. In total, 68.4% of inpatients and 58.8% of outpatients resided in Somerset County. Hillsborough (08844) and Bridgewater (08807) represent the largest segment of RWJ Somerset's inpatient and outpatient cancer patients.

The health factors and outcomes explored in the CHNA bear relevance to the oncology services and its review of specific cancer needs for the community.

| CANCER PATIENT ORIGIN    | 2017 RWJ SOM IP* | %      | 2017 RWJ SOM OP* | %      |
|--------------------------|------------------|--------|------------------|--------|
| Somerset County          | 1,026            | 68.4%  | 1,127            | 68.8%  |
| Primary Service Area     | 1,194            | 79.6%  | 1,286            | 78.5%  |
| Secondary Service Area   | 141              | 9.4%   | 138              | 8.4%   |
| Out of Service Area (NJ) | 145              | 9.7%   | 198              | 12.1%  |
| Out of State             | 20               | 1.3%   | 16               | 1.0%   |
| TOTAL                    | 1,500            | 100.0% | 1,638            | 100.0% |
| Hillsborough (08844)     | 190              | 12.7%  | 226              | 13.8%  |
| Bridgewater (08807)      | 189              | 12.6%  | 203              | 12.4%  |

Source; Decision Support; IP volume includes cases with ICD10 principal or secondary codes C00 thru D49.9 (Neoplasms);

OP volume includes cases with ICD10 principal or secondary codes Z51.0 or Z51.11 (Chemo and Radiation Therapy).

APPENDIX C2: CANCER INCIDENCE RATE REPORT: SOMERSET COUNTY 2010-2014

| INCIDENCE RATE REPORT FOR SOMERSET COUNTY 2010-2014 |   |                                    |                         |                            |  |  |
|---|---|------------------------------------|-------------------------|----------------------------|--|--|
| Cancer Site   | Age-Adjusted<br>Incidence<br>Rate - cases<br>per<br>100,000 | Averag<br>e<br>Annua<br>I<br>Count | Rece<br>nt<br>Tren<br>d | Recent 5-<br>Year<br>Trend |  |  |
| All Cancer Sites                                    | 461.3   | 1720                               | falling                 | -1.6                       |  |  |
| Bladder   | 21.2  | 78                                 | stable                  | -<br>11.6                  |  |  |
| Brain & ONS   | 6.1   | 22                                 | stable                  | -0.5                       |  |  |
| Breast  | 136.4   | 276                                | stable stable           | 0.3                        |  |  |
| Cervix  | 7.2   | 13                                 | <mark>stable</mark>     | -1.8                       |  |  |
| Colon & Rectum                                      | 37  | 139                                | falling                 | -2.3                       |  |  |
| Esophagus   | 3   | 12                                 | falling                 | -1.7                       |  |  |
| Kidney & Renal Pelvis                               | 13  | 50                                 | rising                  | 1.7                        |  |  |
| Leukemia  | 14.9  | 53                                 | stable stable           | 0.5                        |  |  |
| Liver & Bile Duct                                   | 6   | 24                                 | rising                  | 2.9                        |  |  |
| Lung & Bronchus                                     | 46.9  | 170                                | falling                 | -1.2                       |  |  |
| Melanoma of the Skin                                | 24.7  | 92                                 | <mark>stable</mark>     | -0.5                       |  |  |
| Non-Hodgkin Lymphoma                                | 21.7  | 81                                 | rising                  | 1                          |  |  |
| Oral Cavity & Pharynx                               | 10  | 40                                 | rising                  | 1                          |  |  |
| Ovary   | 13  | 27                                 | <mark>stable</mark>     | -1.1                       |  |  |
| Pancreas  | 11.9  | 25                                 | <mark>stable</mark>     | 0.7                        |  |  |
| Prostate  | 134.8   | 237                                | falling                 | -1.6                       |  |  |
| Stomach   | 9.7   | 16                                 | falling                 | -1.8                       |  |  |

The data source for C2 and following tables C3, C4, C5 and C6 is: https://statecancerprofiles.cancer.gov/

APPENDIX C3: CANCER INCIDENCE DETAILED RATE REPORT: SOMERSET COUNTY 2010-2014

SELECT CANCER SITES: RISING INCIDENCE RATE

Kidney & Non-Oral Liver & Renal Hodgkin Cavity & **Pelvis Bile Duct** Lymphoma Pharynx Thyroid Age-Adjusted Incidence Rate INCIDENCE RATE - cases per 100,000 13 21.7 10 12.7 REPORT FOR Average Annual Count 50 24 81 40 23 SOMERSET COUNTY 2010-2014 Recent Trend All Races (includes Recent 5-Year Trend in Hispanic), All Ages Incidence Rates 1.7 2.9 6.9 1 1 Age-Adjusted Incidence Rate - cases per 100,000 5.5 23.9 10.1 24.8 13.1 Average Annual Count 59 White Non-37 16 65 29 Hispanic, All Ages Recent Trend Recent 5-Year Trend in Incidence Rates 1.9 3.2 1.6 1.3 8.3 Age-Adjusted Incidence Rate - cases per 100,000 14.4 10.6 8.8 17.4 Average Annual Count 4 3 or fewer 4 3 6 Black (includes \* Recent Trend Hispanic), All Ages Recent 5-Year Trend in Incidence Rates Age-Adjusted Incidence Rate - cases per 100,000 6.8 7.5 12.5 10.9 13.7 Asian or Pacific Average Annual Count 3 3 6 5 7 Islander (includes \* \* \* \* Recent Trend Hispanic), All Ages Recent 5-Year Trend in Incidence Rates Age-Adjusted Incidence Rate - cases per 100,000 17.6 18.6 21 Hispanic (any race), Average Annual Count 5 3 or fewer 4 3 or fewer 8 All Ages Recent Trend \* \* stable Recent 5-Year Trend in Incidence Rates \* -0.9 \* \* Age-Adjusted Incidence Rate - cases per 100,000 18 9.2 13.8 26.1 12.7 Average Annual Count 31 17 44 26 23 MALES Recent Trend stable stable Recent 5-Year Trend in Incidence Rates 1.5 3.7 1.3 0.5 6.9 Age-Adjusted Incidence Rate - cases per 100,000 8.9 3.2 18.4 6.7 31.3 Average Annual Count 18 7 38 14 59 **FEMALES** stable Recent Trend stable stable stable Recent 5-Year Trend in 7.8 Incidence Rates 1.8 0.6

<sup>\*</sup> Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).

APPENDIX C4: CANCER MORTALITY RATE REPORT: SOMERSET COUNTY 2010-2014

| MORTALITY RATE REPORT FOR SOMERSET COUNTY 2010-2014 |                                    |   |                            |              |   |
|---|------------------------------------|---|----------------------------|--------------|---|
| Cancer Site   | Met Healthy<br>People<br>Objective | Age-Adjusted<br>Death Rate - per<br>100,000 | Average<br>Annual<br>Count | Recent Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |
| All Cancer Sites                                    | Yes                                | 149.6                                       | 549                        | falling      | -1.7  |
| Bladder   | ***                                | 4.7   | 17                         | stable       | 0.2   |
| Brain & ONS   | ***                                | 3.9   | 14                         | stable       | -1.3  |
| Breast  | No                                 | 21.9  | 47                         | falling      | -2.5  |
| Cervix  | Yes                                | 1.7   | 3                          | stable       | -0.9  |
| Colon & Rectum                                      | Yes                                | 14.1  | 52                         | falling      | -2.6  |
| Esophagus   | ***                                | 3   | 11                         | falling      | -1.7  |
| Kidney & Renal Pelvis                               | ***                                | 3   | 11                         | stable       | -0.4  |
| Leukemia  | ***                                | 6.4   | 23                         | stable       | -1.1  |
| Liver & Bile Duct                                   | ***                                | 4.4   | 17                         | stable       | 0.8   |
| Lung & Bronchus                                     | Yes                                | 33.8  | 120                        | falling      | -2.1  |
| Melanoma of the Skin                                | No                                 | 2.7   | 9                          | stable       | -0.5  |
| Non-Hodgkin Lymphoma                                | ***                                | 5.3   | 20                         | falling      | -2.6  |
| Oral Cavity & Pharynx                               | Yes                                | 1.5   | 6                          | stable       | -1.8  |
| Ovary   | ***                                | 7.6   | 16                         | stable       | -1.6  |
| Pancreas  | ***                                | 10  | 22                         | stable       | 0.2   |
| Prostate  | Yes                                | 15.9  | 22                         | falling      | -4  |
| Stomach   | ***                                | 4.9   | 7                          | falling      | -4.2  |
| Thyroid   | *                                  | *   | 3 or fewer                 | *            | *   |
| Uterus (Corpus & Uterus,<br>NOS)                    | ***                                | 5.6   | 12                         | stable       | 0.9   |

<sup>\*\*\*</sup> No Healthy People 2020 Objective for this cancer.

<sup>\*</sup> Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).

#### APPENDIX C5: CANCER MORTALITY DETAIL RATE REPORT: SOMERSET COUNTY 2010-2014

|  |                                       | Colon &<br>Rectum | Lung &<br>Bronchus |
|--|---------------------------------------|-------------------|--------------------|
| MORTALITY RATE REPORT                  | Met Healthy People Objective          | Yes               | Yes                |
| FOR SOMERSET COUNTY                    | Age-Adjusted Death Rate – per 100,000 | 14.1              | 33.8               |
| 2010-2014 All Races                    | Average Annual Count                  | 52                | 120                |
| (includes Hispanic), All               | Recent Trend                          | falling           | falling            |
| Ages                                   | Recent 5-Year Trend in Death Rates    | -2.6              | -2.1               |
|  | Met Healthy People Objective          | No                | Yes                |
| Militar Name I II amenda - All         | Age-Adjusted Death Rate – per 100,000 | 14.6              | 37.7               |
| White Non-Hispanic, All<br>Ages        | Average Annual Count                  | 43                | 105                |
| 7.855                                  | Recent Trend                          | falling           | falling            |
|  | Recent 5-Year Trend in Death Rates    | -2.5              | -1.7               |
|  | Met Healthy People Objective          | No                | Yes                |
| EL 19-1-1-19-19                        | Age-Adjusted Death Rate – per 100,000 | 22.9              | 34.9               |
| Black (includes Hispanic),<br>All Ages | Average Annual Count                  | 5                 | 8                  |
| All Ages                               | Recent Trend                          | stable            | falling            |
|  | Recent 5-Year Trend in Death Rates    | -1.7              | -2.5               |
|  | Met Healthy People Objective          | Yes               | Yes                |
| Asian or Pacific Islander              | Age-Adjusted Death Rate – per 100,000 | 7.5               | 13.3               |
| (includes Hispanic), All               | Average Annual Count                  | 3                 | 5                  |
| Ages                                   | Recent Trend                          | *                 | *                  |
|  | Recent 5-Year Trend in Death Rates    | *                 | *                  |
|  | Met Healthy People Objective          | *                 | *                  |
|  | Age-Adjusted Death Rate – per 100,000 | *                 | *                  |
| Hispanic (any race), All<br>Ages       | Average Annual Count                  | 3 or fewer        | 3 or fewer         |
| Age3                                   | Recent Trend                          | *                 | *                  |
|  | Recent 5-Year Trend in Death Rates    | *                 | *                  |
|  | Met Healthy People Objective          | No                | Yes                |
|  | Age-Adjusted Death Rate – per 100,000 | 17.2              | 41.7               |
| MALES                                  | Average Annual Count                  | 26                | 63                 |
|  | Recent Trend                          | falling           | falling            |
|  | Recent 5-Year Trend in Death Rates    | -2.4              | -2.8               |
|  | Met Healthy People Objective          | Yes               | Yes                |
|  | Age-Adjusted Death Rate – per 100,000 | 11.8              | 28.4               |
| FEMALES                                | Average Annual Count                  | 26                | 58                 |
|  | Recent Trend                          | falling           | falling            |
|  | Recent 5-Year Trend in Death Rates    | -2.8              | -1.2               |

APPENDIX C6: CANCER INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014                     |   |                         |                 |   |
|---|---|-------------------------|-----------------|---|
| County  | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |
| ALL SITES: All Races (includes Hispanic),<br>Both Sexes, All Ages |   |                         |                 |   |
| US (SEER+NPCR)  | 443.6   | 1,556,536               | falling         | -1.6  |
| New Jersey  | 478.4   | 48,693                  | falling         | -0.9  |
| Atlantic County   | 497.4   | 1,642                   | falling         | -0.5  |
| Bergen County   | 459.2   | 5,211                   | falling         | -1.2  |
| Burlington County   | 523.3   | 2,811                   | stable          | 0   |
| Camden County   | 513   | 2,938                   | falling         | -2.3  |
| Cape May County   | 552.4   | 850                     | stable          | -0.1  |
| Cumberland County   | 509   | 865                     | stable          | 0.1   |
| Essex County  | 450.8   | 3,656                   | falling         | -1.5  |
| Gloucester County   | 533.1   | 1,725                   | stable          | -0.3  |
| Hudson County   | 389.8   | 2,379                   | falling         | -1.7  |
| Hunterdon County  | 473.3   | 732                     | stable          | -0.3  |
| Mercer County   | 495.9   | 2,018                   | falling         | -0.4  |
| Middlesex County  | 458.5   | 4,068                   | falling         | -1  |
| Monmouth County   | 514.7   | 3,917                   | falling         | -1.8  |
| Morris County   | 471.9   | 2,803                   | falling         | -2.1  |
| Ocean County  | 515.7   | 4,333                   | falling         | -0.7  |
| Passaic County  | 444.8   | 2,362                   | falling         | -1.1  |
| Salem County  | 526.6   | 434                     | stable          | 0   |
| Somerset County   | 461.3   | 1,720                   | falling         | -1.6  |
| Sussex County   | 489.8   | 851                     | falling         | -1  |
| Union County  | 458.2   | 2,696                   | falling         | -1.2  |
| Warren County   | 500.5   | 659                     | falling         | -0.5  |
| Bladder: All Races (includes Hispanic), Both<br>Sexes, All Ages   | 300.5   | 033                     | isinig          | 0.5   |
| US (SEER+NPCR)  | 20.5  | 71,484                  | falling         | -1.3  |
| New Jersey  | 23.5  | 2,396                   | falling         | -2  |
| Cape May County   | 34.8  | 56                      | rising          | 1.4   |
| Salem County  | 32.1  | 27                      | stable          | 0.6   |
| Gloucester County   | 29.3  | 92                      | rising          | 0.8   |
| Atlantic County   | 29.1  | 96                      | stable          | 0.3   |
| Warren County   | 27.8  | 36                      | stable          | -0.7  |
| Hunterdon County  | 27.8  | 42                      | rising          | 1.3   |
| Cumberland County   | 27.2  | 45                      | rising          | 1.3   |
| Burlington County   | 26.8  | 145                     | stable          | 0   |

| INCIDENCE RA  | TE REPORT: ALL COUNT   | IES 2010-2014           |                 |   |
|---|--|-------------------------|-----------------|---|
|   | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000  | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |
| County  | The state of the s | 43                      | stable          | -0.5  |
| Sussex County Occor County                                | 25.8   |                         |                 | 1 100 10  |
| Ocean County  | 25   | 234                     | falling         | -3.4  |
| Morris County   | 24.7   | 148                     | stable          | -0.2  |
| Monmouth County   | 24.5   | 187                     | stable          | -0.3  |
| Camden County   | 23.4   | 132                     | stable          | -0.2  |
| Bergen County   | 23.2   | 271                     | falling         | -0.8  |
| Mercer County   | 22.7   | 92                      | stable          | -9.9  |
| Middlesex County  | 22.2   | 194                     | falling         | -3.3  |
| Somerset County   | 21.2   | 78                      | stable          | -11.6   |
| Passaic County  | 21.1   | 110                     | stable          | -0.5  |
| Union County  | 20   | 118                     | falling         | -4.7  |
| Essex County  | 19.4   | 152                     | stable          | -0.4  |
| Hudson County Brain & ONS: All Races (includes Hispanic), | 17.1   | 97                      | falling         | -1.7  |
| Both Sexes, All Ages                                      | C.F.   | 21.000                  | falltan.        | 0.0   |
| US (SEER+NPCR)  | 6.5  | 21,969                  | falling         | -0.9  |
| New Jersey  | 7  | 674                     | falling         | -0.3  |
| Atlantic County   | 7.8  | 24                      | stable          | 0.6   |
| Bergen County   | 7.6  | 78                      | stable          | -0.4  |
| Burlington County   | 8  | 39                      | stable          | 0.6   |
| Camden County   | 7.5  | 40                      | stable          | 0.2   |
| Cape May County   | 8.2  | 11                      | stable          | 0   |
| Cumberland County   | 6.9  | 11                      | stable          | -0.9  |
| Essex County  | 5  | 41                      | falling         | -1.4  |
| Gloucester County   | 7  | 22                      | stable          | -0.6  |
| Hudson County   | 5.8  | 38                      | falling         | -1.1  |
| Hunterdon County  | 7.4  | 10                      | stable          | -1  |
| Mercer County   | 7  | 26                      | stable          | -0.5  |
| Middlesex County  | 6.5  | 55                      | falling         | -0.9  |
| Monmouth County   | 7.5  | 53                      | stable          | 0.6   |
| Morris County   | 8.1  | 44                      | stable          | 0.1   |
| Ocean County  | 8.2  | 57                      | stable          | 0.6   |
| Passaic County  | 7  | 37                      | falling         | -0.9  |
| Salem County  | 6.7  | 5                       | *               | *   |
| Somerset County   | 6.1  | 22                      | stable          | -0.5  |
| Sussex County   | 8.2  | 12                      | stable          | -0.3  |
| Union County  | 6.2  | 36                      | falling         | -1.1  |
| Warren County   | 9.7  | 12                      | stable          | 1.3   |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014  |   |                         |   |   |
|--|---|-------------------------|---|---|
| County   | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend                         | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |
| Breast: All Races (includes Hispanic), Both<br>Sexes, All Ages   |   |                         |   |   |
| US (SEER+NPCR)   | 123.5   | 228,664                 | stable                                  | 0.5   |
| New Jersey   | 132   | 7,215                   | stable                                  | 0.3   |
| Atlantic County  | 132.7   | 233                     | stable                                  | -0.1  |
| Bergen County  | 134.7   | 811                     | falling                                 | -0.6  |
| Burlington County  | 140.1   | 403                     | stable                                  | -0.1  |
| Camden County  | 143.8   | 403                     | rising                                  | 0.8   |
| Cape May County  | 125.7   | 98                      | N. Caralle                              | -0.7  |
| Cumberland County  | 111.1   | 98                      | falling<br>falling                      | -0.7  |
| sheets and the same of the sam | 111.1   | 575                     |   | -0.9<br>3.6                                     |
| Essex County Gloucester County   |   | 244                     | rising<br>stable                        | -0.2  |
| AND THE CONTRACT OF THE CONTRA | 137.4   | 5-10-10                 | 100000000000000000000000000000000000000 | 1 1   |
| Hudson County  | 104.2   | 352                     | falling                                 | -0.6  |
| Hunterdon County   | 152.5   | 129                     | stable                                  | -0.1  |
| Mercer County  | 137.3   | 298                     | stable                                  | -0.4  |
| Middlesex County   | 129.4   | 618                     | falling                                 | -0.5  |
| Monmouth County  | 141.6   | 582                     | stable                                  | -0.1  |
| Morris County  | 143   | 456                     | falling                                 | -0.4  |
| Ocean County   | 128.4   | 553                     | falling                                 | -0.6  |
| Passaic County   | 119.2   | 347                     | falling                                 | -0.5  |
| Salem County   | 121.4   | 52                      | stable                                  | -0.7  |
| Somerset County  | 136.4   | 276                     | stable                                  | 0.3   |
| Sussex County  | 129.7   | 121                     | stable                                  | -0.3  |
| Union County   | 132.6   | 428                     | falling                                 | -0.4  |
| Warren County  | 129.7   | 92                      | stable                                  | -0.2  |
| Cervix: All Races (includes Hispanic), Both<br>Sexes, All Ages   |   |                         |   |   |
| US (SEER+NPCR)   | 7.5   | 12,408                  | stable                                  | -0.8  |
| New Jersey   | 7.6   | 380                     | falling                                 | -2.7  |
| Atlantic County  | 10.7  | 16                      | falling                                 | -3.7  |
| Bergen County  | 6.9   | 36                      | falling                                 | -2.1  |
| Burlington County  | 6.9   | 17                      | stable                                  | -0.8  |
| Camden County  | 8.4   | 24                      | falling                                 | -2.2  |
| Cape May County  | 7.1   | 4                       | stable                                  | -1.2  |
| Cumberland County  | 11.5  | 9                       | falling                                 | -3.8  |
| Essex County   | 9.3   | 41                      | falling                                 | -3.7  |
| Gloucester County  | 6.9   | 11                      | falling                                 | -2.8  |
| Hudson County  | 9.5   | 32                      | falling                                 | -3.1  |
| Hunterdon County   | 4.7   | 4                       | falling                                 | -2.6  |

