Hunterdon Medical Center

2019

COMMUNITY HEALTH NEEDS ASSESSMENT

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGEMENTS

Thank you to the many community members who participated in the focus groups and the community stakeholders who participated in the Forces of Change Assessment for their input. To our 70 plus organizations who make up the Hunterdon County Partnership for Health and who are dedicated to the health and wellness of our residents, we appreciate your shared interest in the wellbeing of our community. Special thanks to the Hunterdon Healthcare Population Health team lead by Rose Puelle, PhD whose data analytics we depend on for an accurate assessment. Maya Jategaonkar, Hunterdon Central High School student Class of 2020, thank you for your administrative and research assistance with the 2019 CHNA. The support and participation of those mentioned throughout the entire Community Health Needs Assessment process has been invaluable.

ABOUT US

Hunterdon Healthcare delivers compassionate and exceptional care that improves the health of the community**.** A non-profit organization, Hunterdon Healthcare provides a full range of quality, integrated services and programs that respond to the needs of the community. Hunterdon Medical Center, a 178-bed teaching hospital and Magnet designated facility, the nursing profession's highest honor, provides comprehensive medical, diagnostic, surgical, behavioral health, rehabilitative and preventive health services for inpatients and outpatients. Hunterdon Healthcare treats some 9,000 inpatients annually with 32,000 Emergency Department visits and over 570,000 outpatient visits per year.

Heart and Vascular Care A knowledgeable staff of physicians, specialists, nurses, and technicians that bring you the most advanced cardiovascular care in New Jersey. A full array of cardiac care services is available, from pre-hospital care, provided by Department and Intensive/Cardiac Care Unit services, a specialized Cardiovascular Center, a multi-phase cardiopulmonary rehabilitation program, and cardiac testing services. In addition, our cardiac catheterization suite offers patients a powerful tool in the diagnosis and treatment of heart disease, as well as carotid and Peripheral Arterial Disease. The facility is designated a Primary Stroke Center by the New Jersey State Department of Health and Senior Services. Hunterdon Medical Center treats patients in Hunterdon, Somerset, Mercer, and Warren Counties.

Cancer Care The Hunterdon Regional Cancer Center is a Fox Chase Cancer Center Partner. They offer comprehensive medical and radiation oncology services, early detection and screening programs, nutritional support, clinical research and education programs. Hunterdon Regional Cancer Center is accredited by the American College of Surgeons' Commission on Cancer as a community hospital cancer program.

Primary Care is offered through an expansive network of primary care and pediatric physician practices. A primary care physician serves as a medical home, overseeing all of the patient's healthcare needs, including coordination of care with other physicians and services.

Maternal/Child Health Care The Maternity and Newborn Care Center features 20 private labor and delivery and postpartum suites, operative delivery rooms and 24-hour coverage by board-certified neonatologists or pediatricians. The Center is designated by

the State of New Jersey as an Intermediate Care Nursery with a newly expanded special care nursery. Hunterdon Healthcare's pediatric and primary care practices offer children a medical home for sick and healthy visits.

Surgery When you have surgery at Hunterdon Medical Center, you will have access to the most advanced technology, expert surgeons and personalized patient care. Performing over 8,000 surgeries annually, our surgeons specialize in breast, head and neck, gynecologic, orthopedic, plastic, bariatric, neurologic, urologic and general surgeries. Hunterdon Healthcare also has interests in the Hunterdon Center for Surgery and Hunterdon Wound Healing Center. The Health System also operates the Bridgewater Ambulatory Surgery Center.

Center for Nutrition and Diabetes Management The Center provides education, support groups, blood sugar monitoring, nutrition counseling and fitness programs. This program is recognized as a Center of Excellence by the American Diabetes Association and included a dedicated staff of registered diabetes nurse educators and dietitians.

The Center for Bone and Joint Health is committed to all aspects of bone and joint care with the goal of restoring quality of life as quickly as possible. The Joint Replacement Program starts with pre-admission education classes and follows patients after discharge to assure they reach their optimum level of activity. The Center for Bone and Joint Health team includes orthopedic surgeons, registered nurses, dietitians, physical and occupational therapists, home health professionals and exercise physiologists. The goal is for patients to be able to return to their normal activities and enjoy a healthier lifestyle.

Hunterdon Wound Healing Center A dedicated team of physicians and nurse specialists at the Hunterdon Wound Healing Center applies the latest therapeutic methods to cure non-healing wounds. Hyperbaric oxygen therapy is also available.

Diagnostic Imaging Services Hunterdon Healthcare's diagnostic imaging services include a LightSpeed CT Imaging System, ultrasound, MRI, digital mammography and nuclear medicine. The healthcare system utilizes digital imaging, or Picture Archiving Communication System (PACS), which allows for immediate access to images with the ability for multiple physicians to view reports simultaneously. Faster turnaround of images means quicker diagnosis and expedited patient care.

Hunterdon Behavioral Health Hunterdon Behavioral Health offers a broad spectrum of counseling and therapy programs, and is the principal provider of mental health services in the community. Services include individual, family and group therapy, community outreach, psychiatric evaluations, adult and adolescent partial intensive outpatient

program, addiction treatment services, a school based youth services program and a family crisis intervention unit.

The Center for Advanced Weight Loss The Center for Advanced Weight Loss offers a comprehensive program for individuals struggling with weight loss and its health-related issues. The multidisciplinary team includes bariatric surgeons, a registered nurse and a registered dietitian, licensed clinical social workers, exercise physiologists and other supportive services as needed. The program offers bariatric surgery, medically supervised weight loss and prescription medication.

Sleep Disorders Center The Center monitors, evaluates and treats sleep disorders in adults and children. The Sleep Disorders center is located at Hunterdon Medical Center.

Home Health Services Throughout the hospital's certified Home Health agency, nursing and other services are available in the home, including physical, occupational, and speech therapy, social work, and home infusion.

Hunterdon Health and Wellness Centers Located in Whitehouse Station, Clinton Township and Lambertville, the Hunterdon Health and Wellness Centers integrate fitness, disease prevention, rehabilitation and health enhancement.

Physical and Occupational Therapy Physical and occupational therapy is provided at seven convenient locations as well as for patients in the main hospital campus. Oncology Rehabilitation is also available at Hunterdon Medical Center.

Hunterdon Center for Healthy Aging The Center includes a geriatric assessment program for those with complex and/or multiple health concerns. The Central Jersey Regional Memory Center provides individuals with memory concerns a place to go for early detection, compassionate care and memory loss education.

Hunterdon Older Adult Program is an in-home counseling service for Hunterdon County adults age 60 and older. Maintaining safe independence, self sufficiency, and quality of life are our main goals. Services include in-home counseling, consultation, information services, advocacy, and linkage to community resources. Caregiver support groups and speaker services are also available.

Hospice Hunterdon Hospice is a Medicare-certified, non-profit organization providing physical, spiritual, psychosocial and bereavement support for persons and their families with a life-threatening illness. Care is provided primarily in the patient's home, allowing families to be together, sharing the patients final days in peace, comfort, and dignity.

Visiting Health and Supportive Services Visiting Health and Supportive Services is an alliance of competent, caring, home care service providers. Services include NJ State Certified Home Health Aides, NeighborCARE and Care Connections.

Child Development Center The Child Development Center is dedicated to providing comprehensive multidisciplinary diagnostic, therapeutic, and educational programs and services in a family-centered community-based environment. Related programs include: Developmental Pediatric Associates, Pediatric Rehabilitation, Team Evaluations, Special Child Health Services, Early Intervention Program and Speech and Hearing Services.

Hunterdon Family Medicine Residency Program Hunterdon Medical Center is also a teaching institution and is affiliated with the University of Medicine and Dentistry of New Jersey - Robert Wood Johnson Medical School. The Hunterdon Family Medicine Residency Program is one of the first in the nation for the training of specialists in family medicine.

Urgent Care Centers The Hunterdon Healthcare Urgent Care Centers are located in Flemington and Raritan. Services include treatment for allergies and colds, cough/sore throats, acute illness, flu, pneumonia, bronchitis, urinary infections, injuries, conjunctivitis, cuts/minor burns, sprains/fractures, pains, animal bites/insect stings and more. For our patients who currently see a Hunterdon Healthcare practice, Urgent Care will be able to view that patient's medical record from their primary care office or specialist so the care will be coordinated and seamless.

EXECUTIVE SUMMARY

INTRODUCTION

The Hunterdon Medical Center and the entire Hunterdon Healthcare System appreciates its long standing collaborative relationships with other community organizations in order to provide the highest quality services to the residents of Hunterdon County and the bordering counties. Health and well-being are inextricably linked to the social and economic conditions in which people live. Clinical care is only 20% of what contributes to someone's health. Factors such as housing status, access to healthy food, access (or lack thereof) to transportation and education level account for 40% of what affects our health. Collectively these as well as other factors have been defined as the social determinants of health. Our behaviors, the things we do (or don't do) everyday- diet, exercise, alcohol use and sexual activity shape another 30% of the factors that affect our health. Our physical environment accounts for the last 10% (See Appendix A). In order to care for our patients in a truly holistic way and thus provide the "full circle of care" we must address the social determinants of health to positively impact people's health, life expectancy, and quality of life.

According to the County Health Rankings, Hunterdon is ranked #1 for quality of life. The ranking looks at four factors in determining this ranking: reported poor or fair health days, poor physical health days, poor mental health days, and low birth weight. In addition the county ranked #1 for health factors which include: health behaviors, clinical care, social and economic factors and physical environment.[1] Although we are proud to have achieved this high level of health status, we know there is still work to be done.

We do this in collaboration with the Hunterdon County Partnership for Health- a countywide initiative that involves over 70 multi-sector community service providers, agencies and organizations sharing a common interest in promoting and improving the health, well-being, and quality of life of Hunterdon County residents. Since its inception in 1995, this healthier community initiative has led to the completion of four county-level Behavioral Risk Factor Surveillance Surveys (BRFSS) and the development of a 2016 Community Health Improvement Plan (CHIP).

In 2018, Hunterdon Healthcare System (HHS) and the Hunterdon County Department of Health, two founding members of the Partnership for Health, along with over 70 community member organizations began working on the 2019 Community Health Needs Assessment.

The objectives of the 2019 Hunterdon County Community Health Needs Assessment (CHNA) are as follows:

1. Develop a comprehensive community health profile that provides a snapshot of the health and healthcare-related needs of Hunterdon County residents;
2. Identify and prioritize health issues/needs;
3. Have a CHNA report that provides the focus for the Hunterdon Healthcare System and other community stakeholders for health and wellness improvement efforts.

PRIORITY ISSUES

Members of the Hunterdon County Partnership for Health met in June, 2019 to review assessment findings and vote on the top priority health issues based on the seriousness of the issue, which included size and consequence and the ability to impact or make a difference. The PFH members reviewed aggregate electronic health record data presented by Rose Puelle, PhD of Hunterdon Healthcare Partners, county health data presented by Karen DeMarco, County Health Officer and Director of the Hunterdon County Health Department and local, state and national data presented by Kim Blanda, RN, BSN of Hunterdon Healthcare.

There were five priority issues identified: obesity/healthy weight, mental health, aging related issues, substance misuse and economic well-being.

1. Obesity/Healthy Weight: In 2013 the American Medical Association declared that "obesity is now a disease". There is some debate over this declaration however the effects of carrying extra weight on the body are undisputed.[2] People who are overweight or obese have a much greater risk of developing: heart disease, type II diabetes, bone and joint disease, sleep apnea, certain cancers, metabolic syndrome and psychosoial effects.[3]
   According to the HHS electronic health record as of June 2019 approximately 36 % of adults are within a healthy weight range. This means that 64% fall outside this healthy range. This number, although better than the state and national average, still means that many people are at risk for poor health outcomes related to their weight.

2. Mental Health: According to SAMHSA (Substance Abuse and Mental Health Administration) close to 3.1% of adults in New Jersey suffer from mental health conditions including schizophrenia, bipolar disorder and major depression but only just over 41% of these people seek treatment. According to many of the Hunterdon County school nurses, "school-age children's biggest issues are

related to poor coping skills and anxiety". There is still stigma surrounding mental illness which prevents many from obtaining treatment.

3. Aging-related Issues: According to the U.S. Census Bureau's 2017 National Population Projections by 2030 all baby boomers will be older than age 65. 1 in every 5 residents will be retirement age. This trend is apparent in Hunterdon County where the median age is 46.3 as of 2017 and 17% of the population is age 65 or older. This is about 10% higher than the numbers in both New Jersey and the United States. Stakeholders identified an aging workforce as a potential threat in our county specifically in upper management. There was also concern over the impact on the healthcare system and community resources as people age and require more of these services.

4. Substance Misuse: According to NJSAMS, in Hunterdon County, 36% of people enrolled in treatment are seeking treatment for alcohol misuse. Prevalence of excessive drinking among Hunterdon adults is higher than the state average (19% in Hunterdon County vs. 17% in New Jersey).[4] In 2017, for those enrolled in treatment tobacco was the most used substance followed by heroin and other opioids, IV drugs, and alcohol. [5] The use of electronic cigarettes and vaping devices are another alarming area of concern because of its popularity with our youth. This will be an area of strong focus for our Community Health Implementation Plan.

5. Economic Well-being: There are many factors that impact someone's health. Our health status is determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; race and ethnicity; employment status and the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others. For those experiencing poverty, these social determinants greatly impact their health and well-being. It was discussed in our PFH CHNA meeting that those experiencing poverty but who do not "fit" into one of the first four needs area would be left at risk. It is for this reason we added this needs area. As a hospital system we may not be able to directly affect someone's economic well-being, however we can help identify those who are struggling and refer these residents to our community partners to access housing, food, job and training assistance, legal counsel, and many other necessary resources.

In addition to the five areas identified above there were two overarching themes that the group decided should be incorporated into each of the five areas: impact of technology and social media (both positive and negative), and health equity. According to the CDC,

health equity is achieved when every person has the opportunity to "attain his or her full health potential" and no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances." [6] We will look to design, implement, and evaluate community-driven strategies that work to eliminate health disparities.

METHODOLOGY

The CHNA was conducted utilizing a modified version of the Mobilizing for Action through Planning and Partnerships (MAPP) framework:
1. Community Themes & Strengths Assessment - Conducted 12 focus groups to identify factors affecting the quality of life of residents of Hunterdon County;
2. Forces of Change Assessment - Conducted a brainstorming session with 10 community stakeholders to identify factors, events, and trends that influence or will influence the community's health and the delivery and operation of public health services;
3. Community Health Status Assessment - Analyzed primary and secondary data sources to develop a comprehensive quantitative data-based county health profile.

Throughout the CHNA process, input from members of the Partnership for Health and other community residents, service providers and stakeholders -- especially those representing underserved, low income and minority populations -- was taken into account.

After consideration and analysis of both qualitative and quantitative data from three individual assessments, members of the Partnership for Health developed a master list of health issues in the county and voted on what should be prioritized. This report will focus primarily on Hunterdon County, our primary service area. However, because of our recent expansion into Somerset County and specifically Bridgewater, we will include some data on these areas as well.

KEY FINDINGS

I. **COMMUNITY HEALTH STATUS ASSESSMENT**
   A. Demographic and Socioeconomic
      ● Hunterdon County is the third least densely populated county in NJ.
      ● Higher than state average median income. However, a large variation between the "haves" and "have-nots".
      ● 79% of Hunterdon residents have at least some college education vs.68% for NJ and 58.2% of Bridgewater residents have a bachelor's degree

- 4% of people under age 18 live in poverty in Hunterdon County and 3.8% in Bridgewater vs. 14% in NJ
- Predominantly white, non-Hispanic residents in both Hunterdon and Somerset. The second largest race/ethnicity in Hunterdon is Hispanics and Asian in Somerset.
- Lower than state average unemployment rate (3.5% Hunterdon vs. 4.6% NJ)
- Bridgewater has a population of approximately 44,646

B. Healthcare Access and Utilization
- 95% of Hunterdon adult residents have some form of health insurance, however rates for Hunterdon Hispanics are significantly lower
- Approximately 94% of Somerset residents have insurance
- Higher than state average mammography screenings (43% Hunterdon vs 41% NJ)
- Only 11% of Hunterdon residents described their health as poor or fair (Somerset and Morris Counties share this same rating)
- Hunterdon has a ratio of population to primary care physicians of 840:1, the state average is 1,190:1

C. Health Status and Health Outcomes
- Hunterdon has a lower percentage of obese and overweight adults compared to NJ.
- Latino Hunterdon Residents (age 65+) have higher rates of diabetes than non-Latino residents
- 95.77% of patients age 13-18 in the Hunterdon Healthcare System electronic health record have received a measles vaccine
- The top 5 sites for incidence of cancer in Hunterdon are prostate, breast, melanoma, lung, and colon.

D. Substance Abuse and Mental Health
- Between 2016 and 2017 we saw a decline in alcohol consumption however in 2019 excessive drinking is still higher than the state average
- 6% of Hunterdon residents in treatment are also homeless
- 14% of Hunterdon residents in treatment are age 22-24 and 21% are 30-34
- 49% of Hunterdon residents in treatment abused heroin and other opiates
- Most Hunterdon youths enter the Juvenile Diversion Program because of mariuana use
- Hunterdon Healthcare System's primary care practices screen for depression beginning at age 13

II. COMMUNITY THEMES AND STRENGTHS ASSESSMENT

A. Factors contributing to quality of life (Strengths)
- <u>Bucolic surroundings</u>- Hunterdon County residents appreciate the natural beauty and opportunity for outdoor activities. Parks, open spaces and proximity to the Delaware River were all mentioned as strengths.
- <u>Quality education</u>- Access to a high quality education was the number one factor contributing to a quality of life in Hunterdon County. Even our teen focus group rated their education as being "top-notch".
- <u>Safety</u>- Focus group members appreciate our low crime rate and expressed that they feel safe.
- <u>Healthcare and community resources</u>- Focus group participants repeatedly mentioned access to quality healthcare at Hunterdon Medical Center and many community resources as contributors to the quality of life in Hunterdon County.
- <u>Socioeconomic status</u>- Respondents cited the county's wealth as a key factor contributing to quality of life and also our good health.

B. Factors reducing quality of life (Weaknesses)
- <u>High cost of living</u>- High property taxes and cost of services reduce quality of life in Hunterdon County according to focus group participants. This higher cost of living makes it challenging for many residents to make ends meet and continue to live in the county.This particularly affects our low income, senior and young residents.
- <u>Lack of transportation</u>- There is no public transportation system in Hunterdon County. This can be a barrier to needed services such as healthcare and access to healthy food as well as creating social isolation. The county does have many taxis but the cost is prohibitive, especially for those that are low-income. Hunterdon Medical Center entered into a marketing agreement with Lyft which has helped to bring more options for transportation into the county.
- <u>Rural/isolate nature</u>- Although the county residents appreciate our rural nature they also see if as a factor that reduces quality of life here. "You have to have a car and it takes so long to get anywhere," said one resident. Many areas of the county are without sidewalks and not safe to bike or walk. Some groups, especially the lderly reported feelings of isolation and loneliness- especially in areas where neighbors could be acres away.
- <u>Limited recreational activities for kids and families</u>: Although we have many opportunities for outdoor activity the residents complained about the lack of a movie theater and other indoor family or kid-friendly activities. They also cited

"high cost" as a barrier to many of the available sports teams and clubs. Every teen surveyed expressed, "there is nothing to do here."

- Lack of awareness of disparate populations: This was identified by residents in the 2016 assessment as well. Although many in the county are wealthy there are pockets of poverty throughout the county. Survey participants expressed feeling frustrated by the "Hunterdon bubble" which is a false idea that everyone in the county is rich.

