Newton Medical Center
Community Health Needs Assessment

2019-2021

Atlantic Health System
Newton Medical Center

ACKNOWLEDGEMENTS & CHNA COMPLIANCE

Atlantic Health System – Newton Medical Center (NMC) acknowledges the hard work and dedication of the individuals and the organizations they represent who contributed to NMC's Community Health Needs Assessment.

The 2019-2021 Newton Medical Center Community Health Needs Assessment (CHNA) was approved by NMC's Community Health Committee in December 2019. Questions regarding the Community Health Needs Assessment should be directed to:

Atlantic Health System
Newton Medical Center
Planning & System Development
973-660-3522

A copy of this document has been made available to the public via Atlantic Health System's website at https://www.atlantichealth.org/patients-visitors/education-support/community-resources-programs/community-health-needs-assessment.html. The public may also view a hard copy of this document by making a request directly to the office of the President, Newton Medical Center.

COMPLIANCE CHECKLIST: IRS FORM 990, SCHEDULE H	REPORT PAGE(S)
Part V Section B Line 1a A definition of the community served by the hospital facility	4
Part V Section B Line 1b Demographics of the community	7 and Appendix A
Part V Section B Line 1c Existing health care facilities and resources within the community that are available to respond to the health needs of the community	Appendix G
Part V Section B Line 1d How data was obtained	Addressed Throughout
Part V Section B Line 1f Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	Addressed Throughout
Part V Section B Line 1g The process of identifying and prioritizing community health needs and services to meet the community health need	6
Part V Section B Line 1h The process for consulting with persons representing the community's interests	6
Part V Section B Line 1i Information gaps that limit the hospital facility's ability to assess the community's health needs	None Identified

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EXECUTIVE SUMMARY

Newton Medical Center (NMC) is committed to the people it serves and the communities where they reside. Healthy communities lead to lower health care costs, robust community partnerships, and an overall enhanced quality of life. To that end, beginning in June 2019, NMC, a member of Atlantic Health System (AHS), undertook a comprehensive community health needs assessment (CHNA) to evaluate the health needs of individuals living in the hospital service area, that encompasses portions of Sussex and Warren counties in New Jersey as well as portions of Pike County in Pennsylvania. The purpose of the assessment was to gather current statistics and qualitative feedback on the key health issues facing residents of NMC's service area. The assessment examined a variety of health indicators including chronic health conditions, access to health care, and social determinants of health.

The completion of the CHNA provided NMC with a health-centric view of the population it serves, enabling NMC to prioritize relevant health issues and inform the development of future community health implementation plan(s) focused on meeting community needs. This CHNA Final Summary Report serves as a compilation of the overall findings of the CHNA process. This document is not a compendium of all data and resources examined in the development of the CHNA and the identification of health priorities for NMC's service area, but rather an overview that highlights statistics relevant to NMC's health priorities for the CHNA/CHIP planning and implementation period.

CHNA Components

- Secondary Data Research
- Key Informant Survey
- Prioritization Session
- Implementation Plan
- Key Community Health Issues

Key Community Health Issues

Newton Medical Center, in conjunction with community partners, examined the findings of the Secondary Data and Key Informant Interviews to select Key Community Health Issues. The following issues were identified and adopted as the key health priorities for NMC's 2019-2021 CHNA:

- Barriers to Access to Health Education & Resources
- Cancer
- Diabetes & Unhealthy Weight
- Heart Disease & Stroke
- Mental Health
- Substance Misuse

Based on feedback from community partners, health care providers, public health experts, health and human service agencies, and other community representatives, Newton Medical Center plans to focus on multiple key community health improvement efforts and will create an implementation strategy of their defined efforts, to be shared with the public on an annual basis.

COMMUNITY HEALTH NEEDS ASSESSMENT OVERVIEW

Organization Overview

Newton Medical Center is home to over 1,100 employees and over 350 physicians. As part of its community benefit programs, NMC provides screenings, health education programs, classes, support groups, vaccinations and health professions education.

Since 1932, Newton Medical Center has been providing care to the people of Sussex and Warren counties in New Jersey, Pike County in Pennsylvania and southern Orange County in New York. NMC is home to the Center for Breast Health, the only one of its kind in Sussex County, addressing all woman's breast health needs with state-of-the-art technology, resources, education, support and follow-up care. Newton Medical Center recently achieved the American Nurses Credentialing Center's Pathway to Excellence designation and is one of a select few health care facilities in New Jersey accredited by the Inter-societal Accreditation Commission (IAC) in all three echocardiography procedures: adult transthoracic, adult transesophageal and adult stress.

Newton Medical Center provides emergency care that is close to home for many in northern New Jersey with access to high-tech specialty services available through Atlantic Health System, when needed. Atlantic Health System provides access to renowned specialists, clinical trials, innovative technology and medical treatments, and compassionate support services right here in NJ. Our vast network of hospitals and providers spans 11 counties, so patients can enter our all-encompassing community of cancer care no matter where they live or work.

Atlantic Health System participates in and provides financial support to the North Jersey Health Collaborative (NJHC), an independent, self-governed 501(c)(3) organization with a diverse set of partners representing health care, public health, social services and other community organizations. NJHC's function is a shared process of community needs assessment and health improvement planning to identify the most pressing health issues and facilitate the development of collaborative action plans to address them. By working together NJHC partners are strategically aligning their efforts and resources to achieve collective impact on the health of our communities, accomplishing together what we could never do alone.

Atlantic Health System participates in the New Jersey Healthy Communities Network (NJHCN) and commits annual funding to their Community Grants Program, which brings together local, regional, and statewide funders, leaders and partners to support communities in implementing healthy eating and active living strategies to advance environment, policy and system changes. Since 2011, the NJHCN Community Grants Program has provided $3.2 million in grants. NJHCN Community Grants Program funding collaborative consists of Atlantic Health System, New Jersey Department of Health, New Jersey Health Initiatives, New Jersey Partnership for Healthy Kids, Partners for Health Foundation, and Salem Health & Wellness Foundation. Evaluation for the Community Grants Program is conducted by Center for Research and Evaluation on Education and Human Services (CREEHS) at Montclair State University.

Community Overview

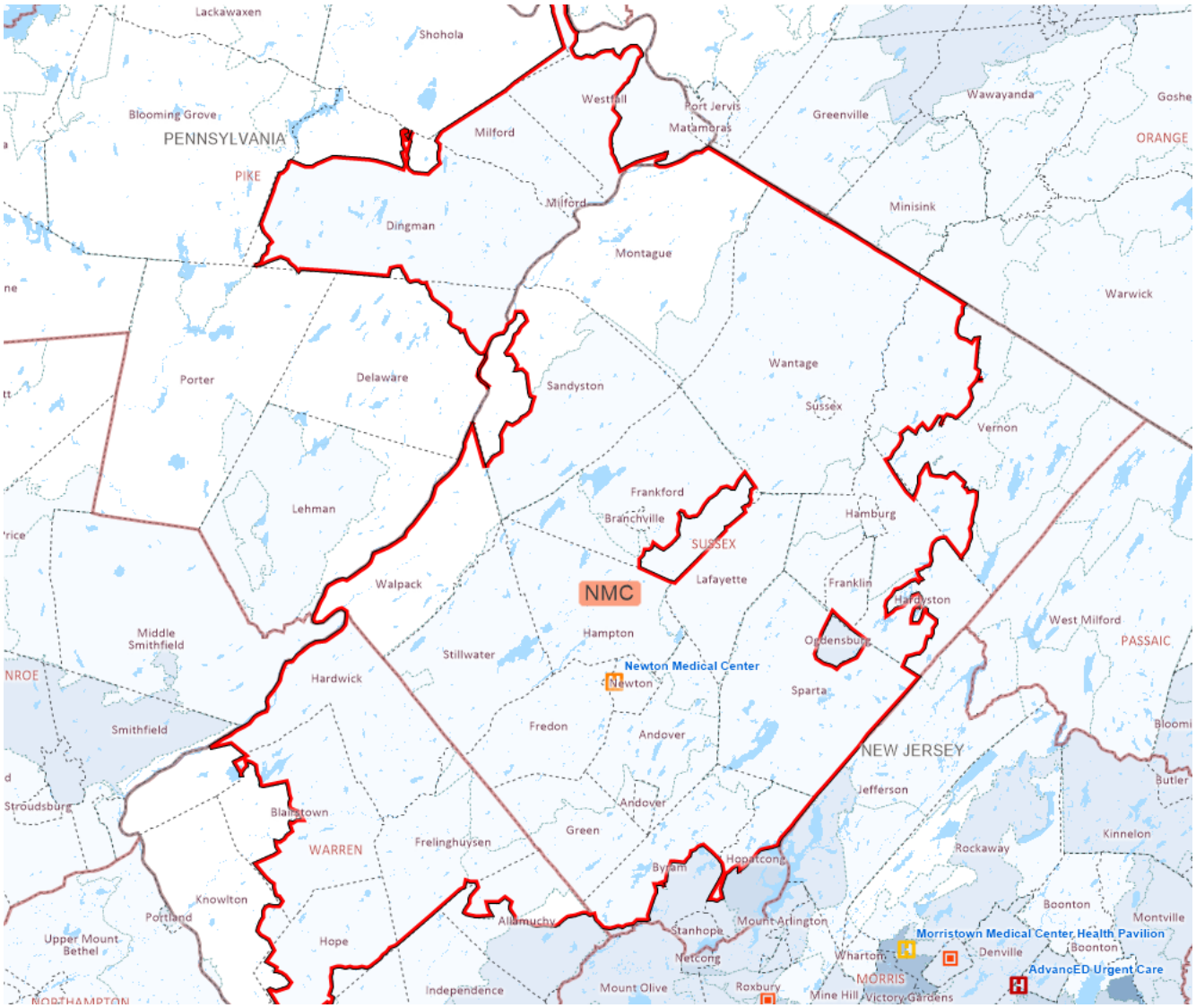
NMC defines the area it serves as the geographic reach from which it receives 75% of its inpatient admissions. For NMC, this represents 11 ZIP Codes, encompassing portions of Warren and Sussex counties in New Jersey and Pike County in Pennsylvania [1] There is broad racial, ethnic, and socioeconomic diversity across the geographic area served by NMC, from more populated suburban settings to rural-suburban areas of the state. Throughout the

[1] Source: NJDOH Discharge Data Collection System – UB-04 Inpatient Discharges

service area, NMC always works to identify the health needs of the community it serves. Following are the towns and cities served by NMC.

NMC STARK SERVICE AREA					
ZIP CODE	CITY	COUNTY	ZIP CODE	CITY	COUNTY
07416	FRANKLIN	SUSSEX	07419	HAMBURG	SUSSEX
07461	SUSSEX	SUSSEX	07821	ANDOVER	SUSSEX
07826	BRANCHVILLE	SUSSEX	07827	MONTAGUE	SUSSEX
07848	LAFAYETTE	SUSSEX	07860	NEWTON	SUSSEX
07871	SPARTA	SUSSEX	07825	BLAIRSTOWN	WARREN
18337	MILFORD	PIKE			

Geographic Area Served by Newton Medical Center



Methodology

NMC's CHNA comprised quantitative and qualitative research components. A brief synopsis of the components is included below with further details provided throughout the document:

- A Statistical Secondary Data Profile depicting population and household statistics, education and economic measures, morbidity and mortality rates, incidence rates, and other health statistics for primary and secondary service areas was compiled with findings presented to advisory committees for review and deliberation of priority health issues in the community.

- A Key Informant Survey was conducted with community leaders and partners. Key informants represented a variety of sectors, including public health and medical services, non-profit and social organizations, public schools, and the business community.

Analytic Support

Atlantic Health System's corporate Planning & System Development staff provided NMC with administrative and analytic support throughout the CHNA process. Staff collected and interpreted data from secondary data sources, collected and analyzed data from key informant surveys, provided key market insights and prepared all reports.

Community Representation

Community engagement and feedback were an integral part of the CHNA process. NMC's Community Health Department played a critical role in obtaining community input through key informant surveys of community leaders and partners and included community leaders in the prioritization and implementation planning process. Public health and health care professionals shared knowledge about health issues, and leaders and representatives of non-profit and community-based organizations provided insight on the community, including the medically underserved, low income, and minority populations.

Research Limitations

Timelines and other restrictions impacted the ability to survey all potential community stakeholders. NMC sought to mitigate these limitations by including in the assessment process a diverse cohort of representatives or and/or advocates for underserved population in the service area.

Prioritization of Needs

Following the completion of the CHNA research, NMC's Community Health Advisory Sub-Committee prioritized community health issues, which are documented herein. NMC will utilize these priorities in its ongoing development of a Community Health Improvement Plan which will be shared publicly on an annual basis.

SECONDARY DATA PROFILE OVERVIEW

Background

One of the initial undertakings of the CHNA was to evaluate a Secondary Data Profile compiled by the North Jersey Health Collaborative and Atlantic Health System's Planning & System Development department. This county and service area-based profile is comprised of multiple data sources. Secondary data is comprised of data obtained from existing resources (see Appendix B) and includes demographic and household statistics, education and income measures, morbidity and mortality rates, health outcomes, health factors, social determinants of health,

and other data points. County-level secondary data were augmented, where possible, by ZIP Code level inpatient and emergency room utilization data for the entire NMC service area and, when available AHS specific health care utilization data.

Secondary data was integrated into a graphical report to inform key stakeholders and NMC Community Advisory Board's Community Health Subcommittee of the current health and socio-economic status of residents in NMC's service area. Following is a summary of key details and findings from the secondary data review. A comprehensive data report is available upon request from Atlantic Health System.

Demographic Overview[2]

Sussex County's projected growth is -1.8% and NMC's service area has a growth of -0.7%; only Hamburg has a projected increase of 0.39%. At 274.97 residents per square mile, Sussex County is the 2nd least densely populated county in New Jersey; the 21 counties range from a low of 183.02 population/sq. mile (Salem County) to a high of 14,864.40 population/sq. mile (Hudson County). NMC's service area is predominately White (Non-Hispanic). The New Jersey average for White (Non-Hispanic) is 53.9%, NMC's service area is 86.4%. Over 97% of the population, ages 5 years and older, speak English only or speak English "very well"; this is 9 percentage points higher than the New Jersey average.

For 2019, the median household income for the NMC service area was over $90,159 which was $12,176 more than the state average (Sparta was 179% greater than the state average). There were three towns over $100,000 (Andover, Sparta and Blairstown) however, in 2024 there are projected five towns over $100,000. No towns are projected to increase more than the state average.

The state average for families below poverty was 7.8%; NMC's service area was 3.8% and Sussex County was 3.8%. NMC's service area has been projected to have a smaller increase in the 'number of families below poverty' than the state average; however, the number of Sussex County families has been projected to increase.

Currently, there are about 4.8% of people within NMC's service area receiving food stamps/SNAP benefits which was lower than the state average, 9.3%, and higher than Sussex County, 4,4%. Within NMC's service area, there were no towns higher than the state average.

The New Jersey unemployment rate is 7.9%, NMC's service area was 6.9% and the Sussex County rate was 7.1%. Out of the towns in the service area, 73% were below the state's unemployment rate.

The percent of the population within NMC's service area that had 'some high school education or less' was lower than the New Jersey average; meaning that the area's population was, on average, more educated.

Health Insurance Coverage / Health Care Access and Payer Mix[3]

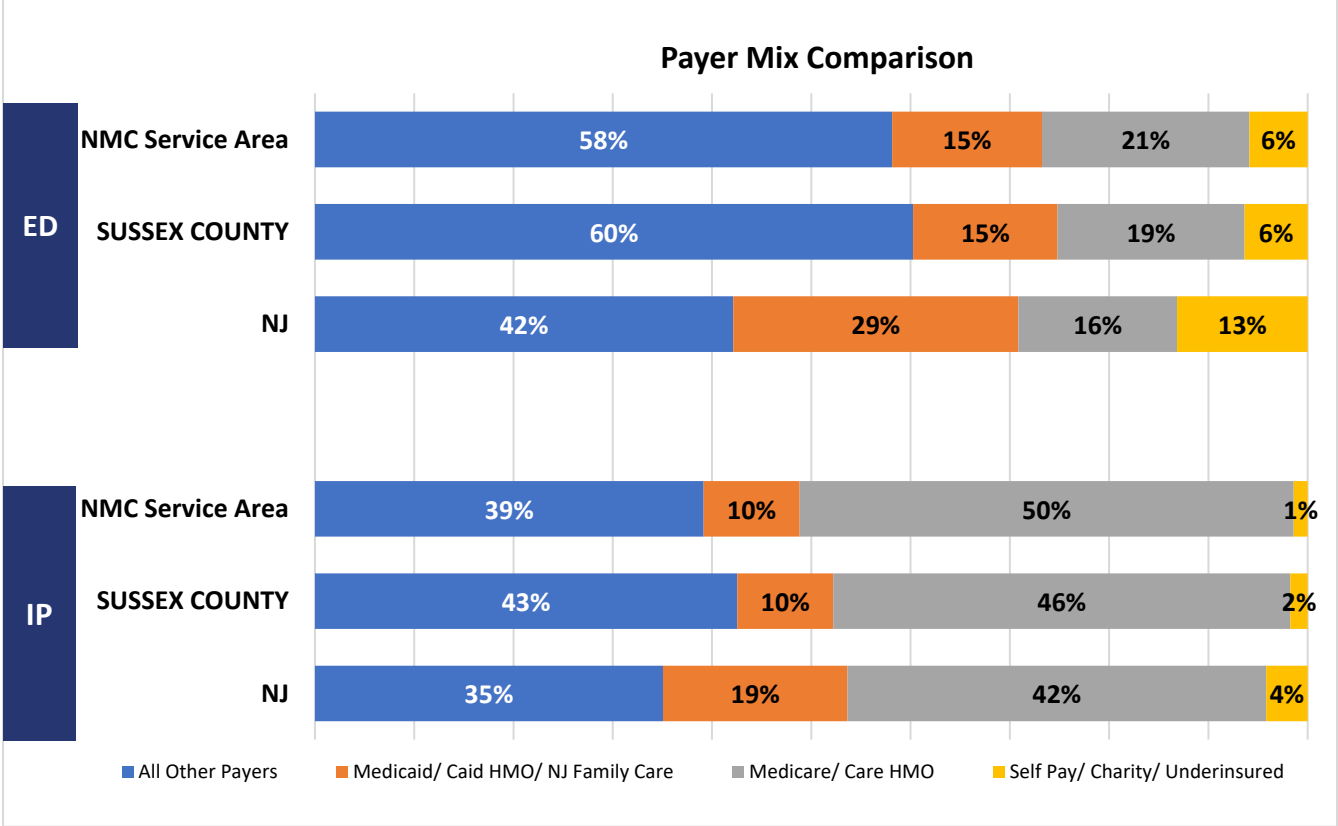
The state average for uninsured was 10.7%; however, NMC's service area and Sussex County were both less than 7.5%. Every town in NMC's service area was less than the state average, Montague had the largest uninsured percent at 10.6%.

Health insurance coverage can have a significant influence on health outcomes. Among ED visits, NMC's Service Area is approximately 15.0% Medicaid/Caid HMO/NJ Family Care with another 6.0% of Self Pay/Charity

[2] Please see Appendix A for tables with demographic information; Source: New Solutions/Claritas 2019-2024 Demographic File
[3] Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Care. The area is approximately 58.0% Commercial and 21.0% Medicare/Care HMO. From a payer mix perspective, the ED payer distribution in the Service Area is largely similar to Sussex County overall and is more favorably distributed than the statewide figures.

Among inpatients, NMC's Service Area is approximately 10.0% Medicaid/Caid HMO/NJ Family Care with another 1.0% of Self Pay/Charity Care. The area is approximately 39.0% Commercial and 50.0% Medicare/Care HMO. From a payer mix perspective, the inpatient payer distribution in the Service Area is largely similar to Sussex County overall and is more favorably distributed than the statewide figures.



Health Status Indicators[4]

A health status indicator describes an aspect of the population used to measure health or quality of life. Health indicators may include measurements of illness or disease, as well as behaviors and actions related to health. Quality of life indicators include measurements related to economy, education, built environment, social environment, and transportation. We know, from literature, that quality of life indicators may be drivers of health status - which is why both categories of data (approximately 155 indicators) are included in this analysis.

For each indicator, a county is assigned a score based on its comparison to four things: other NJ counties, whether state and national health targets have been met, and the directional trend of the indicator value over time. These four comparison scores range from 0-3, where 0 indicates the best performance and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time. Where comparison data is not available, a neutral score is substituted. For ease of interpretation and analysis, indicator comparison scores of concern are visually highlighted in red, showing how the county is faring in each category of comparison.

Indicator scores are calculated as a weighted average of all included comparison scores. If none of the included comparison types are possible for an indicator, no score is calculated, and the indicator is excluded from the data scoring results. The weights of each comparison in calculating the indicator scores were decided by the Data Committee of the North Jersey Health Collaborative. Specifically, this committee saw the value in comparing an indicator value against itself (the "trend") and against other local New Jersey counties, for the purposes of prioritizing interventions, which is why these two comparisons are the most heavily weighted.

The following tables represent the county-based scoring of specific health indictors. The data are organized by major indicator topic, indicator groupings, the specific indicators within that grouping and pertinent data points based on available secondary data sources. An indicator can be compared against all US or NJ counties, US or Statewide values, relative to Healthy People 2020 or local targets and the trend of an indicator value. A score greater than 2 represents an indicator where the county performs at lower than preferred targets. Where a population segment disparity can be identified that population segment is noted.

[4] Healthy Communities Institute/Conduent. Data Scoring Tool. New Jersey Health Matters. North Jersey Health Collaborative.

