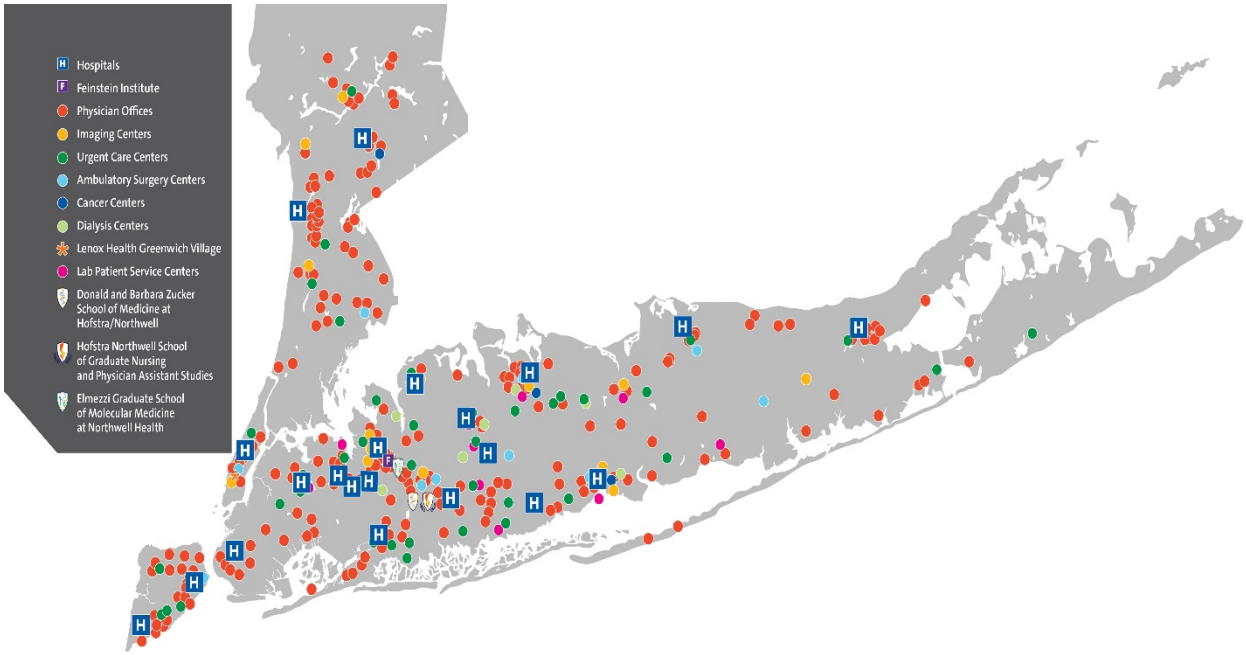
Northwell Health 2019 Community Health Needs Assessment: New York County Assessment

Encompassing the following Northwell Health Hospital:

Lenox Hill Hospital



New York County Health Indicator Status Since 2016 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, safe environments, maternal child health, STD/HIV, vaccine preventable diseases, healthcare-associated infections 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. However, the burden of health disparities, chronic disease, obesity and behavioral health issues is still present as demonstrated below 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 primarily address the 2019-2024 priority agenda items of Prevent Chronic Disease and Promote Well Being and Prevent Mental and Substance Use Disorders as well as including strategies that can improve other priority areas as well.

Since the last community health needs assessment, the following NYSDOH Prevention Objectives[1] have:

Improved
NYSPAO Category: Improve Health Status and Reduce Health Disparities
Premature deaths: Ratio of Hispanics to White non-Hispanics>
Age-adjusted preventable hospitalization rate per 10,000 - Aged 18+ years*#>
NYSPAO Category: Prevent Chronic Disease
Percentage of cigarette smoking among adults*
Asthma emergency department visit rate per 10,000 - Aged 0-4 years*#>
NYSPAO Category: Promote a Healthy Safe Environment
Rate of hospitalizations due to falls per 10,000 - Aged 65+ years*>
Rate of emergency department visits due to falls per 10,000 - Aged 1-4 years*#>
Assault-related hospitalization rate per 10,000 population#>
Assault-related hospitalization: Ratio of Black non-Hispanics to White non-Hispanics#>
Percentage of employed civilian workers age 16 and over who use alternate modes of transportation to work or work from home
NYSPAO Category: Promote Healthy Women, Infants and Children
Percentage of preterm births*>
Premature births: Ratio of Black non-Hispanics to White non-Hispanics#
Premature births: Ratio of Medicaid births to non-Medicaid births#>
Percentage of infants exclusively breastfed in the hospital*>
Percentage of children who have had the recommended number of well child visits in government

[1] New York State Department of Health Prevention agenda Dashboard https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fdashboard%2Fpa_dashboard&p=ch&cos=60&ccomp=1 Accessed November 2019.

sponsored insurance programs*#>
Percentage of children aged 12-21 years who have had the recommended number of well child visits in government sponsored insurance programs*>
Percentage of unintended pregnancy among live births*#>
NYSPAO Category: Promote Mental Health and Prevent Substance Abuse
Age-adjusted suicide death rate per 100,000 population
NYSPAO Category: Prevent HIV/STDs, Vaccine Preventable Diseases and Healthcare Associated Infections
Newly diagnosed HIV case rate per 100,000 population*#
Difference in rates (Black and White) of newly diagnosed HIV cases*#
Difference in rates (Hispanic and White) of newly diagnosed HIV cases*
*Significant change # Did not meet NYSDOH Prevention Agenda Objective
> Continued improvement since 2010-2013 Community Health Needs Assessment

No Significant Change:
NYSPAO Category: Improve Health Status and Reduce Health Disparities
Percentage of premature deaths (before age 65 years) #
Age-adjusted percentage of adults who have a regular health care provider - Aged 18+ years#
NYSPAO Category: Prevent Chronic Disease
Percentage of adults who are obese
Percentage of children and adolescents who are obese
Asthma emergency department visit rate per 10,000 population#
Age-adjusted heart attack hospitalization rate per 10,000 population
NYSPAO Category: Promote a Healthy Safe Environment
Rate of occupational injuries treated in ED per 10,000 adolescents - Aged 15-19 years
Percentage of population that lives in a jurisdiction that adopted the Climate Smart Communities pledge
Percentage of population with low-income and low access to a supermarket or large grocery store
Percentage of residents served by community water systems with optimally fluoridated water
NYSPAO Category: Promote Healthy Women, Infants and Children
Percentage of children aged 0-15 months who have had the recommended number of well child visits in government sponsored insurance programs#
Percentage of children aged 3-6 years who have had the recommended number of well child visits in government sponsored insurance programs#
Percentage of children (aged under 19 years) with health insurance#
Adolescent pregnancy rate per 1,000 females - Aged 15-17 years
Unintended pregnancy: Ratio of Black non-Hispanic to White non-Hispanic#
Unintended pregnancy: Ratio of Medicaid births to non-Medicaid births#
Percentage of women (aged 18-64) with health insurance#
NYSPAO Category: Promote Mental Health and Prevent Substance Abuse
Age-adjusted percentage of adults with poor mental health for 14 or more days in the last month#
Age-adjusted percentage of adults binge drinking during the past month#
NYSPAO Category: Prevent HIV/STDs, Vaccine Preventable Diseases and Healthcare Associated Infections
Percentage of adults with flu immunization - Aged 65+ years#
Gonorrhea case rate per 100,000 women - Aged 15-44 years
Primary and secondary syphilis case rate per 100,000 women#
Did not meet NYSDOH Prevention Agenda Objective

Worsened:

NYSPAO Category: Improve Health Status and Reduce Health Disparities

Premature deaths: Ratio of Black non-Hispanics to White non-Hispanics#<

Preventable hospitalizations: Ratio of Black non-Hispanics to White non-Hispanics#<

Preventable hospitalizations: Ratio of Hispanics to White non-Hispanics#<

NYSPAO Category: Prevent Chronic Disease

Rate of hospitalizations for short-term complications of diabetes per 10,000 - Aged 6-17 years#<

Rate of hospitalizations for short-term complications of diabetes per 10,000 - Aged 18+ years#<

NYSPAO Category: Promote a Healthy Safe Environment

Assault-related hospitalization: Ratio of Hispanics to White non-Hispanics#<

Assault-related hospitalization: Ratio of low-income ZIP codes to non-low-income ZIP codes<

NYSPAO Category: Promote Healthy Women, Infants and Children

Premature births: Ratio of Hispanics to White non-Hispanics#

Exclusively breastfed: Ratio of Black non-Hispanics to White non-Hispanics

Exclusively breastfed: Ratio of Hispanics to White non-Hispanics#<

Exclusively breastfed: Ratio of Medicaid births to non-Medicaid births#<

Maternal mortality rate per 100,000 live births#<

Adolescent pregnancy: Ratio of Black non-Hispanics to White non-Hispanics

Adolescent pregnancy: Ratio of Hispanics to White non-Hispanics

Percentage of live births that occur within 24 months of a previous pregnancy*<

NYSPAO Category: Prevent HIV/STDs, Vaccine Preventable Diseases and Healthcare Associated Infections

Gonorrhea case rate per 100,000 men - Aged 15-44 years*#<

Chlamydia case rate per 100,000 women - Aged 15-44 years*#

Primary and secondary syphilis case rate per 100,000 men*#

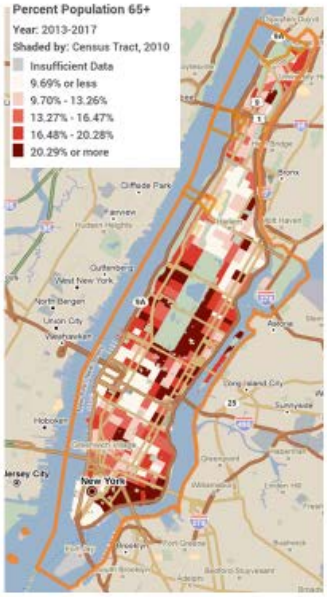
*Significant change # Did not meet NYSDOH Prevention Agenda Objective

< Continued worsening since 2010-2013 Community Health Needs Assessment

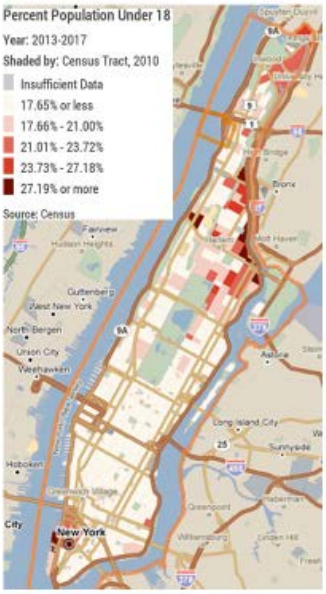
New York County Demographic Profile

Our primary service areas in Manhattan encompass one hospital, across two campuses, Lenox Hill Hospital and Manhattan Eye, Ear, and Throat Hospital, and one free-standing emergency department, Lenox Health Greenwich Village. New York County has a population of 1,642,480 that is 52% female and has an age distribution of 15% aged less than 18 years, 45% aged between 18 and 44 years old, 24% aged 45 to 64, and 16% over 65 years of age.

Manhattan-Estimated Percent of all People 65 or Older



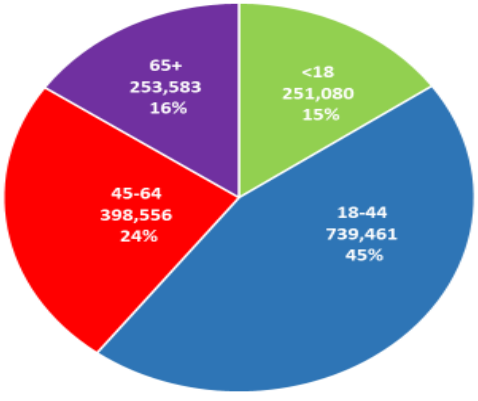
Manhattan-Estimated percent of all people under 18 between 2013-2017



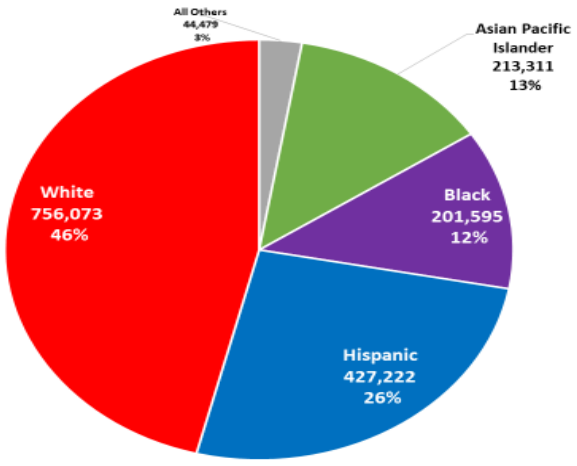
Source: PolicyMap 2018 v 2019:25:11; Census tract

The racial distribution of Manhattan is 46% white, 26% Hispanic, 12% black, and 13% Asian. Approximately 29% of New York County residents are foreign-born and 40% of residents speak a language other than English at home. As shown in the map of foreign-born residents of Manhattan, the population is very diverse.

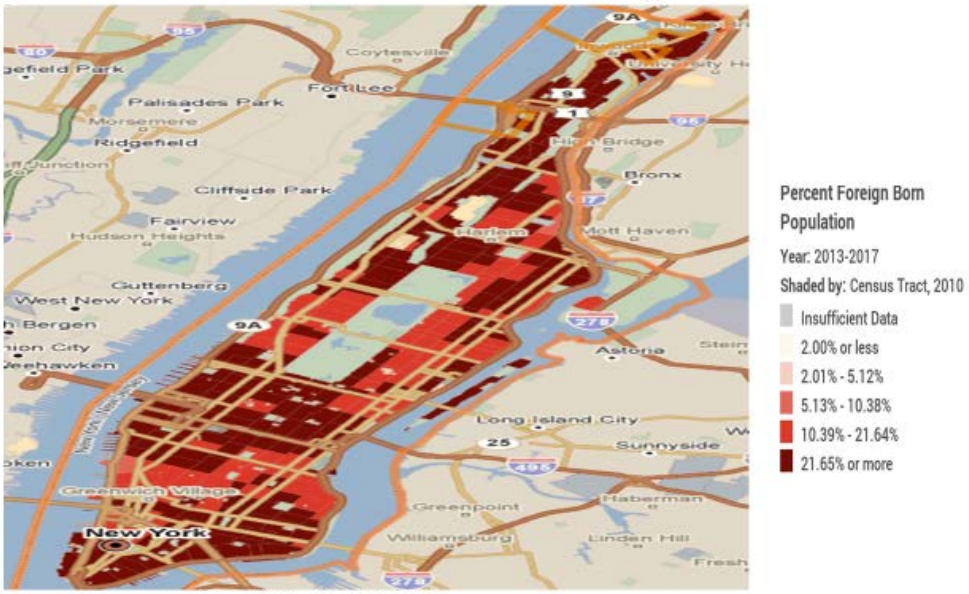
MANHATTAN POPULATION AGE DISTRIBUTION



MANHATTAN RACIAL DIVERSITY



Manhattan-Estimated Percent of all Foreign Born



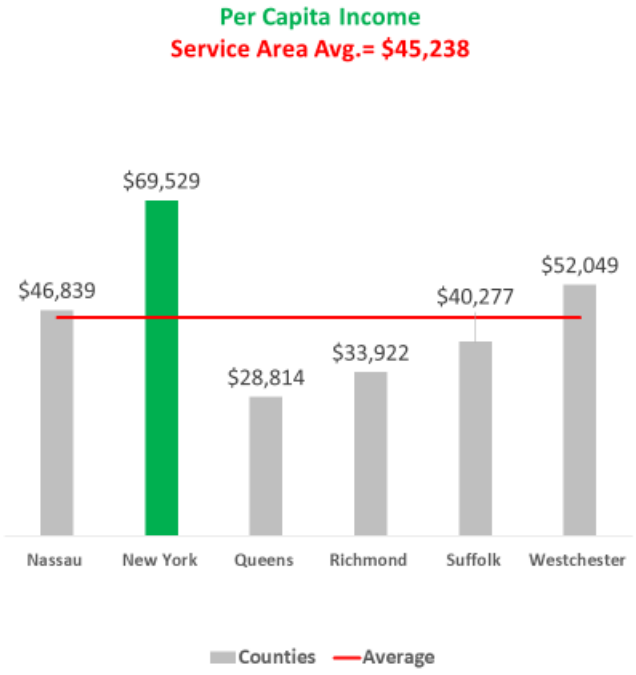
Source: PolicyMap 2018 v 2019:25:11; Census tract

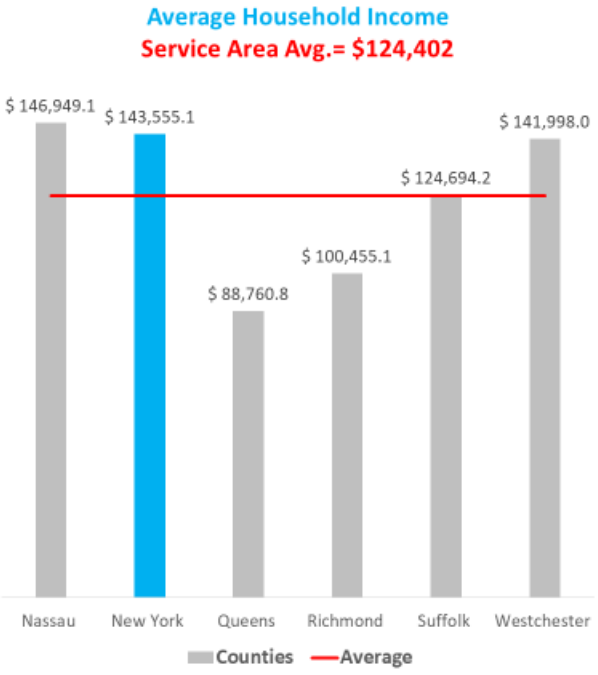
The Hispanic population is the most largely represented minority in New York County. Within the Hispanic population, there are several countries of origin represented. Over half is comprised of Central American, South American, and Spanish subgroups including Dominican, and Puerto Rican followed by Mexican, and Cuban. In addition, there are several countries of origin represented in the Asian population of Manhattan. The breakdown of Asian subpopulations by representation is as follows: Chinese, Asian Indian, Korean, Japanese, Other Asian, Filipino, and Vietnamese.