III. FORCES OF CHANGE ASSESSMENT

1. **State legislation surrounding the legalization of marijuana; Ongoing opioid crisis; Increase in vaping, especially amongst our youth**- Marijuana potency soars while youths' perception of harm drops. As more states legalize, it becomes more difficult to combat. The misuse and addiction to opioids, including prescription pain medications, heroin and synthetic drugs like fentanyl continue to be a national crisis. Vaping and other E-cigarettes are not risk-free. Most E-cigarettes contain nicotine- the addictive drug found in regular cigarettes, cigars and other tobacco products.

2. **Rising levels of depression, anxiety and other Mental Health disorders**- Hunterdon County school nurses identified lack of coping skills and anxiety as the top two health issues in our schools. Anxiety disorders are the most common mental health issue in the United States. It is not uncommon for someone suffering from anxiety to also suffer from depression and vice-versa. Stakeholders discussed the importance of accessible mental health services, early identification and treatment.

3. **Changing demographics in the county: Aging related issues**: Aging workforce including those in leadership positions - According to the 2018 United States Census Bureau data our population is on the decline at approximately 125,000. Census officials estimate that by 2035 the number of seniors citizens will out number the number of children in the United States. The growing elderly population will contribute to an increased demand for specific healthcare, social and supportive services. A discussion ensued among the group as to how to bring younger people into Hunterdon County. The group also discussed the need for organizations with aging leadership to create succession plans.

4. **Social media**- Social media is a social instrument of communication and has both positive and negative effects on society according to our stakeholders. The speed at which information can be disseminated is incredible- practically instant. This is critical when needing to get out urgent messages about weather warnings, health issues, traffic patterns etc. However this same benefit can be devastating when used to bully or spread false information. "If it is on the

internet, it must be true", a troubling misconception by many to be true. Social media can put added strain on small businesses and agencies because they may not have the resources to maintain the needed social media platforms and presence for marketing and communicating with their markets. On the other hand, it is a free resource to conduct research, grow businesses, meet new people and stay connected with old friends; the possibilities are endless. It is an incredible resource if used responsibly.

5. **New Jersey and Hunterdon County Affordability and Changing Demographic**- Many would agree that Hunterdon County is a great place to raise a family, with excellent schools, low crime rates and close proximity to two major metropolitan cities. However, the declining and aging population is a concern as well as loss of people with wealth. State and federal funding for grants and other social programs may be reduced as a result of out migration. Many of the new generation of young people are seeking city living and the convenience of mass transportation. Homes in Hunterdon County are not affordable for most young people which may further stunt our growth. There are opportunities to remedy this through the creation of more affordable housing, the addition of a four year college or university, entertainment such as a movie theater, increasing other arts and culture and promoting all the wonderful things the county currently has to offer.

NEXT STEPS

Hunterdon Medical Center will create a Community Health Improvement Plan (CHIP) and track goals over a three year period in the areas of healthy weight, mental health, substance misuse and aging related issues. Economic Well-being will be addressed by our community partners who specialize in areas surrounding affordable housing, job training and placement, social services, and other areas tied to economic well-being. We will receive updates through the Partnership for Health and our Clinical Liaison will serve as a communication link between the hospital and these community partners.

The Partnership for Health will continue their established Action Teams covering: healthy weight, access/economic well-being, and mental health. Our four Issue Watch Teams will work on substance misuse, Latino Access, mass violence prevention and aging-related issues. All teams will have two overarching themes- health equity and the impact of technology and social media on health. These will be incorporated into all our work. Teams will define measurable goals and objectives and develop clear strategies to address these issues.

INTRODUCTION

The Hunterdon County Partnership for Health, Hunterdon's "healthier community" initiative, was co-founded in 1995 by Robert Wise, President and CEO of Hunterdon Healthcare System, John Beckley, former Hunterdon County Health Department Director and Bernadette West, PhD, then Executive Director of Local Advisory Board (LAB) III, a Central New Jersey regional health-planning organization.

The Partnership for Health is a countywide initiative that involves over 70 community service providers/agencies sharing a common interest in promoting and improving the health, well-being and quality of life for Hunterdon County residents. This is reflected in the Partnership for Health's vision statement of achieving health as defined by the World Health Organization (WHO): "Every individual of Hunterdon County has a state of optimal physical, mental, spiritual and social well-being which allows the individual to pursue the most fulfilling life possible, and not merely a life absent of disease or infirmity."

Health and what influences it has evolved with the recognition of the social determinants of health. It is now understood that health is not a result of just one factor but is shaped, promoted and protected by a multitude of variables in our environment including where we live, work, learn and play. These factors include income, education, housing, access to quality healthcare and healthy food, employment, and transportation, among others.

To better understand the health of the community and barriers to achieving health, the Partnership for Health has taken the lead in conducting a wide range of community surveys and needs assessments designed to measure and track community health indicators over the years. More specifically, the Partnership for Health has led to the completion of four County-level Behavioral Risk Factor Surveillance System (BRFSS) surveys in 1995, 2000, 2005, and 2010. Data from these surveys provided a picture of the community's health over the past 20 years.

In 2016, a Community Health Improvement Plan (CHIP) was developed to focus on the "Top 7" public health issues identified for Hunterdon County at that time -- (1) Obesity/Overweight, (2) Transportation, (3) Substance Abuse, (4) Mental Health, (5) Chronic Disease, (6) Preventitive Care, and (7) Healthy Behaviors. Although HHS addressed all 7 identified priorities, the PFH expressed an interest in selecting a limited set of key issues based on the premise that the Community Health Improvement Plan is only a three year initiative. The attendees reached a consensus and identified obesity to be the priority health issue of Hunterdon County and to be adopted for inclusion in the Community Health Improvement Plan (CHIP). They decided three subcommittees, all concentrating on different challenges related to obesity, would be established: Access and Transportation, Mental Health, and Healthy Lifestyles. There was a fourth committee responsible for communication. Two "Issue Watch" teams were also established to

keep the PFH up to date with substance misuse and Latino Health disparities in Hunterdon County.

In 2018-2019, Hunterdon Healthcare System (HHS), in collaboration with the Hunterdon County Department of Health, and the assistance of the Partnership for Health has led another round of Community Health Needs Assessment (CHNA) activities. This new assessment will provide an updated look into the most pressing health issues of the Hunterdon community.

CHNA is an essential step in the community health improvement process because it allows the Partnership for Health and its members, including Hunterdon Medical Center, to develop and implement more targeted and cost-effective strategies designed to improve the health status of the populations they serve.

With the collaborative efforts of the members of the Partnership for Health [see Appendix B for a list of members] supported by HHS and the County, a comprehensive 2019 Hunterdon County Partnership for Health CHNA process began in November 2018 and concluded in May 2019 with the following objectives:
1. Develop a comprehensive community health profile that provides a snapshot of the health and healthcare-related needs of Hunterdon County residents;
2. Identify and prioritize health issues/needs;
3. Have a CHNA report that fulfills the IRS requirement for non-profit hospitals and at the same time can be used by other community stakeholders for their strategic planning.

The scope and focus of the CHNA was designed to not only be on health outcomes, but also on behaviors, socio-economic status, and other environmental factors that impact health, following the University of Wisconsin Population Health Institute's County Health Rankings model [see Appendix A]. This report discusses the findings from the Assessment and will be used to guide the community's and Hunterdon Medical Center's health improvement planning process.

COMMUNITY

Hunterdon County, established in 1714, is a 427.8 square mile rural-suburban community located in Western New Jersey. Hunterdon is surrounded by Warren County, Morris County, Somerset County and Mercer County and part of Pennsylvania. Although the eighth largest county in NJ by total land area, it is the 18th-most populated with 124,714 residents as estimated by the 2018 US Census. Historically agricultural, Hunterdon has been transitioning into a more commercial, industrial, and residential community. The County, consisting of 26 municipalities, is the home of Hunterdon Medical Center (HMC), the only hospital in Hunterdon.

HMC is a 178-bed teaching hospital that treats some 9,000 inpatients annually with 32,000 Emergency Department visits and over 570,000 outpatient visits per year. Since opening its doors in 1953, HMC focuses on primary care and community wellness, while emphasizing the importance of providing quality care thus achieving a high level of patient satisfaction. This philosophy is reflected in its mission and vision statements.

Mission: Hunterdon Healthcare System delivers compassionate and exceptional care that improves the health of the community.

Vision: Hunterdon Healthcare System is recognized as a national model for offering community-focused health improvement that is consumer-centered and driven by a passion for excellence.

Map of Hunterdon County and its Municipalities
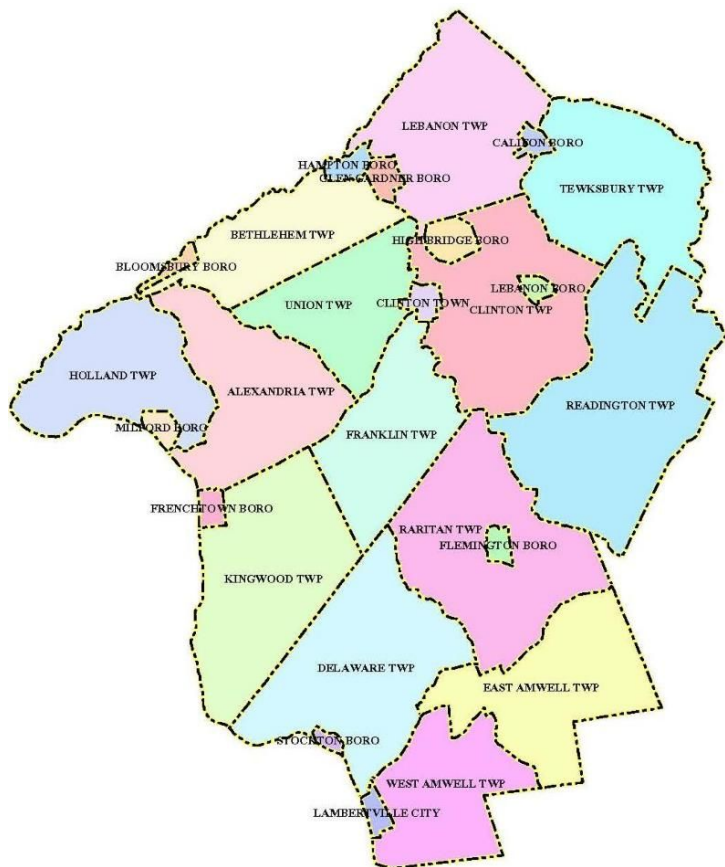
MOBILIZING ACTION THROUGH PLANNING AND PARTNERSHIPS

The CHNA was conducted utilizing the Mobilizing for Action through Planning and Partnerships (MAPP) framework, which was developed by the National Association of County and City Health Officials in partnership with the Public Health Practice Program Office of the Centers for Disease Control and Prevention, as a tool to guide community health improvement. MAPP is a process that is driven by the community and is rooted on partnership development, assessment of needs and assets, and strategic planning on how to use available resources to address the prioritized health needs or concerns.

The MAPP process consists of four assessments, three of which were used for this CHNA:
1. Community Themes & Strengths Assessment
2. Forces of Change Assessment
3. Community Health Needs Assessment

Throughout the CHNA process, input from members of the Partnership for Health and other community residents, service providers and stakeholders -- especially those representing underserved, low-income, and minority populations -- was taken into account.

Kim Blanda, RN, BSN, with Hunterdon Regional Community Health, a division of Hunterdon Healthcare System, led the focus groups and facilitated the Forces of Change brainstorming session. Kim Blanda is a bachelor prepared registered nurse and a business school graduate with over 20 years of experience in healthcare. She is also the Community Health Improvement Plan Coordinator for Hunterdon County and the Coordinator for the Hunterdon County Partnership for Health and serves on many community boards such as Flemington Community Partnership, Salvation Army, One Voice (a faith-based substance misuse prevention coalition), Polytech's Biomedical Sciences Academy, and the Raritan Valley Community College Nursing Program Advisory.

COMMUNITY HEALTH STATUS ASSESSMENT

The Community Health Status Assessment (CHSA) aims to develop a picture of the health status of the community by gathering data on various health indicators and comparing them to the previous year, state, or national data. This information was compiled, analyzed, and presented in graphs and tables that are easily understandable.

Data for the CHNA was obtained from the following primary and secondary sources:

A. Primary

1. *Hunterdon County Behavioral Risk Factor Surveillance System, 2010 (HC BRFSS)* - a health-related landline telephone survey of Hunterdon County adult residents conducted between August 23 and October 15, 2010 with a final sample size of 1,104. Survey questions were adopted from the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS) study. Phone interviews and data analysis were done by Holleran.

2. *Hunterdon County Youth Risk Behavior Survey, 2012 (HC YRBS)* - a health-related paper and pencil survey of Hunterdon County high school students conducted in October 2012 with a final sample size of 2,002. Survey questions were adopted from the CDC Youth Risk Behavior Surveillance (YRBS) study. Data analysis was done by Holleran.

3. *United Way of Hunterdon County Latin Health Behavior Risk Factor Survey, 2016* - This 2016 Latino Health Behavior Risk Factor Study used a convenience sampling strategy to survey Hispanic/Latino residents of Hunterdon County. United Way of Hunterdon County and members of the Hunterdon County Latino Access to Healthcare Committee identified three Hispanic outreach workers who were assigned the task of collecting survey data from the targeted population. Between June, 2016 and September, 2016 outreach workers from the United Way of Hunterdon County surveyed 350 Hispanic/Latino individuals from numerous locations throughout Hunterdon County. Group administration strategies were not used. In many cases, the survey was read to the given participant due to their lack of literacy in reading Spanish.

4. *Community Themes and Strengths Assessments* - a series of focus groups and a stakeholder brainstorming session to capture the needs, concerns and trends were held during the assessment cycle.

5. *Electronic Health Record Data* - aggregate health data was used to identify significant health concerns.

6. *PRIDE Survey 2018*- The Pride Surveys are national questionnaires provided to parents and students to gather information on drugs and alcohol, violence, social influences, and policies. The resulting data is presented in a series of easily read graphs and charts.

7. NJ Department of Education Climate Survey, 2018- In 2012 the New Jersey Department of Education (NJDOE), in collaboration with the

Bloustein Center for Survey Research (Bloustein) at Rutgers, The State University of New Jersey, developed and disseminated the New Jersey School Climate Survey (NJSCS) and supportive materials. Many districts have been using the NJSCS to assist in reinforcing positive conditions and addressing vulnerabilities for learning.

B. Secondary
   1. County Health Rankings and Roadmaps, 2019
   2. US Census Bureau, 2010 (actual) and 2018 (estimate)
   3. CDC Morbidity and Mortality Weekly Report
   4. NJ Center for Health Statistics
   5. NJ Crime Index
   6. NJ Department of Labor and Workforce Development
   7. NJSAMS (NJ Substance Abuse Monitoring System)

DEMOGRAPHICS

Population

TABLE 1: US Census Population Estimates for Hunterdon County

2010 Census	2015 Estimate	2018 Estimate
128,349	125,488	124,714

Source: US Census Bureau QuickFacts, 2010-2018 Estimates

FIGURE 1: Population by Municipality, Hunterdon County (2017)
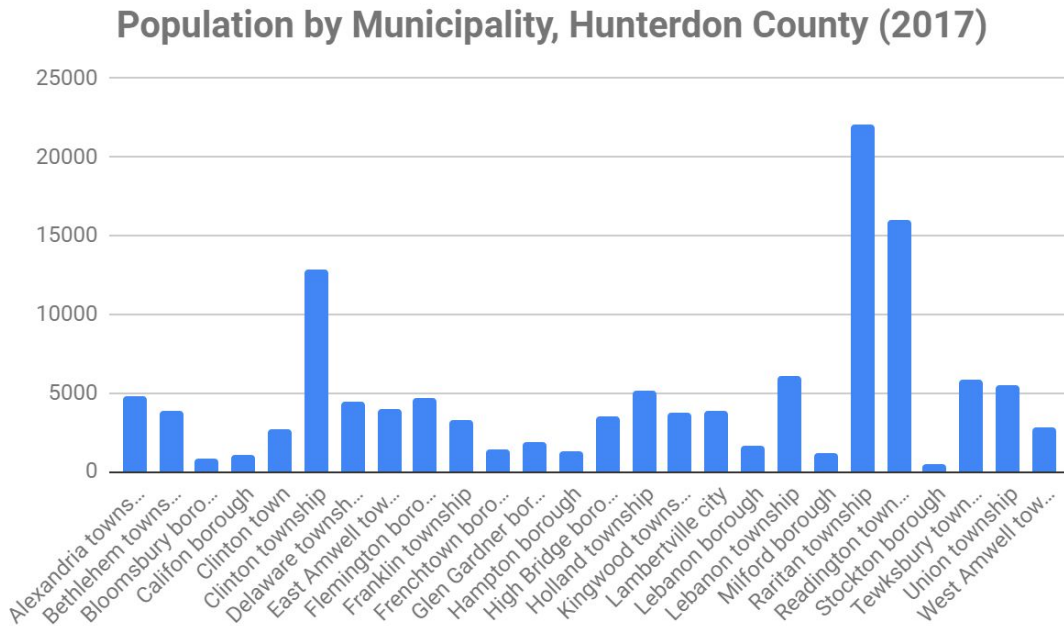
Source: *Population Density by County and Municipality: New Jersey, 2010 and 2017*

The most populated municipalities remain the townships of Raritan, Readington and Clinton respectively. Raritan and Readington are also the largest municipalities by land area in the county. However, population density is the highest in Flemington Borough and Lambertville City.