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
Health	Access to Health Services	Primary Care Provider Rate	3	1	3	3			2	2.28	
		Non-Physician Primary Care Provider Rate	3	3	3	3			0	2.17	
		Mental Health Provider Rate	2	1	3	3			1	1.89	
		Dentist Rate	2	0	3	1				1.50	
		Clinical Care Ranking	1							1.42	
		Adults with Health Insurance	0		1	1	2			1.14	Hispanic or Latino
		Children with Health Insurance	0		1	1	2			1.14	
		Adults who have had a Routine Checkup	1		1				0	1.00	
		Preventable Hospital Stays: Medicare Population	1	1	1	1			0	0.83	
		Adults Unable to Afford to See a Doctor	0		0	0			0	0.42	
Health	County Health Rankings	Mortality Ranking	2							1.58	
		Physical Environment Ranking	2							1.58	
		Clinical Care Ranking	1							1.42	
		Health Behaviors Ranking	1							1.42	
		Morbidity Ranking	0							1.25	
		Social and Economic Factors Ranking	0							1.25	
Health	Immunizations & Infectious Diseases	Adults with Pneumonia Vaccination	3		3					2.00	
		Gonorrhea Cases							3	1.83	
		Adults 50+ with Influenza Vaccination	2		2				2	1.78	
		Chlamydia Cases							2	1.61	
		Lyme Disease Cases							1	1.39	
		Age-Adjusted Rate of ED Visits Due to Influenza	0							1.25	
		Kindergartners with Required Immunizations	1		1				1	1.22	
		Age-Adjusted Death Rate due to Influenza and Pneumonia	0		0	0			1	0.64	
		Tuberculosis Incidence Rate	0		0	0	0		1	0.47	
Health	Wellness & Lifestyle	Insufficient Sleep	3	3	2	2				2.17	
		Life Expectancy	2	0	2	1				1.33	
		Morbidity Ranking	0							1.25	
		Limited Activity due to a Health Problem	1		0					1.17	
		Poor Physical Health: Average Number of Days	0	0	1	0				0.67	
		Frequent Physical Distress	0	0	0	0				0.50	
		Self-Reported General Health Assessment: Poor or Fair	0	0	0	0				0.50	
Health	Prevention & Safety	Death Rate due to Drug Poisoning	2	2	2	3			3	2.33	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
		Age-Adjusted Death Rate due to Unintentional Injuries	2		3	1	3		3	2.25	
		Age-Adjusted Death Rate due to Unintentional Poisonings	1		3	3			2	2.03	
		Age-Adjusted Death Rate due to Motor Vehicle Collisions	1		2				1	1.39	
		Adults who were Injured in a Fall: 45+	0		0					1.00	
		Severe Housing Problems	1	3	0	1			0	1.00	
Health	Disabilities	Persons with Disability Living in Poverty	1	0	0	0			1	0.56	
		Persons with Disability Living in Poverty (5-year)	0	0	0	0				0.50	
Health	Heart Disease & Stroke	Atrial Fibrillation: Medicare Population	1	3	1	3			2	1.94	
		Age-Adjusted Death Rate due to Hypertensive Heart Disease	2		2				2	1.78	
		Stroke: Medicare Population	0	3	1	3			2	1.78	
		Hyperlipidemia: Medicare Population	1	3	1	3			1	1.72	
		Age-Adjusted Death Rate due to Heart Disease	2		2	2			1	1.64	Males
		Age-Adjusted Rate of Adult ED Visits for Acute Myocardial Infarction	2							1.58	
		Adults who Experienced a Stroke	1		2					1.50	
		Age-Adjusted Death Rate due to Heart Attack	2						1	1.47	
		Ischemic Heart Disease: Medicare Population	0	2	1	2			2	1.44	
		Age-Adjusted Hospitalization Rate due to Heart Attack	2		1				1	1.39	
		Adults who Experienced Coronary Heart Disease	1		0				2	1.28	
		Hypertension: Medicare Population	0	1	1	2			2	1.28	
		High Blood Pressure Prevalence	1		0	0	2			0.97	
		Adults who Experienced a Heart Attack	0		0				1	0.89	
		Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	1		1	0	0		1	0.81	
		Heart Failure: Medicare Population	0	0	0	0			0	0.17	
Health	Diabetes	Age-Adjusted Death Rate due to Diabetes	2		2	1			0	1.25	
		Diabetic Monitoring: Medicare Population	1	2	1	1			1	1.22	
		Adults with Prediabetes	1		0					1.17	
		Diabetes: Medicare Population	0	1	0	1			1	0.72	
		Adults 20+ with Diabetes	0	0	0				1	0.64	
Health	Exercise, Nutrition, & Weight	Food Insecure Children Likely Ineligible for Assistance	3	3	3	3			1	2.39	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
		Children with Low Access to a Grocery Store	3	3						2.00	
		People with Low Access to a Grocery Store	3	3						2.00	
		SNAP Certified Stores	3	3						2.00	
		People 65+ with Low Access to a Grocery Store	2	2						1.67	
		Grocery Store Density	2	1						1.50	
		Households with No Car and Low Access to a Grocery Store	2	1						1.50	
		Low-Income and Low Access to a Grocery Store	2	1						1.50	
		Health Behaviors Ranking	1							1.42	
		Farmers Market Density	0	2						1.33	
		Adults 20+ who are Sedentary	1	1			0			1.17	
		Recreation and Fitness Facilities	1	0						1.17	
		Adults 20+ who are Obese	1	0			0		2	1.11	
		Fast Food Restaurant Density	0	1					1	1.06	
		Access to Exercise Opportunities	2	0	1	0				1.00	
		Adults Engaging in Regular Physical Activity	1		1	0	0			0.92	
		Food Environment Index	0	0	2	0			1	0.72	
		Child Food Insecurity Rate	0	0	0	0			0	0.17	
		Food Insecurity Rate	0	0	0	0			0	0.17	
		Rheumatoid Arthritis or Osteoarthritis: Medicare Population	0	0	0	0			3	0.83	
Health	Older Adults & Aging	Diabetes: Medicare Population	0	1	0	1			1	0.72	
		People 65+ Living Alone	0	0	0	0			2	0.61	
		People 65+ Living Below Poverty Level	0	0	0	0			2	0.61	
		Osteoporosis: Medicare Population	0	1	0	0			1	0.56	
		Heart Failure: Medicare Population	0	0	0	0			0	0.17	
Health	Oral Health	Oral Cavity and Pharynx Cancer Incidence Rate	3	2	3	3			2	2.44	
		Dentist Rate	2	0	3	1				1.50	
		Physical Environment Ranking	2							1.58	
		Blood Lead Levels in Children (>=5 micrograms per deciliter)	1		0				3	1.50	
		Lyme Disease Cases							1	1.39	
Health	Environmental & Occ. Health	Asthma: Medicare Population	0	2	0	1			1	0.89	
		Adults with Current Asthma	1		1	0			1	0.97	
		Melanoma Incidence Rate	2	3	3	3			2	2.44	
Health	Cancer	Oral Cavity and Pharynx Cancer Incidence Rate	3	2	3	3			2	2.44	
		Non-Hodgkin Lymphoma Incidence Rate	2	3	2	3			2	2.28	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
		Breast Cancer Incidence Rate	2	3	2	2			2	2.11	
		Colorectal Cancer Incidence Rate	2	2	2	2	2			1.89	
		All Cancer Incidence Rate	1	3	2	3			0	1.67	Males
		Mammography Screening: Medicare Population	3	2	2	2			0	1.67	
		Mammogram in Past 2 Years: 50-74	2		2	1	2			1.64	
		Age-Adjusted Death Rate due to Lung Cancer	2	1	3	1	1		1	1.50	
		Colon Cancer Screening	1		1	2	2			1.47	
		Age-Adjusted Death Rate due to Colorectal Cancer	1	1	2	2	2		1	1.44	
		Cancer: Medicare Population	0	3	0	2			2	1.44	
		Pancreatic Cancer Incidence Rate	0	2	1	2			2	1.44	
		Age-Adjusted Death Rate due to Cancer	2	1	2	2	2		0	1.39	Males
		Liver and Bile Duct Cancer Incidence Rate	1	1	1	0			3	1.33	
		Lung and Bronchus Cancer Incidence Rate	2	1	2	2			0	1.33	
		Prostate Cancer Incidence Rate	0	3	1	3			0	1.33	
		Pap Test in Past 3 Years: 21-65	1		1	1				1.25	
		Age-Adjusted Death Rate due to Pancreatic Cancer	0	1	1	1			1	0.89	
		Age-Adjusted Death Rate due to Breast Cancer	0	1	0	1	1		0	0.44	
		Cervical Cancer Incidence Rate	0	0	0	0	0		1	0.22	
		Age-Adjusted Death Rate due to Prostate Cancer	0	0	0	0	0		0	0	
		Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases	3		3	2			2	2.19	
		Adults with Pneumonia Vaccination	3		3					2.00	
		Adults 50+ with Influenza Vaccination	2		2				2	1.78	
		COPD: Medicare Population	2	1	2	1			2	1.61	
		Age-Adjusted Death Rate due to Lung Cancer	2	1	3	1	1		1	1.50	
Health	**Respiratory Diseases**	Lung and Bronchus Cancer Incidence Rate	2	1	2	2			0	1.33	
		Age-Adjusted Rate of Adult ED Visits for COPD	0							1.25	
		Adults with Current Asthma	1		1	0			1	0.97	
		Asthma: Medicare Population	0	2	0	1			1	0.89	
		Age-Adjusted Death Rate due to Influenza and Pneumonia	0		0	0			1	0.64	
		Tuberculosis Incidence Rate	0		0	0	0		1	0.47	
		Chronic Kidney Disease: Medicare Population	1	2	1	1			3	1.67	
Health	**Other Chronic Diseases**	Adults with Arthritis	1		2				2	1.61	
		Rheumatoid Arthritis or Osteoarthritis: Medicare Population	0	0	0	0			3	0.83	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
		Osteoporosis: Medicare Population	0	1	0	0			1	0.56	
Health	Mortality Data	Age-Adjusted Death Rate due to Suicide	3		3	3	3		2	2.53	
		Death Rate due to Drug Poisoning	2	2	2	3			3	2.33	
		Age-Adjusted Death Rate due to Unintentional Injuries	2		3	1	3		3	2.25	
		Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases	3		3	2			2	2.19	
		Age-Adjusted Death Rate due to Unintentional Poisonings	1		3	3			2	2.03	
		Age-Adjusted Death Rate due to Alzheimer's Disease	3		3	1			1	1.81	
		Age-Adjusted Death Rate due to Hypertensive Heart Disease	2		2				2	1.78	
		Infant Mortality Rate	2		3	1	1			1.69	
		Age-Adjusted Death Rate due to Heart Disease	2		2	2			1	1.64	Males
		Mortality Ranking	2							1.58	
		Age-Adjusted Death Rate	2		2				1	1.56	Males
		Age-Adjusted Death Rate due to Lung Cancer	2	1	3	1	1		1	1.50	
		Age-Adjusted Death Rate due to Heart Attack	2						1	1.47	
		Age-Adjusted Death Rate due to Colorectal Cancer	1	1	2	2	2		1	1.44	
		Age-Adjusted Death Rate due to Cancer	2	1	2	2	2		0	1.39	Males
		Age-Adjusted Death Rate due to Motor Vehicle Collisions	1		2				1	1.39	
		Life Expectancy	2	0	2	1				1.33	
		Age-Adjusted Death Rate due to Diabetes	2		2	1			0	1.25	
		Age-Adjusted Death Rate due to Pancreatic Cancer	0	1	1	1			1	0.89	
		Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	1		1	0	0		1	0.81	
		Age-Adjusted Death Rate due to Influenza and Pneumonia	0		0	0			1	0.64	
		Age-Adjusted Death Rate due to Breast Cancer	0	1	0	1	1		0	0.44	
		Alcohol-Impaired Driving Deaths	0	0	0	0			0	0.17	
		Age-Adjusted Death Rate due to Prostate Cancer	0	0	0	0	0		0	0.00	
Health	Mental Health & Mental Disorders	Age-Adjusted Death Rate due to Suicide	3		3	3	3		2	2.53	
		Adults Ever Diagnosed with Depression	2		3				2	1.94	
		Mental Health Provider Rate	2	1	3	3			1	1.89	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
		Alzheimer's Disease or Dementia: Medicare Population	1	2	1	2			3	1.83	
		Age-Adjusted Death Rate due to Alzheimer's Disease	3		3	1			1	1.81	
		Age-Adjusted Rate of Emergency Department Visits due to Mood Disorder	2							1.58	
		Depression: Medicare Population	1	1	2	0			3	1.50	
		Poor Mental Health: Average Number of Days	1	1	2	1				1.33	
		Frequent Mental Distress	1	0	1	0				0.83	
		Liquor Store Density	2	3	2	3			3	2.50	
		Adults who Drink Excessively	3	3	3	3	0			2.33	
		Death Rate due to Drug Poisoning	2	2	2	3			3	2.33	
		Adults who Binge Drink	3		3	3	2			2.31	
		Opioid Treatment Admission Rate	2		3				2	1.94	
		Adults who Use Alcohol: Past 30 Days	3		3				1	1.89	
Health	**Substance Abuse**	Age-Adjusted Rate of Substance Use Emergency Department Visits	1							1.42	
		Health Behaviors Ranking	1							1.42	
		Age-Adjusted Alcohol-Related Emergency Department Visit Rate	0							1.25	
		Adults who Smoke	1	0	2	0	3			1.17	
		Adults who Currently Use Smokeless Tobacco	1		0				1	1.06	
		Alcohol-Impaired Driving Deaths	0	0	0	0			0	0.17	
		Mothers who Received No Prenatal Care	2		3	3			2	2.19	
		Infant Mortality Rate	2		3	1	1			1.69	
		Very Preterm Births	1		1	0	2		2	1.25	
Health	**Maternal, Fetal & Infant**	Mothers who Received Early Prenatal Care	0		1	1	1		2	1.14	Ages 20-24; Hispanic
		Babies with Low Birth Weight	0		0	0	0		2	0.69	
		Preterm Births	0		0	0	0		2	0.69	
		Food Insecure Children Likely Ineligible for Assistance	3	3	3	3			1	2.39	
		SNAP Certified Stores	3	3						2.00	
Economy		Renters Spending 30% or More of Household Income on Rent	1	3	1	2			1	1.56	Ages 15-24, 65+
		Low-Income and Low Access to a Grocery Store	2	1						1.50	
		Cost of Family Child Care as a Percentage of Income	1		1					1.33	
		Social and Economic Factors Ranking	0							1.25	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
		Cost of Licensed Child Care as a Percentage of Income	0		0					1.00	
		Households that are Above the Asset Limited, Income Constrained, Employed (ALICE) Threshold	0		0					1.00	
		Households that are Asset Limited, Income Constrained, Employed (ALICE)	0		0					1.00	
		Households that are Below the Federal Poverty Level	0		0					1.00	
		Severe Housing Problems	1	3	0	1			0	1.00	
		Unemployed Workers in Civilian Labor Force	1	1	1	0			1	0.89	
		Homeownership	0	0	0	0			3	0.83	
		Households with Cash Public Assistance Income	0	1	0	0			2	0.78	
		People 65+ Living Below Poverty Level	0	0	0	0			2	0.61	
		Students Eligible for the Free Lunch Program	0	0	0	0			2	0.61	
		Median Household Income	1	0	0	0			1	0.56	Black or African American
		Persons with Disability Living in Poverty	1	0	0	0			1	0.56	
		Income Inequality	0	0	0	0				0.50	
		Per Capita Income	1	0	1	0			0	0.50	Black or African American, Hispanic or Latino, Other, Two or More Races
		Persons with Disability Living in Poverty (5-year)	0	0	0	0				0.50	
		Children Living Below Poverty Level	0	0	0	0			1	0.39	Hispanic or Latino
		Families Living Below Poverty Level	0	0	0	0			1	0.39	
		People Living 200% Above Poverty Level	0	0	0	0			1	0.39	
		People Living Below Poverty Level	0	0	0	0			1	0.39	Black or African American, Hispanic or Latino
		Young Children Living Below Poverty Level	0	0	0	0			1	0.39	
		Child Food Insecurity Rate	0	0	0	0			0	0.17	
		Food Insecurity Rate	0	0	0	0			0	0.17	
		Students Passing 8th Grade State Achievement Tests	1		1				2	1.44	
		Cost of Family Child Care as a Percentage of Income	1		1					1.33	
		Students Passing 11th Grade State Achievement Tests	1		1				1	1.22	
Education		Students Passing 4th Grade State Achievement Tests	0		1					1.17	
		Cost of Licensed Child Care as a Percentage of Income	0		0					1.00	
		People 25+ with a Bachelor's Degree or Higher	1	0	2	0			1	0.89	Ages 65+; Race "Other"
		People 25+ with a High School Degree or Higher	0	0	1	1			1	0.72	Ages 65+; Black or African American
		Student-to-Teacher Ratio	0	0	0	0			0	0.17	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
Government & Politics		Voter Turnout: Presidential Election	0		1				2	1.28	
Public Safety		Age-Adjusted Death Rate due to Motor Vehicle Collisions	1		2				1	1.39	
		Substantiated Child Abuse Rate	1		0	0				0.92	
		Violent Crime Rate	0		0	0			1	0.64	
		Alcohol-Impaired Driving Deaths	0	0	0	0			0	0.17	
Environment		Liquor Store Density	2	3	2	3			3	2.50	
		Children with Low Access to a Grocery Store	3	3						2.00	
		People with Low Access to a Grocery Store	3	3						2.00	
		SNAP Certified Stores	3	3						2.00	
		People 65+ with Low Access to a Grocery Store	2	2						1.67	
		Months of Mild Drought or Worse							2	1.61	
		Number of Extreme Heat Events							2	1.61	
		Number of Extreme Precipitation Days							2	1.61	
		PBT Released							2	1.61	
		Weeks of Moderate Drought or Worse							2	1.61	
		Physical Environment Ranking	2							1.58	
		Blood Lead Levels in Children (>=5 micrograms per deciliter)	1		0				3	1.50	
		Grocery Store Density	2	1						1.50	
		Households with No Car and Low Access to a Grocery Store	2	1						1.50	
		Low-Income and Low Access to a Grocery Store	2	1						1.50	
		Farmers Market Density	0	2						1.33	
		Daily Dose of UV Irradiance	0		1					1.17	
		Recognized Carcinogens Released into Air							0	1.17	
		Recreation and Fitness Facilities	1	0						1.17	
		Fast Food Restaurant Density	0	1					1	1.06	
		Access to Exercise Opportunities	2	0	1	0				1.00	
		Severe Housing Problems	1	3	0	1			0	1.00	
		Food Environment Index	0	0	2	0			1	0.72	
Social Environment		Mean Travel Time to Work	3	3	3	3			1	2.39	Males
		Social Associations	1	3	1	2			2	1.78	
		Within County Disparity in Life Expectancy at Birth							1	1.39	

INDICATOR CATEGORY	INDICATOR TOPIC	INDICATOR	County Distribution		Value		Target		Trend	Score >=2	Identified Disparity
			State	US	State	US	HP 2020	Local	Trend		
		Cost of Family Child Care as a Percentage of Income	1		1					1.33	
		Voter Turnout: Presidential Election	0		1				2	1.28	
		Social and Economic Factors Ranking	0							1.25	
		Cost of Licensed Child Care as a Percentage of Income	0		0					1.00	
		Linguistic Isolation	0	2	0	0			2	0.94	
		Substantiated Child Abuse Rate	1		0	0				0.92	
		People 25+ with a Bachelor's Degree or Higher	1	0	2	0			1	0.89	Ages 65+; Race "Other"
		Homeownership	0	0	0	0			3	0.83	
		Households with One or More Types of Computing Devices	0	0	1	1				0.83	
		People 25+ with a High School Degree or Higher	0	0	1	1			1	0.72	Ages 65+; Black or African American
		Households with an Internet Subscription	0	0	1	0				0.67	
		People 65+ Living Alone	0	0	0	0			2	0.61	
		Median Household Income	1	0	0	0			1	0.56	Black or African American
		Per Capita Income	1	0	1	0			0	0.50	Black or African American, Hispanic or Latino, Other, Two or More Races
		Children Living Below Poverty Level	0	0	0	0			1	0.39	Hispanic or Latino
		People Living Below Poverty Level	0	0	0	0			1	0.39	Black or African American, Hispanic or Latino
		Single-Parent Households	0	0	0	0			1	0.39	
		Young Children Living Below Poverty Level	0	0	0	0			1	0.39	
		Solo Drivers with a Long Commute	3	3	3	3			2	2.61	
		Mean Travel Time to Work	3	3	3	3			1	2.39	Males
Transportation		Workers who Drive Alone to Work	3	2	3	2			2	2.28	Native Hawaiian or Other Pacific Islander
		Workers Commuting by Public Transportation	3	0	3	3	3		1	2.06	
		Households with No Car and Low Access to a Grocery Store	2	1						1.50	

Mortality Rates[5]

Age-adjusted mortality rates can provide a general sense of a community's health in comparison to other communities. The leading causes of death in the United States are heart disease, cancer, chronic lower respiratory disease, cerebrovascular disease (stroke), and unintentional injuries. In Sussex County the top 5 leading causes of death are heart disease, cancer, unintentional injuries, chronic lower respiratory disease (CLRD) and Alzheimer's disease.