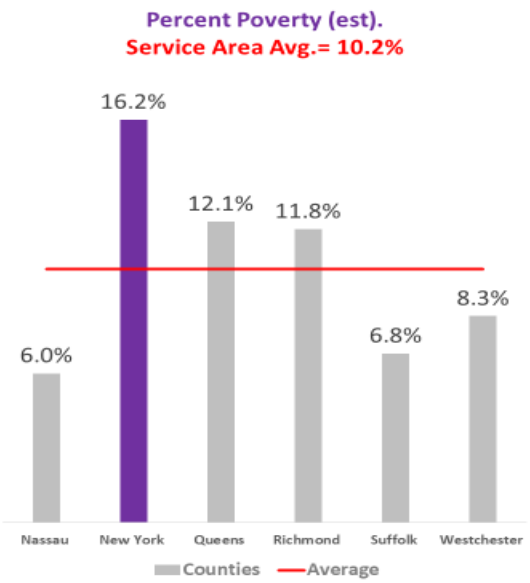
Social Determinant Analysis

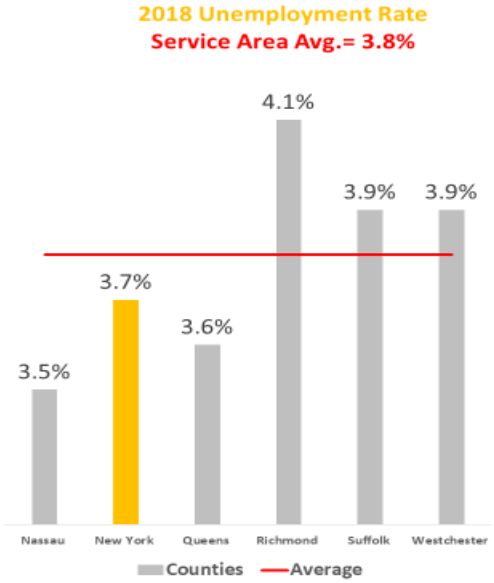
Secondary data on various social determinants of health in New York County analyzed to identify factors that may contribute to the health status of the population of New York County. The results of this analysis are as follows.

The average household income in Manhattan is $143,555 and the per capita income is $69,529. Both of these statistics are above both the service area average with New York having the highest per capita income and the unemployment rate is one of the lowest in the county service areas. The wealth disparity in Manhattan is perhaps better reflected by the poverty rate in the borough. The poverty rate for Manhattan is 16.2%, well above the service area average. Furthermore, among the Manhattan residents living in poverty, some live more than 30% below the federal poverty level as shown in the following map.



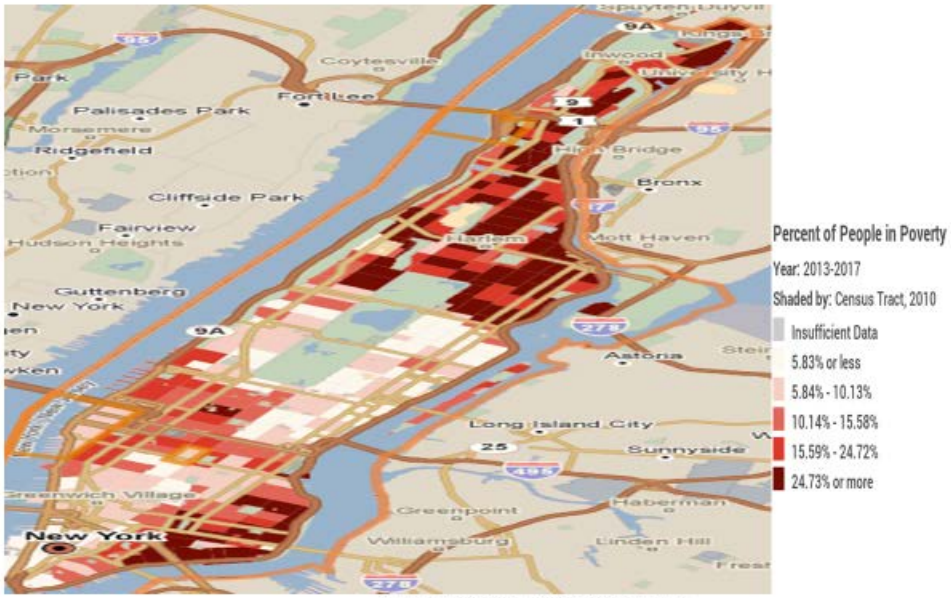






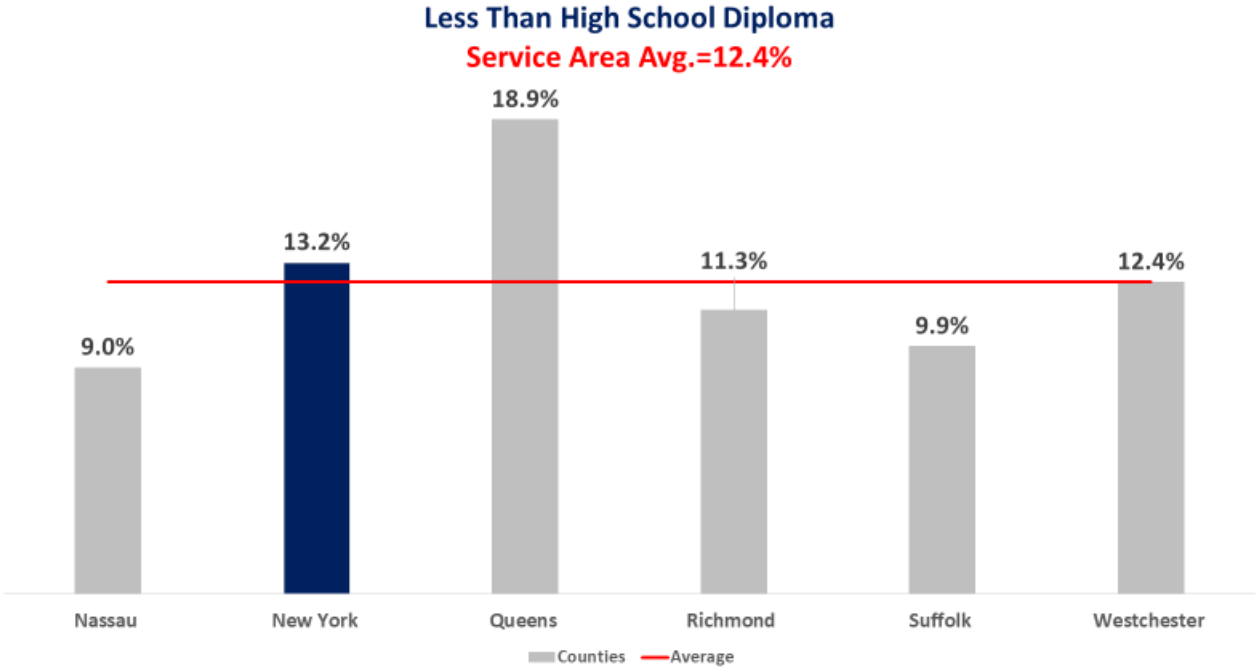
Source: NYCLIW 2018 v 2019.08.12, US Census, dpm

Manhattan-Estimated Percent of all People living in Poverty



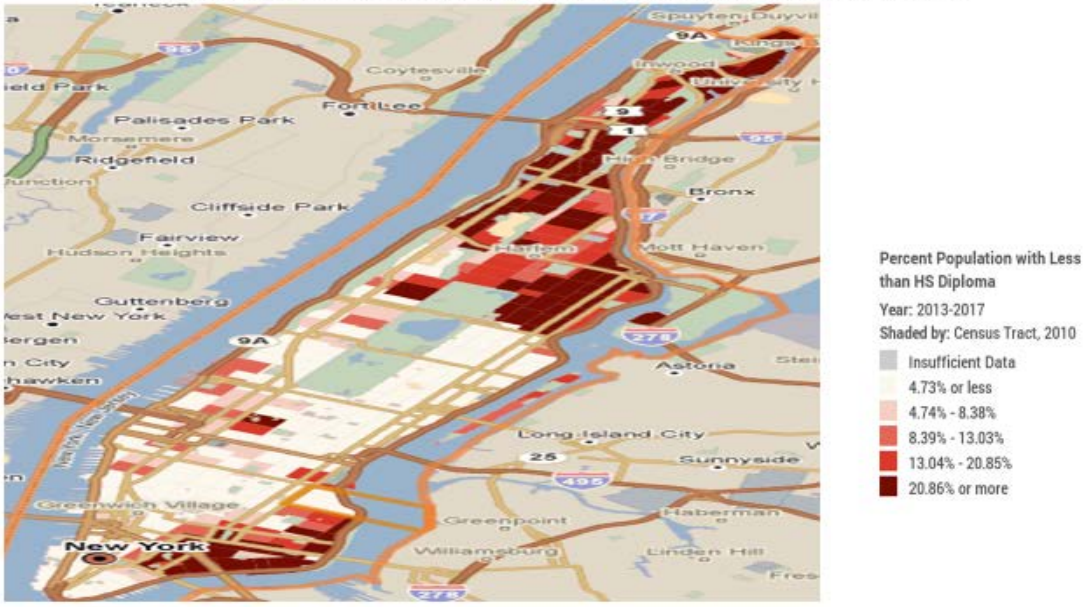
Source: PolicyMap 2018 v 2019:25:11; Census tract

Poverty and unemployment are not the only socioeconomic determinants of health. Educational attainment has perhaps the strongest correlation to health outcomes. In Manhattan, 75.9% of students graduate from high school. However, many areas with increased populations with less thana HS diploma.



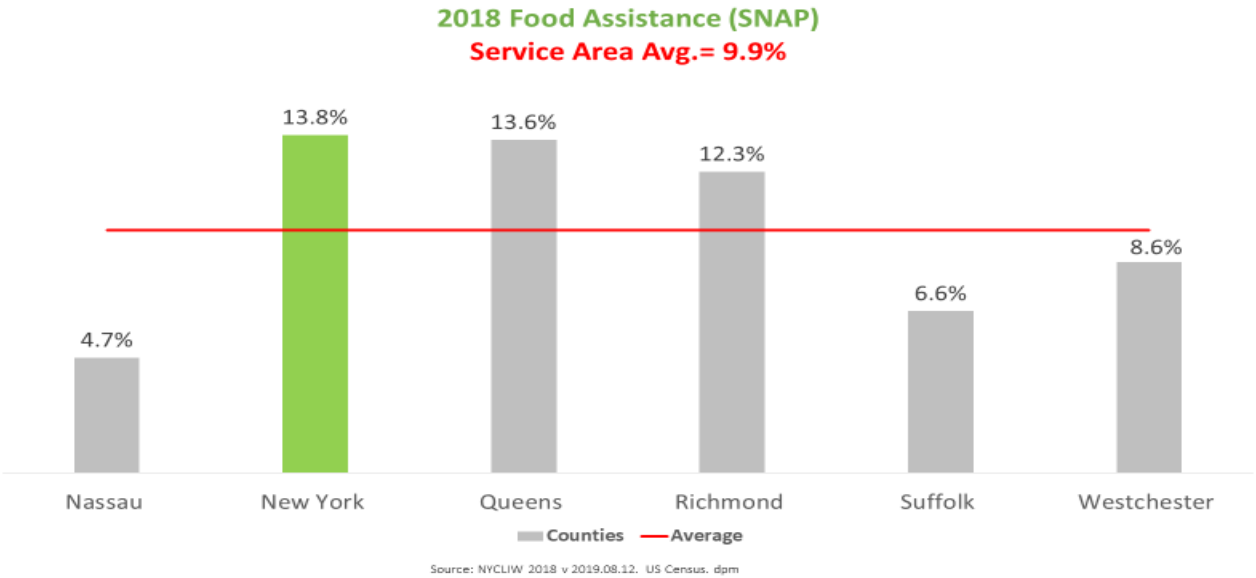
Source: PolicyMap 2018 v 2019.08.12 US Census, dpm

Manhattan-Percent population with less than HS Diploma



Source: PolicyMap 2018 v 2019:25:11; Census tract

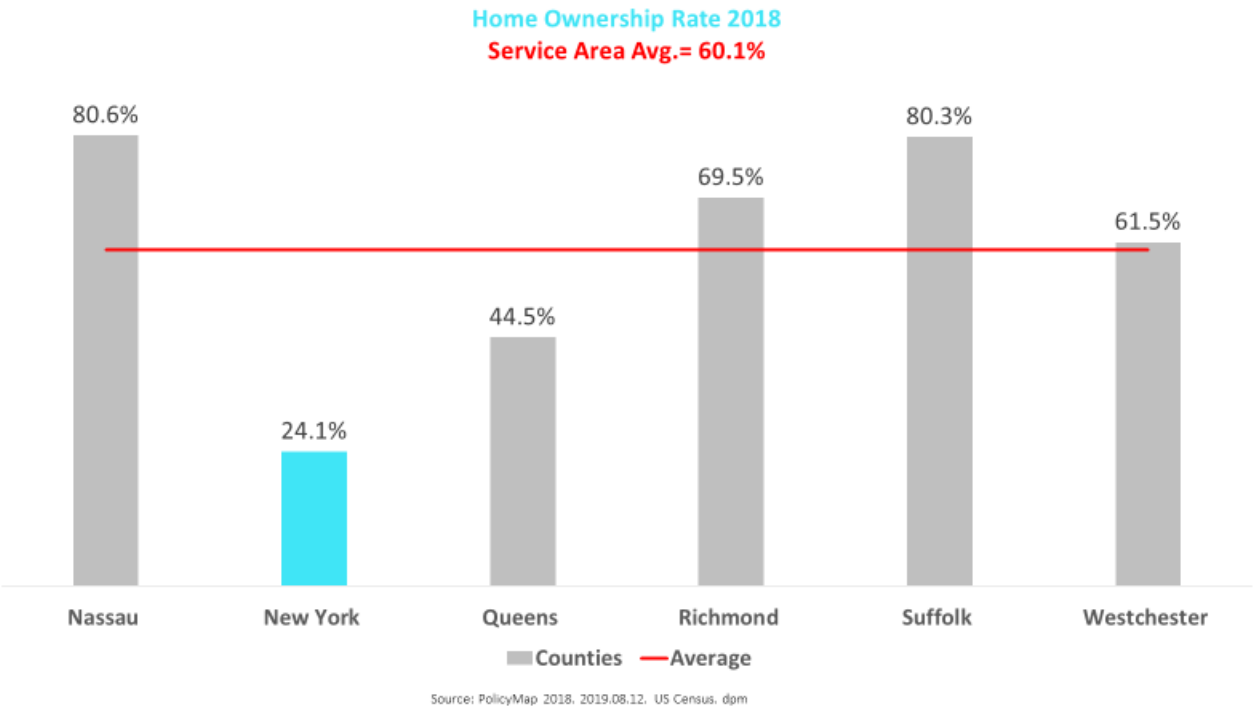
Income and employment greatly impact health in a number of ways, but perhaps the most discernible of those is one's ability to buy food, especially healthful foods. An estimated 15% of the population of Manhattan experiences food insecurity, with approximately 243,570 food insecure individuals living in Manhattan[4]. Approximately 13.8% of Manhattan residents are receiving food assistance (SNAP). This is well above our service area average of 9.9% and, shown in the figure to the right, there is a significant divide in food assistance amongst our counties served. Between 12 and 14% of residents of Manhattan, Staten Island, and Queens receive food assistance while just 4 to 8 % of Long Island and Westchester residents receive food assistance.