TABLE 2: Hunterdon County Population Density

Area in Square Miles	Resident Population 2018 Census	Population per Square Mile
427.8	124,714	291.5

Source: *US Census Bureau QuickFacts, 2010 Census and 2018 Estimate*

FIGURE 2: US and New Jersey Population Growth Projections
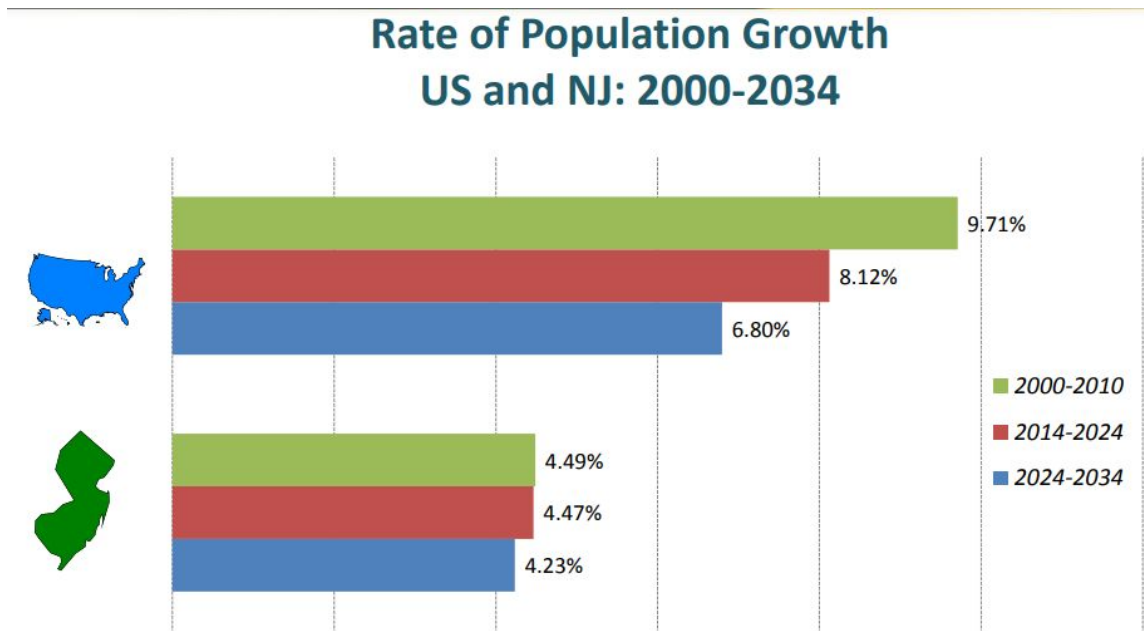
Source: State of NJ Department of Labor and Workforce Development - Population & Labor Force Projections 2014-2034

Age

FIGURE 3: Age Demographic, Hunterdon County - 2019 Projection
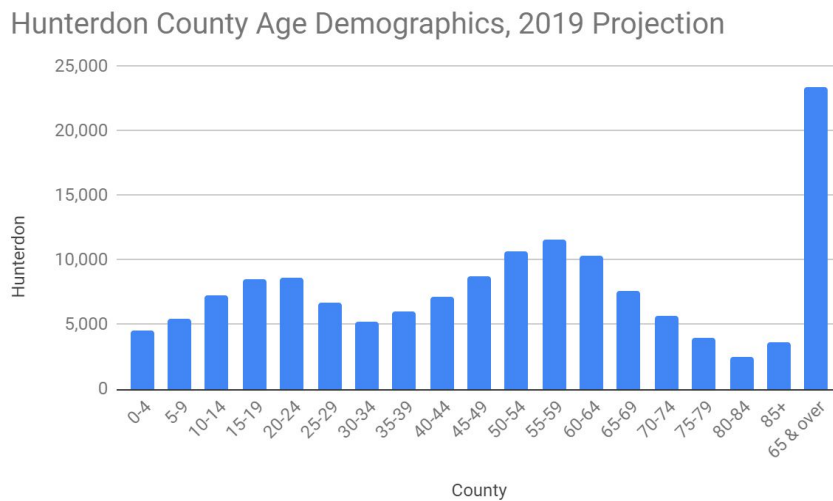
Source: NJ Department of Labor and Workforce Development, Population & Labor Force Projections 2014-2034

Projected Percent Elderly Population

- ■ Less than 20.0%
- ■ 20.0% to 21.9%
- ■ 22.0% to 23.9%
- ■ 24.0% to 24.9%
- ■ 25.0% or higher

New Jersey: 20.0%

Data Source: Division of Economic & Demographic Reasearch,
Population & Labor Force Projections:2014-2034
Prepared by:
New Jersey Department of Labor and Workforce Development
Division of Economic & Demographic Reasearch
January 2017
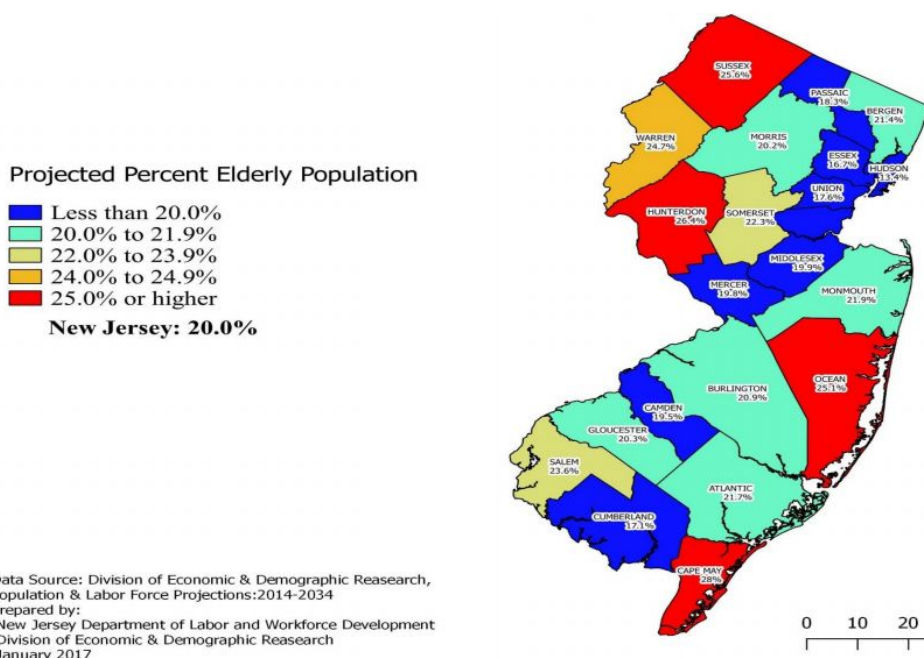
FIGURE 4: Projected Percent of Elderly (65+) Population: 2034 by County
Source: New Jersey Department of Labor and Workforce

As "Baby Boomers" continue to enter their retirement age, the share of New Jersey's population (18 to 64 years old) is projected to shrink.The aging population and increased longevity will certainly have an impact on the health of the community as well as in the provision of healthcare and social services. Prevalence of chronic conditions increases with age leading to higher utilization of healthcare services among the elderly. It is expected that the complex care-needs of this growing population, both primary and specialty care, will pose challenges to healthcare planning and delivery.

Race/Ethnicity

New Jersey is one of the most racially and ethnically diverse states in the country with residents representing more than 100 nations. However, diversity is not spread uniformly throughout the state. Hunterdon is made up of predominantly white, non-Hispanic residents (85.1%), a much higher proportion than NJ (54.9%). However, the county has seen tremendous growth in the number of people of a different race/ethnicity in recent years. The Hispanic community has increased from 2.8% in 2000 to 6.8% in 2018. Asians are the third largest race/ethnic group in Hunterdon and make up 4.2% of the county population, increasing from 1.2% in 2000. This increasing diversity is evident not

only in Hunterdon, but across the nation as well and is projected to continue to grow over the next few decades.

FIGURE 5: Race/Ethnicity, Hunterdon County (2018)

- Black or African American
- American Indian and Alaska Native
- Asian
- Native Hawaiian and Other Pacific Islander
- Hispanic or Latino
- White, non-Hispanic
- Two or more races
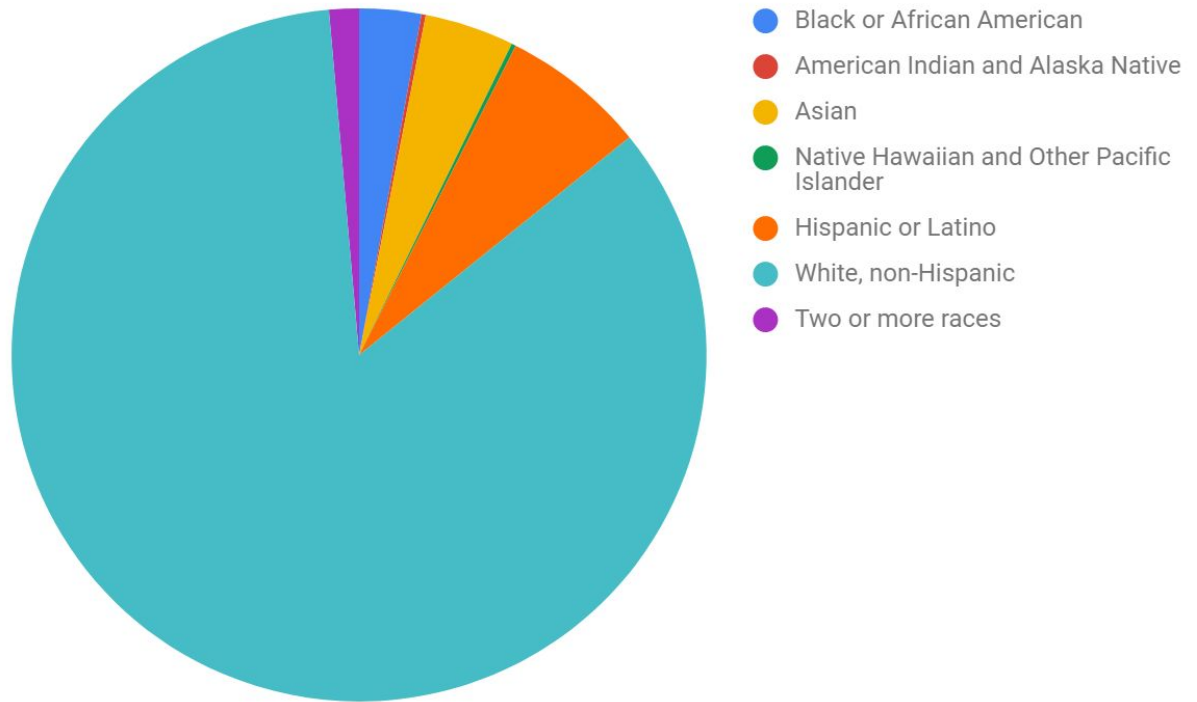
Source: US Census Bureau QuickFacts, 2018 Estimate

The increasing diversity affects the primary language spoken at home. In New Jersey, 31% of homes speak a language other than English.[7] Spanish is the second-most common language spoken at home, followed by Chinese.

The growing diversity - racially, ethnically, culturally, and linguistically - is an asset to the community, as exposure to these differences has been suggested to promote tolerance, understanding, and open-mindedness. However, demographic changes also create challenges for the community, as well as the healthcare system. The ability of service providers to effectively and appropriately communicate with the community they serve is vital. Language and differences in cultural norms, beliefs and attitudes, especially about healthcare, can act as barriers to accessing health and social services, and will necessitate increased awareness, understanding, and sensitivity of these differences among service providers. Hunterdon Medical Center has a Diversity Committee that addresses such topics and the Partnership for Health voted that health equity should be an overarching goal for all of our initiatives.

DISABILITY

According to the 2017 New Jersey BRFSS, 24.6% of adults 18 or older reported having at least one type of disability. New Jersey's population with disabilities includes slightly more women than men. Mobility disability is the most common type of disability in New Jersey. Cognitive disability is the second most common type of disability. Having services available and accessible to persons with disabilities is of utmost importance. In 2018, the percentage of Hunterdon County residents with one or more disabilities was lower than the state average.(5.1% in Hunterdon County vs. 6.7% in New Jersey)

FIGURE 6: Disability by Type, Hunterdon County

Indicator Definition
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)
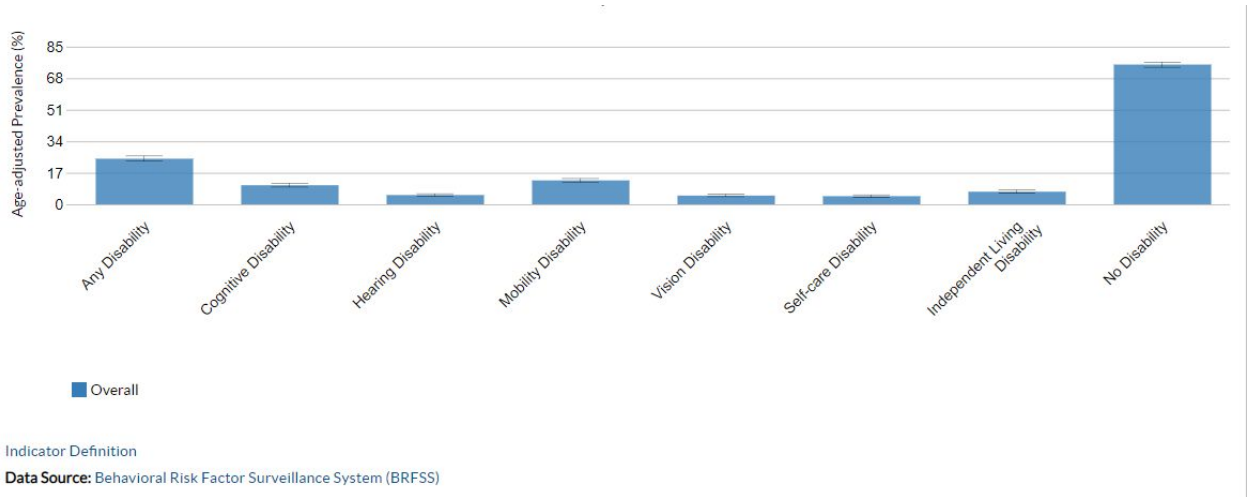
Source: Behavioral Risk Factor Surveillance System (BRFSS) 2010

SOCIAL DETERMINANTS OF HEALTH

According to the World Health Organization, many factors combine together to affect the health of individuals and communities. Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact.

Educational Attainment

According to the US Census Bureau, 89.2% of New Jersians have a high school level of education or higher, and 38.1% have a Bachelor's degree or higher. This is significantly lower than in Hunterdon County, where nearly 95% of residents have a high school diploma or higher and nearly 51% have a Bachelor's degree or higher.

FIGURE 7: Educational Attainment, Hunterdon County (2018)

- ● Bachelor's degree or higher
- ● Some college or associates
- ● High school or GED
- ● Less than high school
- ● No schooling
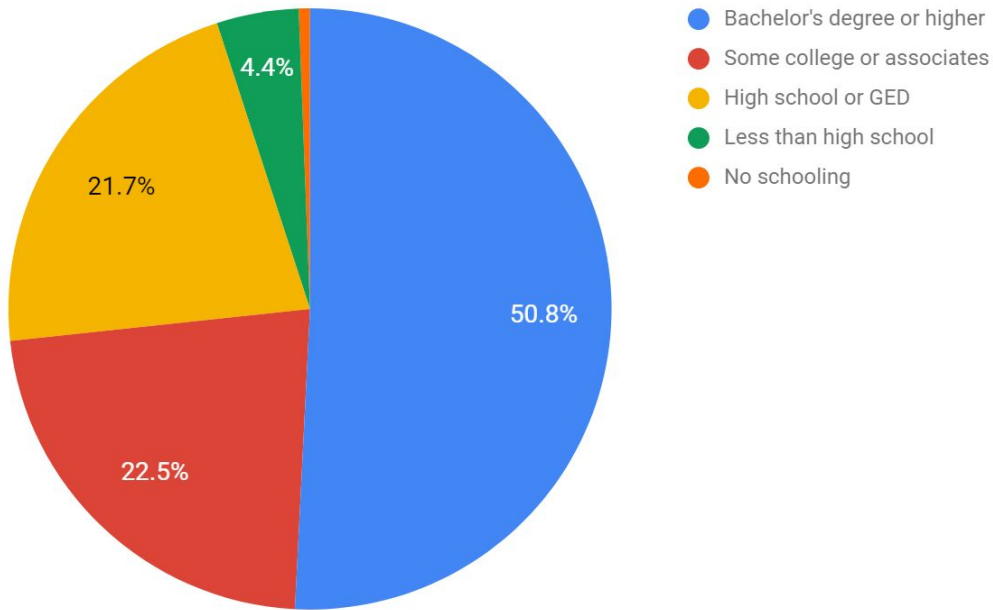
Source: New Jersey Education Data, Town charts, Hunterdon County 2018

In addition, Hunterdon is known for its excellent public school system, with high school graduation rates higher than the state average. The high educational attainment of both adults and youths in the county is a key contributor to overall quality of life. The chart below shows that Hunterdon and Somerset Counties have the lowest high school dropout rates in the state. Studies have shown that educational attainment is strongly correlated with an individual's health. It is suggested that better-educated individuals are more likely to have access to healthcare and are more health literate. Therefore they have better health outcomes and are more likely to contribute positively to their community.

FIGURE 8: NJ School Dropout Rate
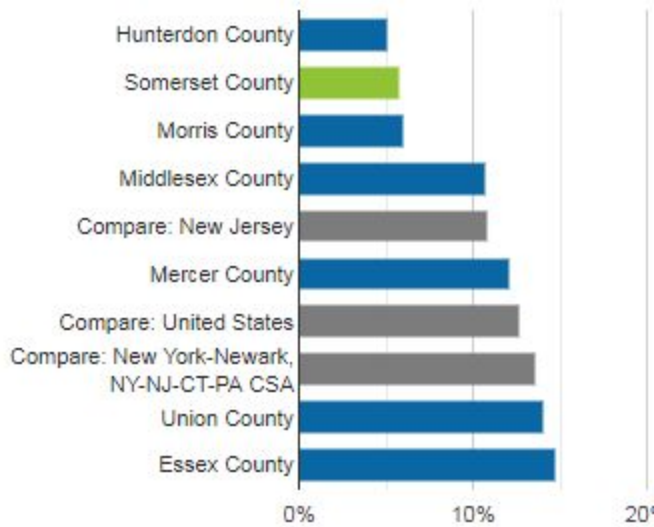
Source: 2018 American Survey Data- Town Charts

Employment

According to the County Health Rankings, in 2019, the unemployment rate was 3.5% in Hunterdon County, lower than the NJ unemployment rate of 4.6%. The rate in Somerset County was 3.8% during this same year. Although employment rates are low, many families need two incomes to afford to live in Hunterdon. Our lower income residents may work more than one job to make ends meet. Our senior citizen residents in our focus group who are now retired explained, "it's getting harder to stay in the county." They also said, "there should be tax breaks for people who no longer have kids in school."

FIGURE 9: NJ Counties- Average Hourly Earnings

FIGURE 10: Unemployment Rates in Hunterdon County (2002-2017)
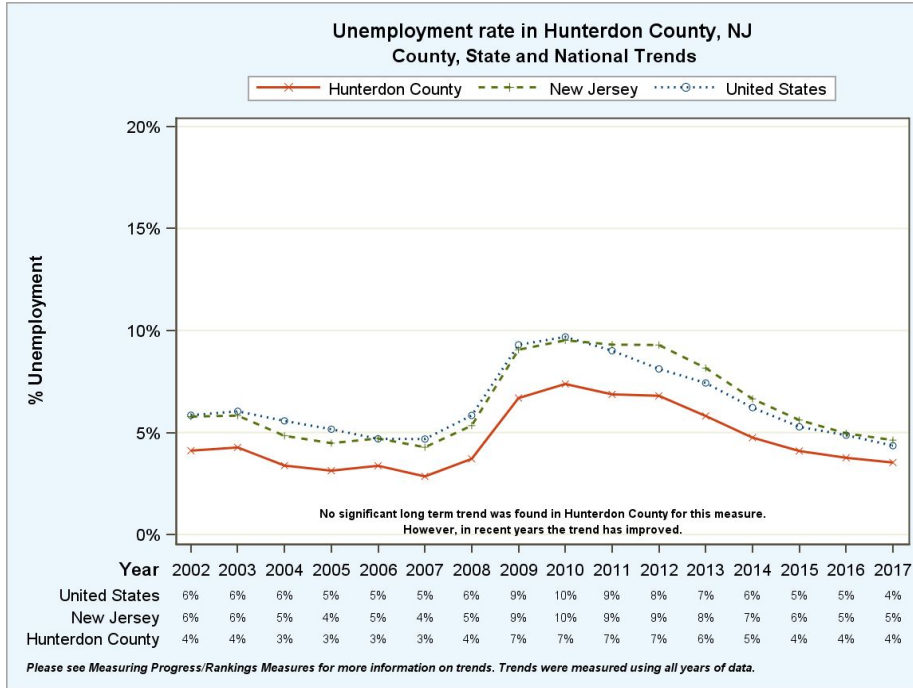
Source: County Health Rankings & Roadmaps, RWJF & Wisconsin University 2019

Income and Poverty

In spite of its general affluence, 3.9% of Hunterdon County residents are living in poverty. In a location such as Hunterdon where cost of living is higher than average, the above numbers actually underestimate the level of poverty. In 2018, there were 380,666 New Jersey households receiving NJ SNAP (Supplemental Nutrition Assistance Program- formerly food stamps) benefits. As of 2018, Hunterdon County had 2,571 individuals receiving SNAP benefits. Flemington has the highest number of SNAP families with concentrated pockets of SNAP families in Lambertville, Raritan Township, and Readington. It should also be noted that Hunterdon County has the lowest percentage of SNAP recipients in the entire state.

