

Community Health Needs Assessment

Prepared for

THE MOUNT SINAI HOSPITAL

The Mount Sinai Hospital

Mount Sinai Queens

By

VERITÉ HEALTHCARE CONSULTING, LLC

December 31, 2020

ABOUT VERITÉ HEALTHCARE CONSULTING

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Arlington, Virginia. The firm serves clients throughout the United States as a resource that helps health care providers conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted more than 50 needs assessments for hospitals, health systems, and community partnerships nationally since 2010.

The firm also helps hospitals, hospital associations, and policy makers with community benefit reporting, program infrastructure, compliance, and community benefit-related policy and guidelines development. Verité is a recognized national thought leader in community benefit and Community Health Needs Assessments.

The community health needs assessment prepared for the Mount Sinai Hospital was directed by the firm's Vice President with a senior associate supporting the work. The firm's staff hold graduate degrees in relevant fields.

More information on the firm and its qualifications can be found at www.VeriteConsulting.com.

TABLE OF CONTENTS

ABOUT VERITÉ HEALTHCARE CONSULTING	1
TABLE OF CONTENTS	2
EXECUTIVE SUMMARY	4
INTRODUCTION	4
OBJECTIVES AND METHODOLOGY	5
REGULATORY REQUIREMENTS.....	5
METHODOLOGY	6
<i>Collaborating Organizations</i>	6
<i>Information Gaps</i>	7
<i>Input on Previous CHNA</i>	7
PRIORITIZED SIGNIFICANT COMMUNITY HEALTH NEEDS	8
<i>Access to Mental Health Care and Poor Mental Health Status</i>	8
<i>Access to Primary Health Care Services by Individuals with Limited Resources</i>	9
<i>Aging Population</i>	9
<i>Chronic Diseases and Contributing Lifestyle Factors</i>	10
<i>COVID-19 Pandemic and Effects</i>	10
<i>Environmental Determinants of Health</i>	11
<i>Homelessness</i>	11
<i>Navigating a Changing Health Care Provider Environment</i>	12
<i>Poverty, Financial Hardship, and Basic Needs Insecurity</i>	12
<i>Safe and Affordable Housing</i>	13
<i>Socio-Economic, Racial, Cultural, Ethnic, and Linguistic Barriers to Care</i>	13
<i>Substance Abuse</i>	14
CHNA DATA AND ANALYSIS	15
DEFINITION OF COMMUNITY ASSESSED	16
SECONDARY DATA ASSESSMENT	20
DEMOGRAPHICS	20
ECONOMIC INDICATORS	32
<i>People in Poverty</i>	32
<i>Household Income</i>	34
<i>Unemployment Rate</i>	35
<i>Insurance Status</i>	38
<i>Crime</i>	44
<i>Housing and Homelessness</i>	46
<i>State of New York and New York City Budget Trends</i>	49
LOCAL HEALTH STATUS AND ACCESS INDICATORS	60
<i>County Health Rankings</i>	60
<i>New York State Department of Health</i>	66
<i>Youth Risk Behavior Surveillance System</i>	85
<i>New York Prevention Agenda 2019-2024</i>	87
<i>New York City Community Health Survey</i>	92
AMBULATORY CARE SENSITIVE CONDITIONS.....	98
<i>Borough/Neighborhood-Level Analysis</i>	98
<i>ACSC Conditions Analysis</i>	101
COMMUNITY NEED INDEX™, SOCIAL VULNERABILITY INDEX, 500 CITIES PROJECT, AND FOOD DESERTS.....	102
<i>Dignity Health Community Need Index</i>	102
<i>Social Vulnerability Index</i>	104
<i>500 Cities Project</i>	109
<i>Food Deserts (Lack of Access to Nutritious and Affordable Food)</i>	112
MEDICALLY UNDERSERVED AREAS AND POPULATIONS	113
HEALTH PROFESSIONAL SHORTAGE AREAS	115
DESCRIPTION OF OTHER FACILITIES AND RESOURCES WITHIN THE COMMUNITY	119
FINDINGS OF THE NYC HEALTH DEPARTMENT COMMUNITY HEALTH ASSESSMENT.....	126

CDC COVID-19 PREVALENCE AND MORTALITY FINDINGS127

PRIMARY DATA ASSESSMENT129

 SUMMARY OF INTERVIEW FINDINGS129

 ISSUES IDENTIFIED BY INTERVIEW PARTICIPANTS130

 ORGANIZATIONS PROVIDING COMMUNITY INPUT.....133

SOURCES134

APPENDIX - ACTIONS TAKEN SINCE PREVIOUS CHNA.....137

EXECUTIVE SUMMARY

Introduction

This community health needs assessment (CHNA) was conducted by The Mount Sinai Hospital (“MSH” or “the hospital”) to identify community health needs and to inform development of an implementation strategy to address identified significant needs.

The Mount Sinai Hospital is comprised of two campuses, the Mount Sinai Hospital in Manhattan and Mount Sinai Queens in Queens. To enhance clarity, we use following acronyms throughout this document:

Acronym	Entity
MS - Manhattan	Mount Sinai Hospital, the campus in Manhattan
MS - Queens	Mount Sinai Queens, the campus in Queens
MSH	Mount Sinai Hospital, the hospital facility with campuses in Manhattan and Queens

OBJECTIVES AND METHODOLOGY

Regulatory Requirements

Federal law requires that tax-exempt hospital facilities conduct a CHNA every three years and adopt an Implementation Strategy that addresses significant community health needs.¹ Each tax-exempt hospital facility must conduct a CHNA that identifies the most significant health needs in the hospital's community. The regulations require that each hospital:

- Take into account input from persons representing the broad interests of the community, including those knowledgeable about public health issues, and
- Make the CHNA widely available to the public.

The CHNA report must include certain information including, but not limited to:

- A description of the community and how it was defined,
- A description of the methodology used to determine the community health needs, and
- A prioritized list of the community's health needs.

Tax-exempt hospital organizations also are required to report information about the CHNA process and about community benefits they provide on IRS Form 990, Schedule H. As described in the instructions to Schedule H, community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. To be reported, community need for the activity or program must be established. Need can be established by conducting a Community Health Needs Assessment. Community benefit activities and programs also seek to achieve objectives, including:

- Improving access to health services,
- Enhancing public health,
- Advancing increased general knowledge, and
- Relieving government burden to improve health.²

CHNAs seek to identify significant health needs for particular geographic areas and populations by focusing on the following questions:

- **Who** in the community is most vulnerable in terms of health status or access to care?
- **What** are the unique health status and/or access needs for these populations?
- **Where** do these people live in the community?
- **Why** are these problems present?

The question of **how** each hospital can address significant community health needs is the subject of the separate Implementation Strategy.

¹ Internal Revenue Code, Section 501(r).

² Instructions for IRS form 990 Schedule H, 2015.

Methodology

Federal regulations that govern the CHNA process allow hospital facilities to define the community they serve based on “all of the relevant facts and circumstances,” including the “geographic location” served by the hospital facility, “target populations served” (e.g., children, women, or the aged), and/or the hospital facility’s principal functions (e.g., focus on a particular specialty area or targeted disease).³ The community defined by MSH accounts for over 80 percent of the hospital’s 2019 inpatient discharges.

Secondary data from multiple sources were gathered and assessed. Considering a wide array of information is important when assessing community health needs to ensure the assessment captures a wide range of facts and perspectives and to increase confidence that significant community health needs have been identified accurately and objectively.⁴

Input from 55 individuals was received through key informant interviews. These informants represented the broad interests of the community and included individuals with special knowledge of or expertise in public health.

In addition, data were gathered to evaluate the impact of various services and programs identified in the previous CHNA process.

Certain community health needs were determined to be “significant” if there was negative variance from benchmarks or the need was identified by multiple key informants. A significant need was identified as a priority if it was identified as problematic in at least two of the following three data sources:

1. The most recently available secondary data regarding the community’s health;
2. Take Care New York 2024, the New York City Department of Health and Mental Hygiene’s “blueprint for advancing health equity” or COVID-19 findings by the U.S. Centers for Disease Control and Prevention, and
3. Input from the key informants who participated in the interview process.

Collaborating Organizations

For this assessment, MSH collaborated with the Mount Sinai Health System and its following hospitals: Mount Sinai Beth Israel Hospital & Mount Sinai Brooklyn, Mount Sinai Morningside & Mount Sinai West, and New York Eye & Ear Hospital. CHNAs for these hospitals were developed alongside the MSH CHNA.

³ 501(r) Final Rule, 2014.

⁴ Note that some data sources present data by borough and others present data by county. As boroughs correspond to counties, data are consistently presented throughout the report as boroughs to simplify presentation. Specifically, Bronx County corresponds to the borough of Bronx, Kings County corresponds to the borough of Brooklyn, New York County corresponds to the borough of Manhattan, Queens County corresponds to the borough of Queens, and Richmond County corresponds to the borough of Staten Island.

Information Gaps

This CHNA relies on multiple data sources and community input gathered between April and December 2020. A number of data limitations should be recognized when interpreting results. For example, some data (e.g., County Health Rankings, Behavioral Risk Factors Surveillance System, and others) exist only at a county-wide level of detail. Those data sources do not allow assessment of health needs at a more granular level of detail, such as by ZIP Code or census tract.

Secondary data upon which this assessment relies measure community health in prior years. For example, the most recent mortality rates available for the region were data collected in 2017. The impacts of the most recent public policy developments, changes in the economy, and other community developments are not yet reflected in those data sets.

The findings of this CHNA may differ from those of others conducted in the community. Differences in data sources, communities assessed (e.g., hospital service areas versus counties or cities), and prioritization processes can contribute to differences in findings.

Input on Previous CHNA

No written comments were received regarding the previous CHNA or Implementation Strategy.

Prioritized Significant Community Health Needs

The significant community health needs prioritized for this CHNA are, in alphabetical order, as follows:

- Access to Mental Health Care and Poor Mental Health Status
- Access to Primary Health Care Services by Individuals with Limited Resources
- Aging Population
- Chronic Diseases and Contributing Lifestyle Factors
- COVID-19 Pandemic and Effects
- Environmental Determinants of Health
- Homelessness
- Navigating a Changing Health Care Provider Environment
- Poverty, Financial Hardship, and Basic Needs Insecurity
- Safe and Affordable Housing
- Socio-Economic, Racial, Cultural, Ethnic, and Linguistic Barriers to Care
- Substance Abuse

A summary of each of the health needs is below, along with supporting data and references to exhibit numbers that contain additional information.

Access to Mental Health Care and Poor Mental Health Status

Mental health status is poor for many residents because of the impact of the COVID-19 pandemic, day-to-day pressures, substance abuse, and psychiatric disorders. The supply of mental health providers is insufficient to meet the demand for mental health services.

- In County Health Rankings, the Bronx, Brooklyn, Queens, and Staten Island compared unfavorably to the state average for ratio of population to mental health providers (**Exhibit 29B**).
- The suicide mortality rate for White residents was higher in the Bronx, Manhattan, Queens, and New York City than the overall state rate (**Exhibit 47**).
- In the CDC's Youth Risk Behavior Surveillance System (YRBSS), respondents in the Bronx, Brooklyn, Manhattan, and New York City as a whole were more likely to indicate that they felt sad every day for two weeks and stopped regular activities due to sadness (**Exhibit 48**).
- Nearly 10 percent of New York City residents surveyed reported experiencing current depression, with rates higher in various neighborhoods (**Exhibit 50D**).
- There were many areas designated as Health Professional Shortage Areas for Mental Health, particularly in the Bronx, Brooklyn, and Queens (**Exhibit 59C**).
- Many interviewees identified mental health as an issue in the community, including COVID-19-related anxiety, depression, and substance abuse. The impact of social-isolation was also identified as an issue by participants.

Access to Primary Health Care Services by Individuals with Limited Resources

New York City has a robust health provider network. However, access to this network can be limited to individuals with limited financial resources, including lack of health insurance and relatively high deductibles / co-pays.

- The uninsured population in the Bronx, Brooklyn, and Queens was greater than the state average (**Exhibit 18**).
- In the 2020 County Health Rankings, the Bronx, Brooklyn, and Queens were the bottom three counties in all of New York for Clinical Care (**Exhibit 29A**).
- Rates for ambulatory care sensitive conditions (ACSCs) in the Bronx, Brooklyn, and Queens were particularly high (**Exhibit 52**). High rates indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.
- The CDC’s 500 Cities Project identified areas of unfavorable health outcomes throughout the community, with concentrations in the Bronx, Brooklyn, and Staten Island (**Exhibit 56A**).
- Federally-designated Medically Underserved Areas (MUAs) and Primary Care Health Professional Shortage Areas (HPSAs) were present (**Exhibits 58 and 59A**).
- Interviewees indicated that the COVID-19 pandemic interrupted access to primary health care services by self-imposed isolation and changes in provider practices.

Aging Population

The population is aging and “aging in place.” This growth will increase needed support for healthcare, housing, transportation, and nutrition assistance.

- In every borough of New York City, the aged 65 and older cohort is expected to grow the most between 2019 and 2024, with a growth rate of 15.5 percent overall (**Exhibit 4**).
- In County Health Rankings, the Bronx and Brooklyn compared unfavorably for older adult preventable hospitalizations (**Exhibit 29B**).
- The asthma hospitalization rates for residents aged 65 years or older in all boroughs were higher than the state average (**Exhibit 39**), and more than 50 percent higher in the Bronx, Brooklyn, and New York City.
- ACSC discharges were higher for patients aged 65 years and older than any other cohort in New York City (**Exhibit 53**).
- Many interviewees identified seniors as one of the community groups most impacted by COVID-19, including exposure from communal interactions in senior centers and congruent living, as well as loneliness from self-isolation.

Chronic Diseases and Contributing Lifestyle Factors

Chronic diseases in the community include arthritis, asthma, cancers, cardiovascular disease, diabetes, hypertension, kidney disease, and pulmonary issues. Contributing lifestyle factors might also include poor nutrition, alcohol consumption, and physical inactivity.

- In County Health Rankings, all five boroughs ranked in the bottom half of counties in New York State for poor or fair health (**Exhibit 29A**).
- The mortality rates for heart disease in the Bronx, Brooklyn, Queens, Staten Island, and New York City as a whole were higher than the New York State average. Rates for diabetes were higher in the Bronx, Brooklyn, Staten Island, and New York City as a whole (**Exhibit 30**).
- Rates of HIV and AIDS were more than 50 percent greater than the state average in the Bronx, Brooklyn, Manhattan, and New York City as a whole (**Exhibit 37**).
- Asthma hospitalizations and mortalities were significantly higher in the Bronx, Brooklyn, Manhattan, and New York City as a whole than the state average (**Exhibit 39**).
- In the CDC’s Youth Risk Behavior Surveillance System (YRBSS), respondents in every borough indicated that they watched more television than state averages, and respondents were less physically active for all boroughs except Staten Island (**Exhibit 48**).
- The percentage of respondents who had ever had high blood pressure was higher in the Bronx and Staten Island than the city average. The percentage who were overweight or obese in the Bronx, Brooklyn, Queens, and Staten Island was higher than the city average (**Exhibit 50B**).
- In Take Care New York 2024, the New York City Department of Health and Mental Hygiene identified “Chronic Disease Preventive Care and Management” as one of the two priorities.
- The CDC identified chronic diseases as underlying medical conditions that may contribute to illness severity mortality among individuals who contract COVID-19.
- Interviewees indicated that chronic diseases were problematic within the community prior to the COVID-19 pandemic and that the severity of chronic disease would likely worsen during the pandemic due to postponed or foregone medical care.

COVID-19 Pandemic and Effects

Since emerging in 2019, COVID-19 has become a health emergency for New York City, the nation, and the world. The virus has wrought severe illness and death, and the pandemic has contributed to unmet basic needs from the resulting economic crises, chronic disease severity, increased mental health needs, and decreased access to health services.

- The CDC provides information, data, and guidance regarding the COVID-19 pandemic. To date, the CDC has found that underlying medical conditions may contribute to disease severity, older adults are disproportionately at risk of severe illness and death, men are more likely to die from COVID-19, and members of racial and ethnic minority groups are at increased risk of contracting COVID-19.
- All participants discussed the immediate and profound impact of COVID-19 on the community. Participants indicated that COVID-19-related illness and deaths have

impacted all communities and has especially affected seniors, low-income residents, racial and ethnic minorities, healthcare providers, and school children. The economic impact of quarantines and social-distancing has increased basic needs instability, housing insecurity, and homelessness. Anxiety and self-isolation have impacted the mental health of many community members. Evolving understanding and changing protocols have increased difficulty in navigating the healthcare system. Long-term pandemic impact is projected to include increased chronic disease burdens because of delayed preventive and management services.