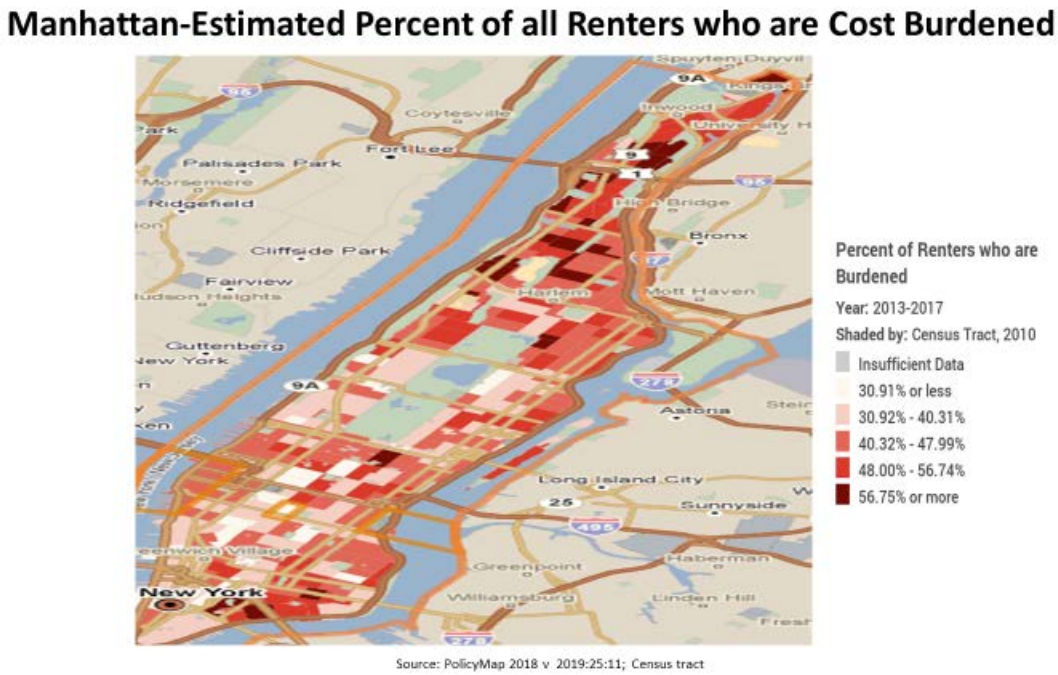


Source: NYCLIW 2018 v 2019.08.12. US Census. dpm

Other contributors to health status include housing security. The home ownership rate in 2018 for New York was 24.1%. However, it is also important to examine rent burden in New York. The U.S. Census

Bureau American Community Survey defines rent burden as the percentage of renter households whose gross rent (rent plus utilities) is greater than 30 percent of their monthly pre-tax income. In New York, we see that there are many communities with significant rent burden which is associated with a lack of affordable housing and homelessness. The following map highlights the Manhattan areas experiencing rent burden.

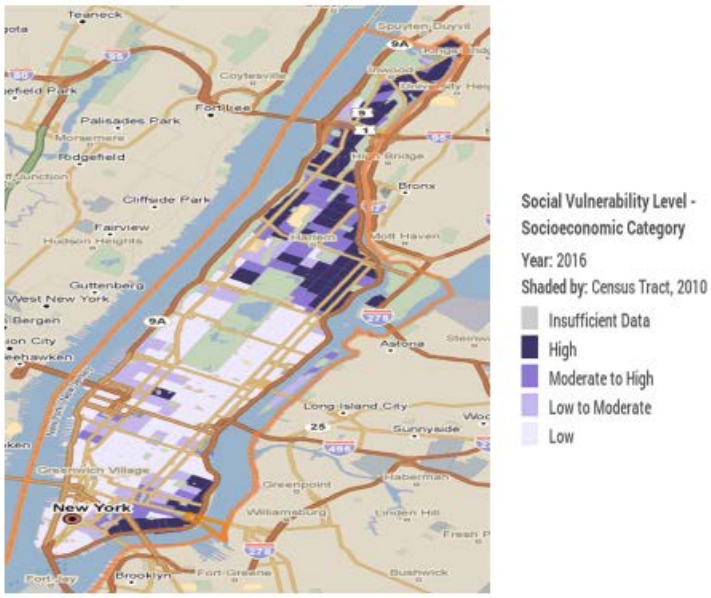




[4] Map the Meal Gap, 2018

Health status is also shaped by a community's social vulnerability which refers to the resilience of communities when confronted by external stresses on human health, stresses such as natural or human-caused disasters or disease outbreaks, reducing social vulnerability can decrease both human suffering and economic loss. The CDC Vulnerability Index uses 15 US Census variables at tract level to help identify communities at risk. Below is the social vulnerability map for Manhattan.

Manhattan-social vulnerability level-socioeconomic category



Source: PolicyMap 2018 v 2019:25:11; Census tract

Primary Data Analysis

To identify community health needs beyond medical health conditions, inspire new dialogues among a cross sector of community-based organizations, develop strategies, and solutions to improve the community health of local communities, Northwell Health organized community-based organization summits in New York, Queens and Richmond Counties. In New York County, Northwell partnered with the Human Services Council of NY to invite community-based social service and behavioral health organizations to participate in small group facilitated discussions to elicit feedback on what community-based organization participants perceived as main health issues and disparities within their respective communities based on New York State Department of Health's Prevention Agenda, the social determinants of health impacting the overall health of communities and strategies to address these issues. The summit was held on June 27, 2019 at the United Jewish Appeal (UJA) Federation of New York in Manhattan. Trained Northwell facilitators led the small group discussions using the Delphi Method to initiate discussions and achieve consensus on priority issues. A comprehensive report, including the methodology, on the Northwell Community Summits can be found in the Appendix.

Analyzing data with a NYS Prevention Agenda lens, the number one priority area across all three counties was Promote Well-Being and Prevent Mental and Substance Use Disorders. Mental health attention and services were a persistent topic of discussion among all groups. Preventing Chronic Diseases was the second leading priority area across all counties. New York County specific results related to barriers to accessing healthcare, strategies to address these barriers and social determinants of health impacting community health are listed in the following tables.

Top barriers to accessing healthcare for the community
Health literacy
Insurance/ Cost of healthcare
Lack of transportation
Lack of healthcare funding

Most Effective Strategies to Address Healthcare Barriers
Integrated healthcare
Affordable insurance coverage
Community partnerships/Engagement
Increased healthcare funding
Health education programs

Top Social Determinants of Health Impacting the Community's Health
Lack of affordable Housing
Health literacy
Food insecurity
Lack of employment opportunities
Better college opportunities
Language barriers

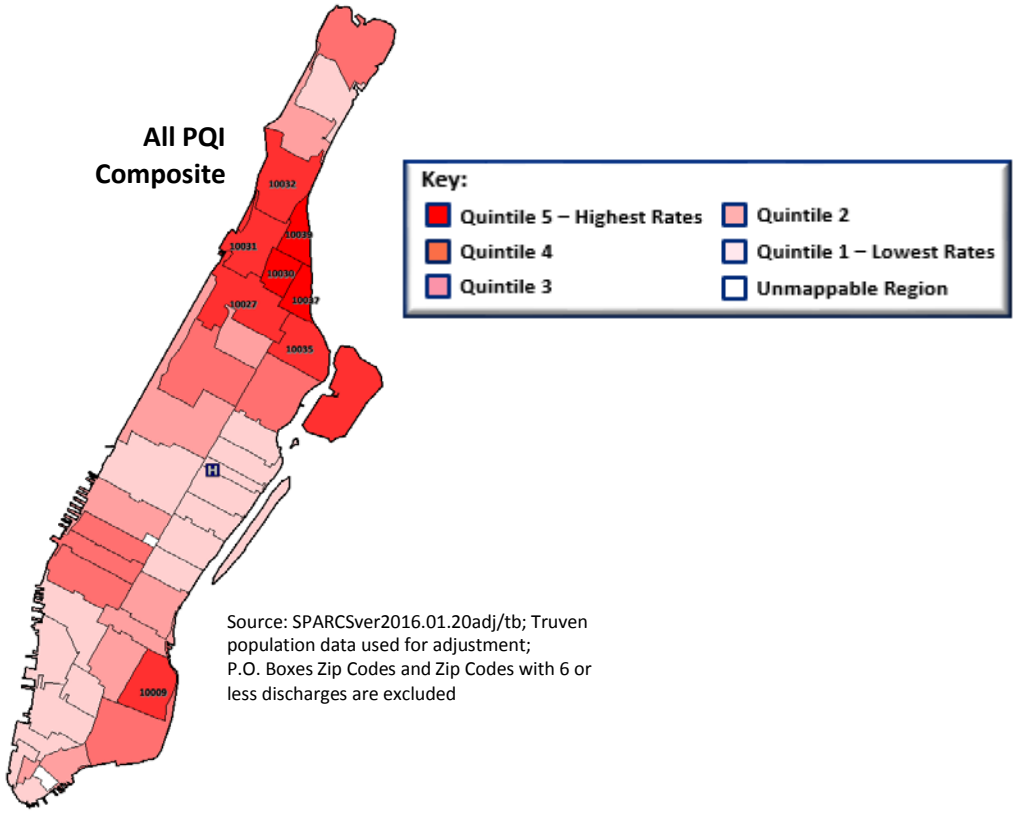
Secondary Data Analysis

As aforementioned, sources of information included SPARCS data[2] (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 data analysis to identify pockets of diminished health in the counties we serve. For PQIs, quintiles are assigned to the data based on their comparative rates of disease per 100,000 population, and we use these quintiles to assess the relative health of different zip codes. The quintiles are arranged 5 to 1 with the 5th quintile containing the highest rates of the targeted PQIs and their associated conditions, while quintile 1 contains the lowest rates.

Prevention Quality Indicator (PQI) Composite

The percentage of premature deaths, defined as before age 65, is 22% lower than the NYS rate and slightly above the NYSPAO. However, there are disparities among racial groups. The premature deaths ratio of Hispanics to White non-Hispanics (1.59) improved and is lower than NYS and the NYSPAO. However, the premature death ratio of Blacks to White non-Hispanics worsened and is on par with NYS and above the NYSPAO. While the New York age-adjusted hospitalization rate for adults significantly declined, the preventable hospitalization ratios of Black non-Hispanics to White non-Hispanics and Hispanics to White non-Hispanics worsened. Of Manhattan's 43 zip codes, a few consistently emerged in PQI quintiles 4 or 5, indicating high rates of disease and poorer health outcomes in those areas. These areas include Inwood and Washington Heights, all of Harlem, and ZCTA 10009 on the Lower East Side. The following map identifies the high risk areas.

[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.

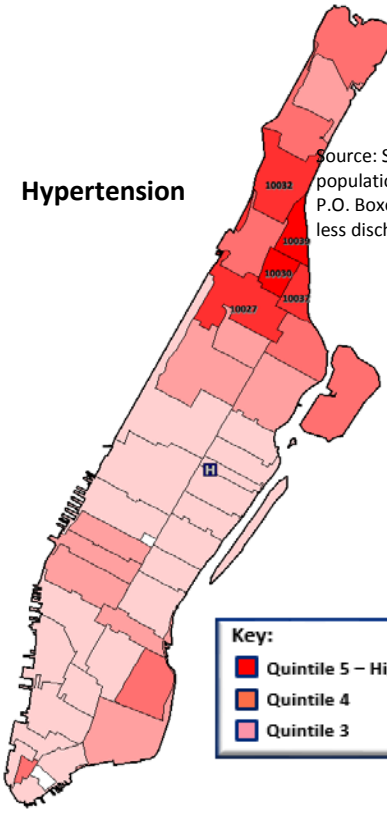


Chronic Disease

To assess chronic disease prevalence in New York County, the county prevalence is compared to New York State (NYS) and in relation to the 2018 NYS Prevention Agenda Objectives (NYSPAO). In addition, communities within the county that have higher prevalence rates than the county average have been identified.

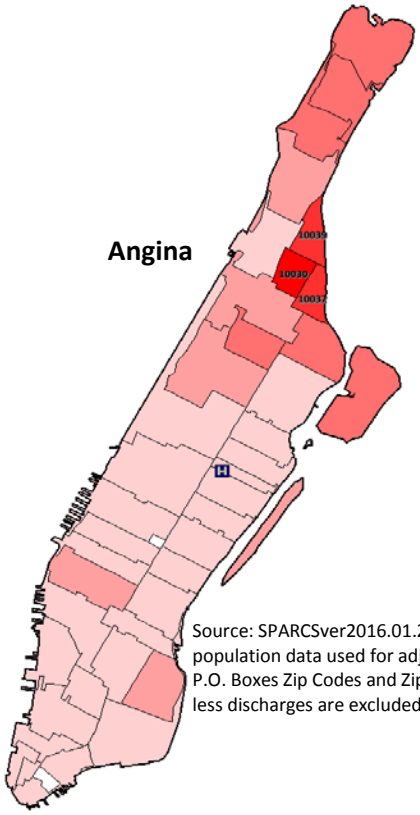
New York County age-adjusted cardiovascular disease, disease of the heart and heart attack mortality rates have significantly declined and are below the NYC and NYS rates. Age-adjusted cardiovascular disease hospitalization rates in Manhattan were below both the NYC and NYS rates. Age-adjusted congestive heart failure hospitalization rates were below than the NYC and NYS rates. Age-adjusted cerebrovascular (Stroke) disease mortality and hospitalization rates were lower than NYC and NYS rates. New York adult hypertension emergency department and hospitalization rates were below the NYC and NYS rates. The age adjusted percentage of adults with physician diagnosed high blood pressure was 19.4 which is below the NYC and NYS rates. Although the county circulatory measures are in most cases better than NYC and NYS, there are areas of health disparities identified in the following maps. Circulatory PQIs had the highest rates in Harlem, Gramercy Park, and Lower Manhattan neighborhoods.

Hypertension



Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment; P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Angina

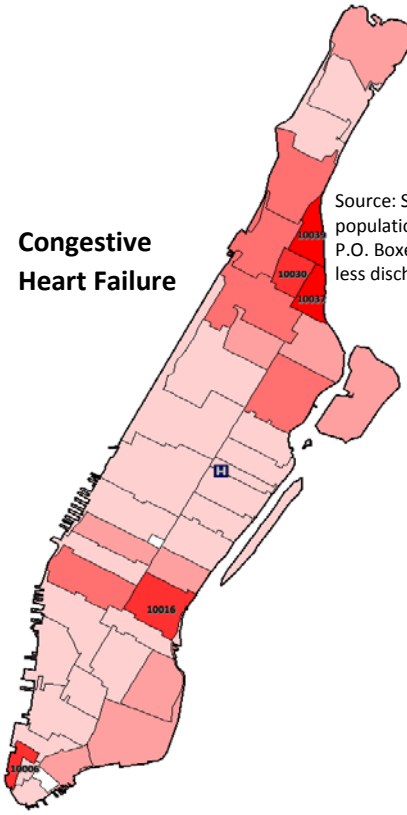


Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment; P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Key:

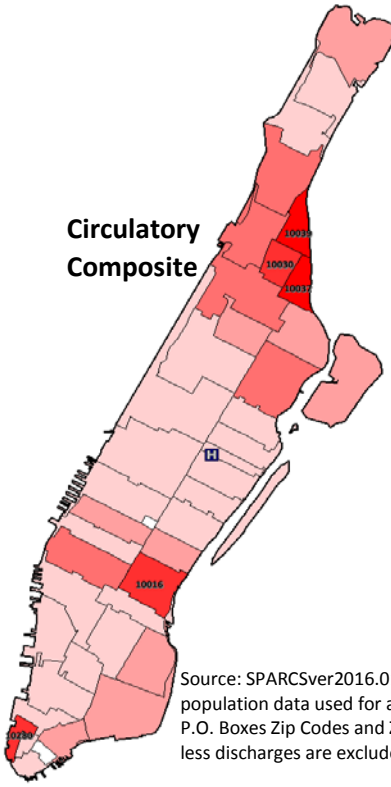
- Quintile 5 – Highest Rates
- Quintile 4
- Quintile 3
- Quintile 2
- Quintile 1 – Lowest Rates
- Unmappable Region

Congestive Heart Failure



Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment; P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Circulatory Composite



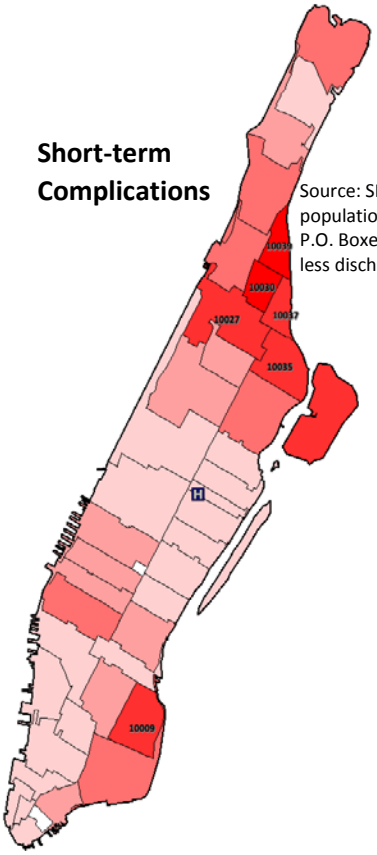
Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment; P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Key:

- Quintile 5 – Highest Rates
- Quintile 4
- Quintile 3
- Quintile 2
- Quintile 1 – Lowest Rates
- Unmappable Region

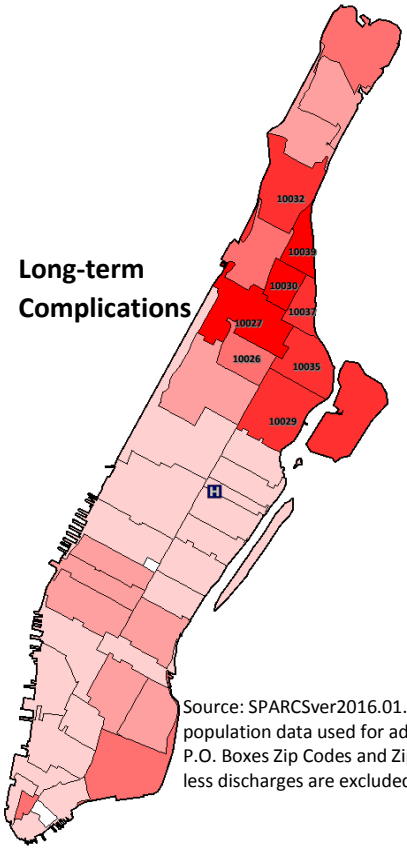
In New York Country, age adjusted percentage of adults with physician diagnosed Diabetes prevalence rate was 8.6%, lower than the NYC and NYS rates. The diabetes short term complication hospitalization rate for children aged 6-17 yrs and adults worsened with the children's rate above the NYS and NYSPAO and the adult rate below the NYS but above the NYSPAO rate. Obesity rates for adults (BMI>30) were 16.1%, below the NYC and NYS rates but 45% of adults are either overweight or obese. Diabetes PQIs had the highest rates in Harlem and Washington Heights.