Community Health Assessment Healthier Somerset/RWJUH Somerset Service Area

| INCIDENCE RA   | ATE REPORT: ALL COUNT                                 | ES 2010-2014            |                 |   |
|--|---|-------------------------|-----------------|---|
| County   | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |
| Mercer County  | 5.4   | 11                      | falling         | -3.2  |
| Middlesex County   | 6.3   | 28                      | falling         | -2.3  |
| Monmouth County  | 6.4   | 25                      | falling         | -2.9  |
| Morris County  | 6   | 17                      | falling         | -2.3  |
| Ocean County   | 9   | 28                      | falling         | -2  |
| Passaic County   | 8.3   | 22                      | falling         | -2.3  |
| Salem County   | 10.8  | 4                       | *               | *   |
| Somerset County  | 7.2   | 13                      | stable          | -1.8  |
| Sussex County  | 4.9   | 5                       | falling         | -16.2   |
| Union County   | 9   | 27                      | falling         | -1.8  |
| Warren County  | 8.4   | 5                       | falling         | -3.6  |
| Colon & Rectum: All Races (includes<br>Hispanic), Both Sexes, All Ages |   |                         |                 |   |
| US (SEER+NPCR)   | 39.8  | 139,083                 | falling         | -2.1  |
| New Jersey   | 42.3  | 4,335                   | falling         | -1.9  |
| Atlantic County  | 42  | 140                     | falling         | -2.7  |
| Bergen County  | 37.9  | 437                     | falling         | -3.9  |
| Burlington County  | 47.7  | 257                     | falling         | -2.1  |
| Camden County  | 45.9  | 263                     | falling         | -3.1  |
| Cape May County  | 45.9  | 72                      | falling         | -2.9  |
| Cumberland County  | 50.7  | 85                      | falling         | -1.4  |
| Essex County   | 42.6  | 344                     | stable          | 0.5   |
| Gloucester County  | 46.1  | 149                     | falling         | -3.1  |
| Hudson County  | 42.8  | 257                     | falling         | -2.5  |
| Hunterdon County   | 40.9  | 63                      | falling         | -2.9  |
| Mercer County  | 41.4  | 170                     | falling         | -5.7  |
| Middlesex County   | 41.8  | 370                     | falling         | -2.5  |
| Monmouth County  | 42.1  | 324                     | falling         | -3.7  |
| Morris County  | 37.5  | 226                     | falling         | -3  |
| Ocean County   | 46  | 407                     | falling         | -3.1  |
| Passaic County   | 41  | 217                     | falling         | -3.7  |
| Salem County   | 44.9  | 38                      | falling         | -2.2  |
| Somerset County  | 37  | 139                     | falling         | -2.3  |
| Sussex County  | 43.7  | 73                      | falling         | -2.8  |
| Union County   | 41.7  | 244                     | falling         | -2.4  |
| Warren County  | 43.3  | 58                      | falling         | -3.1  |
| Esophagus: All Races (includes Hispanic),<br>Both Sexes, All Ages      |   |                         |                 |   |
| US (SEER+NPCR)   | 4.6   | 16,469                  | falling         | -0.9  |

| INCIDENCE RA   | ATE REPORT: ALL COUNTI                                | IFS 2010-2014           |                 |   |
|--|---|-------------------------|-----------------|---|
| County   | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |
| New Jersey   | 4.5   | 470                     | falling         | -0.9  |
| Atlantic County  | 5.1   | 17                      | falling         | -2.2  |
| Bergen County  | 3.5   | 41                      | stable          | -1  |
| Burlington County  | 5.8   | 32                      | stable          | 0.3   |
| Camden County  | 5.6   | 33                      | stable          | -0.7  |
| Cape May County  | 5.6   | 8                       | stable          | -1  |
| Cumberland County  | 5.6   | 10                      | stable          | 0.8   |
| Essex County   | 4.2   | 34                      | falling         | -3.1  |
| Gloucester County  | 5.9   | 20                      | stable          | 0.9   |
| Hudson County  | 3,3   | 20                      | falling         | -2.8  |
| Hunterdon County   | 4.4   | 7                       | stable          | -0.3  |
| Mercer County  | 4.8   | 20                      | stable          | -1.4  |
| Middlesex County   | 4.1   | 36                      | falling         | -1.2  |
| Monmouth County  | 5.1   | 39                      | stable          | -0.1  |
| Morris County  | 4.3   | 26                      | stable          | 0.1   |
| Ocean County   | 5.4   | 48                      | stable          | -4.7  |
| Passaic County   | 4.5   | 24                      | falling         | -1.5  |
| Salem County   | 4.8   | 4                       | stable          | -1.8  |
| Somerset County  | 3   | 12                      | falling         | -1.7  |
| Sussex County  | 5.6   | 10                      | stable          | 0.6   |
| Union County   | 3.5   | 20                      | falling         | -1.6  |
| Warren County  | 5.6   | 8                       | stable          | 1.6   |
| Kidney & Renal Pelvis.: All Races (includes<br>Hispanic), Both Sexes, All Ages |   |                         |                 |   |
| US (SEER+NPCR)   | 16.1  | 56,558                  | rising          | 0.5   |
| New Jersey   | 15.5  | 1,588                   | stable          | -0.3  |
| Atlantic County  | 17  | 57                      | rising          | 1.5   |
| Bergen County  | 15.6  | 178                     | rising          | 1.1   |
| Burlington County  | 19.5  | 104                     | rising          | 2.6   |
| Camden County  | 18.2  | 103                     | rising          | 1.8   |
| Cape May County  | 18.2  | 29                      | rising          | 2.1   |
| Cumberland County  | 22.5  | 38                      | rising          | 4.4   |
| Essex County   | 12.9  | 106                     | rising          | 0.8   |
| Gloucester County  | 18.6  | 61                      | rising          | 2.2   |
| Hudson County  | 12.1  | 76                      | stable          | 0.7   |
| Hunterdon County   | 12.8  | 21                      | stable          | 1.6   |
| Mercer County  | 16.5  | 69                      | rising          | 2.3   |
| Middlesex County   | 14.3  | 128                     | rising          | 0.9   |

| INCIDENCE E   | INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014   |                         |                 |   |  |
|---|---|-------------------------|-----------------|---|--|
| County  | Age-Adjusted Incidence Rate - cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |  |
| Monmouth County   | 16  | 123                     | rising          | 1.3   |  |
| Morris County   | 12.6  | 76                      | stable          | 0.7   |  |
| Ocean County  | 17.9  | 146                     | rising          | 1.8   |  |
| Passaic County  | 15.1  | 80                      | rising          | 1.6   |  |
| Salem County  | 17.9  | 14                      | stable          | 1.1   |  |
| Somerset County   | 13  | 50                      | rising          | 1.7   |  |
| Sussex County   | 14.9  | 27                      | stable          | 0.2   |  |
| Union County  | 14.2  | 84                      | rising          | 0.9   |  |
| Warren County   | 15.5  | 20                      | stable          | 0.7   |  |
| Leukemia: All Races (includes Hispanic),<br>Both Sexes, All Ages          |   |                         |                 |   |  |
| US (SEER+NPCR)  | 13.6  | 46,254                  | falling         | -1.3  |  |
| New Jersey  | 15.1  | 1,491                   | rising          | 0.5   |  |
| Atlantic County   | 14  | 44                      | stable          | 0.4   |  |
| Bergen County   | 16.6  | 184                     | rising          | 0.7   |  |
| Burlington County   | 15.8  | 81                      | rising          | 1.3   |  |
| Camden County   | 15.1  | 84                      | rising          | 0.9   |  |
| Cape May County   | 16.7  | 24                      | stable          | 1.3   |  |
| Cumberland County   | 14.9  | 25                      | rising          | 2.2   |  |
| Essex County  | 12.7  | 99                      | stable          | -0.4  |  |
| Gloucester County   | 17.8  | 55                      | rising          | 1.8   |  |
| Hudson County   | 11.9  | 71                      | falling         | -0.7  |  |
| Hunterdon County  | 13  | 19                      | stable          | -0.7  |  |
| Mercer County   | 14.9  | 61                      | stable          | 0.4   |  |
| Middlesex County  | 15.5  | 135                     | rising          | 0.7   |  |
| Monmouth County   | 15.3  | 112                     | rising          | 0.9   |  |
| Morris County   | 16.2  | 93                      | stable          | 0.5   |  |
| Ocean County  | 15.3  | 126                     | stable          | 0.3   |  |
| Passaic County  | 14.8  | 76                      | stable          | -0.1  |  |
| Salem County  | 14.9  | 11                      | stable          | 1   |  |
| Somerset County   | 14.9  | 53                      | stable          | 0.5   |  |
| Sussex County   | 15.3  | 25                      | stable          | 1.1   |  |
| Union County  | 15.6  | 89                      | rising          | 1.1   |  |
| Warren County   | 15.4  | 20                      | stable          | 14.5  |  |
| Liver & Bile Duct: All Races (includes<br>Hispanic), Both Sexes, All Ages |   |                         |                 |   |  |
| US (SEER+NPCR)  | 7.8   | 28,830                  | rising          | 2.4   |  |
| New Jersey  | 7.3   | 777                     | rising          | 2.7   |  |
| Atlantic County   | 8.1   | 29                      | rising          | 3.2   |  |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014                           |   |                         |                 |   |  |  |  |  |  |
|---|---|-------------------------|-----------------|---|--|--|--|--|--|
| County  | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |  |  |  |  |  |
| Bergen County   | 6.8   | 80                      | rising          | 1.7   |  |  |  |  |  |
| Burlington County   | 7.2   | 41                      | rising          | 3.4   |  |  |  |  |  |
| Camden County   | 8.8   | 52                      | rising          | 3.7   |  |  |  |  |  |
| Cape May County   | 7.5   | 12                      | rising          | 5.8   |  |  |  |  |  |
| Cumberland County   | 10.4  | 19                      | rising          | 6.8   |  |  |  |  |  |
| Essex County  | 7.8   | 67                      | rising          | 2   |  |  |  |  |  |
| Gloucester County   | 8   | 27                      | rising          | 4.1   |  |  |  |  |  |
| Hudson County   | 7   | 44                      | rising          | 1.8   |  |  |  |  |  |
| Hunterdon County  | 5.4   | 9                       | *               | *   |  |  |  |  |  |
| Mercer County   | 8   | 34                      | rising          | 4.1   |  |  |  |  |  |
| Middlesex County  | 7.4   | 67                      | rising          | 3.1   |  |  |  |  |  |
| Monmouth County   | 7   | 56                      | rising          | 2.1   |  |  |  |  |  |
| Morris County   | 5.7   | 35                      | rising          | 1.5   |  |  |  |  |  |
| Ocean County  | 8   | 70                      | rising          | 4.5   |  |  |  |  |  |
| Passaic County  | 7.8   | 43                      | rising          | 2.9   |  |  |  |  |  |
| Salem County  | 10.6  | 9                       | rising          | 4.9   |  |  |  |  |  |
| Somerset County   | 6   | 24                      | rising          | 2.9   |  |  |  |  |  |
| Sussex County   | 7.1   | 12                      | rising          | 1.9   |  |  |  |  |  |
| Union County  | 6.3   | 39                      | rising          | 2.7   |  |  |  |  |  |
| Warren County   | 6.5   | 9                       | stable          | 0.8   |  |  |  |  |  |
| Lung & Bronchus: All Races (includes<br>Hispanic), Both Sexes, All Ages |   |                         | Stable          | 0.0   |  |  |  |  |  |
| US (SEER+NPCR)  | 61.2  | 215,604                 | falling         | -2.2  |  |  |  |  |  |
| New Jersey  | 57.8  | 5,880                   | falling         | -2.3  |  |  |  |  |  |
| Atlantic County   | 67.8  | 227                     | falling         | -0.7  |  |  |  |  |  |
| Bergen County   | 49.7  | 573                     | falling         | -1.3  |  |  |  |  |  |
| Burlington County   | 63.2  | 339                     | falling         | -1  |  |  |  |  |  |
| Camden County   | 70.6  | 405                     | falling         | -0.7  |  |  |  |  |  |
| Cape May County   | 80.9  | 133                     | stable          | -0.2  |  |  |  |  |  |
| Cumberland County   | 73.2  | 124                     | stable          | -0.5  |  |  |  |  |  |
| Essex County  | 50.2  | 397                     | falling         | -1.9  |  |  |  |  |  |
| Gloucester County   | 78.4  | 250                     | stable          | -0.4  |  |  |  |  |  |
| Hudson County   | 47.5  | 275                     | falling         | -2  |  |  |  |  |  |
| Hunterdon County  | 51.8  | 79                      | falling         | -1.6  |  |  |  |  |  |
| Mercer County   | 57.5  | 233                     | falling         | -1.1  |  |  |  |  |  |
| Middlesex County  | 52.3  | 457                     | falling         | -1.5  |  |  |  |  |  |
| Monmouth County   | 62.3  | 473                     | falling         | -2.8  |  |  |  |  |  |
| Morris County   | 48  | 283                     | falling         | -3.3  |  |  |  |  |  |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014                                |  |        |         |      |  |  |  |  |  |
|--|--|--------|---------|------|--|--|--|--|--|
| County   | Age-Adjusted Incidence Rate - Average cases per 100,000 Annual Count |        |         |      |  |  |  |  |  |
| Ocean County   | 71.4   | 653    | falling | -2.2 |  |  |  |  |  |
| Passaic County   | 51.6   | 270    | falling | -1.1 |  |  |  |  |  |
| Salem County   | 74   | 63     | falling | -0.9 |  |  |  |  |  |
| Somerset County  | 46.9   | 170    | falling | -1.2 |  |  |  |  |  |
| Sussex County  | 63.8   | 110    | falling | -1.1 |  |  |  |  |  |
| Union County   | 48.4   | 278    | falling | -1.5 |  |  |  |  |  |
| Warren County  | 64.9   | 86     | falling | -0.9 |  |  |  |  |  |
| Melanoma of the Skin: All Races (includes<br>Hispanic), Both Sexes, All Ages |  |        |         |      |  |  |  |  |  |
| US (SEER+NPCR)   | 20.7   | 71,035 | rising  | 1.8  |  |  |  |  |  |
| New Jersey   | 21.9   | 2,205  | stable  | 0.1  |  |  |  |  |  |
| Atlantic County  | 25.9   | 83     | stable  | -1.4 |  |  |  |  |  |
| Bergen County  | 17.4   | 195    | falling | -2.8 |  |  |  |  |  |
| Burlington County  | 27   | 144    | stable  | 1.3  |  |  |  |  |  |
| Camden County  | 19.8   | 114    | stable  | -1.5 |  |  |  |  |  |
| Cape May County  | 43.7   | 65     | rising  | 3.9  |  |  |  |  |  |
| Cumberland County  | 17.1   | 29     | rising  | 2.2  |  |  |  |  |  |
| Essex County   | 12.7   | 102    | stable  | -0.3 |  |  |  |  |  |
| Gloucester County  | 25.9   | 82     | stable  | -0.5 |  |  |  |  |  |
| Hudson County  | 7.6  | 48     | stable  | 5.1  |  |  |  |  |  |
| Hunterdon County   | 36   | 54     | rising  | 5    |  |  |  |  |  |
| Mercer County  | 23.6   | 95     | stable  | 0.7  |  |  |  |  |  |
| Middlesex County   | 17.9   | 158    | rising  | 1.9  |  |  |  |  |  |
| Monmouth County  | 33.3   | 246    | rising  | 2.4  |  |  |  |  |  |
| Morris County  | 26.2   | 154    | stable  | -0.4 |  |  |  |  |  |
| Ocean County   | 33   | 266    | rising  | 3.7  |  |  |  |  |  |
| Passaic County   | 13.4   | 70     | rising  | 1.8  |  |  |  |  |  |
| Salem County   | 34.2   | 26     | rising  | 5.3  |  |  |  |  |  |
| Somerset County  | 24.7   | 92     | stable  | -0.5 |  |  |  |  |  |
| Sussex County  | 28.8   | 50     | rising  | 2.7  |  |  |  |  |  |
| Union County   | 16.5   | 96     | rising  | 1.3  |  |  |  |  |  |
| Warren County  | 27.1   | 35     | rising  | 1.7  |  |  |  |  |  |
| Non-Hodgkin Lymphoma: All Races<br>(includes Hispanic), Both Sexes, All Ages |  |        |         |      |  |  |  |  |  |
| US (SEER+NPCR)   | 19   | 65,554 | falling | -1.2 |  |  |  |  |  |
| New Jersey   | 21.3   | 2,130  | falling | -0.3 |  |  |  |  |  |
| Atlantic County  | 21   | 67     | stable  | -0.3 |  |  |  |  |  |
| Bergen County  | 22.1   | 249    | stable  | -0.3 |  |  |  |  |  |
| Burlington County  | 21   | 111    | stable  | 0.5  |  |  |  |  |  |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014                                 |   |                         |                 |   |  |  |  |  |  |
|---|---|-------------------------|-----------------|---|--|--|--|--|--|
| County  | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |  |  |  |  |  |
| Camden County   | 19.9  | 113                     | stable          | 0.3   |  |  |  |  |  |
| Cape May County   | 20.6  | 32                      | stable          | -0.1  |  |  |  |  |  |
| Cumberland County   | 19.6  | 33                      | stable          | 0.3   |  |  |  |  |  |
| Essex County  | 19.6  | 157                     | stable          | 0   |  |  |  |  |  |
| Gloucester County   | 21.5  | 68                      | stable          | 0.7   |  |  |  |  |  |
| Hudson County   | 17.6  | 108                     | stable          | -0.5  |  |  |  |  |  |
| Hunterdon County  | 23  | 34                      | stable          | 0.5   |  |  |  |  |  |
| Mercer County   | 22.8  | 90                      | stable          | 0.6   |  |  |  |  |  |
| Middlesex County  | 21.6  | 189                     | stable          | 0.5   |  |  |  |  |  |
| Monmouth County   | 23  | 173                     | falling         | -0.8  |  |  |  |  |  |
| Morris County   | 22.6  | 131                     | stable          | -0.6  |  |  |  |  |  |
| Ocean County  | 21.2  | 181                     | stable          | -0.3  |  |  |  |  |  |
| Passaic County  | 19.2  | 99                      | stable          | 0.4   |  |  |  |  |  |
| Salem County  | 20.7  | 17                      | stable          | 0.5   |  |  |  |  |  |
| Somerset County   | 21.7  | 81                      | rising          | 1   |  |  |  |  |  |
| Sussex County   | 21.8  | 36                      | stable          | 0.4   |  |  |  |  |  |
| Union County  | 22.1  | 130                     | stable          | -0.5  |  |  |  |  |  |
| Warren County   | 22.9  | 29                      | stable          | 0.8   |  |  |  |  |  |
| Oral Cavity & Pharynx: All Races (includes<br>Hispanic), Both Sexes, All Ages |   |                         |                 |   |  |  |  |  |  |
| US (SEER+NPCR)  | 11.5  | 41,223                  | stable          | 0.6   |  |  |  |  |  |
| New Jersey  | 10.4  | 1,083                   | stable          | 0.5   |  |  |  |  |  |
| Atlantic County   | 13.9  | 48                      | stable          | 9.1   |  |  |  |  |  |
| Bergen County   | 9.4   | 108                     | stable          | 0.1   |  |  |  |  |  |
| Burlington County   | 11.4  | 62                      | stable          | 0.2   |  |  |  |  |  |
| Camden County   | 11.7  | 68                      | stable          | 0.4   |  |  |  |  |  |
| Cape May County   | 11.6  | 18                      | stable          | -0.1  |  |  |  |  |  |
| Cumberland County   | 12.9  | 22                      | stable          | 0.3   |  |  |  |  |  |
| Essex County  | 8.5   | 71                      | falling         | -2.4  |  |  |  |  |  |
| Gloucester County   | 10.9  | 38                      | stable          | 1   |  |  |  |  |  |
| Hudson County   | 7.7   | 49                      | falling         | -2.4  |  |  |  |  |  |
| Hunterdon County  | 8.1   | 15                      | stable          | 0   |  |  |  |  |  |
| Mercer County   | 9.3   | 39                      | falling         | -1.5  |  |  |  |  |  |
| Middlesex County  | 10.7  | 96                      | stable          | 0.2   |  |  |  |  |  |
| Monmouth County   | 11.3  | 90                      | stable          | 0.1   |  |  |  |  |  |
| Morris County   | 10.4  | 64                      | stable          | 0.2   |  |  |  |  |  |
| Ocean County  | 11.9  | 98                      | stable          | 0.2   |  |  |  |  |  |
| Passaic County  | 9.4   | 51                      | falling         | -1.3  |  |  |  |  |  |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014                    |  |        |         |       |  |  |  |  |  |
|--|--|--------|---------|-------|--|--|--|--|--|
| County   | Age-Adjusted<br>Incidence Rate - Average<br>cases per 100,000 Annual Count |        |         |       |  |  |  |  |  |
| Salem County   | 14.7   | 12     | stable  | 1.6   |  |  |  |  |  |
| Somerset County  | 10   | 40     | rising  | 1     |  |  |  |  |  |
| Sussex County  | 14.1   | 25     | stable  | 0.9   |  |  |  |  |  |
| Union County   | 9.4  | 57     | stable  | -0.5  |  |  |  |  |  |
| Warren County  | 9.7  | 13     | stable  | 0     |  |  |  |  |  |
| Ovary: All Races (includes Hispanic), Both<br>Sexes, All Ages    |  |        |         |       |  |  |  |  |  |
| US (SEER+NPCR)   | 11.4   | 21,315 | falling | -1.8  |  |  |  |  |  |
| New Jersey   | 12.5   | 695    | falling | -1.9  |  |  |  |  |  |
| Atlantic County  | 11   | 20     | stable  | 15.3  |  |  |  |  |  |
| Bergen County  | 12   | 74     | falling | -2.6  |  |  |  |  |  |
| Burlington County  | 14.3   | 42     | falling | -1.3  |  |  |  |  |  |
| Camden County  | 12.7   | 40     | falling | -1.7  |  |  |  |  |  |
| Cape May County  | 15.3   | 12     | stable  | -0.5  |  |  |  |  |  |
| Cumberland County  | 8.3  | 7      | falling | -17.9 |  |  |  |  |  |
| Essex County   | 11.6   | 52     | falling | -2.4  |  |  |  |  |  |
| Gloucester County  | 13.9   | 25     | stable  | -1    |  |  |  |  |  |
| Hudson County  | 12   | 40     | falling | -2.2  |  |  |  |  |  |
| Hunterdon County   | 11.7   | 10     | falling | -3.1  |  |  |  |  |  |
| Mercer County  | 14.6   | 33     | stable  | -0.5  |  |  |  |  |  |
| Middlesex County   | 12.6   | 61     | falling | -1.9  |  |  |  |  |  |
| Monmouth County  | 12.9   | 54     | falling | -1.8  |  |  |  |  |  |
| Morris County  | 12.8   | 41     | falling | -1.8  |  |  |  |  |  |
| Ocean County   | 12.5   | 54     | falling | -1.9  |  |  |  |  |  |
| Passaic County   | 12.1   | 35     | falling | -2    |  |  |  |  |  |
| Salem County   | 11.9   | 5      | stable  | -0.7  |  |  |  |  |  |
| Somerset County  | 13   | 27     | stable  | -1.1  |  |  |  |  |  |
| Sussex County  | 15.2   | 15     | stable  | -1    |  |  |  |  |  |
| Union County   | 10.8   | 36     | falling | -2.5  |  |  |  |  |  |
| Warren County  | 14.9   | 11     | stable  | -1.1  |  |  |  |  |  |
| Pancreas: All Races (includes Hispanic),<br>Both Sexes, All Ages |  |        |         |       |  |  |  |  |  |
| US (SEER+NPCR)   | 11   | 21,593 | stable  | 0.3   |  |  |  |  |  |
| New Jersey   | 12.4   | 723    | rising  | 0.4   |  |  |  |  |  |
| Atlantic County  | 13.6   | 25     | stable  | -0.1  |  |  |  |  |  |
| Bergen County  | 11.6   | 78     | stable  | -0.2  |  |  |  |  |  |
| Burlington County  | 13.8   | 42     | stable  | 0.6   |  |  |  |  |  |
| Camden County  | 11.4   | 37     | stable  | 0.2   |  |  |  |  |  |
| Cape May County  | 13.9   | 12     | stable  | 1.8   |  |  |  |  |  |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014                    |   |                         |                 |   |  |  |  |  |  |
|--|---|-------------------------|-----------------|---|--|--|--|--|--|
| County   | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |  |  |  |  |  |
| Cumberland County  | 12.5  | 12                      | stable          | 1   |  |  |  |  |  |
| Essex County   | 13.8  | 63                      | stable          | -0.2  |  |  |  |  |  |
| Gloucester County  | 12.1  | 22                      | rising          | 2   |  |  |  |  |  |
| Hudson County  | 12  | 41                      | stable          | 11.2  |  |  |  |  |  |
| Hunterdon County   | 12.2  | 10                      | stable          | 0.6   |  |  |  |  |  |
| Mercer County  | 13.9  | 31                      | rising          | 2.8   |  |  |  |  |  |
| Middlesex County   | 12.2  | 60                      | stable          | 0.2   |  |  |  |  |  |
| Monmouth County  | 12.1  | 53                      | stable          | 0.3   |  |  |  |  |  |
| Morris County  | 11.8  | 40                      | rising          | 1.8   |  |  |  |  |  |
| Ocean County   | 13.5  | 71                      | rising          | 1.5   |  |  |  |  |  |
| Passaic County   | 10.8  | 34                      | stable          | -0.4  |  |  |  |  |  |
| Salem County   | 10.8  | 5                       | *               | *   |  |  |  |  |  |
| Somerset County  | 11.9  | 25                      | stable          | 0.7   |  |  |  |  |  |
| Sussex County  | 10.7  | 10                      | stable          | -1.3  |  |  |  |  |  |
| Union County   | 11.4  | 39                      | stable          | -0.2  |  |  |  |  |  |
| Warren County  | 14.1  | 11                      | rising          | 2.4   |  |  |  |  |  |
| Prostate: All Races (includes Hispanic), Both<br>Sexes, All Ages |   |                         |                 |   |  |  |  |  |  |
| US (SEER+NPCR)   | 114.8   | 194,936                 | falling         | -8.9  |  |  |  |  |  |
| New Jersey   | 139.4   | 6,643                   | falling         | -9.4  |  |  |  |  |  |
| Atlantic County  | 125.3   | 202                     | falling         | -2.9  |  |  |  |  |  |
| Bergen County  | 134.5   | 718                     | falling         | -4  |  |  |  |  |  |
| Burlington County  | 150.4   | 389                     | falling         | -8.6  |  |  |  |  |  |
| Camden County  | 146   | 387                     | falling         | -10.4   |  |  |  |  |  |
| Cape May County  | 164.4   | 125                     | falling         | -1.5  |  |  |  |  |  |
| Cumberland County  | 135.4   | 108                     | falling         | -1.1  |  |  |  |  |  |
| Essex County   | 166.6   | 595                     | falling         | -5.3  |  |  |  |  |  |
| Gloucester County  | 143.6   | 221                     | falling         | -7.9  |  |  |  |  |  |
| Hudson County  | 112.1   | 290                     | falling         | -5.2  |  |  |  |  |  |
| Hunterdon County   | 105.7   | 83                      | falling         | -2.1  |  |  |  |  |  |
| Mercer County  | 146.3   | 278                     | falling         | -14.4   |  |  |  |  |  |
| Middlesex County   | 131.4   | 543                     | falling         | -3.5  |  |  |  |  |  |
| Monmouth County  | 151.4   | 553                     | falling         | -1.7  |  |  |  |  |  |
| Morris County  | 141.3   | 403                     | stable          | -12.8   |  |  |  |  |  |
| Ocean County   | 131.4   | 519                     | falling         | -2.7  |  |  |  |  |  |
| Passaic County   | 137.8   | 334                     | falling         | -6  |  |  |  |  |  |
| Salem County   | 148.7   | 59                      | stable          | -0.8  |  |  |  |  |  |
| Somerset County  | 134.8   | 237                     | falling         | -1.6  |  |  |  |  |  |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014                   |                       |              |                   |               |  |  |  |  |  |
|---|-----------------------|--------------|-------------------|---------------|--|--|--|--|--|
| INCIDENCE RA  | TE REPORT: ALL COUNTI | ES 2010-2014 |                   | Recent 5-Year |  |  |  |  |  |
|   | Age-Adjusted          |              |                   | Trend in      |  |  |  |  |  |
|   | Incidence Rate -      | Average      | Recent            | Incidence     |  |  |  |  |  |
| County  | cases per 100,000     | Annual Count | Trend             | Rates         |  |  |  |  |  |
| Sussex County   | 125.3                 | 115          | falling           | -9.1          |  |  |  |  |  |
| Union County  | 145.3                 | 389          | falling           | -6.5          |  |  |  |  |  |
| Warren County   | 135.4                 | 89           | stable            | -1.2          |  |  |  |  |  |
| Stomach: All Races (includes Hispanic), Both<br>Sexes, All Ages |                       |              |                   |               |  |  |  |  |  |
| US (SEER+NPCR)  | 9,2                   | 14,385       | falling           | -1.3          |  |  |  |  |  |
| New Jersey  | 11                    | 485          | falling           | -1.5          |  |  |  |  |  |
| Atlantic County   | 11.5                  | 18           | stable            | -1.3          |  |  |  |  |  |
|   | 12.5                  | 63           |                   | -1.4          |  |  |  |  |  |
| Bergen County   | 8.4                   | 21           | falling           | -1.4          |  |  |  |  |  |
| Burlington County  Camden County                                | 11.4                  | 28           | falling<br>stable | -3.1<br>-0.7  |  |  |  |  |  |
|   |                       |              | - CVCstates/UCss  | 1             |  |  |  |  |  |
| Cape May County   | 11.5                  | 8            | stable            | 0.2           |  |  |  |  |  |
| Cumberland County   | 11                    | 8            | falling           | -3.3          |  |  |  |  |  |
| Essex County  | 12.2                  | 41           | falling           | -2.4          |  |  |  |  |  |
| Gloucester County   | 9.7                   | 13           | falling           | -2            |  |  |  |  |  |
| Hudson County   | 12.3                  | 32           | falling           | -1.4          |  |  |  |  |  |
| Hunterdon County  | 7.8                   | 6            | falling           | -4.2          |  |  |  |  |  |
| Mercer County   | 9.3                   | 16           | falling           | -3.4          |  |  |  |  |  |
| Middlesex County  | 10.8                  | 41           | falling           | -2.1          |  |  |  |  |  |
| Monmouth County   | 8.8                   | 30           | falling           | -2.3          |  |  |  |  |  |
| Morris County   | 10.5                  | 28           | falling           | -1.1          |  |  |  |  |  |
| Ocean County  | 10.3                  | 40           | falling           | -1.9          |  |  |  |  |  |
| Passaic County  | 13.3                  | 30           | falling           | -1.8          |  |  |  |  |  |
| Salem County  | 12.3                  | 4            | stable            | -1.5          |  |  |  |  |  |
| Somerset County   | 9.7                   | 16           | falling           | -1.8          |  |  |  |  |  |
| Sussex County   | 10.2                  | 7            | falling           | -3.1          |  |  |  |  |  |
| Union County  | 11.7                  | 28           | falling           | -2.1          |  |  |  |  |  |
| Warren County   | 11.1                  | 6            | stable            | -1.8          |  |  |  |  |  |
| Thyroid: All Races (includes Hispanic), Both<br>Sexes, All Ages |                       |              |                   |               |  |  |  |  |  |
| US (SEER+NPCR)  | 7.2                   | 11,504       | rising            | 2             |  |  |  |  |  |
| New Jersey  | 10                    | 461          | stable            | 1.6           |  |  |  |  |  |
| Atlantic County   | 8.4                   | 12           | *                 | *             |  |  |  |  |  |
| Bergen County   | 10.9                  | 54           | rising            | 5.4           |  |  |  |  |  |
| Burlington County   | 11.1                  | 27           | rising            | 7.4           |  |  |  |  |  |
| Camden County   | 11.1                  | 29           | rising            | 5.8           |  |  |  |  |  |
| Cape May County   | 5.3                   | 4            | *                 | *             |  |  |  |  |  |
| Cumberland County   | 11.5                  | 9            | *                 | *             |  |  |  |  |  |
|   |                       |              | No.               |               |  |  |  |  |  |
| Essex County  | 6.8                   | 26           | rising            | 5.6           |  |  |  |  |  |