Environmental Determinants of Health

Residents of local neighborhoods experience considerable traffic, pollution, crime, and noise. Transportation is difficult for individuals with limited mobility.

- Rates of violent crime, robbery, and aggravated assault in New York City were all 50 percent or greater than the state average (**Exhibit 23**).
- In County Health Rankings, the Bronx, Brooklyn, Manhattan, and Staten Island ranked in the bottom half of all New York counties in Physical Environment. The Bronx, Brooklyn, Manhattan, and Staten Island also ranked in the bottom quartile in Air Pollution – Particulate Matter (**Exhibit 29A**).
- Asthma hospitalization rates were particularly high in the Bronx, possibly indicating issues with air quality and the surrounding environment (**Exhibit 39**).
- Interviewees identified housing density and public transportation as contributors to the spread of COVID-19.

Homelessness

Homelessness is increasing in the community. The impact of COVID-19 has contributed to recent increases. Homeless is complex and intertwines other issues including affordable housing, access to mental health care, substance abuse, and poverty.

- The number of unsheltered individuals in New York City decreased slightly between 2017 and 2019. The number of unsheltered individuals in the subways increased by over 20 percent (**Exhibit 27**).
- In County Health Rankings, each of the five boroughs ranked in the bottom quartile of all New York counties in Severe Housing Problems (**Exhibit 29A**).
- Interviewees indicated that shifts in housing homeless people from shelters to hotels during COVID-19 have increased the number of homeless individuals in some neighborhoods. The resumption of evictions, prohibited by COVID-19 restrictions, was projected to increase homelessness, as was migration of homeless individuals from other areas into New York City.

Navigating a Changing Health Care Provider Environment

Many changes in the health care provider environment are leading to anxiety by residents. Additional changes, such as the emergence of Urgent Care Clinics, are leading to uncertainty among residents in how to access healthcare services.

- In County Health Rankings, the Bronx and Brooklyn ranked worse than the state average for preventable hospital stays (**Exhibit 29B**).
- Rates for ambulatory care sensitive conditions (ACSCs) in the Bronx and Brooklyn were particularly high (**Exhibit 51**). High rates indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.
- Many interviewees detailed issues in navigating the changing health care provider environment. Specific issues identified include increased travel times to newer services, misinformation about changes, and gaps between expectations and service delivery options.
- Interviewees indicated that the rapid emergence and severity of COVID-19, evolving understanding, and changing protocols increased difficulty in navigating the healthcare system, particularly for community members with disabilities and those without access to digital sources of information.

Poverty, Financial Hardship, and Basic Needs Insecurity

Lower-income residents can experience considerable difficulty in accessing basic needs, including healthy food and safe, affordable housing. Primary care access can be limited due to the relatively high cost of deductible / co-pays. Unmet mental health needs may be an issue due to daily stress.

- Poverty rates in the Bronx, Brooklyn, and Manhattan were worse than the state and national averages (**Exhibit 12**). The poverty percentages for Black and Hispanic or Latino residents were particularly higher than state and national comparisons (**Exhibit 13**).
- Over 36 percent of households in the Bronx and over 26 percent in Brooklyn had an annual income of less than \$25,000, compared to 20 percent nationwide (**Exhibit 14**).
- Unemployment rates in the Bronx, Brooklyn, Staten Island, and New York City have been higher than state and national averages over recent history (**Exhibit 16**). Rates were particularly high for Black and Hispanic or Latino residents (**Exhibit 17**).
- The Bronx, Brooklyn, and Manhattan ranked worse than state averages for children in poverty, high school graduation, and income inequality (**Exhibit 29B**).
- A large portion of the MSH community ranked in the “Highest Need” category in Community Need Index (**Exhibit 54**).
- Interviewees indicated that the impact of COVID-19 has decreased economic activity, reduced household income, and increased job losses, along with corresponding employee benefits. As a result, more community members are experiencing basic needs instability, included access to food and health care.

Safe and Affordable Housing

Inadequate housing contributes to poor health outcomes. Demand for housing in the community is increasing rents and new housing units will be market rates, unaffordable to some residents.

- According to the U.S. Department of Housing and Urban Development (HUD), the average months on waiting lists for subsidized housing were higher in all boroughs than the national average (**Exhibit 25**).
- The average number of years in public housing was longer in Manhattan than the New York City average (**Exhibit 26B**).
- In County Health Rankings, all boroughs ranked in the bottom quartile of all New York counties in Severe Housing Problems (**Exhibit 29A**).
- Interviewees indicated that the economic impact of COVID-19 has increased housing instability, which was a pre-pandemic concern for some community members due to housing costs.

Socio-Economic, Racial, Cultural, Ethnic, and Linguistic Barriers to Care

Access to care may be limited for residents who do not feel welcomed by providers. Insufficient cultural competence and language limitations can serve as barriers. For some residents, barriers may be influenced by real or perceived differences in services based on race, ethnicity, socioeconomic background, sexual orientation, and/or other characteristics.

- Many neighborhoods in the MSH community are racially and ethnically diverse. Approximately 33 percent of residents in the Bronx and Brooklyn were Black, and over 56 percent of residents in the Bronx were Hispanic or Latino (**Exhibit 6**).
- The population that is linguistically isolated in the Bronx, Brooklyn, Manhattan, and Queens was significantly higher than the New York State and national averages (**Exhibit 10**).
- More than 46 percent of Queens residents and more than 35 percent of the Bronx and Brooklyn residents were foreign born, compared to 23 percent statewide and 14 percent nationally (**Exhibit 11**).
- The rates for cardiovascular disease mortality, diabetes mortality, and respiratory diseases greatly varied by race and ethnicity, with Black and Hispanic residents comparing particularly unfavorably to other cohorts in New York City (**Exhibits 34 and 40**).
- Interviewees indicated that the COVID-19 pandemic disproportionately impacted some community members, including seniors, low-income residents, racial and ethnic minorities, healthcare providers, and school children. Some community members also had difficulty accessing information, including individuals with disabilities. Community members without citizenship documentation were reluctant to receive health care services.

Substance Abuse

Substance abuse in the community includes alcohol and multiple illegal substances. Alcohol abuse is evidenced by binge drinking in local bars, and opioid abuse disproportionately impacts homeless individuals.

- Rates of young adult arrests for drug use/possession/sale were significantly higher in the Bronx, Brooklyn, Manhattan, Queens, and New York City than the state average (**Exhibit 24**).
- Manhattan ranked last among all counties in New York for excessive drinking (**Exhibit 29A**).
- The percentage of adults who reported binge drinking during the past month was higher in Manhattan and Staten Island than the state average (**Exhibit 49D**).
- Interviews indicated that some community members have misused alcohol and drugs to cope with daily stressors, and that misuse has increased to cope with the impact of COVID-19.

CHNA DATA AND ANALYSIS

DEFINITION OF COMMUNITY ASSESSED

This section identifies and describes the community assessed by the Mount Sinai Hospital (MSH) and how it was determined.

MSH’s community is comprised of the entirety of New York City, including each of the five boroughs⁵ (**Exhibit 1**). The community is divided into neighborhoods utilized by the New York State Department of Health;⁶ with each of the 42 neighborhoods in New York City in the MSH community.

Mount Sinai Hospital - Manhattan campus is located in the East Harlem neighborhood of Manhattan, and Mount Sinai – Queens campus is located in the neighborhood of Northwest Queens in Queens. To enhance clarity, we use following acronyms throughout this document:

Acronym	Entity
MS - Manhattan	Mount Sinai Hospital, the campus in Manhattan
MS - Queens	Mount Sinai Queens, the campus in Queens
MSH	Mount Sinai Hospital, the hospital facility with campuses in Manhattan and Queens

New York City (the MSH community) was estimated to have a population of approximately 8.5 million persons in 2018.

The community definition was validated based on the geographic origins of discharges from MS – Manhattan and MS – Queens. In 2019, the community collectively accounted for 80 percent of MSH’s 65,756 inpatient discharges (**Exhibit 1**).

⁵ Data are discussed at the borough-level in this CHNA. However, the Bronx is equivalent to Bronx County, Brooklyn is equivalent to Kings County, Manhattan is equivalent to New York County, Queens is equivalent to Queens County, and Staten Island is equivalent to Richmond County.

⁶ New York State Department of Health. (2006). ZIP Code Definitions of New York City Neighborhoods. Retrieved 2013, from: www.health.ny.gov/statistics/cancer/registry/appendix/neighborhoods.htm

Exhibit 1A: Community Population by Borough, 2018, and Inpatient Discharges, 2019

Borough	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Bronx	1,441,455	6,000	9.1%	11.4%
Brooklyn	2,600,747	9,103	13.8%	17.2%
Manhattan	1,620,082	20,655	31.4%	39.1%
Queens	2,326,648	16,089	24.5%	30.5%
Staten Island	474,101	979	1.5%	1.9%
Total	8,463,033	52,826	80.3%	100.00%

Source: U.S. Census ACS 2018 5-year estimates and the Mount Sinai Health System.

Exhibit 1B: Community Population – Bronx, 2018, and Inpatient Discharges, 2019

Neighborhood	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Bronx	1,441,455	6,000	9.1%	11.4%
Crotona-Tremont	213,665	946	1.4%	1.8%
Fordham-Bronx Park	266,339	759	1.2%	1.4%
High-Bridge-Morisania	218,094	1,219	1.9%	2.3%
Hunts Point-Mott Haven	140,964	1,092	1.7%	2.1%
Kingsbridge-Riverdale	93,256	435	0.7%	0.8%
NE Bronx	209,423	420	0.6%	0.8%
Pelham-Throgs Neck	299,714	1,129	1.7%	2.1%

Source: U.S. Census ACS 2018 5-year estimates and the Mount Sinai Health System.

Exhibit 1C: Community Population – Brooklyn, 2018, and Inpatient Discharges, 2019

Neighborhood	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Brooklyn	2,600,747	9,103	13.8%	17.2%
Bedford Stuyvesant-Crown Heights	330,489	926	1.4%	1.8%
Bensonhurst-Bay Ridge	205,749	365	0.6%	0.7%
Borough Park	330,597	1,260	1.9%	2.4%
Canarsie-Flatlands	209,241	663	1.0%	1.3%
Coney Island-Sheepshead Bay	290,239	1,120	1.7%	2.1%
Downtown Heights-Slope	258,295	1,351	2.1%	2.6%
East Flatbush-Flatbush	301,650	847	1.3%	1.6%
East New York	190,632	495	0.8%	0.9%
Greenpoint	139,116	1,073	1.6%	2.0%
Sunset Park	123,245	153	0.2%	0.3%
Williamsburg-Bushwick	221,494	850	1.3%	1.6%

Source: U.S. Census ACS 2018 5-year estimates and the Mount Sinai Health System.

Exhibit 1D: Community Population – Manhattan, 2018, and Inpatient Discharges, 2019

Neighborhood	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Manhattan	1,620,082	20,655	31.4%	39.1%
Central Harlem-Morningside Heights	182,658	3,040	4.6%	5.8%
Chelsea-Clinton	154,214	1,008	1.5%	1.9%
East Harlem	115,340	6,274	9.5%	11.9%
Gramercy Park-Murray	131,713	936	1.4%	1.8%
Greenwich Village-SoHo	82,858	399	0.6%	0.8%
Lower Manhattan	60,156	358	0.5%	0.7%
Union Square-Lower East Side	187,600	1,015	1.5%	1.9%
Upper East Side	214,611	3,266	5.0%	6.2%
Upper West Side	219,326	3,250	4.9%	6.2%
Washington Heights-Inwood	271,606	1,109	1.7%	2.1%

Source: U.S. Census ACS 2018 5-year estimates and the Mount Sinai Health System.

Exhibit 1E: Community Population – Queens, 2018, and Inpatient Discharges, 2019

Neighborhood	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Queens	2,326,648	16,089	24.5%	30.5%
Bayside-Little Neck	89,725	137	0.2%	0.3%
Flushing-Clearview	256,128	595	0.9%	1.1%
Fresh Meadows	101,457	224	0.3%	0.4%
Jamaica	340,629	935	1.4%	1.8%
Long Island City-Astoria	204,828	7,516	11.4%	14.2%
Ridgewood-Forest Hills	260,709	1,000	1.5%	1.9%
Rockaway	125,898	309	0.5%	0.6%
SE Queens	203,437	328	0.5%	0.6%
SW Queens	285,269	833	1.3%	1.6%
West Queens	458,568	4,212	6.4%	8.0%

Source: U.S. Census ACS 2018 5-year estimates and the Mount Sinai Health System.

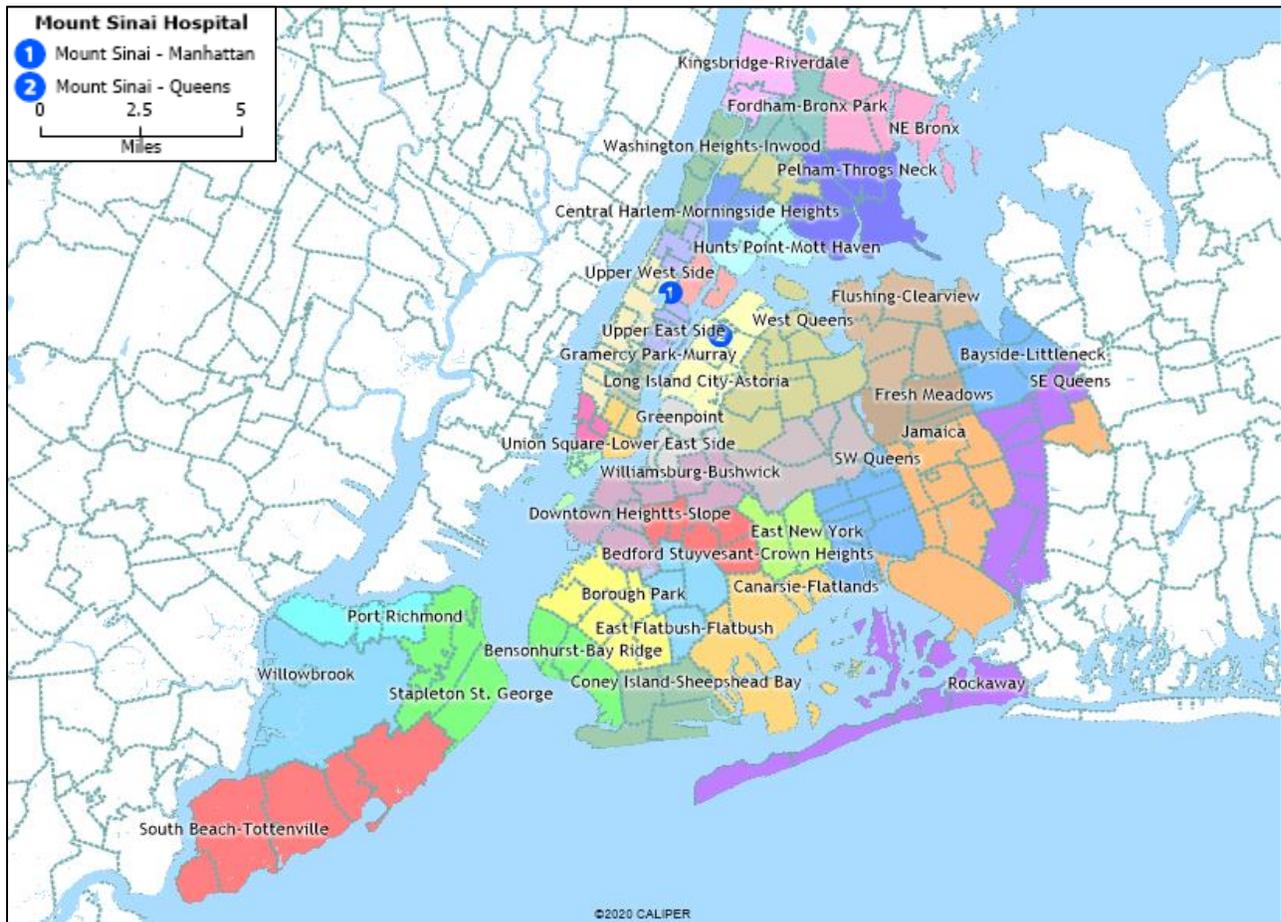
Exhibit 1F: Community Population – Staten Island, 2018, and Inpatient Discharges, 2019

Neighborhood	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Staten Island	474,101	979	1.5%	1.9%
Port Richmond	67,413	142	0.2%	0.3%
South Beach-Tottenville	193,832	393	0.6%	0.7%
Stapleton St. George	122,095	254	0.4%	0.5%
Willowbrook	90,761	190	0.3%	0.4%

Source: U.S. Census ACS 2018 5-year estimates and the Mount Sinai Health System.