Short-term Complications



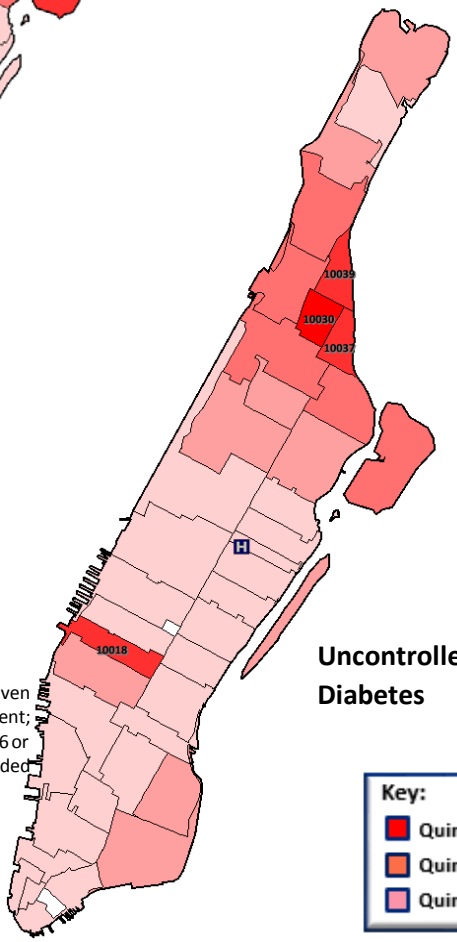
Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment; P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Long-term Complications



Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment; P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Uncontrolled Diabetes



Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment; P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Key:

- Quintile 5 – Highest Rates
- Quintile 4
- Quintile 3
- Quintile 2
- Quintile 1 – Lowest Rates
- Unmappable Region

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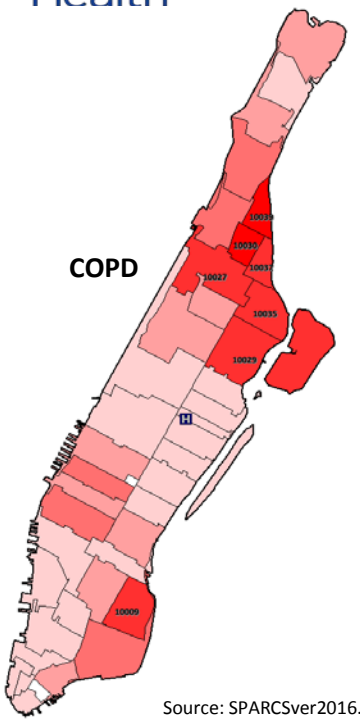
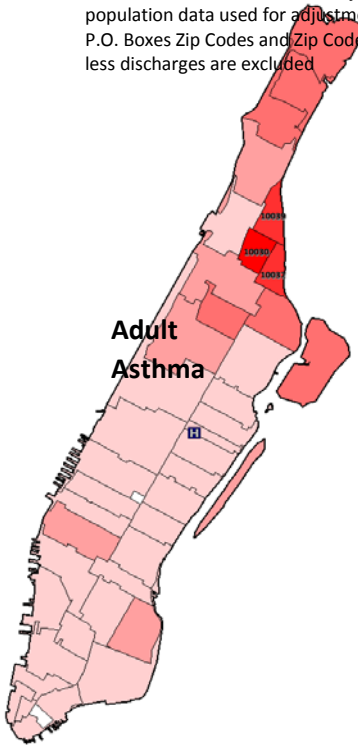
Age- adjusted chronic lower respiratory disease hospitalizations rate per 10,000 in New York County was 24.9, below the NYC and NYS rates. Harlem and the Lower East Side had the highest rates of Chronic Obstructive Pulmonary Disease. Adult asthma rate is 8.8% similar to NYC and emergency department visit rates were well above NYS and NYSPAO rates but children (0-4 yrs.) asthma emergency department visit rates significantly declined but are still above NYS and NYSPAO rates. Manhattan has higher fine particulate matter levels on average than other boroughs.

COPD



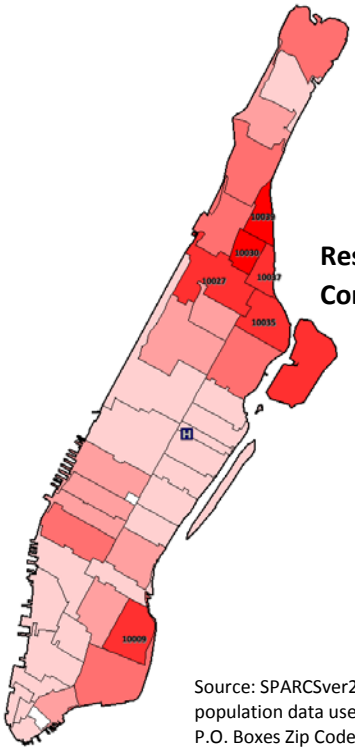
Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment;
P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Adult Asthma



Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment;
P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Respiratory Composite



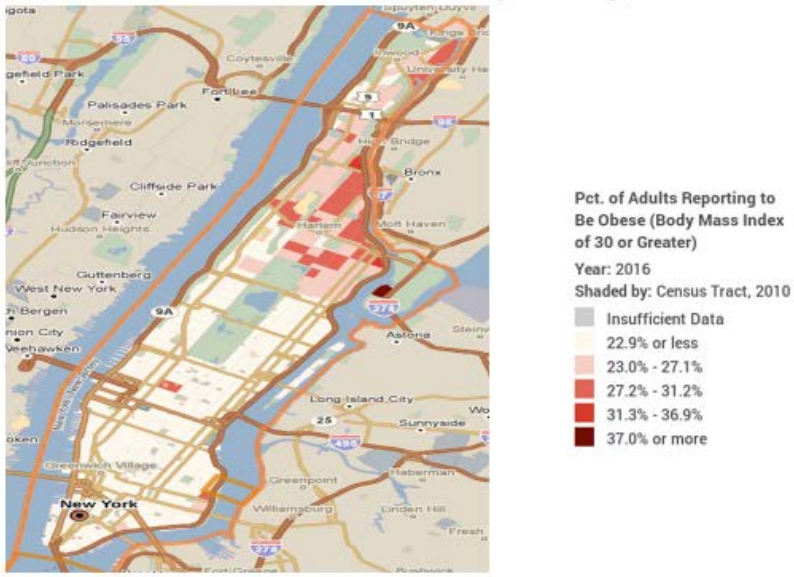
Source: SPARCSver2016.01.20adj/tb; Truven population data used for adjustment;
P.O. Boxes Zip Codes and Zip Codes with 6 or less discharges are excluded

Key:

- Quintile 5 – Highest Rates
- Quintile 4
- Quintile 3
- Quintile 2
- Quintile 1 – Lowest Rates
- Unmappable Region

Lifestyle data including nutrition, physical activity and smoking rates are major factors in the prevention and management of chronic disease. Approximately 80.2% of Manhattan adults report that they are engaged in some type of leisure time physical activity which is above both the NYS rate (73%) and the NYSPAO target of 80% but 1 in 5 do not participate in leisure time physical activity. Almost 1/3 of Manhattan residents report that they eat less than 1 serving of fruit or vegetable per day. In addition, the adult smoking rate has significantly declined to 9.6%, but adolescent vaping and e-cigarette use is on the rise. certain Manhattan neighborhoods have relatively high rates of smoking when compared to other areas of New York City. Harlem and East Harlem as well as Lower Manhattan have smoking rates in the upper two quartiles designated by the NYC DOH Community Health Profiles study.

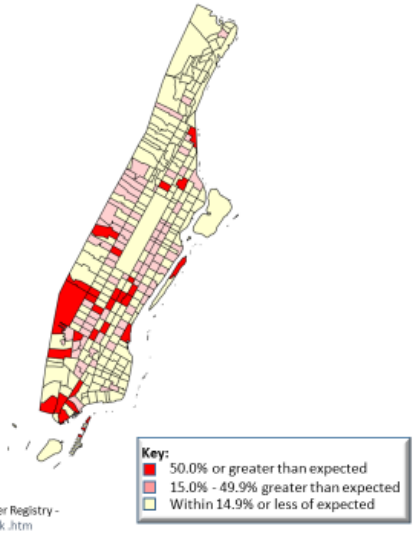
Manhattan-estimated percent of adults reporting to be obese



Manhattan age-adjusted all cancer incidence and cancer mortality rates (461/135) were below NYS (485/149) but the cancer incidence is above the NYC rate. Age-adjusted colon and rectum incidence and mortality rates are below the NYC and NYS rates. Age-adjusted female breast cancer incidence rates significantly increased, late stage incidence is unchanged, and both are above NYC and NYS rates. Percentages of women 50-74 receiving breast cancer guideline screening (78%) were on par with NYC and NYS. Similar age women receiving mammograms between 10.14 and 12.16 (75%) were above NYC and NYS percentages. Breast Cancer PQIs were higher in the areas identified in the following map. Age-adjusted cervix uteri cancer incidence rate (12.8) was less than NYC and on par with NYS. The percentage of women ages 21-65 yrs. receiving cervical cancer screening based on 2010 guidelines was 79% on par with NYC but below NYS. Age-adjusted prostate cancer incidence rate significantly declined and is below NYC and NYS rates and prostate cancer mortality rates are on par with NYC and above NYS. Age-adjusted prostate cancer late stage incidence rate (28.2) is above NYC (23.2) and NYS (25.2) rates. Prostate cancer rates were highest in the areas identified in the following map. Age-adjusted lung and bronchus cancer incidence and mortality rates are on par with NYC and below NYS and areas with increased PQIs are highlighted on the following map. Age-adjusted colon and rectum cancer mortality was below NYC and NYS levels. The percentage of adults, ages 50-75yr, , receiving colorectal cancer screening was 67.7% below the NYS(68.5%) and NYSPAO (80%).

New York County Breast Lung Cancer Incidence
Observed vs. Expected Cases (2010- 2014)*

New York County Breast (Female) Cancer Incidence
Observed vs. Expected Cases (2010- 2014)*



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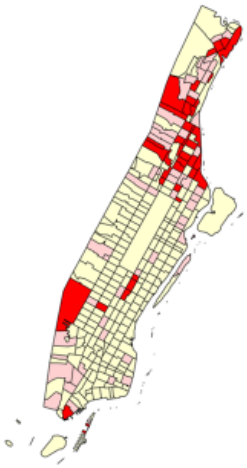
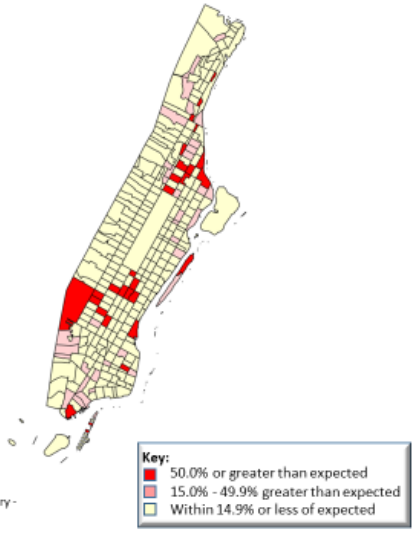
Source: New York State Department of Health, New York State Cancer Registry - https://www.health.ny.gov/statistics/cancer/registry/tract/New York .htm

New York County Colorectal Cancer Incidence
Observed vs. Expected Cases (2010- 2014)*



New York County Colorectal Cancer Incidence
Observed vs. Expected Cases (2010- 2014)*



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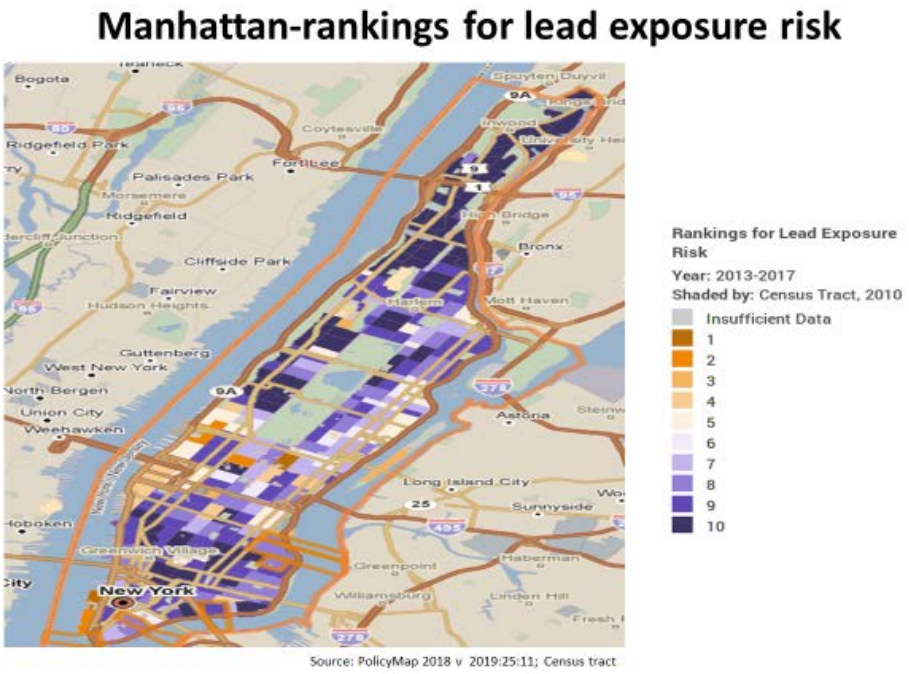
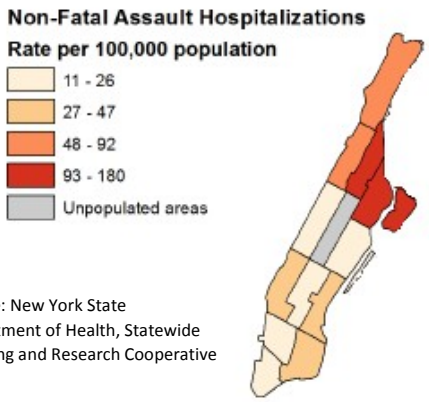
Source: New York State Department of Health, New York State Cancer Registry - https://www.health.ny.gov/statistics/cancer/registry/tract/New York .htm

Healthy Safe Environment

To assess preventable injury prevalence in New York County, the county prevalence is compared to New York State (NYS) and in relation to the 2018 NYS Prevention Agenda Objectives (NYSPAO). Fall-related hospitalization and emergency department rates for Manhattan residents aged 65+ years (per 10,000) significantly declined. Fall hospitalization rates are on par with NYS and below the NYPAO. In addition, pediatric (0-4yrs) falls related emergency department visit rate declined significantly and is below the NYS and slightly above the NYSPAO. East Harlem South one of the top 5 neighborhoods with the highest older adult falls related emergency department visit rate. in New York City rates were present in Upper East Side neighborhoods, as well as Gramercy Park, Murray Hill and Battery Park City. Lead exposure is also an environmental hazard with health impacts. The following map identifies areas with increased exposure.



Air quality also plays a prominent role in health status, especially when it comes to respiratory outcomes like childhood or adult asthma. According to NYC Neighborhood Health Atlas, Manhattan had by far the worst air quality of the boroughs, with an average of 8.9 micrograms of fine particulate matter per cubic meter. Midtown-Midtown South, Turtle Bay-East Midtown, Murray Hill-Kipps Bay, Gramercy and Hudson Yards -Chelsea-Flat Iron-Union Square had the top five highest fine particulate matter in the city.



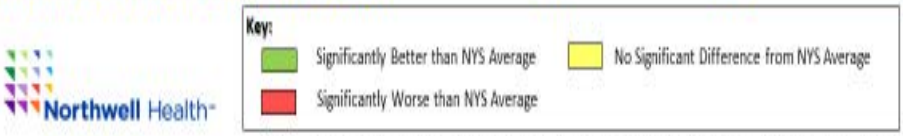
Source: New York State Department of Health, Statewide Planning and Research Cooperative

Finally, neighborhood safety also plays an important role in one's ability to achieve and maintain good health. The rate of non-fatal assault hospitalizations in a neighborhood speaks to its relative safety and whether or not residents may feel comfortable walking, biking, or otherwise exercising outside. Manhattan assault related hospitalization rate as well as the assault related hospitalization ratio of Black non-Hispanic to White non- Hispanics but both are still above the NYS and NYSPAO rates. The assault related hospitalization rate ratio of Hispanics to White non-Hispanics increased and is above the NYS and NYSPAO rates. Assault related hospitalization ratio of low income ZIP codes to non-low-income ZIP codes also increased but is below NYS and NYSPAO rates. Central Harlem North-Polo Grounds and East Harlem have double the Manhattan rates of non-fatal assault hospitalization.