| INCIDENCE RATE REPORT: ALL COUNTIES 2010-2014  |   |                         |                 |   |  |  |  |  |  |
|--|---|-------------------------|-----------------|---|--|--|--|--|--|
| County   | Age-Adjusted<br>Incidence Rate -<br>cases per 100,000 | Average<br>Annual Count | Recent<br>Trend | Recent 5-Year<br>Trend in<br>Incidence<br>Rates |  |  |  |  |  |
| Gloucester County  | 14.2  | 22                      | *               | *   |  |  |  |  |  |
| Hudson County  | 6.3   | 20                      | rising          | 4.8   |  |  |  |  |  |
| Hunterdon County   | 8.7   | 6                       | *               | *   |  |  |  |  |  |
| Mercer County  | 11.9  | 22                      | rising          | 6.8   |  |  |  |  |  |
| Middlesex County   | 8.6   | 36                      | rising          | 4.7   |  |  |  |  |  |
| Monmouth County  | 13.3  | 45                      | rising          | 7.2   |  |  |  |  |  |
| Morris County  | 10.7  | 29                      | rising          | 6.2   |  |  |  |  |  |
| Ocean County   | 12.2  | 37                      | rising          | 8   |  |  |  |  |  |
| Passaic County   | 8.4   | 21                      | rising          | 5.9   |  |  |  |  |  |
| Salem County   | *   | 3 or fewer              | *               | *   |  |  |  |  |  |
| Somerset County  | 12.7  | 23                      | rising          | 6.9   |  |  |  |  |  |
| Sussex County  | 6.8   | 6                       | *               | *   |  |  |  |  |  |
| Union County   | 9.6   | 27                      | rising          | 7.3   |  |  |  |  |  |
| Warren County  | 7.3   | 4                       | *               | *   |  |  |  |  |  |
| Uterus (Corpus & Uterus, NOS): All Races<br>(includes Hispanic), Both Sexes, All Ages  |   |                         |                 |   |  |  |  |  |  |
| US (SEER+NPCR)   | 25.9  | 49,886                  | rising          | 1   |  |  |  |  |  |
| New Jersey   | 31.1  | 1,775                   | rising          | 0.7   |  |  |  |  |  |
| Atlantic County  | 31.6  | 58                      | stable          | 0.6   |  |  |  |  |  |
| Bergen County  | 28.8  | 183                     | stable          | 0.3   |  |  |  |  |  |
| Burlington County  | 32.1  | 96                      | rising          | 1.1   |  |  |  |  |  |
| Camden County  | 33.8  | 109                     | stable          | -2.3  |  |  |  |  |  |
| Cape May County  | 29.9  | 26                      | stable          | 0.9   |  |  |  |  |  |
| Cumberland County  | 36.4  | 34                      | stable          | 1.1   |  |  |  |  |  |
| Essex County   | 29.4  | 137                     | rising          | 1.1   |  |  |  |  |  |
| Gloucester County  | 32  | 59                      | rising          | 1.2   |  |  |  |  |  |
| Hudson County  | 23.8  | 82                      | stable          | -0.1  |  |  |  |  |  |
| Hunterdon County   | 31  | 28                      | stable          | -0.5  |  |  |  |  |  |
| Mercer County  | 33.6  | 76                      | rising          | 0.6   |  |  |  |  |  |
| Middlesex County   | 32.3  | 160                     | rising          | 0.9   |  |  |  |  |  |
| Monmouth County  | 32.1  | 137                     | rising          | 1.1   |  |  |  |  |  |
| Morris County  | 31.2  | 103                     | stable          | 0.4   |  |  |  |  |  |
| Ocean County   | 32.6  | 145                     | stable          | 0.4   |  |  |  |  |  |
| Passaic County   | 29.1  | 87                      | stable          | 0.5   |  |  |  |  |  |
| Salem County   | 34.7  | 16                      | stable          | 1.4   |  |  |  |  |  |
| Somerset County  | 32.2  | 68                      | stable          | 0.7   |  |  |  |  |  |
| Sussex County  | 35  | 35                      | stable          | -0.3  |  |  |  |  |  |
| Union County   | 33.3  | 109                     | stable          | 0.6   |  |  |  |  |  |
| The state of the s |   |                         |                 |   |  |  |  |  |  |

#### APPENDIX C7: RWJ SOMERSET - TUMOR REGISTRY SUMMARY

In 2016, RWJ Somerset's tumor registry data showed that 11.0% and 20.3% of overall analytical cases were diagnosed at Stage 3 and Stage 4 respectively. The following primary sites made up more than 25% of the Stage 4 cases: Oral Cavity and Pharynx (83.3%), Digestive System (30.1%), Respiratory System (47.9%), Bones & Joints (100%), and Female Genital System (28.6%).

Compared to 2015, there was a decrease of 44 cases (-4.6%) registered in 2016. The three biggest decreases in overall cases occurred in Respiratory System (-26, -19.3%), followed by Urinary System (-14, -12.4%) and Male Genital System (-8, -9.6%). Please note that case volume counts smaller than 10 are suppressed. Staging percentages are calculated on analytic cases only.

|                                       | Cases (both<br>analytic and<br>non-analytic |      | 2015              |                  | 2016                            |                   |                  | 2015 - 2016                  |                             |   |  |  |
|---------------------------------------|---|------|-------------------|------------------|---------------------------------|-------------------|------------------|------------------------------|-----------------------------|---|--|--|
|                                       | 2015  | 2016 | %<br>Stage<br>III | %<br>Stage<br>IV | Total<br>%<br>Stage<br>III & IV | %<br>Stage<br>III | %<br>Stage<br>IV | Total %<br>Stage III<br>& IV | Change<br>in Case<br>Volume | Change<br>in %<br>points<br>for<br>Stage<br>III | Change<br>in %<br>points<br>for<br>Stage<br>IV | Change<br>in %<br>points<br>for<br>Stage<br>III & IV |
| Primary Site                          |   |      |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| ORAL CAVITY & PHARYNX                 | 14  | 10   | 33.3%             | 33.3%            | 66.7%                           | 0.0%              | 83.3%            | 83.3%                        | (4)                         | (33.3)  | 50.0   | 16.7   |
| DIGESTIVE<br>SYSTEM                   | 171   | 166  | 15.2%             | 32.5%            | 47.7%                           | 22.6%             | 30.1%            | 52.7%                        | (5)                         | 7.4   | (2.3)  | 5.1  |
| Select Digestive<br>System:           |   |      |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| Esophagus                             |   |      | 28.6%             | 28.6%            | 57.1%                           | 28.6%             | 42.9%            | 71.4%                        | 0                           | 0.0   | 14.3   | 14.3   |
| Stomach                               | 13  | 10   | 16.7%             | 33.3%            | 50.0%                           | 22.2%             | 11.1%            | 33.3%                        | (3)                         | 5.6   | (22.2)   | (16.7)   |
| Small Intestine                       |   |      | 16.7%             | 16.7%            | 33.3%                           | 0.0%              | 33.3%            | 33.3%                        | (2)                         | (16.7)  | 16.7   | 0.0  |
| Colon Excluding<br>Rectum             | 63  | 53   | 15.5%             | 31.0%            | 46.6%                           | 22.4%             | 26.5%            | 49.0%                        | (10)                        | 6.9   | (4.5)  | 2.4  |
| Anus, Anal Canal &<br>Anorectum       | ,   |      | 16.7%             | 16.7%            | 33.3%                           | 60.0%             | 0.0%             | 60.0%                        | (1)                         | 43.3  | (16.7)   | 26.7   |
| Liver & Intrahepatic<br>Bile Duct     |   |      | 15.4%             | 7.7%             | 23.1%                           | 33.3%             | 0.0%             | 33.3%                        | (7)                         | 17.9  | (7.7)  | 10.3   |
| Pancreas                              | 24  | 40   | 9.5%              | 71.4%            | 81.0%                           | 12.9%             | 58.1%            | 71.0%                        | 16                          | 3.4   | (13.4)   | (10.0)   |
| RESPIRATORY<br>SYSTEM                 | 135   | 109  | 17.9%             | 51.2%            | 69.1%                           | 9.4%              | 47.9%            | 57.3%                        | (26)                        | (8.5)   | (3.3)  | (11.8)   |
| Select Respiratory<br>System:         |   |      |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| Lung & Bronchus                       | 132   | 105  | 18.0%             | 51.6%            | 69.7%                           | 9.6%              | 47.9%            | 57.4%                        | (27)                        | (8.5)   | (3.8)  | (12.2)   |
| BONES & JOINTS                        |   |      | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 100.0<br>%       | 100.0%                       | (1)                         | 0.0   | 100.0  | 100.0  |
| SOFT TISSUE                           |   |      | 0.0%              | 40.0%            | 40.0%                           | 0.0%              | 20.0%            | 20.0%                        | (1)                         | 0.0   | (20.0)   | (20.0)   |
| SKIN EXCLUDING<br>BASAL &<br>SQUAMOUS |   |      | 11.1%             | 33.3%            | 44.4%                           | 0.0%              | 0.0%             | 0.0%                         | (5)                         | (11.1)  | (33.3)   | (44.4)   |
| Melanoma Skin                         |   |      | 11.1%             | 33.3%            | 44.4%                           | 0.0%              | 0.0%             | 0.0%                         | (7)                         | (11.1)  | (33.3)   | (44.4)   |
| BASAL &<br>SQUAMOUS SKIN              |   |      | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 0.0%             | 0.0%                         | 1                           | 0.0   | 0.0  | 0.0  |
| BREAST                                | 199   | 224  | 7.7%              | 3.3%             | 11.0%                           | 6.3%              | 6.7%             | 13.0%                        | 25                          | (1.5)   | 3.4  | 1.9  |
| FEMALE GENITAL<br>SYSTEM              | 37  | 49   | 11.5%             | 34.6%            | 46.2%                           | 14.3%             | 28.6%            | 42.9%                        | 12                          | 2.7   | (6.0)  | (3.3)  |
| Select Female<br>Genital System:      |   |      |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| Cervix Uteri                          |   |      | 33.3%             | 66.7%            | 100.0<br>%                      | 33.3%             | 0.0%             | 33.3%                        | 3                           | 0.0   | (66.7)   | (66.7)   |
| Corpus & Uterus,                      | 17  | 24   | 7.1%              | 7.1%             | 14.3%                           | 15.0%             | 15.0%            | 30.0%                        | 7                           | 7.9   | 7.9  | 15.7   |

|                                 | analyt | (both<br>ic and<br>nalytic |                   | 2015             |                                 |                   | 2016             |                              | 2015 - 2016                 |   |  |  |
|---------------------------------|--------|----------------------------|-------------------|------------------|---------------------------------|-------------------|------------------|------------------------------|-----------------------------|---|--|--|
|                                 | 2015   | 2016                       | %<br>Stage<br>III | %<br>Stage<br>IV | Total<br>%<br>Stage<br>III & IV | %<br>Stage<br>III | %<br>Stage<br>IV | Total %<br>Stage III<br>& IV | Change<br>in Case<br>Volume | Change<br>in %<br>points<br>for<br>Stage<br>III | Change<br>in %<br>points<br>for<br>Stage<br>IV | Change<br>in %<br>points<br>for<br>Stage<br>III & IV |
| NOS                             |        |                            |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| Ovary                           | -      |                            | 0.0%              | 100.0%           | 100.0                           | 0.0%              | 87.5%            | 87.5%                        | 6                           | 0.0   | (12.5)   | (12.5)   |
| MALE GENITAL<br>SYSTEM          | 83     | 75                         | 10.0%             | 14.3%            | 24.3%                           | 18.6%             | 20.3%            | 39.0%                        | (8)                         | 8.6   | 6.1  | 14.7   |
| Select Male Genital<br>System:  |        |                            |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| Prostate                        | 77     | 68                         | 7.7%              | 15.4%            | 23.1%                           | 18.5%             | 22.2%            | 40.7%                        | (9)                         | 10.8  | 6.8  | 17.7   |
| URINARY SYSTEM                  | 113    | 99                         | 12.0%             | 14.8%            | 26.9%                           | 6.7%              | 12.4%            | 19.1%                        | (14)                        | (5.3)   | (2.5)  | (7.8)  |
| Select Urinary<br>System:       |        |                            |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| Urinary Bladder                 | 65     | 61                         | 4.8%              | 12.7%            | 17.5%                           | 1.8%              | 10.9%            | 12.7%                        | (4)                         | (2.9)   | (1.8)  | (4.7)  |
| Kidney & Renal<br>Pelvis        | 42     | 35                         | 25.6%             | 20.5%            | 46.2%                           | 15.6%             | 15.6%            | 31.3%                        | (7)                         | (10.0)  | (4.9)  | (14.9)   |
| EYE & ORBIT                     |        |                            | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 0.0%             | 0.0%                         | (2)                         | 0.0   | 0.0  | 0.0  |
| BRAIN & OTHER<br>NERVOUS SYSTEM | 24     | 19                         | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 0.0%             | 0.0%                         | (5)                         | 0.0   | 0.0  | 0.0  |
| ENDOCRINE<br>SYSTEM             | 17     | 10                         | 0.0%              | 13.3%            | 13.3%                           | 0.0%              | 0.0%             | 0.0%                         | (7)                         | 0.0   | (13.3)   | (13.3)   |
| LYMPHOMA                        | 53     | 67                         | 23.3%             | 18.6%            | 41.9%                           | 15.1%             | 22.6%            | 37.7%                        | 14                          | (8.2)   | 4.0  | (4.1)  |
| Select Lymphoma:                |        |                            |                   |                  |                                 |                   |                  |                              |                             |   |  |  |
| Hodgkin Lymphoma                |        |                            | 20.0%             | 20.0%            | 40.0%                           | 25.0%             | 0.0%             | 25.0%                        | 2                           | 5.0   | (20.0)   | (15.0)   |
| Non-Hodgkin<br>Lymphoma         | 47     | 59                         | 23.7%             | 18.4%            | 42.1%                           | 13.3%             | 26.7%            | 40.0%                        | 12                          | (10.4)  | 8.2  | (2.1)  |
| MYELOMA                         | 16     | 14                         | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 0.0%             | 0.0%                         | (2)                         | 0.0   | 0.0  | 0.0  |
| LEUKEMIA                        | 23     | 19                         | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 0.0%             | 0.0%                         | (4)                         | 0.0   | 0.0  | 0.0  |
| MESOTHELIOMA                    |        |                            | 22.2%             | 22.2%            | 44.4%                           | 0.0%              | 14.3%            | 14.3%                        | (2)                         | (22.2)  | (7.9)  | (30.2)   |
| KAPOSI SARCOMA                  |        |                            | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 0.0%             | 0.0%                         | 0                           | 0.0   | 0.0  | 0.0  |
| MISCELLANEOUS                   | 36     | 26                         | 0.0%              | 0.0%             | 0.0%                            | 0.0%              | 0.0%             | 0.0%                         | (10)                        | 0.0   | 0.0  | 0.0  |
| Total                           | 957    | 913                        | 11.9%             | 21.0%            | 32.8%                           | 11.0%             | 20.3%            | 31.3%                        | (44)                        | (0.9)   | (0.7)  | (1.6)  |

#### APPENDIX D: RWJUH SOMERSET RESIDENT SURVEY

#### **Research Objective**

The primary objective of this research was to obtain opinions of residents within RWJUH Somerset's Primary Service Area (PSA) in order to meet the government CHA requirements. Areas of focus included:

- Health issues and concerns that impact the community.
- Barriers to accessing health care.
- Strengths and weaknesses of community services offered.
- Personal health attitudes, conditions and behaviors.

#### <u>Methodology</u>

Interviews were conducted among residents of RWJUH Somerset PSA. Interviews were conducted online and by telephone. A link to the on-line survey was displayed on hospital web pages and social media sites. Additionally, postcards were handed out at area businesses and libraries, directing residents to the on-line survey link. A telephone augment was conducted to capture additional interviews in specific areas and among specific ethnic groups. For the telephone portion, a representative sample of households was generated from a database of residential telephone numbers. The interview averaged 15-20 minutes in length and was conducted April 27-June 18, 2018.

#### Sample Composition Highlights

A total of 701 interviews were conducted in the RWJUH Somerset PSA among adults aged 21+. These interviews broke down among gender, age and ethnicity as follows: 480 (68%) Females, 181 (26%) Males; 199 (28%) 21-49 years of age, 272 (39%) 50-64 years of age, 190 (27%) 65+ years of age; 433 (62%) Caucasian, 71 (10%) African-American, 102 (15%) Hispanic, 42 (6%) Asian.<sup>59</sup>

#### **Executive Summary**

This Community Health Assessment study has generated learnings and insights that can be used to effectively serve the health care needs of the community.

Obesity is the #1 health concern of area residents. High levels of concern were also cited for chronic illnesses such as diabetes, cancer and heart disease.

- Obesity is a leading contributor to chronic illnesses and a major cause of death in the U.S. More than one-half of those surveyed claim to have high blood pressure, high cholesterol and/or a weight problem.
- Increasing outreach and developing educational programs that address nutrition and wellness, with focus on preventative lifestyle behaviors, could improve the health and overall well-being of area residents.

<sup>&</sup>lt;sup>59</sup> Not shown are "other" mentions and "no answer".

 Healthy eating and exercise programs in schools could aid in lowering childhood obesity and the risks associated with chronic conditions.

Additionally, high levels of concern were cited regarding mental health, substance use/abuse, health concerns related to aging and high stress lifestyles.

 The rising opioid epidemic and increased concern about mental health issues presents opportunity to increase education to both community residents and to health care professionals in an effort to help reduce the growing trend of opioid/Rx drug abuse and the stigma associated with mental health.

Regardless of age, income level or ethnicity, the key barriers to seeking medical care are insurance issues and related cost concerns.

 Addressing the economic challenges associated with access to care, including insurance issues, will serve to improve access and affordability of care to a greater proportion of the community.

RWJUH Somerset's PSA is regarded highly by most residents, with many positive services offered to the community. However, specific needs for improvement are cited in the areas of transportation services, healthy food choices in school, safe/affordable housing and interpersonal violence.

• Since access to services can be challenging for some, expanding transportation services, particularly for seniors and persons with disabilities, can improve access to care for these population groups.