Exhibit 2 presents a map displaying the 42 neighborhoods that comprise the MSH community.

Exhibit 2: MSH Community



Sources: Caliper Maptitude (2020) and the Mount Sinai Health System.

SECONDARY DATA ASSESSMENT

This section presents secondary data regarding demographics, economic indicators, and health needs in the MSH community.

Demographics

Population characteristics and changes influence health issues in and services needed by communities. A total of 8,463,033 people were estimated to reside in New York City (the MSH community) in 2018, with a projected population of 8,925,115 residents in 2024.

Exhibit 3 illustrates the total number of residents living in the community by borough, and their distribution by sex and age in 2015.

Exhibit 3: Population by Age and Sex, 2018

Borough	Ages 0-19	Ages 20-44	Ages 45-64	Ages 65+	Total Population
Bronx	28.0%	36.1%	23.7%	12.2%	1,441,455
Male	14.2%	17.1%	10.7%	4.7%	675,373
Female	13.7%	19.0%	13.0%	7.4%	766,082
Brooklyn	25.1%	38.7%	23.1%	13.2%	2,600,747
Male	12.8%	18.6%	10.6%	5.4%	1,231,912
Female	12.3%	20.0%	12.5%	7.8%	1,368,835
Manhattan	16.5%	43.9%	23.8%	15.8%	1,620,082
Male	8.2%	21.1%	11.6%	6.4%	766,505
Female	8.3%	22.8%	12.2%	9.3%	853,577
Queens	22.2%	36.4%	26.7%	14.8%	2,326,648
Male	11.4%	18.2%	12.9%	6.2%	1,131,770
Female	10.8%	18.2%	13.8%	8.6%	1,194,878
Staten Island	24.3%	32.4%	27.8%	15.5%	474,101
Male	12.5%	16.0%	13.3%	6.6%	229,424
Female	11.8%	16.3%	14.6%	8.8%	244,677
Total	23.1%	38.3%	24.6%	14.1%	8,463,033
Male	11.7%	18.6%	11.6%	5.8%	4,034,984
Female	11.3%	19.7%	13.0%	8.3%	4,428,049

Source: U.S. Census Bureau, ACS 5 year estimates, 2014-2018.

In 2018, all of the boroughs had a higher proportion of women in the community. Manhattan had a lower proportion of residents aged 0 to 19 years, a higher proportion of those aged 20 to 44, and a higher proportion of those aged 65 and older than any other borough in New York City.

Exhibit 4 illustrates the total number of residents living in the community by borough and neighborhood, and their distributions by sex and age in 2019 and estimated in 2024, comparing the projected growth rates of different cohorts in the community.

Exhibit 4: Population by Age, 2019-2024

Borough	2019 Population					2024 Population					Percent Change 2019-2024				
	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+
Bronx	1,492,869	375,824	385,674	545,632	185,739	1,537,109	381,078	371,286	568,166	216,579	3.0%	1.4%	-3.7%	4.1%	16.6%
Crotona-Tremont	221,522	63,215	60,055	77,716	20,536	228,949	63,957	58,411	81,398	25,183	3.4%	1.2%	-2.7%	4.7%	22.6%
Fordham-Bronx Park	266,789	69,801	71,239	97,585	28,164	273,638	70,777	66,946	102,109	33,806	2.6%	1.4%	-6.0%	4.6%	20.0%
High-Bridge-Morisania	227,127	63,374	60,398	80,080	23,275	234,910	64,295	58,710	84,250	27,655	3.4%	1.5%	-2.8%	5.2%	18.8%
Hunts Point-Mott Haven	160,383	43,436	47,530	55,192	14,225	166,180	44,204	46,452	58,994	16,530	3.6%	1.8%	-2.3%	6.9%	16.2%
Kingsbridge-Riverdale	97,733	19,744	20,670	36,805	20,514	100,589	20,701	19,849	37,369	22,670	2.9%	4.8%	-4.0%	1.5%	10.5%
NE Bronx	208,498	44,066	49,195	79,320	35,917	214,242	44,362	47,653	81,009	41,218	2.8%	0.7%	-3.1%	2.1%	14.8%
Pelham-Throgs Neck	310,817	72,188	76,587	118,934	43,108	318,601	72,782	73,265	123,037	49,517	2.5%	0.8%	-4.3%	3.4%	14.9%
Brooklyn	2,663,078	625,326	684,350	995,454	357,948	2,729,224	653,945	628,891	1,037,719	408,669	2.5%	4.6%	-8.1%	4.2%	14.2%
Bedford Stuyvesant-Crown Heights	341,972	80,218	92,183	129,765	39,806	352,334	83,689	85,177	136,572	46,896	3.0%	4.3%	-7.6%	5.2%	17.8%
Bensonhurst-Bay Ridge	204,034	40,894	43,653	83,923	35,564	206,780	42,908	39,450	84,873	39,549	1.3%	4.9%	-9.6%	1.1%	11.2%
Borough Park	338,190	99,927	82,231	112,916	43,116	343,242	103,516	76,434	116,365	46,927	1.5%	3.6%	-7.0%	3.1%	8.8%
Canarsie-Flatlands	201,707	43,096	49,180	77,075	32,356	204,737	44,394	46,027	76,786	37,530	1.5%	3.0%	-6.4%	-0.4%	16.0%
Coney Island-Sheepshead Bay	297,873	60,552	64,344	111,283	61,694	303,547	64,212	58,711	112,162	68,462	1.9%	6.0%	-8.8%	0.8%	11.0%
Downtown Heights-Slope	250,601	52,655	66,405	103,511	28,030	259,458	56,586	59,029	111,470	32,373	3.5%	7.5%	-11.1%	7.7%	15.5%
East Flatbush-Flatbush	310,419	70,160	76,325	118,559	45,375	314,247	72,937	69,106	120,203	52,001	1.2%	4.0%	-9.5%	1.4%	14.6%
East New York	204,307	54,032	56,199	72,139	21,937	211,720	56,344	53,456	75,671	26,249	3.6%	4.3%	-4.9%	4.9%	19.7%
Greenpoint	145,369	31,002	49,119	51,254	13,994	151,672	32,237	44,882	58,317	16,236	4.3%	4.0%	-8.6%	13.8%	16.0%
Sunset Park	134,131	32,958	35,389	52,217	13,567	136,770	34,622	31,557	54,732	15,859	2.0%	5.0%	-10.8%	4.8%	16.9%
Williamsburg-Bushwick	234,475	59,832	69,322	82,812	22,509	244,717	62,500	65,062	90,568	26,587	4.4%	4.5%	-6.1%	9.4%	18.1%
Manhattan	1,665,583	252,757	497,356	652,858	262,612	1,705,235	270,933	442,755	693,788	297,759	2.4%	7.2%	-11.0%	6.3%	13.4%
Central Harlem-Morningside Heights	173,865	32,989	54,988	64,793	21,095	179,036	34,735	50,162	69,171	24,968	3.0%	5.3%	-8.8%	6.8%	18.4%
Chelsea-Clinton	165,857	16,118	52,596	72,952	24,191	173,086	17,871	46,285	80,115	28,815	4.4%	10.9%	-12.0%	9.8%	19.1%
East Harlem	117,409	23,562	36,433	41,852	15,562	120,627	24,650	33,266	45,073	17,638	2.7%	4.6%	-8.7%	7.7%	13.3%
Gramercy Park-Murray	143,293	14,134	49,248	55,247	24,664	147,473	15,728	43,487	60,680	27,578	2.9%	11.3%	-11.7%	9.8%	11.8%
Greenwich Village-SoHo	87,200	10,766	26,814	36,570	13,050	89,169	11,683	23,452	39,019	15,015	2.3%	8.5%	-12.5%	6.7%	15.1%
Lower Manhattan	64,760	9,847	24,741	24,050	6,122	69,010	11,267	22,819	27,518	7,406	6.6%	14.4%	-7.8%	14.4%	21.0%
Union Square-Lower East Side	204,928	24,918	69,198	77,652	33,160	208,539	26,126	61,685	83,084	37,644	1.8%	4.8%	-10.9%	7.0%	13.5%
Upper East Side	226,453	35,958	57,469	88,571	44,455	230,234	38,889	51,561	91,359	48,425	1.7%	8.2%	-10.3%	3.1%	8.9%
Upper West Side	229,204	37,720	51,976	94,712	44,796	232,757	40,818	45,703	96,293	49,943	1.6%	8.2%	-12.1%	1.7%	11.5%
Washington Heights-Inwood	252,614	46,745	73,893	96,459	35,517	255,304	49,166	64,335	101,476	40,327	1.1%	5.2%	-12.9%	5.2%	13.5%
Queens	2,398,043	494,546	558,096	980,811	364,590	2,462,682	513,185	507,013	1,014,436	428,048	2.7%	3.8%	-9.2%	3.4%	17.4%
Bayside-Littleneck	93,082	16,124	18,857	39,307	18,794	95,463	16,394	18,346	38,820	21,903	2.6%	1.7%	-2.7%	-1.2%	16.5%
Flushing-Clearview	279,675	49,072	55,097	121,146	54,360	288,443	51,280	49,680	123,492	63,991	3.1%	4.5%	-9.8%	1.9%	17.7%
Fresh Meadows	102,407	22,918	23,505	39,160	16,824	104,962	24,163	21,510	40,058	19,231	2.5%	5.4%	-8.5%	2.3%	14.3%
Jamaica	336,243	73,516	82,622	131,169	48,936	345,375	75,832	76,905	135,010	57,628	2.7%	3.2%	-6.9%	2.9%	17.8%
Long Island City-Astoria	221,393	36,436	63,200	94,443	27,314	227,190	37,994	53,935	103,661	31,600	2.6%	4.3%	-14.7%	9.8%	15.7%
Ridgewood-Forest Hills	260,646	52,501	52,748	110,674	44,723	267,449	55,121	47,550	113,244	51,534	2.6%	5.0%	-9.9%	2.3%	15.2%
Rockaway	126,242	32,467	29,113	44,883	19,779	130,903	33,678	28,515	45,931	22,779	3.7%	3.7%	-2.1%	2.3%	15.2%
SE Queens	197,598	38,810	46,505	78,145	34,138	201,248	39,609	42,817	79,092	39,730	1.8%	2.1%	-7.9%	1.2%	16.4%
SW Queens	282,787	61,351	67,929	115,231	38,276	290,136	63,134	62,281	118,009	46,712	2.6%	2.9%	-8.3%	2.4%	22.0%
West Queens	497,970	111,351	118,520	206,653	61,446	511,513	115,980	105,474	217,119	72,940	2.7%	4.2%	-11.0%	5.1%	18.7%

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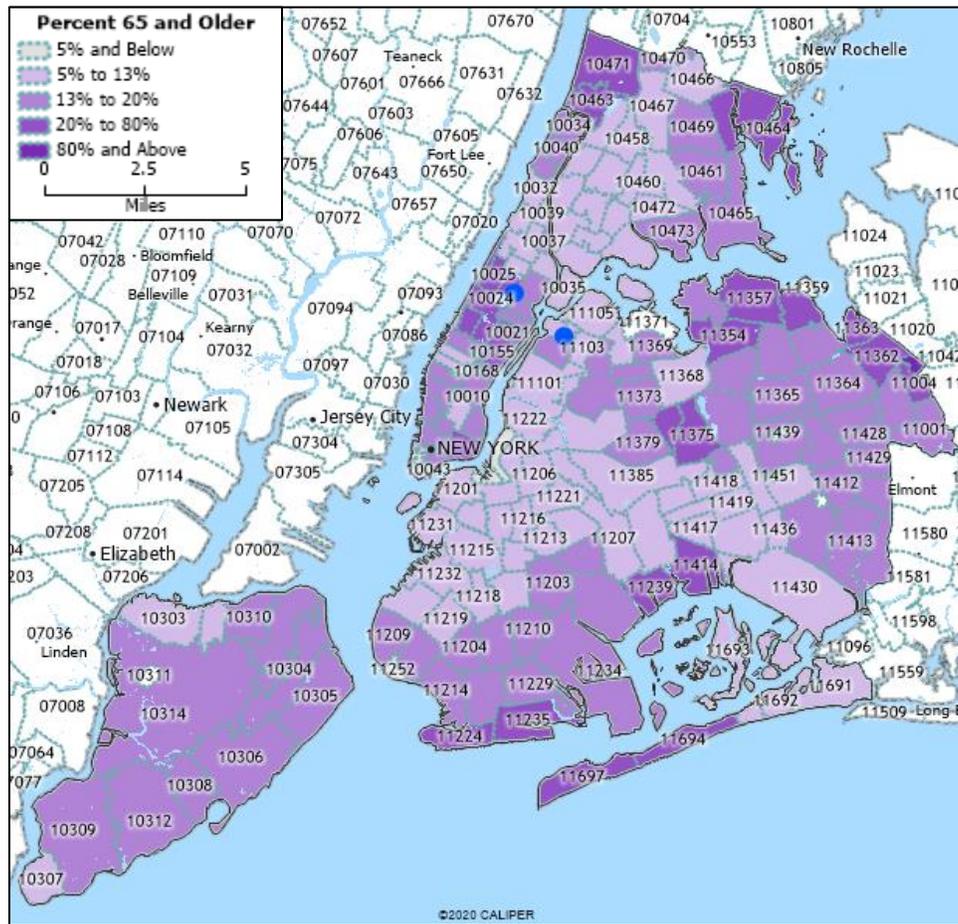
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Borough	2019 Population					2024 Population					Percent Change 2019-2024				
	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+
Staten Island	481,997	103,856	105,798	192,821	79,522	490,865	101,602	104,530	191,414	93,319	1.8%	-2.2%	-1.2%	-0.7%	17.3%
Port Richmond	73,226	19,249	17,800	27,755	8,422	75,081	18,821	17,823	28,164	10,273	2.5%	-2.2%	0.1%	1.5%	22.0%
South Beach-Tottenville	194,510	39,330	41,265	79,968	33,947	198,297	38,241	41,406	78,684	39,966	1.9%	-2.8%	0.3%	-1.6%	17.7%
Stapleton St. George	127,043	27,643	28,827	50,258	20,315	128,897	27,145	27,839	50,219	23,694	1.5%	-1.8%	-3.4%	-0.1%	16.6%
Willowbrook	87,218	17,634	17,906	34,840	16,838	88,590	17,395	17,462	34,347	19,386	1.6%	-1.4%	-2.5%	-1.4%	15.1%
Total	8,701,570	1,852,309	2,231,274	3,367,576	1,250,411	8,925,115	1,920,743	2,054,475	3,505,523	1,444,374	2.6%	3.7%	-7.9%	4.1%	15.5%

Source: HANYS via the Mount Sinai Health System.

The total population of all boroughs is expected to grow 2.6 percent from 2019 to 2024. All boroughs except Staten Island are expected to experience an increase in population among the 0-17, 35-64, and 65+ cohorts. Additionally, all boroughs are expected to experience a decrease in population in the 18-34 age cohort. The population aged 65 and older is expected to experience the highest growth rate in each of the boroughs.

Exhibit 5: Residents Aged 65+, 2018



Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS 5-year estimates, 2014-2018.
 Note: The percentage of residents aged 65+ for Queens ZIP Code 11005 is 87.8 percent.

The proportion of the population 65 years of age and older varies by ZIP Code. The ZIP Codes of 11005 (Southeast Queens), 10022 (Gramercy Park-Murray), 10075 (Upper East Side), and 11360 (Flushing-Clearview) had comparatively high proportions of this population cohort.

Exhibit 6 indicates the distribution of the population by race in the MSH community.