Below is a table outlining NYS Department of Health Injury Data for Manhattan from 2014-2016, color-coded by whether or not the metric was significantly better than, significantly worse than, or comparable to the NYS average

NYS Department of Health Injury Data – Manhattan (2014 – 2016)

CHIRS Indicators	2016 Total	New York County Rate	NYS Rate	Significant Difference
Falls hospitalization rate per 10,000				
Crude rate per 10,000	5,542	33.7	38.2	Yes
Age-adjusted rate per 10,000	5,542	29.5	32.2	Yes
Aged <10 years	103	7	7.4	No
Aged 10-14 years	38	6.5	4.5	No
Aged 15-24 years	95	5.1	4.8	No
Aged 25-64 years	1,319	13.1	17	Yes
Aged 65-74 years	983	71.9	73.8	No
Aged 75-84 years	1,321	181.3	203.3	Yes
Aged 85 years and older	1,683	473	534.4	Yes
Poisoning hospitalization rate per 10,000				
Crude rate per 10,000	1,347	8.2	7.2	Yes
Age-adjusted rate per 10,000	1,347	7.7	6.9	Yes
Motor vehicle mortality rate per 100,000				
Crude rate per 100,000	125	2.5	5.7	Yes
Age-adjusted rate per 100,000	125	2.3	5.3	Yes
Non-motor vehicle mortality rate per 100,000				
Crude rate per 100,000	986	20	27.3	Yes
Age-adjusted rate per 100,000	986	18.2	24.9	Yes
TBI hospitalization rate per 10,000				
Crude rate per 10,000	1,276	7.8	8.3	Yes
Age-adjusted rate per 10,000	1,276	7.1	7.6	No
Alcohol-related motor vehicle mortality rate per 100,000				
Crude	702	14.3	29.9	Yes
Suicide mortality rate per 100,000				
Crude rate per 100,000	392	8	8.4	No
Age-adjusted rate per 100,000	392	7.3	8	Yes
Aged 15-19 years rate per 100,000	11	5.2	5	No



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Source: https://webbit.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ct&cos=60

Healthy Women, Infants, and Children

To assess the prevalence conditions related to the health of women, infants and children in New York County, the county prevalence is compared to New York State (NYS) and in relation to the 2018 NYS Prevention Agenda Objectives (NYSPAO). County maternal mortality rates are still above NYS and the NYSPAO. The mortality rate per 1000 live births defined as fetal death (20 weeks gestation or more) significantly declined below NYS and on par with the NYSPAO rates. The percentage of births delivered by cesarean section significantly declined and is on par with NYC and NYS. The percentage of very low and low birthweight births also significantly declined. The percent of women receiving first trimester prenatal care including women enrolled in WIC significantly improved and is on par with NYC

and NYS rates. The percentage of women receiving adequate prenatal care significantly improved and is above NYC and NYS rates. The percentage of women receiving late or no prenatal care is 5% for the county but Harlem had the highest rates of severe maternal morbidity and preterm births. Premature birth ratio of Black non-Hispanics to White non-Hispanics rate improved but the same ratio of Hispanic to White non-Hispanics worsened. The percentage of who were pre-pregnancy overweight or obese significantly increased to 1 in 4 women. The percentage of WIC enrolled pregnant women with gestational weight gain greater than ideal significantly increased to 40%; however, the percentage of the same population with gestational diabetes and hypertension during pregnancy declined with gestational diabetes below NYC and NYS rates and hypertension above NYC but below NYS rates. Delivery hospital breast feeding practices significantly improved surpassing and/or meeting NYC and NYS rates. However, the rates of hospital exclusively breastfed infants of Black non-Hispanics to White non-Hispanics, Hispanics to White non-Hispanics and Medicaid births to non-Medicaid births worsened. The percent of obese children (ages 2-4 years) enrolled in WIC significantly declined as well as their TV viewing time.

Below is a table outlining NYS Department of Health Birth-related Statistics for Manhattan from 2014-2016, color-coded by whether or not the metric was significantly better than, significantly worse than, or comparable to the NYS average.

NYS Department of Health Birth-related Statistics – Manhattan (2014 – 2016)

CHIRS Indicators	3-Year Total 2014-2016	New York County Rate	NYS Rate	Significant Difference
Percentage of Births				
% births to women aged 25 years and older without a high school education	3,615	7.7	12.8	Yes
% births to out-of-wedlock mothers	16,058	30.2	39.3	Yes
% births that were multiple births	2,337	4.4	3.7	Yes
% early (1st trimester) prenatal care	41,526	78.9	75.2	Yes
% births with late (3rd trimester) or no prenatal care	2,655	5	5.6	Yes
% births with adequate prenatal care	39,835	76.8	74	Yes
WIC Indicators				
% pregnant women in WIC with early (1st trimester) prenatal care	30,491	85.1	86.5	Yes
% pregnant women in WIC with gestational weight gain greater than ideal	13,238	40.1	41.7	Yes
% pregnant women in WIC with gestational diabetes	1,708	5.1	5.5	Yes
% pregnant women in WIC with hypertension during pregnancy	2,146	6.4	7.1	Yes
% WIC infants breastfeeding at least 6 months	3,864	39.5	40.3	No
% infants fed any breast milk in delivery hospital	45,992	94.8	87.3	Yes
% infants fed exclusively breast milk in delivery hospital	24,187	49.8	45.2	Yes
% births delivered by cesarean section	17,541	33	33.5	Yes
Mortality Rate Per 1,000 Live Births				
Infant (<1 year)	193	3.6	4.5	Yes
Neonatal (<28 days)	129	2.4	3.1	Yes
Post-neonatal (1 month to 1 year)	64	1.2	1.5	No
Maternal mortality rate per 100,000 live births	14	26.3	20.4	No
Low Birth Rate Indicators				
% very low birthweight (<1.5 kg) births	655	1.2	1.4	Yes
% very low birthweight (<1.5kg) singleton births	418	0.8	1	Yes

Key:
- Significantly Better than NYS Average
- No Significant Difference from NYS Average
- Significantly Worse than NYS Average

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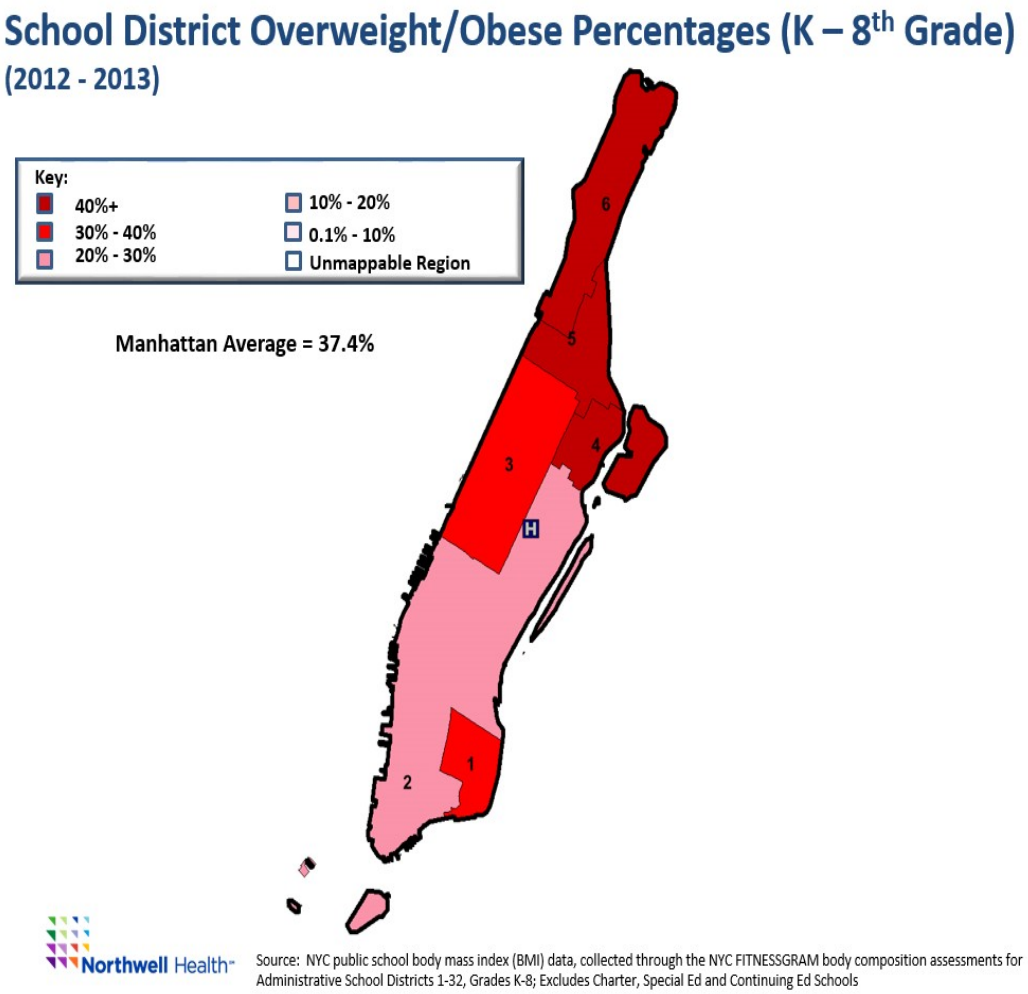
Source: https://webbit.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ct&cos=60

Pediatric Obesity

Many chronic conditions have their roots in pediatric obesity. Diabetes, cardiovascular disease, cancer, orthopedic conditions, pulmonary disease and gastrointestinal disease are co-morbidities of obesity. Currently, Type 2 Diabetes is the most common form of diabetes diagnosed in adolescents. The NYSDOH has required school districts to measure and report body mass index, a measure of obesity using a person's height and weight, in order to identify overweight and obesity in the school aged children and adolescents. The following maps identify the prevalence of overweight and obesity in geographic areas based on school districts. The school districts with over 40% of children and adolescents classified as overweight or obese are:

Manhattan School Districts with 40% of Students Classified as Overweight or Obese: 4, 5, 6

Manhattan School Districts with 30% of Students Classified as Overweight or Obese: 1, 3



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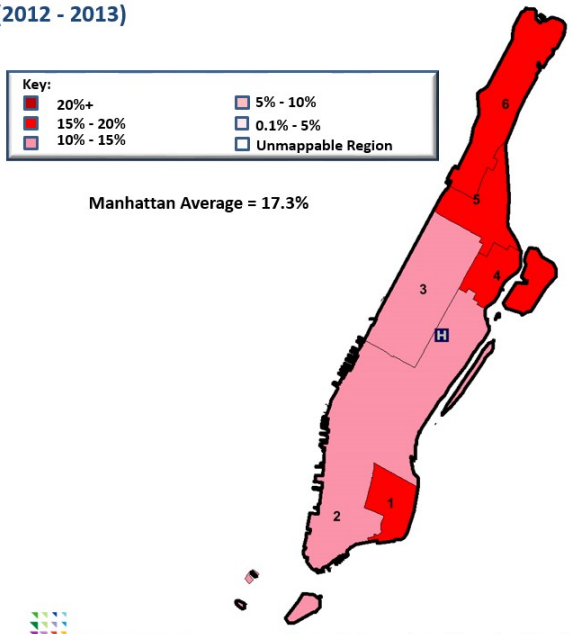
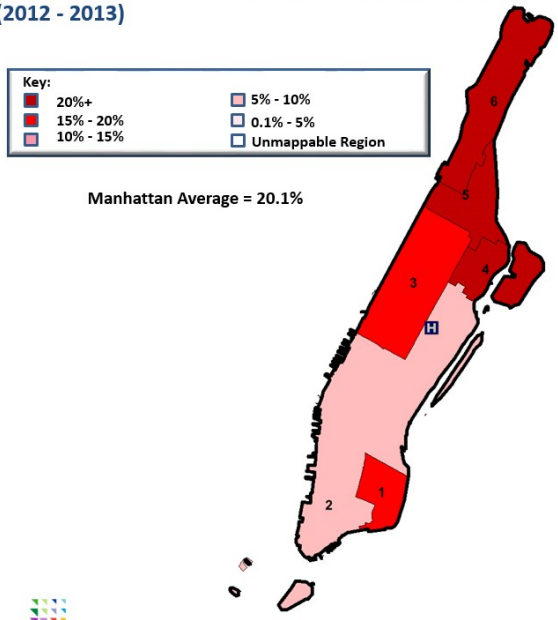
School District Overweight Percentages (K – 8th Grade)
(2012 - 2013)

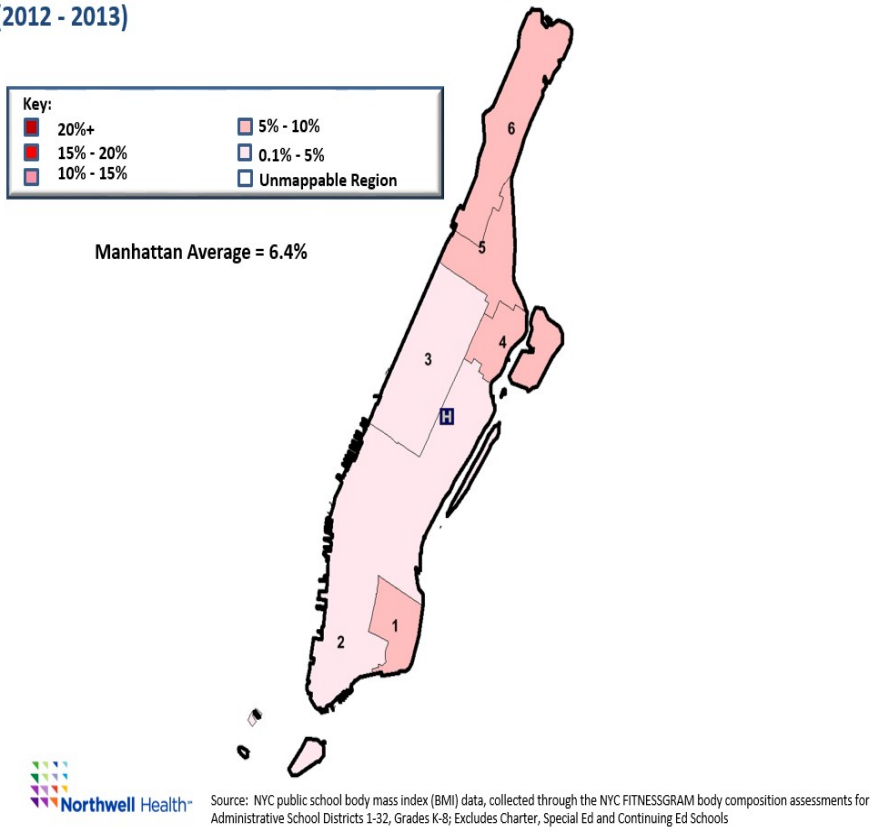


Northwell Health™ Source: NYC public school body mass index (BMI) data, collected through the NYC FITNESSGRAM body composition assessments for Administrative School Districts 1-32, Grades K-8; Excludes Charter, Special Ed and Continuing Ed Schools

School District Obese Percentages (K – 8th Grade)
(2012 - 2013)



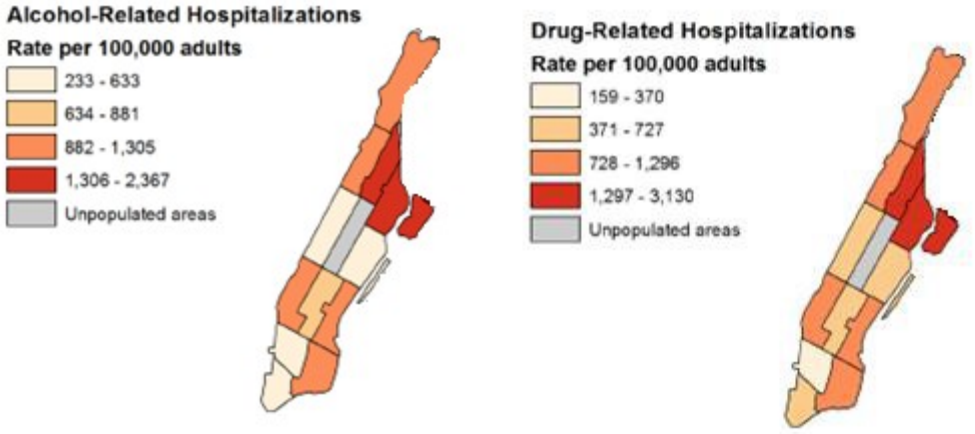
Northwell Health™ Source: NYC public school body mass index (BMI) data, collected through the NYC FITNESSGRAM body composition assessments for Administrative School Districts 1-32, Grades K-8; Excludes Charter, Special Ed and Continuing Ed Schools



Mental Health and Substance Abuse

To assess the prevalence of mental health disorders and substance abuse in New York County, the county prevalence is compared to New York State (NYS) and in relation to the 2018 NYS Prevention Agenda Objectives (NYSPAO). The suicide rate (per 100,000) decreased for New York County to 7.3, lower than the NYS rate (8), it was greater than the NYSPAO of 5.9. The percent of Manhattan adults reporting 14 or more days with poor mental health in the last month was 9.8% compared to NYS (10.7%) and approaching the NYSPAO of 10%. PQI data for mental health emergency department visits showed increased rates in East Harlem, Chelsea and Murray Hill. New York County's rate of binge drinking is 22.4%, above both the NYS (18.3%) and above the NYSPAO of 18.4%. PQI data for substance abuse emergency department visits showed increased rates in those same neighborhoods of East Harlem, Chelsea and Murray Hill. The crude rate of overdose deaths involving any opioid and overdose deaths from synthetic opioids other than methadone significantly increased on par with NYC rates but below NYS rates. Rates for opioid burden and hospital discharges and emergency department visits involving opioid abuse, dependence and unspecified use were all above the NYC and NYS rates. New York opioid and heroin death rates were higher than any other state and rose by 2000% from heroin which prompted a NYS Opioid Prescription Monitoring Program*. The number of provider opioid analgesics prescriptions significantly decreased. Prescribing buprenorphine for substance use disorders significantly declined. Benzodiazepine prescription significantly improved as well.