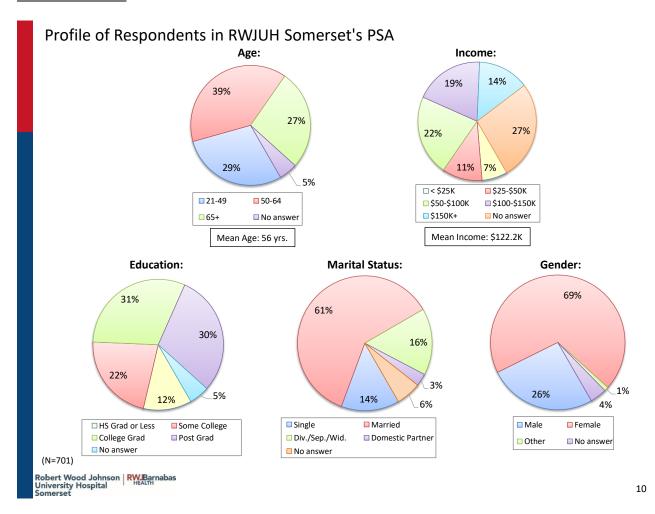
RWJUH Somerset's PSA residents describe their overall health as being good/very good and exhibit many positive health-related behaviors (healthy eating, physical activity, annual physicals and recommended screening tests). They report their children eat breakfast daily and are physically active. However, a substantial portion of residents (Hispanics, lower income, older residents) do not eat healthy, lead a sedentary lifestyle, do not get recommended screening tests, and/or suffer chronic medical conditions.

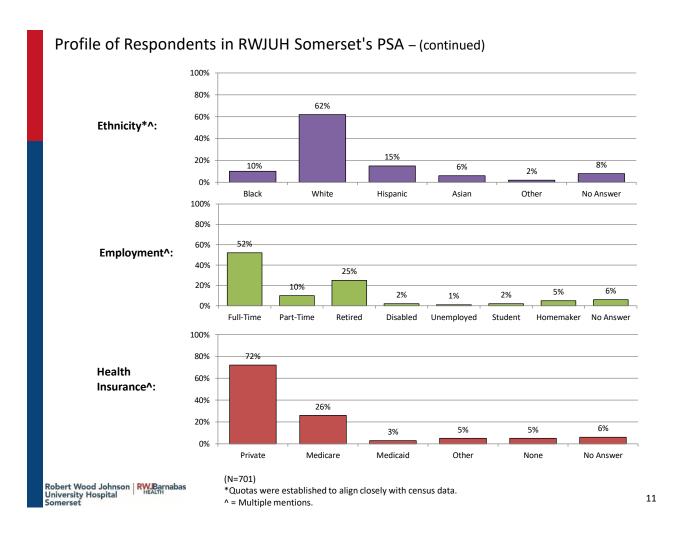
 Diagnostic screenings are crucial in the early detection, treatment and management of chronic diseases. The availability of these preventative services should be expanded to ensure they are reaching and serving minority and lower income populations in a cost-efficient manner.

In summary, survey data suggests that wellness initiatives, programs and services addressing the availability, accessibility and affordability of care would meet a significant portion of the communities' needs.

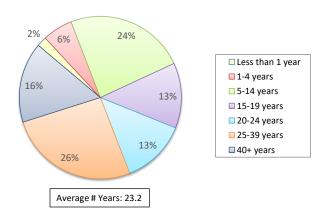
#### Summary Tables of RWJUH Somerset Service Area Resident Survey

#### WHO RESPONDED?

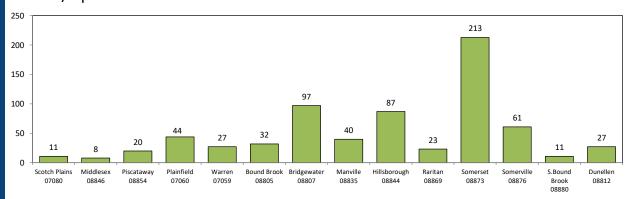




## Length of Time in Area



## Towns/Zips Where Interviews Came From

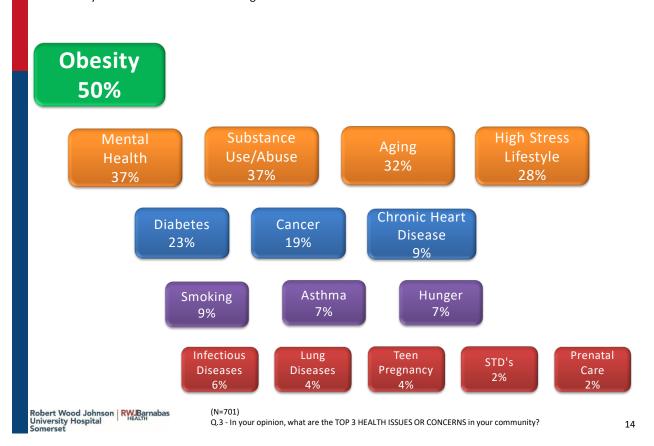


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University Hospital Somerset

#### **HEALTH-RELATED CONCERNS OF AREA RESIDENTS**

Major Health Concerns Among Residents in the RWJUH Somerset's PSA Community

• Obesity is the #1 health concern among area residents.



#### Summary of Health Concerns by Subgroups



- #1 health concern among most age, gender, income, education and ethnic groups.
- Particularly high concern among males; least concern among Asians.

#### Mental Health

- Younger (<65)</li>
- Female
- Highest income (\$150K+)
- Caucasian

## Substance

- Younger (<65)
- Caucasian

#### Aging

- Older (65+)
- Caucasian

## High Stress

- Younger (<65)
- Asian/Hispanic

#### Diabetes

- Lower income (<50K)
- · Hispanic/African Am.

#### Cancer

- Older (65+)
- Lower income (<\$50K)</li>

#### Chronic Heart Disease

- Older (65+)
- African Am./Asian

#### Smoking

- Younger (<50)</li>
- Male
- Hispanic

#### Asthma

#### Hunger

· African Am.

#### Infectious Diseases

- Lower income (<\$50K)
- Least among Caucasians

#### Lung Disease

- Older (65+)
- African Am./HispanicLower income (<\$50K)</li>

#### Teen Pregnancy

- Younger (<50)</li>Hispanic/African Am.
- Lower income (<\$50K)</li>

### STD's

- · Hispanic/African Am.
- Younger (<50)</li>
- Lower income (<\$50K)

#### Prenatal Care

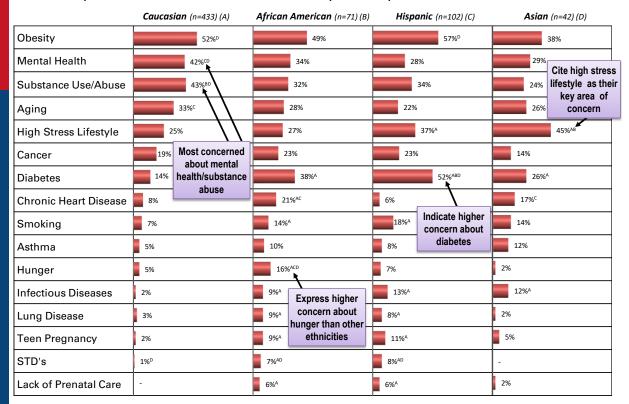
- Hispanic/African Am.
- Younger (<50)
- Lower income (<\$50K)

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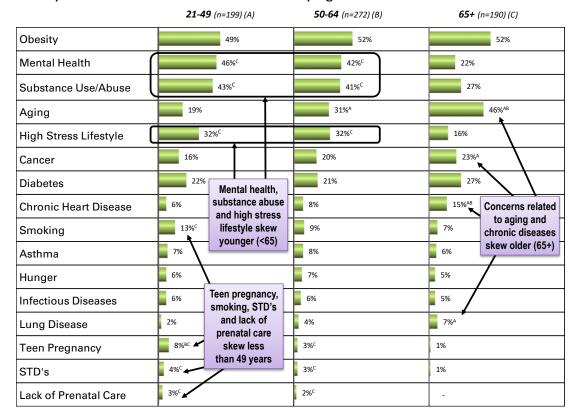
 $\mbox{Q.3}$  - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community?

## Community Health-Related Issues of Concern – by Ethnicity



Robert Wood Johnson | RW.Barnabas University Hospital Somerset Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community? (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

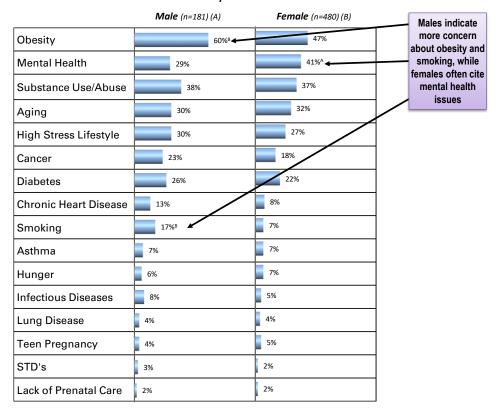
## Community Health-Related Issues of Concern – by Age



Robert Wood Johnson | RW.Barnabas University Hospital Somerset

Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community? (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

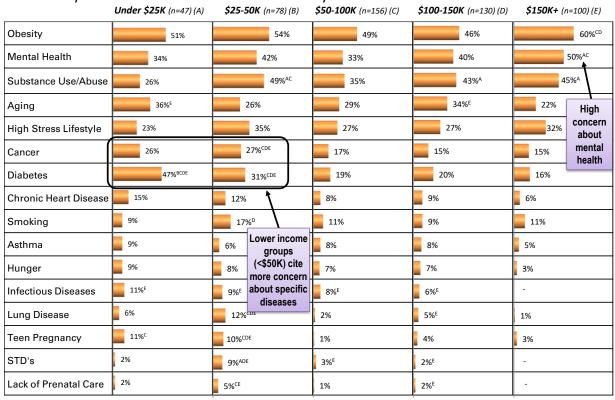
## Community Health-Related Issues of Concern – by Gender



Robert Wood Johnson RW.Barnabas University Hospital Somerset

Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community? (A/B) = Significantly greater than indicated cell at the 90% confidence level.

## Community Health-Related Issues of Concern – by Income



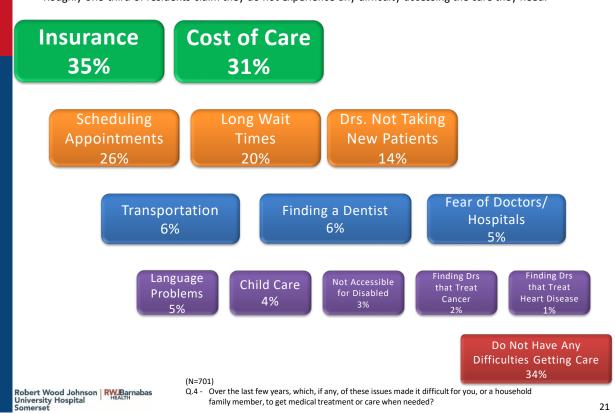
Robert Wood Johnson RW.Barnabas University Hospital Somerset

Q.3 - In your opinion, what are the TOP 3 HEALTH ISSUES OR CONCERNS in your community? (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

#### BARRIERS TO ACCESSING HEALTH CARE SERVICES

# Major Barriers to Accessing Health Care in the RWJUH Somerset PSA

- Insurance and cost of care are the key barriers to obtaining health care services among area residents.
- Roughly one-third of residents claim they do not experience any difficulty accessing the care they need.



**Community Health Assessment** Healthier Somerset/RWJUH Somerset Service Area

### Summary of Health Care Barriers by Subgroups

# Insurance

# **Cost of Care**

- Virtually all age, gender, income, education and ethnic groups cite insurance and cost of care as key issues.
- Particularly high concern among lower income residents and Hispanics.

# Scheduling Appointments

- Younger (<65)
- Female

### Long Wait Times

- Younger (<65)
- Males

# Doctors Not Taking New Patients

• Lowest income (<\$25K)

### Transportation

- Hispanic
- Lowest income (<\$25K)

# Finding a Dentist

- Lower income (<\$50K)</li>
- Hispanic
- Younger (<50)

#### Fear of Doctors/ Hospitals

Lowest income (<\$25K)

#### Language Problems

Robert Wood Johnson | RW.Barnabas University Hospital Somerset

- Problems
- Lower income (<\$50K)</li>Hispanic
- Younger(<50)

#### Child Care

- Younger (<50)</li>
- Hispanic

# Not Accessible for Disabled

- Hispanic
- Find Drs that Treat Cancer
- Hispanic

Find Drs that Treat Heart Disease

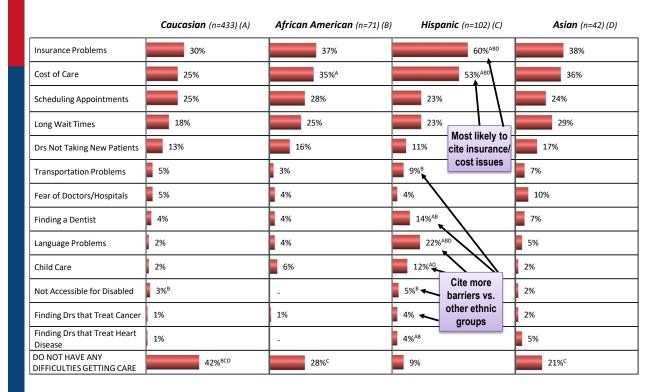
# No Difficulty Getting

- Care
- Older (65+)
- Higher income (\$50K+)
- Caucasian

(N=701)

Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

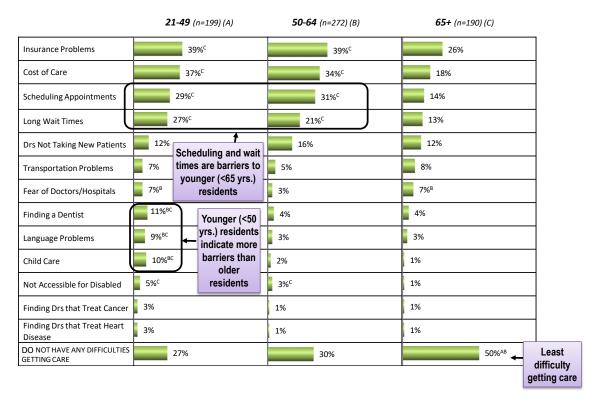
### Barriers to Accessing Health Care Services – by Ethnicity



Robert Wood Johnson | RW.Barnabas University Hospital Somerset Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

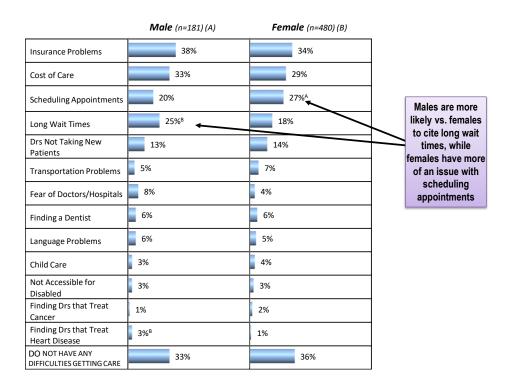
(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

### Barriers to Accessing Health Care Services – by Age



Robert Wood Johnson | RW.Barnabas University Hospital Somerset Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?
 (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

### Barriers to Accessing Health Care Services – by Gender



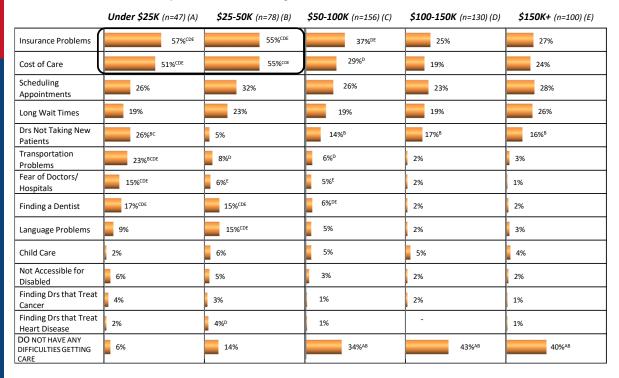
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Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

<sup>(</sup>A/B) = Significantly greater than indicated cell at the 90% confidence level.

### Barriers to Accessing Health Care Services – by Income

• Lower income groups (<\$50K) have more barriers vs. higher income groups and are the most likely to encounter insurance/cost problems when seeking care.



Robert Wood Johnson | RW.Barnabas University Hospital Somerset Q.4 - Over the last few years, which, if any, of these issues made it difficult for you, or a household family member, to get medical treatment or care when needed?

(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

#### **COMMUNITY STRENGTHS AND WEAKNESSES**

#### Area Strengths and Weaknesses

- A large majority of residents surveyed feel their community is a good place to raise a family, with safe places to walk/play, ease of finding fresh food and ample places to socialize.
- On the other hand, the community receives relatively low scores in the areas of interpersonal violence, safe, affordable housing, healthy food offerings at schools and transportation services to assist residents.



### Summary of Community Strengths and Weaknesses by Subgroups

- · Overall, Asians tend to rate community services high, while Hispanics rate community services low versus other ethnic groups.
- Additionally, those in higher income brackets are more positive to their community services versus those in lower income brackets.

# Safe Outdoor Places to Walk/Play

- Asian
- Higher income (\$50K+)
- Least among Hispanic

#### Good Place to Raise a Family

- Asian
- Higher income (\$50K+)
- Least among Hispanic

# Easy to Find Fresh Fruits/Veggies

- Older (65+)
- Higher income (\$50K+)
- Least among Hispanic

# Places to Socialize

- African American
- Higher income (\$50K+)

#### Easy to Live a Healthy Lifestyle

- Higher income (\$50K+)
- Older (50+)
- Least among Hispanic

# Low Level of Violence

- Higher income (\$50K+)
- · Least among Hispanic

# Educational Opportunities

- Higher income (\$50K+)
- Older (65+)
- Least among Hispanic

#### Affordable Basic Needs

- Asian
- Older (65+)

# Transportation Services for Disabled/Seniors

African American

#### Job Opportunities

- Male
- Caucasian/Asian
- Higher income (\$50K+)

# Low Interpersonal Violence

- Male
- Asian
- Lowest income (<\$25K)

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# Ample/Safe Affordable Housing

• Asian

# Schools Offer Healthy Food Choices

- Younger (<50)</li>
- Lowest among Caucasian

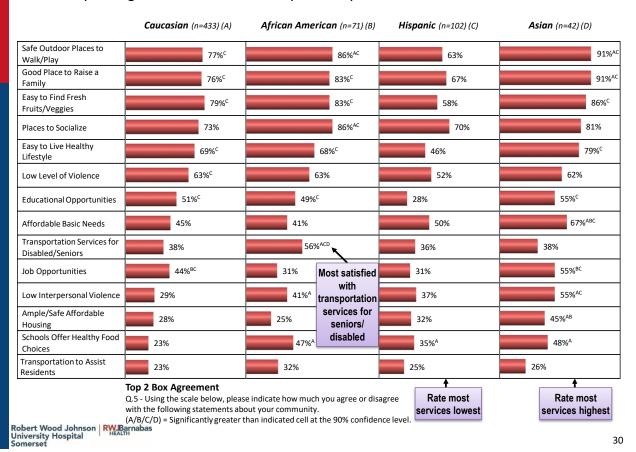
# Transportation Services to Assist Residents

- Older (65+)
- Lowest income (<\$25K)

#### (N=701) Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

# Community Strengths and Weaknesses – by Ethnicity



Community Health Assessment Healthier Somerset/RWJUH Somerset Service Area

### Community Strengths and Weaknesses – by Age

Older residents (65+) are more positive towards many community services such as finding fresh fruit, educational opportunities and affording basic needs vs. their younger counterparts.



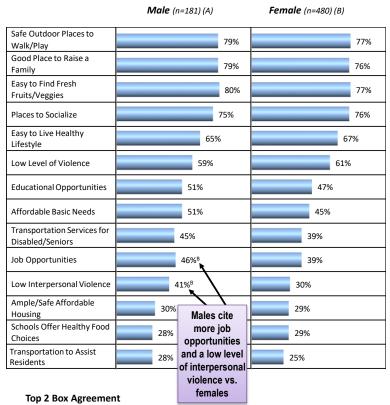
Top 2 Box Agreement

Robert Wood Johnson RWJBarnabas University Hospital Somerset

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following

statements about your community. (A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

# Community Strengths and Weaknesses – by Gender

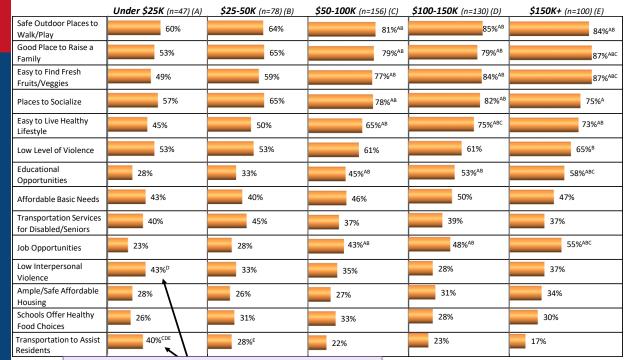


Robert Wood Johnson | RW.Barnabas University Hospital Somerset Q.5-Using the scale below, please indicate how much you agree or disagree with the following statements about your community.

(A/B) = Significantly greater than indicated cell at the 90% confidence level.

### Community Strengths and Weaknesses – by Income

• In general, those in higher income brackets are more positive to their community services versus those in lower income groups.



Lower income residents tend to feel the community has a lower level of interpersonal violence and rate the available transportation systems high

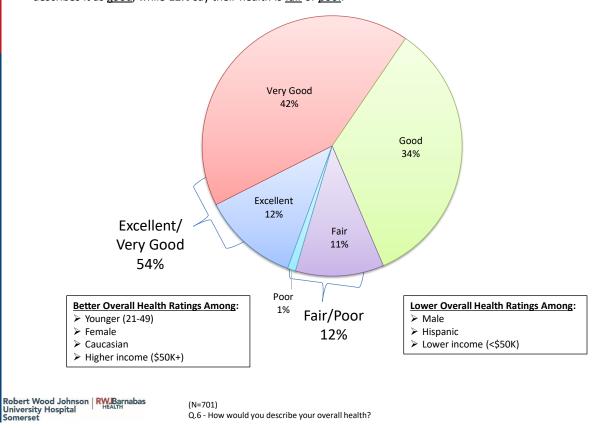
Robert Wood Johnson RWJBarnabas University Hospital Somerset Top 2 Box Agreement

Q.5 - Using the scale below, please indicate how much you agree or disagree with the following statements about your community. (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level. \$33

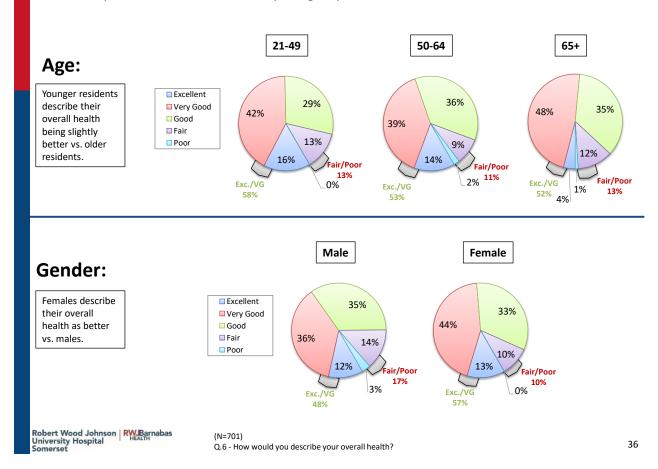
### PERSONAL HEALTH HABITS AND PRACTICES

### Self-Description of Overall Health

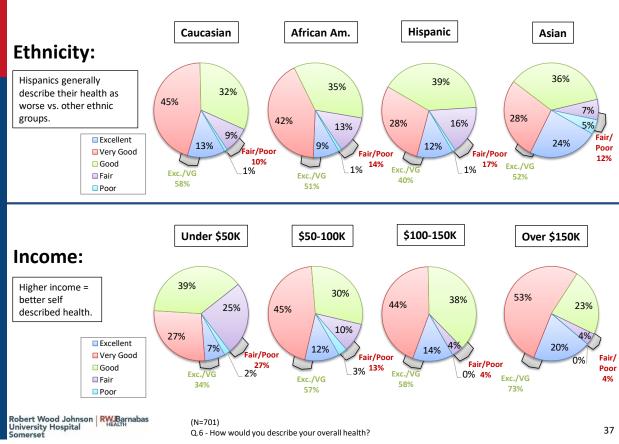
• In all, just over one-half of residents describe their health as being <u>excellent</u> or <u>very good</u>; one-third describes it as <u>good</u>, while 12% say their health is <u>fair</u> or <u>poor</u>.