Over the last decade, heart disease and cancer have been the number 1 and 2 causes of death in the county. For heart disease, there is a 5 year decrease of 23.3% but only a 0.1% decrease over a decade. For cancer, there is an overall decrease in the past decade of 19.4%. Unintentional injuries have had an increase of 21.0% over the past ten years. CLRD shows a drop at the 5-year mark of 1.5%, however over the span of ten years increased 4.5%. Alzheimer's Disease showed a 3.8% increase over the course of 5 years, but an overall decrease of 4.0% over ten years.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	5 Year Change	10 Year Change
Diseases of heart	**175.8**	**193.3**	**208.2**	**155.9**	**199.0**	**191.2**	**180.2**	**157.2**	**172.2**	**175.7**	**(23.3)**	**(0.1)**
Cancer (malignant neoplasms)	**179.4**	**182.8**	**180.6**	**179.0**	**161.9**	**173.8**	**151.3**	**173.4**	**159.3**	**160.0**	**(1.9)**	**(19.4)**
Unintentional injuries	**31.8**	**20.6**	**40.6**	**33.4**	**35.2**	**28.8**	**36.1**	**43.8**	**49.8**	**52.8**	**17.6**	**21.0**
Chronic lower respiratory diseases (CLRD)	**32.8**	**43.8**	**38.0**	**42.5**	**38.7**	**39.4**	**38.8**	**51.6**	**37.6**	**37.3**	**(1.4)**	**4.5**
Alzheimer's disease	**36.8**	**33.5**	**31.6**	**28.5**	**29.0**	**30.8**	**31.6**	**23.9**	**26.7**	**32.8**	**3.8**	**(4.0)**
Stroke (cerebrovascular diseases)	38.4	41.7	26.9	35.1	34.8	40.7	19.8	34.7	34.3	31.5	(3.3)	(6.9)
Diabetes mellitus	18.1	18.6	17.1	21.5	20.1	23.8	17.8	18.6	20.5	17.6	(2.5)	(0.5)
Septicemia	15.2	18.9	15.0	**	**	**	14.6	**	16.5	13.3	N/A	(1.9)
Influenza and pneumonia	**	16.9	**	14.3	**	15.3	**	13.1	**	12.5	N/A	N/A
Chronic liver disease and cirrhosis	**	**	**	**	**	**	**	**	**	12.4	N/A	N/A
Nephritis, nephrotic syndrome and nephrosis (kidney disease)	**	18.9	**	**	15.1	**	16.4	**	14.2	11.8	(3.3)	N/A
Suicide (intentional self-harm)	**	**	**	13.2	**	**	13.0	21.2	17.9	**	N/A	N/A
Other than 24 Major Causes	110.8	107.7	113.4	104.6	107.5	118.3	120.5	107.2	104.0	115.1	7.6	4.3
In situ neoplasms, benign neopl. & neopl. of uncertain or unknown behavior	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Anemias	**	**	**	**	**		**	**	**	**	N/A	N/A
Parkinson's disease	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Essential hypertension and hypertensive renal disease	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Atherosclerosis	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Pneumonitis due to solids and liquids	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Certain conditions originating in the perinatal period	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Congenital malformations, deformations and chromosomal abnormalities (birth defects)	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Viral hepatitis	**	**	**	**	**	**	**	**	**	**	N/A	N/A
HIV (human immunodeficiency virus) disease	**	**	**	**		**	**	**		**	N/A	N/A
Aortic aneurysm and dissection	**	**	**	**	**	**	**	**	**	**	N/A	N/A
Homicide (assault)	**	**	**	**	**	**	**	**	**	**	N/A	N/A

Source: Center for Health Statistics, New Jersey Department of Health
***The value has been suppressed because it does not meet standards of reliability or precision or because it could be used to calculate the number in a cell that has been suppressed.*

SocioNeeds Index[6]

Community health improvement efforts must determine what sub-populations are most in need in order to most effectively focus services and interventions. Social and economic factors are well known to be strong determinants of health outcomes – those with a low socioeconomic status are more likely to suffer from chronic conditions such as diabetes, obesity, and cancer. The 2019 SocioNeeds Index, created by Conduent Healthy Communities Institute, is a measure of socioeconomic need that is correlated with poor health outcomes. All ZIP Codes, counties, and county equivalents in the United States are given an Index Value from 0 (low need) to 100 (high

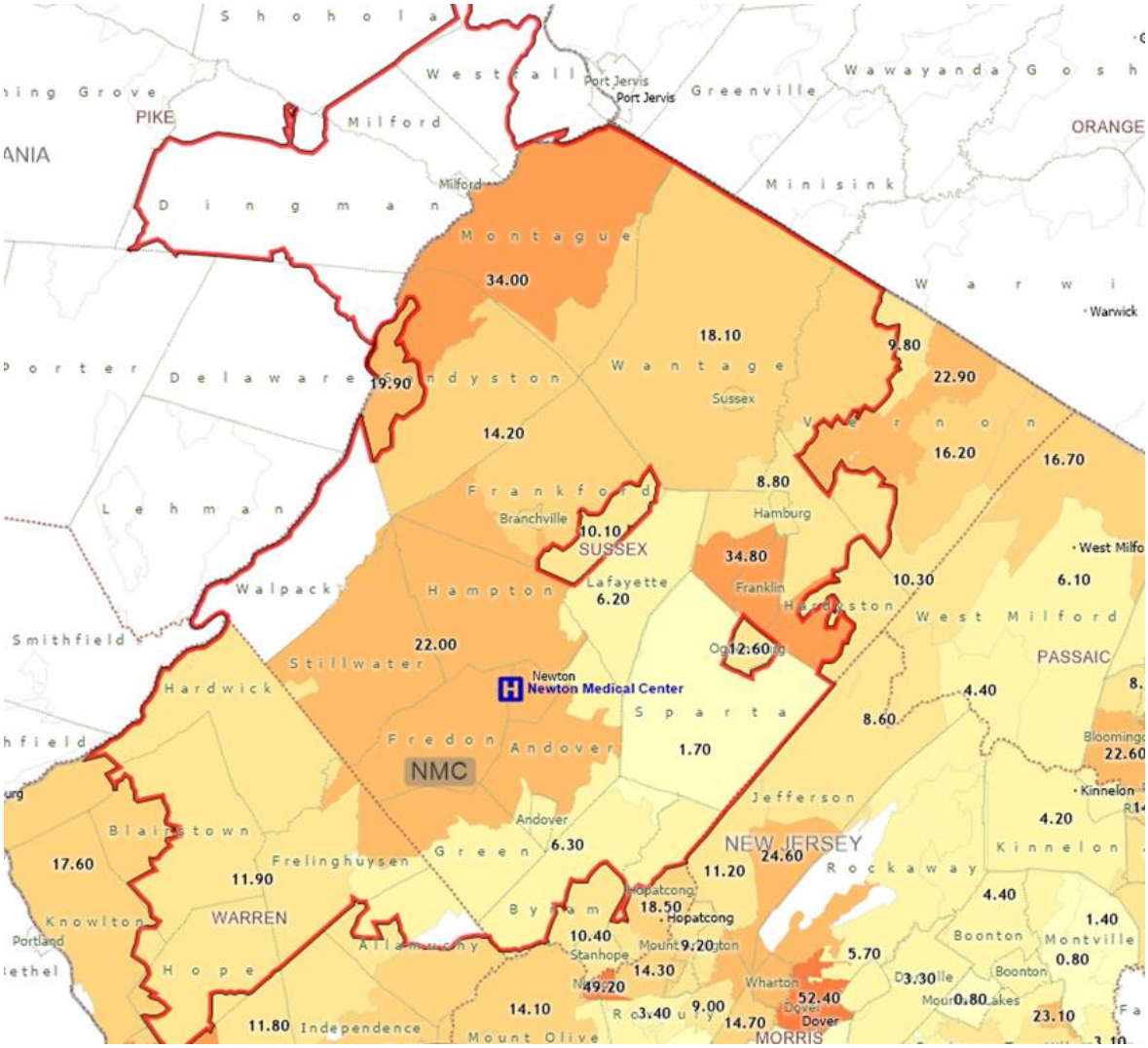
[5] Source: State of New Jersey Department of Health: Measurement period: 2007-2016
[6] Healthy Communities Institute 2018. SocioNeeds Index.
http://www.njhealthmatters.org/index.php?module=indicators&controller=index&action=socioneeds

need). The index summarizes multiple socio-economic indicators into one composite score for easier identification of high need areas by ZIP Code or county.

Within the community, the ZIP Codes or counties with the highest index values are estimated to have the highest socioeconomic need. The index value for each location is compared to all other similar locations (i.e. counties compare to other counties and ZIP Codes to other ZIP Codes) within the comparison area. Zip Codes are ranked using natural breaks classification, which groups the ZIP Codes into clusters based on similar index values.

The SocioNeeds Index is calculated for a community from several social and economic factors, ranging from poverty to education, that may impact health or access to care. The index is correlated with potentially preventable hospitalization rates and is calculated using Claritas estimates for 2019.

This map represents a socio-needs index for each ZIP Code within the North Jersey Health Collaborative. A higher index is indicative of poorer health outcomes and broadly, the index is designed to aid organizations in allocating efforts to a community that broadly may require more intervention. Darker shading represents a higher need index – and is relative to all ZIP Codes in the State.



Ambulatory Care Sensitive Conditions: ED & IP

ACS conditions are illnesses that can often be managed effectively on an outpatient basis and generally do not result in hospitalization if managed properly. Generally, a higher ACSC rate in Acute settings indicates a cultural acceptance of the ED as a source for Primary Care – or an area that lacks primary care providers. These conditions, if treated in a more appropriate setting, can lead to broad improvements in community health through primary care expansion, urgent care expansion, which may ultimately lead to a lower chronic disease rate in a community.

Below are ACS condition discharges that occurred in the area served by NMC. In the service area. The greatest overall ACS volume is for ENT related issues among the ED population, followed by cellulitis, kidney and urinary tract infections, dental conditions and asthma. Among inpatients the greatest number of ACS conditions are for chronic obstructive pulmonary disorder, cellulitis, congestive heart failure, kidney, urinary tract infection and bacterial pneumonia. Addressing these areas of utilization (i.e. providing care in a lower cost setting when possible) may help to decrease the cost of care provided to these patients and potentially create a stronger patient/primary care provider relationship.

NEWTON MC SERVICE AREA: AMB CARE SENSITIVE CONDITIONS				
ACS Condition Cohort (Cell values <10 Masked)	NJE17: ED		NJS17: IP	
ENT	853	21.6%	9	0.6%
CELLULITIS	466	11.8%	223	14.8%
KIDNEY/URINARY INFECTION	465	11.7%	171	11.4%
COPD	259	6.5%	243	16.1%
DENTAL CONDITIONS	362	9.1%	9	0.6%
DEHYDRATION	251	6.3%	117	7.8%
BACTERIAL PNEUMONIA	163	4.1%	136	9.0%
ASTHMA	255	6.4%	40	2.7%
GASTROINSTESTINAL OBSTRUCTION	242	6.1%	47	3.1%
DIABETES	152	3.8%	121	8.0%
GRAND MAL STATUS/OTHER EPILEPTIC CONVULSION	158	4.0%	110	7.3%
CONGESTIVE HEART FAILURE	35	0.9%	186	12.4%
HYPERTENSION	158	4.0%	6	0.4%
CONVULSION	103	2.6%	37	2.5%
NUTRITION DEFICIENCIES	**	0.1%	36	2.4%
ANGINA	16	0.4%	12	0.8%
HYPOGLYCEMIA	**	0.2%		0.0%
PELVIC INFLAMMATORY DISEASE	**	0.2%		0.0%
SKIN GRAFTS W CELLULITIS		0.0%	**	0.1%
FAILURE TO THRIVE	**	0.0%		0.0%
Grand Total	**3,958**	**100.0%**	**1,505**	**100.0%**
ACSCs at % of Total ED or Inpatient NMC Service Area	**13.1%**		**12.7%**	

Localized Data: Disease Utilization Rate[7]

For this study, acute care utilization at the ZIP Code level was examined as a proxy for incidence of select diseases or conditions. For certain geographies, AHS can investigate ZIP Code groupings to develop hyper-local data sets to inform approaches to community health improvement. In the following charts we see NMC's service are rate/1,000 population for specific diseases, with select comparative geographies.

Heart Attack

The rate/1,000 population has increased over the period across all comparative regions. The highest rate among comparative geographies is in Franklin, where the rate is at the 90th percentile. Franklin has also seen the greatest point increase over the period.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	1.41	1.58	1.53	2.34	1.91	2.01	0.6	70%	70%
WESTERN REGION	1.15	1.07	1.04	1.07	1.28	1.24	0.1	40%	40%
AHS REGION	1.08	1.03	1.00	1.06	1.19	1.17	0.1	40%	40%
Newton	1.78	2.15	2.16	2.85	2.27	2.25	0.5	80%	80%
Franklin	1.26	1.99	2.92	2.57	2.40	2.79	1.5	80%	90%
Sussex County	1.37	1.46	1.39	2.12	1.86	1.80	0.4	70%	70%
NEW JERSEY	1.30	1.26	1.27	1.36	1.49	1.46	0.2	50%	50%

Heart Failure

The rate/1,000 population has decreased over the period in the NMC 75% Service Area, Franklin, and Sussex County regions. The rate/1,000 is in the 60th percentile in the Western Region, Newton, and New Jersey overall. All other comparative geographies have a rate that is at or below the 40th percentile.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	3.00	2.69	2.42	2.75	2.98	2.85	(0.2)	40%	30%
WESTERN REGION	3.43	3.43	3.49	3.60	3.73	3.83	0.4	60%	60%
AHS REGION	2.95	2.93	2.92	3.05	3.07	3.20	0.2	50%	40%
Newton	3.10	3.51	2.59	3.72	3.82	3.81	0.7	60%	60%
Franklin	4.69	4.17	3.65	6.05	4.61	2.79	(1.9)	80%	30%
Sussex County	2.92	2.73	2.35	2.59	2.71	2.81	(0.1)	40%	30%
NEW JERSEY	3.33	3.26	3.30	3.40	3.45	3.66	0.3	60%	60%

[7] Source: NJ UB-04 Discharges; 2012-2016. Inpatient and Emergency Dept (treat/release) Utilization rate/1,000 population.

Hypertension

The rate/1,000 population has increased over the period across all comparative regions. The highest rate among comparative geographies is in Franklin, which is in the 80th percentile and has seen the greatest point increase over the period. All other comparative geographies have a rate that is at the 60th percentile, or lower.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	89.30	92.42	96.65	105.43	111.50	115.27	26.0	40%	40%
WESTERN REGION	125.08	122.55	122.68	130.08	134.05	134.01	8.9	60%	60%
AHS REGION	104.14	104.35	105.14	109.35	113.27	114.46	10.3	50%	40%
Newton	109.31	116.60	120.38	124.28	131.67	136.67	27.4	60%	60%
Franklin	123.64	139.42	138.24	167.69	178.30	178.64	55.0	80%	80%
Sussex County	88.65	90.78	95.48	103.40	110.47	113.97	25.3	40%	40%
NEW JERSEY	112.08	111.11	112.34	118.03	126.14	130.76	18.7	60%	50%

Stroke/TIA

The rate/1,000 population has increased over the period across all comparative geographies, except for the broader Western, AHS, and New Jersey Regions. The highest rate among comparative geographies is in Franklin, where the rate is in the 90th percentile.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	2.28	2.59	2.58	2.94	3.10	3.65	1.4	60%	70%
WESTERN REGION	2.55	2.60	2.76	2.64	2.73	2.53	(0.0)	50%	40%
AHS REGION	2.48	2.46	2.50	2.47	2.59	2.47	(0.0)	40%	40%
Newton	2.09	2.97	3.26	3.76	3.82	4.13	2.0	80%	80%
Franklin	3.06	4.35	2.55	5.14	3.14	4.64	1.6	60%	90%
Sussex County	2.28	2.46	2.34	2.76	2.84	3.48	1.2	50%	70%
NEW JERSEY	2.95	2.90	2.95	2.88	2.92	2.77	(0.2)	50%	50%

Diabetes

The rate/1,000 population has increased over the period across all comparative regions. The highest rate among comparative geographies is in Franklin, where the rate is at the 80th percentile. In all comparative regions, the rate/1,000 is at or above the 50th percentile.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	35.30	37.38	37.38	42.77	44.57	48.54	13.2	40%	50%
WESTERN REGION	56.49	56.38	56.95	60.61	62.61	63.33	6.8	70%	70%
AHS REGION	44.81	45.32	46.03	47.83	49.70	50.65	5.8	50%	50%
Newton	44.17	50.12	48.42	54.84	57.45	62.90	18.7	60%	70%

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
Franklin	54.25	76.87	61.28	72.84	73.46	71.31	17.1	80%	80%
Sussex County	35.67	37.36	38.10	42.54	44.87	48.12	12.5	40%	50%
NEW JERSEY	48.90	49.00	49.75	52.07	55.38	57.67	8.8	60%	60%

Obesity

The rate/1,000 population has increased over the period across all comparative regions. The highest rate among comparative geographies is in Franklin, where the rate is at the 80th percentile. Franklin has also seen the greatest point increase over the period. All other comparative geographies have a rate that is at the 50th percentile, or lower.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	11.03	12.27	11.93	13.34	13.30	16.95	5.9	40%	40%
WESTERN REGION	13.92	14.16	14.98	16.01	16.74	18.98	5.1	60%	50%
AHS REGION	10.86	11.33	12.01	13.17	13.98	16.83	6.0	40%	40%
Newton	12.37	14.95	13.48	13.33	14.10	18.29	5.9	40%	50%
Franklin	17.84	20.85	17.69	22.75	25.47	31.01	13.2	80%	80%
Sussex County	11.44	12.48	12.72	14.11	14.11	17.49	6.1	40%	40%
NEW JERSEY	12.52	13.04	13.78	14.84	15.89	19.27	6.8	50%	50%

COPD & Allied Health Conditions

The rate/1,000 population has increased over the period across all comparative regions. The highest rate among comparative geographies is in Franklin. Except for Franklin at the 90th percentile and Newton at the 70th percentile, the rate/1,000 is at or below the 60th percentile in all comparative regions.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	19.17	18.71	20.72	22.63	25.84	25.09	5.9	60%	60%
WESTERN REGION	16.64	16.53	16.27	17.42	20.22	18.83	2.2	50%	40%
AHS REGION	15.43	15.22	15.06	15.96	17.86	16.86	1.4	40%	40%
Newton	24.97	24.63	28.10	29.64	28.72	30.29	5.3	70%	70%
Franklin	29.92	31.00	35.56	40.00	49.65	41.78	11.9	90%	90%
Sussex County	18.57	18.27	20.07	22.13	24.69	24.25	5.7	60%	60%
NEW JERSEY	19.65	19.37	19.14	20.17	22.78	22.02	2.4	60%	50%

Asthma

The rate/1,000 population has increased over the period across all comparative regions, except for the Western and AHS Regions. The highest rate among comparative geographies is in the Western Region. The rate/1,000 is in the 80th percentile in the Western Region, Newton, and Franklin.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	25.60	21.88	25.82	31.16	33.69	30.48	4.9	70%	60%
WESTERN REGION	50.66	47.63	46.72	49.96	51.60	49.82	(0.8)	80%	80%
AHS REGION	32.67	30.98	31.39	32.96	33.18	31.52	(1.2)	70%	60%
Newton	33.70	33.92	31.40	39.17	41.07	42.36	8.7	80%	80%
Franklin	39.83	26.11	34.29	51.74	56.48	47.91	8.1	80%	80%
Sussex County	25.52	22.40	26.54	30.66	33.98	30.88	5.4	70%	60%
NEW JERSEY	33.93	32.47	32.87	34.61	35.94	34.82	0.9	70%	70%

Pneumonia

The rate/1,000 population has increased over the period within the NMC 75% Service Area and Newton, as well as across the broader Western and AHS Regions. The highest rate among comparative geographies is in Newton. In Newton, the rate/1,000 is in the 80th percentile and has also seen the greatest point increase over the period.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	5.56	4.27	4.33	4.31	4.52	5.85	0.3	40%	60%
WESTERN REGION	5.01	4.78	4.24	4.45	5.42	5.83	0.8	50%	60%
AHS REGION	4.88	4.48	4.11	4.22	4.93	5.00	0.1	40%	50%
Newton	6.98	5.39	5.58	5.50	5.74	8.46	1.5	50%	80%
Franklin	8.29	8.16	6.38	6.79	5.54	6.69	(1.6)	50%	70%
Sussex County	5.38	4.12	4.13	4.22	4.44	5.37	(0.0)	30%	50%
NEW JERSEY	5.81	5.41	4.98	5.08	5.85	5.65	(0.2)	60%	60%

Cellulitis

The rate/1,000 population has decreased over the period across all comparative geographies, except for the NMC 75% service area, Franklin, and Sussex County Regions. The highest rate among comparative geographies is in Franklin. The rate/1,000 is in the 70th percentile in both Newton and Franklin. All other comparative geographies have a rate at or below the 60th percentile.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	7.74	6.71	7.64	8.57	8.12	7.81	0.1	50%	50%
WESTERN REGION	10.21	10.07	9.86	9.52	9.09	8.76	(1.5)	60%	60%
AHS REGION	7.98	7.86	7.65	7.52	7.19	6.91	(1.1)	50%	50%
Newton	10.66	9.92	10.06	10.64	11.00	9.95	(0.7)	70%	70%
Franklin	9.19	8.16	12.58	13.39	14.40	10.58	1.4	80%	70%
Sussex County	7.80	6.77	7.74	8.32	8.10	7.82	0.0	50%	50%
NEW JERSEY	10.42	10.03	9.75	9.44	8.86	8.53	(1.9)	60%	60%

Renal Failure

The rate/1,000 population has increased over the period across all comparative regions, with the exception of Newton. The highest rate among comparative geographies is in Franklin. The rate/1,000 is in the 70th percentile in Franklin.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	1.81	1.94	1.92	1.90	1.97	1.81	0.0	40%	40%
WESTERN REGION	2.22	2.17	2.06	2.33	2.61	2.60	0.4	60%	60%
AHS REGION	1.76	1.76	1.79	1.96	2.15	2.10	0.3	50%	50%
Newton	2.71	2.54	2.63	2.65	2.43	2.09	(0.6)	60%	50%
Franklin	2.52	3.63	3.10	2.20	3.14	2.79	0.3	70%	70%
Sussex County	1.75	1.90	1.76	1.76	1.91	1.83	0.1	40%	40%
NEW JERSEY	2.09	2.08	2.11	2.30	2.53	2.42	0.3	60%	60%

Mental Health (Acute Care Setting)

The rate/1,000 population has increased over the period across all comparative regions. The highest rate among comparative geographies is in Franklin, which is in the 90th percentile and has seen the greatest point increase over the period.

GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	14.92	13.54	14.86	15.14	16.31	16.47	1.5	60%	60%
WESTERN REGION	16.13	16.81	16.61	17.16	17.60	17.33	1.2	70%	60%
AHS REGION	13.35	13.47	13.53	13.97	14.21	14.51	1.2	50%	50%
Newton	17.95	17.22	18.47	16.97	20.40	19.54	1.6	80%	70%
Franklin	20.19	14.14	20.61	21.10	24.73	28.04	7.9	90%	90%
Sussex County	14.82	13.26	14.64	15.39	15.92	15.88	1.1	60%	60%
NEW JERSEY	15.33	15.19	15.31	15.59	15.98	16.60	1.3	60%	60%

Substance Use Disorders (Acute Care Setting)

The rate/1,000 population has increased over the period across all comparative regions, except for Newton. The highest rate among comparative geographies is in Franklin, where the rate is in the 90th percentile. The rate/1,000 is at or above the 50th percentile in all comparative geographies.