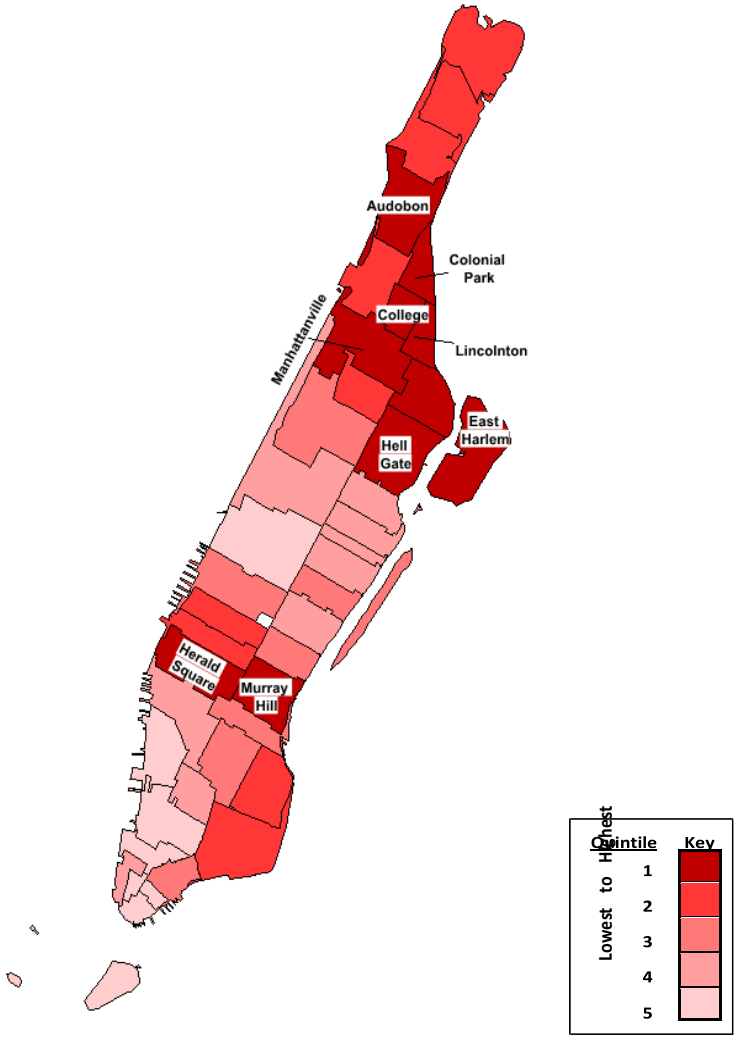
*Prescription Opioid Abuse and Heroin Addiction in New York State. Report from Office of NYS Comptroller. (June 2016) https://www.osc.state.ny.us/press/releases/june16/heroin_and_opioids.pdf



Source: New York State Department of Health, Statewide Planning and Research Cooperative System, 2011-2013

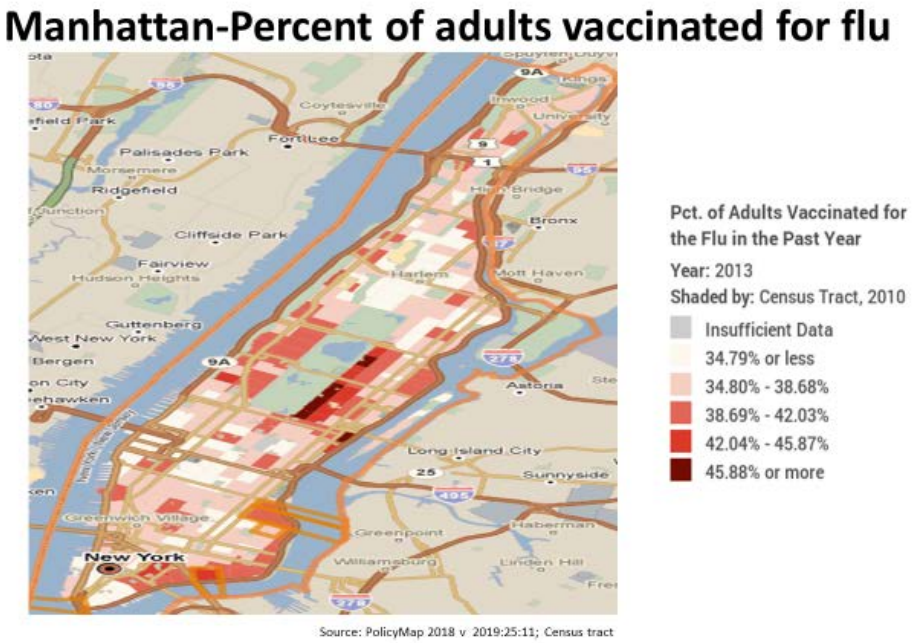
This data was also supported by the analysis of serious mental illness in Manhattan. The calculation of serious mental illness rates first required establishing a definition of all behavioral health diagnoses that qualify as a Serious Mental Illness (SMI). After review of scholarly and regulatory research, it was determined that the definition most relevant and applicable was New York State's Office of Mental Health's (OMH) DSM4-R/ICD-9 diagnoses codes for Serious Mental Illness, a criteria used to determine eligibility for Health Home services for Medicaid recipients. CMS General Equivalency Mappings (GEMs) were applied to crosswalk all ICD-9 diagnoses codes to find their ICD-10 equivalents. The updated definition was then applied to NYS DOH Statewide Planning and Research Cooperative Systems, (SPARCS) claims based data source. The definition was used to analyze all inpatient admissions within Northwell Health's service area counties, with a principle diagnoses code defined as an SMI for the full years of 2014-2015. The data was stratified by patient origin (county and zip code), gender and age-group. Adjusted rates were calculated after stratifying both inpatient volumes and US census based population estimates (sourced from Truven Health Analytics) by patient origin (county and zip), gender, and age-group. An average county-level rate was calculated and used as a benchmark comparison when analyzing at the zip-code level. The adjusted rates per zip-code, per county, were then ranked into quintiles, and visualized using MapInfo, a geo-spatial software program. While the analysis is indicative of a density of patients and cases and can add value in future planning and community health initiatives, it is not without its limitations. The primary limitation of the analysis is that it is far from comprehensive, restricted to just claims-based data looking at inpatient admissions based on a principle diagnoses of SMI. However, its value is in its ability to provide a relational understanding in terms of neighborhoods and communities with the highest rates of SMI.

The county rate of Serious Mental Illness (SMI) in Manhattan was 469.1 per 100,000 population. The highest rates of SMI were found in the Central and East Harlem communities. Zip code 10035, East Harlem, had the highest rate in all of Manhattan, with a total of 1,795 per 100,000 population. Other areas exhibiting high rates include Audobon, College, Colonial Park, Hell Gate, Herald Square, Lincolnton, Manhattanville, Murray Hill and Triborough.



HIV, STDs, Vaccine-Preventable Diseases & Health Care-Associated Infections

To assess the prevalence of HIV, STDs. Vaccine-Preventable Diseases & Health Care-Associated Infections in New York County, the county prevalence is compared to New York State (NYS) and in relation to the 2018 NYS Prevention Agenda Objectives (NYSPAO). The age-adjusted New York County's newly diagnosed HIV case rate (per 100,000) as well as the difference in rates (Black and White) and (Hispanic and White)declined significantly. The overall HIV newly diagnosed and difference in rates Black and White were still well above the NYS and NYSPAO. The top 5 neighborhoods with increased case rates were in Manhattan (Clinton, Hudson Yards-Chelsea-Flat Iron-Union Square, Central Harlem North- Polo Grounds, Central Harlem South and Manhattanville). The New York County men's ages 15-44 years Gonorrhea case rate (per 100,000) significantly increased 1250, also critically higher than the NYS rate (452) and the NYSPAO (199). The women's ages 15-44 years Chlamydia case rate significantly increased on par with NYS but above the NYSPAO. The men's primary and secondary syphilis case rate (91) significantly increased above NYS (24) and NYSPAO (10). The Mumps incidence significantly increased almost double the NYC and triple the NYS rates. The tuberculosis case rate (per 100,000) for New York County significantly improved to 4.7, above the NYC but above the NYSPAO rates. The flu immunization rates for the county were 66% above the NYS but below the NYSPA) of 70%.



Below is a table outlining NYS Department of Health HIV/AIDS and STD Rates for Manhattan from 2014-2016, color-coded by whether or not the metric was significantly better than, significantly worse than, or comparable to the NYS average.

NYS Department of Health AIDS & STD Rates – Manhattan (2014-2016)

Indicator	3 Year Total 2014-2016	New York County Rate	New York State Rate	Significant Difference
HIV Case Rates Per 100,000				
Crude	1,773	36	16	Yes
Age-aged	1,773	31.4	16	Yes
AIDS Case Rates Per 100,000				
Crude	762	15.5	7.8	Yes
Age-aged	762	14.3	7.7	Yes
AIDS Mortality Rates Per 100,000				
Crude	287	5.8	3	Yes
Age-aged	287	5.2	2.6	Yes
Early Syphilis Case Rates Per 100,000				
Early syphilis case rate per 100,000	4,406	89.5	25.1	Yes
Gonorrhea Case Rates Per 100,000				
Males - Aged 15-44 years	12,136	1,054.20	377.5	Yes
Females - Aged 15-44 years	2,142	170.8	191	Yes
Aged 15-19 years	1,155	548.5	305.8	Yes
Chlamydia Case Rates Per 100,000				
Males - Aged 15-44 years	18,680	1,622.70	875.7	Yes
Females - Aged 15-44 years	19,557	1,559.00	1,577.40	No
% sexually active young women (aged 16-24) with at least one chlamydia test in Medicaid program (2016 only)	19,557	1,559.00	1,577.40	No
Pelvic Inflammatory Disease Hospitalization Rates Per 10,000				
Pelvic inflammatory disease (PID) hospitalization rate per 10,000 females - Aged 15-44 years (2016 only)	78	1.9	2.5	No

Key:
- Significantly Better than NYS Average
- No Significant Difference from NYS Average
- Significantly Worse than NYS Average

Northwell Health

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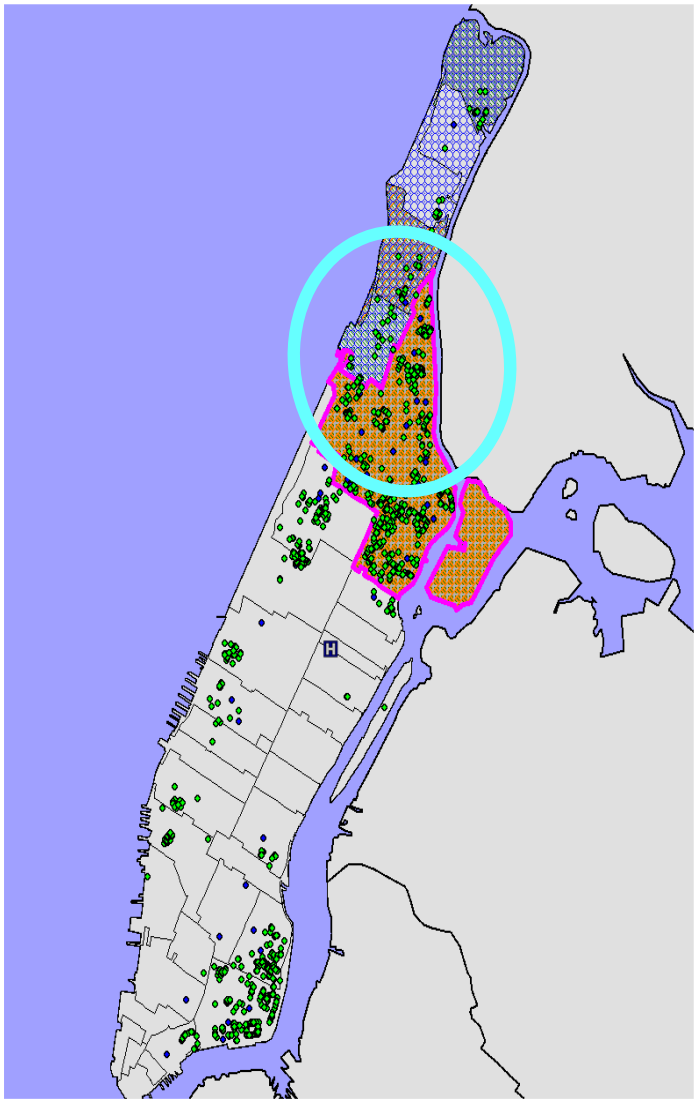
Source: https://webbit.health.ny.gov/SASStoredProcess/guest?_program=%2FEBI%2FPHIG%2Fapps%2Fchir_dashboard%2Fchir_dashboard&p=ct&cos=60

New York County Summary of Findings

Finally, PQI and social determinant data were overlaid to identify areas of greatest need in New York County. Areas of New York County that fall into Quintiles 4 & 5 of the PQI Composite Rate were mapped. Then we began to overlay characteristics that provide some indication of health outcomes such as percent Non-White, percent Less than High School Diploma, percent Unemployed, and percent Below Poverty Level. In addition, we highlighted areas where less than 70% were located within 0.5 mi to a supermarket, which classifies an urban area as food insecure. Ultimately, there was a substantial overlap between social determinants of health, a lack of easy access to food, and poor health outcomes. This overlap was most apparent in Harlem, and Inwood and Washington Heights (these areas are circled on the map below).



Key:
- = PQI Composite Rate (Quintile 1)
- = PQI Composite Rate (Quintile 2)
- = % Non-White*
- = % Less than High School Diploma*
- = % Unemployed*
- = % Below Poverty Level* (Family of 4 - $23, 850)
- = More than 0.5 mi to Supermarket**
- = Northwell Health Hospital
- = HUD/Low Income Housing (Senior)
- = HUD/Low Income Housing (Family)

Sources: PQIs - SPARCSver11.01.2012adj/tb; Truven population used for adjustment; P.O. Boxes are excluded; Low Income Housing Developments – HUD New York State Housing Website http://portal.hud.gov/hudportal/HUD?src=/states/new_York; Website of individual New York County Local Housing Authorities; Social Determinant Indicators - 2014 United States Census American Community Survey - https://www.census.gov/programs-surveys/; Access to food - http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx

In both our primary and secondary data analyses, major trends emerged regarding mental health and substance abuse, chronic disease, health literacy, health behaviors and community infrastructure associated with nutrition and physical activity, as well as access to healthcare. In our primary data analysis, community-based organizations expressed concerns about mental health and substance abuse and chronic diseases identifying that access to healthcare services is affected by insurance, cost, health literacy, transportation and community healthcare services funding. These conditions were also identified as needs through the secondary data analysis especially in areas with increased disease and social determinant of health prevalence. The community stakeholders identified social determinants of health such as lack of affordable housing, food insecurity, transportation, health literacy, education and employment that are impacting community health and advocated for creating more healthcare community based organization partnerships to engage community members especially with a shared pool of financial resources. We saw the impacts of social determinants of health in our secondary data analysis as well. Finally, much of the conversation in our primary data analyses was centered on health disparities.

Therefore, 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 New York County, emerged as pressing community health issues in the Northwell Health New York County Service area:

- 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 desserts
- Environmental hazards
- Lack of affordable housing
- Need for quality education and better college opportunities
- Lack of community healthcare services funding

APPENDIX

Greater New York Hospital Association Health Committee Members and Meeting Dates

Northwell Health Community-Based Summits Report

Greater New York Hospital Association Community Health Needs Assessment Planning Committee

Bronx-Lebanon Hospital Center Health Care System*
Flushing Hospital Medical Center
Hospital for Special Surgery
Jamaica Hospital Medical Center
Memorial Hospital for Cancer and Allied Diseases
Montefiore Health System*
The Mount Sinai Health System*
New York Hospital Queens
NYC Health + Hospitals
New York-Presbyterian Hospital*
NYU Langone Medical Center*
Northwell Health*
Richmond University Medical Center
St. John's Episcopal Hospital
The Rockefeller University Hospital

*Health systems that represent multiple hospital facilities in NYC

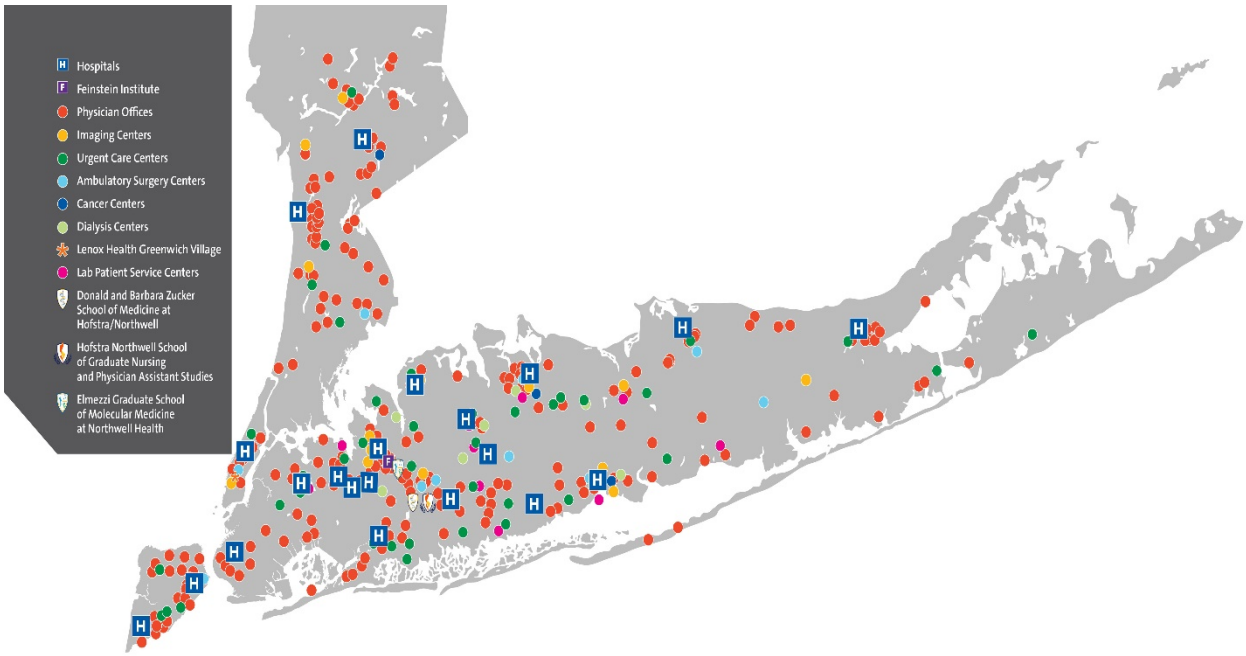
Meeting Dates

January 11, 2019

March 13, 2019

May 29, 2019

Northwell Health 2019 New York, Queens, and Richmond Counties Community Based Organization Community Health Summits



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Acknowledgement: Northwell Health would like to acknowledge Devin Oliva for her efforts in the data analysis and preparation of this report.

