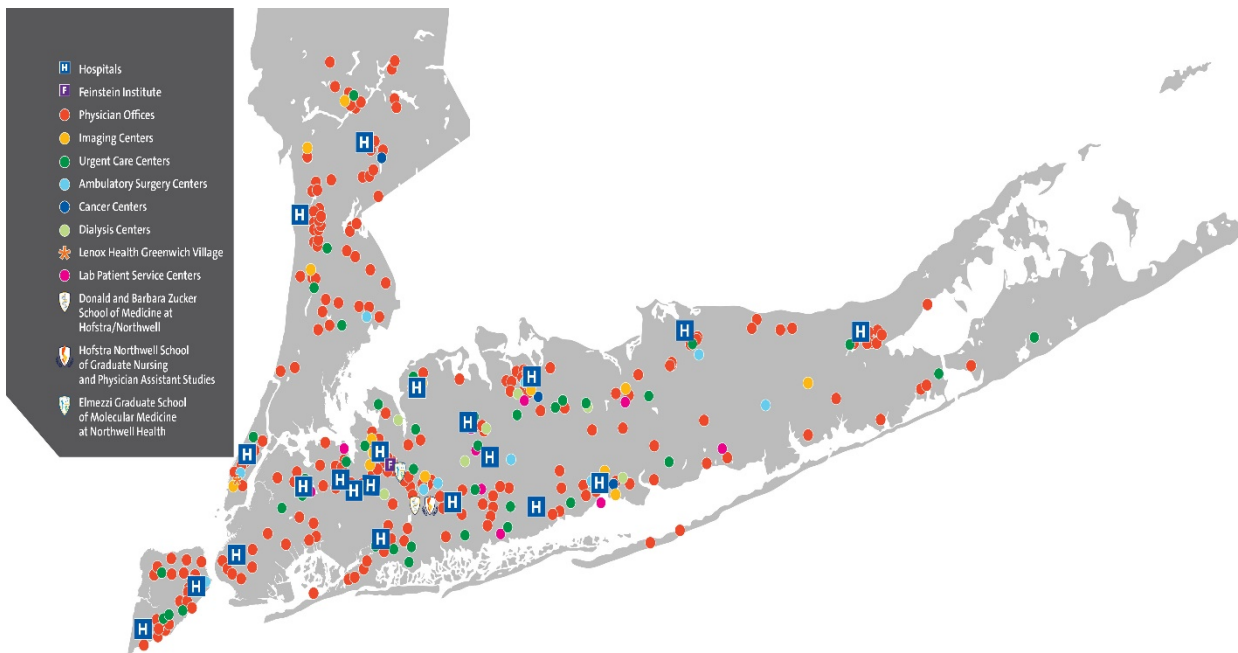


Northwell Health 2019 Community Health Needs Assessment





About Northwell Health

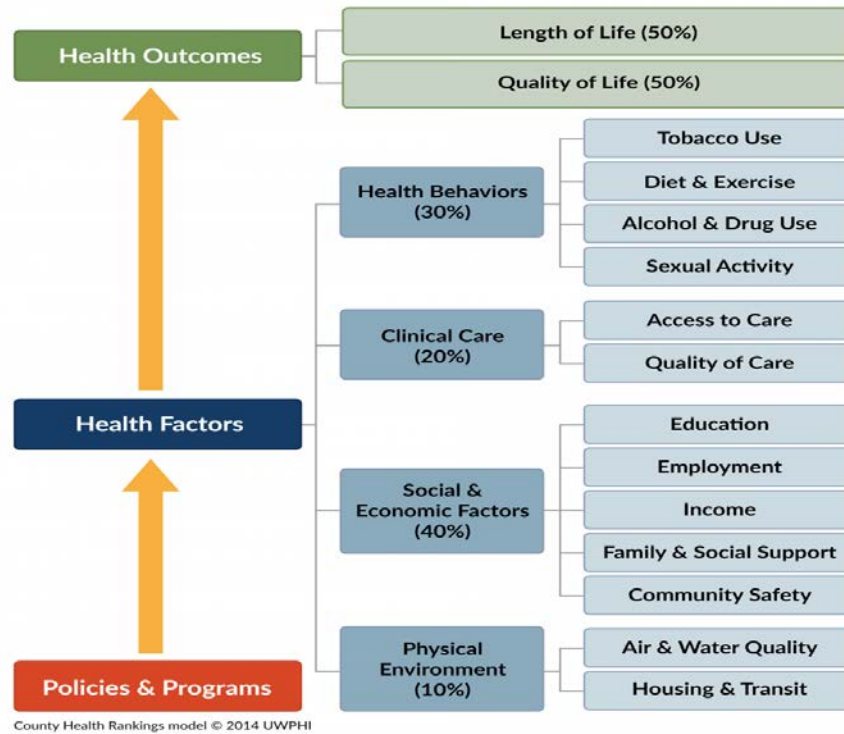
Northwell Health strives to improve the health of the communities it serves and is committed to providing the highest quality clinical care; educating the current and future generations of health care professionals; searching for new advances in medicine through the conduct of bio-medical research; promoting health education; and caring for the entire community regardless of the ability to pay. Every role, every person, every moment matters. We put our patients and customers at the center of everything we do, while acting on our core values: Caring, Excellence, Innovation and Integrity.

Formerly known as North Shore-LIJ Health System, Northwell Health has undergone significant growth in the last several years. Today, Northwell is New York's largest integrated health care system and one of the largest in the country as well. With five tertiary hospitals, three specialty care hospitals, eleven community hospitals, and four affiliates, this 23 hospital system is over 70,000 people looking at healthcare differently. Its service area spans 6 New York State counties including Nassau, New York, Queens, Richmond, Suffolk and Westchester.

The purpose of this report is to assess and to respond to community health needs as a system. The findings in this report are organized into the priority and focus areas put forth by the New York State Department of Health (NYSDOH) Prevention Agenda, which is aimed at reducing health disparities for racial, ethnic, disability, and low socioeconomic groups, as well as other populations who experience them. The 2019-2024 New York State Department of Health Prevention Agenda (NYSDOHPA) uses the Community Health Rankings as the framework for understanding modifiable determinants of health without discounting genetic predisposition to disease (see Figure 1).¹ The 2019-2024 NYSDOHPA incorporated a "Hands Across All Policies" approach which calls on agencies to identify and strengthen the ways that their policies and programs can have a positive impact on health. The overarching strategy of the Prevention Agenda is to implement public health approaches that improve the health and well-being of entire populations and achieve health equity. This strategy includes an emphasis on social determinants of health – defined by Healthy People 2020 as the conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

Figure 1. County Health Rankings Model¹

¹ County Health Rankings and Roadmaps web site. <https://www.countyhealthrankings.org/> Accessed November 2019



New York State Department of Health Prevention Agenda

The Prevention Agenda¹ calls for the formation of diverse cross sector partnerships to collaborate and work together across communities to improve the health and quality of life for all New Yorkers. The Prevention Agenda envisions New York as the Healthiest State in the Nation, and features five priority areas:

- Prevent Chronic Diseases
 - Focus area 1: Health Eating and Food Security
 - Focus Area 2: Physical Activity
 - Focus Area 3: Tobacco Prevention
 - Focus Area 4: Chronic Disease Preventive Care and Management
- Promote a Healthy and Safe Environment
 - Focus Area 1: Injuries, Violence and Occupational Health
 - Focus Area 2: Outdoor Air Quality
 - Focus Area 3: Built Environment
 - Focus Area 4: Water Quality
- Promote Healthy Women, Infants and Children
 - Focus Area 1: Maternal and Women’s Health
 - Focus Area 2: Perinatal and Infant Health
 - Focus Area 3: Child and Adolescent Health
 - Focus Area 3: Cross Cutting Healthy Women, Infants, and Children
- Promote Well-Being and Prevent Mental and Substance Use Disorders
 - Focus Area 1: Well-Being
 - Focus Area 2: Mental and Substance Use Disorders
- Prevent Communicable Diseases
 - Focus Area 1: Vaccine-Preventable Diseases
 - Focus Area 2: Human Immunodeficiency Virus (HIV)
 - Focus Area 3: Sexually Transmitted Infections (STIs)
 - Focus Area 4: Hepatitis C Virus (HCV)



- Focus Area 3: Antibiotic Resistance and Healthcare-Associated Infections

The Prevention Agenda establishes goals for each priority area and defines indicators to measure progress toward achieving these goals, including reductions in health disparities among racial, ethnic, and socioeconomic groups.

Northwell Health Service Area Indicator Status Since the 2016 Community Health Needs Assessment (CHNA)

The 2016-2019 Implementation Plan activities have had an impact in improving and meeting New York State Prevention Agenda Objectives that were related to health disparities, chronic disease, obesity and behavioral health as shown below. Since 2018, Northwell Health has delivered over 13,000 community health programs and over 22,000 health screenings. Examples of interventions that helped achieved these goals include robust chronic disease and cancer screening programs; implementation of culturally relevant evidence-based chronic disease self-management education; prevention of childhood obesity through school-based projects as well as promotion of policies and practices in support of breastfeeding; creation of community environments that promote and support healthy food and beverage choices and physical activity; elimination of exposure to secondhand smoke and prevention of the initiation of tobacco use by youth, especially among low socioeconomic status (SES) populations and the promotion of tobacco cessation, especially among low SES populations and those with poor mental health; and strengthened infrastructure to promote mental, emotional and behavioral wellbeing (see link for Northwell Health Community Service and Community Benefit Programs <https://www.northwell.edu/education-and-resources/community-engagement/community-health-investment/community-service-plans>). In addition, Northwell Health's strategic social determinant of health programming and outcomes are described in the Determinants of Health section in this document. However, the burden of health disparities, chronic disease, obesity and behavioral health issues is still present as demonstrated by the indicators that have not met the New York State Department of Health (NYSDOH) Prevention Agenda Objectives and/or have worsened indicating the need to continue to address the 2013-2016 priority agenda item and focus areas. (See *appendix for Individual County Community Health Needs Assessments*).

Collaborative Process and Criteria for Prioritizing NYSDOH Priority Agenda Items

Northwell Health began the Community Health Needs Assessment (CHNA) process in January 2019. As an integrated health care system, the Office of Community Relations with assistance from Community Health Department was the lead corporate office that planned, coordinated and reported the CHNA in collaboration with internal and external stakeholders for Northwell Health. System stakeholders included senior leadership, the Committee on Community Health of the Northwell Board of Trustees, executive directors and staff of Northwell hospitals, Office of Strategic Planning, Office of Government and Community Affairs, Community Health and corporate service lines. External stakeholders included representatives from county health departments, area hospitals, academia, business, government agencies and community based organizations with an emphasis on those who serve communities with health disparities. A series of internal and external stakeholder meetings were held to discuss the process including: the CHNA methodology; recruitment of community, academic and government partners; secondary data analysis; primary data collection from external stakeholders; evaluation of primary data; identification of health system and community resources; identification of NYSDOH Priority Agenda items and development of the implementation plan (See *Individual County Community Health Needs Assessments for stakeholder participation*). The Committee on Community Health of the Northwell Board of Trustees was updated on the CHNA process during its quarterly



meetings, provided feedback on the process including the selection of the NYSDOH Priority Agenda items and approved the recommended NYSDOH Priority Agenda items and the Implementation Plan for Northwell Health as the governing body of community health of the Northwell Health Board of Trustees.

Primary Analysis

The CHNA stakeholders determined that in addition to census, hospitalization and vital statistics data, the assessment should include the “voice of the community” (e.g. the community’s perception of need). This assessment included individual and community health priorities, barriers to accessing health care and strategies to improve the individual’s and community’s health. Social determinants of health which impact wellness were included in the assessment. The group agreed that quantitative and qualitative data should be collected from community organizations and the population-at-large in the forms of community member and community-based organization/provider surveys, facilitated focus groups and community-based organization summits with each county service area partners choosing the preferred methods for their communities. To collect and analyze primary data, Northwell Health partnered with local health departments, area hospitals/health systems and community-based organizations in each of the six counties in our service area, as well as the Long Island Health Collaborative (LIHC) which focuses on health in Nassau and Suffolk County. LIHC is a partnership of Long Island's hospitals, county health departments, health providers, community-based social and human service organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders; the Health and Welfare Council of Long Island, a regional umbrella organization for health and human service providers ; and the Human Services Council, a network of New York City human service organizations representing over 200,000 staff providing services such as housing, childcare, elder care, food pantries, and mental health counseling to vulnerable New York City community members. *Full reports for the primary data methodology and analysis for individual counties can be found in the Individual County Community Health Needs Assessments.*

Secondary Analysis

Since the Northwell Health service area includes Nassau, New York, Queens, Richmond, Suffolk, and Westchester counties, secondary community health data collection, assessment and NYSDOH Priority Agenda Item selection was performed by county. Sources of information included SPARCS data² (version 2016), NYSDOH Vital Statistics, NYS Cancer Registry, the NYSDOH Surveillance System, New York State DOH Prevention Agenda Dashboard, New York State Community Indicator Reports, New York State Opioid Data Dashboard, New York City Neighborhood Health Atlas, Behavioral Health Risk Factor Surveillance System, NYCDOHMH EpiQuery data set, Policy Map, Northwell Health TSI Reporting and Analytics and U.S Census data. Data were age-adjusted (direct standardization of rates) based on 2010 U.S. standard population.

A mapping of Prevention Quality Indicators (PQIs) quintiles was also used as part of the health data analysis. PQIs are a set of measures that can be used with hospital inpatient discharge data to identify quality of care for “ambulatory care sensitive conditions.” These are conditions for which quality community health and outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease. The PQIs are population based and adjusted for covariates. Even though these indicators are based on hospital inpatient data, they provide insight into the community health care system or services outside the hospital setting. With high-quality, population health and community-based primary care, hospitalization for these illnesses often can be

² 2017 SPARCS data set was recalled by the NYSDOH for further analysis leaving the 2016 data set as the most recent at the time of this assessment but a 2 year analysis of 2015 and 2016 was not possible due to the use of IDC 9 codes in 2015 and the use of IDC 10 codes in 2016. Therefore, with guidance from the NYSDOH the PQI analysis was performed using the combined 2013-2014 data sets.



avoided. Although other factors outside the direct control of the health care system, such as poor environmental conditions or lack of patient adherence to treatment recommendations, can result in hospitalization, the PQIs provide a good starting point for assessing quality of health services in the community combined with data on race, ethnicity and social determinants of health.