### Self-Description of Overall Health – by Subgroups

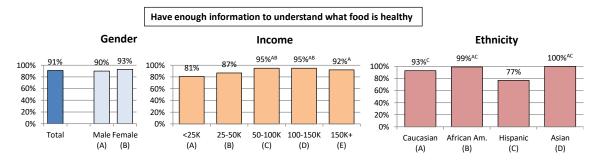


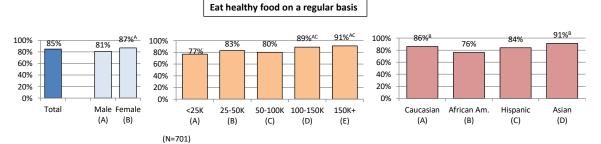
# Self-Description of Overall Health – by Subgroups – (continued)



### Self-Description of Understanding and Eating Healthy

- The vast majority of residents feel they understand what food is healthy and most say they eat healthy food regularly.
- Females and those with higher incomes are most likely to eat healthy on a regular basis.
- While African Americans claim to understand what healthy food is, they are the least likely to eat healthy regularly.

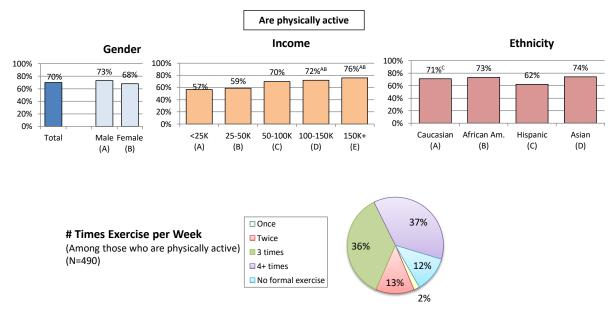




Robert Wood Johnson | RW.IBarnabas University Hospital Somerset Q.11 - Do you feel that you... Gender: (A/B) = Significantly greater than indicated cell at the 90% confidence level. Income: <math>(A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level. Ethnicity: <math>(A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

### Self-Description of Physical Activity

- In all, 7 of 10 residents claim to be physically active; highest among the higher income brackets.
- Hispanics tend to the least physically active.



Q.11 - Do you feel that you...

Q.11 - How often do you exercise each week?

Gender: (A/B) = Significantly greater than indicated cell at the 90% confidence level. Income: (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level. Ethnicity: (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

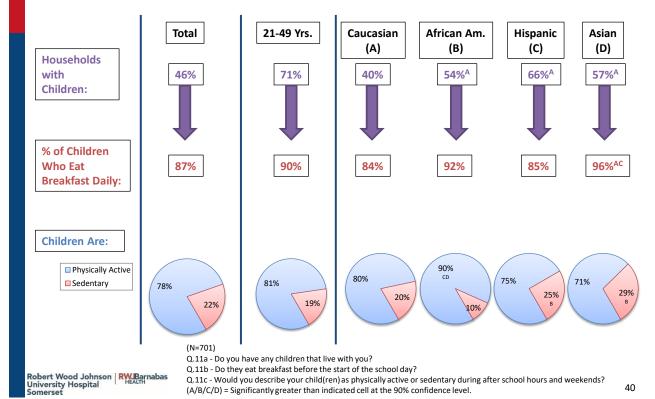
39

Robert Wood Johnson RW Barnabas

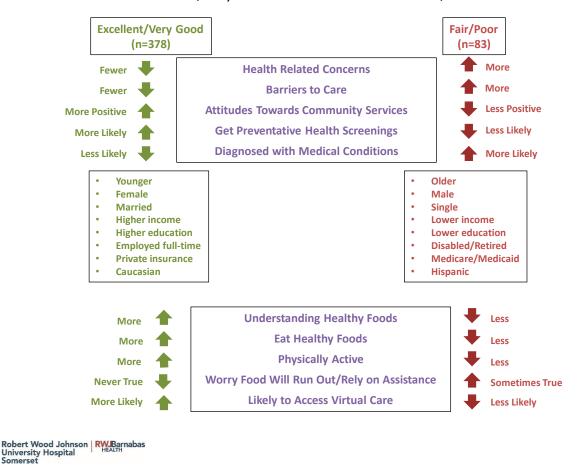
University Hospital Somerset

### Activity Level of Children in Household

- In households with children, the large majority are eating breakfast daily and are physically active.
- While both Hispanics and Asians have a high level of children present in the household, they have the lowest level of physically active children.



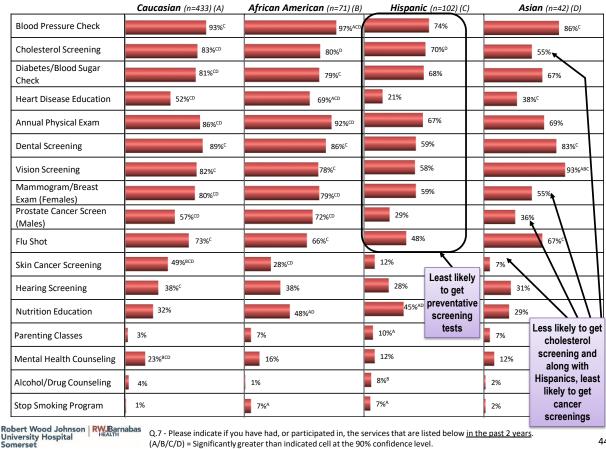
### Profile of Those in "Excellent/Very Good" Health vs. Those in "Fair/Poor" Health



#### INCIDENCE OF SCREENING TESTS AND CONDITIONS DIAGNOSED

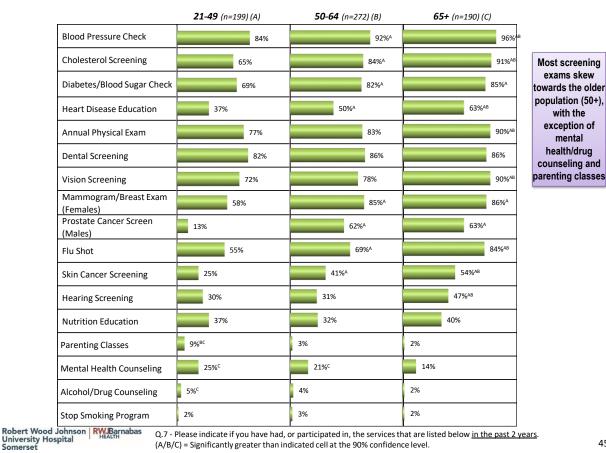
#### Incidence of Screenings/Exams/Tests – Past 2 Years Hispanics are the least likely ethnic group to get any screening tests or exams. Asians also have a reported low level of obtaining mammograms, prostate cancer and skin cancer screenings. Higher income residents are more likely to get screening tests than lower income residents. 100% 90% 84% 78% 79% 76% 52% 49% 50% 0% Blood Cholesterol Diabetes/ Heart Disease Annual Physical Dental Vision Mammogram/ Prostate **Blood Sugar** Breast Exam Cancer Pressure Screening Education Exam Screening Screening (Males) Check Check (Females) Older (50+) Older (50+) Caucasian/ Older (50+) African Am./ Female Asian Older (50+) Older (50+) Higher Highest African Am. Higher Caucasian Higher Older (65+) Higher income Highest incon income Older (50+) income Older (65+) Highest income (\$50K+) (\$150K+) (\$50K+) (\$150K+) Higher (\$50K+) Higher income (\$50K+) (\$150K+) Least among Least among Least among Hispanic/Asian Least among income Least among (\$50K+) Least among Least among Hispanic/Asian (\$100K+ Hispanic Hispania Asian Hispanio Hispanic 100% 69% Skews Younger 50% 39% 35% 35% 20% 5% 4% 2% Flu Shot Hearing Nutrition Parenting Mental Health Alcohol/Drug Stop Smoking Skin Cancer Counseling Screening Screening Counseling Education Classes Program • Older African Am./ Female African Am./ Older (65+) Caucasian Hispanic Hispanic Older (50+) Younger (<50) Caucasian Hispanic Least among (65+) Hispanio Younger (<65) Younger (<65)</li> Hispanic Lowest Higher income (\$50K+) income Least amona (<\$25K) Hispanic/Asian Robert Wood Johnson RW Barnabas (N=701) University Hospital Somerset Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years.





Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years. (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

### Incidence of Screenings/Exams/Tests - by Age



(A/B/C) = Significantly greater than indicated cell at the 90% confidence level.

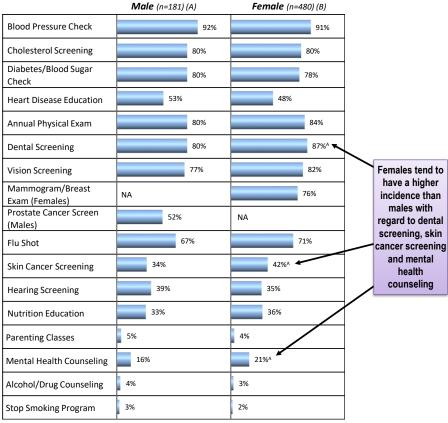
45

exams skew

with the exception of

mental health/drug

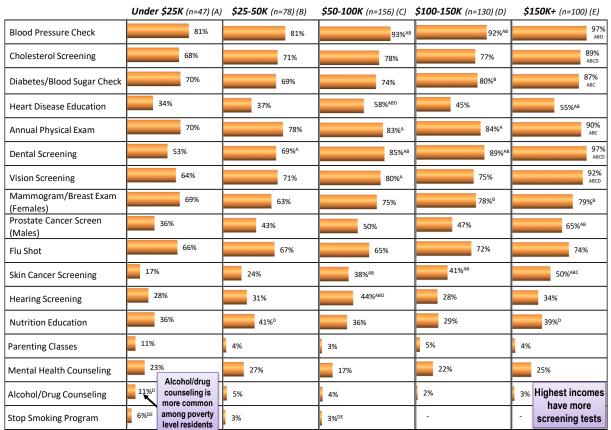
### Incidence of Screenings/Exams/Tests – by Gender



Robert Wood Johnson | RW.Barnabas University Hospital Somerset

Q.7 - Please indicate if you have had, or participated in, the services that are listed below <u>in the past 2 years</u>. (A/B) = Significantly greater than indicated cell at the 90% confidence level. NA = Not applicable.

### Incidence of Screenings/Exams/Tests - by Income

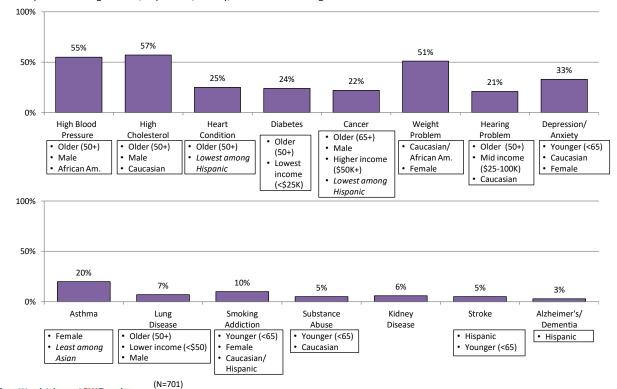


Robert Wood Johnson | RW.Barnabas | Q.7 - Please indicate if you have had, or participated in, the services that are listed below in the past 2 years.

University Hospital | (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level.

### Conditions Diagnosed by Physician (Self or Family Member)

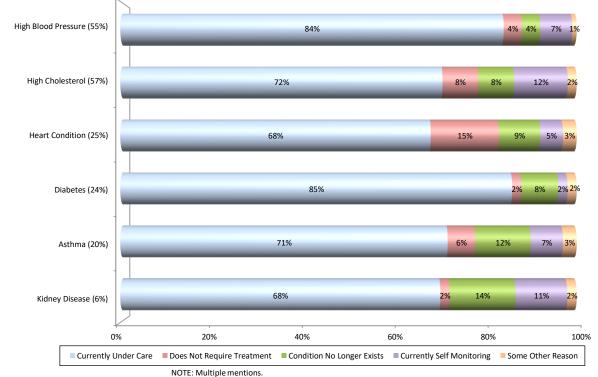
- Older residents (50+) report being diagnosed with more conditions versus their younger counterparts, although depression/anxiety, smoking addiction and substance abuse skew towards the younger population.
- Males report somewhat higher incidence of high blood pressure, high cholesterol, cancers and lung disease, while females
  report more weight issues, depression/anxiety, asthma and smoking addictions.



Robert Wood Johnson RWJBarnabas University Hospital Q.8 - Have you, or a household family member, ever been told by a doctor or other health professional that you have had any of the following?

### How Conditions Are Being Managed

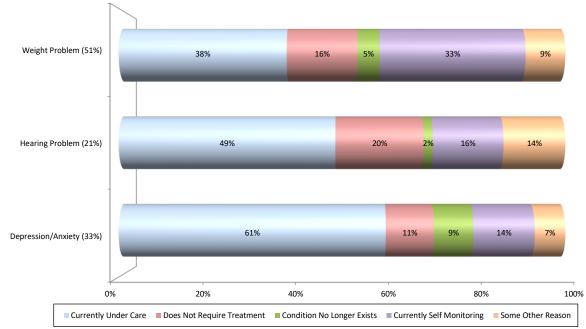
• The large majority of those reporting high blood pressure, diabetes, high cholesterol, heart conditions, asthma and kidney disease are currently under care for their conditions, with some reporting the condition no longer exists, does not require treatment or is currently being monitored on their own.



 ${\it Q.9-Are\ you/household\ family\ member\ currently\ under\ care\ for\ this\ [CONDITION]?}$ 

### How Conditions Are Being Managed – (continued)

- Of those reporting weight issues, 38% say they are currently under a physicians care for the condition, while about one-third (33%) say they are currently monitoring on their own; 16% say the condition does not warrant treatment and a handful say the condition no longer exists.
- While a majority of those diagnosed with depression/anxiety are currently under care, some are monitoring it on their own, say it doesn't require treatment or the condition no longer exists.



NOTE: Multiple mentions.

Q.9 - Are you/household family member currently under care for this [CONDITION]?

Q.10 - Why are you/household family member not under current care for the [CONDITION] you mentioned?

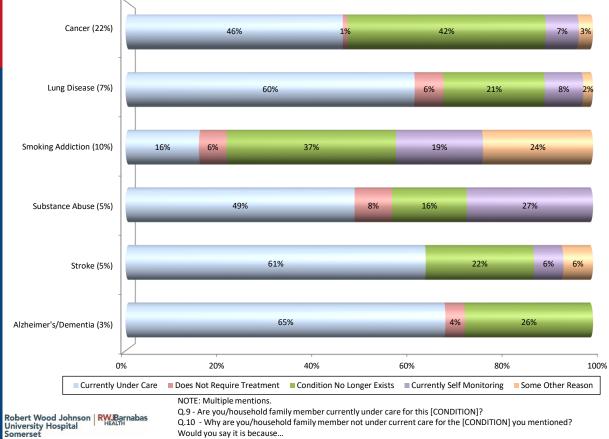
Would you say it is because...

50

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### How Conditions Are Being Managed – (continued)

Few residents are under a physicians care for smoking addiction, with many saying the condition no longer exists.

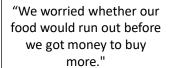


Q.9 - Are you/household family member currently under care for this [CONDITION]?

Q.10 - Why are you/household family member not under current care for the [CONDITION] you mentioned? Would you say it is because...

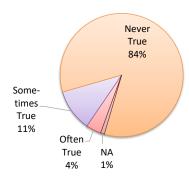
### **ADDITIONAL DATA**

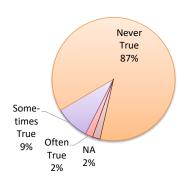
### Statements About Ample Food/Food Assistance Programs

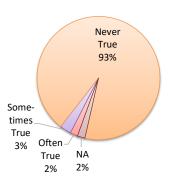


"The food that we bought just didn't last and we didn't have money to get more."

"We rely on a community supper program, food pantry or meal assistance program to supplement our household."







Those who agree with these statements tend to be: lower income, younger, African Am. or Hispanic.

(N=701)

Robert Wood Johnson | RW Barnabas University Hospital Somerset

Q.12 - Please read the following statements that people have made about their food situation.

For each one, indicate how true the statement was for your household over the last 12 months.

# **Physician Habits**

- Older and higher income residents are significantly more likely versus their younger/lower income counterparts
  to visit the same doctor or group every year or two for a check-up, while the younger and lower income
  residents are more likely to visit the doctor only when sick or need medical care.
- Hispanics tend to visit the doctor only when sick or urgent care is needed.

|  |       | Age              |                 |                  | Income          |                  |                 |                  | Ethnicity          |                  |                 |                  |                 |
|--|-------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|--------------------|------------------|-----------------|------------------|-----------------|
|  | Total | 21-49<br>(A)     | 50-64<br>(B)    | 65+<br>(C)       | <25<br>(A)      | 25-50<br>(B)     | 50-100<br>(C)   | 100-150<br>(D)   | 150+<br>(E)        | Caucasian<br>(A) | AA<br>(B)       | Hispanic<br>(C)  | Asian<br>(D)    |
|  | %     | %                | %               | %                | %               | %                | %               | %                | %                  | %                | %               | %                | %               |
| Go to Dr/group every year or two for check-up  | 75    | 68               | 78 <sup>A</sup> | 86 <sup>AB</sup> | 64              | 64               | 75 <sup>B</sup> | 79 <sup>AB</sup> | 91 <sup>ABCD</sup> | 80 <sup>c</sup>  | 83 <sup>c</sup> | 54               | 71 <sup>c</sup> |
|  |       |                  |                 | <b>\</b>         |                 |                  |                 |                  | <b>→</b>           |                  |                 |                  |                 |
| Go to Dr/group only when sick/hurt             | 20    | 28 <sup>BC</sup> | 21 <sup>C</sup> | 10               | 21              | 31 <sup>DE</sup> | 21              | 18               | 17                 | 19               | 13              | 28 <sup>AB</sup> | 29 <sup>B</sup> |
|  |       | +                |                 |                  | +               |                  |                 |                  |                    |                  |                 |                  |                 |
| Go to Urgent Care or ER when need medical care | 11    | 19 <sup>BC</sup> | 7               | 6                | 17 <sup>E</sup> | 17 <sup>DE</sup> | 10              | 8                | 5                  | 8                | 4               | 26 <sup>AB</sup> | 17 <sup>B</sup> |
|  |       | +                |                 |                  | <b>+</b>        |                  |                 |                  |                    |                  |                 |                  |                 |

Robert Wood Johnson | RWJBarnabas University Hospital Somerset

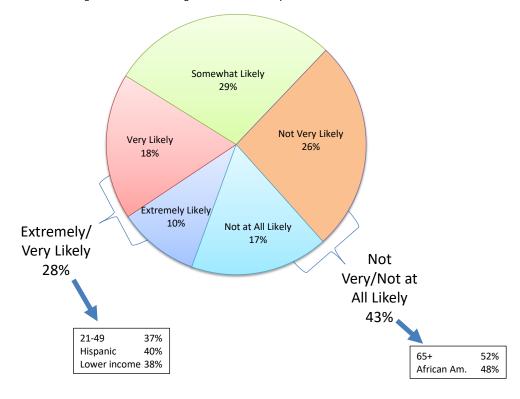
(N=701)

NOTE: Multiple mentions.

Q.13 - When you need medical care, which of the statements below best describes you? Age: (A/B/C) = Significantly greater than indicated cell at the 90% confidence level. Income: (A/B/C/D/E) = Significantly greater than indicated cell at the 90% confidence level. Ethnicity: (A/B/C/D) = Significantly greater than indicated cell at the 90% confidence level.

### Likelihood of Accessing Medical Care Virtually

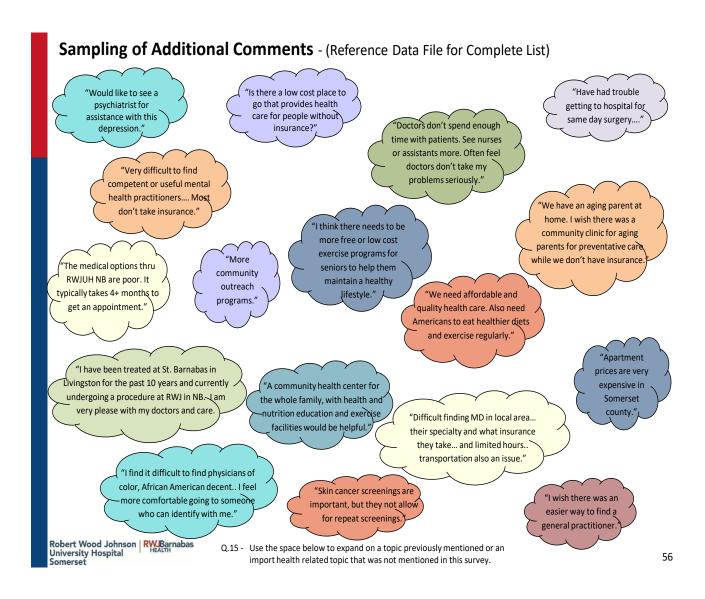
• Few residents indicated a strong likelihood of accessing medical care virtually.



Robert Wood Johnson | RW\_Barnabas University Hospital | Somerset

(N=701)

Q.14 - If you were able to access medical care virtually, for example, through FaceTime or Skype, how likely would you be to use this type of technology?