Exhibit 6: Distribution of Population by Race, 2018

Neighborhood	Total Population 2018	White	Black	Asian	Other Race*	Two or More Races	Hispanic or Latino (Any Race)
Bronx	1,441,455	21.3%	33.9%	3.6%	37.5%	3.7%	56.1%
Crotona-Tremont	213,665	12.9%	34.6%	1.3%	48.3%	2.9%	68.3%
Fordham-Bronx Park	266,339	18.1%	26.2%	4.0%	47.8%	3.8%	64.7%
High-Bridge-Morisania	218,094	11.8%	38.8%	1.1%	44.4%	3.9%	63.3%
Hunts Point-Mott Haven	140,964	12.1%	32.9%	0.8%	51.3%	3.0%	68.7%
Kingsbridge-Riverdale	93,256	50.6%	14.3%	4.3%	25.2%	5.6%	44.5%
NE Bronx	209,423	18.9%	59.9%	4.3%	13.6%	3.3%	25.9%
Pelham-Throgs Neck	299,714	33.8%	25.2%	7.4%	29.6%	4.0%	53.4%
Brooklyn	2,600,747	43.5%	32.6%	11.8%	9.2%	2.9%	19.2%
Bedford Stuyvesant-Crown Heights	330,489	20.8%	66.7%	3.0%	6.3%	3.2%	13.8%
Bensonhurst-Bay Ridge	205,749	58.7%	1.9%	29.2%	7.3%	2.9%	15.8%
Borough Park	330,597	64.1%	4.3%	22.1%	7.3%	2.2%	12.6%
Canarsie-Flatlands	209,241	23.7%	66.2%	4.5%	4.0%	1.6%	9.4%
Coney Island-Sheepshead Bay	290,239	64.3%	7.4%	18.0%	7.4%	2.9%	13.3%
Downtown Heights-Slope	258,295	64.0%	15.4%	8.3%	7.0%	5.3%	16.1%
East Flatbush-Flatbush	301,650	18.4%	70.4%	2.9%	6.1%	2.2%	10.5%
East New York	190,632	20.4%	59.2%	3.6%	14.6%	2.1%	37.4%
Greenpoint	139,116	76.6%	5.9%	5.5%	8.6%	3.5%	21.7%
Sunset Park	123,245	32.8%	3.4%	36.3%	24.4%	3.1%	43.7%
Williamsburg-Bushwick	221,494	38.7%	32.1%	5.6%	19.9%	3.7%	41.8%
Manhattan	1,620,082	56.4%	14.8%	12.1%	12.1%	4.6%	25.7%
Central Harlem-Morningside Heights	182,658	22.5%	53.5%	5.5%	13.6%	4.9%	25.4%
Chelsea-Clinton	154,214	69.7%	6.0%	16.9%	4.2%	3.2%	15.3%
East Harlem	115,340	29.6%	34.1%	8.1%	24.6%	3.7%	46.9%
Gramercy Park-Murray	131,713	75.3%	3.4%	17.4%	1.4%	2.6%	7.5%
Greenwich Village-SoHo	82,858	73.2%	2.7%	18.6%	1.7%	3.8%	6.4%
Lower Manhattan	60,156	65.8%	5.0%	23.0%	2.3%	3.9%	10.3%
Union Square-Lower East Side	187,600	54.1%	7.9%	24.5%	10.1%	3.3%	20.9%
Upper East Side	214,611	81.3%	2.8%	10.5%	2.9%	2.6%	9.8%
Upper West Side	219,326	73.8%	7.7%	9.5%	5.7%	3.4%	15.9%
Washington Heights-Inwood	271,606	34.5%	16.9%	3.5%	34.7%	10.5%	64.5%
Queens	2,326,648	39.3%	18.3%	25.0%	13.9%	3.4%	27.9%
Bayside-Littleneck	89,725	46.1%	2.6%	45.3%	4.0%	2.0%	10.7%
Flushing-Clearview	256,128	33.7%	2.2%	51.9%	9.6%	2.5%	17.4%
Fresh Meadows	101,457	44.1%	8.0%	37.2%	6.8%	3.9%	17.4%
Jamaica	340,629	14.7%	48.4%	18.3%	15.2%	3.4%	17.1%
Long Island City-Astoria	204,828	61.9%	6.4%	18.0%	10.0%	3.7%	26.0%
Ridgewood-Forest Hills	260,709	70.5%	2.6%	17.5%	6.0%	3.5%	28.1%
Rockaway	125,898	47.5%	38.3%	3.8%	8.0%	2.3%	23.9%
SE Queens	203,437	15.7%	57.9%	15.0%	7.8%	3.6%	12.4%
SW Queens	285,269	34.8%	10.7%	25.2%	23.3%	6.1%	34.5%
West Queens	458,568	41.6%	6.4%	26.0%	23.3%	2.7%	51.9%
Staten Island	474,101	74.3%	10.2%	8.7%	4.2%	2.5%	18.3%
Port Richmond	67,413	54.0%	26.4%	7.3%	8.8%	3.5%	37.0%
South Beach-Tottenville	193,832	90.1%	1.7%	5.0%	1.9%	1.4%	11.1%
Stapleton St. George	122,095	61.3%	19.4%	9.7%	6.0%	3.6%	22.0%
Willowbrook	90,761	73.1%	4.2%	16.6%	3.5%	2.6%	15.1%
New York City	8,463,033	42.7%	24.2%	13.9%	15.6%	3.5%	29.1%

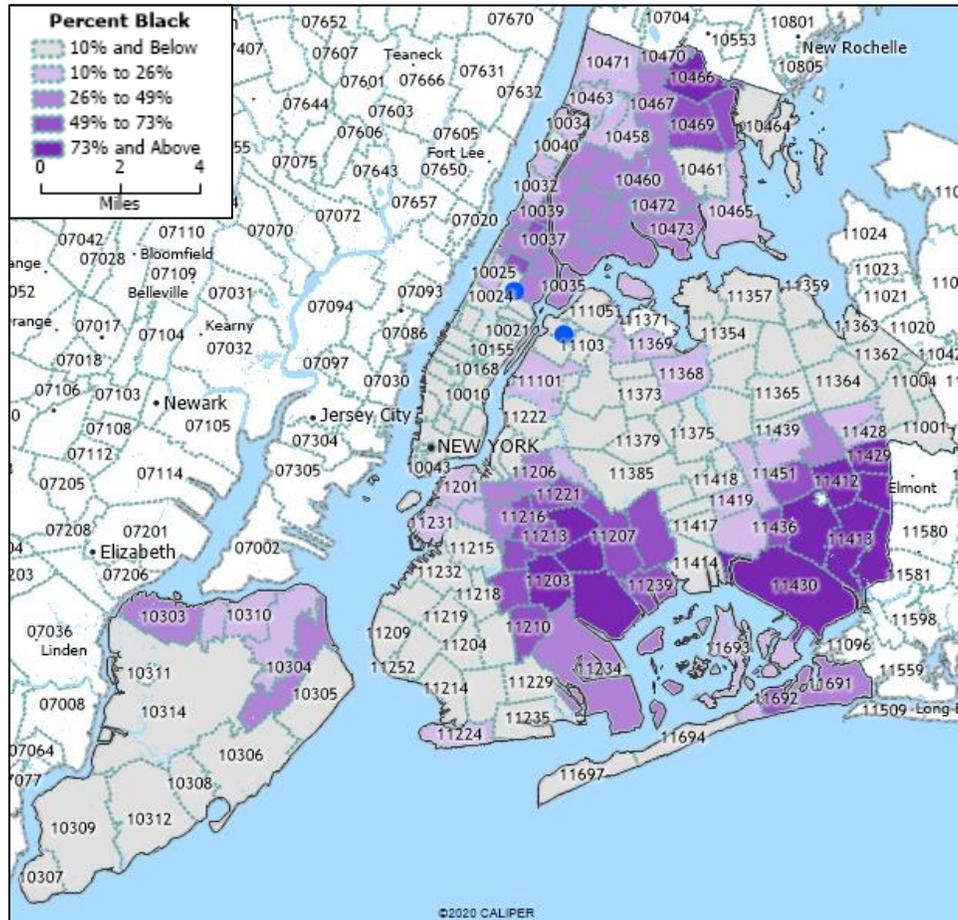
Source: U.S. Census Bureau, ACS 5-year estimates, 2014-2018. * "Other Race" includes the following Census-designated race groups: American Indian / Alaska Native, Native Hawaiian / Pacific Islander, and Some Other Race

New York City and the MSH community are very diverse. Black populations were most prevalent in the Bronx and Brooklyn. Queens had a higher proportion of Asian residents, while the Bronx had a higher proportion of Hispanic (or Latino) residents. The diversity of the

community is important to recognize given the presence of health disparities and barriers to health care access experienced by different racial and ethnic groups.

The percentage of Black residents is highest in the Brooklyn neighborhoods of East Flatbush-Flatbush, Bedford Stuyvesant-Crown Heights, and Canarsie-Flatlands. Asian residents are most concentrated in the Queens' neighborhoods of Flushing-Clearview, Bayside-Littleneck, and Fresh Meadows. Hispanic residents are most concentrated in the Bronx neighborhoods Hunts Point-Mott Haven, Crotona-Tremont, and Fordham-Bronx Park (**Exhibits 7, 8, and 9**).

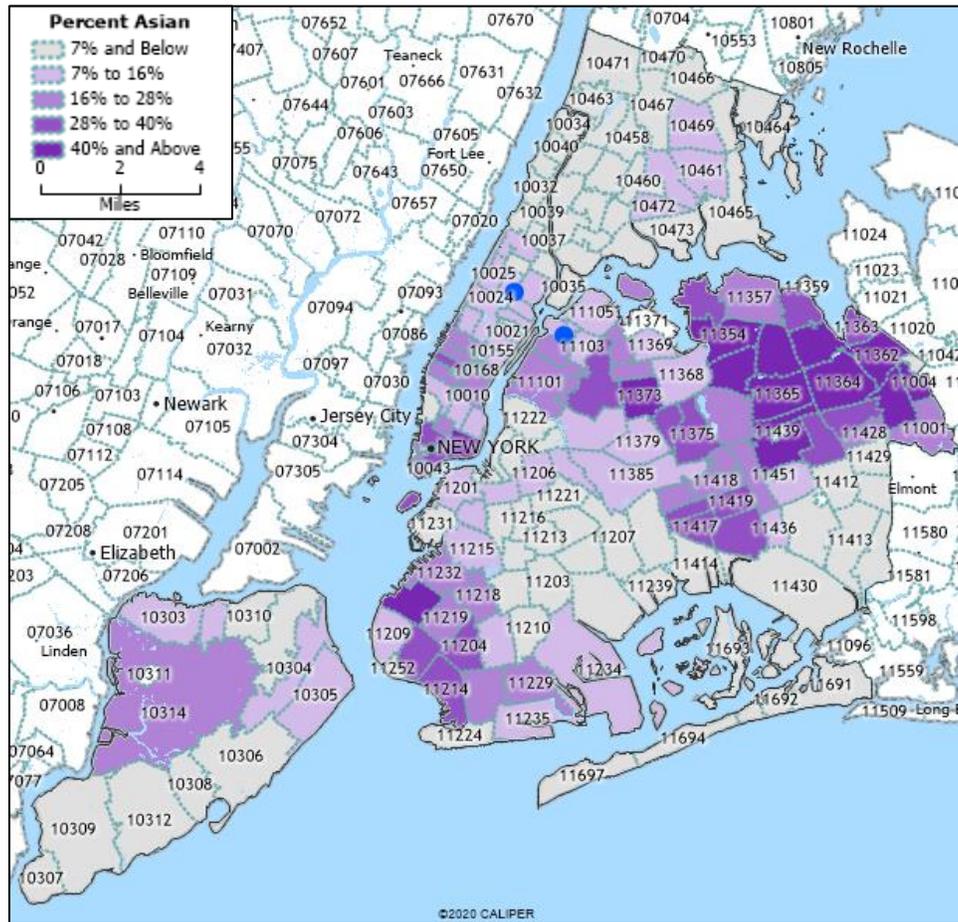
Exhibit 7: Percent of Population – Black, 2018



-Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

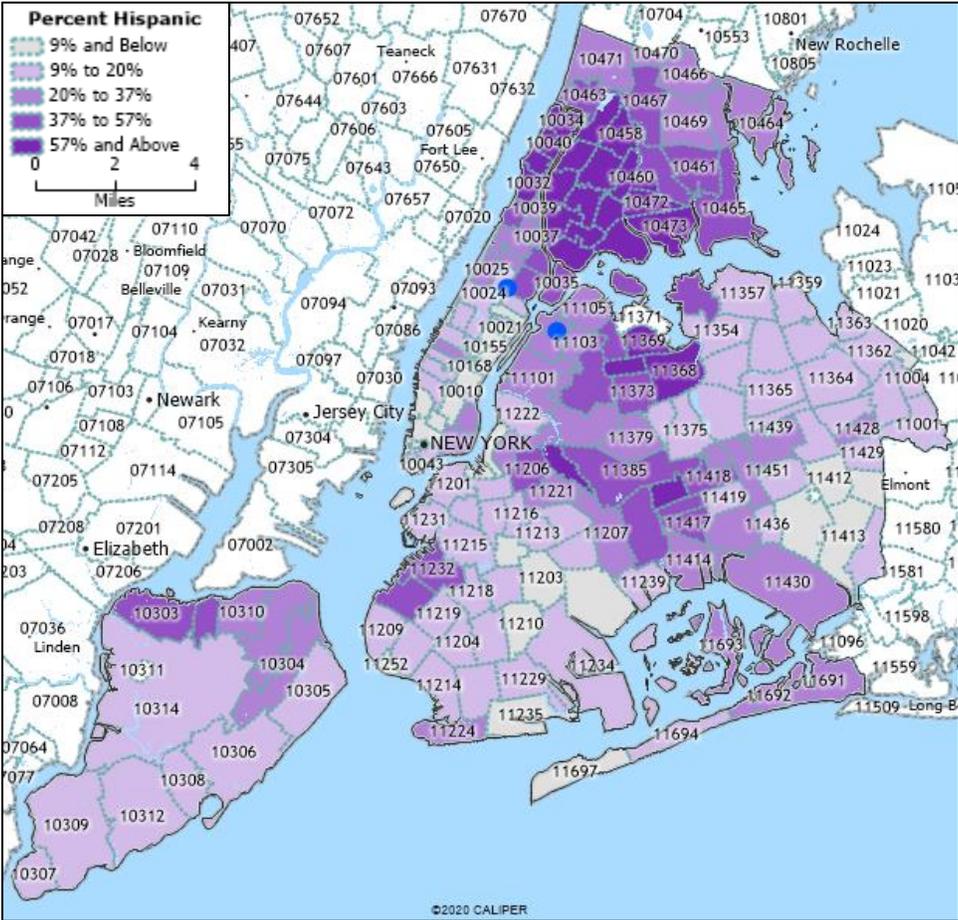
Exhibit 8: Percent of Population – Asian, 2018



Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Exhibit 9: Percent of Population – Hispanic (or Latino), 2018



Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Other community demographic indicators are presented in **Exhibit 10**.

Exhibit 10: Other Socioeconomic Indicators, 2014-2018

Borough and Neighborhood	Population 25+ without High School Diploma	Population with a Disability	Population Linguistically Isolated
Bronx	27.9%	14.8%	26.1%
Crotona-Tremont	35.4%	15.5%	32.0%
Fordham-Bronx Park	29.4%	13.5%	32.9%
High-Bridge-Morisania	34.3%	16.4%	32.6%
Hunts Point-Mott Haven	38.0%	14.6%	30.5%
Kingsbridge-Riverdale	16.5%	14.0%	18.6%
NE Bronx	18.9%	15.0%	11.1%
Pelham-Throgs Neck	23.6%	14.6%	22.3%
Brooklyn	18.4%	10.2%	22.3%
Bedford Stuyvesant-Crown Heights	17.0%	11.6%	7.2%
Bensonhurst-Bay Ridge	19.2%	10.7%	34.7%
Borough Park	23.5%	10.1%	35.7%
Canarsie-Flatlands	12.4%	9.5%	12.3%
Coney Island-Sheepshead Bay	17.1%	13.6%	40.5%
Downtown Heights-Slope	9.4%	8.7%	8.4%
East Flatbush-Flatbush	13.7%	7.9%	11.7%
East New York	20.4%	11.5%	14.5%
Greenpoint	14.8%	8.4%	19.1%
Sunset Park	43.2%	8.5%	54.8%
Williamsburg-Bushwick	24.9%	10.5%	21.3%
Manhattan	12.9%	10.2%	15.3%
Central Harlem-Morningside Heights	17.6%	11.3%	11.9%
Chelsea-Clinton	5.8%	9.2%	10.0%
East Harlem	27.1%	15.8%	19.7%
Gramercy Park-Murray	3.3%	7.4%	6.7%
Greenwich Village-SoHo	8.6%	7.1%	10.0%
Lower Manhattan	8.6%	5.4%	11.2%
Union Square-Lower East Side	18.9%	11.9%	20.8%
Upper East Side	2.3%	7.6%	5.5%
Upper West Side	6.2%	9.7%	9.1%
Washington Heights-Inwood	27.4%	12.6%	34.2%
Queens	18.5%	9.5%	28.9%
Bayside-Littleneck	10.6%	9.1%	29.4%
Flushing-Clearview	22.6%	8.5%	52.3%
Fresh Meadows	13.8%	8.9%	29.3%
Jamaica	17.4%	10.1%	17.0%
Long Island City-Astoria	13.0%	8.5%	23.6%
Ridgewood-Forest Hills	12.0%	8.7%	24.5%
Rockaway	20.3%	15.8%	12.5%
SE Queens	12.1%	9.3%	12.9%
SW Queens	22.4%	10.2%	20.5%
West Queens	26.0%	8.6%	45.9%
Staten Island	11.5%	10.0%	10.9%
Port Richmond	18.0%	9.1%	12.8%
South Beach-Tottenville	7.9%	9.6%	8.0%
Stapleton St. George	15.0%	11.0%	14.5%
Willowbrook	10.0%	9.9%	11.0%
New York	13.5%	11.5%	13.4%
United States	12.3%	12.6%	8.5%

Source: U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

Note: Light grey shading denotes worse than national average; dark grey denotes 50 percent worse than national average

Key findings include:

- The Bronx, Brooklyn, Manhattan, and Queens compared unfavorably to New York State and the U.S. for the percentage of residents aged 25 and older who did not graduate high school. The Bronx was particularly unfavorable.
- The Bronx compared unfavorably to New York State for the percentage of residents with a disability.
- The percentage of residents who were linguistically isolated was higher than the state average in every borough in New York City except for Staten Island, and all were significantly higher than the United States average. Linguistic isolation is defined as the population aged five and older who speak a language other than English and speak English less than “very well.”