FIGURE 11: Federal Poverty Thresholds 2016
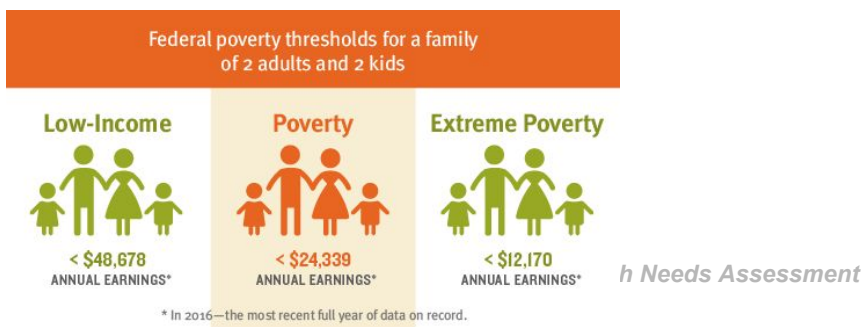
FIGURE 12: Median Household Income (2016)
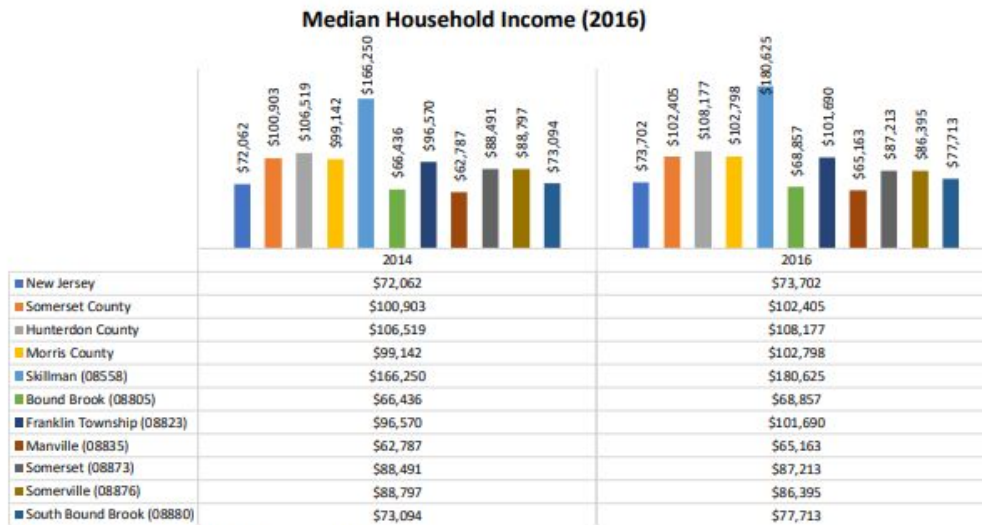
Source: United States Census 2016 5 Year ACS Estimates

In 2017, the US Census Report listed $110,969 as the median income in Hunterdon County. This is significantly higher than the state average, $76,475. Above is a 2016 comparison of median household income in counties and zip codes surrounding Hunterdon.

TABLE 3: Per Capita Income and Median Household Income, Hunterdon County, New Jersey and USA

	Hunterdon County	New Jersey	USA
Per Capita Income	**$54,200**	**$39,069**	**$31,177**
Median Household Income	**$110,969**	**$76,475**	**$57,652**

Source: US Census Bureau Estimate 2018

TABLE 4: Income Below the Federal Poverty Level State and County Comparisons 2016

	Families	People	Children	Seniors
New Jersey	8.1%	10.9%	15.6%	8.1%
Somerset County	3.4%	4.5%	6.0%	5.2%
Hunterdon County	3.1%	4.5%	5.3%	3.5%

FIGURE 13: Number of People on SNAP (previously known as food stamps)

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

■ New Jersey   ■ Somerset County   ■ Hunterdon County   ■ Morris County

	2015	2016	2017
New Jersey	20.89%	19.96%	18.60%
Somerset County	8.13%	7.70%	6.78%
Hunterdon County	4.83%	4.64%	4.26%
Morris County	5.55%	4.99%	4.69%
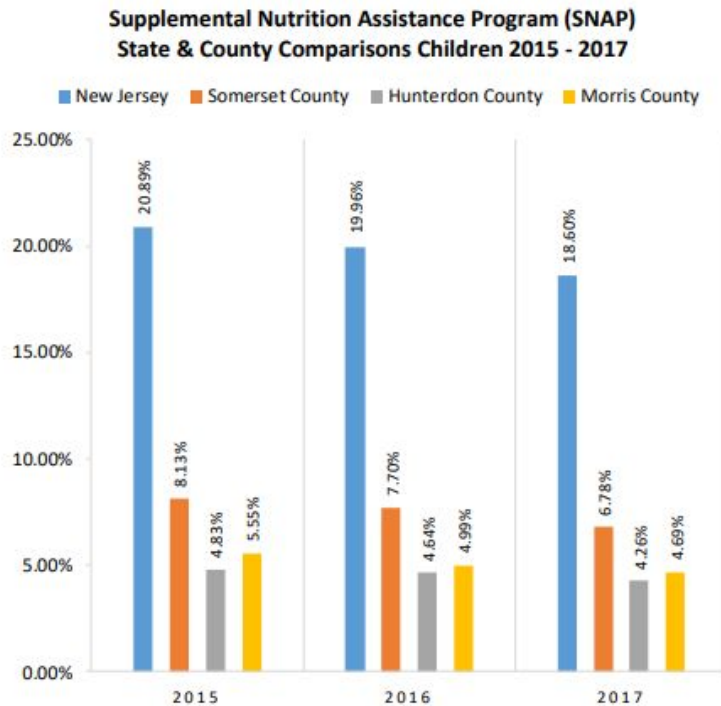
Source: http://www.nj.gov/humanservices/dfd/news/cps_dec17.pdf

"Hidden poverty" was a term used by focus group participants to refer to individuals who were financially well-off but are not experiencing financial difficulties. A lot of them are either too embarrassed to ask for help or do not know where to get help as they never had to do so before. Another at-risk group is called ALICE, an acronym that stands for "Asset Limited, Income Constrained, Employed." ALICE is a new way of defining and understanding the struggles of households that earn above the Federal Poverty Level, but not enough to afford a bare-bones household budget. For far too many families, the cost of living outpaces what they earn. These households struggle to manage even their most basic needs - housing, food, transportation, child care, health care, and necessary technology. When funds run short, cash-strapped households are forced to make impossible choices, such as deciding between quality child care or paying the rent, filling a prescription or fixing the car. These short-term decisions have long-term consequences not only for ALICE families, but for all of us. Many Focus Group participants explained that "Maintaining a household in Hunterdon County can be very stressful because of the high cost of living here."

The New Jersey WorkFirst-Temporary Assistance for Needy Families (TANF) program is designed to help needy families achieve self-sufficiency. It is the state's current welfare reform program. Hunterdon has the lowest number of families receiving this type of

support. We suspect others would benefit however because of the current political climate or a resident's immigration status barriers exist to services. Somersets numbers are higher than Hunterdon but still modest compared to other counties like Essex and Camden.

FIGURE 14: Total WFNJ/TANF Families by County May 2019
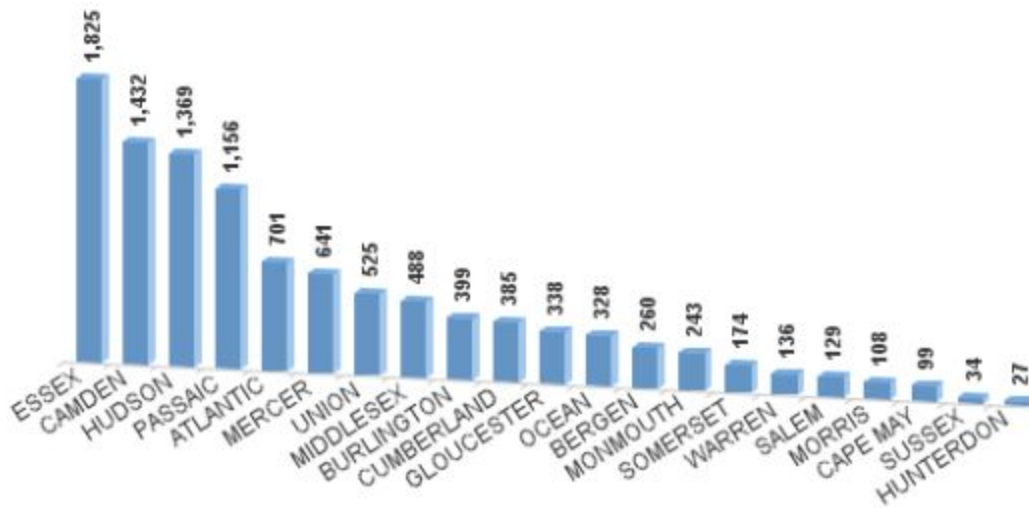
Source: State of New Jersey Department of Human Services Division of Family Development

The Temporary Assistance for Needy Families (TANF) program provides grant funds to states and territories to provide families with financial assistance and related support services. State-administered programs may include childcare assistance, job preparation, and work assistance. Keeping accurate numbers of those in-need is important especially in a county like Hunterdon where numbers are low. Grants and other types of funding are more difficult to obtain in a wealthy county even though we know there is need. Screening for social determinants is important if we plan to help all of those that need it.

FIGURE 15: WFNJ Families Receiving Emergency Assistance Funds by County May 2019
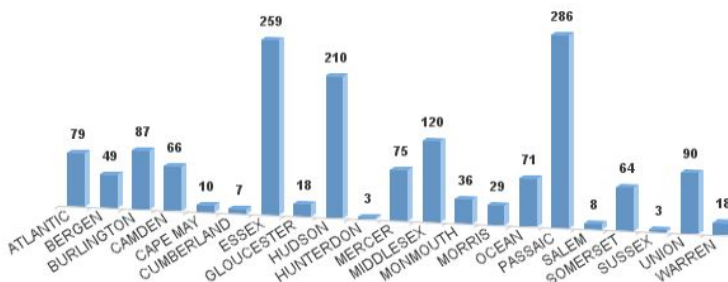
Source: State of New Jersey Department of Human Services Division of Family Development

Housing

TABLE 5: Median Value of Housing and Gross Rent, Hunterdon County and New Jersey

2013-2017	**New Jersey**	**Hunterdon County**
Median Value Housing	$321,100	$393,800
Median Gross Rent	$1,249	$1,388

Source: US Census Bureau QuickFacts 2013-2017

The bucolic nature and scenic landscape of Hunterdon County can mislead someone to believe that homelessness and poverty don't exist here. Indeed many of our own residents don't see it. However, as Hunterdon grew throughout the 20th century, long-time residents found themselves going through tough financial times. Many farmers lived here for generations contributing to our large agricultural community but didn't have the resources nor abilities to update their properties. Gentrification, disintegration of current homes, and the lower profit-margins for farming have aided the development of homelessness in Hunterdon. Unexpected expenses for household necessities, car repairs or illness could lead to a families' inability to pay their monthly bills and homelessness may result.

What is **Affordable Housing**?

The government says housing is "affordable" if a family spends **no more than 30%** of their income to live there.

In Hunterdon County, The Interfaith Hospitality Network (IHN) works within the faith community to provide temporary shelter to women, children and families. During their first month of providing services in Hunterdon County, twenty individuals met the organization's eligibility requirements. According to New Jersey's Department of Community Affairs, of the state's 30,000 to 35,000 homeless individuals, more than half of them are children. Family Promise of Hunterdon County provided "homeless-related services" within the shelter program from 2005 to August 2019 to approximately 1080 people- 265 were children. The top three causes of homelessness were eviction, domestic violence, and family break-up.

Crime/Safety

According to the County Health Rankings and Roadmaps, high levels of violent crime compromise physical safety and psychological well-being. High crime rates can also

deter residents from pursuing healthy behaviors, such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence. Exposure to chronic stress also contributes to the increased prevalence of certain illnesses, such as upper respiratory illness, and asthma in neighborhoods with high levels of violence. Uniform Crime Reporting (UCR) data is generally regarded as a valid and reliable index of the types of crime residents view as serious events.

Violent Crime is the number of violent crimes reported per 100,000 population. Hunterdon's rate based on 2014 and 2016 data was 42. Somerset County's rate was 64. These rates are very low compared to many counties in NJ. Essex had the highest violent crime rate in the state at 606. Rates measure the number of events (i.e., deaths, births, etc.) in a given time period (generally one or more years) divided by the average number of people at risk during that period. Rates help us compare health data across counties with different population sizes.

In Hunterdon County, then prosecutor Anthony P. Kearns III in collaboration with Hunterdon Prevention Resources created a new youth diversion program. The Hunterdon County Law Enforcement Adolescent Program (LEAP) offers at-risk youth a unique, early intervention juvenile diversion program that utilizes a combination of Life Skills, Goal Setting, Parent Education, and Community Services. This can be a life-changing opportunity and help youth to get on a better path. The objective of the LEAP program is to decrease the overall number of juveniles entering the legal court system.

TABLE 6: Total Arrests - Hunterdon and Somerset County 2016

	Hunterdon County	**Somerset County**
Drug Abuse Violations	980	941
Driving Under the Influence	418	795
Disorderly Conduct	78	205

Source: 2016 Uniform Crime Report: Section Three

FIGURE 16: Violent Crime Rate in Hunterdon County
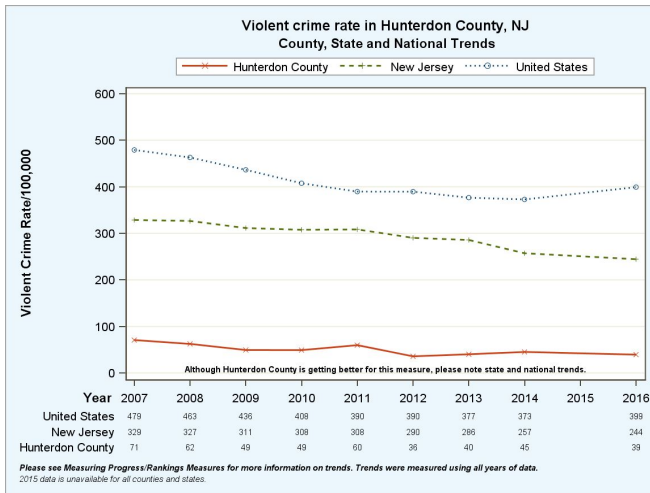
Source: County Health Rankings & Roadmaps, RWJF & Wisconsin University 2019

Food Insecurity

In a county as wealthy as Hunterdon you may be surprised to know that we have more than a dozen food pantries. The USDA defines food insecurity as a state in which "consistent access to adequate food is limited by a lack of money and other resources at times during the year." Hunterdon Healthcare has incorporated the CDC food insecurity screening questions into their electronic health record and tracks this and other social determinants of health.

Our county school nurses have been particularly helpful in identifying children who are food insecure. One nurse stated, "I'm not sure this child has any food over the weekend." This is both horrifying and unacceptable. Over the past couple of years we have been working with the school nurses and NORWESCAP Backpack Program to connect in-need school children with healthy weekend meals when they don't have access to free and reduced meal programs in schools. We have grown this program to eleven Hunterdon schools and nearly 100 children. This program also prompted us to investigate starting a summer feeding program. In the summer of 2018 the Partnership for Health and the Salvation Army partnered to begin the Summer Lunch Club. In our first year we served 1,100 meals! We are continuing to support this program by recruiting volunteers and educational support for the program which includes lunch and education on making healthy choices. Our wide network of resources has also resulted in the distribution of

bike helmets, school supplies, and fun outdoor toys to encourage physical activity. Snap-Ed is providing weekly fun lessons on healthy eating. Through donations our Hunterdon Healthcare Foundation was able to provide a milk refrigerator that was necessary to expand the program to more children this summer.

Our focus groups revealed that another vulnerable group is our county senior citizens. Many explained that they were "too proud' to use pantries and worried about social stigma. They also complained that "The food pantry is so noisy and I can't hear. It's hard to navigate when it is so crowded." Our largest pantry began offering "senior only" hours and pop-up pantries at low income senior residents in the county. The PFH's Access Action Team worked with go Hunterdon to create a map highlighting LINK transportation routes to every pantry in the county. We are working to address this issue and will continue to do so.

Transportation

Another factor frequently mentioned during focus group sessions reducing the quality of life in Hunterdon was transportation. Public transportation options within the county are very limited. This makes it difficult for a significant segment of the community to engage in community activities and access services. Low-income individuals, senior citizens, persons with disabilities and those that are otherwise transportation dependent are particularly negatively impacted.

The Hunterdon County LINK Transportation System (www.ridethelink.com), a service of Hunterdon County, provides deviated fixed route and demand response service within Hunterdon County; with limited connections to services outside of the county. LINK fares range from $2.00- $8.00, with discounted fares available for eligible riders.

The LINK operates Monday- Friday, with Saturday service available only within theFlemington area. Service hours vary by route, but most operate 7:30 a.m.- 6:30 p.m. All vehicles are handicap accessible. Riders must request demand response service at least one day in advance. Wait times and ride times can be long on the demand response service, which are not ideal for persons with disabilities or senior citizens.

Private taxis, Uber, and particularly Lyft, the ride-hailing app, have become more common in recent years. While they provide additional transportation options, these

services can be expensive, particularly for individuals who need to make multiple or recurring trips to medical appointments.

goHunterdon, a local non-profit transportation management association, facilitated a partnership between Hunterdon Healthcare and Lyft in March 2018 to designate three geo-coded locations at the Hunterdon Medical Center campus (Main Entrance, Emergency Department and Doctor's Building) for Lyft pick up and drop offs.

Lyft usage to and from Hunterdon Medical Center increased significantly as a result. More importantly, data for the 12 month period March 2018-March 2019 provided valuable insight into demand, including transportation needs by day of the week, time of day, origin town/destination, average miles per ride, and average cost per ride. This data is being analyzed by goHunterdon to inform decisions about transportation demand moving forward. goHunterdon is actively working to identify additional transportation options and opportunities to secure funding to support transportation service that can provide access to healthcare. This effort will be ongoing.

SOCIAL IMPACT

Social Media

There are many benefits of social media: enhanced communication skills and social connections, development of new interests, self expression, technical skills, new friends and enhanced relationships with existing ones; all of these things can enhance one's mental health.   However, children and adults on social media often choose to only broadcast the best moments of their lives. They pick and choose which moments to show which creates unrealistic expectations for those who are easily impressionable.

"According to the Pew Research Center, by 2015, 73% of teens had smartphones. One psychology professor at San Diego State University discovered that teens who spend 5 or more hours a day online were 71% more likely to have at least one risk factor for suicide compared to teens who spent only 1 hour a day online. This risk increases with only two or more hours spent online" The overwhelming numbers of friends, followers, and likes is very "in your face" and making comparisons of these numbers, especially among young people, has become very easy.