### **APPENDIX E: RESOURCE INVENTORY**

|   |  |                          | ZIP           |       |   |         |  |
|---|--|--------------------------|---------------|-------|---|---------|--|
| Resource Type                           | Provider Name  | Street Address           | Town          | Code  | Phone                                   | PSA/SSA |  |
| Ambulatory Care                         | Basking Ridge  | 136 MOUNTAIN VIEW Blvd.  | BASKING RIDGE | 07920 | (212) 639-8810                          | SSA-2   |  |
| Ambulatory Care                         | RIDGE  | 140 ALLEN ROAD           | BASKING RIDGE | 07920 | (908) 604-7800                          | SSA-2   |  |
|   |  | 175 MORRISTOWN ROAD -    |               |       |   |         |  |
| Ambulatory Care                         | Franklin Surgical Center   | SUITE 102                | BASKING RIDGE | 07920 | (908) 766-5556                          | SSA-2   |  |
| Ambulatory Care                         | University Radiology Group, PC   | 1 ROBERTSON DRIVE, SUITE | BEDMINSTER    | 07921 | (908) 234-0205                          |         |  |
| Ambulatory Care                         | REJUV SURGERY CENTER, L.L.C.   | 59 MINE BROOK ROAD       | BERNARDSVILLE | 07924 | (908) 630-0007                          |         |  |
| Ambulatory Care                         | BRIDGEWATER DIALYSIS CENTER  | 2121 ROUTE 22 WEST       | BOUND BROOK   | 08805 | (732) 469-7202                          |         |  |
| Ambulatory Care                         | University Radiology Group, PC   | 33 MONROE STREET         | BRIDGEWATER   | 08807 | (908) 725-1291                          |         |  |
| Ambulatory Care                         | Ambulatory Surgical Center Of Somerset   | 1081 ROUTE 22 W, SUITE   | BRIDGEWATER   | 08807 | (908) 809-1000                          |         |  |
| Ambulatory Care                         | ARTHUR W PERRY MD  | 3055 ROUTE 27            | FRANKLIN PARK | 08823 | (732) 422-9600                          |         |  |
| Ambulatory Care                         | Hillsborough Radiology Centers, LLC  | 105 RAIDER BOULEVARD     | HILLSBOROUGH  | 08844 | (908) 359-9331                          |         |  |
| Ambulatory Care                         | Hillsborough Radiology Centers, LLC  | 375 ROUTE 206, SUITE ONE | HILLSBOROUGH  | 08844 | (908) 874-7600                          |         |  |
| Ambulatory Care                         | Digestive Healthcare Center, Pa  | 412 COURTYARD DRIVE      | HILLSBOROUGH  | 08844 | (908) 218-9222                          |         |  |
| Ambulatory Care                         | Hillsborough Dialysis Center   | 220 TRIANGLE ROAD        | HILLSBOROUGH  |       | (908) 369-0398                          |         |  |
| Ambulatory Care                         | Central Jersey Ambulatory Surgical Center,   | 511 COURTYARD DRIVE      | HILLSBOROUGH  | 08844 | (908) 895-0001                          |         |  |
| Ambulatory Care                         | ATLANTIC MATERNAL FETAL MEDICINE AT  | 784-792 CHIMNEY ROCK     | MARTINSVILLE  | 08836 | (973) 971-7082                          |         |  |
| Ambulatory Care                         | NEIGHBORHOOD HEALTH CENTER CARDINAL  | 950 PARK AVENUE          | PLAINFIELD    | 07060 | (908) 754-5840                          |         |  |
| Ambulatory Care                         | Dialysis Clinic, Inc., Somerset  | 950 HAMILTON STREET      | SOMERSET      |       | (732) 565-5440                          | PSA     |  |
| Ambulatory Care                         | University Radiology Group, PC   | 75 VERONICA AVENUE       | SOMERSET      |       | (732) 246-0060                          | PSA     |  |
| Ambulatory Care                         | Somerset Dialysis Center   | 240 CHURCHILL AVENUE     | SOMERSET      |       | (732) 937-5000                          | PSA     |  |
| Ambulatory Care                         | ProCure Proton Therapy Center  | 103 CEDAR GROVE LANE     | SOMERSET      |       | (732) 357-2600                          | PSA     |  |
| Ambulatory Care                         | University Orthopaedic Associates, LLC   | 2 WORLDS FAIR DRIVE      | SOMERSET      |       | (732) 537-0909                          | PSA     |  |
| Ambulatory Care                         | Fresenius Medical Care Piscataway  | 1135 EASTON AVENUE       | SOMERSET      |       | (781) 699-9000                          | PSA     |  |
| , |  | 920 HAMILTON STREET,     |               |       | , |         |  |
| Ambulatory Care                         | Hamilton Street Dialysis   | SUITE C-3                | SOMERSET      | 08873 | (732) 220-1593                          | PSA     |  |
|   | in a second and a second a second and a second a second and a second a second and a | 107 CEDAR GROVE LANE,    |               |       | ( ,                                     |         |  |
| Ambulatory Care                         | Urgent Care Imaging Center, LLC  | SUITE 108                | SOMERSET      | 08873 | (201) 774-9990                          | PSA     |  |
| , and a configuration                   | organic care imaging center) and   | 1527 STATE ROUTE 27,     | 00.11121.021  | 00070 | (202)                                   |         |  |
| Ambulatory Care                         | Multi Care Therapy Center  | SUITE 1100               | SOMERSET      | 08873 | (732) 545-7474                          | PSA     |  |
| Ambulatory care                         | AMBULATORY SURGICAL CENTER AT BASKING  | 30112 1100               | SOWIENSET     | 00073 | (732) 343 7474                          | 1 JA    |  |
| Ambulatory Care                         | RIDGE L.L.C.   | 81 VERONICA AVENUE       | SOMERSET      | 08873 | (973) 871-2533                          | PSA     |  |
| Ambulatory care                         | MDGE E.E.C.  | 100 FRANKLIN SQUARE      | SOWIENSET     | 00073 | (373) 671 2333                          | 1 JA    |  |
| Ambulatory Care                         | Raritan Valley Surgery Center  | DRIVE, SUITE 100         | SOMERSET      | 08873 | (732) 560-1000                          | PSA     |  |
| Ambulatory Care                         | University Center for Ambulatory Surgery   | 2 WORLDS FAIR DRIVE      | SOMERSET      |       | (732) 748-1117                          | PSA     |  |
| Ambulatory Care                         | SOMERSET EYE INSTITUTE PC  | 562 EASTON AVENUE        | SOMERSET      | _     | (732) 828-5900                          | PSA     |  |
| Ambulatory Care                         | Physicians Dialysis Somerville   | 1 ROUTE 206 NORTH        | SOMERVILLE    |       | (908) 450-0396                          | 1 JA    |  |
| Ambulatory Care                         | Ambulatory Surgical Center of Somerville, LLC  |                          | SOMERVILLE    |       | (908) 393-8360                          |         |  |
| Ambulatory Care                         | University Radiology Group, PC   | 16 MOUNTAIN BOULEVARD    | WARREN        |       | (908) 769-7200                          |         |  |
| Ambulatory Care                         | CSH-OUTPATIENT CENTER WARREN   | 266 KING GEORGE ROAD     | WARREN        |       | (732) 258-7050                          |         |  |
| Ambulatory Care                         | Surgicare of Central Jersey, LLC   | 40 STIRLING ROAD         | WATCHUNG      |       | (908) 769-8000                          |         |  |
| Behavioral Health                       | East Mountain Hospital   | 40 EAST MOUNTAIN ROAD    | BELLE MEAD    |       | (908) 281-1500                          |         |  |
| Behavioral Health                       | CARRIER CLINIC   | 252 ROUTE 601            | BELLE MEAD    |       | (908) 281-1300                          |         |  |
| Behavioral Health                       | Bridgeway Rehabilitation, Inc.   | 515 Church St            | BOUND BROOK   |       | (908) 704-8252                          |         |  |
| Behavioral Health                       | Easter Seal Society of NJ  | 21 Davenport Street      | BRIDGEWATER   |       | (908) 704-8232                          |         |  |
| Behavioral Health                       |  | · ·                      |               |       |   |         |  |
| penavioral Health                       | Richard Hall CMHC  | 500 North Bridge Street  | BRIDGEWATER   | 08807 | (908) 253-3160                          |         |  |

|                         |   |                           |                                  | ZIP   |                |         |
|-------------------------|---|---------------------------|----------------------------------|-------|----------------|---------|
| Resource Type           | Provider Name                             | Street Address            | Town                             | Code  | Phone          | PSA/SSA |
| Behavioral Health       | Catholic Charities - Diocese of Metuchen  | 540 Route 22 East         | BRIDGEWATER                      | 08807 | (908) 722-1881 |         |
| Behavioral Health       | Richard Hall CMHC                         | 500 North Bridge Street   | BRIDGEWATER                      | 08807 | (908) 725-2800 |         |
| Behavioral Health       | Richard Hall CMHC                         | 500 North Bridge Street   | BRIDGEWATER                      | 08807 | (908) 725-2800 |         |
| Behavioral Health       | Richard Hall CMHC                         | 500 North Bridge Street   | BRIDGEWATER                      | 08807 | (908) 253-3128 |         |
| Behavioral Health       | Richard Hall CMHC                         | 500 North Bridge Street   | BRIDGEWATER                      | 08807 | (908) 725-2800 |         |
| Behavioral Health       | Alternatives, Inc.                        | 600 First Avenue          | Raritan                          | 08869 | (908) 685-1444 |         |
| Behavioral Health       | Somerset County Department of Human       | 27 Warren St 3rd Floor    | SOMERVILLE                       | 08876 | (908) 704-6320 |         |
| Behavioral Health       | Easter Seal Society of NJ                 | 245 US Highway 22, Suite  | SOMERVILLE                       | 08876 | (908) 722-4300 |         |
| Behavioral Health       | Easter Seal Society of NJ                 | 21 Davenport Street       | SOMERVILLE                       | 08876 | 908) 722-4300  |         |
| Behavioral Health       | Somerset County PESS                      | 282 Main St               | SOMERVILLE                       | 08876 | (908) 526-4100 |         |
| Behavioral Health       | Freedom Trail SHC                         | 166 West Main Street      | SOMERVILLE                       | 08876 | (908) 722-5778 |         |
|                         |   | 470 U.S. Highway 202/206  |                                  |       |                |         |
| Clinical Care           | Somerset Valley Urgent Care               | & Hills Drive             | BEDMINSTER                       | 07921 | 908-781-7171   |         |
| Clinical Care           | AFC Urgent Care Bound Brook               | 601 W Union Ave           | BOUND BROOK                      | 08805 | 732-469-3627   |         |
| Clinical Care           | Access Medical Associates                 | Building 1 3322 Route 22  | Branchburg                       | 08876 | 908-704-0100   |         |
| Clinical Care           | Dental Care Bridgewater                   | 475 N Bridge St           | BRIDGEWATER                      | 08807 | (908) 947-0320 |         |
|                         |   | 350 Grove Street at Route | -                                |       | (,             |         |
| Clinical Care           | U.S. HealthWorks Medical Group            | 22 Eas                    | BRIDGEWATER                      | 08807 | 908-231-0777   |         |
| Clinical Care           | Brunswick Urgent Care                     | 3185 NJ-27                | FRANKLIN PARK                    | 08823 | 732-422-4889   |         |
| Clinical Care           | Family Care PA                            | 257 US-22                 | Green Brook                      |       | 732-968-7878   |         |
| Clinical Care           | RWJ Physician Enterprise Urgent Care      | 751 Route 206 North Suite | HILLSBOROUGH                     |       | 908-685-2513   |         |
| Clinical Care           | Hillsborough Comprehensive Dental Care    | 390 Amwell Rd Suite 108   | HILLSBOROUGH                     |       | (908) 431-5624 |         |
| Clinical Care           | Dental Care Hillsborough                  | 706 US-206                | HILLSBOROUGH                     |       | (908) 533-9027 |         |
| Clinical Care           | Hunterdon Healthcare Urgent Care          | 45F 206 South             | Raritan                          |       | 908-237-4122   |         |
| Clinical Care           | Dental Care Somerset                      | 441 Elizabeth Ave         | SOMERSET                         |       | (908) 333-4995 | PSA     |
| Clinical Care           | Krantz Dental Care                        | 7 Cedar Grove Ln #33      | SOMERSET                         |       | (732) 469-8083 | PSA     |
| Clinical Care           | Platinum Dental Group, LLC                | 636 Easton Ave            | SOMERSET                         |       | 732) 828-0606  | PSA     |
| Clinical Care           | Cedar Grove Dental                        | 97 Cedar Grove Ln         | SOMERSET                         |       | (732) 271-1220 | PSA     |
| Clinical Care           | Somerset Dentists                         | 710 Easton Ave Ste 1      | SOMERSET                         |       | (732) 545-4465 | PSA     |
| Clinical Care           | KK Dental                                 | 1323 NJ-27                | SOMERSET                         |       | (732) 249-0411 | PSA     |
| Clinical Care           | Brunswick Dental Care                     | 225 Demott Ln             | SOMERSET                         |       | (732) 246-0100 | PSA     |
| Clinical Care           | Complete Dental Care                      | 25 Clyde Rd               | SOMERSET                         |       | (732) 873-4122 | PSA     |
| Clinical Care           | Belbar Dental Associates                  | 812 Hamilton St           | SOMERSET                         |       | (732) 846-2494 | PSA     |
| Clinical Care           | Esteem Dental Services                    | 84 Veronica Ave B1017     | SOMERSET                         |       | (732) 210-0505 | PSA     |
| Clinical Care           | Zufall Health Center                      | 71 Fourth St.             | SOMERVILLE                       |       | (908) 526-2335 | 1 3/4   |
| Clinical Care           | ME Urgent Care Center                     | 1569 US Highway 22        | WATCHUNG                         |       | 908-322-2631   |         |
| Communicable Disease    | Planned Parenthood of Greater Northern    | 203 South Main Street     | Manville                         |       | 908) 231-9230  |         |
| Communicable Disease    | Somerset Family Practice                  | 110 Rehill Avenue         | SOMERVILLE                       |       | 908) 685-2900  |         |
| Communicable Disease    | Women's Health & Counseling Center        | 71 Fourth Street          | SOMERVILLE                       |       | (908) 526-2335 |         |
|                         | women's nearth & counseling center        | / I FOULTH Street         | SOIVIERVILLE                     | 000/0 | (908) 526-2335 |         |
| Family & Social Support | Somerset County Vocational Technical High | 14 Vogt Drive             | DDIDGE\A/ATED                    | 00007 | ` '            |         |
| Services                | Cafe and Carried Company                  | 14 Vogt Drive             | BRIDGEWATER                      |       | ext. 7286      |         |
| Family & Social Support | Safe and Sound Somerset                   | 427 Homestead Road        | HILLSBOROUGH<br>North Plainfield | 08844 | (908) 359-0003 |         |

|                         |   |                            | ZIP              |       |                  |         |  |
|-------------------------|---|----------------------------|------------------|-------|------------------|---------|--|
| Resource Type           | Provider Name                                 | Street Address             | Town             | Code  | Phone            | PSA/SSA |  |
| Family & Social Support | Somerset County Board of Social Services      | 610 Franklin Blvd.         | SOMERSET         | 08873 | (732) 846-6499   | PSA     |  |
| amily & Social Support  | Somerset County Board of Social Services      | 73 East High Street        | SOMERVILLE       | 08876 | (908) 526-8800   |         |  |
| Family & Social Support | Zufall Health Center                          | 71 Fourth Street           | SOMERVILLE       | 08876 | (908) 526-2335   |         |  |
| Family & Social Support | Community Child Care Solutions                | 86 East Main Street        | SOMERVILLE       | 08876 | (908) 927-0869   |         |  |
| Family & Social Support | Empower Somerset, Inc.                        | 34 W. Main Street, Suite   | SOMERVILLE       | 08876 | (908) 722-4400   |         |  |
| Family & Social Support |   | 34 West Main Street Second |                  |       | ,                |         |  |
| Services                | EmPOWER Family Success Center                 | Floor, Suite 201           | SOMERVILLE       | 08876 | (908) 722-4400   |         |  |
| Family & Social Support | ,   | ,                          |                  |       | (908) 526-2335   |         |  |
| Services                | Franklin High School                          | 71 Fourth Street           | SOMERVILLE       | 08876 | ext. 133         |         |  |
| Family & Social Support | VanDerveer #10                                | Union Avenue               | SOMERVILLE       |       | (732) 324-8200   |         |  |
| Family & Social Support | 70.156.766.1120                               | oon / wende                | South Bound      | 00070 | (, 52) 52 : 5255 |         |  |
| Services                | Somerset County Child Assault Prevention      | PO Box 155                 | Brook            | 08880 | (732) 356-1422   |         |  |
| Jei vices               | Somerset county crima rissault i revention    | 331 US HIGHWAY ROUTE       | Brook            | •     | (732)330 1422    |         |  |
| Healthcare Locations    | RWJ SLEEP CENTER                              | 206 - 2ND FLOOR            | HILLSBOROUGH     | 00044 | (908) 231-6180   |         |  |
| Healthcare Locations    |   | 65 HIGHLAND AVENUE         |                  |       | (908) 234-0011   |         |  |
|                         | THE MATHENY SCHOOL AND HOSPITAL               |                            | PEAPACK          | _     | , ,              | PSA     |  |
| Healthcare Locations    | SPORTS MEDICINE INSTITUTE AT SPUH, THE        | 562 EASTON AVENUE          | SOMERSET         | 088/3 | (732) 745-8600   | PJA     |  |
| Haraldhaa aa baaada aa  | ROBERT WOOD JOHNSON UNIVERSITY                | 440 PELILL AVE             | CON 45D) (II.I.5 | 00076 | (000) 605 3300   |         |  |
| Healthcare Locations    | HOSPITAL SOMERSET                             | 110 REHILL AVE             | SOMERVILLE       |       | (908) 685-2200   |         |  |
| Healthcare Locations    | Somerset Medical Center                       | 110 REHILL AVE             | SOMERVILLE       |       | 908-685-2200     |         |  |
| Maternal and Pediatric  | Central Jersey Womens Health                  | 1 Robertson Dr # 25        | BEDMINSTER       |       | (908) 532-0787   |         |  |
| Maternal and Pediatric  | All Women's Healthcare                        | 3461 US-22                 | Branchburg       |       | (908) 788-6469   |         |  |
| Maternal and Pediatric  | Somerset OB/GYN Associates                    | 215 Union Ave A            | BRIDGEWATER      |       | (908) 722-2900   |         |  |
| Maternal and Pediatric  | Somerset Ob/gyn Associates                    | 1 New Amwell Rd B          | HILLSBOROUGH     | 08844 | (908) 874-5900   |         |  |
| Maternal and Pediatric  | First Choice Women's Resource Centers         | 211 W Front St #118        | PLAINFIELD       | 07060 | (908) 561-0079   |         |  |
| Maternal and Pediatric  | Zufall Health Center - Medical                | 71 4th St                  | SOMERVILLE       | 08876 | (908) 526-2335   |         |  |
| Senior Services         | Assisted Living at Fellowship Village         | 9000 Fellowship Road       | BASKING RIDGE    | 07920 | (908)580-3824    | SSA-2   |  |
| Senior Services         | Sunrise Of Basking Ridge                      | 404 King George Road       | BASKING RIDGE    | 07920 | (908)542-9000    | SSA-2   |  |
|                         | VISITING NURSE ASSOCIATION OF SOMERSET        |                            |                  |       |                  |         |  |
| Senior Services         | HILLS HOME HEALTH & HOSPICE SERVICES,         | 200 MT AIRY ROAD           | BASKING RIDGE    | 07920 | (908) 766-0180   | SSA-2   |  |
| Senior Services         | VNA SOMERSET HILLS HOSPICE                    | 200 MT AIRY ROAD           | BASKING RIDGE    | 07920 | (908) 766-0180   | SSA-2   |  |
| Senior Services         | Fellowship Garden State Hospice               | 8000 FELLOWSHIP ROAD       | BASKING RIDGE    |       | (908) 580-9519   | SSA-2   |  |
| Senior Services         | Skilled Nursing at Fellowship Village         | 8000 Fellowship Drive      | BASKING RIDGE    |       | (908)580-3800    | SSA-2   |  |
| Senior Services         | Care One at Somerset Valley Assisted Living   | 1621 Route 22 West         | BOUND BROOK      |       | (732)469-2000    | 33A Z   |  |
| Senior Services         | Care One at Somerset Valley                   | 1621 Route 22 West         | BOUND BROOK      |       | (732)469-2000    |         |  |
| Senior Services         | Compassionate Care Hospice of Clifton, L.L.C. | 9 LAMINGTON ROAD, SUITE    | BRANCHBURG       |       | (908) 526-2600   |         |  |
| Senior Services         | Friends Retirement Concepts at Arbor Glen     | 100 MONROE STREET          |                  |       |                  |         |  |
|                         | · · · · · · · · · · · · · · · · · · ·         |                            | BRIDGEWATER      |       | (908) 595-6500   |         |  |
| Senior Services         | The Chelsea at Bridgewater                    | 680 202/206 North          | BRIDGEWATER      |       | (908)252-3400    |         |  |
| Senior Services         | Avalon at Bridgewater                         | 565 State Highway 28       | BRIDGEWATER      |       | (908)707-8800    |         |  |
| Senior Services         | Brandywine Assisted Living at Middlebrook     | 2005 Route 22 West         | BRIDGEWATER      |       | (732)868-8181    |         |  |
| Senior Services         | Friends Retirement Concepts                   | 100 Monroe Street          | BRIDGEWATER      |       | (908)595-6565    |         |  |
| Senior Services         | Bridgeway Care and Rehabilitation Center at   | 270 Route 28               | BRIDGEWATER      |       | (908)722-7022    |         |  |
| Senior Services         | Friends Retirement Concepts/Arbor Glen        | 100 Monroe Street          | BRIDGEWATER      |       | (908)595-6565    |         |  |
| Senior Services         | Green Knoll Center                            | 875 Route 202-206 North    | BRIDGEWATER      |       | (908)526-8600    |         |  |
| Senior Services         | N. J. Eastern Star Home, Inc.                 | 111 Finderne Avenue        | BRIDGEWATER      |       | (908)722-4140    |         |  |
| Senior Services         | N. J. Eastern Star Home, Inc.                 | 111 Finderne Avenue        | BRIDGEWATER      | 08807 | (908)722-4140    |         |  |
| Senior Services         | Abingdon Care & Rehabilitation Center         | 303 Rock Ave               | Green Brook      |       | (732)968-5500    |         |  |
| Senior Services         | Adult Learning Center At Hillsborough         | 216 Rt 206 S               | HILLSBOROUGH     | 08844 | (908)904-1055    |         |  |
| Senior Services         | The Avalon At Hillsborough                    | 393 Amwell Road            | HILLSBOROUGH     | 08844 | (908)874-7200    |         |  |
| Senior Services         | Brookdale Hillsborough                        | 600 Auten Road             | HILLSBOROUGH     | 08844 | (908)431-1300    |         |  |
|                         | Bridgeway Care And Rehabilitation Center At   |                            |                  |       |                  |         |  |
| Senior Services         | Hillsborough                                  | 395 Amwell Road            | HILLSBOROUGH     | 08844 | (908)281-4400    |         |  |
| Senior Services         | Foothill Acres Rehabilitation & Nursing       | 39 East Mountain Road      | HILLSBOROUGH     | 08844 | (908)369-8711    |         |  |
| Senior Services         | SarahCare At Watchung Square                  | 130 Route 22 East          | North Plainfield |       | (908)561-8888    |         |  |

|                          |   |                           |             | ZIP   |                |         |
|--------------------------|---|---------------------------|-------------|-------|----------------|---------|
| Resource Type            | Provider Name                               | Street Address            | Town        | Code  | Phone          | PSA/SSA |
| Senior Services          | Rehab at River's Edge                       | 633 Route 28              | Raritan     | 08869 | (908)526-8950  |         |
| Senior Services          | Stonebridge At Montgomery Health Care       | 100 Hollinshead Spring    | Skillman    | 08558 | (609)759-3600  |         |
| Senior Services          | Stonebridge At Montgomery Health Care       | 100 Hollinshead Spring    | Skillman    | 08558 | (609)759-3654  |         |
| Senior Services          | Forever Young Medical Day Care, L.L.C.      | 18 Worlds Fair Drive      | SOMERSET    | 08873 | (732)271-8010  | PSA     |
| Senior Services          | Rainbow Home                                | 370 Campus Drive, Suite   | SOMERSET    | 08873 | (732)412-7167  | PSA     |
| Senior Services          | Martin and Edith Stein Assisted Living      | 350 Demott Lane           | SOMERSET    | 08873 | (732)568-1155  | PSA     |
| Senior Services          | Spring Hills at Somerset                    | 473 Demott Lane           | SOMERSET    | 08873 | (732)873-4800  | PSA     |
| Senior Services          | The Martin and Edith Stein Hospice          | 49 VERONICA AVENUE, 206   | SOMERSET    | 08873 | (732) 227-1212 | PSA     |
| Senior Services          | Parker at McCarrick                         | 15 Dellwood Lane          | SOMERSET    | 08873 | (732)545-4200  | PSA     |
| Senior Services          | Regency Heritage Nursing and Rehabilitation | 380 Demott Lane           | SOMERSET    | 08873 | (732)873-2000  | PSA     |
| Senior Services          | Somerset Woods Rehabilitation & Nursing     | 780 Old New Brunswick     | SOMERSET    | 08873 | (732)653-3000  | PSA     |
| Senior Services          | Willow Creek Rehabilitation and Care Center | 1165 Easton Ave           | SOMERSET    | 08873 | (732)246-4100  | PSA     |
| Senior Services          | Community Visitng Nurse Service             | 110 WEST END AVENUE       | SOMERVILLE  | 08876 | (908) 725-9355 |         |
| Senior Services          | Community Care Hospice                      | 110 WEST END AVENUE       | SOMERVILLE  | 08876 | (908) 725-9355 |         |
| Senior Services          | The Chelsea at Warren                       | 274 King George Road      | WARREN      | 07059 | (908)903-0911  |         |
| Senior Services          | Brightview Warren                           | 57 Mt Bethel Road         | WARREN      | 07059 | (908)756-3790  |         |
| Senior Services          | Brandywine Senior Living at Mountain Ridge  | 680 Mountain Boulevard    | WATCHUNG    | 07069 | (908)754-8180  |         |
| Senior Services          | McAuley Hall Health Care Center             | 1633 Highway 22           | WATCHUNG    | 07069 | (908)754-3663  |         |
|                          | CARRIER CLINIC OUTPATIENT ADDICTION         |                           |             |       |                |         |
| Substance Abuse Services | TREATMENT SERVICES                          | 252 RTE 601               | BELLE MEAD  | 08502 | (908) 281-1412 |         |
| Substance Abuse Services | CARRIER CLINIC BLAKE RECOVERY CENTER        | 252 ROUTE 601 PO BOX 147  | BELLE MEAD  | 08502 | (908) 281-1000 |         |
|                          | FAMILY AND COMMUNITY SERVICES OF            |                           |             |       |                |         |
| Substance Abuse Services | SOMERSET COUNTY                             | 339 WEST SECOND STREET    | BOUND BROOK | 08805 | (732) 356-1082 |         |
|                          | AMERICAN DAY CD CENTERS D/B/A/ HIGH         | 3322 ROUTE 22 WEST, SUITE |             |       |                |         |
| Substance Abuse Services | FOCUS CENTERS                               | 1403                      | Branchburg  | 08876 | (732) 474-7447 |         |
| Substance Abuse Services | GENPSYCH                                    | 981 US HIGHWAY 22         | BRIDGEWATER | 08807 | (908) 526-8370 |         |
| Substance Abuse Services | COMPREHENSIVE FAMILY TREATMENT OF           | 540-550 ROUTE 22 EAST     | BRIDGEWATER | 08807 | 9087221881     |         |
|                          | RICHARD HALL COMMUNITY MENTAL HEALTH        |                           |             |       |                |         |
| Substance Abuse Services | CENTER OF SOMERSET COUNTY                   | 500 NORTH BRIDGE STREET   | BRIDGEWATER | 08807 | (908) 725-2800 |         |
| Substance Abuse Services | CAPITOL CARE AT SOMERSET                    | 2121 ROUTE 22 WEST        | BRIDGEWATER | 08873 | (844) 437-3482 |         |
| Substance Abuse Services | GENPSYCH                                    | 981 US HIGHWAY 22         | BRIDGEWATER | _     | (908) 231-0511 |         |
| Substance Abuse Services | DAYTOP VILLAGE OF NEW JERSEY AT             | 362 SUNSET ROAD           | SKILLMAN    |       | (908) 874-5153 |         |
| Substance Abuse Services | THE CENTER FOR GREAT EXPECTATIONS           | 19 B DELLWOOD LN          | SOMERSET    |       | (732) 247-7003 | PSA     |
|                          |   | 75 VETERANS MEMORIAL      |             |       | ,              |         |
| Substance Abuse Services | GUIDED LIFE STRUCTURES                      | DRIVE                     | SOMERVILLE  | 08876 | (908) 704-0011 |         |
| Substance Abuse Services | SOMERSET TREATMENT SERVICES                 | 118 WEST END AVENUE       | SOMERVILLE  |       | (908) 722-1232 |         |

## APPENDIX F: WORLD CAFÉ EXERCISE REPORT





## Greater Somerset Public Health Partnership In Cooperation with Healthier Somerset

Community Health Assessment Preliminary Review Listening Session Thursday, June 28, 2018

Multi-Purpose Room 7:45-10AM
Hillsborough Municipal Complex—Peter J. Biondi Building, Hillsborough Township, NJ

## World Café Exercise Report

Welcome Remarks: Stephanie Carey, Greater Somerset Public Health Partnership (GSPHP)

Introductions: Serena Collado, Director of Community Health, Healthier Somerset

Community Health Assessment Data Briefing - Tamara Cunningham, RWJBarnabas Health

Ms. Cunningham provided an overview and brief report on CHA preliminary qualitative data findings.