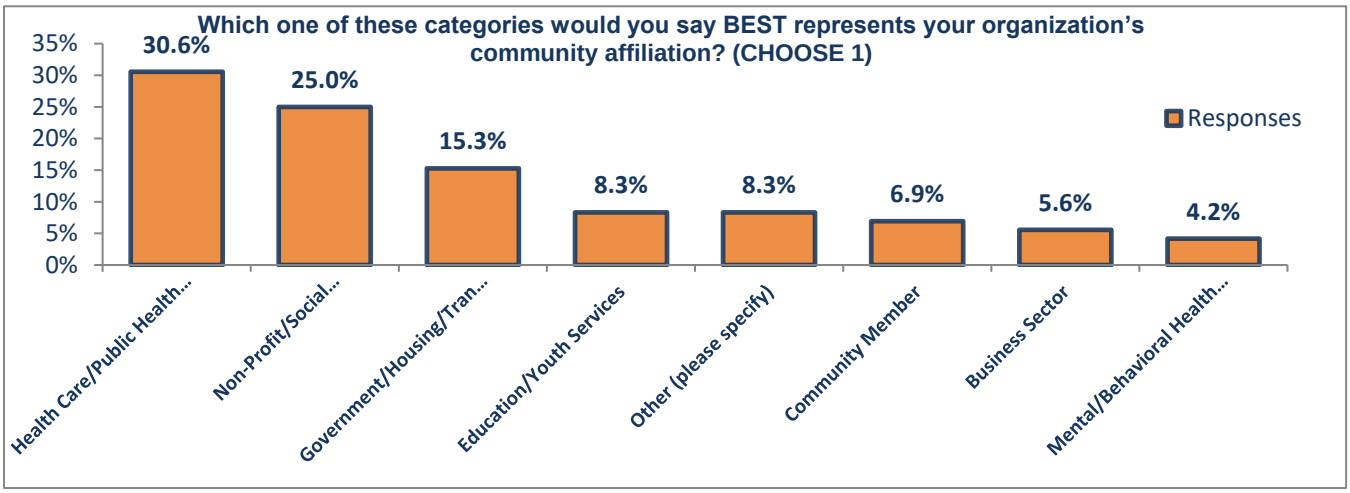
GEOGRAPHIC AREA	2012	2013	2014	2015	2016	2017	Rate Change '12 to '17	Statewide Percentile Rank '16	Statewide Percentile Rank '17
NMC 75% Service Area	6.83	6.11	5.95	6.65	7.30	7.28	0.5	50%	50%
WESTERN REGION	10.03	9.71	9.82	11.30	12.29	12.75	2.7	80%	80%
AHS REGION	8.02	8.06	8.25	8.97	9.23	9.46	1.4	70%	70%

Newton	8.80	6.99	6.56	7.60	7.89	8.38	(0.4)	60%	60%
Franklin	12.44	10.33	9.12	13.21	14.77	17.46	5.0	80%	90%
Sussex County	7.07	6.23	6.45	6.91	7.49	7.34	0.3	50%	50%
NEW JERSEY	8.63	8.66	8.77	9.56	10.08	10.22	1.6	70%	70%

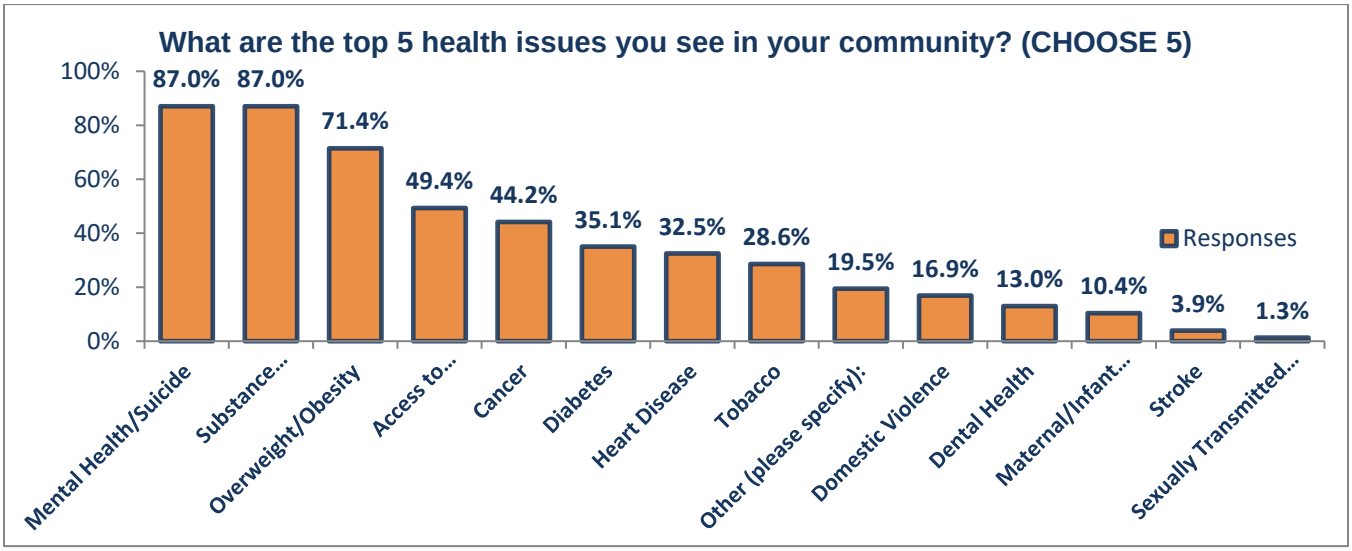
KEY INFORMANT FINDINGS

Background

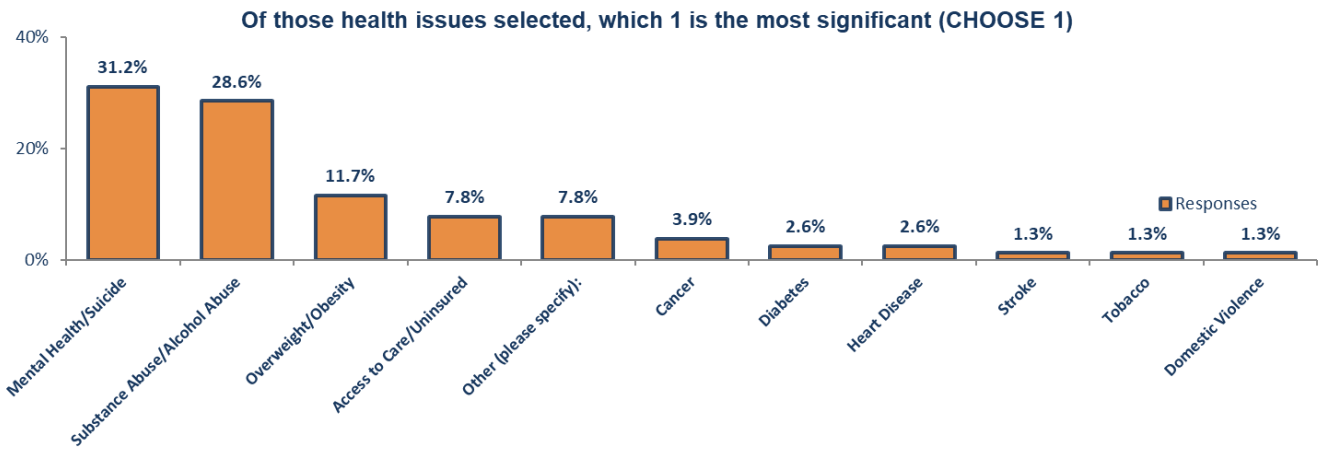
NMC received 77 responses to its community-based key-stakeholder survey, which was administered online. Below we show the breakdown of the respondents' organizational and community affiliations by category.



Below we show the breakdown of the percent of respondents who selected each health issue in the 2019 survey. Issues are ranked on the number of participants who selected the issue. Each respondent chose 5. This year, the top 5 ranked issues were mental health/suicide, substance abuse/alcohol abuse, overweight/obesity, access to care/uninsured, and cancer.



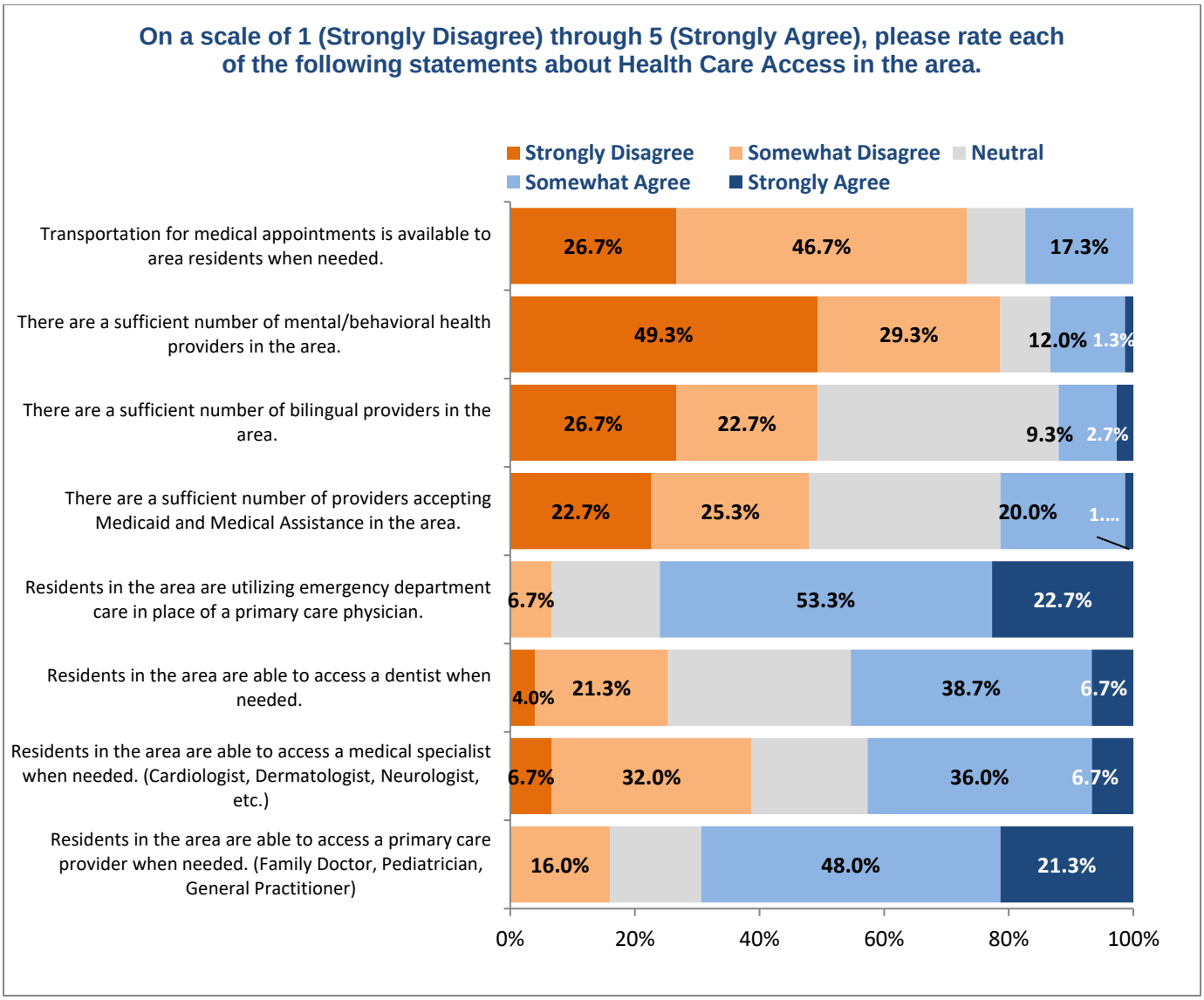
The respondents' top significant health issue in 2019 is mental health/suicide, followed by access to care/uninsured and cancer.



SELECT STAKEHOLDER COMMENTS: TOP HEALTH ISSUE

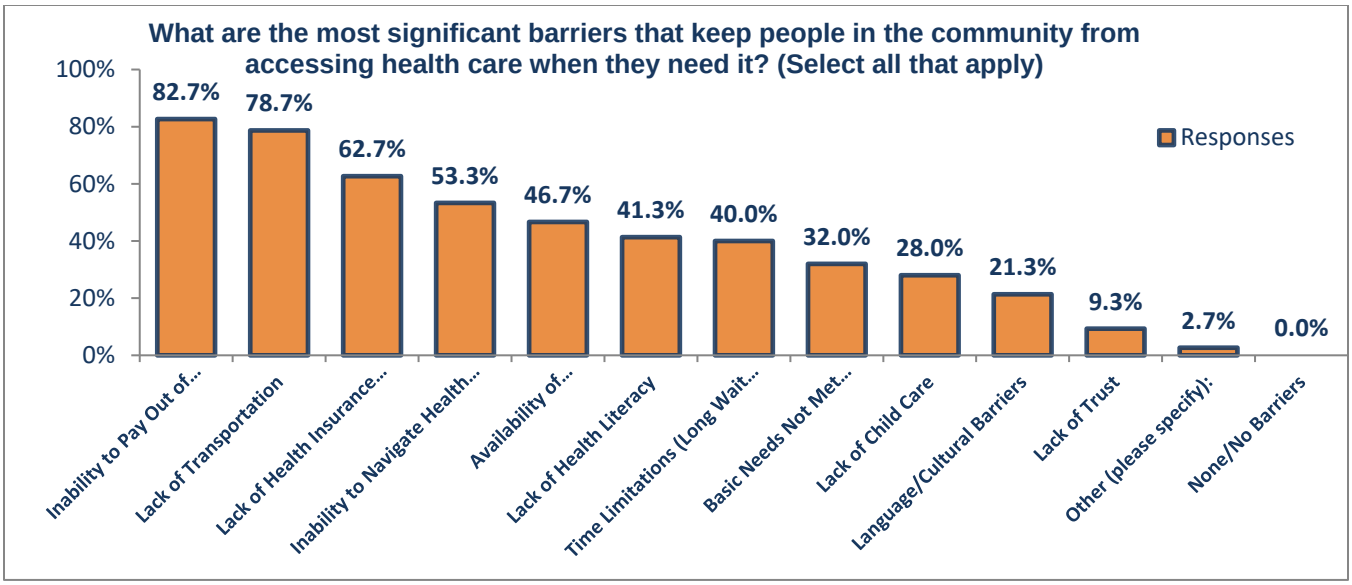
- *It is difficult to find a mental health provider without having to wait months to be seen, especially if one does not have insurance. Yes, there are crisis hotlines, but many who need help may not feel they are in "crisis".*
- *For some of the patient population in Sussex County, transportation is a barrier to healthcare particularly for patients seeking behavioral health services.*
- *A lot of physical health issues stem from mental health issues- anxiety, fear, etc.*
- *Obesity affects diabetes, heart health, and to some extent mental health, so I think if we can address it we can make ripples of improvement.*
- *Treatment for substance use disorder and mental health is woefully lacking in Sussex County. People with these needs are forced to go long distances to get services.*
- *Access to all types of care is difficult in our rural communities for low income people.*

The second set of questions concerned the ability of residents to access health care services such as primary care providers, medical specialists, dentists, transportation, Medicaid providers, and bi-lingual providers. Respondents were provided with statements such as: “Residents in the area are able to access a primary care provider when needed.” They were then asked to rate their agreement with these statements on a scale of 1 (Strongly Disagree) through 5 (Strongly Agree).



After rating availability of health care services, respondents were asked about the most significant barriers that keep people in their community from accessing healthcare when they need it. The barriers that were most frequently selected are summarized below.

In 2019, Inability to Pay Out of Pocket Expenses (Co-pays, Prescriptions, etc.) was rated by participants as the most significant barrier (82.7%), followed by Lack of Transportation at 78.7%. Other barriers that were rated by participants as being the most significant included Lack of Health Insurance Coverage, Inability to Navigate Healthcare System, Availability of Providers/Appointments, and Lack of Health Literacy. It is important to note that **not one respondent** felt that there were no barriers to access in the community.



When respondents were asked for their choice of top significant barrier, Inability to Pay Out of Pocket Expenses was identified (30.7%). Lack of Transportation, Availability of Providers/Appointments, and Inability to Navigate the Healthcare System followed. After selecting the most significant barriers, informants were asked to share any additional information regarding these barriers.

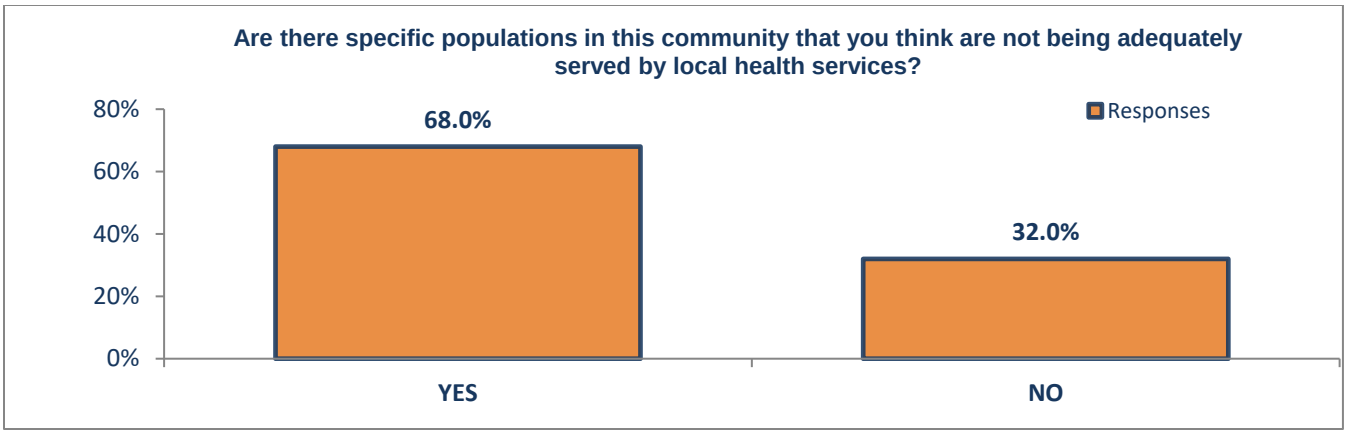
After selecting the most significant barriers, informants were asked to share any additional information regarding the barriers to accessing health care.

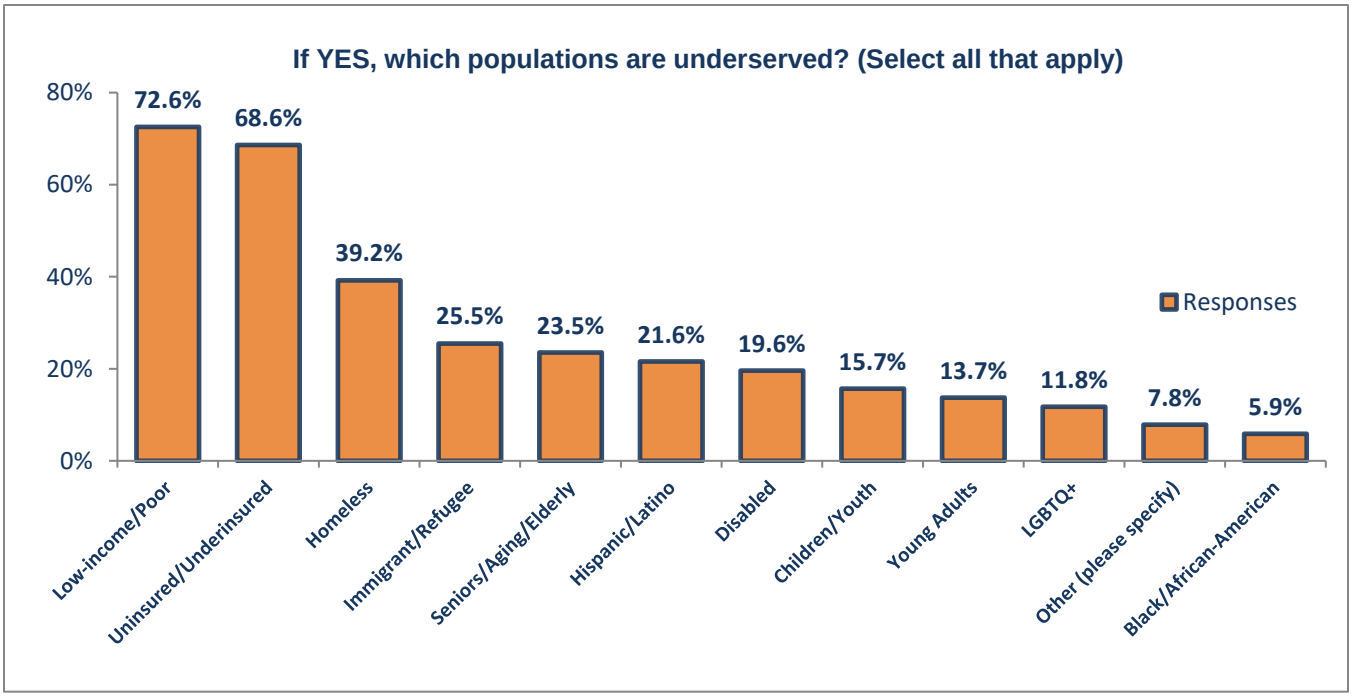
SELECT STAKEHOLDER COMMENTS: HEALTHCARE ACCESS & BARRIERS

- *Access to care, including transportation issues, paired with lack of health literacy and inability to pay greatly affects the health of our residents.*
- *Not enough Medicaid providers or specialists in the county.*
- *The healthcare system is more difficult to navigate than ever. Many people in Sussex County are not tech savvy without access to the internet.*
- *No urgent centers in northern part of county---why most people go to ER in Newton.*
- *The available transportation services in our area are limited in scope, as many in need reside and/or have providers outside of the pick-up/drop-off destinations. LogistiCare is only available to those who have Medicaid, leaving anyone with Medicare, commercial, or no insurance no options for transportation.*

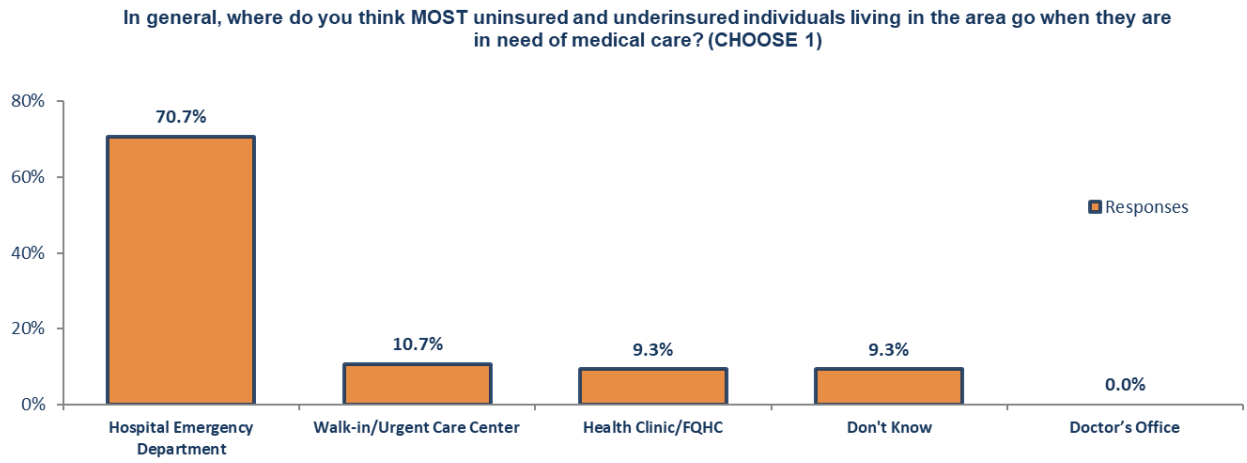
The top three population groups identified by key informants as being underserved when compared to the general population in this current survey were:

- Low-income/Poor
- Uninsured/Underinsured
- Homeless
- Followed closely by Immigrant/Refugee, Seniors/Aging/Elderly, and Hispanic/Latino.
- Followed closely by Homeless, Hispanic/Latino, and Seniors/Aging/Elderly





70.7% of key informants indicated hospital emergency departments as the primary place where uninsured/ underinsured individuals go when they are in need of medical care. Walk-in/Urgent Care Center and Health Clinic/FQHC were also mentioned as preferred places to obtain medical care. Not one respondent selected the Doctor's Office as the primary place where uninsured/underinsured individuals go when in need of care.



Mental Health Services, Transportation, Free/Low Cost Medical Care, Substance Abuse Services, and Free/Low Cost Dental Care were most frequently indicated by key stakeholders as the most needed resources in the community to improve health and quality of life for residents.

IDENTIFICATION OF COMMUNITY HEALTH NEEDS

Prioritization

Following a review of secondary data and key informant findings, a select group of providers, community health agency representatives and other community stakeholders were asked to participate in a health issue prioritization survey. The prioritization survey included 14 health issues or concerns, which were identified during the primary and secondary analysis phases of the community health needs assessment. For each of the 14 health issues included in the survey, participants in this prioritization process were asked to respond to six statements related to the extent to which the health-related disparity or concern impacts the community served by Newton Medical Center or can be positively impacted by community health improvement efforts directed by Newton Medical Center. In completing their responses, prioritization survey participants were asked to provide their perspective based on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree) for six criteria for each of the 14 identified health issues.