Determinants of Health

The community health needs assessment included primary and secondary data analysis and mapping of determinants of health for each county in the Northwell Health service area. The determinants of health encompass the range of personal, social, economic, and environmental factors that influence health status. The determinants of health reach beyond the boundaries of traditional health care to include sectors such as education, housing, and environment and it is the interrelationships among them that determine individual and population health. According to the Centers for Disease Control and Prevention³ (CDC) we can identify the determinants of health in several categories, including (1) Policymaking, (2) Social Factors, (3) Health Services, (4) Individual Behavior, and (5) Biology and Genetics. Northwell Health has used a social determinants of framework as discussed earlier to guide program development and implementation to improve the quality of life and health outcomes in the communities we serve. Examples of our previous efforts are described in the sections below. In addition, in July of 2019, Northwell Health has implemented social determinant of health screening in our enterprise inpatient EMR. This initiative supports the concept of “It’s not what is a matter with you, but what matters to you”.

1) Policymaking

Public policies at the local, state, and federal level influence community health and can impact all other factors that influence overall individual health. Public policy affects housing, education, income, access to food, the availability and quality of health care, and the environment in which we live. Tobacco policies and built environment regulations are just two of the many avenues to promote better community health.

Across New York City and in Nassau, Suffolk, and Westchester counties, the Complete Streets Act is seeking to improve roadways to be safer and better suited for walking and biking. A “complete street” is a roadway planned and designed to consider the safe, convenient access and mobility of all roadway users of all ages and abilities. This includes sidewalks, lane striping, bicycle lanes, paved shoulders, signage, crosswalks, and pedestrian signals. The Complete Streets initiative will allow more citizens to achieve the health benefits associated with active forms of transportation. Complete Streets is active in Nassau, Suffolk, and Westchester counties, as well as all of New York City (NYC DOT Sustainable Streets). Northwell Health in collaboration with the Long Island Health Collaborative has partnered with local government agencies in support of this initiative and the development and promotion of the Are You Ready Feet? A web-based community physical activity platform for individuals and groups to promote walking and built environment resources (<https://www.lihealthcollab.org/about>). Community engagement statistics include 970 community member accounts, total miles logged 334,289 and 4 school districts.

Tobacco legislation is pivotal in reducing smoking and vaping rates and improving the health status of individuals. Across New York City, the Smoke Free Air Act of 1995 has been amended several times in recent years to respond to changing smoking trends. In 2002 it was amended to prohibit smoking in virtually all workplaces and recreational venues, and in 2009 it was amended to prohibit smoking on and around hospital grounds. In 2013, the Smoke Free Air Act was amended to include e- cigarettes in all of its existing components. New York City has also adopted Tobacco 21,

³ Centers for Disease Control and Prevention (CDC). "Social Determinants of Health: Know What Affects Health." Oct. 2015.



making 21 the minimum age to purchase tobacco products anywhere in the city. Suffolk and Nassau Counties have also adopted Tobacco 21 legislation. Current flavored electronic cigarette restriction legislation is also being discussed across the region. Northwell Health has been an active member of the regional coalitions that educated the public and legislators regarding the health impact of these issues.

Suffolk County has also adopted legislation to prohibit smoking in county parks and beaches. Northwell Health, as a lead agency in collaboration with the New York City Department of Health and Mental Hygiene and Smoke Free NYC has helped 13 Queens Community Boards to pass Smoke Free Housing Resolutions and 3000 apartments become smoke free including the largest New York State cooperative apartment complex, Northshore Towers. Recently, the US Housing and Urban Development announced that public housing developments will be required to provide a smoke-free environment affecting approximately 940,000 public housing units.

2) Social Factors

Social determinants of health reflect the social factors and physical conditions of the environment in which people are born, live, learn, play, work, and age. Also known as *social and physical determinants* of health, they impact a wide range of health, functioning, and quality-of-life outcomes. In 2018, Northwell Health joined other national healthcare systems in forming the Democracy Collaborative, a healthcare anchor institution network focused on impacting community health and well-being by leveraging institutional assets including hiring, purchasing, and investment for equitable, local economic impact and powerfully influence the upstream determinants of health and help build inclusive and sustainable economies. A partnership was formed between Northwell Health and the ACEND Long Island program at Hofstra University that will focus on local procurement. The program serves as the suburban model for the national ACEND 2020 initiative, led by the University of Washington's Consulting and Business Development Center and funded by JP Morgan Chase. The goal of Ascend Long Island is to provide vital resources in the areas of procurement, access to capital and access to markets to small business owners within a cluster of underserved communities within Nassau County known as "The Corridor" – Hempstead Village, Freeport Village, Roosevelt, and Uniondale. Ascend Long Island will create an ecosystem of support for diverse business owners with community partners and anchor businesses that will assist them in building capacity for their companies through training in the "3 M's" -- Management, Money (access to financing), and Markets (access to contracts).

a) Socioeconomic Factors

i) Income

A large body of research documents the links between income and a wide array of health indicators across the life span, beginning even before birth. Children in poor families are about seven times as likely to be in poor or fair health as children in families with incomes at or above 400% of the federal poverty level (FPL). In addition, lower-income children experience higher rates of asthma, heart conditions, hearing problems, digestive disorders and elevated blood lead levels⁴. Approximately 13.6% of New Yorkers with 18% of people < 18 years old.⁵ Higher income is also linked with better health and longer life among adults. Poor adults are nearly five times as likely to report

⁴ Robert Wood Johnson Foundation. (2011, April). Income, Wealth and Health. *Exploring the Social Determinants of Health*

⁵ American Community Survey <https://www.census.gov/library/visualizations/interactive/2018-poverty-rate.html> Accessed on November 2019



being in poor or fair health as adults with family incomes at or above 400% of FPL. Among adults at age 25, those in the highest-income group can expect to live more than six years longer than their poor counterparts⁷.

ii) Poverty

The CDC defines poverty as a condition in which “a person or group of people lack human needs because they cannot afford them.”³ In the United States, the federal poverty level is expressed as an annual pre-tax income level indexed by size of household and age. For example, in 2019, the federal poverty level was \$12,490 for an individual younger than 65 years of age and \$25,750⁶ for a family of four.⁴ Poverty and poor health worldwide are inextricably linked, as poverty is both a cause and a consequence of poor health. Prosperity provides individuals with resources that can be used to avoid or buffer exposure to health risks. By contrast, poverty affects health by limiting access to such resources.

iii) Employment

Unemployed New Yorkers —376,000 of November 2019⁷—face numerous health challenges beyond loss of income. Laid-off workers are 54% more likely than those continuously employed to have fair or poor health, and 83% more likely to develop a stress-related condition, such as stroke, heart attack, heart disease, or arthritis.⁶ In 2017, Northwell launched *From the Community, For the Community*, a healthcare workforce development program. Committed to improving an individual’s total health, this program trains job seekers from communities with health disparities and connects them with entry-level healthcare and social service positions as Community Health Workers (CHW). In 2017, Northwell launched *From the Community, For the Community*, a healthcare workforce development program. Committed to improving an individual’s total health, this program trains job seekers from communities with health disparities and connects them with entry-level healthcare and social service positions as CHWs. The CHWs assist community members in overcoming healthcare access barriers through advocacy, education and care coordination. To date the program has graduated 52 CHWs in 4 cohorts completing a rigorous didactic and practicum curriculum. They are employed at Northwell Health as well as at community-based social service agencies and primary care practices. This program complements other Northwell Health local hire initiatives which includes a Veteran’s Local Hiring initiative that has recruited over 500 veterans for employment at Northwell Health.

b) Educational Attainment

People who graduate from high school have better health than those who do not complete high school. In fact, research shows education is the strongest predictor of long-term health⁸. Educational attainment and high school graduation rates can be strong predictors of health outcomes. For example, nearly 33% of adults that did not graduate from high school are obese, while 21% of those who graduated from college are obese⁹. In addition, children of parents that did not graduate from high school have an obesity rate 3.1x higher than those children whose parents earned a college degree (30.4% compared to

⁶ Federal Poverty Guidelines <https://aspe.hhs.gov/2019-poverty-guidelines> Accessed on November 2019.