Exhibit 11 presents the percentage of residents by borough and neighborhood who are foreign born, and their geographic region of origin.

Exhibit 11: World Region of Birth of Foreign Born Residents as a Percent of Total Population, 2014-2018

Borough and Neighborhood	Total Population	Europe	Asia	Africa	Oceania	Latin America	Northern America	Total Foreign Born
Bronx	1,441,455	1.8%	2.7%	3.9%	0.0%	27.1%	0.0%	35.5%
Crotona-Tremont	213,665	0.3%	1.0%	4.8%	0.0%	32.5%	0.0%	38.6%
Fordham-Bronx Park	266,339	2.0%	3.4%	3.3%	0.0%	32.4%	0.0%	41.1%
High-Bridge-Morissania	218,094	0.2%	1.1%	6.1%	0.0%	30.1%	0.0%	37.6%
Hunts Point-Mott Haven	140,964	0.1%	0.6%	4.8%	0.0%	26.3%	0.0%	31.9%
Kingsbridge-Riverdale	93,256	6.4%	4.2%	1.0%	0.1%	19.2%	0.2%	31.0%
NE Bronx	209,423	2.5%	2.5%	4.1%	0.0%	27.9%	0.1%	37.1%
Pelham-Throgs Neck	299,714	2.5%	5.4%	2.4%	0.0%	18.6%	0.0%	28.9%
Brooklyn	2,600,747	7.0%	10.4%	1.2%	0.1%	17.4%	0.3%	36.5%
Bedford Stuyvesant-Crown Heights	330,489	1.8%	2.4%	1.6%	0.2%	22.3%	0.3%	28.5%
Bensonhurst-Bay Ridge	205,749	12.2%	24.2%	2.0%	0.0%	6.4%	0.2%	44.9%
Borough Park	330,597	10.4%	19.9%	0.9%	0.1%	7.4%	0.3%	38.9%
Canarsie-Flatlands	209,241	3.9%	4.2%	1.2%	0.0%	31.5%	0.1%	41.0%
Coney Island-Sheepshead Bay	290,239	23.5%	21.1%	0.8%	0.0%	5.5%	0.1%	51.1%
Downtown Heights-Slope	258,295	5.1%	5.3%	0.8%	0.4%	5.8%	0.7%	18.2%
East Flatbush-Flatbush	301,650	1.6%	2.7%	2.1%	0.1%	37.3%	0.2%	43.9%
East New York	190,632	0.5%	3.3%	1.9%	0.0%	30.0%	0.1%	35.7%
Greenpoint	139,116	9.3%	4.6%	0.4%	0.4%	6.9%	0.7%	22.2%
Sunset Park	123,245	2.8%	27.5%	1.1%	0.0%	20.3%	0.2%	51.9%
Williamsburg-Bushwick	221,494	2.3%	4.2%	0.6%	0.1%	18.3%	0.1%	25.7%
Manhattan	1,620,082	5.5%	8.9%	1.4%	0.4%	12.0%	0.8%	28.9%
Central Harlem-Morningside Heights	182,658	2.4%	4.3%	4.7%	0.2%	12.4%	0.3%	24.3%
Chelsea-Clinton	154,214	7.8%	12.9%	1.2%	0.7%	6.7%	1.3%	30.6%
East Harlem	115,340	1.9%	6.3%	1.3%	0.1%	14.2%	0.3%	24.1%
Gramercy Park-Murray	131,713	7.1%	11.8%	0.8%	0.4%	3.1%	0.9%	24.0%
Greenwich Village-SoHo	82,858	6.5%	13.7%	0.6%	1.2%	1.8%	1.5%	25.4%
Lower Manhattan	60,156	8.9%	15.8%	0.4%	0.5%	3.1%	0.8%	29.4%
Union Square-Lower East Side	187,600	4.9%	18.1%	0.3%	0.5%	4.8%	0.8%	29.5%
Upper East Side	214,611	8.7%	8.0%	1.0%	0.4%	4.7%	0.8%	23.7%
Upper West Side	219,326	6.8%	7.0%	1.0%	0.4%	6.9%	1.0%	23.1%
Washington Heights-Inwood	271,606	2.7%	2.6%	1.3%	0.1%	37.8%	0.4%	44.9%
Queens	2,326,648	5.3%	18.3%	1.1%	0.0%	22.1%	0.1%	46.9%
Bayside-Littleneck	89,725	5.0%	31.5%	0.3%	0.0%	5.3%	0.2%	42.2%
Flushing-Clearview	256,128	4.9%	41.6%	0.3%	0.0%	9.2%	0.1%	56.1%
Fresh Meadows	101,457	4.5%	29.8%	0.6%	0.0%	8.4%	0.2%	43.5%
Jamaica	340,629	1.5%	12.2%	1.7%	0.0%	27.6%	0.1%	43.1%
Long Island City-Astoria	204,828	10.5%	13.2%	1.7%	0.2%	14.3%	0.4%	40.3%
Ridgewood-Forest Hills	260,709	14.8%	16.0%	1.2%	0.1%	12.0%	0.2%	44.3%
Rockaway	125,898	4.1%	3.2%	2.2%	0.0%	17.1%	0.2%	26.7%
SE Queens	203,437	1.3%	9.4%	1.4%	0.0%	29.7%	0.1%	41.9%
SW Queens	285,269	3.2%	12.5%	0.5%	0.0%	31.9%	0.1%	48.2%
West Queens	458,568	4.1%	19.8%	0.9%	0.1%	32.9%	0.1%	57.8%
Staten Island	474,101	7.7%	7.2%	2.4%	0.0%	5.5%	0.1%	23.0%
Port Richmond	67,413	2.2%	5.7%	3.8%	0.0%	13.3%	0.1%	25.0%
South Beach-Tottenville	193,832	9.5%	4.1%	1.3%	0.0%	2.4%	0.1%	17.4%
Stapleton St. George	122,095	8.9%	8.4%	3.8%	0.0%	7.6%	0.1%	28.9%
Willowbrook	90,761	6.4%	13.3%	1.9%	0.0%	3.7%	0.1%	25.5%
New York State	19,618,453	3.7%	6.5%	1.0%	0.1%	11.1%	0.3%	22.6%
United States	322,903,030	1.5%	4.1%	0.7%	0.1%	6.9%	0.3%	13.5%

Source: U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

In New York State in 2018, 22.6 percent of the population was foreign born compared to 13.5 percent in the U.S. as a whole. These New York residents were primarily from Latin America and Asia. Queens had the highest percentage of foreign born residents in the community, at 46.9 percent. Queens also had the largest percentage of the population that was born in Asia. The Bronx had the highest percentage of residents born in Latin America.

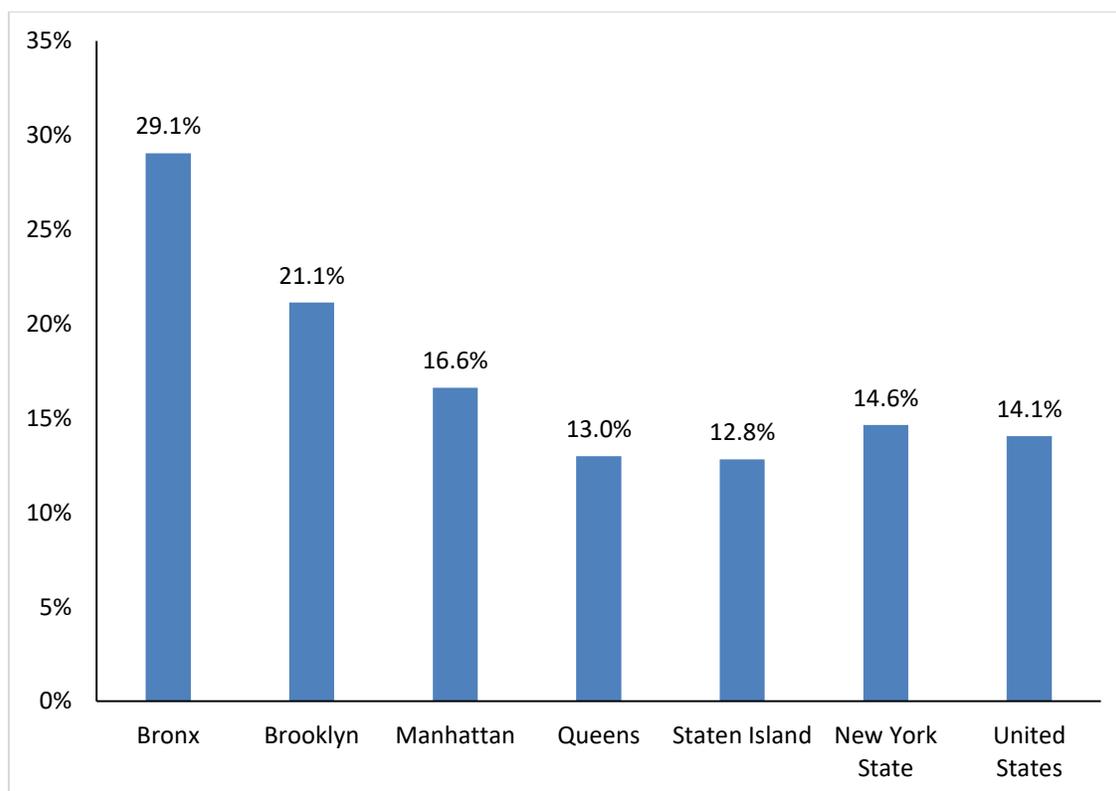
Economic Indicators

The following types of economic indicators with implications for health were assessed: (1) people in poverty; (2) household income; (3) unemployment rates; (4) insurance status; (5) crime; (6) housing and homelessness; and (7) State of New York and New York City budget trends.

People in Poverty

Many health needs are associated with poverty, making it important to understand poverty and other measures of economic well-being. According to the U.S. Census, in 2018 approximately 14.1 percent of people in the U.S., and 14.6 percent of people in New York State lived in poverty. The Bronx, Brooklyn, and Manhattan boroughs reported higher poverty rates than the New York State and U.S. averages (**Exhibit 12**).

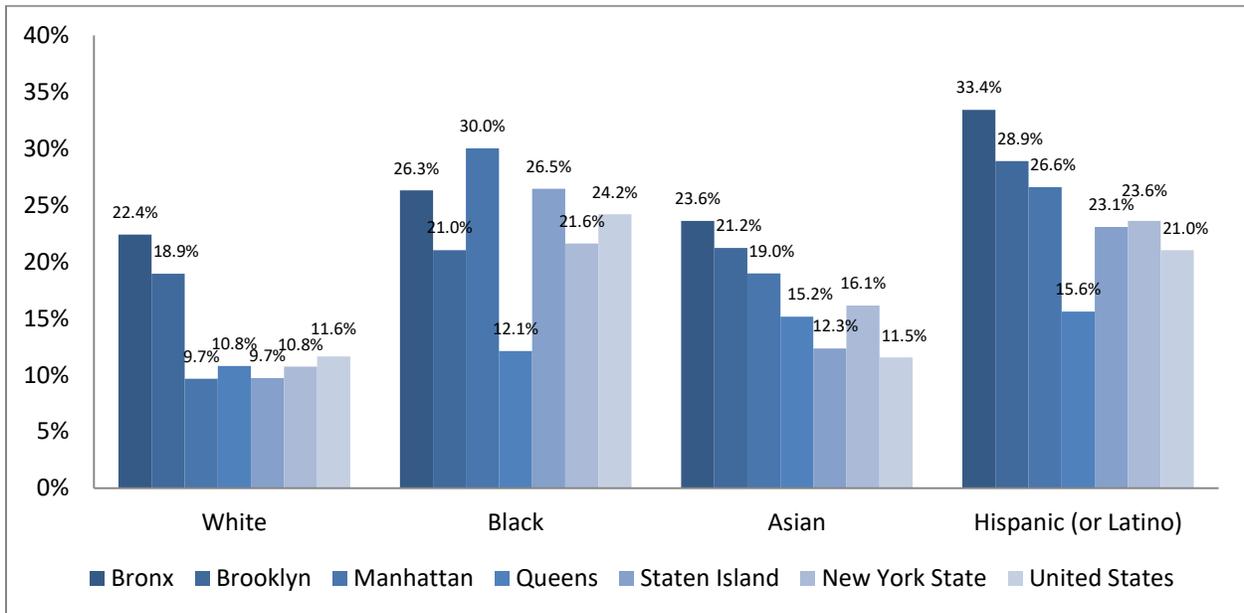
Exhibit 12: Percent of People in Poverty, 2014-2018



Source: U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

Exhibit 13 presents poverty rates by race and ethnicity in each borough.

Exhibit 13: Percent of People in Poverty, by Borough and Race / Ethnicity, 2014-2018



Source: U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

Throughout each of the boroughs, poverty rates for Black and Hispanic (or Latino) residents were disproportionately higher compared to other groups. Poverty rates in the Bronx were higher than the New York State and national averages for every demographic group.

Household Income

Household income is assessed by many public and private agencies to determine household needs for low-income assistance programs. In the five boroughs in 2018, 36.5 percent of all households in the Bronx and 26.2 percent of households in Brooklyn had incomes below \$25,000, an approximation of the federal poverty level (FPL) for a family of four (**Exhibit 14**).