The six prioritization criteria used to evaluate each issue were:

- Number of people impacted
- The risk of morbidity and mortality associated with the problem
- Impact of the problem on vulnerable populations
- Availability of resources to address the problem
- Relationship of issue to other community issues
- Is within the organization's capability/ competency to impact

The 14 issues identified for prioritization in the area served by NMC were:

- Cancer
- Heart Disease or Stroke
- Mental Health
- Obesity/Unhealthy Weight
- Substance Misuse
- Diabetes
- Barriers to Access to Health Education and Resources
- Barriers to Care for the Aging/ Elderly Population
- Tobacco Use & Vaping
- Domestic Violence
- Maternal and Child Health
- Barriers to Transportation Access
- Dental Health
- Pulmonary Diseases (Including COPD)

Weighted averages for each impact on an issue were calculated. For each of the six potential impacts on an issue, the weighted averages were combined to create an overall weighted average for each issue (the overall ranking). The most impactful factor for each issue had the highest weighted average of the six impacts for that issue, the least impactful factor had the lowest weighted average for that issue. These results were presented to the Newton Medical Center Community Health Committee, who, in partnership with hospital administration, recommended the adoption of the following priority areas for inclusion in the 2019-2021 CHNA for NMC.

- Barriers to Access to Health Education & Resources
- Cancer
- Diabetes & Obesity
- Heart Disease & Stroke
- Mental Health
- Substance Misuse

Following is a broad overview of each of the 6 health priorities. NMC will develop a Community Health Improvement Plan (CHIP) to address these 6 health priorities in 2020 and annually thereafter.

IDENTIFIED HEALTH PRIORITIES

Barriers to Access to Health Education & Resources (Health Literacy)[8]

The need to address existing barriers to access to health education and resources in the area served by Newton Medical Center was identified throughout the CHNA process.

The U.S. Department of Health and Human Services (HHS) defines health literacy as "the degree to which individuals have the capacity to obtain, process, and understand basic health information needed to make appropriate health decisions." Adequate health literacy may include being able to read and comprehend essential health-related materials (e.g., prescription bottles, appointment slips, etc.). Adequate health literacy may increase a person's capacity to take responsibility for their health and their family's health. However, health literacy is not just the result of individual capacities but also the health-literacy related demands and complexities of the health care system. For example, individuals with low literacy may not be able to understand prescription labels—but an organization that values health literacy makes it a priority to implement systems and interventions such as visual aids and counseling that increase understanding and thereby advance patient safety.

Low overall literacy may impact health literacy; however, the relationship between them is complex. For example, an individual may have high overall literacy and still have low health literacy. Low or limited health literacy skills are more prevalent among certain population groups and may be linked to many poor health outcomes. Health literacy has the potential to impact a broad array of functional skills that are required to make health decisions in various settings. Although there are many ways in which health literacy may impact health and health outcomes, this summary focuses on health literacy related to reading and comprehension of essential health-related materials.

A number of factors impact health literacy including a patient's receipt of appropriate written health communication materials, ability to accurately interpret written health-related information, and communication with providers. When patients receive written health communication materials that don't match their reading level, patient education is not effective. Additionally, when patients have low overall literacy skills but high verbal fluency, their verbal fluency can mask their inability to interpret written information. Potential communication barriers between patients and health care providers created by low health literacy may lead to a variety of negative health outcomes for the patient. For example, such communication barriers have been associated with patients being more likely to be hospitalized.

The impact of health literacy on skills needed to make health-related decisions may affect a patient's adherence to a treatment regimen (e.g., medication), which may decrease its benefits. Patients with low health literacy also tend to use the emergency department more often and are more likely to return to the emergency department after 2 weeks. One systematic review found low literacy (used as a proxy for health literacy) may impact parent/caregiver behavior (e.g., medication dosing, duration of breastfeeding). The study also found some evidence of an impact of parents' low literacy on children's health outcomes (e.g., depressive symptoms, persistent asthma).

A number of factors may influence an individual's health literacy, including living in poverty, education, race/ethnicity, age, and disability. Adults living below the poverty level have lower health literacy than adults living above the poverty level. Certain characteristics influenced by poverty, including insurance status, may impact health literacy more than other factors. For example, uninsured and publicly insured (e.g., Medicaid) individuals

[8] https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/health-literacy

are at higher risk of having low health literacy. Studies have found that older adult Medicare beneficiaries with low health literacy have higher medical costs, increased ER visits and hospital admissions, and decreased access to health care. Education may also impact health literacy. For example, in a nationally representative sample, almost half of adults who did not graduate from high school had low health literacy.

Some of the greatest disparities in health literacy occur among racial and ethnic minority groups from different cultural backgrounds and those who do not speak English as a first language. Results from the National Assessment of Adult Literacy demonstrated that Hispanic adults have the lowest average health literacy scores of all racial/ethnic groups, followed by Black and then American Indian/Alaska Native adults. People with low health literacy and limited English proficiency are twice as likely as individuals without these barriers to report poor health status. One study found that 74% of Spanish-speaking patients have less-than-adequate health literacy as compared to 7% of English-speaking patients. Cultural beliefs may also impact communication between patients and providers and affect a patient's ability to follow a physician's instructions.

Health literacy challenges may impact older adults more than other age groups. On average, adults age 65 and older have lower health literacy than adults under the age of 65. Low health literacy among older adults is associated with increased reports of poor physical functioning, pain, limitations of daily activities, poor mental health status.

Improvements in health practice that address low health literacy are needed to reduce disparities in health status. As limited health literacy is common and may be difficult to recognize, "experts recommend that practices assume all patients and caregivers may have difficulty comprehending health information and should communicate in ways that anyone can understand." Examples include simplifying communication; confirming comprehension for all patients to minimize risk of miscommunication; making the health care system easier to navigate; and supporting patient's efforts to improve their health.
Additional research is needed to increase the evidence base for what works to improve the effects of health literacy on health outcomes and disparities. This additional evidence will facilitate public health efforts to address health literacy as a social determinant of health.

Mental Health

Need for Mental Health Providers[9]

Most counties in the United States face shortages of mental health professionals. In 96 percent of the counties in the nation, there is a shortage of psychiatrists who prescribe medications for people with serious mental illness (SMI). From 2003 to 2013, the number of practicing psychiatrists decreased by 10 percent when adjusted for population size. Many psychiatrists are shifting to private practice, accepting only cash for reimbursement. In part, this may reflect low reimbursement for psychiatric services from state Medicaid programs and Medicaid-contracted managed care payers, cuts to federal and state funding for public sector programs, and inadequate rate setting for psychiatric services. The greatest shortages are in poorer and more rural counties. The need for child psychiatrists is even greater than the shortage of psychiatrists for adults with SMI. The lack of access to psychiatric services creates several issues, such as long wait times for scheduled appointments, often leading to emergency department visits and hospitalizations.

Expanding the workforce by allowing advanced practice registered nurses to practice to the full extent of their training, broadening the scope of practice of psychologists to prescribe some medications, and educating more

[9] https://www.samhsa.gov/sites/default/files/programs_campaigns/ismicc_2017_report_to_congress.pdf

advanced practice registered nurses and psychiatric-mental health physician assistants, are examples of strategies to address the shortage. Tele-mental health is widely accepted as a mechanism that can address shortages in some geographic areas. One in five counties also has a shortage of non-prescriber mental health professionals, defined as psychologists, advanced practice psychiatric nurses, social workers, licensed professional counselors, and marriage and family therapists. Also, there are categories of mental health service providers, including licensed professional counselors and marriage and family therapists, whose services are not eligible for reimbursement by Medicare. Peer support can play an important role in a functioning mental health system and should be included as a part of a full continuum of services, whenever possible. Peer support services have been demonstrated to promote recovery and resiliency through the generation of hope, engagement in treatment services, and activation for improved health outcomes. Youth and family peer support services have also generated notable outcomes in this area.

Most states report insufficient psychiatric crisis response capacity as well as insufficient numbers of inpatient psychiatric hospital beds. It is critical that every state have adequate bed capacity to respond to the needs of people experiencing both psychiatric crises and those who need longer periods of inpatient care, such as people in forensic care (care that is provided because of involvement in the criminal or juvenile justice systems). In many areas, bed shortages have led to long delays in gaining access to treatment and an increase in individuals waiting for competency restoration services needed to restore competency to participate in legal proceedings. A report by the National Association of State Mental Health Program Directors Research Institute found that most states (35 of the 46 who responded) have shortages of psychiatric hospital beds. The configuration of available beds and the number of beds per 100,000 population varies substantially across states, but few states report they have adequate numbers of inpatient beds to meet needs. Use of a variety of strategies, such as building psychiatric respite bed capacity, may help to address these capacity issues.

- As a whole the workforce is too few, aging into retirement, inadequately reimbursed, inadequately supported and trained and facing significant changes affecting practice, credentialing, funding, and ability to keep up with changes in practice models driven by changing science, technologies and systems.
- Shortages of qualified workers, recruitment and retention of staff and an aging workforce have long been cited as problems.
- Lack of workers in rural/frontier areas and the need for a workforce more reflective of the racial and ethnic composition of the U.S. population create additional barriers to accessing care for many.
- Recruitment and retention efforts are hampered by inadequate compensation, which discourages many from entering or remaining in the field.
- The misperceptions and prejudice surrounding mental and substance use disorders and those who experience them are imputed to those who work in the field.
- Pre-service education and continuing education and training of the workforce have been found wanting, as evidenced by the long delays in adoption of evidence-based practices, underutilization of technology, and lack of skills in critical thinking. These education and training deficiencies are even more problematic with the increasing integration of primary care and mental or substance use disorder treatment, and the focus on improving quality of care and outcomes.
- Of additional concern, the current workforce is unprepared to meet the mental and substance use disorder treatment needs of the rapidly growing population of older adults.

Several themes emerged as common factors that are influencing workforce trends across the country.[10]

[10] SAMHSA. (2017, September). ATTC: Network Coordinating Office. National Workforce Report 2017. From http://attcnetwork.org/documents/ATTC_Network_Natl_Report2017_single.pdf (

- The Affordable Care Act and Medicaid expansion: The Patient Protection and Affordable Care Act (ACA) and accompanying reforms expanded access to SUD treatment to millions of Americans. Treatment agencies need more staff to treat more clients. Many existing SUD staff need to complete additional coursework or pursue master's level degrees.
- Clinical supervision: In many states, clinical supervision is also required when implementing evidence-based practices. Organizations that invest in their staff by providing good clinical supervision may have greater success with workforce recruitment and retention.
- Healthcare integration: The movement to integrate mental health and SUD treatment with primary care has had an impact on the workforce. SUD professionals are under increasing pressure to acquire skills that allow them to work in integrated healthcare settings, and primary care physicians, nurses, and other medical professionals are beginning to play larger roles in SUD treatment and recovery services.
- The opioid epidemic: No state in the country has been spared from the devastation of the opioid epidemic. Building the capacity of the SUD workforce to provide effective evidence-based treatment for opioid use disorders has been a top priority.

What are some strategies to increase the size of the workforce to better provide evidence-based mental health services and supports?[11]

- HRSA has taken several steps to address these workforce challenges as part of its mission to prepare a diverse workforce and improve the workforce distribution to increase access for underserved communities. Among its many programs, HRSA awards health professional and graduate medical education training grants and operates scholarship and loan repayment programs.
- Of note is the National Health Service Corps, where, as of September 2015, roughly 30 percent of its field strength of 9,683 was composed of behavioral health providers, meeting service obligations by providing care in areas of high need.
- HRSA is also putting increased emphasis on expanding the delivery of medication-assisted treatment, increasing SBI, and coordinating RSS. The development of the workforce qualified to deliver these services and services to address co-occurring medical and mental disorders will have significant implications for the national workforce's ability to reach the full potential of integration.

What are SAMHSA and other Federal agencies doing to address the workforce crisis and enhance recovery supports as an integral part of the solution?[12]

- SAMHSA will support active strategies to strengthen and expand the behavioral health workforce and improve the behavioral health knowledge and skills of those health care workers not considered behavioral health specialists. Through technical assistance, training, partnerships, and traditional and social media outreach, SAMHSA will promote an integrated, aligned, and competent workforce.
- This workforce will enhance the availability of prevention and treatment for substance abuse and mental illness, strengthen the capabilities of behavioral health professionals, and promote health system infrastructure that can deliver competent, organized behavioral health services.
- SAMHSA will monitor and assess the needs of youth, young adult and adult peers, communities, and health professionals in meeting behavioral health needs within America's transforming health promotion and health care delivery systems.
- SAMHSA also recognizes the growing understanding and value of peer providers to assist with engagement, support, and peer services. Increasing the peer and paraprofessional workforce and

[11] U.S. Department of Health & Human Services. (2016, Nov.). Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health.
[12] SAMHSA. Leading Change 2.0: Advancing the Behavioral Health of the Nation 2015-2018

increasing the evidence base for the best uses of peer and paraprofessional behavioral health services and supports, will require additional commitment and will help to expand the reach of limited professional treatment and support professionals.

What is the best way to ensure the behavioral health workforce has access to the information they need to remain current in advancing technologies in prevention, treatment and recovery support? [13]

- Strong health IT systems improve the organization and usability of clinical data, thereby helping patients, health care professionals, and health system leaders coordinate care, promote shared decision-making, and engage in quality improvement efforts. These systems have the capacity to easily provide information in multiple languages and to put patients in touch with culturally appropriate providers through telehealth.

What kinds of training programs or strategies might BH managers adopt to enhance staff retention?[14]

- Members of the behavioral health workforce benefit from continued training and clinical supervision to maintain high-quality services. In addition, these practices and other organizational factors may prevent staff from experiencing burnout and may assist in overcoming challenges in retention of qualified workers.
- For example, clinical supervision has been shown to serve as a protective factor in substance abuse treatment counselors' turnover, emotional exhaustion, and job satisfaction. In the substance abuse treatment field, staff turnover has been found to be as high as 50 percent in some contexts, with average annual estimates around 32 percent for counselors. Substance abuse treatment facilities can play a key role in supporting their workforce through training and supervision practices.

What are initiatives that increase access to providers in underserved areas and integrate behavioral health and primary care?

- The National Network to Eliminate Disparities (NNED) in Behavioral Health is dedicated to promoting equality in behavioral health services for individuals, families, and communities. NNED, with help from SAMHSA and the National Alliance for Multi-Ethnic Behavioral Health Associations, builds coalitions of racial, ethnic, cultural, and sexual minority communities and groups dedicated to removing disparities in behavioral health care.[15]
- The Minority Fellowship Programs (MFP) increase the knowledge of issues related to mental health conditions and addictions among minorities, and to improve the quality of mental health services and substance abuse prevention and treatment delivered to ethnic minority populations. SAMHSA provides grants to encourage and facilitate the doctoral and post-doctoral development of nurses, psychiatrists, social workers, psychologists, marriage and family therapists, and professional counselors by providing funding to organizations which oversee the fellowship opportunities.
- Graduate Psychology Education (GPE) Program: HRSA grants in the GPE program support interdisciplinary training for health service psychologists to provide mental and behavioral health care services to underserved populations, such as those in rural areas, older adults, children, chronically ill or disabled persons, and victims of abuse or trauma, including returning military personnel.

[13] U.S. Department of Health & Human Services. (2016, Nov.). Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health.
[14] Sherman, Laura, Lynch, Sean, et. al. Behavioral Health Workforce: Quality Assurance Practices in Substance Abuse Treatment Facilities. The CBHSQ Report. SAMHSA.
[15] SAMHSA. (n.d.). Serving the Needs of Diverse Populations.

- HRSA's National Health Service Corps are health professionals who provide primary health care services in underserved communities in exchange for either loan repayment assistance or scholarships to help pay the costs of their medical education.
- SAMHSA's cooperative agreement with Historically Black Colleges and Universities supports a Center for Excellence in Substance Abuse and Mental Health which provides student internships at minority serving institutions.[16]
- CMS is providing technical and program support to states to introduce policy, program, and payment reforms to identify individuals with substance use disorders, expand coverage for effective treatment, expand access to services, and develop data collection, measurement, and payment mechanisms that promote better outcomes.
- Medicaid is also encouraging the trend to integration in other ways, including supporting new models for delivering primary care, expanding the role of existing community-based care delivery systems, enacting mental health and substance use disorder parity for Medicaid and Children's Health Insurance Program (CHIP) as included in the final rule that CMS finalized in March 2016.[17]

Substance Use Disorders[18]

The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5), no longer uses the terms substance abuse and substance dependence, rather it refers to substance use disorders, which are defined as mild, moderate, or severe to indicate the level of severity, which is determined by the number of diagnostic criteria met by an individual. Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria. Following are overviews of the most common substance use disorders in the United States.

Opioids reduce the perception of pain but can also produce drowsiness, mental confusion, euphoria, nausea, constipation, and, depending upon the amount of drug taken, can depress respiration. Illegal opioid drugs, such as heroin and legally available pain relievers such as oxycodone and hydrocodone can cause serious health effects in those who misuse them. Some people experience a euphoric response to opioid medications, and it is common that people misusing opioids try to intensify their experience by snorting or injecting them. These methods increase their risk for serious medical complications, including overdose. Other users have switched from prescription opiates to heroin as a result of availability and lower price. Because of variable purity and other chemicals and drugs mixed with heroin on the black market, this also increases risk of overdose. Overdoses with opioid pharmaceuticals led to almost 17,000 deaths in 2011. Since 1999, opiate overdose deaths have increased 265% among men and 400% among women.

In 2014, an estimated 1.9 million people had an opioid use disorder related to prescription pain relievers and an estimated 586,000 had an opioid use disorder related to heroin use.

Symptoms of opioid use disorders include strong desire for opioids, inability to control or reduce use, continued use despite interference with major obligations or social functioning, use of larger amounts over time, development of tolerance, spending a great deal of time to obtain and use opioids, and withdrawal symptoms

[16] SAMHSA. (2013, January 24). Report to Congress on Nation's Substance Abuse and Mental Health Workforce Issues.
[17] U.S. Department of Health & Human Services. (2016, Nov.). Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health.
[18] https://www.samhsa.gov/disorders/substance-use

that occur after stopping or reducing use, such as negative mood, nausea or vomiting, muscle aches, diarrhea, fever, and insomnia.

Stimulants increase alertness, attention, and energy, as well as elevate blood pressure, heart rate, and respiration. They include a wide range of drugs that have historically been used to treat conditions, such as obesity, attention deficit hyperactivity disorder and, occasionally, depression. Like other prescription medications, stimulants can be diverted for illegal use. The most commonly abused stimulants are amphetamines, methamphetamine, and cocaine. Stimulants can be synthetic (such as amphetamines) or can be plant-derived (such as cocaine). They are usually taken orally, snorted, or intravenously.

In 2014, an estimated 913,000 people ages 12 and older had a stimulant use disorder because of cocaine use, and an estimated 476,000 people had a stimulant use disorder as a result of using other stimulants besides methamphetamines. In 2014, almost 569,000 people in the United States ages 12 and up reported using methamphetamines in the past month.

Symptoms of stimulant use disorders include craving for stimulants, failure to control use when attempted, continued use despite interference with major obligations or social functioning, use of larger amounts over time, development of tolerance, spending a great deal of time to obtain and use stimulants, and withdrawal symptoms that occur after stopping or reducing use, including fatigue, vivid and unpleasant dreams, sleep problems, increased appetite, or irregular problems in controlling movement.

Marijuana is the most-used drug after alcohol and tobacco in the United States. According to SAMHSA data:

- In 2014, about 22.2 million people ages 12 and up reported using marijuana during the past month.
- Also, in 2014, there were 2.6 million people in that age range who had used marijuana for the first time within the past 12 months. People between the ages of 12 and 49 report first using the drug at an average age of 18.5.

In the past year, 4.2 million people ages 12 and up met criteria for a substance use disorder based on marijuana use.

Marijuana's immediate effects include distorted perception, difficulty with thinking and problem solving, and loss of motor coordination. Long-term use of the drug can contribute to respiratory infection, impaired memory, and exposure to cancer-causing compounds. Heavy marijuana use in youth has also been linked to increased risk for developing mental illness and poorer cognitive functioning.

Some symptoms of cannabis use disorder include disruptions in functioning due to cannabis use, the development of tolerance, cravings for cannabis, and the development of withdrawal symptoms, such as the inability to sleep, restlessness, nervousness, anger, or depression within a week of ceasing heavy use.

According to the CDC, more than 480,000 deaths each year are caused by cigarette smoking. Tobacco use and smoking do damage to nearly every organ in the human body, often leading to lung cancer, respiratory disorders, heart disease, stroke, and other illnesses.

In 2014, an estimated 66.9 million Americans aged 12 or older were current users of a tobacco product (25.2%). Young adults aged 18 to 25 had the highest rate of current use of a tobacco product (35%), followed by adults aged 26 or older (25.8%), and by youths aged 12 to 17 (7%).

In 2014, the prevalence of current use of a tobacco product was 37.8% for American Indians or Alaska Natives, 27.6% for Whites, 26.6% for Blacks, 30.6% for Native Hawaiians or other Pacific Islanders, 18.8% for Hispanics, and 10.2% for Asians.

Excessive alcohol use can increase a person's risk of developing serious health problems in addition to those issues associated with intoxication behaviors and alcohol withdrawal symptoms. According to the Centers for Disease Control and Prevention (CDC), excessive alcohol use causes 88,000 deaths a year.

Data from the National Survey on Drug Use and Health (NSDUH) show that in 2014, slightly more than half (52.7%) of Americans ages 12 and up reported being current drinkers of alcohol. Most people drink alcohol in moderation. However, of those 176.6 million alcohol users, an estimated 17 million have an AUD. Many Americans begin drinking at an early age. In 2012, about 24% of eighth graders and 64% of twelfth graders used alcohol in the past year.

The definitions for the different levels of drinking include the following:

- Moderate Drinking—According to the Dietary Guidelines for Americans, moderate drinking is up to 1 drink per day for women and up to 2 drinks per day for men.
- Binge Drinking—SAMHSA defines binge drinking as drinking 5 or more alcoholic drinks on the same occasion on at least 1 day in the past 30 days. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as a pattern of drinking that produces blood alcohol concentrations (BAC) of greater than 0.08 g/dL. This usually occurs after 4 drinks for women and 5 drinks for men over a 2-hour period.
- Heavy Drinking—SAMHSA defines heavy drinking as drinking 5 or more drinks on the same occasion on each of 5 or more days in the past 30 days.

Excessive drinking can put you at risk of developing an alcohol use disorder in addition to other health and safety problems. Genetics have also been shown to be a risk factor for the development of an AUD.