Source: Global Digital Statshot Report- July 2019

"Another study looked at social media use and social isolation among U.S. young adults. The study used a nationally representative sample of 1,787 19-32-year-olds. It assessed participants' usage of 11 social media platforms: Facebook, Twitter, Google+, YouTube, LinkedIn, Instagram, Pinterest, Tumblr, Vine, Snapchat, and Reddit. The study found that those who visited any platforms at least 58 times per week were three times more likely to feel socially isolated compared to those who used social media fewer than 9 times per week." [8]

Even with its drawbacks, social media can be a useful tool in healthcare. Information can be disseminated in seconds. In instances where we need to push out emergent information about severe weather, warming/cooling stations, sheltering and emergency medical treatment- it can be done quickly with little to no cost. Hunterdon Healthcare has been using social media to host educational Facebook Live sessions. Listeners can type in questions "real-time". It is very interactive and can be done from wherever the participant or practitioner happen to be. It can also be recorded for future viewing. Focus group participants reported both the negative "some people are really rude and will say anything on social media" and the positive "I found out where to go for a free farm market."

Social Isolation & Mental Health

Social isolation is considered a risk factor in the development of disease and disability that can occur in the course of existing disease. It has been included as well in the measure of quality of life and thus is an outcome as well as a risk factor. Social isolation and loneliness are linked to cognitive decline, depression, and heart disease. "Research has linked social isolation and loneliness to higher risks for a variety of physical and mental conditions: high blood pressure, heart disease, obesity, a weakened immune system, anxiety, depression, cognitive decline, Alzheimer's disease, and even death. People who find themselves unexpectedly alone due to the death of a spouse or partner, separation from friends or family, retirement, loss of mobility, and lack of transportation are at particular risk." [10] Those who engage in activities and socialize with others are more likely to live longer and be happier which can improve cognitive function.

Effects of loneliness on the body alter the tendency of cells in the immune system to promote inflammation, which is necessary to help our bodies heal from injury. Inflammation that lasts too long increases the risk of chronic diseases accelerate buildup of plaque in arteries, help cancer cells grow and spread, promote inflammation in the brain leading to Alzheimers.

"Across the country, suicide rates have been on the rise, and that rise has struck the nation's seniors particularly hard. Of the more than 47,000 suicides that took place in 2017, those 65 and up accounted for more than 8,500 of them, according to the Center

for Disease Control and Prevention" [11] There are many reasons that seniors are more susceptible to suicide, one of which is loneliness. They may struggle with social isolation due to the death of a spouse or someone close to them. "Research has shown that bereavement is 'disproportionately experienced by older adults' and can often trigger physical or mental health illnesses like 'major depression and complicated grief.'

FIGURE 17: Suicide Rates in the United States by Age (2017)

Suicide Rates In America

People 85 years and older face one of the highest suicide rates of any age group.

Age Group	Suicides per 100,000
<15	1.3
15-24	14.5
25-34	17.5
35-44	17.9
45-54	20.2
55-64	19.0
65-74	15.6
75-84	18.0
85+	20.1

Source: *Centers For Disease Control and Prevention,* 2017 data
Credit: *Nick Underwood/NPR*
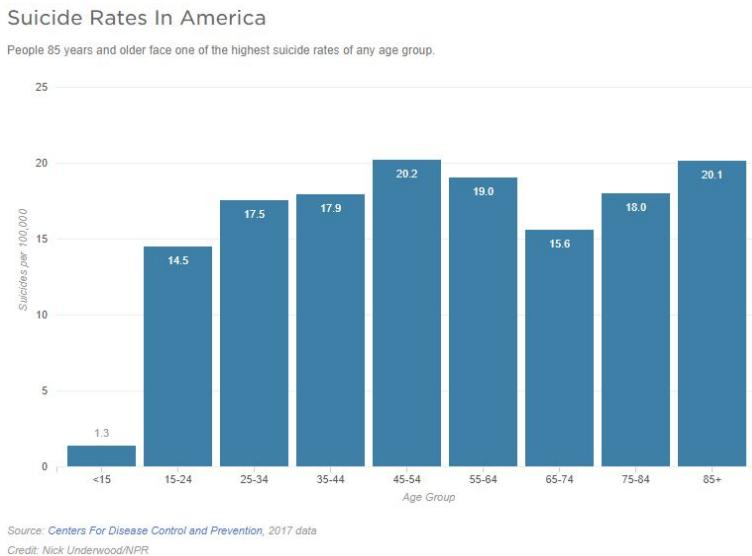
Source: NPR: Isolated And Struggling, Many Seniors Are Turning To Suicide

Suicide rates across the United States have been on the rise, and they are affecting an unanticipated population: senior citizens. "Of the more than 47,000 suicides that took place in 2017, those 65 and up accounted for more than 8,500 of them, according to the Center for Disease Control and Prevention." [12] The reason for these increasing numbers is very likely linked to social isolation, defined structurally by the National Institute of Health as "the absence of social interactions, contacts, and relationships with family and friends, with neighbors on an individual level, and with 'society at large' on a broader level."[13] Bereavement is disproportionately experienced by older adults and can directly trigger a multitude of physical and mental illnesses, including depression. Family members may live great distances that prevent frequent visits and increase feelings of loneliness and isolation. According to the National Institute on Aging, social isolation and loneliness can be linked to higher risks for a variety of physical and mental conditions: high blood pressure, heart disease, obesity, a weakened immune system, anxiety, depression, cognitive decline, Alzheimer's disease, and even death. People experiencing unexpected loss due to death, separation from friends or family, retirement, changes in health status or mobility, or lack of transportation are at a particular risk.

When activities of daily life become impacted things like driving, reading, social interactions, and other activities, depression may result.

"Depression is not a normal part of aging", NIH, National Institute on Aging

It can often be hard to recognize signs of depression in older adults, especially when family visits are scarce. Warning signs include stockpiling medication, rushing to revise a will, using alcohol or drugs increasingly, altering sleep habits, sharing statements of hopelessness and withdrawing socially. The physical effects that social isolation and loneliness can have on the body are surprising. Those who engage in activities and socialize with others are more likely to live longer and be happier which can improve cognitive function. Loneliness can trigger various types of inflammation which can increase the risk of chronic diseases such as Alzheimer's. It can also compromise the immune system, leaving a person susceptible to viruses and infections. Other effects include accelerated buildup of plaque in arteries and growth and spreading of cancer cells.[14]

Technology

The impact of technology on our lives cannot be ignored. Our phones, computers, cars, homes and even our wristwatches are digitized. We can control many of these with verbal commands or the touch of our finger. We have cars capable of driving themselves and safety systems that alert us before an accident occurs- even breaking for us. We can literally order anything we could ever want or need from our home and have it delivered! Even our financial system has changed whereby our banking and bill paying can all be done from home. Our library catalog card systems have been replaced by search engines and most of us are regular "Googlers". Where phone calls used to be the main line of communication, now different generations are demanding new ways of communicating. "Remember that when talking about "millennial" communication preferences, we're really talking about the future of workplace communication overall—and whether you like it or not, you'll need to prepare for those changes. As of 2015, according to Pew Research Center, millennials have surpassed Gen Xers as being the most prominently represented generation in the modern workforce, with 53.5

million people." [15]   It's become necessary to understand each generation and their communication preferences.

Technology has greatly impacted and advanced medical practice as well. Our surgeons are equipped with robots and lasers whose procision is far beyond the abilities of us as humans. Gene mutations can be identified. Designer medications exist that provide therapies specific to your body. Medical professions can access your medical history and communicate with other specialists you've seen simply with your permission to share your electronic health record. A computer takeover is unlikely however because patients' desire for emotional connection, reassurance, and a healing touch from their caregivers is well documented and longstanding. Studies also demonstrate the effectiveness of the "therapeutic touch" of physicians who care and connect emotionally with their patients.[16] Technology is amazing but there is no substitute for human interaction.

As we celebrate the efficiency and abundance that technology provides we realize there are downsides. The use of technology can have negative impacts on our health. According to The Vision Council, "Many individuals suffer from physical eye discomfort after screen use for longer than two hours at a time." Digital eye strain may also affect your head, neck, and shoulders, depending on your posture as you use different devices. Bright light reduces levels of the hormone melatonin, which regulates sleep, and decreases leptin, which makes you feel full. At the same time, bright light increases ghrelin, which makes you feel hungry. Sedentary activities like computer use can also lead to weight gain.[17]

Technology can also affect our mental health and sleep patterns. The artificial light from TV and computer screens affects melatonin production and throws off circadian rhythms, preventing deep, restorative sleep. Research out of the University of Gothenburg, Sweden reinforces this fact, specifically relating to young adults. Doctoral students conducted four studies to find out the effects of heavy computer and cell phone use on the sleep quality, stress levels, and general mental health of young adults. They concluded that heavy cell phone use increased sleep disorders in men and increased depressive symptoms in both men and women. The most likely to experience mental health issues were those that were constantly accessible via cell phone. [18] This growing and serious problem of technology overuse is something that the medical and community at large will need to address.

CLINICAL CARE

According the County Health Rankings model, clinical care accounts for 20% of what affects our health. Although this seems like a small percentage, the US spent $3.3 Trillion on health expenditures in 2016. We depend on the medical expertise, research and specialized care that we have access to in this country and more locally in the northeast. In Hunterdon we have a large network of primary care physicians. A primary

care provider is one that typically specializes in internal or family medicine- this means they have a broad base of medical knowledge. The benefit to having a primary care physician is that they are familiar with you and your health and wellness needs. This knowledge and familiarity with your medical history and your life in general leads to more comprehensive care. They may have been treating you for years, perhaps your family members too. It is this well-rounded, connected and personalized care that leads to better health outcomes through prevention and individualized treatment. Having a PCP can be very satisfying and reassuring to a patient, especially in times of illness.

Healthcare Access and Utilization

Access to quality and timely healthcare is critical for an individual to achieve the best possible health outcome, as it impacts the individual's overall physical, social and mental well-being. Access to primary care is of particular importance as it is the first step in preventing, diagnosing, and treating an illness. Common barriers to accessing healthcare include high cost and deductibles, lack of insurance coverage, lack of transportation, and language difficulties. All of these barriers, at varying levels, are present in Hunterdon County.

In Hunterdon, 95% of adult residents reported having some form of health insurance compared to 91% in New Jersey and 94% in Somerset County. Although our insurance rates are high, disparity exists especially among the hispanic community, the fastest growing ethnic group in the county. According to the 2016 Latino Health Behavior Risk Factor Survey, overall, 26.1% (n=78) of the survey participants reported having healthcare insurance coverage, while 73.9% (n=221) reported they did not. This is a substantial increase for those without health insurance in 2016 as compared to the 2011 data. Overall, a little over one-fifth (n=71; 23.7%) of Hunterdon Latinos surveyed reported not being able to see a doctor in the last year due to costs. This percentage is substantially higher than the 5.0% of residents who reported in the 2010 Hunterdon County BRFSS of not being able to see a doctor in the last year due to costs. Inferential statistics were conducted to determine whether there was a significant decrease in response to this question based on: a) gender; b) age group; and c) educational level. No significant differences were found for gender nor age group. However, those with a high school education or higher were more likely to report having to see a doctor, but could not due to the costs. The current political climate and undocumented immigrants remain a barrier to access to healthcare.

FIGURE 18: Percentage of Uninsured Adults in Hunterdon County
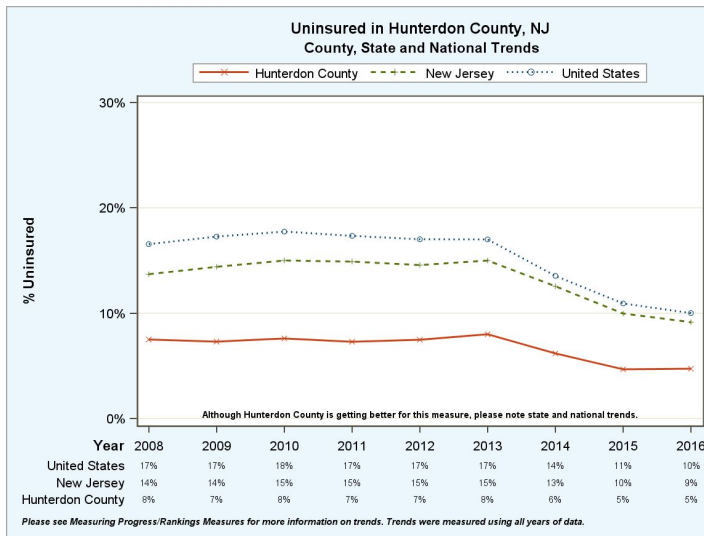
Source: County Health Rankings & Roadmaps 2019

Physician Supply

While there is a projected shortage of primary care providers in NJ and the rest of the nation, Hunterdon is in a better position, as its main focus has always been on primary care and preventive services. Hunterdon boasts a 840:1 ratio of population to primary care physicians (includes family medicine, internal medicine, pediatrics, and obstetrics/gynecology), substantially better than the state ratio of 1190:1. This is thought to contribute to the reason Hunterdon County has such high health rankings.

Preventive Services

Within our hospital system we empower patients to take measures to prevent disease and manage chronic illness. Our large primary care network and promotion of healthy life choices helps our patients to achieve their health goals. In 2016, 59% of our patients age 50 and above in the primary care setting were seeking preventive care within the last 12 months. However, due to efforts made by our population health team and the physician practices we were able to increase that to nearly 66% over 3 years. Early detection of cancer increases chances for successful treatment and therefore survival. Accessibility and affordability of these preventive services is important. In Hunterdon, percentages of reported use of preventive services are generally higher than the state average. Most Hunterdon Residents have health insurance.

Among the Hunterdon Hispanic community, use of preventive services is not nearly as frequent. Hispanics are less likely to be screened for blood cholesterol and for breast and colorectal cancers. Again, not having access to these preventive/early diagnostic tests contributes to poorer health status of Hispanics in the community. However,

initiatives by our population health team and Hunterdon Regional Cancer Center have helped to increase the percentage of latino patients, in the primary care setting age 51-74 years who have been appropriately screened for colorectal cancer from 63% in 2016 to nearly 71% in the second quarter of 2019.

Emergency Care

Emergency departments (EDs) provide a significant source of medical care in the United States with over 145 million total ED visits occurring in 2016. ED utilization reflects the greater health needs of the surrounding community and may be the only care available to those who are uninsured and cannot receive care elsewhere. Many ED visits could be avoided if patients had access to primary care services. Hunterdon Medical Center (HMC) is the only hospital in Hunterdon County. HMC is a 178-bed teaching hospital that treated about 9,000 (excludes newborns) inpatients in 2018 and had 570,000 outpatient visits. The Emergency Department (ED) has over 32,000 visits each year.

TABLE 9: Hunterdon Medical Center- Top 5 Symptoms of ED Patients 2019

Presenting Symptoms	Number of ED Triaged Patients
Abdominal pain	3502
Chest pain	2086
Dyspnea	1220
Fever	1101
Back injury-pain-swelling	1077

Source: HMC Emergency Department Director, 2019

HEALTH OUTCOMES

Morbidity/Mortality

"Morbidity has been defined as any departure, subjective or objective, from a state of physiological or psychological well-being. In practice, morbidity encompasses disease, injury, and disability. In addition, although for this lesson the term refers to the number of persons who are ill, it can also be used to describe the periods of illness that these persons experienced, or the duration of these illnesses."[19] Mortality means death and in this case we will examine causes of death.

FIGURE 19: Premature Death: Years of Potential Life Lost Based on 3-Year Averages
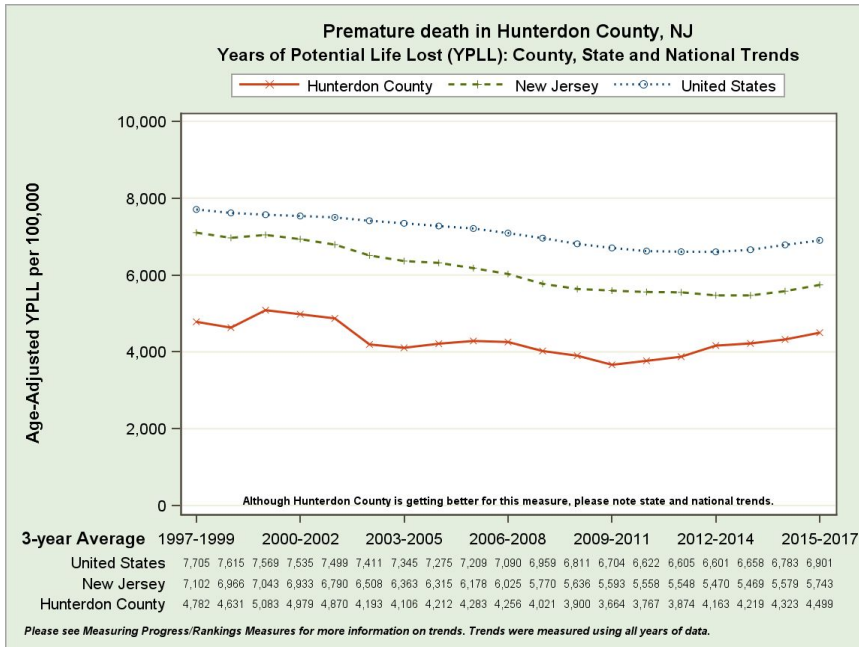
Source: County Health Rankings & Roadmaps

TABLE 10: Leading Causes of Death in New Jersey

Cause of Death	Percent of Deaths	Number of Deaths
Heart disease	25.2%	18,842
Cancer	21.7%	16,262
Unintentional injury	6.0%	4,484
Stroke	4.6%	3,475
CLRD	4.3%	3,228
Alzheimer's Disease	3.8%	2,830
Diabetes	2.5%	1,908
Septicemia	2.5%	1,897
Kidney disease	2.1%	1,591
Influenza and Pneumonia	1.8%	1,337
All other causes	25.4%	19,207

TABLE 11: Leading Causes of Death in Hunterdon County

Diseases	Number of Deaths	Rate	Rank
Heart Disease	224	25.2%	2
Cancer	229	25.7%	1

Source: NJSHAD Complete Health Indicator Report of Leading Causes of Death 2017

It's important to note that Hunterdon's cancer rates are slightly higher than the state's, making cancer our leading cause of death over heart disease by just 05%.

Cancer

Cancer has a major impact on society in the United States and across the world. In 2018, an estimated 1,735,350 people were diagnosed with cancer in the United States and 609,640 people will die from the disease. Cancer statistics describe what happens in large groups of people and provide a picture in time of the burden of cancer on society. Statistics tell us things such as how many people are diagnosed with and die from cancer each year, the number of people who are currently living after a cancer diagnosis, the average age at diagnosis, and the numbers of people who are still alive at a given time after diagnosis. They also tell us about differences among groups defined by age, sex, racial/ethnic group, geographic location, and other categories.Research has shown that some types of cancer are preventable, while others, if detected in the early stages, are curable. This strongly supports our preventive care focus. In fact at our Primary Care Practices we saw an increase in the number of adults (age 50+) receiving colon cancer screenings. We continue to work to

What's known about cancer prevention is still evolving and there still remains differences in opinion and research. However, what is not up for debate are the well accepted healthy lifestyle recommendations. According to the Mayo Clinic these seven tips can help reduce certain cancer risks: don't use tobacco, eat a healthy diet (limit alcohol, eat lean and light, avoid processed meats), maintain a healthy weight and physical activity regimen, wear sun protection, keep vaccines current, avoid risky behaviors (unprotected sex, sharing needles) and seek regular preventive medical care.

Hunterdon County has one of the highest rates of Melanoma in the state. This may be due to our large agricultural community and the number of residents getting repeated sun exposure. We are also concerned over some residents delaying medical attention because of lack of insurance or residency status. They are

waiting until the cancer is more advanced and less treatable or lethal. Many initiatives to educate migrant workers and the general public on the importance of prevention and screenings have been rolled out and free screenings are offered.