Executive Summary

Background- Health disparities negatively impact the health of individuals and communities. Disparities are the preventable differences that are the product of unequal distribution of resources. Health disparities arise from life circumstances such as economic standing, access to education, transportation options, and literacy levels. These circumstances are better known as social determinants of health. Understanding the unique social determinants of health in each community is imperative to improving the overall health of that community. To better understand what the community views as priority, Northwell Health conducted a Community Health Needs Assessments (CHNA). CHNAs identify unmet health needs and work to address these issues. The purpose of these summits was to elicit feedback from the local community, government and health and social service providers related to their perspectives on the health and social needs of their clients with the goal of advancing the New York State Department of Health's 2019-2024 Prevention Agenda (NYSPA) to:

1. Improve the health of New Yorkers in five priority areas; and
2. Reduce health disparities for racial, ethnic, disability and low socioeconomic groups, as well as other populations who experience them.

Methods- Over 57 cross sector Community Based Organizations (CBO) that provide services in Richmond, Queens, and New York counties participated in county community health summits facilitated by trained Northwell Health staff. Participants were separated into small groups which had representation from cross sectors such as behavioral health, food insecurity, transportation, legal, housing, chronic disease, healthcare and entitlement program access. The Delphi Method was used to promote a focused discussion and elicit feedback. Written responses were used to compile top New York State Prevention Agenda priority areas, barriers to healthcare, and social determinants of health data tables. Audio recordings were used to supplement the written data.

Results- The three counties shared common answers across questions but also showcased the unique needs of each geographic location. The most common NYS Agenda priority focus area across the three counties was the prevention of mental and substance use disorders. Common barriers to healthcare were lack of health literacy skills, high cost of insurance and medical care, and the stigma associated with certain health conditions. An effective strategy to combating barriers was the encouragement of community engagement and CBO-Health Provider partnerships. Social determinants of health addressing the areas of economics, education, environment, and social factors covered a wide variety of issues. Top answers included lack of affordable housing, food insecurity, health literacy levels, and environmental hazards.

Conclusion- The Northwell CHNA process engages the community to gain a better understanding the needs of a population from community-based organizations who are direct providers of services to vulnerable community members. This process has identified the top areas of focus including social determinants of health by county. The results are intended to be used to develop and enhance programs and services designed for and by the community to improve population health.

Methods

This study used small group discussions as the primary method of data collection. Small groups encourage the exchanging of ideas and experiences among participants. This method is useful to examine what people think of a topic, how they think, and why they think the way they do (Kitzinger, 1995). To elicit feedback from the community on health issues and social determinants of health, community-based organizations serving these communities were invited to provide input. Northwell Health, New York's largest health system, conducted half day summits at Commonpoint Queens' Central Queens Forest Hills in Queens County on June 21, 2019, United Jewish Appeal (UJA) Federation of New York in New York County on June 27, 2019, and Staten Island University Hospital in Richmond County on April 29, 2019. The summits were comprised of members from various Community Based Organizations (CBO) across the three counties. The main goal of these summits was gaining community feedback on the New York State Department of Health Prevention Agenda and social determinants of health impacting the community.

Recruitment

For Richmond County, the Community Outreach staff of Staten Island University Hospital (SIUH) sent an email from the SIUH Executive Director inviting local organizations in Richmond County to participate in the focus groups. The email explained the purpose of the summit, time, place, and how to register through Eventbrite. Through the Eventbrite registration link, participants filled out their name, contact information, and the organization they represented. Participants were also asked to identify the top two areas their organization focused on. The service areas they could choose from were behavioral health, food insecurity, transportation, legal, housing, chronic disease, healthcare and entitlement program access, and other, which was free text write in response. SIUH staff received weekly and biweekly updates on registration statistics. They reached out to organizations through email and phone to encourage registration.

Queens and New York Counties also utilized Eventbrite registration. Northwell Health partnered with the Human Services Council of NY, 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 to aid in recruitment of their members. Forest Hills Hospital and Lenox Hill Hospital Community Outreach contacted local organizations. The Human Services Council sent emails from their Executive Director to member organizations serving Queens and New York Counties with information about registration.

After registration, email confirmation and any updates were sent through Eventbrite. This included an email 24 hours prior as a reminder. The participants were divided into groups based on the total number of participants. To create multi-service groups, groups were comprised of participants from various organizations that had different service areas.

Participants

Upon arrival, participants were checked in at a registration desk. They were given instructions as to the group number they were assigned and where to go. Richmond County had

the largest number of groups with five. Queens County and New York County had two groups each. Each group in Richmond consisted of 11 to 12 people for a grand total of 57. The Queens groups had 16 and 17 people for a grand total of 33. The New York groups had 21 people each for a grand total of 42. Participants were verbally informed that the session was being recorded and assured that participation was voluntary. "Ground rules" were also discussed and participants were asked to avoid using names and specific details to maintain confidentiality. A list of organizations represented is available in Appendix A and a copy of the script used by interviewers is available in Appendix B.

Procedure

The Delphi Method was employed in the small groups to collect data. The classical Delphi Method is broken down into two phases, exploration and evaluation. During the exploration phase, participants are first posed with a question or problem to answer or comment on via questionnaire. This provides participants with the opportunity to explore the problem or topic. During the evaluation phase, responses are summarized and then used to construct the second question. This gives participants the chance to assess and re-evaluate their responses based on group feedback (Adler & Ziglio, 1996). The Delphi Method provides anonymity and allows expression of opinions while also permitting refinement of views. This method is viewed as a flexible research technique that can be adapted in numerous ways. (Skulmoski, Hartman, & Krahn, 2007). Due to the Delphi Method's flexibility, it was utilized for the summits. Each participant was provided a copy of the NYS Prevention Agenda, sticky notes and markers. The Delphi Method was adapted and utilized for the first two questions as follows.

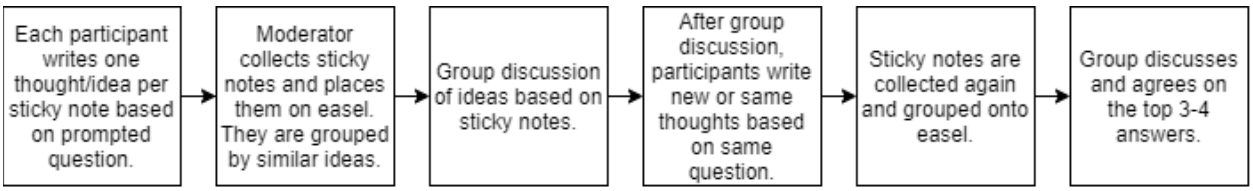

Figure 1: Delphi Method

To reduce the time burden on the participants and efficiently facilitate discussion and feedback for the next five questions, the participants were read the question aloud and instructed to write their response(s) on sticky notes. The sticky notes were collected, grouped by common themes, posted on the easel by the moderator and discussed as a group.

Data analysis

After data collection, the sticky notes were analyzed by group by question and responses were recorded. Each idea or thought went towards a grouping. If one sticky note had multiple responses listed, it was counted toward one or more groupings. The responses were then organized and compared to the NYS Prevention Agenda's priority and focus areas. The responses from the first focus group question, "What do you think are the biggest health concerns in your community?", were categorized into the priority and focus areas. Tables by county were created to summarize data.

Results

With the NYS Prevention Agenda as a framework, the top priority areas of each county become evident. Tables 4-6 categorize participant responses based on NYS Agenda priority and focus areas. The following data is in response to the question, “What do you think are the biggest health concerns in your community?”.

Table 4: Richmond County by NYS Prevention Agenda Priority and Focus Areas n= 57				
County	**Priority Area**	**Priority Area Total**	**Focus Area**	**Focus Area Total**
Richmond	Promote Well- Being and Prevent Mental and Substance Use Disorders	72	Prevent Mental and Substance Use Disorders	50
			Promote Well Being	22
	Prevent Chronic Diseases	25	Preventive Care and Management	12
			Healthy Eating and Food Security	9
			Tobacco Prevention	3
			Physical Activity	1
	Promote a Healthy and Safe Environment	21	Injuries, Violence and Occupational Health	9
			Built and Indoor Environments	6
			Outdoor Air Quality	5
			Food and Consumer Products	1
	Promote Healthy Women, Infants and Children	9	Child & Adolescent Health	4
			Cross Cutting Health Women, Infants, & Children	3
			Maternal & Women's Health	1
			Perinatal & Infant Health	1
	Prevent Communicable Diseases	5	Sexually Transmitted Infections (STIs)	2
			Vaccine-Preventable Diseases	2
			Human Immunodeficiency Virus (HIV)	1

Notes: Priority and focus areas are from NYS Department of Health Prevention Agenda 2019-2024. Responses are from the first question groups were asked, "What do you think are the biggest health concerns in your community?".

Table 5: Queens County by NYS Prevention Agenda Priority and Focus Areas n= 33				
County	**Priority Area**	**Priority Area Total**	**Focus Area**	**Focus Area Total**
Queens	Promote Well- Being and Prevent Mental and Substance Use Disorders	39	Promote Well Being	23
			Prevent Mental and Substance Use Disorders	16
	Prevent Chronic Diseases	35	Preventive Care and Management	20
			Healthy Eating and Food Security	10
			Physical Activity	3
			Tobacco Prevention	2
	Promote a Healthy and Safe Environment	8	Built and Indoor Environments	5
			Injuries, Violence and Occupational Health	3
	Promote Healthy Women, Infants and Children	4	Child & Adolescent Health	3
			Cross Cutting Health Women, Infants, & Children	1
	Prevent Communicable Diseases	1	Vaccine-Preventable Diseases	1

Notes: Priority and focus areas are from NYS Department of Health Prevention Agenda 2019-2024. Responses are from the first question groups were asked, "What do you think are the biggest health concerns in your community?".

Table 6: New York County by NYS Prevention Agenda Priority and Focus Areas n= 42				
County	**Priority Area**	**Priority Area Total**	**Focus Area**	**Focus Area Total**
New York	Promote Well- Being and Prevent Mental and Substance Use Disorders	40	Prevent Mental and Substance Use Disorders	19
			Promote Well Being	21
	Prevent Chronic Diseases	27	Healthy Eating and Food Security	10
			Preventive Care and Management	10
			Physical Activity	5
			Tobacco Prevention	2
	Promote a Healthy and Safe Environment	16	Injuries, Violence and Occupational Health	11
			Built and Indoor Environments	5
	Promote Healthy Women, Infants and Children	10	Child & Adolescent Health	6
			Cross Cutting Health Women, Infants, & Children	2
			Maternal & Women's Health	2
	Prevent Communicable Diseases	4	Sexually Transmitted Infections (STIs)	3
			Antibiotic Resistance and Healthcare-Associated Infections	1

Notes: Priority and focus areas are from NYS Department of Health Prevention Agenda 2019-2024. Responses are from the first question groups were asked, "What do you think are the biggest health concerns in your community?".

Table 7 is derived from the question, “What do you think prevents people from getting treatment in your community?”. Table 8 uses participant quotes to highlight the top barriers to accessing treatment.

Table 7: Top Barriers to Healthcare in the Community by County		
County	Top Barrier Answers	Total
Richmond	Health Literacy	18
	Insurance/Cost	16
	Stigma/Fear	16
	Lack of Transportation	11
Notes: n= 57 Respondents could write the same answer twice. Total represents the frequency of the answer across all groups within that county.		

County	Top Barrier Answers	Total
Queens	Insurance/Cost	19
	Health Literacy	11
	Lack of Trust	6
	Stigma/Fear	5
Notes: n= 33 Respondents could write the same answer twice. Total represents the frequency of the answer across all groups within that county.		

County	Top Barrier Answers	Total
New York	Health Literacy	19
	Insurance/Cost	10
	Lack of Transportation	10
	Lack of Healthcare Funding	9
Notes: n= 42 Respondents could write the same answer twice. Total represents the frequency of the answer across all groups within that county.		

Table 8: Participant Quotes on Healthcare Barriers		
Topic	**Theme**	**Quote**
Barriers to healthcare	Stigma/Fear	"I have a client... her language wasn't as great in English and she was diagnosed with uh postpartum depression um and ACS (Administration for Children's Services) was called in this instance, right. But she did not have postpartum depression. It was a lack of communication there. Why was ACS called on this particular client who is an immigrant and maybe not someone else who was diagnosed with postpartum depression. Right? But it's also the stigma of being diagnosed with something and being looked at different because of who you represent and what community you represent." - Group 5, Female.
	Health Literacy	"Because the healthcare is so complex, they don't understand for your particular health plan, whatever level of health plan you are paying or not paying... But the complexity of the system prevents people from understanding how to get there with declining resources, whatever they have." - Group 7, Female.
	Lack of Transportation	"... we see a large number of dialysis patients and one of the um key reasons why they end up in the emergency room is because of missed dialysis appointments and its because they're going three times a week back and forth and if there are issues getting transportation, getting affordable transportation, um they end up just not going to treatment and then we constantly see them in the emergency room and they have to be admitted ..."- Group 9, Female.
	Lack of Trust	"Um we won't know about any of the other issues that these patients are having unless they can trust us enough to divulge this information so that we can help them um if patients are coming to you and not speaking about you know the domestic violence, the uh lack of food, the fact that you know maybe their children were taken away, the not having the the um right support system or going through a depression and they don't feel trust enough in their provider to to say all these things that are sort of causing their barriers to health. The idea is I'm just coming to my provider say give me a pill for my diabetes and let me get out of here because I gotta go home and take care of this other stuff. Um but if I'm trusting in my provider to say I'm opening up and saying I can't take care of my diabetes because I don't have enough money to buy food. I think it is all about trust, particularly with the underserved community that we service. A lot of them are ya know individuals who don't speak their language, have a different culture who are maybe undocumented."- Group 6, Female.
	Insurance/Cost	"What are you going to do to make sure I don't go into debt because I have this health issue and that is a huge concern because like no one wants to go to the doctor until the last minute because its like I don't know if I'll be able to pay for that. Like why is that even a thought you know? It's it's a really dangerous, I guess mind set, that a lot of us have um here in the U.S. because we just don't believe we can afford our care."- Group 6, Male.
	Insurance/Cost	"People tend to have insurance um but with co-payments and deductibles and all these things, they can't afford to go to the doctor. Because yes, maybe the visit will be free but medication, they would have to pay a co-payment, they may not be able to afford it... "- Group 4, Female.
	Lack of Healthcare Funding	"To the fundamental flaws in the way systems and funding are designed. Um you know you start with where the funding goes to and you know who provides what service and I think this really gets back to what people are talking about. If you started, if you started from scratch and took people and said what is it that you need and designed around that, we would have a very opposite situation." - Group 8, Female.

After barriers were discussed, the question, “What kind of strategies or education or services do you think would help address the top barriers?” was asked. Table 9 highlights the top responses by county.

Table 9: Most Effective Strategies to Address Healthcare Barriers by County

County	Top Strategy Answers	Total
Richmond	Community Partnerships/Engagement	12
	Culturally Competent Professionals/Services	9
	Early Education	3
	Access to Transportation	2
	Senior Support	2

Notes: n=57
Total represents the frequency of the answer across all groups within that county.

County	Top Strategy Answers	Total
Queens	Integrated Healthcare	7
	Community Partnerships/Engagement	6
	Culturally Competent Professionals/Services	4
	Access to Education	3
	Increasing Health Literacy	3

Notes: n= 33
Total represents the frequency of the answer across all groups within that county.

County	Top Strategy Answers	Total
New York	Integrated Healthcare	9
	Affordable Insurance Coverage	7
	Community Partnerships/Engagement	7
	Increased Healthcare Funding	7
	Health Education Programs	6

Notes: n=42
Total represents the frequency of the answer across all groups within that county.

Table 10 combines two questions, “How does economic instability impact the health of your community?” and “How does education impact the health of your community?”.