⁷ NYS Bureau of Labor Statistics <https://www.labor.ny.gov/stats/pressreleases/pruistat.shtm> Accessed on November 2019

⁸ American Public Health Association. Public Health and Education: Working Collaboratively Across Sectors to Improve High School Graduation as a Means to Eliminate Health Disparities. *Policy Statement*.

⁹ Trust for America's Health and Robert Wood Johnson Foundation. *F as in Fat: How Obesity Threatens America's Future - 2011*. Washington, D.C.: Trust for America's Health, 2011.



9.5%).¹⁰High school graduates have better health and lower medical costs than high school dropouts do, and college graduates have even better health and lower medical costs than high school graduates do. Graduation from high school is associated with an increase in average lifespan of 6 to 9 years.¹¹ Northwell Health has devoted organizational resources across the health system to implement educational support programs for youth from communities with health disparities. The Medical Scholars Pipeline Program (MSPP) at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell was created to provide an educational pathway for underrepresented in medicine (URM) students from high schools in the five New York City boroughs, Nassau County and Suffolk County to enter into health care professions. The three-year curriculum strengthens students' academic skills, bolsters their written and oral communication skills, provides college test preparatory classes, introduces a wide variety of health care professions, and provides experiences at Northwell Health facilities. To date, 196 students have enrolled in the program and 98 students have completed the three-year curriculum. One hundred percent of the rising first year college students in the program have enrolled in prestigious colleges and universities including Hofstra, Dartmouth, Yale, Harvard and Columbia. Eleven MSPP graduates are enrolled in professional health care programs. In 2017, the MSPP expanded to Lenox Hill Hospital in New York City. In 2018, the MSPP expanded Suffolk County at Southside Hospital.

c) Food Security

Food insecurity refers to United States Department of Agriculture's measure of lack of access to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Food insecure households are not necessarily food insecure all the time. Food insecurity may reflect a household's need to make trade-offs between basic needs, such as housing or medical bills, and purchasing nutritionally adequate, healthful foods. There exists a paradox of sorts in which food insecurity and lack of access to healthy foods are consistently linked to obesity.¹²Some studies demonstrate a linear relationship between food insecurity and obesity, while others demonstrate a U-shaped relationships. In both instances, there exists a point in which individuals may have enough money to buy typically cheaper, energy-dense and processed foods, but not enough money to buy fresh, healthy alternatives. In addition, many low income neighborhoods are classified as 'food deserts' meaning nutritious foods are hard to obtain. In these neighborhoods, supermarkets are often too far to be accessible by foot or public transportation, leading residents to opt for the unhealthy or energy-dense foods sold at local convenience stores.

The Island Harvest identified 155,150 individuals in Nassau and Suffolk as food insecure (73,050 and 82,100 respectively), and Map the Meal Gap identified 208,590 food insecure individuals in New York County, 244,830 in Queens County, 41,080 in Richmond County,

¹⁰ Singh GK, Kogan MD. *Childhood obesity in the United States, 1976-2008: Trends and Current Racial/Ethnic, Socioeconomic, and Geographic Disparities*. A 75th Anniversary Publication. Health Resources and Services Administration, Maternal and Child Health Bureau. Rockville, Maryland: U.S. Department of Health and Human

¹¹ American Public Health Association. Public Health and Education: Working Collaboratively Across Sectors to Improve High School Graduation as a Means to Eliminate Health Disparities. *Policy Statement*.

¹² Franklin, B., Jones, A., Love, D., Puckett, S., Macklin, J., & White-Means, S. (2011). Exploring Mediators of Food Insecurity and Obesity: A Review of Recent Literature. *Journal of Community Health J Community Health*, 37(1), 253-264. doi:

10.1007/s10900-011-9420-4



and 75,400 in Westchester County.¹³ In total, Northwell's service area encompasses 725,050 food insecure individuals. To address food security in the service area, Northwell Health has launched the LIJ Valley Stream *Food as Health* program a hospital-community partnership among LI Harvest and Gods Love We Deliver that screens inpatients for food security and provides onsite emergency food, nutrition counseling, SNAP enrollment and community social service navigation in addition to home-based interventions for non-ambulatory patients with nutrition related diagnosis (i.e. diabetes, hypertension, unintended weight loss). Since 2018 over 2,600 patients have been screened using the Hunger Vital Sign Survey with 27% self-identifying as food insecure. Over 300 patients with nutrition related disorders over 160 were referred to the onsite center, Long Island Cares for home intervention or God's Love We Deliver for a medically tailored home meal delivery program. The majority of the additional non-ambulatory patients were discharged to rehabilitation or skilled nursing facilities. Of those seen at the onsite center, Seventy-three percent (73%) of patients reported increased food security on follow-up after attending a Food as Health program visit validated by the Hunger Vital Signs Survey. All of patients report improved self-management of their disease after attending a Food as Health program visit and reported finding the program helpful. Most of program participants self-reported healthier eating habits, lower food costs, utilization of emergency foods and connection to community food resources. Forty percent of participants were provided referrals to other non-food community resources such as housing, transportation and entitlements. Future program regional expansion is planned for Northwell's Southside Hospital in December 2019 and Huntington Hospital in 2020.

d) Crime and Violence

The circumstances that give rise to violence are also made worse by violence, feeding a cycle of poor community health. A lack of safety worsens the risk factors for violence, thus perpetuating it. Fear of violence erodes trust and social ties, so residents are isolated and not able to participate in group processes that promote community health and well-being. In addition, areas of high crime make it difficult for residents to feel safe and comfortable exercising outdoors. Lack of perceived safety and fear of neighborhood violence are strongly¹⁴ correlated with poorer health outcomes, especially in regards to chronic diseases like asthma¹⁵ and obesity.¹⁶ Northwell Health has implemented the American College of Surgeons STOP THE BLEED Program across our service area as a response to mass shootings as part of a national awareness campaign and a call to action. Stop the Bleed is intended to educate, train, and empower civilian bystanders with the necessary skills and tools to help in a bleeding emergency before professional help arrives. When a response is delayed, massive bleeding from any cause, can result in death.

¹³ Feeding America Food Insecurity by State

https://public.tableau.com/profile/feeding.america.research#!/vizhome/2017StateWorkbook-Public_15568266651950/CountyDetailDataPublic. Accessed on November 2019.

¹⁴ Appugliese, D., Bradley, R. H., Cabral, H. J., Lumeng, J., & Zuckerman, B. (2006). Neighborhood safety and overweight status in children. *Archives of Pediatrics & Adolescent Medicine*, 160, 25-31.