FIGURE 20: Age-Adjusted Invasive Cancer Rates in New Jersey
Melanoma of the Skin, 2012-2016
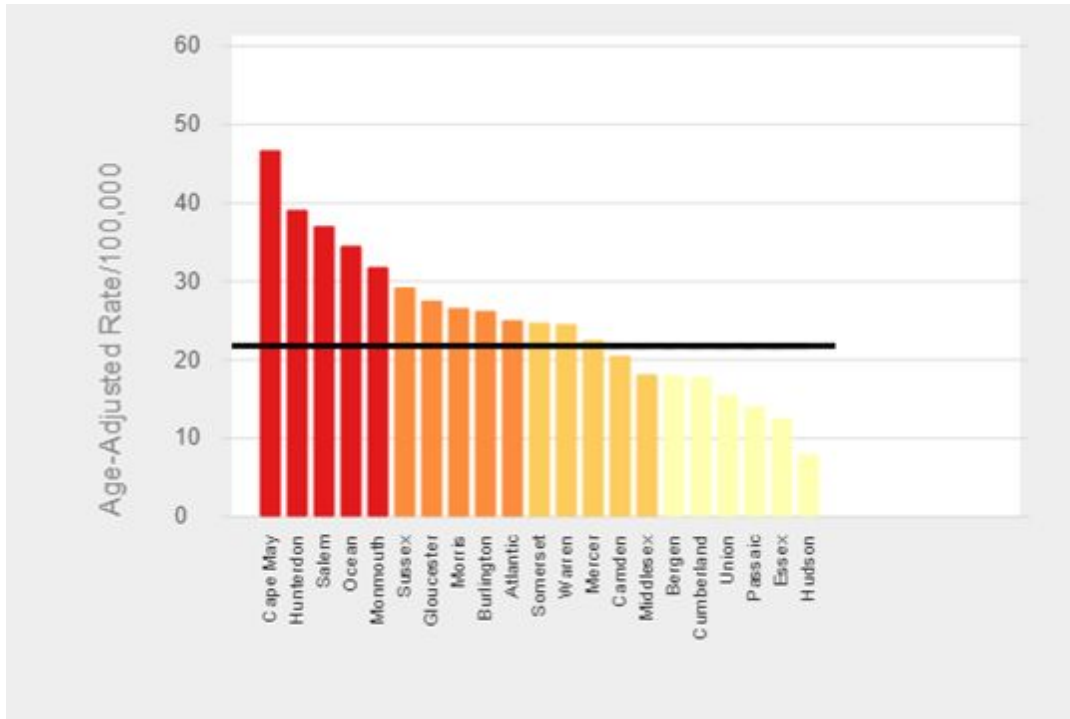
Source: Hunterdon Regional Cancer Center 2012-2016

TABLE 12 : Top Five Cancers in Hunterdon County 2012-2016

Type of Cancer	Incidence
Breast	839
Melanoma of the skin	638
Prostate	440
Lung and Bronchus	419
Colon and Rectum	347

Source: Hunterdon Regional Cancer Center 2012-2016

FIGURE 21: Hunterdon Regional Cancer Center Top 10 Cancer Site Incidence 2017

Hunterdon Regional Cancer Center Top 10 Cancer Site Incidence 2017

Corpus Uteri 3.5%
Pancreas 3.5%
Thyroid Gland 5.8%
Colon 5.8%
Lymph Nodes 7.0%
Urinary Bladder 9.1%
Melanoma Skin 10.3%
Breast 32.4%
Prostate Gland 11.6%
Bronchus & Lung 11.0%
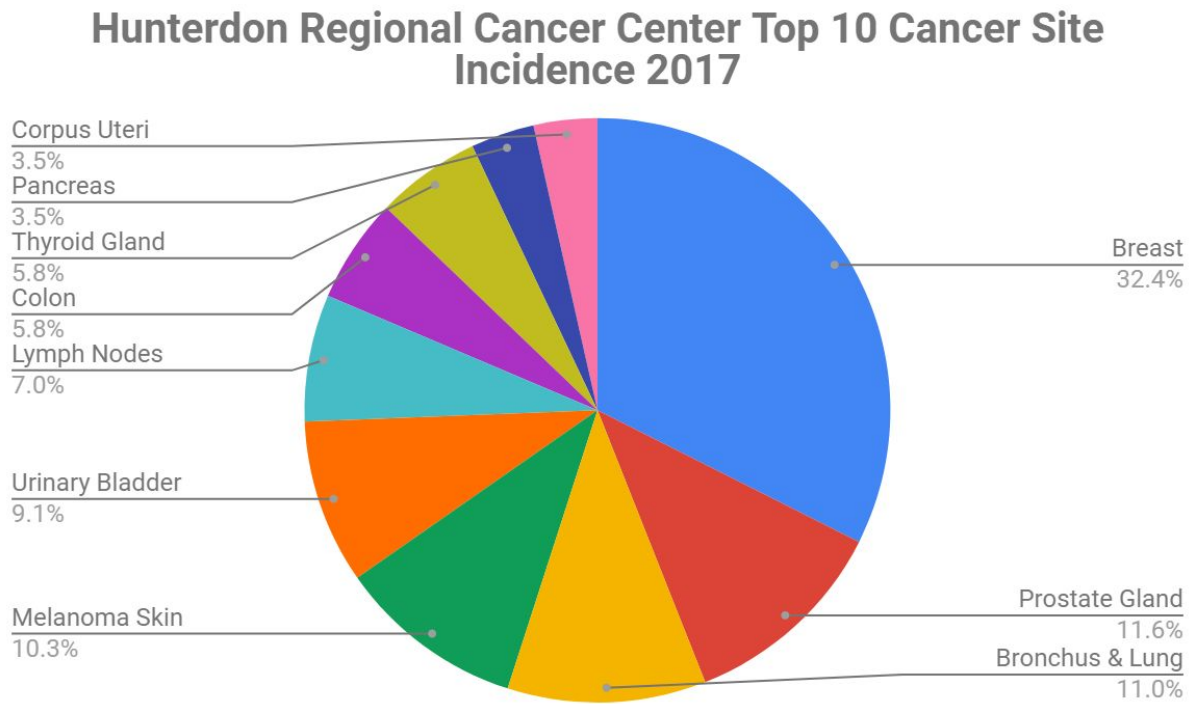
Source: Hunterdon Regional Cancer Center 2012-2016

Diabetes

Type 1 diabetes occurs at every age, in people of every race, and of every shape and size. 1.25 million Americans have it and 40,000 people will be diagnosed with it this year. An estimated 30.0 million people have diabetes in the US, however an estimated 7.2 million of these are undiagnosed. According to the American Diabetes Association's Economic Costs of Diabetes in the US, the total estimated cost of diagnosed diabetes in 2017 was $327 billion, including $237 billion in direct medical costs and $90 billion in reduced productivity.

Prediabetes is a condition in which blood glucose or A1C levels - which reflect average blood glucose levels - are higher than normal but not high enough for a diagnosis of diabetes. People with prediabetes are at an increased risk of developing type 2 diabetes and cardiovascular disease, which can lead to heart attack or stroke. An estimated 84.1

million adults ages 18 years or older (33.9% of US adults) have prediabetes. The prevalence of prediabetes is similar among men and women across racial and ethnic groups.

Cardiovascular Health

According to the CDC, about 610,000 people die of heart disease in the United States every year–that's 1 in every 4 deaths. Heart disease is the leading cause of death for

By 2035, more than **130** million adults, or **45.1%** of the US population,

are projected to have some form of CVD. Total costs of CVD are expected to reach $1.1 trillion in 2035, with direct medical costs projected to reach $748.7 billion and indirect costs estimated to reach $368 billion.

both men and women. However in Hunterdon County the death rates for cancer are slightly higher. More than half of the deaths due to heart disease in 2009 were in men. Coronary heart disease (CHD) is the most common type of heart disease, killing over 370,000

people annually. Every year about 735,000 Americans have a heart attack. Of these, 525,000 are a first heart attack and 210,000 happen in people who have already had a heart attack. About half of the patients age 65 plus in our EHR have hypertension (high blood pressure). However, this is significantly lower than the national rates for hypertension.[20]

Mental Health

Poor mental health days are measured by the average number of mentally unhealthy days reported in the past 30 days. According to the County Health Rankings, in 2017, our number was 3.0, but it has since increased with the current number of 3.4. Mental health issues are prevalent among county residents. Substance abuse and the "success-driven" culture of the county are believed to contribute to this growing problem. Stress and anxiety, caused by the pressure to succeed academically and athletically among youths, and professionally and financially among adults, were mentioned in the focus group sessions to be contributing to the mental health problem. School nurses frequently report lack of coping skills and anxiety as the top two issues with school age children.

The 2016 Latino BRFSS asked the question "When 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?" Of the 351 people surveyed, 266 answered this question. 216 (62.4%) indicated "none" or zero to this question. The remaining 47 (36.6) participants indicated that they had days during the past 30 days when their mental health was not good. This figure is higher than the 26.7% reported in the 2010 Hunterdon BRFSS. For those 47 participants reporting at least one day where their mental health was not good, the overall average was 9.6 days

(32% of days) per 30 day period (ie. month), with a range of 1 to 30 days. Inferential statistics were conducted to determine whether there was a significant difference in whether mental health was not good based on: a) gender; b) age group; and c) educational level. No significant differences were found.

HEALTH BEHAVIORS

Healthy Weight, Physical Activity, and Nutrition

Old habits die hard and it can take many attempts to adopt healthier behaviors. However, the benefits are worth it and healthier habits may protect against serious health problems like obesity and diabetes. New habits, like healthy eating and regular physical activity, may also help with weight management and increased energy levels. Focus group participants explained that access to fresh farm markets, parks (like the one

pictured below) and outdoor recreation helped them make better health choices. Initiatives led by the Hunterdon Healthcare Population Health team and the Partnership for Health seem to have impacted our "Healthy Weight" statistics. Although slight, we have increased the number of adults (18 and over) in our primary care practices with a BMI in the healthy weight range. This is to be celebrated as the national trends continue to trend in a negative direction.

The electronic health records used to analyze aggregate BMI of patients are based on actual measurements taken during physician office visits. It is interesting to note that this BMI data is significantly higher when compared to the self-reported BRFSS data shown in the national obesity prevalence map below.

FIGURE 22: Prevalence of Self-reported Obesity Among US Adults
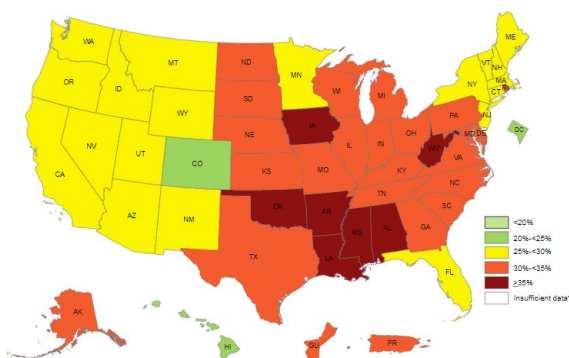
Source: CDC Adult Obesity Prevalence Maps 2017

Increased physical exercise is associated with lower risk of type 2 diabetes, heart disease, stroke, cancer, and hypertension and lower rates of obesity. According to the National Institute of Health (NIH) aerobic exercises,including jogging, swimming, cycling, walking, gardening,and dancing have been proven to reduce anxiety and depression. It also appears that regular exercise has a positive effect on the brain and may boost cognitive function. In fact, there is currently a $47 Million study at the University of California, Berkeley to look at lifestyle changes and if they can protect memory in people at risk of developing dementia. The benefits of exercise are many and extend beyond maintaining a healthy weight.

Healthy eating means eating a variety of foods that give you the nutrients you need to maintain your health, feel good, and have energy. Residents in both Hunterdon and Somerset have access to fresh produce in the growing season via farm markets and in grocery stores all year assuming they have the money to pay for it (and transportation). We have several grocery stores however there are "food deserts" in Hunterdon. The USDA defines food deserts as parts of the country void of fresh fruit, vegetables, and other whole foods, usually found in impoverished areas. This is largely due to a lack of grocery stores, farmers' markets, and healthy food providers. This has become a big problem because while food deserts are often short on whole food providers, especially fresh fruits and vegetables, instead, they are heavy on local quickie marts that provide a wealth of processed, sugar, and fat laden foods that are known contributors to our nation's obesity epidemic. In Lambertville, Hunterdon County there is no grocery store. For residents without transportation this poses a dilemma. Some residents take advantage of the food pantry located in the city for fresh produce however supplies may vary throughout the year after the growing season. In Flemington many lower income residents have reported using convenience stores and bodegas to buy most of their food. One teen reported, "I get breakfast every morning at the Quickie Mart on my way to school." This is unfortunate because of the many fresh farm markets available in Hunterdon County if you have transportation to access them.

FIGURE 23: Adult Obesity in Hunterdon County

Adult obesity in Hunterdon County, NJ
County, State and National Trends

Hunterdon County ——×—— New Jersey – – + – – United States ····⊙····

% Obese

Hunterdon County is getting worse for this measure.

3-year Average	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
United States	24%	24%	26%	26%	27%	28%	28%	28%	28%	28%	28%	29%
New Jersey	21%	22%	23%	24%	24%	25%	25%	25%	25%	26%	26%	26%
Hunterdon County	18%	19%	18%	19%	20%	21%	20%	21%	21%	22%	21%	21%

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data.
Note: Starting with the 2011 data, a new BRFSS methodology was introduced that included cell phone users. Data from prior years should only be compared with caution.

Source: County Health Rankings & Roadmaps 2019

Tobacco and Vaping
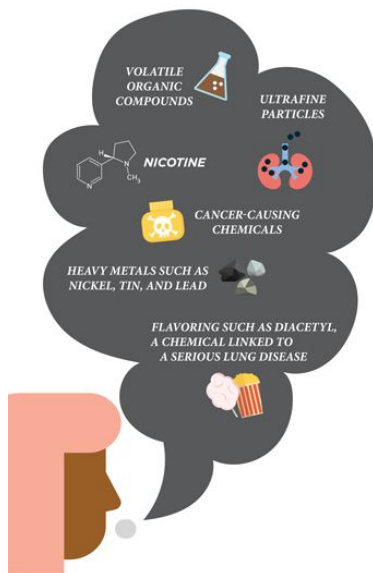
Tobacco use is the leading cause of preventable death, chronic disease, healthcare crisis, economic burden, cause of lost productivity, and source for poor health outcomes and quality performance measures. According to the Wisconsin University and the Robert Wood Johnson Foundation County Health Rankings and Roadmaps 13% of Hunterdon County residents are smokers compared to the New Jersey rate of 14%. Although cigarette use has long been a concern and continues to be, a new method of tobacco delivery is becoming increasingly popular and is especially troubling because of its popularity with our nation's youth.

The term "vaping" refers to inhaling and exhaling aerosol from an electronic vaping device or electronic cigarette (e-cigarette). Electronic cigarettes are the most common type of vaping device. Vaping has become increasingly popular among young people, with 1.3 million more teens using the devices in 2018 than in 2017. Considerable progress has been made in reducing cigarette smoking among our nation's youth. However, the tobacco product landscape continues to evolve to include a variety of tobacco products, including smoked, smokeless, and electronic products, such as e-cigarettes.

Source: Center for Disease Control 2019
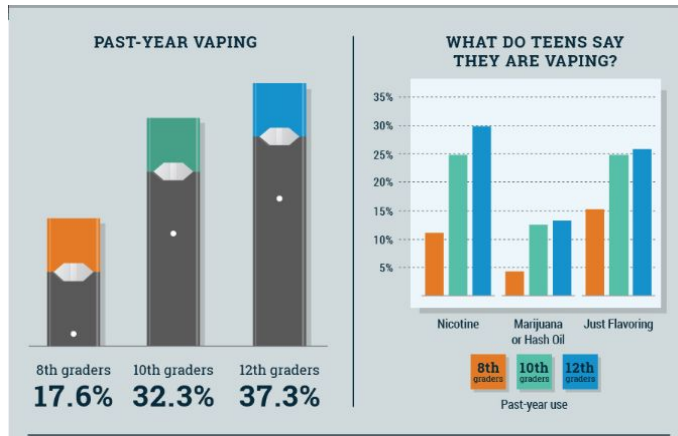
E-cigarettes are designed to deliver nicotine, flavorings, and other additives to the user via an inhaled aerosol. E-cigarettes entered the US marketplace around 2007, and since 2014, they have been the most commonly used tobacco product among US youth. Since electronic cigarettes are not regulated there are no laws against them. Current e-cigarette use increased 78% among high school students during the past year, from 11.7% in 2017 to 20.8% in 2018. In 2018, more than 3.6 million US youth, including 1 in 5 high school students and 1 in 20 middle school students, currently use e-cigarettes. Nicotine exposure during adolescence can harm the developing brain - which continues to develop until about age 25. Nicotine exposure during adolescence can impact learning, memory, and attention. Using nicotine in adolescence can also increase the risk for future addiction to other drugs. In addition to nicotine, the aerosol that users inhale and exhale from e-cigarettes can potentially expose both themselves and bystanders to other harmful substances, including heavy metals, volatile organic compounds, and ultrafine particles that can be inhaled deeply into the lungs. E-cigarettes can also be used to deliver other drugs, including marijuana. For adults, e-cigarettes may have the potential to reduce risk for current smokers if they completely transition from cigarettes to e-cigarettes; however, a majority of adults who use e-cigarettes also smoke cigarettes.

A typical JUUL cartridge, or "pod," contains about as much nicotine as a pack of 20 regular cigarettes. [21] However, despite the risks, approximately two thirds of JUUL users

aged 15-24 do not know that JUUL always contains nicotine. The most popular brand of e-cigarette among teens is called Juul, from which many teens coined the term "juuling" to indicate the use of these USB flash drive-shaped electronic cigarettes. The devices come in bright colors and contain liquid cartridges in flavors like cotton candy, green apple and chocolate: 81% of youth who ever tried tobacco chose flavored tobacco as their first tobacco product. They are battery-powered nicotine-delivery devices made in various designs. Each e-cigarette contains a small lithium ion battery that heats up a liquid solution held in the cartridge and produces a fog-like aerosol that is drawn into the lungs and exhaled through the mouth and nose. E-cigarettes are fairly new and are not yet regulated by the FDA, and researchers are still working on understanding the health effects that these addictive chemicals can have on the body, especially those that are not fully developed. We know now that e-cigarette vapor (also known as "e-juice") contains cancer-causing toxic chemicals which may be harmful in both first and second-hand vapor. The nicotine in vape pens can act as a gateway drug - its addictive nature may increase a teen's risk of addiction to other drugs later in life, including other tobacco products which are known to cause cancer and even death. [22]

FIGURE 24: E-Cigarette Use Among High School Students
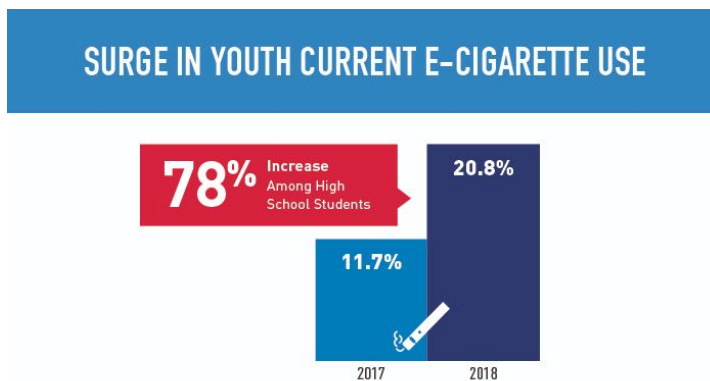
Source: 2018 National Youth Tobacco Survey

Marijuana and Other Illicit Drugs

Electronic cigarettes are now being used by marijuana smokers. This trend is on the rise among teens, who use the devices to vaporize cannabis in liquid form, which produces an odorless vapor. This form of marijuana is much stronger than the regular form of marijuana, containing between 50 and 90 percent THC, the drug's main addictive and mind-altering chemical. Some of the side effects from vaporizing marijuana include memory loss and trouble concentrating, paranoia, respiratory related illnesses, and increased risk of several types of cancer. Marijuana also affects driving ability.[23] Drivers who have been using marijuana drive differently than drunk drivers. Where a drunk

driver may drive faster than normal and miscalculate their skills, a driver under the influence of marijuana tends to overcompensate for their deficits. Marijuana, second to alcohol, is the most commonly found drug in the blood of drivers who have been involved in crashes. Drivers with THC were approximately twice as likely to be responsible for a deadly crash or be killed than drivers who hadn't used alcohol or any drugs, according to several studies. Younger adults, ages 18-25, are also more likely to attempt driving under the influence of marijuana than adults 26 and older.[24] Below is a chart that shows high school marijuana use over a 30 day period in Hunterdon County.