Exhibit 14: Percent Low-Income Households by Borough and Neighborhood, 2018

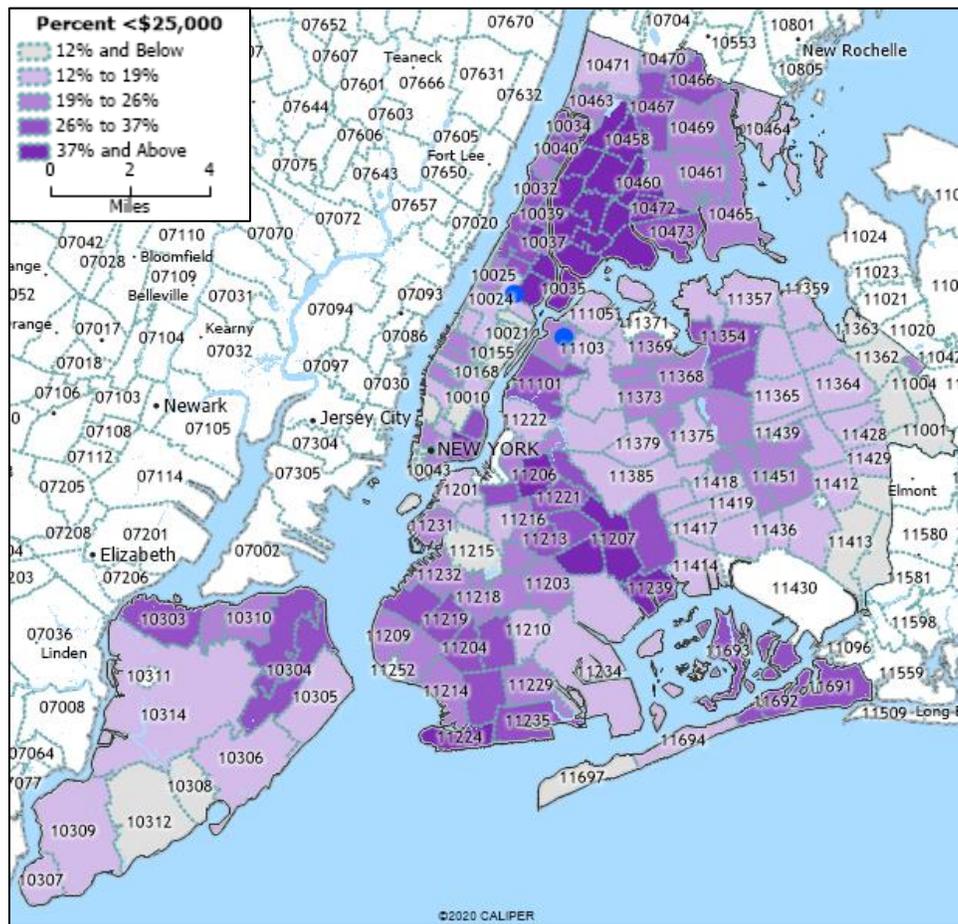
Borough and Neighborhood	Occupied Housing Units	Average Median Income	Percent less than \$25,000 per year	Percent less than \$50,000 per year
Bronx	499,728	38,085	36.5%	60.0%
Crotona-Tremont	72,343	26,455	48.2%	72.7%
Fordham-Bronx Park	90,352	35,802	37.9%	63.6%
High-Bridge-Morisania	76,023	27,965	45.8%	71.2%
Hunts Point-Mott Haven	47,438	25,442	49.4%	74.9%
Kingsbridge-Riverdale	37,280	64,814	23.0%	39.8%
NE Bronx	72,882	56,623	23.3%	45.5%
Pelham-Throgs Neck	107,286	50,014	29.2%	50.9%
Brooklyn	950,856	56,015	26.2%	45.9%
Bedford Stuyvesant-Crown Heights	134,452	49,270	32.9%	53.4%
Bensonhurst-Bay Ridge	76,536	63,809	21.4%	40.8%
Borough Park	103,469	51,954	27.4%	49.7%
Canarsie-Flatlands	71,881	69,933	19.4%	38.2%
Coney Island-Sheepshead Bay	109,898	50,960	30.0%	50.1%
Downtown Heights-Slope	106,145	107,567	16.1%	27.5%
East Flatbush-Flatbush	110,866	55,468	22.4%	45.6%
East New York	65,421	38,960	35.5%	58.7%
Greenpoint	56,640	75,456	22.3%	37.4%
Sunset Park	36,895	49,368	26.5%	50.2%
Williamsburg-Bushwick	78,653	44,995	33.0%	53.5%
Manhattan	758,133	82,459	21.4%	35.1%
Central Harlem-Morningside Heights	72,946	46,133	34.2%	52.7%
Chelsea-Clinton	88,265	106,526	18.2%	29.8%
East Harlem	46,118	32,785	42.6%	62.5%
Gramercy Park-Murray	73,260	123,153	12.6%	22.3%
Greenwich Village-SoHo	42,256	115,594	14.6%	25.7%
Lower Manhattan	27,577	132,831	13.8%	20.7%
Union Square-Lower East Side	89,392	66,692	28.6%	44.0%
Upper East Side	111,632	120,979	10.9%	20.1%
Upper West Side	106,906	112,852	16.3%	27.0%
Washington Heights-Inwood	95,109	52,153	27.1%	48.2%
Queens	779,234	64,987	18.8%	39.0%
Bayside-Littleneck	33,392	84,488	11.8%	28.4%
Flushing-Clearview	91,311	57,042	24.2%	46.2%
Fresh Meadows	34,784	64,565	19.4%	39.9%
Jamaica	104,953	67,548	17.7%	37.6%
Long Island City-Astoria	88,834	69,649	19.1%	37.6%
Ridgewood-Forest Hills	100,903	74,619	17.4%	34.3%
Rockaway	42,087	56,203	26.3%	47.0%
SE Queens	61,482	84,917	12.1%	27.9%
SW Queens	83,550	69,836	16.4%	36.0%
West Queens	144,892	56,128	20.0%	45.2%
Staten Island	166,152	79,267	18.7%	33.9%
Port Richmond	22,651	66,491	26.4%	41.0%
South Beach-Tottenville	68,815	90,646	14.2%	28.1%
Stapleton St. George	43,324	61,625	24.8%	42.7%
Willowbrook	31,362	86,742	15.0%	29.5%
New York	7,316,537	65,323	20.7%	39.8%
United States	119,730,128	60,293	20.2%	42.2%

Source: U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

There was significant variation in low-income households among boroughs and neighborhoods in New York City. The percentage of households with incomes below \$25,000 was 36.5 percent in the Bronx, for instance, compared to 18.7 percent for Staten Island. There was also considerable variation within boroughs by neighborhoods. For example, the Manhattan neighborhood of East Harlem had 42.6 percent of households with incomes below \$25,000, while the Upper East Side neighborhood had 10.9 percent of households below this income level.

Exhibit 15 presents a map of the percentage of households in the community with incomes under \$25,000.

Exhibit 15: Percent Households Less Than \$25,000 Annual Income, 2018



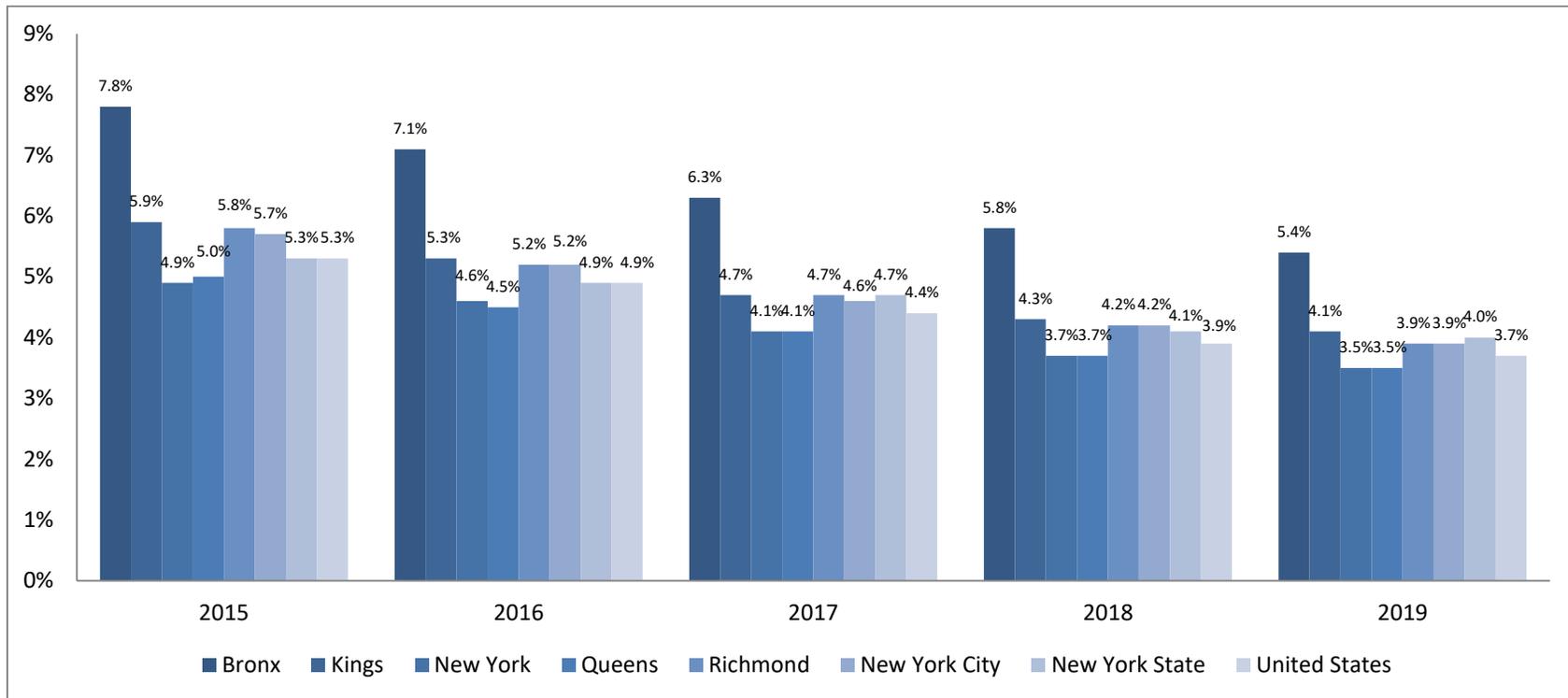
Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Unemployment Rate

Exhibit 16 shows the unemployment rate for each borough in the community, with New York City, New York State, and national averages for comparison.

Exhibit 16: Unemployment Rates, 2015-2019

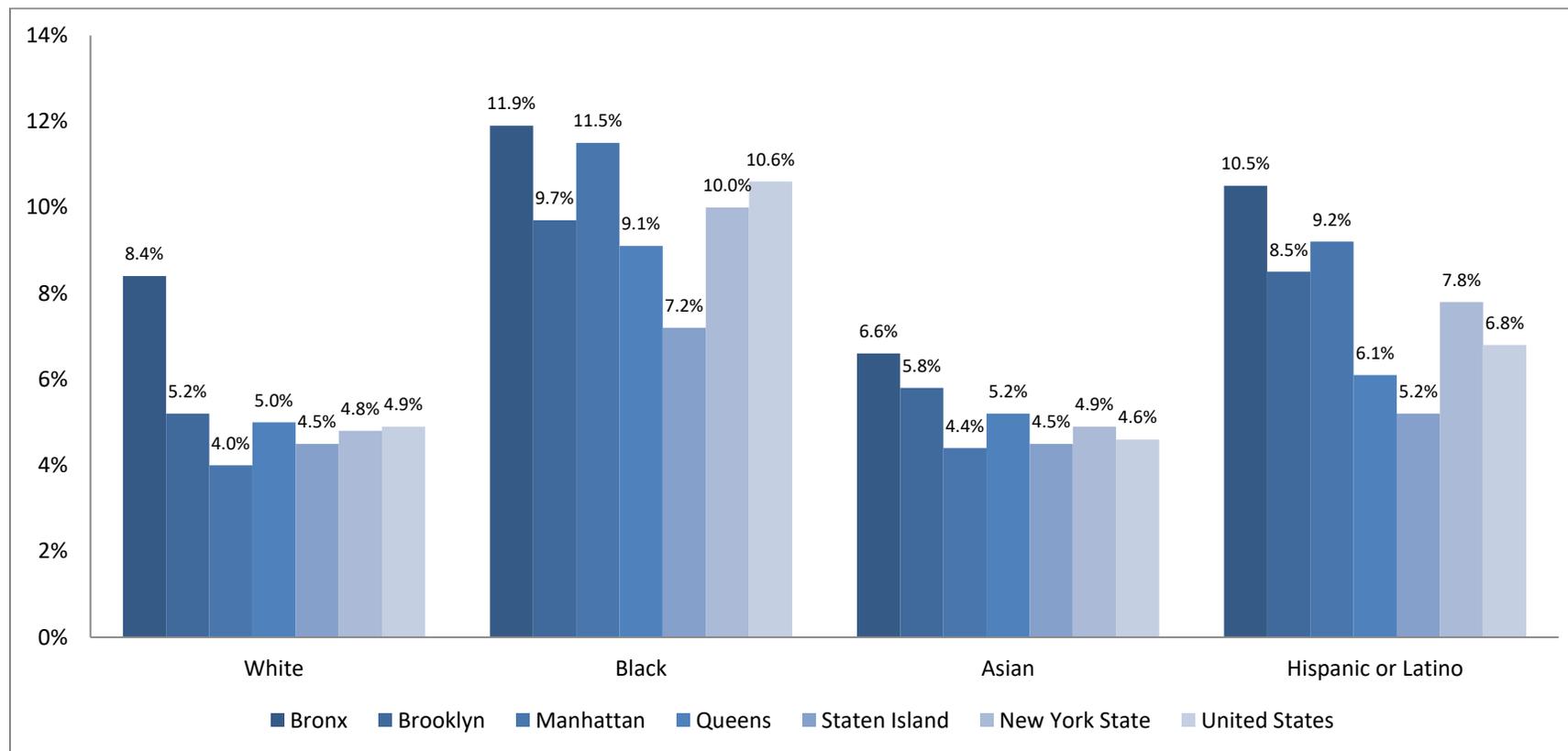


Source: U.S. Bureau of Labor Statistics, 2020.

New York City as a whole experienced higher unemployment rates than national averages for each year from 2015 through 2019. The unemployment rate in the Bronx has been particularly high over the time period. All areas show a decrease in unemployment from 2015 to 2019.

Exhibit 17 presents unemployment rates by race and ethnicity in each borough.

Exhibit 17: Unemployment Rates by Race and Ethnicity, 2014-2018



Source: U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

The Black and Hispanic populations reported higher unemployment rates than other cohorts over the period 2014-2018. Differences in unemployment rates were most evident in Manhattan. The Bronx and Manhattan had higher rates of unemployment in the Black and Hispanic population than the state average.

Insurance Status

Exhibit 18 displays the percent of the population in the MSH community that is uninsured, with New York State and United States averages for comparison.

Exhibit 18: Uninsured Population, 2014-2018

Borough and Neighborhood	Uninsured Population
Bronx	9.7%
Crotona-Tremont	10.0%
Fordham-Bronx Park	11.2%
High-Bridge-Morisania	10.7%
Hunts Point-Mott Haven	12.2%
Kingsbridge-Riverdale	5.3%
NE Bronx	7.8%
Pelham-Throgs Neck	8.6%
Brooklyn	8.2%
Bedford Stuyvesant-Crown Heights	8.4%
Bensonhurst-Bay Ridge	8.5%
Borough Park	7.8%
Canarsie-Flatlands	6.8%
Coney Island-Sheepshead Bay	7.8%
Downtown Heights-Slope	4.8%
East Flatbush-Flatbush	8.7%
East New York	7.1%
Greenpoint	6.8%
Sunset Park	15.8%
Williamsburg-Bushwick	11.5%
Manhattan	5.8%
Central Harlem-Morningside Heights	7.4%
Chelsea-Clinton	4.5%
East Harlem	8.6%
Gramercy Park-Murray	3.0%
Greenwich Village-SoHo	4.5%
Lower Manhattan	3.3%
Union Square-Lower East Side	5.2%
Upper East Side	3.3%
Upper West Side	3.7%
Washington Heights-Inwood	10.5%
Queens	10.5%
Bayside-Littleneck	6.7%
Flushing-Clearview	14.9%
Fresh Meadows	7.1%
Jamaica	8.7%
Long Island City-Astoria	9.4%
Ridgewood-Forest Hills	8.4%
Rockaway	6.5%
SE Queens	6.1%
SW Queens	9.6%
West Queens	16.0%
Staten Island	4.9%
Port Richmond	9.0%
South Beach-Tottenville	3.2%
Stapleton St. George	5.8%
Willowbrook	4.3%
New York	6.5%
United States	9.4%

Source: U.S. Census ACS 5-year estimates 2014-2018.

The boroughs of Bronx, Brooklyn, and Queens had higher rates of uninsured residents than the New York State average. Additionally, the Bronx and Queens had uninsured rates higher than the United States average. The neighborhoods of Sunset Park (Brooklyn) and Flushing-Clearview (Queens) each had uninsured rates of approximately 15 percent.

Exhibit 19 portrays the distribution of MSH community discharges by neighborhood and by payer. This information helps to identify where higher percentages of self-pay individuals and Medicaid recipients live within the community.