Community Health Assessment is a process that:

- Determines and evaluates the state of health and health needs of a local population
- Enables the identification of major risk factors and causes of ill health; and
- Identifies action needed to address these factors

### Why do a CHA?

- To provide data for decision-making
- To promote awareness and action
- To satisfy a mandate
- Leads to the development of Community Health Improvement Plan (CHIP)



The process consists of development of data and internal oversight, review of secondary source data, primary research, priority setting and plan development, communication plan (all constituents), implementation and evaluation.

## Primary Data - Resident Survey:

Resident Survey PRELIMINARY results for respondents' top health issues/concerns for Somerset were:

- Obesity/overweight (46%)
- Mental Health issues -depression, anxiety, suicide, etc. (41%)
- Substance use, abuse or overdose (39%)
- Aging concerns Alzheimer's, falls, dementia, arthritis, etc. (31%)
- High stress lifestyles (27%)
- Cancer (18%)
- Diabetes (16%)
- Chronic heart disease (8.6%)

Top Barriers include insurance problems (32.7%), costs (27.3%), inconvenient appointment schedules (26%) and wait times (19%), Doctors not accepting new patients (14%).

## Primary Data - Focus Groups/Key Informant Interviews:

Results of 5/24 Mental Health Focus Group:

- · Not enough providers and addition services, fragmented
- Financial/insurance constraints
- Language limitations (Latino/Hispanic)





- Transportation barriers
- Stigma
- Insufficient Supports (housing for recovery)

### Medicaid / Underserved Focus Group on June 26:

- Lack of providers accepting Medicaid
- · Transportation barriers to out of area providers
- · ED becomes primary care source as unable to hand off to community provider
- · Lack of supports for better health and prevention (education, care coordination)

Key Informant interviews underway to include Faith-based, Asian, Housing, Food, Public Health and Senior perspectives.

## Secondary Data:

#### **Key Findings:**

- · Growing, aging and increasingly diverse population
- · Upper quartile performance for most indicators examined

#### Opportunities:

- Increasing mortality rates for Alzheimer's, lower respiratory, diseases of the heart and stroke
- Lowest percentage of live births with first trimester prenatal care in the tri-county area; increasing Infant mortality rate and highest % of LBW babies
- · Children meeting all immunization requirements
- More uninsured/people under federal poverty than comparatives
- Adults Age 65+ not having flu shot and adults with high cholesterol more than Healthy People target
- Rate for history of depression higher than state/comparatives
- · Diabetes % increasing and double that of Hunterdon
- % of adults with arthritis increasing, higher than comparative rates
- · HIV prevalence and STD rates higher than comparative counties
- · Heavy drinking % higher than state/comparatives
- % adults with BMI > 30 higher than comparatives; % adults reporting no leisure time physical activity increasing (still lower than state)
- Increasing rate of children with elevated blood lead levels; higher than comparatives
- Over 50% of respiratory, digestive and oral cancers diagnosed later stages

## Health Outcomes - Mortality (Somerset County):





## Top 10 Causes of Death:

- Diseases of Heart
- 2. Cancer (malignant neoplasms)
- 3. Stroke (cerebrovascular diseases)
- 4. Chronic lower respiratory diseases
- Unintentional injuries
- 6. Alzheimer's disease
- 7. Diabetes mellitus
- 8. Septicemia
- 9. Influenza and pneumonia
- 10. Nephritis nephrotic syndrome and nephrosis

#### Percent Change:

- Between 2013 and 2015, 4 of the top 10 age-adjusted death rates declined, with greatest decreases in Diabetes (-28.4%), Influenza and pneumonia (-20.9%), and Nephritis Nephrotic Syndrome and Nephrosis (-19.2%).
- Since 2008, the top 2 COD (Heart Disease & Cancer), experienced an increase.
- Alzheimer's Disease increased 34.8% from 2013, the largest percent increase almost 2x greater than the next leading COD, Chronic Lower Respiratory Disease at 18.1% change.

Source: NJDOH Center for Health Statistics NJ State Health Assessment Data – 2015 is most recent year available.

## Community Need Index (CNI)

SOURCE: 2017 DIGNITY HEALTH, TRUVEN HEALTH ANALYTICS, 2016; INSURANCE COVERAGE ESTIMATES, 2016; THE NIELSON COMPANY, 2016; AND COMMUNITY NEED INDEX, 2016.

#### A CNI:

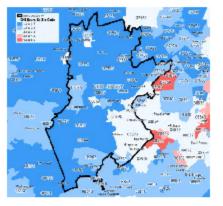
- CNI scoring helps pinpoint specific areas that have greater need than others.
- The CNI score is an average of five different barrier scores that measure various socioeconomic indicators of each community using 2015 source data.
- Provides a score for every populated ZIP code in the United States on a scale of 1.0 to 5.0
- A score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with the most need.





|                   | County   | ZIP<br>Code | ZIP Code<br>Description | CNI<br>Score |
|-------------------|----------|-------------|-------------------------|--------------|
|                   | Somerset | 08805       | Bound Brook             | 3.2          |
| Highest<br>CNI    | Somerset | 08835       | Manville                | 3            |
| Score             | Somerset | 08869       | Raritan                 | 2.8          |
| (Highest<br>Need) | Somerset | 08880       | South Bound<br>Brook    | 2.8          |
|                   | Somerset | 08873       | Somerset                | 2.6          |

|                  | Somerset     | 07931 | Far Hills        | 1.6 |
|------------------|--------------|-------|------------------|-----|
| Lowest           | Somerset     | 08558 | Skillman         | 1.6 |
| CNI<br>Score     | RWJBH<br>SOM | 08844 | Hillsborough     | 1.6 |
| (Lowest<br>Need) | RWJBH<br>SOM | 08853 | Neshanic Station | 1.6 |
|                  | RWJBH<br>SOM | 08836 | Martinsville     | 1.4 |



## Using the Tools of Community Engagement in Your Organization -

Stephanie Carey, Health Officer (Montgomery/Hopewell Borough/Pennington Borough)

The goal is to engage community members and partners to better address public health issues. Stephanie provided a demonstration to the coalition partners present on how to use the World Café exercise.

#### What is a World Café?

A World Café or Knowledge Café is a structured conversational process for knowledge sharing in which groups of people discuss a topic at several tables, with individuals switching tables periodically and getting introduced to the previous discussion at their new table by a "table host".

## World Café Etiquette and Facilitator Introductions World Café Etiquette

· Focus on what really matters





- Contribute your ideas and thinking
- Speak your mind and heart with humility.
- Listen to understand.
- Connect your ideas with others.
- Play, doodle and draw
- Have fun!

#### **Tools of Community Engagement**

These are tools you can take back to your organization to assure your communities' voices are heard!

- World Café -Collaborative Dialogue for Questions that matter www.theworldcafe.com
- SWOT–Assessing Strengths/ Weaknesses/Opportunities/ Threats
- Appreciative Inquiry-Asking what's best about your organization helps identify its values.
- Affinity Model—gathering comments on a key question without judgment, then identifying common themes

Table Hosts spend 10 minutes gathering feedback (on post-its) and 2 minutes clarifying and identifying themes.

Table Hosts (Facilitators) for World Café Exercise:

Tiffany O'Neal, Healthier Somerset
Jeremy Szeluga, Montgomery Township Health Department
Cheryl Komline, Bernards Health Department
Devangi Patel, Montgomery Township Health Department

#### Support Team:

Monika Baskaran, Montgomery Township Health Department Nicholas Cai, Montgomery Township Health Department Siobhan Spano, Hillsborough Health Department - Timekeeper Stephanie Carey, Montgomery Township Health Department - Floater

Table One: Tiffany — What does a healthy community look like (define "health")? What do you view as barriers to good health in Somerset County? (Partial SWOT analysis) (Community)

Table Two: Jeremy — Appreciative Inquiry to define organizational values and themes—The theme for your columns may be values-words What is the best thing about GSPHP? Healthier Somerset? Why are you here today? A year from now, what will bring you back to the organization? (Organization)





Table Three: Cheryl – Based on the data you heard today, which items are most relevant to our Community Health Assessment? What/whose input is missing? (CHA) qualitative data and gap analysis from community members

Table Four: Devangi -- For our 2015-2018 Community Health Improvement Plan implementation, what worked well? What didn't go so well? What lessons did we learn implementing the 2015 CHIP that we can use to do better next time? OR What one thing do you wish we could all work together on over the next three years to make our towns healthier? (CHIP Evaluation)

#### Questions:

Participants started at the table matching the number given to them at Registration.

Participants wrote their answers to the questions on post-it notes in 3-5 word phrases. A person could write as many post-its as they want, 1 idea per post-it., and stick on flip chart paper. After 10 minutes (or sooner if they are done), facilitator encouraged the group to spend two minutes clustering the post-its along similar themes, asking questions to clarify, build consensus, and name the theme. A total of 12 minutes per small group, with 2 minute changeovers. (A new flip chart page for each changeover)

There were a total of 4 rotations to the 4 tables. Final answers were compiled into tables along with identified themes for each of the questions:

| Healthler<br>SOMERSET                       | What does a healthy community look like? (Define Health)      |   |  |   |   |  |  |
|---|---|---|--|---|---|--|--|
| Mental/Emotional<br>Health                  | Disease Prevention  | Health/Well Being   | Community Involvement  | Access to Care  | Environment                               |  |  |
| Mental well being (x4)                      | Farly detection for all cancer and<br>chronic diseases        | Healthy Community<br>People aware of where to<br>get help | Healthy people participating in<br>clinics   | Everyone being able to<br>have affordable health<br>care  | Access to fresh fruit<br>and vegetables   |  |  |
| Emotional health                            | Preventive Care Programs                                      | Belief that health is a<br>priority                       | People seeking information   | financial support   | A good public<br>health infrastructure    |  |  |
| emotional,<br>relationship support          | Free of Disease (x2)  | physical well being (14)                                  | Support groups all ages  | Conditions that lead to \$<br>affordability of<br>healthcare  | Healthy air and<br>water                  |  |  |
| Mental health needs<br>treated (affordable) | Using science or set to prevent<br>disease and promote health | People exercising and<br>learning<br>(x2)                 | People connect to people more than first cats  | Sufficient and accessible<br>treatment providers  | Fitness and green<br>structs (open space) |  |  |
| Stigms free(2)                              | Preventing disease not just treating                          | Health Activities   | People helping people "clear up"   | Equity in everything  | Complete streets                          |  |  |
| Treuma informed                             |   | Access to spiritual,<br>physical support                  | People outside engaged in activities   | Options for medical care  | Smoke free                                |  |  |
|   |   | Everyone lives long<br>active and healthy lives           | People living and working together<br>in health and harmony                              | Access to quality<br>healthcare   | Hoskiny menu<br>restaurants               |  |  |
|   |   | Walk ability  | Kind, Caring and Supportive  | Economic options  |   |  |  |
|   |   | Bio-psycho social<br>(bolistic)                           | People outside telking together  | A healthy community is<br>one where healthcare is a<br>valuable and equal to no<br>matter what your<br>finances are |   |  |  |
|   |   | Healthy mind/healthy body                                 | A community where people have<br>opportunity to be physically active<br>outdoors/indoors |   |   |  |  |
|   |   | Mind-Body-Spirit work<br>as one holistic support          | Resources to use   |   |   |  |  |
|   |   |   | Spiritual community  |   |   |  |  |
|   |   |   | Public health programs   |   |   |  |  |
|   |   |   | Priendly welcoming community   |   |   |  |  |
|   |   |   | Strong community policing  |   |   |  |  |

| Healthier<br>SOME USE   |   |  | What do you view as a barrier to good health in Somerset County? |  |  |   |  |  |  |  |
|---|---|--|--|--|--|---|--|--|--|--|
| Insurance   | Access to care  | Communication                                  | Transportation   | Health Literacy  | Money/Funding                                    | Affordability                           | Stigma/<br>Community Norma                       | Other  |  |  |
| Lack of or not signed<br>up for insurance   | Lack of recovery<br>support options                         | Lack of Social<br>media presence               | Dengerous roads for physical activities                          | Misundentanding<br>Public Health                         | Lack of funding x2                               | Cost of Healthy<br>Foods                | Stigma x2  | Political agendas                            |  |  |
| Lack of recovery<br>support options   | Cost of healthcare<br>including dental<br>care              | Lack of<br>communication of<br>community needs | Transportation access  | Lack of health<br>considering and public<br>decisions    | Federal Gov't<br>Financial Support               | Financial Cost of<br>Living (Very High) | Competitions with<br>black and white<br>entities | Too much focus<br>on material<br>accusations |  |  |
| Outdated insurance<br>coverage rules  | Rевоштова всовая x2   | Language Barrier x2                            | Transportation in larger towns                                   | Lack of education<br>about health                        | Funding  | Cost of Living                          | Affordability of area (economics)                | System varies                                |  |  |
| No one is holding<br>insurance companies<br>accountable for poor<br>coverage and high<br>premiums | Access by<br>adolescents (athaid<br>to tell mom and<br>dad) | Lack of education in<br>public health          | Transportation x2  | Not Understanding<br>public health                       | Equity in resouces                               | Income vs Expenses                      | Lack of knowledge                                | No support system                            |  |  |
| High out of pocket<br>insurance costs   | Focus is on care as<br>opposed to primary<br>prevention     | Social services                                | Lack of Transportation   | Lack of free maps at<br>locations (like coffee<br>shops) | Law of diminishing<br>returns for budget<br>cuts | Affordable Living                       | Inequity<br>concentration<br>povertty            |  |  |  |
| No Medicaid<br>Insurance accepted   | Health insurance premiums                                   | Need more english<br>speaking professors       |  |  |  | High Costs of living                    | Social inequality                                |  |  |  |
| No Medicaid<br>Providers  | Financial Providers<br>+ Patients                           |  |  |  |  |   |  |  |  |  |
|   | Cost of Healthcare<br>Dental Care                           |  |  |  |  |   |  |  |  |  |

| Healthier<br>SQMERSET  | What is the best thing a                 | Public Health                                      | 6.28.18 |  |
|--|--|--|---------|--|
| People   | Process                                  | Results  |         |  |
| Many partners  | Sharing information                      | Access to community                                |         |  |
| Relevant presenters  | Community                                | Improving the health & well-<br>being of community |         |  |
| Their passion for the community  | Joint ideas                              | Improvement of services in<br>community            |         |  |
| A well informed membership   | Shared communication                     | Funding for studies & staff                        |         |  |
| Coalition to address health needs<br>of our community                  | Networking with partner<br>organizations | Full time paid staff                               |         |  |
| People who care and are<br>passionate about the health of<br>community | Collaboration (x5)                       | Funding for wellness programs                      |         |  |
| Supportive partners  | Takes on new issues                      | Addressing community needs                         |         |  |
|  | Collecting information                   |  |         |  |
|  | Always looking to improve                |  |         |  |

| Healthier<br>SOMERSET   | What is the bes                          | _                | Public Health | 6.28.18 |  |
|---|--|------------------|---------------|---------|--|
| Partnership   | Process                                  | Results          | Data          |         |  |
| The Health Officers & Associates  | Progress                                 | Thriving members | Data (x3)     |         |  |
| Dedication to Public Health<br>Somerset Co.   | Cooperation                              |                  |               |         |  |
| Dedication to<br>helping/education/collaboration  | It promotes public health collaborations |                  |               |         |  |
| Comprehensive view of community<br>health (x2)  |  |                  |               |         |  |
| Provide a public health perspective to health   |  |                  |               |         |  |
| Good organization for health officers<br>to discuss concerns in their<br>municipalities |  |                  |               |         |  |
| Ability to work with other Public<br>Health members                                     |  |                  |               |         |  |

| Healthier<br>SOMERSET                  |   | Public Health                       | 6.28.18  |                            |                          |  |
|--|---|-------------------------------------|--|----------------------------|--------------------------|--|
| Continued Energy &<br>Optimism         | Engagement/Make a<br>Difference   | Leadership                          | Learn and Share  | Networking                 | Other                    |  |
| To advocate for Local<br>Public Health | Public Health improvement   | Strong link to local<br>governments | Learn about<br>mandatory practice of<br>STD prevention                       | To visit Nurse<br>Assoc.   | Accreditation            |  |
| I love Somerset County                 | Improve school health & well-being  | Passionate leaders                  | Learn where our community stands & how to improve                            | To begin<br>collaborations | Support the CHIP process |  |
| To express my voice & opinion          | live & work in Somerset<br>County. I want to contribute<br>to making the county<br>better/healthy | To support community leaders        | To learn more about<br>Healthier Somerset                                    | Meet people in county      | Education                |  |
|  | Learn how to better support community (x3)  |                                     | Learn more about<br>how different parts of<br>public health are<br>connected | Relationship<br>building   | My colleagues            |  |
|  | To build and be cohesive  |                                     | Wanted to hear<br>preliminary data   |                            |                          |  |
|  | Share community's needs   |                                     | To get insight on<br>public health issues in<br>the county                   |                            |                          |  |

| Heathler<br>SOMEOSEE  | A Yea   | Full in Dealth                                      | 6.28.18                           |                            |  |  |  |
|---|---|---|-----------------------------------|----------------------------|--|--|--|
| Results   | Connections/Continued<br>Partnerships   |   |                                   |                            |  |  |  |
| Demonstration of two public<br>health initiatives &<br>improvements | Still working   | Commitment to change                                | Public Health guidance            | Ideas to improve community |  |  |  |
| Success in improvement of health services                           | More collaboration between<br>addiction + mental health<br>services & Healthier<br>Somerset | Better/more data (x4)                               | Concerns related to school health |                            |  |  |  |
|   | Partnerships  | Increased focus on public<br>health issues (x2)     |                                   |                            |  |  |  |
|   | Community connections   | Obtainable actions items                            |                                   |                            |  |  |  |
|   |   | Progress in implementing<br>health improvement plan |                                   |                            |  |  |  |

| Mealthler<br>25 Value 1 | Based on the data                       | Priblic Beatth                  | 6/28/18  |   |  |  |
|-------------------------|---|---------------------------------|--|---|--|--|
| MENTAL HEALTH           | ACCESS TO RESOURCES                     | DATA                            | OTHER  |   |  |  |
| Mental Health x5        | Transportation                          | Obesity weight                  | Insues of Equity   | The data seemed inverted vs<br>community perception | Socialization                            |  |
|                         | Transportation Access                   | Diabetes                        | Easy ways to get active in busy lives                              |   |  |  |
|                         | Apps to access country wide resources   | Obesity                         | Housing Concerns   | Nutrition information for residents                 |  |  |
|                         | Where to find health<br>information     | Late stage of cancer very young | Food Deserts   |   | Lack of Participation                    |  |
|                         | Health Information                      |                                 | Transportation Issues  |   | Senall Total Quantity<br>of participants |  |
|                         | Maps of resources within our<br>country |                                 | Cultural and language<br>barriers                                  |   |  |  |
|                         | Equity access to services               |                                 | What is the barrier to getting<br>more participation in<br>survey? |   |  |  |
|                         | Access to care                          |                                 |  |   |  |  |
|                         | Increase Funding for Public<br>Health   |                                 |  |   |  |  |

| Haalthler   | Based on t                                 | •  | ata you heard tonight, which items are missing from our community health assessment?                                    |  |  | Public Hendth |  |
|---|--|--|---|--|--|---------------|--|
| Mental Health   | Transportation                             | Data   | Access to Resources   | Representation   | Languages  |               |  |
| People in recovery from<br>mental health substance<br>abuse             | Access to<br>Transportation<br>Barriers x4 | Evaluation prior to CHIP   | Like Doctors/ Providers   | Public Health perspective  | Non english speaking<br>communities asian/S.E.<br>Asian Communities,<br>Eastern European)      |               |  |
| Definition of community<br>mental health                                | Affordable<br>Transportation x2            | % People and Age and Race<br>Distribution by Municipality                    | Limited coverage in<br>Private health insurances  | Teachers and Education   | Non-English Speaking<br>many spoken languages  |               |  |
| % Somerset County<br>Residents utilization of<br>mental health services |  | Qualitative Community Health<br>Data - What are community<br>leaders socing? | Access to Care Barriers   | Clergy Faith Loaders x 3   | Data from the unserved<br>and underserved<br>especially from those<br>who do not speak English |               |  |
|   |  | Municipal Level Data<br>Summaries  | Community Services  | Electoral Officials  | Language Terminology   |               |  |
|   |  | Health Equity  | Community Education   | "Millennials" 18-25 years x 3  |  |               |  |
|   |  | % Insured Somerset County<br>residents who utilized Primary<br>Care Services | Materials in languages<br>representative of the<br>non-english speaking<br>populations in the<br>respective communities | Community Members/Leaders x4   |  |               |  |
|   |  | Community Assets   |   | LOBTQ individuals  |  |               |  |
|   |  | Environmental Factors Data   |   | The Healthcare Professional  |  |               |  |
|   |  | Closn Air, Closn Water Data  |   | Parents  |  |               |  |
|   |  | Medicaid utilization   |   | Vo Tech  |  |               |  |
|   |  | More people to give input  |   | Homeless Populations   |  |               |  |
|   |  |  |   | Older Adults   |  |               |  |
|   |  |  |   | Seniors in long term care facilities                                     |  |               |  |
|   |  |  |   | Teens/Youth/Schools x5   |  |               |  |
|   |  |  |   | Vets   |  |               |  |
|   |  |  |   | Identification of Vulnerable,<br>unserved and underserved<br>populations |  |               |  |
|   |  |  |   | Police Department  |  |               |  |