FIGURE 25: Substance Use and Abuse - High School Marijuana Use
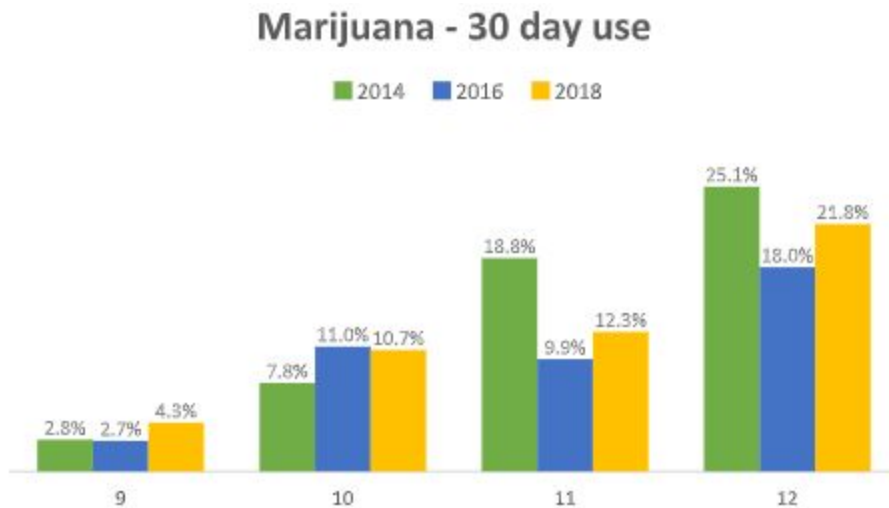
Source: PRIDE Survey Hunterdon County High School Students 2019

When you smoke weed, THC (the active ingredient in marijuana) travels to the brain and slows down nerve cells. THC also impacts the parts of the brain that control memory, concentration, and coordination. That "high" feeling means that the brain isn't working fast enough to do its job.

Many people are pushing for marijuana, also known as weed or pot,to be legalized. Half of Americans today, including the Drug Policy Alliance (DPA), think that weed should be handled just like alcohol and tobacco. 10 of the 50 states and the District of Columbia have legalized marijuana for recreational purposes.

FIGURE 26 : States Where Marijuana is Legal

Source: Business Insider 2019

Prescription drug abuse in the United States is increasing at an alarming rate. The majority of preventable drug overdose deaths involve opioids (70%); opioid deaths totaled 43,036 in 2017 in the United States. Preventable opioid overdose deaths claimed 14,762 lives in 2017. Many adults prescribed opioids by doctors subsequently become addicted or move from pills to heroin. Seventy percent of people who have misused prescription painkillers reported getting them from friends or relatives. Most people don't even know that sharing opioids is a felony. Teenagers report they can easily obtain prescription pills from medicine cabinets in their own and other people's homes.[25] Efforts by a local substance abuse prevention coalition, the Hunterdon County Prosecutor's Office, and other county partners continue to educate our residents about proper disposal of prescription medications. Prescription collection drop boxes are currently located in many locations throughout Hunterdon County.

FIGURE 27: Marijuana - High School Perception of Risk/Harm

Table 7: Perception of Risk of Marijuana Use

Grade Level	N of Valid	N of Miss	Moderate or Great Risk
9th	321	11	76.9
10th	270	6	61.9
11th	299	14	52.8
12th	226	5	38.9
9-12	1116	36	59.1
Total	1116	36	59.1

Source: Students Perception of Risk, Hunterdon PRIDE Survey
Note: "N of Valid" are answered questions and 'N of Miss" were unanswered

FIGURE 28: Substance Abuse Admissions by Municipality

Hunterdon County	Alcohol		Cocaine/Crack		Heroin		Other Opiates		Marijuana/Hashish		Other Drugs		Unknown		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
ALEXANDRIA TWP	7	2			2	1	1	3							10	1
BETHLEHEM TWP	5	1			4	1			5	5					14	1
BLOOMSBURY BORO	7	2	1	4	4	1	1	3	2	2					15	1
CALIFON BORO	15	4			8	2	1	3	2	2	2	5	1	50	29	3
CLINTON TOWN	18	4	1	4	15	4			1	1	1	3			36	4
CLINTON TWP	29	7	1	4	30	8	4	11	4	4					68	7
DELAWARE TWP	4	1			1	0									5	0
EAST AMWELL TWP	1	0							2	2					3	0
FLEMINGTON BORO	101	25	8	33	100	26	7	18	32	29	11	28			259	26
FRANKLIN TWP	4	1			1	0			2	2	1	3			8	1
FRENCHTOWN BORO	16	4			9	2	1	3	1	1	1	3	1	50	29	3
GLEN GARDNER BORO	33	8	1	4	32	8	5	13	7	6	1	3			79	8
HAMPTON BORO	20	5			20	5	1	3	7	6	1	3			49	5
HIGH BRIDGE BORO	13	3	3	13	10	3	1	3	4	4					31	3
HOLLAND TWP	2	0													2	0
LAMBERTVILLE CITY	15	4			17	4					2	5			34	3
LEBANON BORO	12	3	1	4	17	4	2	5	6	6					38	4
LEBANON TWP	13	3	1	4	9	2	2	5	2	2					27	3
MILFORD BORO	37	9	1	4	14	4	1	3	11	10					64	6
RARITAN TWP	3	1			12	3	3	8	6	6					24	2
READINGTON TWP	14	3	4	17	16	4	4	11	6	6	3	8			47	5
STOCKTON BORO	10	2			5	1			1	1	3	8			19	2
TEWKSBURY TWP	3	1	1	4	1	0					5	13			10	1
UNION TWP	2	0			2	1	1	3	1	1					6	1
WEST AMWELL TWP	1	0			3	1			1	1					5	0
NOT Stated	26	6	1	4	49	13	3	8	6	6	8	21			93	9
Total	411	100	24	100	381	100	38	100	109	100	39	100	2	100	1004	100

Source: NJ Department of Human Services, Division of Mental Health and Addiction Services

TABLE 13: Hunterdon County Overdose Deaths, Naloxone Administrations, Opioid Prescriptions Dispensed

Historic Data (2013-2017)

Hunterdon County	2013	2014	2015	2016	2017	2018
Suspected Overdose Deaths	8	12	14	20	22	20
Naloxone Administrations	N/A	N/A	58	58	77	75
Opioid Prescriptions Dispensed	62,314	62,132	65,882	59,559	54,572	47,741

Source: NJ Department of Law and Public Service

TABLE 14: Somerset County Overdose Deaths, Naloxone Administrations, Opioid Prescriptions Dispensed

Historic Data (2013-2017)

Somerset County	2013	2014	2015	2016	2017	2018
Suspected Overdose Deaths	32	33	35	44	49	52
Naloxone Administrations	N/A	N/A	138	217	250	223
Opioid Prescriptions Dispensed	153,489	156,461	163,041	155,433	141,565	123,230

Source: NJ Department of Law and Public Service

According to the 2016 New Jersey Statewide Crime Summary, there were 37,243 arrests reported by the law enforcement agencies of the state for index offenses, a decrease of 5 percent when compared to 2015. Adults accounted for 93 percent and juveniles accounted for 7 percent of the arrests. In 2014, 32 percent of persons arrested for drug abuse violations were age 21 and under. 51 percent of the drug arrests were due to marijuana and 39 percent were arrests related to opioid or cocaine and their derivatives (heroin, morphine). In 2014 in Hunterdon County, 44% of substance use/abuse arrests were due to alcohol and 32% were due to heroin.
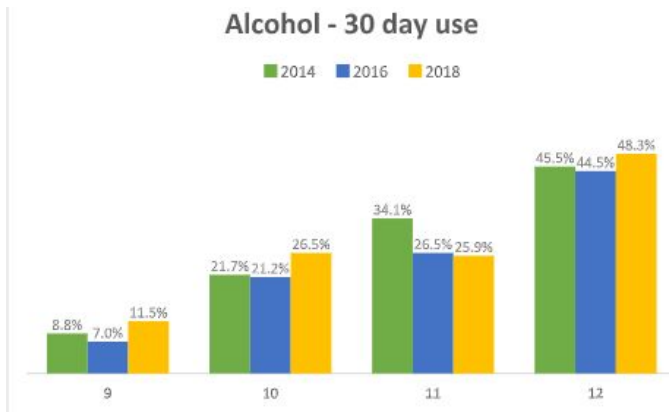
Alcohol

According to the 2015 National Survey on Drug Use and Health (NSDUH), 86.4 percent of people ages 18 or older reported that they drank alcohol at some point in their lifetime; 70.1 percent reported that they drank in the past year; 56.0 percent reported that they drank in the past month. In 2015, 26.9 percent of people ages 18 or older reported that they engaged in binge drinking in the past month; 7.0 percent reported that they engaged in heavy alcohol use in the past month.[26] About 1 in 4 college students report academic consequences from drinking, including missing class, falling behind in class, doing poorly on exams or papers, and receiving lower grades overall.XX

Excessive drinking is a risk factor for a number of adverse health outcomes such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. Approximately 88,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the United States. Excessive drinking is the percentage of adults that report either binge drinking, defined as consuming more

than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) nr 2 (men) drinks per day on average.

According to the County Health Rankings and Roadmaps, 19% of Hunterdon County Residents drink excessively, and Somerset County is close at 18%. This is higher than the NJ rate of 17%. Prevention Resources, a Hunterdon County based substance abuse prevention organization, shared some recent data about alcohol use for high school students in the county. In a Risk and Protective Factor Survey, they looked at students' alcohol use in the past 30 days. The trend shows a steady increase in the use of alcohol in the past 30 days and there seems to be a decreasing perception of harm as teens become upperclassmen.

FIGURE 29: Alcohol Use and Abuse: Percentage of HS Students who Used Alcohol in the Past 30 Days

Source: Hunterdon PRIDE Survey 2019

FIGURE 30: Alcohol use and Abuse: Perception of Risk/Harm by HS Students

Grade Level	N of Valid	N of Miss	Moderate or Great Risk
9th	327	5	92.4
10th	273	3	87.2
11th	301	12	84.1
12th	226	5	82.3
9-12	1127	25	86.9
Total	1127	25	86.9

Source: Students Perception of Risk, Hunterdon PRIDE Survey

Note: "N of Valid" are answered questions and 'N of Miss" were unanswered

FORCES OF CHANGE ASSESSMENT

INTRODUCTION

The purpose of the Forces of Change Assessment (FOCA) is to identify and analyse present and future external forces expected to have an impact, be it positive or negative, on the public health system and the community's health. Forces of change include:

- **Trends**- patterns over time, such as migration in or out of the community or a growing disillusionment with government
- **Factors**- discrete elements, such as a community's large ethnic population, an urban setting or the jurisdiction's proximity to a major waterway
- **Events**- one-time occurrences, such as a hospital closure, a natural disaster or the passage of new legislation

Categories of forces of change include: Social, Economic, Political, Technological, Environmental, Scientific, Legal and Ethical.

METHODOLOGY

A total of 10 key stakeholders and community leaders participated in the Forces of Change brainstorming session. Participants represented many different sectors including: healthcare, business, economic development, government, law enforcement, public health, population health, education and non-profit. The Assessment was held on April 30, 2019 and the session was two hours long. Similar to the Community Health Needs Assessment focus groups, a modified version of the Nominal Group Technique was used. In round robin fashion, each participant identified a force of change. All responses were listed on the board by the facilitator. This process was repeated. Once every participant had the opportunity to share at least 2 responses, the facilitator asked if any of the forces written on the board can be combined (i.e. similar ideas). Next participants were given a ballot which lists the final discrete forces identified and grouped during the brainstorming session. They were then asked to select their Top 5 Forces and rank them in order of significance (with 1 being the most significant). The ballots were collected and assigned points. The force ranked #1 (i.e. most important) received 5 points, #2 (i.e. 2nd most important) with 4 points, and so on. Points were added and the 5 forces that have the highest point total were considered to be the most important "forces" for the entire group.

RESULTS

The following lists by category, all the individual Forces of Change identified by the FOC participants:

Social
- Aging workforce
- Obesity
- Vaccine preventable diseases (impact of unvaccinated on the community)
- State legislation around marijuana ("pot")
- Opioid crisis
- Healthcare disparities (How do we address that?)
- Aging workforce (Have to come back to work after retirement)
- Rising levels of depression and anxiety in our youth
- Social service resources for Medicare clients limited
- Mental health in criminal justice system
- Vaping (nicotine and marijuana)
- Aging leadership
- Partnership for health - good communication between sectors

Economic
- New Jersey and Hunterdon County affordability (both residential and businesses)
- Changing demographics in the county (Not as many young families moving in)
  - Affects many areas: healthcare, schools
- Stress on local non-profit organizations
- Hype around possible economic downturn
- Cost of treating the undocumented

Political
- Resistance to common sense economic development in Hunterdon County
- Polarizing national political climate

Environmental
- Transportation and isolation
- Terrorism and gun violence

Technological
- Social media
- More data than ever before

Participants were asked to combine, if any, forces they believe to be similar. The group ultimately settled on a final list and ranked their Top 5 Forces of Change. The forces

identified to be most significant were not surprising and most are reflective of issues of concern for both our state and nation at large. The 5 ranked to be the leading Forces of Change are as follows:

1. <u>State legislation surrounding the legalization of marijuana; Ongoing opioid crisis; Increase in vaping, especially amongst our youth</u>- Marijuana potency soars while youths' perception of harm drops. As more states legalize, it becomes more difficult to combat. The misuse and addiction to opioids, including prescription pain medications, heroin and synthetic drugs like fentanyl continue to be a national crisis. Vaping and other E-cigarettes are not risk-free. Most E-cigarettes contain nicotine- the addictive drug found in regular cigarettes, cigars and other tobacco products.

2. <u>Rising levels of depression, anxiety and other Mental Health disorders</u>- Hunterdon County school nurses identified lack of coping skills and anxiety as the top two health issues in our schools. Anxiety disorders are the most common mental health issue in the United States. It is not uncommon for someone suffering from anxiety to also suffer from depression and vice-versa. Stakeholders discussed the importance of accessible mental health services, early identification and treatment.

3. <u>Changing demographics in the county</u>: Aging related issues: Aging workforce including those in leadership positions - According to the 2018 United States Census Bureau data our population is on the decline at approximately 125,000. Census officials estimate that by 2035 the number of seniors citizens will out number the number of children in the United States. The growing elderly population will contribute to an increased demand for specific healthcare, social and supportive services. A discussion ensued among the group as to how to bring younger people into Hunterdon County. The group also discussed the need for organizations with aging leadership to create succession plans.

4. <u>Social media</u>- Social media is a social instrument of communication and has both positive and negative effects on society according to our stakeholders. The speed at which information can be disseminated is incredible- practically instant. This is critical when needing to get out urgent messages about weather warnings, health issues, traffic patterns etc. However this same benefit can be devastating when used to bully or spread false information. "If it is on the internet, it must be true", a troubling misconception by many to be true. Social media can put added strain on small businesses and agencies because they may not have the resources to maintain the needed social media platforms and presence for marketing and communicating with their markets. On the other hand, it is a free resource to conduct research, grow businesses, meet new people and stay

connected with old friends; the possibilities are endless. It is an incredible resource if used responsibly.

5. <u>New Jersey and Hunterdon County Affordability and Changing Demographic</u>- Many would agree that Hunterdon County is a great place to raise a family, with excellent schools, low crime rates and close proximity to two major metropolitan cities. However, the declining and aging population is a concern as well as loss of people with wealth. State and federal funding for grants and other social programs may be reduced as a result of out migration. Many of the new generation of young people are seeking city living and the convenience of mass transportation. Homes in Hunterdon County are not affordable for most young people which may further stunt our growth. There are opportunities to remedy this through the creation of more affordable housing, the addition of a four year college or university, entertainment such as a movie theater, increasing other arts and culture and promoting all the wonderful things the county currently has to offer.

Forces of Change	Challenges/Threats	Opportunities/Strategies
Substance Misuse	- Marketing - Legalization of marijuana - Traffic stops - Social services and workforce (What about teen workforce?) - Is it a gateway drug? - Teens, pregnant moms, etc. - Increased black market use - Addiction	- Build stigma around use - Municipalities can opt in or out - Business interest - Revenue source - Collaboration is a big opportunity
Mental Health	- Comorbidity of mental health and substance misuse - Suicide - Funding - Access to behavioral health services (need more providers)	- Prevention/Reduce stigma - Open communication - Bring it to light through many avenues (Schools, workplace) - Multi-sectors work well together

Aging		
Aging (continued)	- LYFT is here - County task force on transportation - Cross-age experiences (multigenerational) - Focus on leadership progression/ succession - More formalized infrastructure (marry senior care, end of life) - Seniors' children scattered around country - Make connections to community and resources	- Affordability of Hunterdon - Isolation (dignified/proud) - Aging in place challenges - Expense of in-home services - Transportation - Drug misuse/alcohol and pot - Health disparities
Social Media	- Not a priority at some agencies because n F/T person in place to do it - Isolation/Teens don't talk to each other - Polarization - Misinformation - Speed of misinformation - Decrease in thoughtful communication - Anxiety over speed of response	- Updating websites to reach more people - Building our social media skills - Increase marketing and how to market to different groups - Fast
Changing Demographic	- Loss of people with wealth - Decreased funding for grants and state/federal	- Still a great place to raise a family - Four-year college/university education at RVCC

	funding R/T out migration ● Young people moving out so other young people don't want to move in ● Concern about overcrowding vs. people leaving (misinformation many times)	● More affordable housing ● Movie theater/entertainme nt (especially kids) ● Arts/culture ● Off hours use of schools ● Many community and state parks and river towns

COMMUNITY THEMES AND STRENGTHS ASSESSMENT

INTRODUCTION

The purpose of the Community Themes and Strengths Assessment (CTSA) is to gather input from community members to develop a more in-depth understanding of issues they feel are important, their concerns and their perceptions about quality of life. Focus groups were the approach used to engage the community, to generate ideas, prioritize issues perceived as having the greatest impact on the health of the community and to obtain an in-depth view of their idea of a healthy community. Twelve focus groups were completed between September 2018 and June 2019 with a total of 219 participants. Participants were chosen from various sectors of Hunterdon County: population health teams, medical professionals, school nurses, teens, faith leaders, senior service providers, Partnership for Health members, home health aides, teachers and administrators, food pantry managers, municipal liaisons (senior residents), and senior center members.