Table 10: How Economic Stability and Education Impact Community Health by County				
County	Economic Stability	Total	Education	Total
Richmond (n=57)	Lack of Affordable Housing	8	Improved Health Literacy	16
	Deprioritization of Health	6	Improved Health Outcomes	7
	Food Insecurity	4	Early Childhood Education Influence	5
Queens (n=33)	Lack of Affordable Housing	11	Improved Health Literacy	9
	Job Instability	6	Better College Opportunities	6
	Limited Transportation Access	5	Need for Quality Education	5
New York (n=42)	Lack of Affordable Housing	14	Improved Health Literacy	13
	Food Insecurity	5	Better College Opportunities	3
	Lack of Employment Opportunities	5	Language Barriers	3

Notes: Total represents the frequency of the answer across all groups within that county.

Table 11 combines the questions, “How does your neighborhood and environment impact the health of your community?” and “How do social factors impact the health of your community?”.

Table 11: How Neighborhood/ Environment and Social Factors Impact Community Health by County

County	Neighborhood and Environment	Total	Social Factors	Total
Richmond (n=57)	Poor Neighborhood Infrastructure	9	Community Engagement Improves Health	9
	Need for Safe Housing/Recreation	8	Prevalence of Racism/Discrimination	5
	Environmental Hazards	6	Need for Culturally Competent Services	2
Queens (n=33)	Poor Neighborhood Infrastructure	9	Need for Culturally Competent Services	4
	Environmental Hazards	8	Immigration Status Impacts Health	4
	Food Deserts	5	Low Income	4
New York (n=42)	Food Deserts	9	Prevalence of Racism/Discrimination	5
	Need for Safe Housing/Recreation	7	Lack of Family/Social Support	3
	Need for Affordable Housing	5	Incarceration Rates	2

Notes: Total represents the frequency of the answer across all groups within that county.

Discussion

Community Health Concerns

While differences among county priorities and determinants of health exist, similarities are also evident. Analyzing data with a NYS Prevention Agenda lens, the number one priority area across all three counties was Promote Well-Being and Prevent Mental and Substance Use Disorders. Mental health attention and services were a persistent topic of discussion among all groups. Preventing Chronic Diseases was the second leading priority area across all counties. The counties diverge in the specific focus areas. Queens heavily focused on preventive care and management whereas Richmond and New York had a closer breakdown between preventive care and food security.

Barriers

There were six leading healthcare barriers across the counties. The top barrier answers were health literacy, insurance/cost, stigma/fear, lack of transportation, lack of trust, and lack of healthcare funding. Richmond and New York's top barrier was health literacy and Queens' was insurance/cost.

Strategies to Barriers

A common answer among all groups and counties on how to address barriers to healthcare was community partnerships and engagement. This ranged from the CBO involvement in health programs and partnerships with hospitals to encouraging community members to utilize community services. Another top response was providing culturally competent services. Cultural competency is the ability to live and work in a culture other than one's own (Issel & Wells, 2018). Cultural competency is a continuum that varies greatly but the highest level is cultural proficiency. Proficiency entails proactively seeking knowledge and information about other cultures, in addition to being able to educate others on cultures (Issel & Wells, 2018). The need for cultural proficiency is heightened in the three counties due to various racial and ethnic backgrounds as well as immigration status.

Social Determinants of Health

The top economic stability impact on health across the three counties was lack of affordable housing. This is consistent with CDC data that found Richmond and Queens counties with high social vulnerability levels for housing and transportation and moderate to high for New York County ("Online GIS Maps"). The leading educational impact on health across all three locations was health literacy. Responses stated that higher educational levels resulted in higher health literacy. This is reinforced by the fact that estimates show that census block groups in Queens County could have as high as 73% of people in that block group having below basic or

basic health literacy. Richmond block groups could have as high as 53% and New York with 66% ("Health Literacy Data Map). Below basic skills include being able to locate information such as the time of a visit on an appointment slip but struggling with more complex information. Basic health literacy skills include being able to locate multiple pieces of information but struggling with interpreting the meaning, such as knowing if their blood pressure is in a healthy range ("Health Literacy Data Map).

The top neighborhood and environment factor in Richmond and Queens were poor neighborhood infrastructure. For New York county, the top response was food deserts. However, this category did not have a large gap as other categories did. Need for safe housing/recreation, environmental hazards, and need for affordable housing were also leading answers. For social factors impacting health, New York's top response was the prevalence of racism and discrimination. Richmond had that community engagement improves overall health and Queens had the need for culturally competent services. Social conditions such as racism and the lack of culturally competent services can contribute to chronic stress, which leads to compromised health (Woolf & Braveman, 2011).

Limitations

The original second question of "What do you think are the biggest priorities for health in your community?" has been omitted. This question has been omitted because only two out of the nine groups directly addressed the question. It is also a continuation and redundancy of the first question, "What do you think are the biggest health concerns in your community?".

Further, it should be noted that the totals used in result tables represent the frequency of sticky notes that contained that response. However, due to the data collection process, respondents could write the same response two times. Therefore, there is no way to determine if the response was from the first round of being asked the question or the second round of being asked the same question. In addition, due to sound quality, audio transcription was not completed. Without transcription, a traditional qualitative analysis was not preformed.

Conclusion

This CHNA process aimed to understand what CBOs considered top health concerns, barriers to healthcare, and social determinants of health in their communities. Understanding non-medical factors such as economic status, education level, and health literacy skills in each county and how they influence health, aid in better serving local communities. This allows healthcare systems to develop and implement programs that meet the needs of their community in partnership with Community-Based Organizations.

References

1. Adler, M., & Ziglio, E. (1996). *Gazing into the oracle: The Delphi method and its application to social policy and public health*. Jessica Kingsley Publishers.

2. Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi method for graduate research. *Journal of Information Technology Education: Research, 6*(1), 1-21.

3. Issel, L. M., & Wells, R. (2018). *Health program planning and evaluation: a practical, systematic approach for community health*. Burlington, MA: Jones & Bartlett Learning.

4. Online GIS Maps. (n.d.). Retrieved from https://www.policymap.com/maps.

5. National Health Literacy Mapping to Inform Health Care Policy (2014). Health Literacy Data Map. University of North Carolina at Chapel Hill. Retrieved June 1, 2015, from http://healthliteracymap.unc.edu/#

6. Woolf, S. H., & Braveman, P. (2011). Where Health Disparities Begin: The Role Of Social And Economic Determinants—And Why Current Policies May Make Matters Worse. *Health Affairs, 30*(10), 1852–1859. doi: 10.1377/hlthaff.2011.0685

Appendices

Appendix A: Summit Participant Organizations

County	Organization
Richmond	City Harvest
Richmond	Community Health Center of Richmond
Richmond	Coordinated Behavioral Care
Richmond	Empowerment Zone
Richmond	GRACE Foundation of New York
Richmond	Healthcare Associates in Medicine
Richmond	Legal Services NYC
Richmond	New York Council on Problem Gambling
Richmond	Northwell
Richmond	Office of The District Attorney Richmond
Richmond	On Your Mark
Richmond	Richmond University Medical Center
Richmond	Seamen's Society
Richmond	Staten Island Partnership for Community Wellness
Richmond	Staten Island PPS
Richmond	Staten Island USA
Richmond	VISIONS Services for the Blind
Richmond	YMCA NYC
Queens	American Lung Association
Queens	Catholic Charities Neighborhood Services, Inc.
Queens	Community Healthcare Network
Queens	Comunilife
Queens	EAC Network/DSRIP-PAM Program
Queens	Fortune Society
Queens	Lawyers Alliance for New York
Queens	My Elder
Queens	New Horizon counseling center
Queens	NowPow
Queens	Public Health Solutions
Queens	SACSS
Queens	Self-employed
Queens	The Child Center of NY
Queens	UNH
Queens	Urban Pathways
Queens	YWCA of Queens

County	Organization
New York	Chayim Aruchim
New York	Columbia University
New York	Community Healthcare Network
New York	CompuForce
New York	Comunilife, Inc.
New York	DIDIT
New York	Dominican Women's Development Center
New York	Fortune Society
New York	Harlem Grown
New York	Healthfirst
New York	Hudson Guild
New York	Lenox Hill Hospital
New York	NCS
New York	NowPow
New York	NYC Department of Transportation – Safety Education & Outreach Division
New York	Partnership with Children
New York	Pink Concussions
New York	Public Health Solutions
New York	RAIN TOTAL CARE, Inc.
New York	Say-Ah
New York	The Bridge Inc.
New York	The Jewish Board
New York	Urban Pathways
New York	VISIONS Services for the Blind

Appendix B: Script

-Introduction and overview

(10 minutes total)

(3 minutes)

Hello and welcome to this group discussion. My name is_____, and I am today's facilitator. My role is to help get a conversation going and to make sure we cover several important topics that we would like your input on. Let's go around the room now and introduce ourselves.

Rules for Focus Groups

(2 minutes)

I would like to thank you all for taking the time out of your day to come here and discuss your ideas. The overall goal is to hear your thoughts about health. In particular, we are interested in your views about things that impact the health of the people in your community.

- We value your experience and we are here to learn from you. Your thoughts are very important to all of us on this team we will be audio recording today's meeting so that we won't miss anything you say.
- Participating in today's meeting is completely voluntary. You have the right to withdraw from the group at any time without penalty.

The total length of time of the focus group meeting is expected to be about 1 hr. 15 minutes. We will be timing sections so that we can cover all the topics and get your feedback on these issues.

There are a few "ground rules"

- I might move you along in conversation. Since we have limited time, I'll ask that off-topic questions or comments be answered after the focus group session. • I'd like to hear everyone speak so I might ask people who have not spoken up to comment.
- Please respect each other's opinions. There are no right or wrong answer to the questions I will ask. We want to hear what each of you think and its okay to have different opinions.

- We'd like to stress that we want to keep the sessions confidential, so we ask that you not use names or anything directly identifying when you talk about your personal experiences. For example, if you talk about a friend, or specific places, don't use their full names or give the kind of information that could be used to fully identify someone. We want to keep all identities anonymous.

- We also ask that you not discuss other participants' responses outside of the discussions. However, because this is in a group setting, the other individuals participating will know your responses to the questions and we cannot guarantee that they will not discuss your responses outside of the focus group.

- Please do not film or record any part of this session. Please silence and put away your phones and other electronic devices.

Overview of "Delphi Method"

(5 minutes)

Let's talk about the sticky notes and markers in front of you. For some of the questions today, I will ask you the question, and then I want you to write your response down on those sticky notes, one idea per note. You will put the notes in that container and then pass the container to the moderator. I will stick the notes onto this easel, and together we will see which notes are similar and which ones are different, by putting them into groups. We want the notes to be anonymous, so don't write your name on it, and you don't have to say which one you wrote. We will use these notes to start many of our conversations today.

Let's practice doing this now. I'm going to ask you a question and I want you to write down your answers, one idea per note. Make sure you write legibly and in big letters. What is your favorite season? Write down your answer on the sticky note, put it in the container.

[Moderator's assistant takes the container full of notes, mixes them up, and places them on the easel, grouping the notes that say the same thing. Then, pointing to one of the seasons:]

Let's talk about this group. Why do you think someone would say this is their favorite?

[Discuss the pros/cons to that season, and then move on to the next season—until it seems like the group understands how it will work]

We will use this method for many of the discussion questions today. For other questions, we will just talk without writing anything. I will tell you when to write something down and when we will just talk about it. Ok?

DO YOU HAVE ANY QUESTIONS SO FAR?

Ok, let's get started (Start Recorder)

To health concerns in our community

(30 minutes)

Step 1: Group generation

To start our conversation today, let's talk about the New York State Prevention Agenda which are the health priority areas identified by the New York State Department of Health. Please take out and look at your handout titled "New York State Prevention agenda 2019-2024 Priority areas, Focus Areas and Goals "in your folder. There are 5 priority areas: Prevent Chronic Diseases — Promote Healthy and Safe Environment —Promote Healthy Women, Infants and

Children — Promote Wellbeing and Prevent Mental and Substance Use Disorders and Prevent Communicable Diseases. Under each of these areas are specific focus areas that relate to the main priority. (Give participants 2 minutes to review)

Step 2: Individual generation I

(3 minutes) Now, with all of these different types of health priorities, what do you think are the biggest health concerns in your community? Write down one or more thoughts on the sticky notes provided, using one sticky note for each thought. Be sure to write in very big, legible letters. Place sticky note in the container.

[Moderator's assistant writes "Health Concerns in Your Community" on easel pad. Moderator's assistant takes the container full of notes, mixes them up, and places them on the easel, grouping the notes that say similar things.]

Step 3: Discussion of individual ideas I

(15 minutes) Let's talk about your responses for a few minutes and think through what the biggest concerns for your community might be. Remember, you don't need to say what your answer was, and you can change your mind about your answer. What do people think about (say name of 1 the group of responses)? [Briefly discuss each grouping. Ensure discussion focuses on the specific community. While there may be many concerns, remember that we are interested in identifying the biggest concerns.]

Step 4: Individual generation Il

(2 minutes) Now that we've had a chance to talk about these issues, I'd like to get your written responses again. So, just like before, please write down what you think the biggest priorities for health in your community are. You can write the same ideas you wrote last time, or you can write something different.

Step 5: Build consensus

[Moderator's assistant takes the container full of notes, mixes them up, and places them on the easel, grouping the notes that say similar things.]

[Take 8 minutes to help the group identify the top 3-4 concerns]

Barriers to getting treatment

(15 minutes)

Step 1. Individual generation

(2-3 minutes) Sometimes people cannot or do not get care for their health problems. What do you think prevents people from getting treatment in your community? Some examples might be lack of insurance, transportation, embarrassment or stigma, and not knowing how to get treatment. Please write your response on a note.

[Moderator's assistant writes "Barriers to health care" on easel. After 1-2 minutes of participants writing and putting their notes into the container, Moderator's assistant takes the container full of notes, mixes them up, and places them on the easel, grouping the notes that say similar things]

Step 2. Discussion of individual ideas

(5 minutes) Let's talk about your responses and think through what the biggest barriers in your community might be.

[Discuss groupings of notes. Ensure discussion focuses on the specific community. While there may be many concerns, remember that we are interested in identifying the biggest concerns]

Step 3. Build consensus

(2-3 minutes) What would you all say the biggest factors are for your community? Let's discuss them.

[Help group reach a consensus. Identify top 3 barriers. They can vote is that helps the group]

Step 4. Group generation of solutions

(3 minutes)

What kind of strategies or education or services do you think would help address the top barriers? Don't respond out loud yet, just write your response on a sticky note and place in container.

(Moderator's assistant takes the container full of notes, mixes them up, and places them on the easel, grouping the notes that say similar things. Move on to next section while moderator's assistant groups and places notes on easel)

Social determinants of health

(20 minutes, 5 min. per topic)

Now, we're going to talk in more detail about how your community and environment affect your health.

Step 1. Individual generation I (economic stability)

(1-2 minutes) How does economic instability impact the health of your community? In other words, how do housing, employment, food, and transportation impact health in your specific community? Write your answers down on the notes and place them in the container.

[Allow 1-2 minutes to write responses]

[Moderator's assistant collects and shuffle notes, place them on easel.]

Step 2. Discussion of individual generation I (economic stability)

- (3 minutes) Let's discuss your responses for a few minutes. Remember, you don't need to say what your answer was, and you can change your mind about your answer. Do you feel the responses are accurate? Do you want to change anything?

Step 3. Individual generation Il (education)

- (1-2 minutes) How does education impact health of your community? In other words, how do issues like literacy and early childhood education impact health in

your specific community? Write your answers down on the notes and place them in the container.

[Allow 1-2 minutes to write responses]

[Moderator's assistant collects and shuffle notes, place them on easel]

Step 4. Discussion of individual generation Il (education)

- (3 minutes) Let's discuss your responses for a few minutes. Remember, you don't need to say what your answer was, and you can change your mind about your answer. Do you feel the responses are accurate? Do you want to change anything?

Step 5. Individual generation Ill (neighborhood and environment)

- (1-2 minutes) How does your neighborhood and environment impact the health of your community? In other words, how do issues like having access to types of food stores, the level of safety, amount of pollution, and other similar issues impact health in your specific community? Write your answers down on the notes and place them in the container.

  [Allow 1-2 minutes to write responses]

[Moderator's assistant collects and shuffle notes, place them on easel]

Step 6. Discussion of individual generation Ill (neighborhood and environment)

- (3 minutes) Let's discuss your responses for a few minutes. Remember, you don't need to say what your answer was, and you can change your mind about your answer. Do you feel the responses are accurate? Do you want to change anything?

Step 7. Individual generation IV (social factors)

1. (1-2 minutes) How do social factors impact health of your community? In other words, how do issues like how tightly knit a community is, the amount of discrimination a person faces, or incarceration impact health in your specific community? Write your answers down on the notes and place them in the container.

   [Allow 1-2 minutes to write responses]

   [Moderator's assistant collects and shuffle notes, place them on easel]

Step 8. Discussion of individual generation IV (social factors)

2. (3 minutes) Let's discuss your responses for a few minutes. Remember, you don't need to say what your answer was, and you can change your mind about your answer. Do you feel the responses are accurate? Do you want to change anything?

Conclusions:

(5-10 minutes)

(2-3 minutes) Is there anything else you want to talk about that we haven't addressed?

(2-3 minutes) What was the most important thing that we discussed today?

Thank you all again for sharing your thoughts, feelings, and experiences with us today. We so appreciate it!