| Receiver                |  | What Whose input is missing? |                           |                              |   |  |  |
|-------------------------|--|------------------------------|---------------------------|------------------------------|---|--|--|
| Youth                   | Healthouse   | Leaders                      | Representation            | Public Realth                | Language  |  |  |
| Millensiek" 19-25 years | The Healthcare Professional                            | Trackers and Education       | Evaluation prior CHEP     | Public Health<br>perspective | Language Terminology  |  |  |
| Adolosuser young adults | Vets   | Clorgy Faith Loaders         | Passets                   | Community Health<br>Workers  | Non english speaking communities as last S.S.<br>Asian Communities, Eastern European) |  |  |
| Youth                   | Doctors/ Providen                                      | Electoral Officials          | People and Distribution   | Prevention Agencies          | Non-Roglish Speaking many spoken<br>languages   |  |  |
| Toma                    | Sources with long term care Societies                  | Laden                        | Community Massines        |                              |   |  |  |
|                         | People in movery from mental health<br>solutions about | Other Community<br>Landers   | More people to give input |                              |   |  |  |
|                         |  | Police department            | Clife Adula?              |                              |   |  |  |
|                         |  | Charle Leaden                | Vo Tesh                   |                              |   |  |  |
|                         |  |                              | Houseless Populations     |                              |   |  |  |
|                         |  |                              | Schools                   |                              |   |  |  |
|                         |  |                              | LGBTQ individuals         |                              |   |  |  |

| Physilius<br>SEMESTI   | For our 2015-2018 (                 | For our 2015-2018 Community Health Improvement Plan Implementation, what worked well |                              |  |  |  |  |  |  |
|--|-------------------------------------|--|------------------------------|--|--|--|--|--|--|
| Collaboration  | Committeement                       | General Comments   | Services                     |  |  |  |  |  |  |
| A large group discussion   | Hospital committed to process       | I like the priorities and that mental<br>health was included                         | Substance abuse prevention   |  |  |  |  |  |  |
| Community ORGS invited to process  | Dedication of partners to implement | I use the chip for great writing   | Accessible care for everyone |  |  |  |  |  |  |
| Community partner participation  | Priorities seem on target           | Good strategies to address needs   | Non bias care                |  |  |  |  |  |  |
| Working groups were good   | Partners seem involved and vested   |  |                              |  |  |  |  |  |  |
| The samion where we broke into<br>groups and came up with the focus<br>areas, very interactive and inclusive<br>of entire H.S. |                                     |  |                              |  |  |  |  |  |  |
| Working together   |                                     |  |                              |  |  |  |  |  |  |
| Coalitions from various sectors<br>involved  |                                     |  |                              |  |  |  |  |  |  |

| Healthier                                      | For our  | r 2015-2018 Comm<br>Implementation              | 6.28.18   | Public Health   |   |                            |  |
|--|--|---|---|---|---|----------------------------|--|
| Data   | Tracking   | Funding   | Suggestions   | Access  | Community   | Not aware of CHII          |  |
| Raw data is limited                            | Baselines were questionable                                  | Not enough funding for<br>Public Transportation | Identify new partners to<br>work towards goal                           | Barriers  | Disconnect between<br>clinical and public<br>health | Not aware of CHIP<br>(x14) |  |
| Lack of data for<br>comparison to next<br>CHIP | Mental health<br>programs/education,<br>school mental health | No funding for implementing major improvements  | Convey goals in lay<br>language to public                               | Transportation alternatives limited (x3)                                |   |                            |  |
|  | Goals were not realistic                                     | Lack of implementation funding                  | Ensure that CHIP<br>strategies connect back to<br>CHA.                  | Language barriers   | Too much<br>healthcare focus                        |                            |  |
|  | Lack of progress<br>reports                                  | Resources to address<br>barriers to care        | Require provision of<br>Baseline data                                   | Not signed up for insurance   | Lots of hospital, not<br>community health<br>need   |                            |  |
|  | No CHIP tracking accountability                              |   | Designate priority area<br>leaders to provide data<br>for CHIP Tracking | Availability of services in<br>northern and southern parts of<br>county | Hospital need vs.<br>Community Need                 |                            |  |
|  | Little to no<br>implemental known                            |   |   |   |   |                            |  |
|  | Some of the<br>objectives were not<br>SMART                  |   |   |   |   |                            |  |

| Healthler<br>SOMENSET |                        |                     | n implement<br>to do better n |                       | 6.28.18          | Public Bealth           |             |
|-----------------------|------------------------|---------------------|-------------------------------|-----------------------|------------------|-------------------------|-------------|
| Need to share mu      | nicipal level data wit | h municipalities to | address issues at th          | e local level         |                  |                         |             |
| Communication         |                        |                     |                               |                       |                  |                         |             |
| Communication o       | f activities from wor  | kgroups to commi    | mity workers and ag           | gency partners        |                  |                         |             |
| Track CHIP regul      | arly                   |                     |                               |                       |                  |                         |             |
| Goals and Objecti     | ves must tie back to   | CHA                 |                               |                       |                  |                         |             |
| Objectives must b     | S.M.A.R.T.             |                     |                               |                       |                  |                         |             |
| Are goals focused     | on the community?      |                     |                               |                       |                  |                         |             |
| CHIP should focu      | s on well care         |                     |                               |                       |                  |                         |             |
| Public Health Foc     | us is key              |                     |                               |                       |                  |                         |             |
| Data accuracy (sp     | )                      |                     |                               |                       |                  |                         |             |
| Better alignment b    | etween healthier So    | merset and local h  | ealth                         |                       |                  |                         |             |
| rofessional traini    | ngs for coalition par  | tners about S.M.A   | R.T. objectives, pu           | blic health, cultural | competence, heal | th equity, available da | sta sources |

| Healthier<br>SOMERSET   | What do you wis   | 6.28.18  | Public Health   |   |   |  |
|---|---|--|---|---|---|--|
| Suggestions   | Data  | Mental Health  | Questions   | Education   | Schools and Youth   |  |
| Access to affordable prescriptions and free screening   | Share raw data with<br>community partners<br>who cannot attend<br>regular meetings    | Mental Health<br>Program definition,<br>focus for actual<br>implementation and<br>what each group can<br>offer           | Are we<br>reaching/communicating<br>with people whose<br>primary language isn't<br>English? | Training<br>physicians on<br>MH and PH and<br>substance abuse | Develop<br>community youth<br>recreation centers                            |  |
| Promote impact of Public<br>Health  | Is data from FQHC correct?  | Fliminate issues<br>around stigma (mental<br>health)   | How do we define<br>Mental Health?  | Root cause<br>analysis  | School-based<br>services for all<br>community schools                       |  |
| Satellite office for primary care<br>for poverty population to avert<br>use of ER.  | Implement a performance management QI system to keep track of activities and progress | Mental Health x3   | What is Public Health's<br>role in addressing and<br>preventing Mental<br>Health?           | Education of residents about disease stats                    | Substance use<br>provention<br>programs starting<br>in elementary<br>school |  |
| Transition conversation from<br>health care to public health<br>(Primary prevention not<br>secondary or tertiary<br>prevention) | Data from Richard Hall  | More satellite<br>substance use<br>treatment providers<br>other than ER, for<br>lower income and non<br>English speakers | What is the Hospital's role in addressing Mental Health issues in the community?            | Focus on equity<br>in all not equality                        |   |  |
| CHIP not shalf document,<br>encourage and promote<br>benefits of utilizing the CHIP<br>in 2018+                                 | Data from Zufall  |  |   |   |   |  |
| A county wide approach to<br>meet needs not by municipality   | Data from Zufall- are<br>people using it?   |  |   |   |   |  |
| Increase awareness of<br>available resources  |   |  |   |   |   |  |
| Providing non English<br>speaking people information  |   |  |   |   |   |  |
| Recommend and Implement<br>Policies across districts  |   |  |   |   |   |  |
| Set up programs where ER<br>does not accept primary care<br>issues and refers to on-site<br>satellite office                    |   |  |   |   |   |  |



## Healthier Somerset & Greater Somerset Public Health Partnership



SWOT Analysis Based on June 28, 2018 Community World Café Community Engagement Exercise

| Strengths  | Weaknesses  |
|--|---|
| Member interest in learning about community health needs Always looking to improve Collaboration between community partners Member commitment/involvement Shared resources Access to community CHIP used to apply for program funding Passion to support the underserved Members want to be actively engaged and make a difference Promotes Public Health collaborations   | Disconnect between clinical and public health Unidentified unrepresented populations Lack of social media presence Lack of Public health focused trainings (ex: equity, population health, policy and systems change) Lacking focus on affordable food, housing, health care and transportation Significant health inequities by zip code Document meetings and conversations with GMPHP leadership CHIP Objectives weren't SMART and didn't include baseline data and sources Lack of localized data by municipality (vulnerable populations by priority area) |
| Opportunities  | Threats   |
| Funding for studies and staff Transition conversation from health care to public health (primary prevention — not secondary or tertiary) Satellite offices for primary care and substance use for lower income and non-English speakers to reduce unnecessary ER use Conduct focus groups Identify health inequities experienced by vulnerable populations Collect mental health and substance abuse data to address mental health needs Professional development training Work with Priority Area Leaders to develop SMART objectives | Lack of awareness of Healthier Somerset's CHA/CHIP process among new members Lack of funding for affordable food, housing, health care and transportation Lack of funding for local data collection Funding for programs, marketing and resources Gaps in accountability in CHIP Implementation Language barriers Lack of Medicaid providers Community norms (social/health inequities, stigma, etc.) Communicating with partners/representatives of the community who are not available Federal Government financial support and budget cuts                   |

nformation last updated: July 30, 2018

## APPENDIX G: DISCHARGES AND POPULATION 18-64 FOR AMBULATORY CARE SENSITIVE CONDITIONS

| ACSC Discharges from NJ Hospitals | Total ACS<br>Discharges | ANGINA | ACTURAA  | BACTERIAL<br>PNEUMONIA | CELLULITIC | CONGESTIVE<br>HEART<br>FAILURE | CONVULSION | COPD  | DEHYDRATION | DENTAL     | DIABETES | ENT |
|-----------------------------------|-------------------------|--------|----------|------------------------|------------|--------------------------------|------------|-------|-------------|------------|----------|-----|
| <u>{</u>                          | Discharges              | ANGINA | ASTRIVIA | PINEUIVIUNIA           | CELLULIIIS | FAILURE                        | CONVOLSION | COPD  | DENTURATION | CONDITIONS | DIADETES | ENI |
| ALL RACES                         |                         | L      |          | <u> </u>               |            |                                |            |       | <u> </u>    | ļ          |          |     |
| Statewide                         | 55,565                  | 603    | 3,780    | 6,170                  | 6,230      | 5,260                          | 963        | 6,355 | 2,923       | 761        | 7,624    | 533 |
| RWJSOM PSA                        | 1,851                   | 11     | 136      | 189                    | 213        | 141                            | 39         | 151   | 79          | 42         | 286      | 23  |
| WHITE                             |                         |        |          |                        |            |                                |            |       |             |            |          |     |
| Statewide                         | 27,668                  | 276    | 1,289    | 3,316                  | 4,150      | 2,014                          | 528        | 3,729 | 1,469       | 379        | 3,271    | 237 |
| RWJSOM PSA                        | 842                     | 1      | 57       | 84                     | 135        | 53                             | 22         | 84    | 30          | 25         | 122      | 5   |
|                                   |                         |        |          |                        |            |                                |            |       |             |            |          |     |
| BLACK                             |                         |        |          |                        |            |                                |            |       |             |            |          |     |
| Statewide                         | 15,535                  | 160    | 1,363    | 1,578                  | 892        | 2,180                          | 242        | 1,792 | 740         | 186        | 2,603    | 134 |
| RWJSOM PSA                        | 508                     | 6      | 31       | 57                     | 38         | 61                             | 8          | 44    | 19          | 11         | 78       | 7   |

|                      |            | 010700                 | GRAND MAL                 |         |         |                         | WIDNEW/UDI | NUTRITION                  |              | BE11/16             |              |               |
|----------------------|------------|------------------------|---------------------------|---------|---------|-------------------------|------------|----------------------------|--------------|---------------------|--------------|---------------|
| ACSC Discharges from | Total ACS  | GASTRO-<br>INSTESTINAL | STATUS/OTHER<br>EPILEPTIC | HYPERTE | HYPOGLY | IMMUNIZATION<br>RELATED | NARY       | DEFICIENCIES<br>(til 12/14 | OTHER        | PELVIC<br>INFLAMMAT | PULMONARY    | SKIN GRAFTS W |
| NJ Hospitals         | Discharges | OBSTRUCTION            | CONVULSION                | NSION   | CEMIA   | PREVENTABLE             | INFECTION  | DSCHG)                     | TUBERCULOSIS | ORY DISEASE         | TUBERCULOSIS | CELLULITIS    |
| ALL RACES            |            |                        |                           |         |         |                         |            |                            |              |                     |              |               |
| Statewide            | 55,565     | 1,936                  | 4,534                     | 994     | 60      | 8                       | 4,164      | 2,068                      | 33           | 359                 | 73           | 134           |
| CMMC PSA             | <br>2,102  | 82                     | 198                       | 31      | 1       | 1                       | 145        | 102                        | 1            | 10                  | 6            | 11            |
|                      |            |                        |                           |         |         |                         |            |                            |              |                     |              |               |
|                      |            |                        |                           |         |         |                         |            |                            |              |                     |              |               |
| <u>WHITE</u>         |            |                        |                           |         |         |                         |            |                            |              |                     |              |               |
| Statewide            | 27,668     | 969                    | 2,226                     | 346     | 25      | 3                       | 2,051      | 1,203                      | 4            | 110                 | 6            | 67            |
| CMMC PSA             | 607        | 17                     | 52                        | 3       |         |                         | 47         | 36                         |              | 3                   |              | 3             |
|                      |            |                        |                           |         |         |                         |            |                            |              |                     |              |               |
|                      |            |                        |                           |         |         |                         |            |                            |              |                     |              |               |
| <u>BLACK</u>         |            |                        |                           |         |         |                         |            |                            |              |                     |              |               |
| Statewide            | <br>15,535 | 437                    | 1,293                     | 427     | 26      | 2                       | 841        | 462                        | 10           | 118                 | 16           | 33            |
| CMMC PSA             | 611        | 25                     | 60                        | 11      |         |                         | 32         | 24                         |              | 4                   | 1            | 1             |

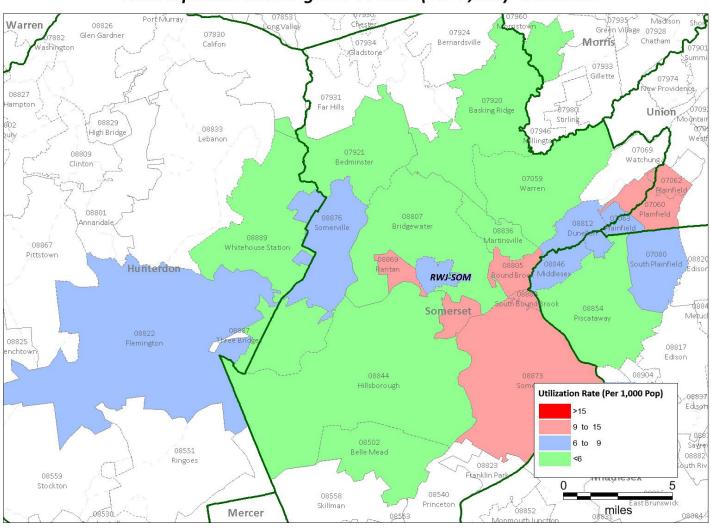
Population Source: Claritas Inc. via New Solutions

| ACSC 2016 Discharge<br>Rate per 1,000<br>population | Est 2016<br>Population<br>18-64 | Total ACS<br>Discharges | ANGINA | ASTHMA  | BACTERIAL<br>PNEUMONIA | CELLULITIS | CONGESTIVE<br>HEART<br>FAILURE | CONVULSION | COPD    | DEHYDRATION | DENTAL<br>CONDITIONS | DIABETES | ENT     |
|---|---------------------------------|-------------------------|--------|---------|------------------------|------------|--------------------------------|------------|---------|-------------|----------------------|----------|---------|
| ALL RACES   |                                 |                         |        |         |                        |            |                                |            |         |             |                      |          |         |
| Statewide   | 5,610,651                       | 9.903                   | 0.107  | 0.674   | 1.100                  | 1.110      | 0.938                          | 0.172      | 1.133   | 0.521       | 0.136                | 1.359    | 0.095   |
| CMMC PSA  | 196,505                         | 10.697                  | 0.153  | 0.672   | 1.165                  | 1.216      | 1.242                          | 0.122      | 1.008   | 0.478       | 0.117                | 1.435    | 0.097   |
| Variance from Statewide                             |                                 | 0.793                   | 0.045  | (0.002) | 0.066                  | 0.106      | 0.304                          | (0.050)    | (0.125) | (0.043)     | (0.019)              | 0.076    | 0.002   |
| <u>WHITE</u>  |                                 |                         |        |         |                        |            |                                |            |         |             |                      |          |         |
| Statewide   | 3,657,780                       | 7.564                   | 0.075  | 0.352   | 0.907                  | 1.135      | 0.551                          | 0.144      | 1.019   | 0.402       | 0.104                | 0.894    | 0.065   |
| CMMC PSA  | 108,045                         | 5.618                   | 0.102  | 0.231   | 0.703                  | 0.824      | 0.500                          | 0.083      | 0.731   | 0.278       | 0.056                | 0.574    | 0.046   |
| Variance from Statewide                             |                                 | (1.946)                 | 0.026  | (0.121) | (0.203)                | (0.311)    | (0.051)                        | (0.061)    | (0.288) | (0.124)     | (0.048)              | (0.320)  | (0.019) |
| BLACK   |                                 |                         |        |         |                        |            |                                |            |         |             |                      |          |         |
| Statewide   | 783,378                         | 19.831                  | 0.204  | 1.740   | 2.014                  | 1.139      | 2.783                          | 0.309      | 2.288   | 0.945       | 0.237                | 3.323    | 0.171   |
| CMMC PSA  | 30,581                          | 19.980                  | 0.294  | 1.373   | 2.322                  | 1.373      | 3.662                          | 0.164      | 1.962   | 0.556       | 0.229                | 2.714    | 0.164   |
| Variance from Statewide                             |                                 | 0.149                   | 0.090  | (0.366) | 0.307                  | 0.235      | 0.880                          | (0.145)    | (0.326) | (0.389)     | (0.009)              | (0.609)  | (0.008) |
| Variance Black from Wh                              | ite                             |                         |        |         |                        |            |                                |            |         |             |                      |          |         |
| Statewide   |                                 | 12.27                   | 0.13   | 1.39    | 1.11                   | 0.00       | 2.23                           | 0.16       | 1.27    | 0.54        | 0.13                 | 2.43     | 0.11    |
| PSA   |                                 | 14.36                   | 0.19   | 1.14    | 1.62                   | 0.55       | 3.16                           | 0.08       | 1.23    | 0.28        | 0.17                 | 2.14     | 0.12    |
| Est Admissions Statewid                             | e                               | 9609.41                 | 100.89 | 1086.94 | 867.82                 | 3.20       | 1748.67                        | 128.92     | 993.37  | 425.39      | 104.83               | 1902.46  | 83.24   |
| Est Admissions PSA                                  |                                 | 439.20                  | 5.89   | 34.92   | 49.49                  | 16.81      | 96.72                          | 2.45       | 37.64   | 8.51        | 5.30                 | 65.45    | 3.58    |

|                         |            |            |             | GRAND MAL    |         |         |              |           | NUTRITION    |              |             |              |               |
|-------------------------|------------|------------|-------------|--------------|---------|---------|--------------|-----------|--------------|--------------|-------------|--------------|---------------|
| ACSC 2016 Discharge     | Est 2016   |            | GASTRO-     | STATUS/OTHER |         |         | IMMUNIZATION |           | DEFICIENCIES |              | PELVIC      |              |               |
| Rate per 1,000          | Population | Total ACS  | INSTESTINAL | EPILEPTIC    |         | HYPOGLY | RELATED      | NARY      | (til 12/14   | OTHER        | INFLAMMAT   |              | SKIN GRAFTS W |
| population              | 18-64      | Discharges | OBSTRUCTION | CONVULSION   | NSION   | CEMIA   | PREVENTABLE  | INFECTION | DSCHG)       | TUBERCULOSIS | ORY DISEASE | TUBERCULOSIS | CELLULITIS    |
| ALL RACES               |            |            |             |              |         |         |              |           |              |              |             |              |               |
| Statewide               | 5,610,651  | 9.903      | 0.345       | 0.808        | 0.177   | 0.011   | 0.001        | 0.742     | 0.369        | 0.006        | 0.064       | 0.013        | 0.024         |
| CMMC PSA                | 196,505    | 10.697     | 0.417       | 1.008        | 0.158   | 0.005   | 0.005        | 0.738     | 0.519        | 0.005        | 0.051       | 0.031        | 0.056         |
| Variance from Statewide |            | 0.793      | 0.072       | 0.200        | (0.019) | (0.006) | 0.004        | (0.004)   | 0.150        | (0.001)      | (0.013)     | 0.018        | 0.032         |
| WHITE                   |            |            |             |              |         |         |              |           |              |              |             |              |               |
| Statewide               | 3,657,780  | 7.564      | 0.265       | 0.609        | 0.095   | 0.007   | 0.001        | 0.561     | 0.329        | 0.001        | 0.030       | 0.002        | 0.018         |
| CMMC PSA                | 108,045    | 5.618      | 0.157       | 0.481        | 0.028   | 0.000   | 0.000        | 0.435     | 0.333        | 0.000        | 0.028       | 0.000        | 0.028         |
| Variance from Statewide |            | (1.946)    | (0.108)     | (0.127)      | (0.067) | (0.007) | (0.001)      | (0.126)   | 0.004        | (0.001)      | (0.002)     | (0.002)      | 0.009         |
| BLACK                   |            |            |             |              |         |         |              |           |              |              |             |              |               |
| Statewide               | 783,378    | 19.831     | 0.558       | 1.651        | 0.545   | 0.033   | 0.003        | 1.074     | 0.590        | 0.013        | 0.151       | 0.020        | 0.042         |
| CMMC PSA                | 30,581     | 19.980     | 0.818       | 1.962        | 0.360   | 0.000   | 0.000        | 1.046     | 0.785        | 0.000        | 0.131       | 0.033        | 0.033         |
| Variance from Statewide |            | 0.149      | 0.260       | 0.311        | (0.185) | (0.033) | (0.003)      | (0.027)   | 0.195        | (0.013)      | (0.020)     | 0.012        | (0.009)       |
| Variance Black from Wh  | ite        |            |             |              |         |         |              |           |              |              |             |              |               |
| Statewide               |            | 12.27      | 0.29        | 1.04         | 0.45    | 0.03    | 0.00         | 0.51      | 0.26         | 0.01         | 0.12        | 0.02         | 0.02          |
| PSA                     |            | 14.36      | 0.66        | 1.48         | 0.33    | 0.00    | 0.00         | 0.61      | 0.45         | 0.00         | 0.10        | 0.03         | 0.00          |
| Est Admissions Statewid | e          | 9609.41    | 229.47      | 816.26       | 352.90  | 20.65   | 1.36         | 401.74    | 204.36       | 9.14         | 94.44       | 14.71        | 18.65         |
| Est Admissions PSA      |            | 439.20     | 20.19       | 45.28        | 10.15   | 0.00    | 0.00         | 18.70     | 13.81        | 0.00         | 3.15        | 1.00         | 0.15          |

Population Source: Claritas Inc. via New Solutions

# RWJ-Somerset PSA/SSA Total Inpatient ACSC Age 18-64 Rate (Per 1,000) - All Races



# RWJ-Somerset PSA/SSA Total Inpatient ACSC Age 18-64 Rate (Per 1,000) - Black