METHODOLOGY

A modified version of the Nominal Group Technique (NGT) was employed in conducting the focus groups. These steps included:
1. An introduction of all participants and the facilitator
2. An outline of the general "rules" to be observed during the session
3. A review of the three questions to be posed:
    a. What factors contribute to quality of life living in Hunterdon County?
    b. What factors reduce quality of life living in Hunterdon County?
    c. What recommendations do you have to improve the quality of life in Hunterdon County?
4. A "round-robin" method was used by the facilitator who called on each participant (in turn) to share an idea in response to the question posed. Each unique idea

was written on a board or a flip chart poster in the exact words used by the participant. Each participant got two turns to respond to each question. Afterwards, the facilitator opened the floor and asked participants to share any additional ideas they had that were not yet listed on the board.

5. The ideas were clarified and grouped. Participants were asked to look at the ideas listed on the board and to agree on a final listing. The voting then began. Each idea was read to the group by the facilitator, and the participants, by raising their hands, cast two votes on the ideas they believed to be the most important. The votes were then tallied and recorded. The same steps were followed for all three questions.

Data from all 12 focus groups were collected and analyzed independently and collectively. The analysis identified prevailing themes in each of the three questions and coded accordingly.

The group and date of the sessions are as follows:

| Group	# of Participants	Date
Population Health Team	13	January 24, 2019
Medical Professionals	34	January 24, 2019
School Nurses	15	March 21, 2019
Teens	10	June 10, 2019
Faith Leaders	10	November 7, 2018
Senior Service Providers	12	September 20, 2018
Partnership for Health Members	16	March 12, 2019
Home Health Aides	50	January 23, 2019
Teachers/Administrators	7	February 1, 2019
Food Pantry Managers	16	October 22, 2018
Municipal Liaisons (Senior Residents)	17	May 17, 2019
Senior Center Members	19	April 5, 2019

RESULTS

Because participants of the focus groups were from varying backgrounds with varying life and work experiences, a broad range of responses was expected. However, in spite of their differences, common themes across all 12 focus groups were apparent in each of the three questions.

Factors Contributing to Quality of Life

For factors that contribute to quality of life in Hunterdon, common responses from participants were: natural beauty of the county and the opportunity it provides residents to engage in outdoor physical activity, quality education system, low crime rate and a feeling of safety and good community services and resources. Figure 31 highlights the most important factors contributing to the quality of life in Hunterdon, as voted by all focus group participants.

FIGURE 31: Leading Factors that Contribute to Quality of Life in Hunterdon County

Most Prioritized Factors Contributing to the Quality of Life in Hunterdon County
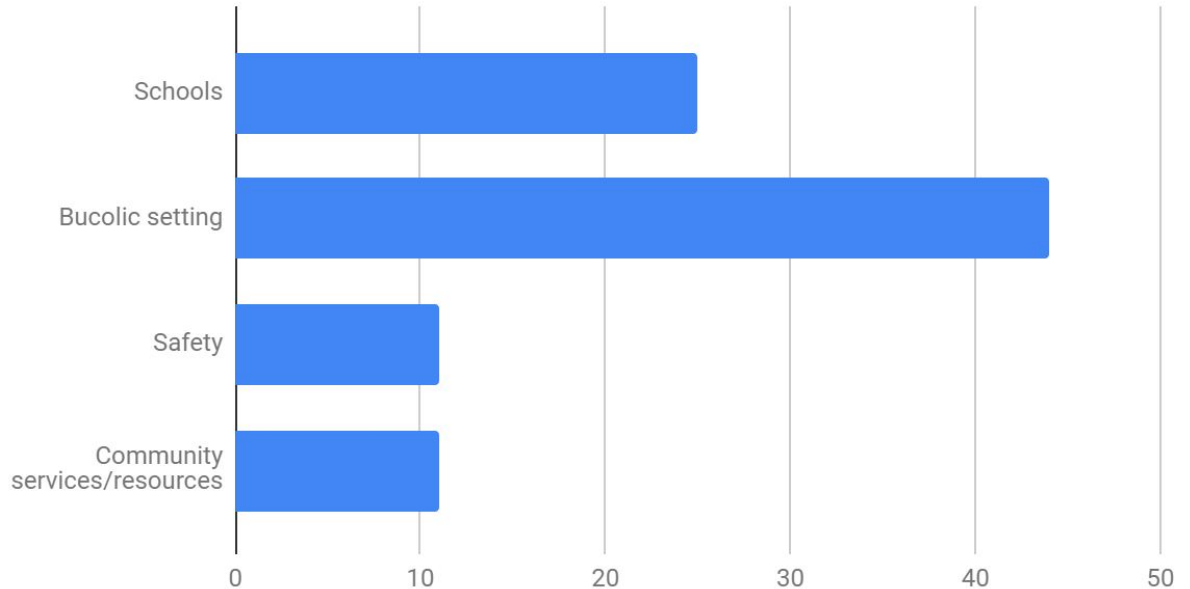
Bucolic Setting/Environment

"Hunterdon County is a beautiful and scenic place to live."

By far the factor contributing to quality of life in Hunterdon County that the focus group members agreed on was the bucolic nature of the area. The rural nature and open spaces are the reason many of them chose to live here. The counties character includes the natural resources, parks, open space and the overall beauty of the county's physical environment. A clean and beautiful neighborhood has a profound impact on the physical and mental health and well-being of its residents. The availability and accessibility of open space encourage physical activity by providing opportunities to engage in various outdoor recreational activities. Our proximity to the Delaware River and two in-county reservoirs also allows for water recreation.

Schools

"My parents think we have good schools here and so do I".

Even the county teen focus group unanimously listed "good schools" as adding to the quality of life here. Hunterdon has long been known for its Blue Ribbon Schools and high graduation rates. However, education is also valued by members of the community so parents encourage learning and in many instances have the money to expose children to educational experiences that extend beyond their school day.

Safety

"I feel safe walking in my community".

Another area appreciated by focus group members is our low crime rate. The feeling of safety was important to the participants. They also expressed that this helped with keeping their housing values high.

Community services/resources

"There are many community services and resources in the county".

Participants cited that our county is rich in services. There are many services available for the residents including targeted services for the more vulnerable groups: children, seniors, and the growing Latino population. The majority of residents have some type of health insurance, reducing barriers to accessing needed health services. However, high deductible plans and undocumented residents has created some access challenges.

Factors Reducing Quality of Life

FIGURE 32: Leading Factors that Reduce Quality of Life in Hunterdon County

Most Prioritized Factors Reducing Quality of Life in Hunterdon County
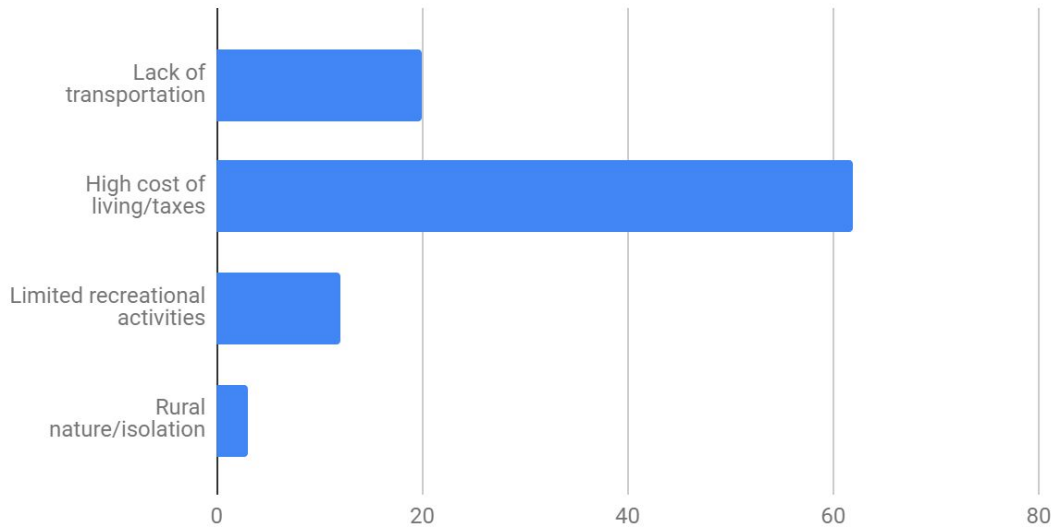
Lack of transportation

"We don't have any public transportation and taxis are too expensive".

Participants view the rural nature of Hunterdon County as both positive and negative. Although the natural beauty was seen as a factor that contributes to quality of life, the large geographic area can make navigating the county for those without a car difficult. Even with a personal vehicle, participants complained about the time "wasted" while getting from one point in the county to another.

High cost of living/taxes

"I will not be able to stay here when I retire".

As in the 2016 assessment, high property taxes are the number one prioritized factor for reducing quality of life in Hunterdon County. This is especially troublesome for the elderly, minority and young adult population. Teens in our focus group did not anticipate being able to live here as adults because of the high rents, home prices and property taxes. Many adult participants stated they would not remain in Hunterdon after retiring.

Limited recreational activities

"There are not a lot of things to do here, especially for teens".

This factor was somewhat contradictory. The participants enjoy the parks and outdoor activity but complained about the availability of indoor activities that were affordable. "Not everyone can afford to join a gym". Teens were particularly disappointed in the "lack of things to do" and said "it's boring here." Everyone is in agreement that we need a movie theater in the county.

Rural nature/isolation

"As a senior, it can be lonely here especially if you can't drive. I live on a large property and don't have neighbors close by."

Social isolation and loneliness are unfortunately the negative side to living in a rural area without public transportation. Residents, especially seniors expressed feelings of isolation. Teens also said, "we have to depend on our parents or we can't see our friends."

Recommendations to Improve Quality of Life

When participants were asked what recommendations they have to improve the quality of life living in Hunterdon, it was not surprising that they mentioned changing many of the factors they identified to be detrimental to the quality of life living in the county.   Most frequently cited recommendations related to affordability, transportation, a long standing problem.

Improve Affordability

The high cost of living frequently was a topic of concern to our residents. Recommendations ranged from consolidating school districts to tax breaks for seniors or those without school-age children. They explained that there should be more affordable housing and a living wage for those that work and want to live here.

Expansion of Mental Health and Addiction Services

Accessibility to mental health and rehabilitative services is important to our residents. Many recommended expansion of services within the county. "Remove barriers to care like poor insurance coverage" and long wait times for appointments. "The programs should meet the needs of the person, not the insurance companies". They also stressed

the need for continued education to the public about mental health disorders to reduce stigma.

Improve Transportation

As our senior population continues to grow and the need for workforce transportation expands, so does the need for improvement in transportation. This has been a longstanding problem in our county identified in all prior assessments. The LINK services have made some recent route changes and expansion into Somerset County which is helpful, but still does not address the many needs of our residents. Services like Lyft and Uber are slowly becoming more available in the county. To improve accessibility to many services, riders need more individualized on demand, affordable transportation options.

Increase Services to Senior Citizens

Residents want more senior housing and a dementia friendly community. They also recommend the county increase the affordable senior housing and create more opportunities for multigenerational volunteers to assist seniors- described as "adopt a senior". Communal living spaces were suggested to be considered by county planners.

CONCLUSION

This Community Health Needs Assessment report includes both qualitative and quantitative data, and provides an overview of the health status and health needs of the Hunterdon community as well as the surrounding areas. Quantitative data was gathered from multiple sources, both primary and secondary, such as the BRFSS, YRBS, US Census Bureau, NJHA County Health Profile and others. Qualitative data was collected from focus groups with members of the business community, healthcare professionals, faith leaders, social service providers, school nurses, county employees, teens, and senior citizens, as well as from the Forces of Change brainstorming session with key community stakeholders.

Review and analysis of all data helped the members of Partnership for Health to identify the following health priorities: healthy weight/obesity, mental health, substance misuse, aging-related issues and economic well-being. Action teams, composed of individuals with the expertise, passion and knowledge of the identified priority health issue, have been formed. Action team members are tasked to define attainable goals and objectives and develop clear strategies to address this health issue. All of this will be captured and documented in the 2019 Community Health Improvement Plan (CHIP).

In addition to the five areas identified above two overarching themes will be incorporated into each of the five areas: impact of technology and social media (both positive and negative), and health equity. We will look to design, implement, and evaluate community-driven strategies that work to eliminate health disparities and provide the people in our service area the best opportunity for optimum health and well-being.

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APPENDICES

Appendix A: County Health Rankings Model 2012
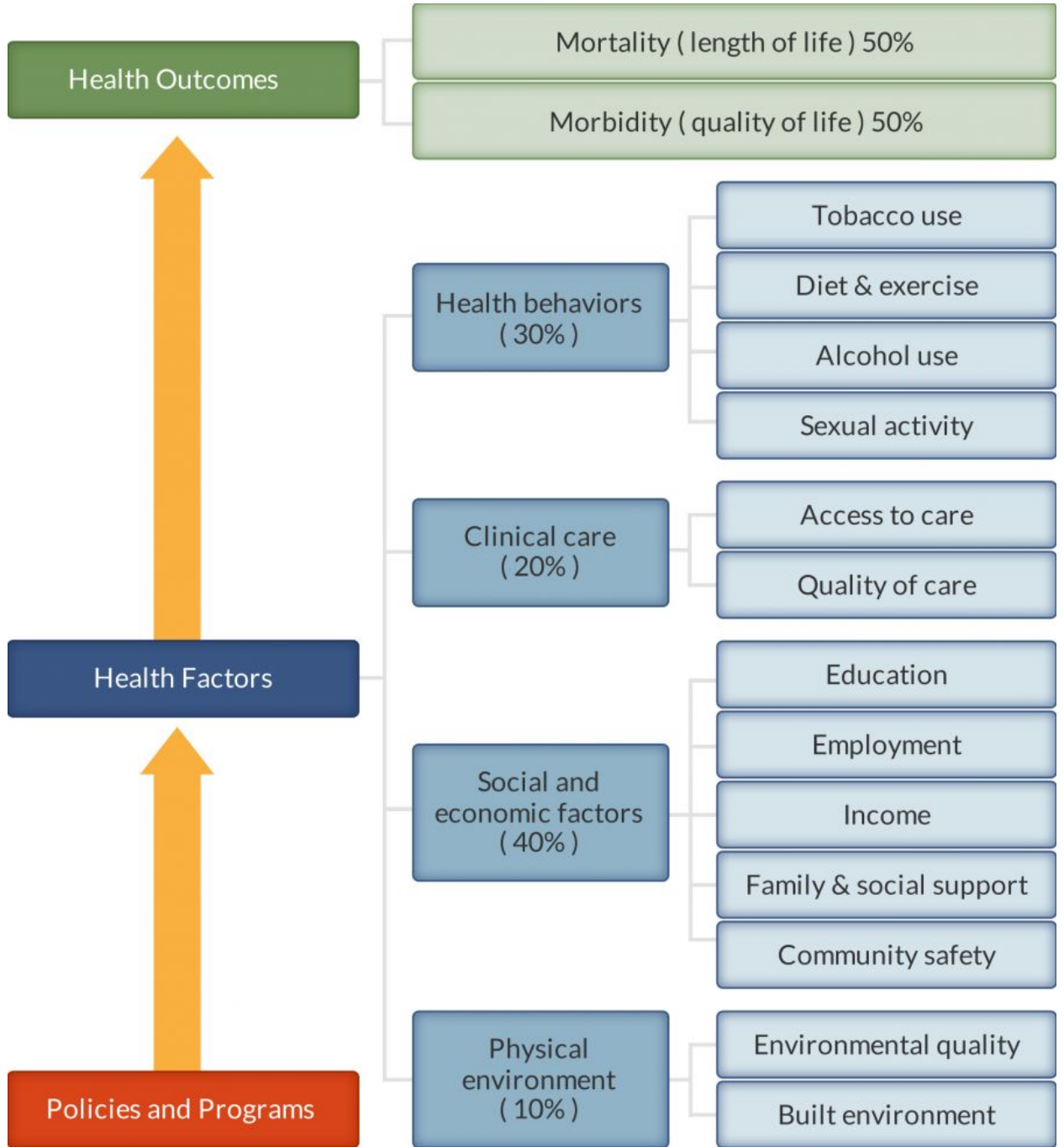
County Health Rankings model ©2012 UWPHI

Appendix B: List of Partnership for Health Members

- American Heart Association
- America's Grow a Row
- Alzheimer's Association
- Anderson House
- Cancer Coalition of Hunterdon and Mercer
- Calvary Episcopal Church
- Catholic Diocese of Metuchen
- Center for Healthy Aging
- Center for Nutrition and Diabetes Management
- Central Jersey Family Health Consortium
- Certified Fitness for Special Needs
- Clinton Public School
- Delaware Valley Family Health Center
- Easter Seals- New Jersey
- Family Promise
- Fisherman's Mark
- Flemington Jewish Community Center
- Francis Desmares Elementary School
- Flemington Area Food Pantry
- Foothill Acres
- Go Hunterdon
- Habitat for Humanity
- Hampton Public School
- HART Commuter Information Services
- High Point Partial Care
- Hunterdon Care Center
- Hunterdon Cardiovascular Associates
- Hunterdon Central Regional High School
- Hunterdon County Chamber of Commerce
- Hunterdon County Resident
- Hunterdon County Department of Human Services
- Hunterdon County Division of Health
- Hunterdon County Division of Senior, Disabilities and Veterans Services
- Hunterdon County Economic Development
- Hunterdon County Medication Access Partnership
- Hunterdon County Medical Reserve Corps
- Hunterdon County Office of the Prosecutor
- Hunterdon County Parks and Recreation
- Hunterdon County Public Health Nursing and Education
- Hunterdon County School Nurses Association

- Hunterdon County Superintendent Office
- Hunterdon County Vocational School District
- Hunterdon County YMCA
- Hunterdon Drug Awareness Program
- Hunterdon Helpline
- Hunterdon Healthcare System
- Hunterdon HealthCare Partners
- Hunterdon Medical Center
- Home Health Services
- Hunterdon Behavioral Health
- HMC Foundation
- Hunterdon/Mercer Regional Chronic Disease Coalition
- Hunterdon Pediatric Associates
- Hunterdon Preparatory School
- Hunterdon Prevention Resources
- Hunterdon Regional Cancer Center
- Hunterdon Regional Community Health
- Hunterdon Hospice
- Hunterdon Lifeline
- Hunterdon Integrative Medicine
- Hunterdon and Mercer County Regional Chronic Disease Coalition
- Hunterdon Prevention Resources
- Kingwood School
- Latino Healthcare Access Committee
- Nightingale NJ
- NJ Cancer Education and Early Detection
- NJ SNAP- Ed
- New Jersey Department of Health
- New Jersey Health Initiatives
- NORWESCAP
- One Voice
- Phillips Barber Family Health Center
- Raritan Valley Community College
- Readington Township Board of Health
- Right at Home
- Rutgers Cooperative Extension Services
- Safe Communities Coalition of Hunterdon and Somerset County
- Safe in Hunterdon
- The Salvation Army of Flemington
- St. Luke's
- State of New Jersey- Department of Education
- Shoprite of Hunterdon County

- Templo Internacional de Restauracion
- Town of Clinton
- United Way of Hunterdon County
- Valley Crest Farm
- Visiting Health and Supportive Services
- WakeFern Food Corporation
- Zufall Health