Exhibit 19: MSH Discharges by Neighborhood and Payer, 2018

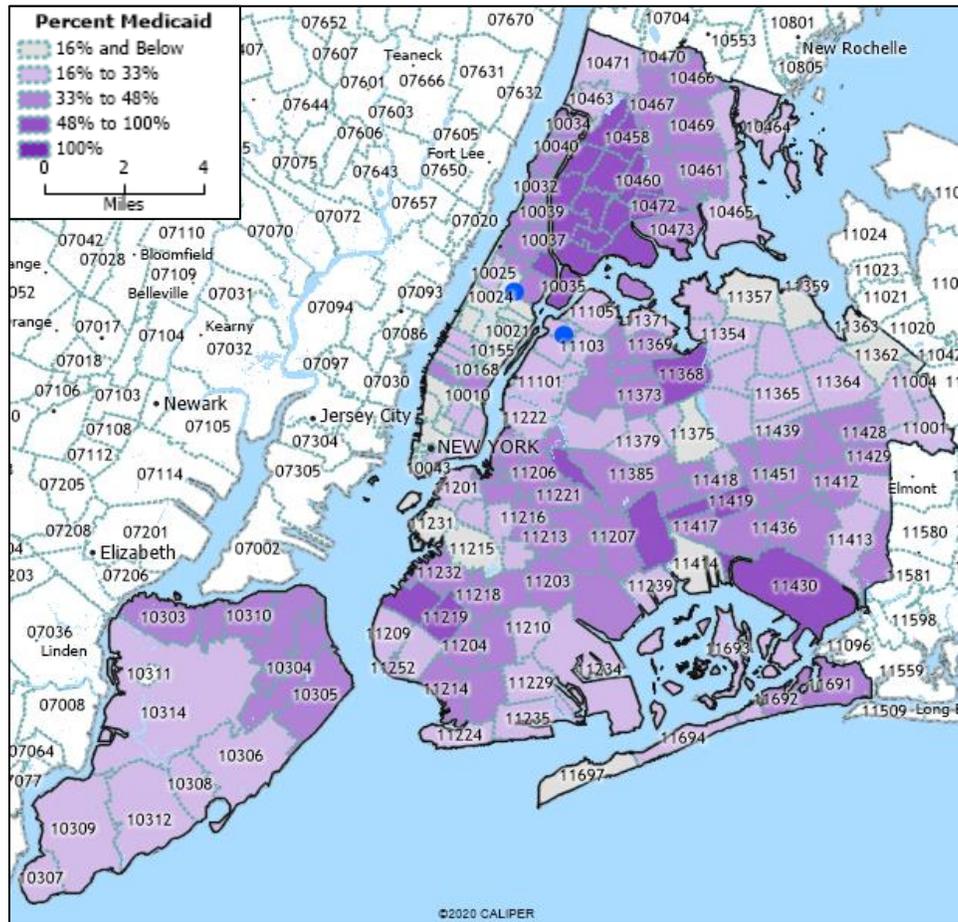
Borough	Private Insurance	Medicaid	Medicare	Self-Pay	Other
Bronx	17.8%	48.0%	31.7%	1.6%	0.9%
Crotona-Tremont	13.3%	58.2%	25.9%	1.8%	0.8%
Fordham-Bronx Park	16.7%	52.3%	28.3%	1.8%	0.8%
High-Bridge-Morisania	13.7%	55.4%	28.2%	1.6%	1.0%
Hunts Point-Mott Haven	13.8%	54.8%	28.6%	1.7%	1.1%
Kingsbridge-Riverdale	24.7%	26.4%	47.5%	0.6%	0.8%
NE Bronx	23.2%	35.8%	38.5%	1.7%	0.9%
Pelham-Throgs Neck	22.5%	40.1%	34.9%	1.5%	0.9%
Brooklyn	28.0%	36.7%	32.7%	1.4%	1.2%
Bedford Stuyvesant-Crown Heights	26.2%	40.1%	30.6%	1.9%	1.3%
Bensonhurst-Bay Ridge	30.2%	31.1%	36.8%	1.1%	0.9%
Borough Park	25.4%	43.0%	30.1%	0.9%	0.5%
Canarsie-Flatlands	30.5%	27.9%	38.2%	1.5%	1.9%
Coney Island-Sheepshead Bay	23.1%	29.8%	45.4%	0.8%	0.9%
Downtown Heights-Slope	47.6%	21.6%	29.0%	0.7%	1.1%
East Flatbush-Flatbush	28.0%	34.7%	33.2%	2.3%	1.7%
East New York	19.5%	48.2%	28.8%	2.1%	1.5%
Greenpoint	37.5%	34.4%	26.2%	1.0%	0.8%
Sunset Park	28.8%	50.3%	18.8%	1.4%	0.8%
Williamsburg-Bushwick	21.0%	45.9%	30.4%	1.7%	1.0%
Manhattan	31.3%	28.2%	37.6%	1.5%	1.4%
Central Harlem-Morningside Heights	21.2%	41.9%	33.8%	2.0%	1.2%
Chelsea-Clinton	34.4%	27.5%	35.4%	1.8%	0.8%
East Harlem	17.1%	45.1%	35.0%	2.0%	0.8%
Gramercy Park-Murray	38.1%	22.2%	35.0%	3.6%	1.1%
Greenwich Village-SoHo	48.4%	12.4%	36.4%	1.4%	1.5%
Lower Manhattan	57.5%	15.7%	24.4%	0.8%	1.6%
Union Square-Lower East Side	28.7%	27.4%	42.2%	1.1%	0.6%
Upper East Side	46.7%	7.6%	42.0%	1.1%	2.6%
Upper West Side	39.5%	14.5%	44.3%	0.9%	0.8%
Washington Heights-Inwood	19.8%	40.6%	36.4%	1.0%	2.3%
Queens	28.5%	32.9%	35.5%	1.7%	1.5%
Bayside-Littleneck	34.3%	14.9%	48.9%	0.6%	1.3%
Flushing-Clearview	35.1%	21.1%	41.2%	0.9%	1.7%
Fresh Meadows	38.6%	22.8%	36.1%	1.0%	1.5%
Jamaica	24.3%	39.1%	33.5%	1.8%	1.4%
Long Island City-Astoria	36.1%	27.2%	33.4%	1.8%	1.6%
Ridgewood-Forest Hills	32.3%	24.3%	40.7%	1.5%	1.2%
Rockaway	19.2%	37.1%	42.2%	0.6%	0.9%
SE Queens	28.8%	30.3%	38.3%	1.5%	1.2%
SW Queens	26.6%	39.6%	30.4%	1.9%	1.5%
West Queens	24.5%	41.9%	28.6%	2.8%	2.2%
Staten Island	25.6%	28.5%	42.9%	1.1%	1.8%
Port Richmond	23.2%	42.2%	31.5%	1.6%	1.6%
South Beach-Tottenville	31.0%	20.6%	45.5%	0.9%	2.0%
Stapleton St. George	20.2%	35.5%	41.3%	1.3%	1.7%
Willowbrook	25.5%	22.7%	48.9%	1.0%	1.9%
New York City	26.3%	36.3%	34.6%	1.5%	1.3%

Source: Verité analysis dataset via the Mount Sinai Health System Health System

The highest percentages of discharges for private insurance were from Manhattan and Queens. Medicaid discharges were most prevalent in the Bronx and Brooklyn. The percent of Medicare discharges was highest in Manhattan and Staten Island.

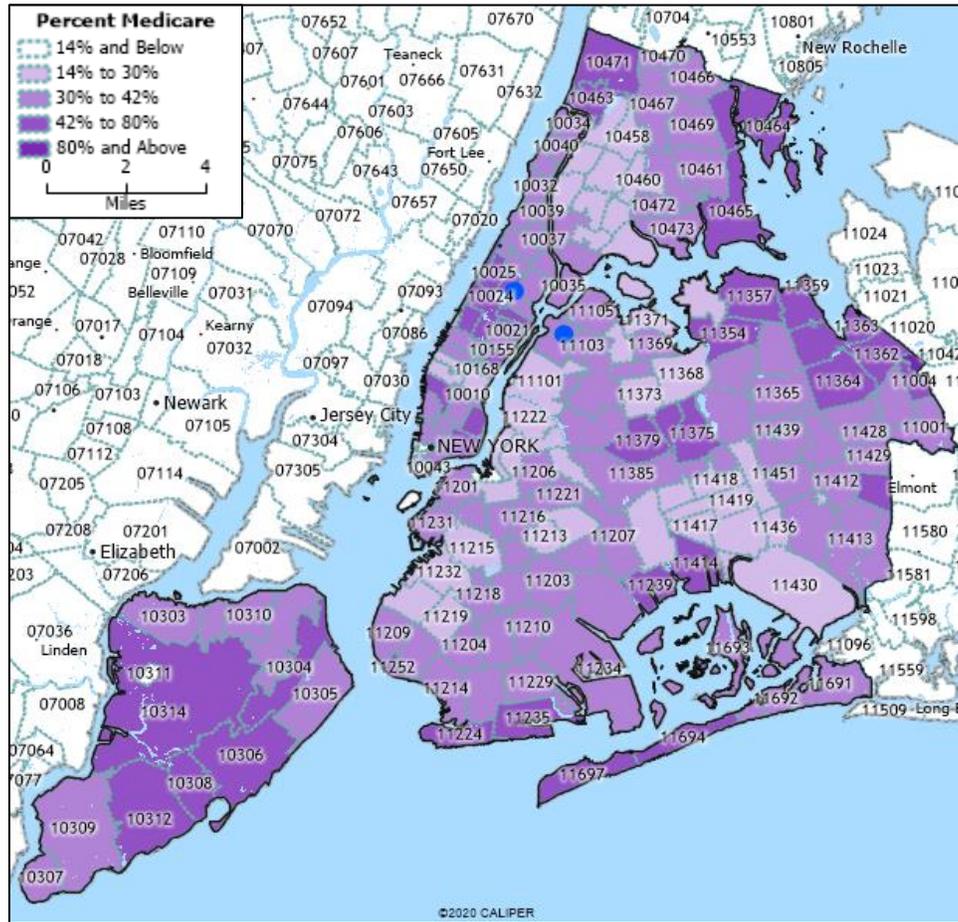
Exhibits 20, 21, and 22 present MSH community discharges at a ZIP Code level.

Exhibit 20A: Medicaid Discharges by ZIP Code, 2018



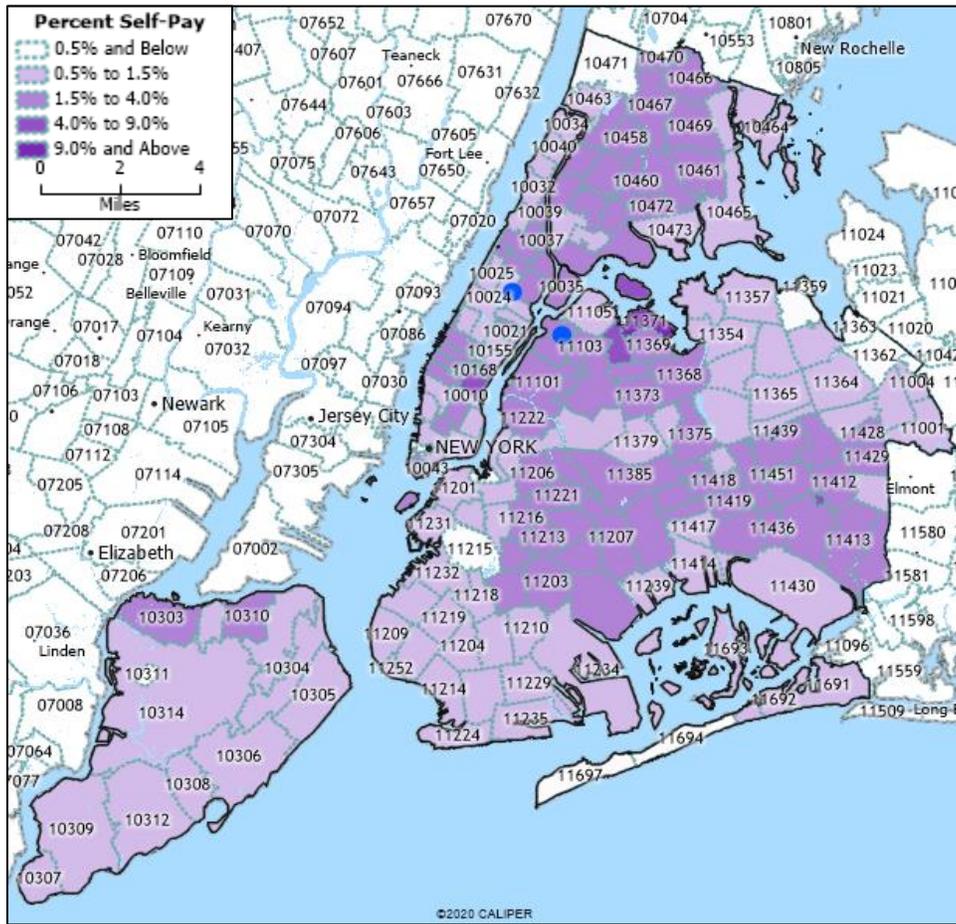
Source: Caliper Maptitude (2020) and Verité analysis of 2018 SPARCS data via the Mount Sinai Health System.

Exhibit 20B: Medicare Discharges by ZIP Code, 2018



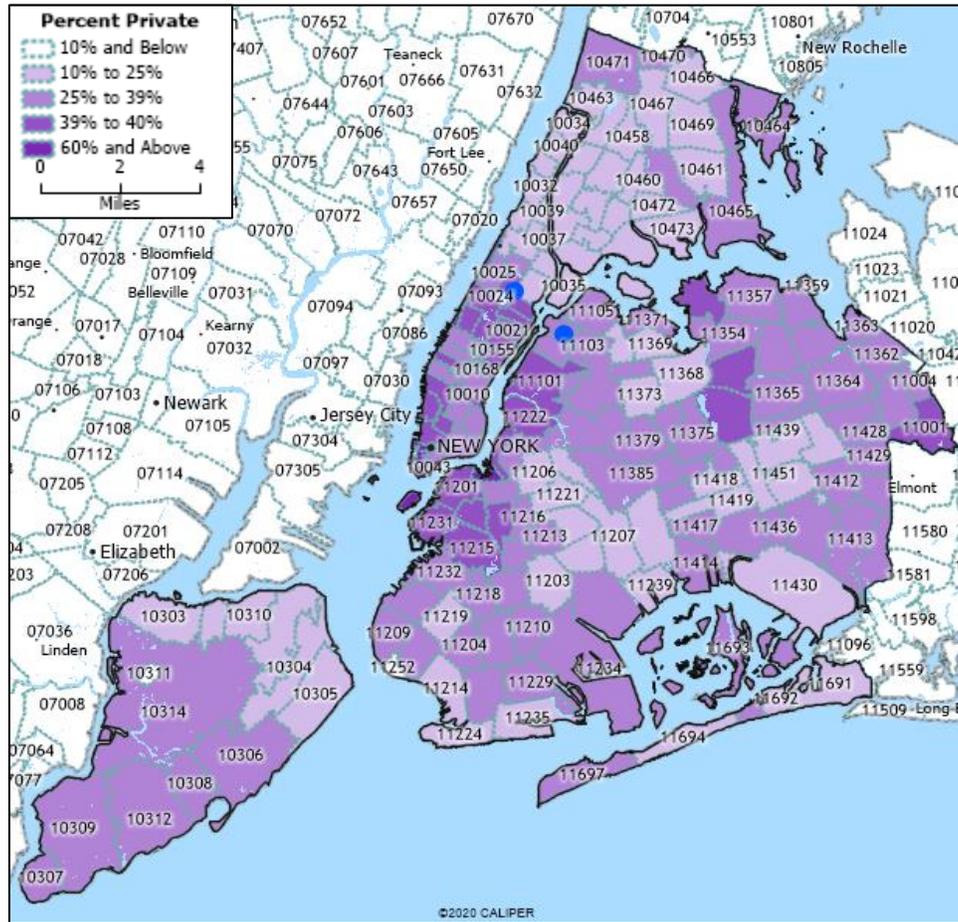
Source: Caliper Maptitude (2020) and Verité analysis of 2018 SPARCS data via the Mount Sinai Health System.

Exhibit 21: Self-Pay Discharges by ZIP Code, 2018



Caliper Maptitude (2020) and Verité analysis of 2018 SPARCS data via the Mount Sinai Health System.

Exhibit 22: Private Discharges by ZIP Code, 2018



Source: Caliper Maptitude (2020) and Verité analysis of 2018 SPARCS data via the Mount Sinai Health System.

Crime

A safe environment supports community health by helping to prevent injury and promote recreation and good mental health. The Federal Bureau of Investigation’s Uniform Crime Reporting Program provides data on violent and property crimes (**Exhibit 23**).

Exhibit 23: Crime Rates per 100,000 Population, 2018

Indicator	New York City	New York State	United States
Total Violent Crime	541.0	350.5	380.6
Murder and Non-negligent Manslaughter	3.5	2.9	5.0
Rape	33.0	33.6	42.6
Robbery	152.1	93.1	86.2
Aggravated Assault	352.5	220.9	246.8
Total Property Crime	1,502.4	1,440.5	2,199.5
Burglary	127.1	159.3	376.0
Larceny-Theft	1,310.3	1,214.0	1,594.6
Motor Vehicle Theft	64.9	67.2	228.9

Source: Federal Bureau of Investigation, Uniform Crime Reporting Program, 2020.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

New York City had comparatively high rates of violent crime in 2018, including murder and non-negligent manslaughter, robbery, and aggravated assault. The City also had high rates of property crimes when compared New York State, but lower rates compared to the United States overall.