To be diagnosed with an AUD, individuals must meet certain diagnostic criteria. Some of these criteria include problems controlling intake of alcohol, continued use of alcohol despite problems resulting from drinking, development of a tolerance, drinking that leads to risky situations, or the development of withdrawal symptoms. The severity of an AUD—mild, moderate, or severe—is based on the number of criteria met.

Hallucinogens can be chemically synthesized (as with lysergic acid diethylamide or LSD) or may occur naturally (as with psilocybin mushrooms, peyote). These drugs can produce visual and auditory hallucinations, feelings of detachment from one's environment and oneself, and distortions in time and perception.

In 2014, approximately 246,000 Americans had a hallucinogen use disorder. Symptoms of hallucinogen use disorder include craving for hallucinogens, failure to control use when attempted, continued use despite interference with major obligations or social functioning, use of larger amounts over time, use in risky situations like driving, development of tolerance, and spending a great deal of time to obtain and use hallucinogens.

Heart Disease and Stroke

Heart Disease[19]

In the area served by Newton Medical Center, there are identified health concerns or disparities among the population that are related to heart disease.

[19] https://www.cdc.gov/heartdisease/about.htm

Heart disease currently stands as the leading cause of death in the United States, with more than 600,000 Americans dying of heart disease and related conditions each year.[20] This amounts to one in every four deaths in the United States annually. Several health conditions, your lifestyle, and your age and family history can increase your risk for heart disease. About half of all Americans (47%) have at least one of the three key risk factors for heart disease: high blood pressure, high cholesterol, and smoking. Some of the risk factors for heart disease cannot be controlled, such as your age or family history. But you can take steps to lower your risk by changing the factors you can control.

The term "heart disease" refers to several types of heart conditions.

Coronary artery disease (CAD) is the most common type of heart disease in the United States. For some people, the first sign of CAD is a heart attack. CAD is caused by plaque buildup in the walls of the arteries that supply blood to the heart (called coronary arteries) and other parts of the body. Plaque is made up of deposits of cholesterol and other substances in the artery. Plaque buildup causes the inside of the arteries to narrow over time, which could partially or totally block the blood flow. This process is called atherosclerosis.

Too much plaque buildup and narrowed artery walls can make it harder for blood to flow through your body. When your heart muscle doesn't get enough blood, you may have chest pain or discomfort, called angina. Angina is the most common symptom of CAD. Over time, CAD can weaken the heart muscle. This may lead to heart failure, a serious condition where the heart can't pump blood the way that it should. An irregular heartbeat, or arrhythmia, also can develop. Being overweight, physical inactivity, unhealthy eating, and smoking tobacco are risk factors for CAD. A family history of heart disease also increases your risk for CAD.

Heart Attack, also called a myocardial infarction, occurs when a part of the heart muscle doesn't receive enough blood flow. The more time that passes without treatment to restore blood flow, the greater the damage to the heart muscle. Learn more about the signs and symptoms of a heart attack.

Every year, about 790,000 Americans have a heart attack. Of these cases, 580,000 are a first heart attack and 210,000 happen to people who have already had a first heart attack. One of 5 heart attacks is silent—the damage is done, but the person is not aware of it. Coronary artery disease (CAD) is the main cause of heart attack. Less common causes are severe spasm, or sudden contraction, of a coronary artery that can stop blood flow to the heart muscle.

Other related conditions include:

- Acute coronary syndrome: a term that includes heart attack and unstable angina.
- Angina: asymptom of coronary artery disease, is chest pain or discomfort that occurs when the heart muscle is not getting enough blood. Angina may feel like pressure or a squeezing pain in the chest. The pain also may occur in the shoulders, arms, neck, jaw, or back. It may feel like indigestion.
- Stable angina: happens during physical activity or under mental or emotional stress.
- Unstable angina: chest pain that occurs even while at rest, without apparent reason. This type of angina is a medical emergency.
- Aortic aneurysm and dissection: conditions that can affect the aorta, the major artery that carries blood from the heart to the body. An aneurysm is an enlargement in the aorta that can rupture or burst. A dissection is a tear in the aorta. Both conditions are medical emergencies.

[20] www.cdc.gov/nchs/ data/nvsr/nvsr60/nvsr60_03.pdf

- Arrhythmias: irregular or unusually fast or slow heartbeats. Arrhythmias can be serious. One example is called ventricular fibrillation. This type of arrhythmia causes an abnormal heart rhythm that leads to death unless treated right away with an electrical shock to the heart (called defibrillation). Other arrhythmias are less severe but can develop into more serious conditions, such as atrial fibrillation, which can cause a stroke.
- Atherosclerosis: occurs when plaque builds up in the arteries that supply blood to the heart (called coronary arteries). Plaque is made up of cholesterol deposits. Plaque buildup causes arteries to narrow over time.
- Atrial fibrillation: a type of arrhythmia that can cause rapid, irregular beating of the heart's upper chambers. Blood may pool and clot inside the heart, increasing the risk for heart attack and stroke.
- Cardiomyopathy: occurs when the heart muscle becomes enlarged or stiff. This can lead to inadequate heart pumping (or weak heart pump) or other problems. Cardiomyopathy has many causes, including family history of the disease, prior heart attacks, uncontrolled high blood pressure, and viral or bacterial infections.
- Congenital heart defects: problems with the heart that are present at birth. They are the most common type of major birth defect. Examples include abnormal heart valves or holes in the heart's walls that divide the heart's chambers. Congenital heart defects range from minor to severe.
- Heart failure: often called congestive heart failure (CHF) because of fluid buildup in the lungs, liver, gastrointestinal tract, and the arms and legs. Heart failure is a serious condition that occurs when the heart can't pump enough blood to meet the body's needs. It does not mean that the heart has stopped but that muscle is too weak to pump enough blood. The majority of heart failure cases are chronic, or long-term heart failures. The only cure for heart failure is a heart transplant. However, heart failure can be managed with medications or medical procedures.
- Peripheral arterial disease (PAD): occurs when the arteries that supply blood to the arms and legs (the periphery) become narrow or stiff. PAD usually results from atherosclerosis, the buildup of plaque and narrowing of the arteries. With this condition, blood flow and oxygen to the arm and leg muscles are low or even fully blocked. Signs and symptoms include leg pain, numbness, and swelling in the ankles and feet.
- Rheumatic heart disease is damage to the heart valves caused by a bacterial (streptococcal) infection called rheumatic fever.

Stroke

In the area served by Newton Medical Center, there are identified health concerns or disparities among the population that are related to stroke.

Stroke is a disease that affects the arteries leading to and within the brain. It is the fifth highest cause of death and a leading cause of disability in the United States.

A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or bursts (or ruptures). When that happens, part of the brain cannot get the blood (and oxygen) it needs, so it and brain cells die. When brain cells die during a stroke, the abilities controlled by that area of the brain are lost. These abilities may include speech, movement, and memory. The way a stroke affects you depends on where the stroke occurs in the brain and how much of the brain is damaged.

Stroke can be caused either by a clot obstructing the flow of blood to the brain (called an ischemic stroke) or by a blood vessel rupturing and preventing blood flow to the brain (called a hemorrhagic stroke). A TIA (transient ischemic attack), or "mini stroke", is caused by a temporary clot.

- Ischemic stroke occurs when a vessel supplying blood to the brain is obstructed. It accounts for about 87 percent of all strokes. Fatty deposits lining the vessel walls, called atherosclerosis, are the main cause for ischemic stroke. Fatty deposits can cause two types of obstruction:

    - Cerebral thrombosis is a thrombus (blood clot) that develops at the fatty plaque within the blood vessel.

    - Cerebral embolism is a blood clot that forms at another location in the circulatory system, usually the heart and large arteries of the upper chest and neck. Part of the blood clot breaks loose, enters the bloodstream and travels through the brain's blood vessels until it reaches vessels too small to let it pass. A main cause of embolism is an irregular heartbeat called atrial fibrillation. It can cause clots to form in the heart, dislodge and travel to the brain.

- Hemorrhagic strokes make up about 13 percent of stroke cases. It's caused by a weakened vessel that ruptures and bleeds into the surrounding brain. The blood accumulates and compresses the surrounding brain tissue. The two types of hemorrhagic strokes are intracerebral (within the brain) hemorrhage or subarachnoid hemorrhage. A hemorrhagic stroke occurs when a weakened blood vessel ruptures. Two types of weakened blood vessels usually cause hemorrhagic stroke: aneurysms and arteriovenous malformations (AVMs).

- A Transient Ischemic Attack (TIA) is often called a mini-stroke, but it's really a major warning. TIA is a temporary blockage of blood flow to the brain. Since it doesn't cause permanent damage, it's often ignored. But this is a big mistake. TIAs may signal a full-blown stroke ahead.

- Strokes without a known cause are called "cryptogenic." In most cases, a stroke is caused by a blood clot that blocks blood flow to the brain. But in some instances, despite testing, the cause can't be determined. That's why it's important to dig deeper for a definitive diagnosis. Collaboration by neurologists, cardiologists, electrophysiologists and others may reveal the answers needed to provide targeted treatment for preventing recurrent strokes. Having a stroke of unknown cause, or cryptogenic stroke, may be frustrating and overwhelming. With a proper diagnostic work-up and collaboration with your physician, you can take part in finding the cause of your stroke and help prevent another one from occurring.

- Brain stem strokes can have complex symptoms, and they can be difficult to diagnose. A person may have vertigo, dizziness and severe imbalance without the hallmark of most strokes — weakness on one side of the body. The symptoms of vertigo dizziness or imbalance usually occur together; dizziness alone is not a sign of stroke. A brain stem stroke can also cause double vision, slurred speech and decreased level of consciousness.

When you first notice symptoms, get help immediately. F.A.S.T. is an easy way to remember the sudden signs of stroke. Learning the signs and symptoms of strokes and getting to a hospital quickly will give you the best chance of having a positive outcome after a stroke. When you spot the signs, you'll know when you need to call 9-1-1 for help. F.A.S.T. stands for:

- **Face** Drooping Does one side of the face droop or does it feel numb? Ask the person to smile. Is the person's smile uneven?
- **Arm** Weakness Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward?

- **Speech** Difficulty Is speech slurred? Is the person unable to speak or hard to understand? Ask the person to repeat a simple sentence, like "The sky is blue." Is the sentence repeated correctly?
- **Time** to call 9-1-1 If someone shows any of these symptoms, even if the symptoms go away, call 9-1-1 and get the person to the hospital immediately. Check the time so you'll know when the first symptoms appeared.

Once you have had a stroke, you are at a greater risk for another stroke. Up to 80 percent of second clot-related strokes may be preventable. Following are steps that can reduce the risk for a stroke:

- Monitor your blood pressure.
- Control your cholesterol.
- Keep your blood sugar down.
- Get active.
- Eat better.
- Lose weight if you need to.
- Don't smoke, period.
- Talk to your doctor about aspirin* or other medications.

The American Stroke Association provides extensive information about the causes, types, preventative steps and treatment of stroke.

Cancer

In the area served by Newton Medical Center, there are identified health concerns or disparities among the population that are related to cancer, including:

- The incidence of breast cancer
- The incidence of non-Hodgkin's lymphoma
- The incidence of melanoma
- The incidence of oral cavity and pharynx cancer
- The overall cancer incidence rate, with an identified disparity among men
- The age-adjusted death rate due to cancer among men

Continued advances in cancer research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers. Among people who develop cancer, more than half will be alive in 5 years, yet cancer remains a leading cause of death in the United States, second only to heart disease.[21]

Many cancers are preventable by reducing risk factors such as:

- Use of tobacco products
- Physical inactivity and poor nutrition
- Obesity
- Ultraviolet light exposure

[21] https://www.healthypeople.gov/2020/topics-objectives/topic/cancer

Other cancers can be prevented by getting vaccinated against human papillomavirus (HPV) and hepatitis B virus. In addition to prevention, screening is effective in identifying some types of cancers in early, often highly treatable stages including:

- Breast cancer (using mammography)
- Cervical cancer (using Pap test alone or combined Pap test and HPV test)
- Colorectal cancer (using stool-based testing, sigmoidoscopy, or colonoscopy)

For cancers with evidence-based screening tools, early detection must address the continuum of care from screening to appropriate follow-up of abnormal test results and referral to cancer treatment.[22]

However, while scientific advances and medical breakthroughs in cancer treatment options and their efficacy, the benefits of these health improvements have thus far been felt disproportionately by only a small, sub-section of the population. To explain this phenomenon, researchers have pointed to the complex and interrelated factors, which contribute to the risk of developing cancer, and to the observed disparities in cancer incidence and death among racial, ethnic, and underserved groups.[23]

The most obvious factors are a lack of health care coverage and low socioeconomic status (SES). SES is most often based on any number of factors including – but not limited to – a person's income, education level, occupation, social status in the community, and geographic location (where the person lives). Studies have found that SES, more than race or ethnicity, predicts the likelihood of an individual's or group's access to things like:

- Education
- Health insurance and health care services
- Safe and healthy living and working conditions, including places free from exposure to environmental toxins

All of these are factors associated with the risk of developing and surviving cancer.

Additionally, SES also appears to play a major role in the prevalence of behavioral risk factors for cancer (like tobacco smoking, physical inactivity, obesity, and excessive alcohol use), as well as rates of cancer screenings, with those with lower SES having fewer cancer screenings.

In addition to – and in some cases, on top of – the socioeconomic, racial, and ethnic disparity trends which have long been prevalent in cancer prevalence and outcomes data, this past decade has seen new emerging trends and issues associated with cancer, largely due to the aging population, increases in cancer survivorship, and shifts in lifestyle habits.

Recently, overweight and obesity have emerged as new risk factors for developing certain cancers, including but not limited to colorectal, breast, uterine corpus (endometrial), pancreas, and kidney cancers. The impact of the current weight trends on cancer incidence will not be fully known for several decades. Continued focus on preventing weight gain will lead to lower rates of cancer and many chronic diseases.[24]

[22] Zapka, J. G., et al. (2003). A framework for improving the quality of cancer care: the case of breast and cervical cancer screening. Cancer Epidemiology and Prevention Biomarkers, 12(1), 4-13.
[23] https://www.healthypeople.gov/2020/topics-objectives/topic/cancer
[24] http://seer.cancer.gov

Cancer survivors often face physical, emotional, social, and financial challenges as a result of their cancer diagnosis and treatment. Survivors are at risk of recurrence of their first cancer and are at greater risk of developing other cancers and other health conditions. Factors that increase these risks for survivors include:

- The immediate and long-term effects of cancer and its treatment
- Obesity and unhealthy behaviors, such as smoking and lack of physical activity
- Genetic changes

In the coming decade, as the number of cancer survivors is expected to increase by more than 30% to 18 million, understanding survivors' health status and behaviors will become increasingly important.[25]

Diabetes and Obesity

NMC is committed to its continued work with community partners to ensure that the many years of funding committed by NMC for projects that work to stem the spread of chronic diseases linked to diabetes and obesity continue to drive successful improvements in overall health of the community.

Diabetes[26]

Diabetes mellitus (DM) occurs when the body cannot produce enough insulin or cannot respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications.

Many forms of diabetes exist. The 3 common types of DM are:

- Type 2 diabetes, which results from a combination of resistance to the action of insulin and insufficient insulin production
- Type 1 diabetes, which results when the body loses its ability to produce insulin
- Gestational diabetes, a common complication of pregnancy. Gestational diabetes can lead to perinatal complications in mother and child and substantially increases the likelihood of cesarean section. Gestational diabetes is also a risk factor for the mother and, later in life, the child's subsequent development of type 2 diabetes after the affected pregnancy.

Effective therapy can prevent or delay diabetic complications. However, about 28 percent of Americans with DM are undiagnosed, and another 86 million American adults have blood glucose levels that greatly increase their risk of developing type 2 DM in the next several years. Diabetes complications tend to be more common and more severe among people whose diabetes is poorly controlled, which makes DM an immense and complex public health challenge. Preventive care practices are essential to better health outcomes for people with diabetes.

DM affects an estimated 29.1 million people in the United States and is the 7th leading cause of death. Diagnosed DM:

- Increases the all-cause mortality rate 1.8 times compared to persons without diagnosed diabetes
- Increases the risk of heart attack by 1.8 times

[25] De Moor, J. S., et al. (2013). Cancer survivors in the United States: prevalence across the survivorship trajectory and implications for care. Cancer Epidemiology and Prevention Biomarkers, 22(4), 561-570.
[26] https://www.healthypeople.gov/2020/topics-objectives/topic/diabetes

- Is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness
- In addition to these human costs, the estimated total financial cost of DM in the United States in 2012 was $245 billion, which includes the costs of medical care, disability, and premature death.
- The number of DM cases continues to increase both in the United States and throughout the world. Due to the steady rise in the number of persons with DM, and possibly earlier onset of type 2 DM, there is growing concern about:

    - The possibility of substantial increases in prevalence of diabetes-related complications in part due to the rise in rates of obesity
    - The possibility that the increase in the number of persons with DM and the complexity of their care might overwhelm existing health care systems
    - The need to take advantage of recent discoveries on the individual and societal benefits of improved diabetes management and prevention by bringing life-saving discoveries into wider practice
    - The clear need to complement improved diabetes management strategies with efforts in primary prevention among those at risk for developing type 2 DM

Four “transition points” in the natural history of diabetes health care provide opportunities to reduce the health and economic burden of DM:

- Primary prevention: Movement from no diabetes to diabetes
- Testing and early diagnosis: Movement from unrecognized to recognized diabetes
- Access to care for all persons with diabetes: Movement from no diabetes care to access to appropriate diabetes care
- Improved quality of care: Movement from inadequate to adequate care
  Disparities in diabetes risk:
- People from minority populations are more likely to be affected by type 2 diabetes. Minority groups constitute 25 percent of all adult patients with diabetes in the United States and represent most children and adolescents with type 2 diabetes.
- African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Native Hawaiians and other Pacific Islanders are at particularly high risk for the development of type 2 diabetes.
- Diabetes prevalence rates among American Indians are 2 to 5 times those of whites. On average, African American adults are 1.7 times as likely and Mexican Americans and Puerto Ricans are twice as likely to have the disease as non-Hispanic whites of similar age.
  Barriers to progress in diabetes care include:
- Systems problems (challenges due to the design of health care systems)
- The troubling increase in the number of people with diabetes, which may result in a decrease in the attention and resources available per person to treat DM

Evidence is emerging that diabetes is associated with additional comorbidities including:

- Cognitive impairment
- Incontinence
- Fracture risk
- Cancer risk and prognosis

The importance of both diabetes and these comorbidities will continue to increase as the population ages. Therapies that have proven to reduce microvascular and macrovascular complications will need to be assessed considering the newly identified comorbidities.

Lifestyle change has been proven effective in preventing or delaying the onset of type 2 diabetes in high-risk individuals. Based on this, new public health approaches are emerging that may deserve monitoring at the national level. For example, the Diabetes Prevention Program research trial demonstrated that lifestyle intervention had its greatest impact in older adults and was effective in all racial and ethnic groups. Translational studies of this work have also shown that delivery of the lifestyle intervention in group settings at the community level are also effective at reducing type 2 diabetes risk. The National Diabetes Prevention Program has now been established to implement the lifestyle intervention nationwide.

Another emerging issue is the effect on public health of new laboratory-based criteria, such as introducing the use of A1c for diagnosis of type 2 diabetes or for recognizing high risk for type 2 diabetes. These changes may impact the number of individuals with undiagnosed diabetes and facilitate the introduction of type 2 diabetes prevention at a public health level.

Several studies have suggested that process indicators such as foot exams, eye exams, and measurement of A1c may not be sensitive enough to capture all aspects of quality of care that ultimately result in reduced morbidity. New diabetes quality-of-care indicators are currently under development and may help determine whether appropriate, timely, evidence-based care is linked to risk factor reduction. In addition, the scientific evidence that type 2 diabetes can be prevented or delayed has stimulated new research into the best markers and approaches for identifying and referring high-risk individuals to prevention programs in community settings.

Finally, it may be possible to achieve additional reduction in the risk of type 2 diabetes or its complications by influencing various behavioral risk factors, such as specific dietary choices, which have not been tested in large randomized controlled trials.

Obesity[27]

Each year, the *State of Obesity: Better Policies for a Healthier America* report, issued by the Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF), highlights the latest obesity trends as well as strategies, policies, programs, and practices that can reverse the epidemic. State of Obesity also demonstrates the level of commitment necessary to effectively fight obesity on a large scale and includes key recommendations for specific action.

New studies documenting national obesity rates and trends from the past year reinforce what we already know: obesity rates are alarmingly high; sustained, meaningful reductions have not yet been achieved nationally except possibly among our youngest children in low-income families; many populations continue to see steady increases in obesity; and racial, ethnic, and geographic disparities are persistent. Therefore, addressing the obesity epidemic remains imperative for ensuring the health of the nation.

According to the most recent National Health and Nutrition Examination Survey (NHANES), 18.5 percent of children and 39.6 percent of adults had obesity in 2015–2016. These are the highest rates ever documented by NHANES. There were no statistically significant changes in youth or adult rates compared with the 2013–2014

[27] https://stateofobesity.org/wp-content/uploads/2018/09/stateofobesity2018.pdf

survey, but rates have increased significantly since 1999–2000, when 13.9 percent of children and 30.5 percent of adults had obesity.

The severity of racial, ethnic, and geographic disparities remains striking. Black and Latino children and adults continue to have higher obesity rates than Whites and Asians. The Youth Risk Behavior Survey, which is based on self-reported data, found that 14.8 percent of U.S. high school students had obesity in 2017. That survey also reported persistent inequities–18.2 percent of Black and Latino high schoolers had obesity compared to 12.5 percent of their White peers. Two other studies found that adults and children who live in rural areas have higher rates of severe obesity.

Accelerating progress to address obesity will require collaboration, sufficient resources, and sustained efforts, including by federal, state, and local agencies and the private sector. For decades, experts at CDC, National Institutes of Health (NIH), U.S. Department of Agriculture (USDA), U.S. Department of Education, the Administration for Children and Families, and the Food and Drug Administration (FDA) have been researching and developing strategies to prevent and address obesity. Over the past 15 years, policymakers have taken significant steps to implement new approaches through the WIC program, the Supplemental Nutrition Assistance Program, the National School Lunch and Breakfast Programs, updated menu labeling rules, and an updated Nutrition Facts label. Some of these efforts were delayed or weakened, preventing full implementation and thus denying researchers the ability to effectively study which efforts best help people maintain a healthy weight.

For instance, a USDA rule published in November 2017 scaled back key nutrition standards for school breakfast and lunch programs that went into effect in 2012. The question is whether schools will continue the healthy changes that they already implemented. In 23 states, 100 percent of school food agencies were compliant as of September 2016 and at least 90 percent of agencies were compliant in every state. FDA requirements for food retailers and restaurants to post calorie information on menus and elsewhere went into effect in May 2018, more than eight years after becoming law and after several unnecessary delays. Recent federal budget proposals include deep cuts to key health programs such as the CDC's National Center for Chronic Disease Prevention and Health Promotion. This cut would eliminate dedicated funding for addressing nutrition, physical activity, and obesity.