¹⁵ Apter, A. J., Bogen, D. K., Boyd, R. C., Garcia, L. A., Have, T. T., & Xingmei, W. (2010, September). Exposure to community violence is associated with asthma hospitalizations and emergency department visits. *The Journal of Allergy and Clinical Immunology*, 126(3), 552-557

¹⁶ Appugliese, D., Bradley, R. H., Cabral, H. J., Lumeng, J., & Zuckerman, B. (2006). Neighborhood safety and overweight status in children. *Archives of Pediatrics & Adolescent Medicine*, 160, 25-31.

e) Social Support

Social connectedness improves physical health and mental and emotional well-being. A landmark study from the University of Michigan found that lack of social connection is actually a greater detriment to health than obesity, smoking and high blood pressure. Strong social connection leads to a 50% increased chance of longevity, strengthens the immune system, and helps faster recovery from disease.¹⁷ In addition, people who feel more connected to others have lower levels of anxiety and depression, and also have higher self-esteem, greater empathy for others and are generally more trusting and cooperative. Ultimately, social connectedness generates a positive feedback loop of social, emotional, and physical well-being. To provide community support for people with signs of depression and other mental health issues, Northwell has partnered with regional departments of health initiatives such as THRIVE NYC to provide the Mental Health First Aid Certification Course to community members that teach individuals how to listen and respond to someone in distress. After successfully completing the course, individuals received a three-year certification in Mental Health First Aid. To support the thousands of family, friend and loved one caregivers who provide the safety net for individuals throughout the lifecycle, Northwell Health has established brick and mortar Caregiving Centers. The nationally recognized Northern Westchester Hospital Ken Hamilton Caregivers Center is open to all community members regardless of where they receive care and is staffed by social workers and caregiver coaches. The Center provides counseling for caregivers, navigation to community resources, workspace, nourishment and a space for caregiver respite. The Center also assists other organizations outside of Northwell Health to establish similar models. The Northwell Peconic Bay Medical Center and Huntington Hospital Caregivers Center modeled after the Ken Hamilton Center in Suffolk County opened in 2019. More Northwell Sites are planned.

f) Built Environment

i) Housing

The connection between housing and health has been well known for more than a century—Florence Nightingale once wrote, “The connection between health and the dwelling of the population is one of the most important that exists.” Today there is renewed interest in understanding the complex pathways connecting housing factors, neighborhood factors, social factors, adverse health outcomes, and disproportionate disease burden—particularly with respect to skyrocketing rates of chronic diseases such as asthma, obesity, and diabetes¹⁸. Dilapidated housing is associated with exposures to lead, asthma triggers (such as mold, moisture, dust mites, and rodents), and mental health stressors such as violence and social isolation²¹. In addition, secondhand and third hand smoke exposure is a danger, especially to children, in crowded housing units. There is a wealth of research pointing to the dangers of secondhand smoke as well as the tendency for residual smoke particles to persist in walls, carpet, and furnishings known as third hand smoke.

ii) Access to Exercise Opportunities

Increasing evidence suggests that land-use and transportation decisions can facilitate or

¹⁷ House, J., Landis, K., & Umberson, D. (1988, July 29). Social relationships and health. *Science*, 241(4865), 540- 545.

¹⁸ Hood, E. (2005). Dwelling Disparities: How Poor Housing Leads to Poor Health. *Environmental Health Perspectives*, 113(5), A310–A317.



obstruct the creation and maintenance of healthy communities¹⁹. A healthy community protects and improves the quality of life for its citizens, promotes healthy behaviors and minimizes hazards for its residents. By assessing community characteristics such as sidewalks, transportation options, availability of public recreational space, and mixed-use design, we can measure corresponding health outcomes, including rates of physical activity, obesity, asthma, injury, and crime, as well as indicators of mental health and social capital. To promote childhood physical activity and increase access to school-based physical activity program, Northwell Peconic Bay Medical Center in collaboration with area organizations provides the national Project Fit America (PFA) Program to schools in Suffolk County providing grants to install PFA equipment and curriculum in 10 elementary schools on the East End of Long Island, and look forward to further expanding this effort to more schools across Long Island. Because of PFA, the students at these schools have shown a significant increase in physical fitness and the schools built physical education environment has been modified. Cohen Children's Medical Center has joined this initiative to expand the program to more Suffolk and Nassau County schools.

3) Health Services

Across the lifespan, our health care system is designed to help people stay healthy, recover from illness, live with chronic disease or disability, and cope with death and dying. Quality health care delivers these services in ways that are safe, timely, patient centered, efficient, and equitable. Unfortunately, Americans too often do not receive care they need or receive worse care than others resulting in health disparities. Both access to services and the quality of health services can greatly impact health. Lack of access, limited insurance coverage, and limited cultural competency among providers create barriers to receiving services. These barriers ultimately lead to unmet health needs, delays in appropriate care, and hospitalizations that could be prevented.

a) Availability of Primary Care Providers

Multiple analyses conducted on the supply of primary care providers and preventive services show that primary care helps prevent illness and death and is associated with a more equitable distribution of health in populations²⁰. Ultimately, availability of primary care and preventive services plays a large part in patients' ability to access these services and to maintain well-being and prevent disease.

b) Insurance Coverage

Access to care is often dictated by an individual's insurance status and their ability to pay. For the uninsured in the United States, however, out-of-pocket healthcare costs are simply too high to afford and much of the uninsured population chooses to avoid healthcare altogether. Population groups that do not have health insurance are less likely to have a source of primary care and thus have less access to the entire health system²¹. New York

¹⁹ Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*, 83(3), 457–502. <http://doi.org/10.1111/j.1468-0009.2005.00409.x>

²⁰ Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*, 83(3), 457–502. <http://doi.org/10.1111/j.1468-0009.2005.00409.x>

²¹ Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*, 83(3), 457–502. <http://doi.org/10.1111/j.1468-0009.2005.00409.x>



State Department of Health data shows significant improvement in the number of children and Adults with health insurance over the past 3 years²².

c) Language and Cultural Competency

In 2002 the Institute of Medicine released *Unequal Treatment*²³, a seminal report documenting extensive evidence of disparities in the burden of disease, quality and appropriateness of care, and health outcomes among specific US populations, in particular ethnic minorities. Language and communication problems may lead to patient dissatisfaction, poor comprehension and adherence, and lower quality of care²⁴. In addition to language and interpretation issues, if providers, organizations, and systems do not work together to provide culturally competent care, patients are at higher risk of having negative health consequences, receiving poor quality care, or being dissatisfied with their care. For instance, African Americans and other ethnic minorities report less partnership with physicians, less participation in medical decisions, and lower levels of satisfaction with care²⁵. Subsequently, lower quality patient-physician interactions are associated with lower overall satisfaction with health care. Northwell Health's Center for Equity of Care provides in-person and online cultural competency, health literacy and unconscious bias training for the health system. In addition, Northwell partnered with the Long Island Health Collaborative to develop a Cultural Competency Health Literacy Community Provider Training to advance cultural and linguistic competence, promote effective communication to eliminate health disparities, and enhance patient outcomes. The program has received national recognition for its curriculum, community focus and evaluation. The program training is available online and in person through a network of cross sector Master Trainers. To date 345 participants have attended the Train the Trainer workshops, 1458 participants have attended the 2 hr Workforce Training and 1803 participants have attended the CCHL training at their worksite or hosting organization. A full evaluation of the program found that the program successfully taught skills that would improve participants' service to community members due to its impact on further expanding knowledge of culturally and linguistically appropriate services/care. One month post-training, participants felt most confident in concepts of the "teach-back" method and less confident in their understanding of how the National CLAS standards can help reduce health disparities. According to NYSDOH Delivery Service Reform Incentive Program population health literacy measure the patient CG-CAHPS/H-CAHPS performance scorecard, there have been positive improvements relating to health literacy in Nassau, Suffolk, and Eastern Queens where the trainings were provided. These performance scorecards are created using post-admissions surveys from hospital patients and record changes on the following health literacy measures: "explained what to do if illness got worse," "instructions easy to understand," and "describing how to follow instructions."