Limiting policies and funding for obesity prevention efforts at a moment when the enormity and intractability of this public health problem is so pressing will have adverse consequences for the country and its residents. After all, Americans' health is directly tied to national security and the U.S. economy.

In response to ongoing high levels of obesity, the United States must be bold enough to find and test new strategies, and resolute enough to intensify evidence-based solutions that are already making a difference. This means communities, governments, and other institutions need to work across sectors and levels to support policies, practices, and programs that work. Over time, these investments can pay off—in lives saved and in reduced healthcare costs.

The annual State of Obesity reports have documented how, over the past 15 years, a series of evidenced-based policies and programs have helped Americans eat healthier and provided more opportunities for physical activity in their homes, schools, and communities. These initiatives have taken root at the local, state, and federal levels, with participation from the private sector.

A renewed commitment to obesity prevention policies and programs, and continued innovation at the state and local levels is critical to achieving success among more children and adults in our country. Effective obesity prevention efforts also require substantial investment to support multifaceted, multi-sector collaborations;

merging multiple sources of public and private funding can best ensure that these efforts are sustainable as a long-term enterprise. This is particularly important for populations that have elevated risk.

TFAH and RWJF recommend three guiding principles regarding obesity prevention:

1) Promote policies and scale programs that take a multi-sector approach. Multi-sector aligned initiatives—collaborations that involve, for example, health departments, schools, transportation departments, local businesses, and other agencies—are more likely to achieve results.
2) Adopt and implement policies that help make healthy choices easy. Federal, state, and local governments can create conditions in schools, communities, and workplaces that make healthy eating and active living accessible, affordable, and convenient.
3) Invest in programs that level the playing field for all individuals and families. While obesity affects all populations, some have significantly higher levels than others—often due to social and economic factors largely beyond their control, such as racism, poverty, and lack of access to healthcare. Carefully designed initiatives, that are informed by community input and address these challenges, are critically important. Investing in these programs requires not only adequate funding, but also staffing, public promotion, and other community resources.

TFAH and RWJF offer the following specific recommendations to Healthcare System and Providers:

- Hospitals should no longer sell or serve sugary drinks on their campuses; they should also improve the nutritional quality of meals and promote breastfeeding.
- Nonprofit hospitals should prioritize childhood obesity prevention programs as they work to meet their community benefit requirements.
- All public and private health plans should cover the full range of obesity-prevention, treatment, and management services, including nutritional counseling, medications, and behavioral health consultation.
- Medicare should encourage eligible beneficiaries to enroll in obesity counseling as a covered benefit and evaluate its use and effectiveness. Health plans, medical schools, continuing medical education, and public health departments should raise awareness about the need and availability of these services.
- The healthcare system should extend programs that are effective in terms of costs and performance, such as the Diabetes Prevention Program (DPP) and the community health worker–clinical coordination models. Providers and payers should allocate resources to educating and referring patients to DPP and other covered benefits as appropriate.
- Public and private payers should cover value-based purchasing models that incorporate health outcome measures that incentivize clinicians to prioritize healthy weight.

APPENDIX A: DEMOGRAPHIC TABLES

Current and Forecasted Population

POPULATION: SERVICE AREA & COMPARATIVE GEOGRAPHIES						
ZIP Code	ZIP Code Name	Population of Base Yr (2010)	Population of Current Yr (2019)	Population of Forecast Yr (2024)	Population Growth: Base Yr to Current Yr (%)	Population Growth: Current Yr to Forecast Yr (%)
07416	FRANKLIN	5,625	5,338	5,247	-5.10%	-1.70%
07419	HAMBURG	9,178	9,158	9,194	-0.22%	0.39%
07461	SUSSEX	19,991	18,646	18,247	-6.73%	-2.14%
07821	ANDOVER	9,442	8,863	8,696	-6.13%	-1.88%
07826	BRANCHVILLE	6,034	5,809	5,731	-3.73%	-1.34%
07827	MONTAGUE	4,150	3,990	3,934	-3.86%	-1.40%
07848	LAFAYETTE	5,200	4,875	4,776	-6.25%	-2.03%
07860	NEWTON	26,044	24,497	24,044	-5.94%	-1.85%
07871	SPARTA	20,805	19,707	19,410	-5.28%	-1.51%
07825	BLAIRSTOWN	9,581	9,187	9,090	-4.11%	-1.06%
18337	MILFORD	14,784	14,307	14,207	-3.32%	-0.70%
	NMC SERVICE AREA	**130,834**	**124,377**	**122,576**	**-3.2%**	**-0.7%**
	SUSSEX COUNTY	**150,179**	**141,240**	**138,722**	**-6.0%**	**-1.8%**
	NEW JERSEY	**8,791,914**	**9,043,262**	**9,195,645**	**2.9%**	**1.7%**

Population Density

POPULATION DENSITY: ZIP CODES AND COMPARATIVE GEOGRAPHIES		
ZIP Code	ZIP Code Name	Population / Square Mile
07416	FRANKLIN	568.40
07419	HAMBURG	587.80
07461	SUSSEX	222.94
07821	ANDOVER	206.71
07826	BRANCHVILLE	111.99
07827	MONTAGUE	83.04
07848	LAFAYETTE	204.11
07860	NEWTON	244.04
07871	SPARTA	518.93
07825	BLAIRSTOWN	117.34
18337	MILFORD	181.21
	NMC SERVICE AREA	**217.63**
	SUSSEX COUNTY	**274.97**
	NEW JERSEY	**1,303.47**

Race & Hispanic[28]

POPULATION: SERVICE AREA & COMPARATIVE GEOGRAPHIES											
		White (Non-Hispanic)		Hispanic (of Any Race)		Asian (Non-Hispanic)		Black (Non-Hispanic)		Another Race (Non-Hispanic)	
ZIP Code	ZIP Code Name	2019	2024	2019	2024	2019	2024	2019	2024	2019	2024
07416	FRANKLIN	83.1%	81.1%	9.6%	10.7%	1.8%	1.8%	2.9%	3.4%	2.6%	2.9%
07419	HAMBURG	82.7%	80.6%	8.4%	9.4%	3.4%	3.7%	3.7%	4.3%	1.9%	2.0%

[28] Source: New Solutions/Claritas 2019-2024 Demographic File

POPULATION: SERVICE AREA & COMPARATIVE GEOGRAPHIES											
		White (Non-Hispanic)		Hispanic (of Any Race)		Asian (Non-Hispanic)		Black (Non-Hispanic)		Another Race (Non-Hispanic)	
ZIP Code	ZIP Code Name	2019	2024	2019	2024	2019	2024	2019	2024	2019	2024
07461	SUSSEX	87.3%	85.6%	7.7%	8.8%	1.2%	1.3%	1.9%	2.2%	1.9%	2.1%
07821	ANDOVER	88.8%	87.6%	6.8%	7.7%	1.8%	1.9%	1.5%	1.6%	1.2%	1.2%
07826	BRANCHVILLE	92.1%	91.0%	4.4%	5.0%	1.0%	1.1%	0.9%	1.1%	1.6%	1.8%
07827	MONTAGUE	85.7%	84.0%	8.0%	9.1%	1.1%	1.1%	2.2%	2.4%	3.0%	3.3%
07848	LAFAYETTE	86.5%	85.0%	6.8%	7.7%	2.2%	2.3%	2.7%	3.0%	1.7%	2.0%
07860	NEWTON	84.8%	82.8%	8.6%	9.9%	2.1%	2.3%	2.7%	3.0%	1.8%	2.0%
07871	SPARTA	86.6%	84.8%	7.2%	8.3%	2.9%	3.2%	1.6%	1.8%	1.7%	1.9%
07825	BLAIRSTOWN	91.6%	90.4%	4.7%	5.4%	1.3%	1.5%	1.5%	1.7%	0.9%	1.0%
18337	MILFORD	84.6%	83.6%	9.9%	10.9%	1.1%	1.2%	2.6%	2.5%	1.8%	1.8%
	NMC SERVICE AREA	**86.4%**	**84.8%**	**7.7%**	**8.7%**	**1.9%**	**2.1%**	**2.2%**	**2.5%**	**1.7%**	**1.9%**
	SUSSEX COUNTY	**85.8%**	**84.1%**	**8.4%**	**9.5%**	**2.0%**	**2.2%**	**2.1%**	**2.4%**	**1.7%**	**1.9%**
	NEW JERSEY	**53.9%**	**50.9%**	**21.0%**	**22.8%**	**10.0%**	**11.0%**	**12.8%**	**12.8%**	**2.3%**	**2.5%**

Language Spoken at Home[29]

POPULATION 5 YEARS AND OVER: SERVICE AREA & COMPARATIVE GEOGRAPHIES				
ZIP Code	ZIP Code Name	Speak English only or speak English "very well"	Speak English less than "very well"	% Speak English less than "very well"
07416	FRANKLIN	4,928	227	4.4%
07419	HAMBURG	8,108	122	1.5%
07461	SUSSEX	17,948	232	1.3%
07821	ANDOVER	8,921	255	2.8%
07826	BRANCHVILLE	5,463	89	1.6%
07827	MONTAGUE	3,927	19	0.5%
07848	LAFAYETTE	4,481	137	3.0%
07860	NEWTON	23,921	783	3.2%
07871	SPARTA	19,056	494	2.5%
07825	BLAIRSTOWN	8,808	233	2.6%
18337	MILFORD	13,237	509	3.7%
	NMC SERVICE AREA	**118,798**	**3,100**	**2.6%**
	SUSSEX COUNTY	**135,813**	**3,663**	**2.6%**
	NEW JERSEY	**7,365,008**	**1,021,939**	**12.2%**

\Median Household Income[30]

CURRENT AND PROJECTED MEDIAN HOUSEHOLD INCOME: SERVICE AREA & COMPARATIVE GEOGRAPHIES				
ZIP Code	ZIP Code Name	2019 HH INCOME Median HH Income	2024 HH INCOME Median HH Income	% Change Median HH Income - Projected
07416	FRANKLIN	$65,944	$68,682	4.2%
07419	HAMBURG	$94,024	$100,299	6.7%
07461	SUSSEX	$90,159	$95,526	6.0%
07821	ANDOVER	$110,222	$118,119	7.2%
07826	BRANCHVILLE	$87,048	$91,369	5.0%
07827	MONTAGUE	$75,488	$79,502	5.3%
07848	LAFAYETTE	$99,830	$106,597	6.8%
07860	NEWTON	$85,246	$90,717	6.4%

[29] Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates
[30] Source: New Solutions/Claritas 2019-2024 Demographic File

CURRENT AND PROJECTED MEDIAN HOUSEHOLD INCOME: SERVICE AREA & COMPARATIVE GEOGRAPHIES				
ZIP Code	ZIP Code Name	2019 HH INCOME Median HH Income	2024 HH INCOME Median HH Income	% Change Median HH Income - Projected
07871	SPARTA	$139,228	$148,125	6.4%
07825	BLAIRSTOWN	$101,067	$108,517	7.4%
18337	MILFORD	$82,942	$90,828	9.5%
	NMC SERVICE AREA	**$90,159**	**$95,526**	**6.0%**
	SUSSEX COUNTY	**$93,651**	**$99,703**	**6.5%**
	NEW JERSEY	**$77,983**	**$85,857**	**10.1%**

Poverty[31]

CURRENT AND PROJECTED MEDIAN HOUSEHOLD INCOME: SERVICE AREA & COMPARATIVE GEOGRAPHIES						
ZIP Code	ZIP Code Name	2019 # Families Below Poverty	2019 % Families Below Poverty	2024 # Families Below Poverty	2024 % Families Below Poverty	% Change 2019-2014
07416	FRANKLIN	85	5.9%	85	5.9%	0.0%
07419	HAMBURG	30	1.2%	37	1.4%	23.3%
07461	SUSSEX	201	3.9%	201	4.0%	0.0%
07821	ANDOVER	63	2.5%	67	2.7%	6.3%
07826	BRANCHVILLE	76	4.6%	70	4.2%	-7.9%
07827	MONTAGUE	49	4.5%	49	4.5%	0.0%
07848	LAFAYETTE	35	2.7%	36	2.8%	2.9%
07860	NEWTON	437	6.7%	427	6.6%	-2.3%
07871	SPARTA	82	1.5%	94	1.7%	14.6%
07825	BLAIRSTOWN	89	3.4%	93	3.6%	4.5%
18337	MILFORD	148	3.8%	150	3.8%	1.4%
	NMC SERVICE AREA	**1,295**	**3.8%**	**1,309**	**3.9%**	**1.08%**
	SUSSEX COUNTY	**1,492**	**3.8%**	**1,488**	**3.9%**	**-0.27%**
	NEW JERSEY	**179,302**	**7.8%**	**182,371**	**7.8%**	**1.71%**

Food Stamps / SNAP[32]

ESTIMATED TOTAL HOUSEHOLDS: SERVICE AREA & COMPARATIVE GEOGRAPHIES				
ZIP Code	ZIP Code Name	Total Households (HH)	HH receiving food stamps/SNAP	% of HH Receiving SNAP
07416	FRANKLIN	2,119	156	7.4%
07419	HAMBURG	3,696	141	3.8%
07461	SUSSEX	6,884	307	4.5%
07821	ANDOVER	3,452	59	1.7%
07826	BRANCHVILLE	2,234	87	3.9%
07827	MONTAGUE	1,685	148	8.8%
07848	LAFAYETTE	1,529	67	4.4%
07860	NEWTON	9,867	671	6.8%
07871	SPARTA	7,015	177	2.5%
07825	BLAIRSTOWN	3,390	72	2.1%
18337	MILFORD	5,069	377	7.4%
	NMC SERVICE AREA	**46,940**	**2,262**	**4.8%**
	SUSSEX COUNTY	**54,224**	**2,396**	**4.4%**

[31] Source: New Solutions/Claritas 2019-2024 Demographic File
[32] Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

ESTIMATED TOTAL HOUSEHOLDS: SERVICE AREA & COMPARATIVE GEOGRAPHIES				
ZIP Code	ZIP Code Name	Total Households (HH)	HH receiving food stamps/SNAP	% of HH Receiving SNAP
	NEW JERSEY	3,195,014	298,642	9.3%

Unemployment Rate[33]

POPULATION 16 YEARS AND OVER: SERVICE AREA & COMPARATIVE GEOGRAPHIES				
ZIP Code	ZIP Code Name	Population 16 Years and Over	Unemployed	% Unemployed
07416	FRANKLIN	4,461	343	7.7%
07419	HAMBURG	7,078	411	5.8%
07461	SUSSEX	15,482	1,300	8.4%
07821	ANDOVER	7,624	435	5.7%
07826	BRANCHVILLE	4,869	292	6.0%
07827	MONTAGUE	3,445	362	10.5%
07848	LAFAYETTE	4,032	206	5.1%
07860	NEWTON	21,552	1,660	7.7%
07871	SPARTA	15,965	782	4.9%
07825	BLAIRSTOWN	7,595	638	8.4%
18337	MILFORD	11,572	692	6.0%
	NMC SERVICE AREA	**103,675**	**7,121**	**6.9%**
	SUSSEX COUNTY	**119,220**	**8,520**	**7.1%**
	NEW JERSEY	**7,143,654**	**566,878**	**7.9%**

Education Attainment[34]

CURRENT AND PROJECTED EDUCATION LEVEL (AGE 25+): SERVICE AREA & COMPARATIVE GEOGRAPHIES						
ZIP Code	ZIP Code Name	2019 Some High School or Less	2019 % Some High School or Less	2024 Some High School or Less	2024 % Some High School or Less	% Point Change 2019-2014
07416	FRANKLIN	275	7.12%	274	7.13%	0.01%
07419	HAMBURG	240	3.62%	244	3.67%	0.04%
07461	SUSSEX	930	7.02%	940	7.01%	-0.01%
07821	ANDOVER	301	4.79%	311	4.91%	0.12%
07826	BRANCHVILLE	283	6.56%	282	6.50%	-0.07%
07827	MONTAGUE	192	6.77%	194	6.90%	0.13%
07848	LAFAYETTE	139	3.86%	143	3.94%	0.08%
07860	NEWTON	1,402	7.79%	1,404	7.77%	-0.02%
07871	SPARTA	391	2.95%	408	3.01%	0.06%
07825	BLAIRSTOWN	595	8.88%	610	8.90%	0.02%
18337	MILFORD	708	6.81%	732	6.89%	0.08%
	NMC SERVICE AREA	**5,456**	**6.12%**	**5,542**	**6.15%**	**0.03%**
	SUSSEX COUNTY	**5,842**	**5.76%**	**5,895**	**5.78%**	**-0.02%**
	NEW JERSEY	**675,582**	**10.8%**	**692,826**	**10.8%**	**0.00%**

[33] Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates
[34] Source: New Solutions/Claritas 2019-2024 Demographic File

Health Insurance Coverage / Health Care Access[35]

CIVILIAN NONINSTITUTIONALIZED POPULATION: SERVICE AREA & COMPARATIVE GEOGRAPHIES				
ZIP Code	ZIP Code Name	Insured	Uninsured	% Uninsured
07416	FRANKLIN	5,187	374	6.7%
07419	HAMBURG	8,487	263	3.0%
07461	SUSSEX	17,283	1,782	9.3%
07821	ANDOVER	9,003	467	4.9%
07826	BRANCHVILLE	5,570	363	6.1%
07827	MONTAGUE	3,694	439	10.6%
07848	LAFAYETTE	4,269	147	3.3%
07860	NEWTON	23,171	1,931	7.7%
07871	SPARTA	19,699	756	3.7%
07825	BLAIRSTOWN	8,795	411	4.5%
18337	MILFORD	12,921	1,348	9.4%
	NMC SERVICE AREA	**118,079**	**8,281**	**7.0%**
	SUSSEX COUNTY	**134,783**	**10,367**	**7.1%**
	NEW JERSEY	**7,868,933**	**938,966**	**10.7%**

[35] Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

APPENDIX B: SECONDARY DATA SOURCES

The following table represents data sources for health-related indicators that were reviewed as part of NMC's CHNA secondary data analysis.

SOURCE
American Community Survey (ACS) 1-Year
American Community Survey (ACS) 5-Year
American Community Survey Supplemental Estimates
American Lung Association (ALA)
BRFSS
Bureau of Labor Statistics (BLS)
CDC (Diabetes Atlas)
CDC (Heart Disease and Stroke Atlas)
CDC (WONDER)
CDC's National Center for Health Statistics
Centers for Medicare & Medicaid Services (CMS)
Claritas Consumer Buying Power
Claritas Pop-Facts® Demographics
Conduent Healthy Communities Institute SocioNeeds Index
County Business Patterns
County Health Rankings (CHR)
Environmental Protection Agency (EPA)
Fatality Analysis Reporting System (FARS)
Feeding America
Food Atlas (USDA)
Institute for Health Metrics and Evaluation (IHME)
National Cancer Institute (NCI)
National Center for Education Statistics (NCES)
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)
National Survey on Drug Use and Health (NSDUH)
New Jersey Department of Health UB-04 Deidentified Hospital Discharge Data
Small Area Health Insurance Estimates (SAHIE)
The Robert Wood Johnson Foundation and the CDC Foundation 500 Cities Project
U.S. Census Quickfacts
U.S. Small-area Life Expectancy Estimates Project (USALEEP)
USDA Census of Agriculture
Youth Risk Behavior Survey (YRBS)

APPENDIX C: SECONDARY DATA INDICATORS[36]

The following table represents health-related indicators that were reviewed as part of HMC's CHNA secondary data analysis. The data are compiled and maintained by the Conduent Healthy Communities Institute in collaboration with The North Jersey Health Collaborative (NJHC, the Collaborative), an independent, self-governed 501(c)(3) organization with a diverse set of partners representing health care, public health, social services and other community organizations.