4) Individual Behavior

Individual behavior also plays a role in health outcomes. Many public health and health care

²² NYSDOH Prevention Agenda Dashboard

https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/dashboard/pa_dashboard&p=sh

²³ Institute of Medicine. (2002, March). *Unequal Treatment: What Healthcare Providers Need to Know About Racial and Ethnic Disparities in Healthcare*. Shaping the Future for Health.

²⁴ Carrasquillo, O., Orav, E. J., Brennan, T. A., Burstin, H. R. 1999. Impact of language barriers on patient satisfaction in an emergency department. *Journal of General Internal Medicine*, 14, 82-87.

²⁵ Saha, S., Arbelaez, J. J., Cooper, L. A. 2003. Patient-physician relationships and racial disparities in the quality of health care. *American Journal of Public Health*, 93, 1713-1719.



interventions focus on changing individual behaviors such as substance abuse, diet, and physical activity. Positive changes in individual behavior can reduce the rates of chronic disease. Northwell health has invested in implementing evidence-based chronic disease self-management programs such as the Stanford Chronic Disease Self-Management Program, Tomondo Control de su Salud and the National Diabetes Prevention Program which have all been shown to improve participants disease self-management skills (i.e. nutrition, physical activity, stress, advocacy) and health outcomes across chronic diseases including behavioral health disorders.

a) Diet and Nutrition

A healthy diet is a pillar of well-being throughout the lifespan. It promotes the achievement of healthy pregnancy outcomes; supports normal growth, development and aging; helps maintain a healthful body weight; reduces chronic disease risks; and promotes overall health and well-being. Americans consume many different habitual dietary patterns, which reflect their life experiences and wide-ranging personal, socio-cultural and other environmental influences. Early initiation and continuing support of breastfeeding has been linked to prevention of obesity. Cohen Children's Medical Center through their BFREE program promotes sustainable hospital, worksite and community breast feeding practices through engagement, training, policy, Breast Feeding Friendly Designations and community Breast Feeding Cafes. The BREE Program has targeted areas in Nassau and Suffolk Counties with low breast feeding rates and obesity related health disparities including Glen Cove, Islip, Wyandanch, Riverhead and the Shinnecock Indian Reservation in South Hampton. To date, the program has facilitated in achieving the national Breast Feeding Friendly Designation for 7 pediatric, obstetrics/gynecology, primary care practices and a hospital with four more in the pipeline. They have aided 8 childcare settings such as daycares and preschools to achieve the designation with 4 more settings in the process of designation as well. They have collaborated with 18 worksites achieving 7 Breast Feeding Friendly Worksites including libraries, school districts, urgent centers, local governments and assisted care facilities. Five Baby Café USA sites that provide Free drop-in center and support group for breastfeeding mothers and babies facilitated by trained staff have been established in the following settings : Southside Hospital, Wyandanch Community Church of the Nazarene, Childcare Center of the Hamptons , St. Patrick's Roman Catholic Church Glen Cove, Family Service League Homeless Shelter and Pronto.

b) Physical Activity

Physical activity is shown to reduce all-cause mortality, reduce the risk for cardiovascular disease, lower blood pressure and rates of hypertension, as well as decrease blood lipid levels. It is estimated that being physically inactive is responsible for 1 in 10 deaths among U.S. adults²⁶ and that sedentary adults pay, on average, \$1500 more per year in healthcare costs than physically active adults²⁷. In addition, physical inactivity and/or sedentary lifestyle is perhaps the greatest contributor to the obesity epidemic in the United States.

²⁶ Danaei G, Ding EL, Mozaffarian D, et al. The Preventable Causes of Death in the United States: Comparative Risk Assessment of Dietary, Lifestyle, and Metabolic Risk Factors. *PLoS Med* 6(4): e1000058. doi:10.1371/journal.pmed.1000058, 2009.

²⁷ Anderson LH, Martinson BC, Crain AL, et al. Healthcare Charges Associated with Physical Inactivity, Overweight, and Obesity. *Preventing Chronic Disease*, 2(4):A09, 2005.

In 2018 New York ranked as the 29th most inactive state in the country²⁸

c) Alcohol and Substance Abuse

Alcohol and drug dependence often go hand in hand. Research shows that people who are dependent on alcohol are much more likely than the general population to use illicit drugs, and people with drug dependence are much more likely than the general population to drink alcohol. While alcohol and substance abuse problems are public health crises in their own respects, alcohol and substance abuse also contribute to a number of other health problems. Patients with alcohol and drug use disorders are more likely to have psychiatric disorders, are more likely to attempt suicide and are more likely to suffer from chronic diseases²⁹. Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an evidence-based practice used to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs. SBIRT screening and referral process is integrated into Northwell enterprise inpatient, emergency department and ambulatory EMRs and healthcare provider workflows in 14 hospitals, 16 emergency departments, and 5 primary care practices spanning Northwell's 6 county service area. Project Connect is a complementary program developed in collaboration with the Central Nassau Guidance & Counseling (CBO) to provide external navigation for patients struggling with substance use. Patients are provided with support and assistance for 120 days following enrollment during an emergency department visit. These programs are part of a 4 layer framework that also includes the SBIRT screening process (foundation) Naloxone Saturation Campaign (NAL-SAT)(layer 2), Medication for Addiction Treatment MAT in ED (layer 3) and Project Connect (layer 4). As of 2019, 1,000,000 pts received SBIRT screens in ED and primary care practices; 31,000 have had SBIRT Coaching; 365 pts were enrolled in Project Connect.

i) Tobacco

Cigarette smoking is the leading preventable cause of death in the United States. Tobacco causes more than 480,000 deaths each year in the United States.³⁰ This is nearly one in five deaths. Approximately 28,000 New Yorker die from Smoking related caused and 750,000 live with smoking related conditions.³¹ Not only are cigarette and tobacco use often associated with increased mortality, but they are leading contributors to increased morbidity and chronic disease as well. According to the United States Department of Health and Human Services³² smoking is estimated to increase the risk—For coronary heart disease by 2 to 4 times, For stroke by 2 to 4 times, Of developing lung cancer by 25 times.

The Northwell Health Center for Tobacco Control offers evidence-based tobacco cessation programs for the community and employees. For 20 years, nurses and nurse

²⁸ America's Health Rankings 2018

<https://www.americashealthrankings.org/explore/annual/measure/Sedentary/state/NY>

²⁹ Stinson FS et al., Drug and Alcohol Dependence 80 (2005) 105–116

³⁰ CDC Smoking Related Deaths https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm accessed November 2019

³¹ NYSDOH Tobacco Statistics 2015. https://www.health.ny.gov/prevention/tobacco_control/

³² U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014



practitioners at the Center for Tobacco Control (CTC) have been offering tobacco cessation services to the community. Our programs are provided in-person in Great Neck and at Southside Hospital. The CTC facilitates group programs as well as individual coaching sessions to accommodate the needs of the patient. The CTC also provides treatment by phone or through Telehealth services. A weekly support is available to assist patients in remaining tobacco-free. In addition, individuals can enroll in our program via Eventbrite.

The newest aspect of our CTC program is the addition of Telehealth services for individuals who cannot receive in-person services. This year, nearly 700 individuals who use tobacco were treated for tobacco dependence at the CTC through the group and individual cessation programs. With an increasing focus on the health of our employees we have educated approximately 5,000 Northwell employees about the benefits of quitting and about the services available through the CTC. We have also educated over 4,000 health care providers and health care students (nursing, PA and medical students) about how to assist their patients to quit their tobacco use. The CTC provided tobacco prevention education to about 2,000 local school students. The CTC also provided tobacco prevention and cessation information as well resources to nearly 18,000 community members.

ii) Opioid and Heroin

Deaths from Opioid and Heroin rose over the past decade. New York experienced death rates that were higher than any other state for which CDC data was available. New York death rates rose by 2000% from heroin and 200% from opioids³³. The consequences of this abuse have been devastating and are continuing to rise, as the number of unintentional overdose deaths has nearly quadrupled since 1999. Heroin acts as a cheaper alternative to prescription opioids so we see a rise in heroin addiction and heroin overdose as well. Governor Andrew Cuomo and legislative leaders announced an agreement on June 14, 2016 to combat heroin and opioid abuse in New York State. The comprehensive legislation package will limit opioid prescriptions from 30 to 7 days, require mandatory prescriber education on pain management methods, and eliminate burdensome insurance barriers to treatment. In addition, this legislative package will expand support for New Yorkers in recovery, increasing treatment beds by 270 and substance use program slots by 2,335³⁴. During 2012-2017, the crude rate of opioid analgesics declined from 474.5 prescriptions per 1,000 population in 2012 to 408.7 per 1,000 in 2017, while the crude rate of benzodiazepine prescriptions increased slightly between 2012 (266.0 per 1,000 population) and 2017 (271.2 per 1,000). In New York State, a significant reduction occurred in the number of patients who received opioid prescriptions from five or more prescribers, at five or more pharmacies in a six-month period ("doctor shoppers") between 2012 (27.0 per 100,000 population) and 2017 (1.4 per 100,000 population)³⁵. Although significant progress has been made in reducing

³³ Prescription Opioid Abuse and Heroin Addiction in New York State. Report from Office of NYS Comptroller. (June 2016) https://www.osc.state.ny.us/press/releases/june16/heroin_and_opioids.pdf

³⁴ NYS Governor's Office. (2016, June 14). Governor Cuomo and Legislative Leaders Announce Agreement to Combat Heroin and Opioid Abuse in New York State. Retrieved June, 2016, from <https://www.governor.ny.gov/news/governor-cuomo-and-legislative-leaders-announce-agreement-combat-heroin-and-opioid-abuse-new>

³⁵ NYS Annual Opioid Report 2018



opioid analgesics prescriptions in NYS, opioid related deaths have continued to rise especially in Suffolk County. Northwell Health has established a system-wide Opioid Task Force that collaborates with government and community-based organizations to combat this epidemic from prevention to intervention. Naloxone Saturation Campaign (NAL-SAT) is available in all 18 Northwell emergency departments and 5 primary care practices, NAL-SAT is an Opioid Overdose Program which provides an education on prevention, recognition, response and a Naloxone rescue kits free to patients, family friends and staff. Medication for Addiction Treatment (MAT) is currently offered to patients in 1 of the 6 learning laboratories in the health system- 4 emergency departments, 1 primary care practice, and 1 inpatient unit. Medications include those such as Buprenorphine in combination with psychosocial support provided by one of our Northwell Health treatment facilities. To date, 4,155 individual received Opioid Overdose education and naloxone rescue kits including patients, family, friends, community members, staff and students; 60 Buprenorphine inductions in 4 emergency depts and 60 direct referrals to next day induction and/or treatment.

5) Health Disparities

Our innate biology and genetic makeup contribute to health outcomes in different ways. For instance, with some exception, breast cancer is mostly prevalent in women rather than men. In addition, carrying the BRCA1 or BRCA2 gene increases one's risk for developing breast or ovarian cancer. These are just two examples of how one's risk for developing disease may be linked to their biology and genetic makeup. While health is increasingly linked to social and physical determinants, it is important to understand and investigate the differences in health outcomes among different population subgroups. The New York State Office of Minority Health provides detailed Minority Population Profiles describing the health indicators by race and ethnicity as well as measures of socio-demographic status, birth outcomes, prenatal care usage, and rates of hospitalizations and mortality for an array of chronic diseases and injury related conditions for each county in New York State. Although there has been improvement in some health indicators, there are still significant disparities among race and ethnicities. New York State Black Non-Hispanic residents still experience the greatest health disparities such as age adjusted mortality rates, premature death rates, chronic disease prevalence followed by Hispanic Non-Black residents compared to White non-Hispanic residents.³⁶

²⁷ Prescription Opioid Abuse and Heroin Addiction in New York State. Report from Office of NYS Comptroller. (June 2016) https://www.osc.state.ny.us/press/releases/june16/heroin_and_opioids.pdf

²⁸ NYS Governor's Office. (2016, June 14). Governor Cuomo and Legislative Leaders Announce Agreement to Combat Heroin and Opioid Abuse in New York State. Retrieved June, 2016, from <https://www.governor.ny.gov/news/governor-cuomo-and-legislative-leaders-announce-agreement-combat-heroin-and-opioid-abuse-new>



County Specific Community Health Needs Analysis

The county sections in the Appendix included in this report contain the county specific outcomes since the 2016 CHNA, primary and secondary data analysis of the 2019 CHNA and the collaborative stakeholder process as described previously that was used to determine the New York State Department of Health Prevention Agenda Priority Areas that will be the focus of the Northwell Health Implementation Plan. The facilities and the geographic regions they are located in the Northwell Health service area include:

- 1) *Nassau County*
Glen Cove Hospital
LIJ Valley Stream Hospital
North Shore University Hospital
Plainview Hospital
Syosset Hospital
- 2) *New York County*
Lenox Hill Hospital /Manhattan Eye, Ear and Throat Hospital (a division of Lenox Hill Hospital)
- 3) *Queens County*
Cohen Children's Medical Center
Long Island Jewish Medical Center
LIJ Forest Hills Hospital
Zucker Hillside Hospital
- 4) *Richmond County*
Staten Island University Medical Center
- 5) *Suffolk County*
Huntington Hospital
Mather Hospital
Peconic Bay Medical Center
Southside Hospital
South Oaks Hospital
- 6) *Westchester County*
Phelps Hospital
Northern Westchester Hospital

Northwell Health Service Area County Identified Health Priorities

As a result of the 2019 primary and secondary data analysis the following health priorities, which are also impacted by identified social determinants of health such as poverty, unemployment, lack of housing, education and healthy food access which are present in specific areas in every county, emerged as pressing community health issues in the Northwell Health Service area:

Nassau County

- Chronic disease, especially in at risk and diverse communities (Cancer, Diabetes, CVD, Obesity)



- Mental health and substance use
- Concern for a healthy safe environment – especially related to violence
- Access to healthcare
- Changes in the built environment – housing and access to affordable food
- Economic stability
- Need for better health literacy
- Better collaboration between healthcare and community-based organizations.