PRIMARY TOPIC	INDICATOR
Economy	Cost of Family Child Care as a Percentage of Income
	Cost of Licensed Child Care as a Percentage of Income
Economy / Employment	Unemployed Workers in Civilian Labor Force
Economy / Government Assistance Programs	Households with Cash Public Assistance Income
	Students Eligible for the Free Lunch Program
Economy / Homelessness	Homelessness by County
Economy / Homeownership	Homeownership
Economy / Housing Affordability & Supply	Renters Spending 30% or More of Household Income on Rent
	Severe Housing Problems
Economy / Income	Households that are Above the Asset Limited, Income Constrained, Employed (ALICE) Threshold
	Households that are Asset Limited, Income Constrained, Employed (ALICE)
	Households that are Below the Federal Poverty Level
	Median Household Income By Age - 25-44
	Median Household Income By Age - 45-64
	Median Household Income By Age - 65+
	Median Household Income By Age - Under 25
	Median Income Per Individual Worker
	Median Individual Worker Income - Female
	Median Individual Worker Income - Male
	Per Capita Income
Economy / Poverty	Children Living Below Poverty Level
	Children Under 5 Years Old Living in Poverty
	Families Living Below Poverty Level
	Households Receiving SNAP with Children
	People 65+ Living Below Poverty Level
	People Living 200% Above Poverty Level
	People Living Below Poverty Level
	Utility Assistance for Low-Income Households
	Young Children Living Below Poverty Level
Education / Educational Attainment in Adult Population	People 25+ with a Bachelor's Degree or Higher
	People 25+ with a High School Degree or Higher
Education / School Resources	Student-to-Teacher Ratio
Education / Student Performance K-12	Students Passing 11th Grade State Achievement Tests

[36] Data indicators accessed via Healthy Communities Institute. Community Dashboard; The North Jersey Health Collaborative; http://www.njhealthmatters.org/

PRIMARY TOPIC	INDICATOR
	Students Passing 4th Grade State Achievement Tests
	Students Passing 8th Grade State Achievement Tests
Environment / Air	Recognized Carcinogens Released into Air
Environment / Built Environment	Access to Exercise Opportunities
	Children with Low Access to a Grocery Store
	Farmers Market Density
	Fast Food Restaurant Density
	Food Environment Index
	Grocery Store Density
	Households with No Car and Low Access to a Grocery Store
	Liquor Store Density
	Low-Income and Low Access to a Grocery Store
	People 65+ with Low Access to a Grocery Store
	People with Low Access to a Grocery Store
	Recreation and Fitness Facilities
	SNAP Certified Stores
Environment / Toxic Chemicals	PBT Released
	Risk factor for childhood lead exposure: Pre-1950 Housing
Environment/ Weather	UV Irradiance
	Months of Mild Drought or Worse
	Number of Extreme Heat Days
	Number of Extreme Heat Events
	Number of Extreme Precipitation Days
	Weeks of Moderate Drought or Worse
Government & Politics / Elections & Voting	Voter Turnout: Presidential Election
Health	Age-Adjusted Years of Potential Life Lost
Health / Access to Health Services	Adults Unable to Afford to See a Doctor
	Adults who enrolled in the health insurance marketplace
	Adults who have had a Routine Checkup
	Adults with at least one primary care provider
	Adults with Health Insurance
	Adults with Health Insurance: 18-64
	Children with Health Insurance
	Children with Health Insurance: 0-17
	Medicare Healthcare Costs
	Non-Physician Primary Care Provider Rate
	Persons with Private Health Insurance Only
	Persons with Public Health Insurance Only
	Preventable Hospital Stays: Medicare Population
Health / Cancer	Age-Adjusted Death Rate due to Breast Cancer
	Age-Adjusted Death Rate due to Cancer
	Age-Adjusted Death Rate due to Colorectal Cancer
	Age-Adjusted Death Rate due to Lung Cancer

PRIMARY TOPIC	INDICATOR
	Age-Adjusted Death Rate due to Pancreatic Cancer
	Age-Adjusted Death Rate due to Prostate Cancer
	All Cancer Incidence Rate
	Breast Cancer Incidence Rate
	Cancer: Medicare Population
	Cervical Cancer Incidence Rate
	Colon Cancer Screening
	Colorectal Cancer Incidence Rate
	Liver and Bile Duct Cancer Incidence Rate
	Lung and Bronchus Cancer Incidence Rate
	Mammogram in Past 2 Years: 50-74
	Mammography Screening: Medicare Population
	Melanoma Incidence Rate
	Non-Hodgkin Lymphoma Incidence Rate
	Oral Cavity and Pharynx Cancer Incidence Rate
	Pancreatic Cancer Incidence Rate
	Pap Test in Past 3 Years: 21-65
	Prostate Cancer Incidence Rate
Health / County Health Rankings	Clinical Care Ranking
	Health Behaviors Ranking
	Morbidity Ranking
	Mortality Ranking
	Physical Environment Ranking
	Social and Economic Factors Ranking
Health / Diabetes	Adults 20+ with Diabetes
	Adults with Prediabetes
	Age-Adjusted Death Rate due to Diabetes
	Diabetes: Medicare Population
	Diabetic Monitoring: Medicare Population
Health / Disabilities	Persons with a Cognitive Difficulty
	Persons with a Disability
	Persons with a Disability (5-year)
	Persons with a Hearing Difficulty
	Persons with a Self-Care Difficulty
	Persons with a Vision Difficulty
	Persons with an Ambulatory Difficulty
	Persons with Disability Living in Poverty
	Persons with Disability Living in Poverty (5-year)
Health / Environmental & Occupational Health	Blood Lead Levels in Children (>5 micrograms per deciliter)
Health / Exercise, Nutrition, & Weight	Adults 20+ who are Obese
	Adults 20+ who are Sedentary
	Adults Engaging In Regular Physical Activity
	Child Food Insecurity Rate

PRIMARY TOPIC	INDICATOR
	Food Insecure Children Likely Ineligible for Assistance
	Food Insecurity Rate
Health / Heart Disease & Stroke	Adults who Experienced a Heart Attack
	Adults who Experienced a Stroke
	Adults who Experienced Coronary Heart Disease
	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)
	Age-Adjusted Death Rate due to Heart Attack
	Age-Adjusted Death Rate due to Heart Disease
	Age-Adjusted Death Rate due to Hypertensive Heart Disease
	Age-Adjusted Hospitalization Rate due to Heart Attack
	Atrial Fibrillation: Medicare Population
	Heart Failure: Medicare Population
	High Blood Pressure Prevalence
	Hyperlipidemia: Medicare Population
	Hypertension: Medicare Population
	Ischemic Heart Disease: Medicare Population
	Stroke: Medicare Population
Health / Immunizations & Infectious Diseases	Adults 50+ with Influenza Vaccination
	Adults with Pneumonia Vaccination
	Age-Adjusted Death Rate due to Influenza and Pneumonia
	Age-Adjusted Rate of ED Visits Due to Influenza
	Chlamydia Cases
	First Grade Students with Required Immunizations
	Gonorrhea Cases
	Hepatitis C Cases
	HIV/AIDS Prevalence Rate
	Kindergartners with Required Immunizations
	Lyme Disease Cases
	Pre-Kindergarten Students with Required Immunizations
	School-Aged Children that are Unvaccinated Due to Religious Exemption
	Sixth Grade Students with Required Immunizations
	Syphilis Cases
	Transfer Children with Required Immunizations
	Tuberculosis Incidence Rate
Health / Maternal, Fetal & Infant Health	Babies with Low Birth Weight
	Babies with Very Low Birth Weight
	Infant Mortality Rate
	Mothers who Received Early Prenatal Care
	Mothers who Received No Prenatal Care
	Preterm Births
	Very Preterm Births
Health / Mental Health & Mental Disorders	Adults Ever Diagnosed with Depression
	Age-Adjusted Death Rate due to Suicide

PRIMARY TOPIC	INDICATOR
	Depression: Medicare Population
	Frequent Mental Distress
	Inadequate Social Support
	Mental Health Provider Rate
	Poor Mental Health: Average Number of Days
Health / Mortality Data	Age-Adjusted Death Rate
Health / Older Adults & Aging	Adults 65+ with a Disability
	Adults 65+ with a Hearing Difficulty
	Adults 65+ with a Self-Care Difficulty
	Adults 65+ with a Vision Difficulty
	Adults 65+ with an Independent Living Difficulty
	Adults who were Injured in a Fall: 45+
	Adults with Arthritis
	Age-Adjusted Death Rate due to Alzheimer's Disease
	Alzheimer's Disease or Dementia: Medicare Population
Health / Oral Health	Dentist Rate
Health / Other Chronic Diseases	Age Adjusted Death Rate due to Chronic Kidney Disease
	Chronic Kidney Disease: Medicare Population
	Osteoporosis: Medicare Population
	Rheumatoid Arthritis or Osteoarthritis: Medicare Population
Health / Prevention & Safety	Age-Adjusted Death Rate due to Unintentional Injuries
	Age-Adjusted Death Rate due to Unintentional Poisonings
Health / Respiratory Diseases	Adults with Current Asthma
	Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases
	Age-Adjusted Rate of Adult ED Visits for COPD
	Asthma: Medicare Population
	COPD: Medicare Population
Health / Substance Abuse	Adults who Binge Drink
	Adults who currently Use Smokeless Tobacco
	Adults who Drink Excessively
	Adults who Smoke
	Adults who Use Alcohol: Past 30 Days
	Age-Adjusted Rate of Substance Use Emergency Department Visits
	Death Rate due to Drug Poisoning
	Opioid Treatment Admission Rate
Health / Wellness & Lifestyle	Frequent Physical Distress
	Insufficient Sleep
	Life Expectancy
	Limited Activity due to a Health Problem
	Poor Physical Health: Average Number of Days
	Self-Reported General Health Assessment: Poor or Fair
Public Safety / Crime & Crime Prevention	Violent Crime Rate
Public Safety / Transportation Safety	Age-Adjusted Death Rate due to Motor Vehicle Collisions

PRIMARY TOPIC	INDICATOR
	Alcohol-Impaired Driving Deaths
Social Environment	Households with an Internet Subscription
	Households with One or More Types of Computing Devices
Social Environment / Children's Social Environment	Substantiated Child Abuse Rate
Social Environment / Demographics	Within County Disparity in Life Expectancy at Birth
Social Environment / Family Structure	Single-Parent Households
Social Environment / Neighborhood/Community Attachment	Linguistic Isolation
	People 65+ Living Alone
	Social Associations
Social Environment / Social & Civic Involvement	Civic Engagement Ranking
Transportation / Commute to Work	Mean Travel Time to Work
	Solo Drivers with a Long Commute
	Workers Commuting by Public Transportation
	Workers who Drive Alone to Work

APPENDIX D: KEY INFORMANT SURVEY TOOL

The Affordable Care Act added new a requirement that every 501(c)(3) hospital organization is required to conduct a Community Health Needs Assessment (CHNA) and adopt an implementation strategy at least once every three years effective for tax years beginning after March 23, 2012.

Newton Medical Center (NMC) is undertaking a comprehensive community health needs assessment (CHNA) to re-evaluate the health needs of individuals living in the hospital service area. The purpose of the assessment is to gather current statistics and qualitative feedback on the key health issues facing service area residents. The completion of the CHNA will enable NMC to take an in-depth look at its community and the findings will be utilized to prioritize public health issues and develop a community health implementation plan focused on meeting community needs.

1. What are the top 5 health issues you see in your community? (CHOOSE 5)

- ☐ Access to Care/Uninsured
- ☐ Cancer
- ☐ Dental Health
- ☐ Diabetes
- ☐ Heart Disease
- ☐ Maternal/Infant Health
- ☐ Mental Health/Suicide
- ☐ Overweight/Obesity
- ☐ Sexually Transmitted Diseases
- ☐ Stroke
- ☐ Substance Abuse/Alcohol Abuse
- ☐ Tobacco
- ☐ Domestic Violence
- ☐ Other (specify):

2. Of those health issues selected, which 1 is the most significant? (CHOOSE 1)

- ☐ Access to Care/Uninsured
- ☐ Cancer
- ☐ Dental Health
- ☐ Diabetes
- ☐ Heart Disease
- ☐ Maternal/Infant Health
- ☐ Mental Health/Suicide
- ☐ Overweight/Obesity
- ☐ Sexually Transmitted Diseases
- ☐ Stroke
- ☐ Substance Abuse/Alcohol Abuse
- ☐ Tobacco
- ☐ Domestic Violence
- ☐ Other (specify):

3. Please share any additional information regarding these health issues and your reasons for ranking them this way in the box below:

_____
_____
_____
_____
_____
_____
_____
_____

4. On a scale of 1 (Strongly Disagree) through 5 (Strongly Agree), please rate each of the following statements about Health Care Access in the area.

	(1) Strongly Disagree	(2) Somewhat Disagree	(3) Neutral	(4) Somewhat Agree	(5) Strongly Agree
Residents in the area are able to access a primary care provider when needed. (Family Doctor, Pediatrician, General Practitioner)					
Residents in the area are able to access a medical specialist when needed. (Cardiologist, Dermatologist, Neurologist, etc.)					
Residents in the area are able to access a dentist when needed.					
Residents in the area are utilizing emergency department care in place of a primary care physician.					
There are a sufficient number of providers accepting Medicaid and Medical Assistance in the area.					
There are a sufficient number of bilingual providers in the area.					
There are a sufficient number of mental/behavioral health providers in the area.					
Transportation for medical appointments is available to area residents when needed.					

5. What are the most significant barriers that keep people in the community from accessing health care when they need it? (Select all that apply)

- ☐ Availability of Providers/Appointments
- ☐ Basic Needs Not Met (Food/Shelter)
- ☐ Inability to Navigate Health Care System
- ☐ Inability to Pay Out of Pocket Expenses (Co-pays, Prescriptions, etc.)
- ☐ Lack of Child Care
- ☐ Lack of Health Insurance Coverage
- ☐ Lack of Transportation
- ☐ Lack of Trust
- ☐ Language/Cultural Barriers
- ☐ Time Limitations (Long Wait Times, Limited Office Hours, Time off Work)
- ☐ Lack of Health Literacy
- ☐ None/No Barriers
- ☐ Other (please specify)

6. Of those barriers mentioned in question 5, which 1 is the most significant? (CHOOSE 1)

- ☐ Availability of Providers/Appointments
- ☐ Basic Needs Not Met (Food/Shelter)
- ☐ Inability to Navigate Health Care System
- ☐ Inability to Pay Out of Pocket Expenses (Co-pays, Prescriptions, etc.)
- ☐ Lack of Child Care
- ☐ Lack of Health Insurance Coverage
- ☐ Lack of Transportation
- ☐ Lack of Trust
- ☐ Language/Cultural Barriers
- ☐ Time Limitations (Long Wait Times, Limited Office Hours, Time off Work)
- ☐ Lack of Health Literacy
- ☐ None/No Barriers
- ☐ Other (please specify)

7. Please share any additional information regarding barriers to health care in the box below:

_____
_____
_____
_____
_____
_____
_____
_____

8. Are there specific populations in this community that you think are not being adequately served by local health services?

- YES, (*proceed to Question 9*)
- NO, (*proceed to Question 11*)

9. If #8 YES, which populations are underserved? (Select all that apply)

- ☐ Uninsured/Underinsured
- ☐ Low-income/Poor
- ☐ Hispanic/Latino
- ☐ Black/African-American
- ☐ Immigrant/Refugee
- ☐ Disabled
- ☐ Children/Youth
- ☐ Young Adults
- ☐ Seniors/Aging/Elderly
- ☐ Homeless
- ☐ LGBTQ+
- ☐ Other (please specify)

10. What are the top 5 health issues you see affecting the underserved population(s) you selected? (CHOOSE 5)

- ☐ Access to Care/Uninsured
- ☐ Cancer
- ☐ Dental Health
- ☐ Diabetes
- ☐ Heart Disease
- ☐ Maternal/Infant Health
- ☐ Mental Health/Suicide
- ☐ Overweight/Obesity
- ☐ Sexually Transmitted Diseases
- ☐ Stroke
- ☐ Substance Abuse/Alcohol Abuse
- ☐ Tobacco
- ☐ Domestic Violence
- ☐ Other (specify):

11. In general, where do you think MOST uninsured and underinsured individuals living in the area go when they are in need of medical care? (CHOOSE 1)

- ☐ Doctor's Office
- ☐ Health Clinic/FQHC
- ☐ Hospital Emergency Department
- ☐ Walk-in/Urgent Care Center
- ☐ Don't Know
- ☐ Other (please specify)

12. Please share any additional information regarding Uninsured/Underinsured Individuals & Underserved Populations in the box below:

_____
_____
_____
_____
_____
_____
_____
_____

13. Related to health and quality of life, what resources or services do you think are missing in the community? (Select all that apply)

- ☐ Free/Low Cost Medical Care
- ☐ Free/Low Cost Dental Care
- ☐ Primary Care Providers
- ☐ Medical or Surgical Specialists
- ☐ Mental Health Services
- ☐ Substance Abuse Services
- ☐ Bilingual Services
- ☐ Transportation
- ☐ Prescription Assistance
- ☐ Health Education/Information/Outreach
- ☐ Health Screenings
- ☐ None
- ☐ Other (please specify):

14. What challenges do people in the community face in trying to maintain healthy lifestyles, like exercising and eating healthy and/or trying to manage chronic conditions, like diabetes or heart disease?

_____
_____
_____
_____

15. In your opinion, what is being done well in the community in terms of health and quality of life? (Community Assets/Strengths/Successes)

_____
_____
_____
_____

16. What recommendations or suggestions do you have to improve health services that impact the health needs of the community?

_____
_____
_____
_____

17. Name & Contact Information: (Note: Your name and email address are required to track survey participation.
Your identity WILL NOT be associated with your responses.)

- Name (*Required*) _____
- Organization _____
- Address _____
- Address 2 _____
- City/Town _____
- State/Province _____
- ZIP/Postal Code _____
- Email (*Required*) _____

18. Which one of these categories would you say BEST represents your organization's community affiliation? (CHOOSE 1)

- ☐ Health Care/Public Health Organization
- ☐ Mental/Behavioral Health Organization
- ☐ Non-Profit/Social Services/Aging Services
- ☐ Faith-Based/Cultural Organization
- ☐ Education/Youth Services
- ☐ Government/Housing/Transportation Sector
- ☐ Business Sector
- ☐ Community Member
- ☐ Other (please specify)

19. Which of the following represents the community(s) your organization serves? (Select all that apply)

- ☐ White/Caucasian
- ☐ Black/African American
- ☐ Asian/Pacific Islander
- ☐ Seniors
- ☐ Active Adults
- ☐ Poor or Underserved
- ☐ LGBTQ+
- ☐ Hispanic/Latino
- ☐ Other (please specify)

20. Newton Medical Center will use the information gathered through this survey in guiding their community health improvement activities. Please share any other feedback you may have for them below:

_____
_____
_____
_____

APPENDIX E: KEY INFORMANT SURVEY PARTICIPANTS

Newton Medical Center solicited input in the stakeholder survey process from a wide-ranging group of organizations serving the needs of residents who are served by the hospital and health system. Following are the organizations from which NMC solicited responses to a stakeholder survey.

Organizational Affiliation(s)	Organizational Affiliation(s)
Advance Housing, Inc.	Project Self-Sufficiency
American Cancer Society, Eastern Division	Riker, Danzig, Scherer, Hyland, Perretti, LLP
Andover School	Rutgers Cooperative Extension
Atlantic Health System	Samaritan Inn
Atlantic Home Care	SCARC, Inc.
Bristol Glen	Sexual Assault Response Team (SART)
Capitol Care	Smith McCracken Funeral Home
DAWN Center for Independent Living	Sparta Ecumenical Food Pantry
Deacon Homes, Inc.	Special Child Health Services
Domestic Abuse & Sexual Assault Intervention Services (DASI)	Sussex County Chamber of Commerce
Family Promise of Sussex County	Sussex County Community College
Forward Franklin Alliance	Sussex County Department of Health & Human Services
Franklin Borough School	Sussex County Division of Community & Youth Services
LocalShare	Sussex County Division of Senior Services
Macaroni Kid	Sussex County Division of Social Services
National Alliance on Mental Illness (NAMI) Sussex	Sussex County Division of Youth & Family Services
National Multiple Sclerosis Society, NJ Metro Chapter	Sussex County Library
NJ Cancer Education and Early Detection Program (NJ CEED)	Sussex County Office of Public Health Nursing
Newton Auxiliary	Sussex County Office of Transit
Newton Medical Center	Sussex County Prosecutor's Office
Newton Medical Center Community Health Committee	Sussex County Sheriff's Office
Newton Medical Center Foundation	Sussex County YMCA
Newton Police Department	Sussex Personal Assistance Services Program (PASP)
Newton Schools	Sussex Wantage School
Newton Town Manager	Sussex Warren County Regional Chronic Disease Coalition
North Jersey Health Collaborative	The Center for Prevention and Counseling
Northwest NJ Community Action Partnership (NORWESCAP)	The Moreville Agency
Pass It Along	Tobacco-Free for a Healthy NJ
Pathways to Prosperity	Town of Newton, New Jersey
Peace by Piece	United Way of Northern New Jersey
Perona Farms	Willow Glen Academy
Project SEARCH	Zufall Health

APPENDIX F: PRIORITIZATION PARTICIPANTS

Newton Medical Center solicited input in the prioritization phase of the CHNA process from a sub-set of organizations who participated in the stakeholder survey and serve the needs of residents served by the hospital and health system. Following are the organizations included in the prioritization survey.

Organization
Andover School
Atlantic Health System, Newton Medical Center
Atlantic Health System, Newton Medical Center Emergency Department & CLEAR program
Deacon Homes Inc.
Newton Medical Center Community Advisory Board
Newton Medical Center Community Health Committee
Newton Town Manager
Perona Farms
Smith McCracken Funeral Home
Sussex County Chamber of Commerce
Sussex County Department of Health & Human Services
Sussex County Division of Senior Services
Sussex County Division of Youth and Family Services
Sussex County Office of Public Health Nursing/NJ CEED
Sussex County YMCA
The Center for Prevention and Counseling
United Way of Northern New Jersey
Willow Glen Academy
Zufall Health Center, Inc.
Zufall Health Center, SNAP-ED

APPENDIX G: SUSSEX COUNTY LICENSED HEALTH FACILITIES[37]

Facility	Type/Services
NEWTON MEDICAL CENTER 175 HIGH ST NEWTON, NJ 07860 (973)-579-8300	General Acute Care Hospital
Planned Parenthood of Northern, Central and Southern New Jersey, Inc. 8 MORAN STREET NEWTON, NJ 07860 (973)-383-5218	Ambulatory Care Facility-Satellite
Karen Ann Quinlan Hospice 99 SPARTA AVENUE NEWTON, NJ 07860 (973)-383-0115	Hospice
Renal Center of Newton 7 EAST CLINTON STREET NEWTON, NJ 07860 (973)-940-0965	Ambulatory Care Facility
The Imagecare Center at Newton 222 HIGH STREET NEWTON, NJ 07860 (973)-729-0002	Ambulatory Care Facility
Spine Surgery Associates & Discovery Imaging PC 280 NEWTON SPARTA ROAD NEWTON, NJ 07860 (973)-579-3968	Ambulatory Care Facility
Zufall Health Center Newton 238 SPRING STREET NEWTON, NJ 07860 (973)-328-9100	Ambulatory Care Facility- Satellite
Karen Ann Quinlan Home for Hospice 28 FAIRVIEW HILL ROAD NEWTON, NJ 07860 (973)-383-0115	Hospice Branch
Eye Physician of Sussex Co Surgical Center 183 HIGH STREET Newton, New Jersey 07860 (973)-383-6345	Surgical Practice
The Imagecare Center at Sparta 89 SPARTA AVENUE SPARTA, NJ 07871 (973)-729-0002	Ambulatory Care Facility
Sparta Cancer Center, LLC 89 SPARTA AVENUE SPARTA, NJ 07871 (973)-726-7001	Ambulatory Care Facility
Specialty Surgical Center, LLC 380 LAFAYETTE ROAD, SUITE 110 SPARTA, NJ 07871 (973)-940-3166	Ambulatory Care Facility
Compassionate Care Hospice of Northern NJ, LLC 350 SPARTA AVENUE, BUILDING B, SUITE 2 SPARTA, NJ 07871 (973)-726-7510	Hospice

[37] https://nj.gov/health/healthfacilities/about-us/facility-types/

Facility	Type/Services
ImageCare Center at Sparta 376 LAFAYETTE ROAD SPARTA, NJ 07871 (973)-729-0002	Ambulatory Care Facility
Northwest Jersey Ambulatory Surgical Center 350 SPARTA AVENUE Sparta, New Jersey 07871 (973)-729-8580	Surgical Practice
Premier Health Associates, LLC 532 LAFAYETTE ROAD SUITE 200 Sparta, New Jersey 07871 (973) -300-1248	Surgical Practice
Ave Care At Newton, Inc 85-1/2 Trinity Street Newton, NJ07860 (973)-362-1408	Residential Dementia Care Home
EverMay At Branchville, LLC 3 Phillips Road Branchville, NJ07826 (973)-948-8884	Assisted Living Residence
Andover Subacute and Rehab 1 O'brien Lane Andover, NJ07821 (973)-383-6200	Long Term Care Facility
Andover Subacute and Rehabilitation II 99 Mulford Road Andover, NJ07821 (973)-383-6200	Long Term Care Facility
Barn Hill Care Center 249 High Street Newton, NJ07860 (973)-383-5600	Long Term Care Facility
Homestead Rehabilitation & Health Care Center 129 Morris Turnpike Newton, NJ07860 (973)-948-5400	Long Term Care Facility
Knoll View Corp 8 Knoll Road Sparta, NJ07871 (973)-729-4311	Assisted Living Program
United Methodist Communities at Bristol Glen 200 Bristol Glen Drive Newton, NJ07860 (973)-300-5788	Long Term Care Facility Assisted Living Residence
Valley View Rehabilitation and Healthcare Center 1 Summit Avenue Newton, NJ07860 (973)-383-1450	Long Term Care Facility
Westwind Manor 25 Main Street Franklin, NJ07416 (973)-827-6575	Comprehensive Personal Care Home

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