New York County

- Mental health and substance abuse
- Chronic disease, especially in at risk and diverse communities
- Obesity
- Health literacy and Language barriers
- Low income and employment opportunities
- Limited transportation
- Access to healthcare including costs of insurance and health care
- Food deserts
- Environmental hazards
- Lack of affordable housing
- Need for quality education and better college opportunities
- Lack of community healthcare services funding

Queens County

- Mental health and substance abuse
- Chronic disease, especially in at risk and diverse communities
- Health literacy
- Access to healthcare related to lack of insurance and insurance costs
- Lack of affordable Housing
- Poor neighborhood infrastructure that impacts nutrition and physical activity
- Environmental hazards
- Immigration status
- Low income and employment
- Limited transportation access
- Need for education

Richmond County

- Chronic disease, especially in at risk and diverse communities
- Mental health and substance abuse
- Chronic disease, especially in at risk and diverse communities
- Health Literacy including fear and stigma
- Limited transportation
- Access to healthcare including costs of insurance and health care
- Poor neighborhood infrastructure related to housing, recreation and safety
- Food insecurity
- Economic instability and lack of affordable housing
- Environmental hazards
- Need for early childhood health and youth education



- Lack of community engagement
- Need for stronger healthcare and community-based organization partnerships.

Suffolk County

- Mental health and substance use
- Chronic disease, especially in at risk and diverse communities (CVD, Obesity, Cancer, Diabetes)
- Women's Wellness
- Concern for a healthy safe environment – related to clean air and water
- Access to healthcare
- Changes in the built environment – housing and access to affordable food
- Economic stability
- Need for better health literacy
- Better collaboration between healthcare and community-based organizations.

Westchester County

- Chronic disease, especially in at risk and diverse communities
- Mental health and substance abuse
- Obesity
- Food and Nutrition: access to healthy foods
- Physical activity and access to safe recreational areas
- Built environment: air quality, affordable housing, employment opportunities
- Health and social issues related to the senior population
- Health literacy especially targeting youth
- Cross sector health care and community-based organization partnerships

Northwell Health NYSDOH Priority Agenda Prioritization

The NYSDOH Priority Agenda Items were selected based on the following criteria adapted from the Catholic Health Association Assessing and Addressing Community Health Needs Manual:

1. Magnitude- The magnitude of the problem as it relates to the number of community members impacted by the issue.
2. Severity- The severity of the problem which is determined by the risk of morbidity and mortality associated with the problem.
3. Historical trends- The prevalence of the issue over time.
4. Alignment of the problem with the organization's strengths and priorities.
5. Impact of the problem on vulnerable populations.
6. Importance of the problem to the community.
7. Existing resources addressing the problem.
8. Relationship of the problem to other community issues.
9. Feasibility of change and the availability of evidence-based approaches.
10. Value of immediate intervention versus any delay, especially for long-term or complex threats.

A discussion and debate approach was utilized to identify Priority Agenda Items. Health system, county and regional priority-setting groups comprised of representatives from internal and external



CHNA stakeholders met to discuss the needs identified in the primary and secondary data analysis, and applied the criteria listed above to these needs to identify priorities. Priority-setting group consensus on Priority Agenda Items and focus areas was reached. The priority-setting groups then proceeded to validate the priorities chosen to confirm that the needs identified are the needs that should be addressed by presenting the process used for setting priorities and conclusions to internal and external stakeholders. These stakeholders included community-based organizations, academic public health experts, health system and facility community health staff, and other key stakeholders.

To improve the health of the community, Northwell Health as a result of the CHNA process described previously and approved by the Committee on Community Health of the Northwell Health Board of Trustees, has selected the following NYSDOH 2019-2024 Priority Agenda Item and focus areas for the service area of the health system:

PRIORITY AREA: Prevent Chronic Disease

FOCUS AREA: Healthy Eating and Food Security

- Increase access to healthy affordable foods and beverages
- Increase skills and knowledge to support healthy food and beverage choices
- Increase food security

FOCUS AREA: Physical Activity

- Promote school, childcare and worksite environments that support physical activity for people of all ages and abilities

FOCUS AREA: Tobacco Prevention

- Prevent initiation of tobacco use, including combustible tobacco and electronic vaping products (electronic cigarettes and similar devices) by youth and young adults
- Promote tobacco use cessation, especially among populations disproportionately affected by tobacco use including: low SES, frequent mental distress/substance use disorder; LGBT; and disability

FOCUS AREA: Preventative Care and Management

- Increase cancer screening rates for breast, cervical and colorectal cancer
- Increase early detection of cardiovascular disease, diabetes, prediabetes and obesity
- Promote the use of evidence-based care to manage chronic diseases
- Improve self-management skills for individuals with chronic diseases

PRIORITY AREA: Promote Well-Being and Prevent Mental and Substance Use Disorders

FOCUS AREA: Promote Well Being

- Strengthen opportunities to build well-being and resilience across the lifespan
- Facilitate supportive environments that promote respect and dignity for all ages

FOCUS AREA: Prevent Mental and Substance Use Disorders

- Prevent opioid and other substance misuse and deaths
- Reduce Prevalence of major depressive disorders



The 2019-2024 NYSDOH Prevention Agenda Dashboard Improve Health Status and Reduce Health Disparities objective that Northwell will be focusing on is *Age-adjusted preventable hospitalization rate per 10,000 - Aged 18+ years* in addition to a focus on low income populations with health disparities.

Implementation Plan

The Northwell Health Implementation Plan for 2019-2021 includes the goals, objectives, activities, and performance measures planned to address the chosen New York State Prevention Agenda Priority Areas (see the appendix for the Northwell Health Implementation Plan).

Community Resource Directories

The Northwell Service area community resources are vast. Northwell Health provides annually updated community service plans which list the community health improvement programs available to residents in our service area which are available in print or on the Northwell health website on the following link <https://www.northwell.edu/about/our-organization/office-community-and-public-health/reports> . The most comprehensive, current and easily searchable inventory of community resources in our service area are found on the sites described below. These sites include linkages to community resources such as community outreach agencies; religious services organizations; local government social service organizations; not for profit health and welfare agencies; community based health education; local public health programs; education; youth development programs; housing; food access organizations; clothing and furniture banks; transportation services; employment support services; specialty education; community-based clinical services and advocacy organizations; specialty community-based/clinical services for individuals with developmental disabilities; specialty education for special needs children; Ryan White Programs; HIV prevention/outreach and social services; peer/family mental health advocacy organizations; self-advocacy and family support; foster care agencies; family support/training; community-based behavioral health and substance abuse treatment support services; National Alliance on Mental Illness (NAMI);and alternatives to incarceration.

The United Way 211 Long Island database <http://www.unitedwayli.org/findhelp> , is a searchable directory of over 3000 local health and human service agencies and programs. A similar database is available for the metropolitan area. Developed by the Greater New York Hospital Foundation, HITE – the Health Information Tool for Empowerment – is an online resource (<http://www.hitesite.org/Default.aspx>) for community members, social workers, discharge planners, and other information and referral providers with over 5000 services. The Long Island Health Collaborative also contains a community health resource list on their website <https://www.lihealthcollab.org/healthy-resources.aspx> . HITE's and 211's comprehensive customizable directories helps community members and the social services workforce provide fast, accurate linkages for community health programs and social services. All information in the HITE and 211 resource database is verified and updated annually.