Exhibit 24 presents crime rates among the young adult population aged 16-21, by borough in the community.

Exhibit 24: Young Adult Crime Rates per 10,000 Population, 2017

Borough	Young Adults - Driving While Intoxicated		Young Adult Arrests - Drug Use/Possession/Sale Arrests		Young Adult Arrests - Property Crimes Arrests	
	Number	Rate	Number	Rate	Number	Rate
Bronx	28	2.3	2,441	200.2	1,230	100.9
Brooklyn	54	3.2	2,602	153.6	1,612	95.1
Manhattan	49	5.1	2,273	238.3	2,138	224.2
Queens	94	6.5	1,800	123.9	1,328	91.4
Staten Island	33	9.7	354	103.7	467	136.8
New York City	258	4.6	9,470	167.3	6,775	119.7
New York State	2,648	17.5	16,944	111.8	16,169	106.7

Source: NYS Division of Criminal Justice Services via Kids' Well-being Indicators Clearinghouse, 2020.

Rates are per 10,000 young adults aged 16-21 years. Data were presented by county, see Introduction.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

Young adult rates of driving while intoxicated compared well to the state. Drug use, possession, or sale arrest rates were more than 50 percent worse than the state average in the Bronx, Manhattan, and higher in Brooklyn, Queens, and New York City overall. Young adults residing in Manhattan, Staten Island, and New York City overall also exhibited high rates of arrests from property crime.

Housing and Homelessness

According to the U.S. Department of Housing and Urban Development (HUD), approximately 750,000 people in the five boroughs lived in HUD-subsidized housing in 2019, with more than 65 percent of these residents living in the Bronx and Brooklyn. **Exhibit 25** provides average costs and wait times across all HUD programs.

Exhibit 25: HUD-Subsidized Housing Estimates, All Programs, 2019

Borough	People in Subsidized Housing	Average Household Income	Spending per Unit per Month		Average Months on Waiting List
			Average Household Contribution	Average Federal Contribution	
Bronx	234,978	\$20,037	\$485	\$1,008	50
Brooklyn	258,536	\$21,471	\$509	\$1,061	30
Manhattan	173,331	\$22,520	\$522	\$1,194	39
Queens	67,630	\$21,501	\$508	\$1,005	83
Staten Island	23,536	\$20,171	\$480	\$1,022	31
New York State	1,113,866	\$19,783	\$471	\$963	34
United States	9,439,919	\$14,835	\$357	\$765	26

Source: U.S. Department of Housing and Urban Development, 2020.

Household and federal rent contributions per housing unit were higher in all boroughs than the state and U.S. averages. The average months on the waiting list for subsidized housing in each of the five boroughs were higher than national averages as well, and all were higher than the state average, except for Staten Island.

The New York City Housing Authority (NYCHA) is responsible for administering the City's Public Housing program and certain Section 8 Programs.⁷ **Exhibit 26A** presents characteristics of NYCHA residents.

⁷ New York City Housing Authority (NYCHA). (2017, April). About NYCHA Fact Sheet. Retrieved 2017, from: <https://www1.nyc.gov/assets/nycha/downloads/pdf/factsheet.pdf>

Exhibit 26A: Characteristics of Families and Individuals Served by NYCHA, 2019

Borough	Percentage of NYCHA Population Under 18	Percentage of NYCHA Families with Head of Household 62+	Percentage of NYCHA Population 62+ and Living Alone	Percentage of NYCHA Families with One Parent and Minors Under 18	Percentage of NYCHA Families with One or More Employed
Bronx	29.7%	35.6%	9.3%	30.6%	46.4%
Brooklyn	28.2%	35.5%	8.8%	29.3%	48.1%
Manhattan	23.7%	42.4%	10.7%	23.7%	45.3%
Queens	27.0%	36.0%	9.3%	27.7%	48.8%
Staten Island	33.6%	35.0%	10.5%	32.6%	41.1%
New York City	27.3%	37.6%	9.5%	27.9%	46.7%

Source: New York City Housing Authority, Resident Data Book Summary, 2020.

Note: Light grey shading denotes worse than New York City average; dark grey denotes 50 percent worse than New York City average.

The Bronx, Brooklyn, and Staten Island have a greater percentage of residents who are under 18 than New York City overall. Manhattan has greater percentage of families with a head of household who is 62 years and older than other boroughs and New York City overall. Approximately ten percent of NYCHA residents are 62 and older and living alone. Approximately thirty percent of NYCHA households are single-parent families with children. Between 40 and 50 percent of NYCHA households have at least one family member who is employed.

Exhibit 26B presents additional characteristics of NYCHA residents by borough.

Exhibit 26B: Characteristics of Families and Individuals Served by NYCHA, 2019

Borough	Average Family Size	All Average Total Gross Income	All Families Average Years in Public Housing
Bronx	2.3	\$23,628	21.9
Brooklyn	2.3	\$25,200	22.3
Manhattan	2.2	\$25,871	25.8
Queens	2.2	\$25,782	21.8
Staten Island	2.3	\$22,413	17.7
New York City	2.2	\$25,007	23.1

Source: New York City Housing Authority, Resident Data Book Summary, 2020.

The average NYCHA family size ranges from 2.2 to 2.3 persons in community boroughs and New York City and average gross income is approximately \$25,000. Manhattan residents served by NYCHA report longer tenures in public housing at an average of 26 years compared to the New York City average of 23 years.

The New York City Department of Homeless Services provides short-term, emergency shelter for individuals and families and engages in homelessness prevention initiatives. Each year, the Department conducts the Homeless Outreach Population Estimate (HOPE) survey, a point-in-time-estimate of unsheltered individuals. Exhibit 27 provides the results of the 2019 estimate.

Exhibit 27: Unsheltered Individuals, 2005-2019

Borough	Unsheltered 2017	Unsheltered 2018	Unsheltered 2019	Percent Change 2017-2019	Percent Change 2018-2019
Surface Areas	2,080	1,904	1,410	-32.2%	-25.9%
Bronx	1,220	119	115	-32.0%	-28.5%
Brooklyn	255	337	237	-54.9%	-3.4%
Manhattan	363	1,160	829	-34.7%	-29.7%
Queens	199	220	175	-12.1%	-20.5%
Staten Island	43	68	54	25.6%	-20.6%
Subways	1,812	1,771	2,178	20.2%	23.0%
Total Unsheltered Individuals	3,892	3,675	3,588	-7.8%	-2.4%

Source: New York City Department of Homeless Services, 2019.

In 2019, an estimated 3,588 people in New York City were unsheltered, a 7.8 percent decrease from 2017 and a 2.4 percent decrease from 2018. While the number of unsheltered individuals decreased in each borough from 2018 to 2019, there was a 23.0 increase in the number of unsheltered individuals counted in the subway system.

New York City's overall rate of homelessness (43.4 per 100,000) is lower than that of many other large cities (**Exhibit 28**).

Exhibit 28: Homelessness Rate, Selected Cities, 2019

City or Metropolitan Area	Total Population	Unsheltered Homeless	Rate per 100,000
San Francisco	881,549	5,180	587.6
Los Angeles City & County	10,039,107	42,471	423.1
Seattle/King County	2,252,782	5,228	232.1
District of Columbia	705,749	608	86.1
Philadelphia	1,584,064	973	61.4
Chicago	2,693,976	1,260	46.8
New York City	8,336,817	3,622	43.4
Miami/Dade County	2,716,940	1,008	37.1
Boston	692,600	121	17.5

Source: Verité analysis of data from the U.S. Department of Housing and Urban Development, 2020, and the U.S. Census, 2019

State of New York and New York City Budget Trends

Examining recent trends in public budgets for health care, public health, and social services can illuminate the availability of public services that support the health of the community.

New York State Budget Changes between FY 2020 and FY 2021⁸

The State of New York provides “download disbursement information for the budget year and prior years going back to FY 1995 for all governmental funds.”⁹ The estimated FY 2020-2021 expenditures budget includes both funding increases and decreases from FY 2019-2020 for health-related services. Changes include:

- **Health**
 - The overall estimated expenditures for health increased \$3.5 billion, or 4.8 percent;
 - The Office for the Aging budget decreased \$2.0 million, or -0.8 percent;
 - The Department of Health budget increased \$3.5 billion, or 4.8 percent; and
 - The Office of the Medicaid Inspector General decreased \$2.3 million, or 5.1 percent.
- **Social Welfare**
 - The overall Social Welfare budget increased by \$1.2 billion, or 13.3 percent;
 - The Office of Children and Family Services budget increased \$666.5 million, or 25.5 percent;
 - The Division of Housing and Community Renewal budget increased \$313.0 million, or 59.6 percent;
 - The Office of Temporary and Disability Assistance budget increased \$215.6 million, or 4.2 percent.
- **Mental Hygiene**
 - The overall Mental Hygiene budget decreased \$957.1 million, or by -13.9 percent;
 - The Office of Addiction Services and Supports budget increased \$124.8 million, or 21.6 percent;
 - The Justice Center for the Protection of People with Special Needs budget was increased by \$1.0 million, or 1.5 percent;
 - The Office of Mental Health budget increased by \$144.7 million, or by 4.8 percent;
 - The Office for People with Developmental Disabilities decreased by \$1.2 billion, or -38.3 percent.

⁸ New York State Department of the Budget. (2020). *New York State Budget*. Retrieved 2020, from: <https://openbudget.ny.gov/spendingForm.html>

⁹ <https://openbudget.ny.gov/spendingForm.html>

New York City Budget Changes between FY 2020 and FY 2021

The New York City Council developed its budget for FY 2021 “at the confluence of historic events and movements” during which New York City was “reeling from the health impacts of the COVID-19 pandemic, dealing with the resulting economic decline, and grappling with the sweeping social movement to reform policing and to reinvest funding in our youth, social services, housing, healthcare, and other community needs.” The Council developed the FY 2021 budget “while juggling all these issues simultaneously, and while social distancing and conducting work and public hearings remotely.” The FY 2021 Budget is intended to “address the City’s financial realities, invest in the social safety net, and continue a deliberative process of re-envisioning the public safety system to create a more resilient and equitable City.”¹⁰

Included in the budget are Council initiatives for programs and services which are intended to respond to needs unmet by city services. Such programs and services are provided by non-profit organizations, which are allocated discretionary funds from the Council. Funding is intended to support local communities while maintaining budget stability.

The Council funded multiple organizations for numerous programs across various budget categories. FY 2021 budget categories that related to health are as follows:

- Anti-Poverty
- Children’s Services
- Community Development
- Criminal Justice Services
- Domestic Violence Services
- Education
- Food Initiatives
- Health Services
- Homeless Services
- Housing
- Immigrant Services
- Mental Health Services
- Senior Services
- Youth Services
- Young Women’s Initiative

A summary of programs by budget category, including a comparison to the FY 2017 budget, is below.

- **Anti-Poverty** – The initiative is as follows:
 - Anti-Poverty Initiatives, “help to address income disparities throughout the five boroughs,” administered through multiple City agencies, is budgeted in FY 2021 at \$2,800,000, which is unchanged from FY 2020.

¹⁰ New York City Council Finance Division (2020), *Fiscal Year 2021 Adopted Expense Budget, Adjustment Summary / Schedule C*.

- **Children’s Services** – Initiatives are as follows:
 - The City’s First Readers program, “support programs that foster literacy development,” administered through multiple City agencies, is budgeted for FY 2021 at \$3,904,900, a decrease of \$1,500,290 from FY 2020; and
 - Discretionary Child Care programs, support for “child care programs,” administered through the Department of Education (DOE) is budgeted in FY 2021 at \$4,900,856, a decrease of \$293,144 from FY 2020.

- **Community Development** – Initiatives are as follows:
 - The Adult Literacy Initiative, support for “basic literacy instruction, English for Speakers of Other Languages and high school equivalency classes,” administered by Department of Youth and Community Development (DYCD), is budgeted for FY 2021 at 3,400,000, a decrease of \$600,000 from FY 2020;
 - The Communities of Color Nonprofit Stabilization Fund, “capacity building, strengthening, and rescuing of nonprofit human service organizations that serve communities of color,” administered by DYCD, is budgeted for FY 2021 at \$2,500,000, a decrease of \$1,200,000 from FY 2020;
 - The Digital Inclusion and Literacy Initiative, “computer-based training and learning, [and] technical skill development,” administered by DYCD, is budgeted for FY 2021 at \$1,530,000, a decrease of \$1,530,000 from FY 2021;
 - The Diversity, Inclusion and Equity in Tech Initiative, “career readiness training in the technology industry,” administered by DYCD and the New York City Housing Authority (NYCHA) is budgeted for FY 2021 at \$595,000, a decrease of \$105,000 from FY 2021;
 - LGBT Community Services, “programs that increase coordinated delivery of health and human services for LGBT people and families,” administered by DYCD, is budgeted for FY 2021 at \$3,166,250, a decrease of \$558,750 from FY 2020;
 - Trans Equity Programs, “services that help empower the transgender and gender non-conforming (TGNC) community,” administered by DYCD and the Department of Health and Mental Hygiene (DOHMH), is budgeted for FY 2021 at \$1,933,750, a decrease of \$341,250, from FY 2020; and
 - Census 2020 Outreach, administered in FY 2020 by DYCD and budgeted at \$14,000,000, did not appear in the FY 2021 Adopted Expense Budget Schedule C.

- **Criminal Justice Services** – Initiatives are as follows:
 - Alternatives to Incarceration (ATI), “alternative-to-incarceration (ATI) programs that provide individuals involved in the criminal justice system with intermediate sanctions,” administered by the Mayor’s Office of Criminal Justice (MOCJ), is budgeted for FY 2021 at \$11,878,800, a decrease of \$1,608,200 from FY 2020;
 - Diversion Programs, “various diversion programs across the City,” administered by MOCJ, are budgeted for FY 2021 at \$2,162,000, a decrease of \$363,000 from FY 2020;

- Discharge Planning, “holistic, wrap-around experience for individuals to provide seamless reentry into communities,” administered by MOCJ, is budgeted for FY 2021 at \$250,000, a decrease of \$550,000 from FY 2020;
 - The Initiative to Combat Sexual Assault, support to “community-based organizations that provide physical and sexual assault related services,” administered by MOCJ, is budgeted for FY 2021 at \$3,210,000, which is unchanged from FY 2020;
 - Innovative Criminal Justice Programs, “criminal justice programs related to bail and bail reform,” administered through multiple City agencies, is budgeted for FY 2021 at \$1,833,000, a decrease of \$1,205,000 from FY 2020;
 - Support for Victims of Human Trafficking, “counseling and assistance with mental health, education, immigration, housing and employment, as an alternative to detention or incarceration, for defendants in the City’s five human trafficking intervention courts,” administered by MOCJ, is budgeted for FY 2021 at \$1,200,000, which is unchanged from FY 2020; and
 - Supports for Persons Involved in the Sex Trade, support to “organizations that offer wrap-around comprehensive services, including medical needs, legal assistance, housing, emergency shelter, and case management to persons involved in the sex trade,” administered through multiple City agencies, are budgeted for FY 2021 at \$4,144,697, an increase of \$1,156,697 from FY 2020.
- **Domestic Violence Services** – Initiatives are as follows:
 - The Domestic Violence and Empowerment (DoVE) Initiative, “support services including case management, crisis intervention, referrals, counseling, empowerment workshops, legal advocacy and referrals,” administered by MOCJ, is budgeted for FY 2021 at \$9,805,000, which is unchanged from FY 2020; and
 - The Supportive Alternatives to Violent Encounters (SAVE), “Community Empowerment Program that provides domestic violence education, outreach, technical assistance and training to community and school-based organizations,” administered by multiple City agencies, is budgeted for FY 2021 at \$2,450,000, which is unchanged from FY 2020.
- **Education** – Initiatives are as follows:
 - College and Career Readiness, support for “programs that ensure students are college and career ready,” administered by DOE, is budgeted for FY 2021 at \$1,198,000, a decrease of \$580,000 from FY 2020;
 - Community Schools initiatives, “funding supports community schools,” administered by DOE, is budgeted for FY 2021 at \$3,450,000, a decrease of \$300,000 from FY 2020;
 - Educational Programs for Students, support for “direct educational programs for students in areas such as literacy, math, science and technology,” administered by multiple City agencies, is budgeted for FY 2021 at \$8,328,800, a decrease of \$175,000 from FY 2020;
 - The Jill Chaifetz Helpline, support for a helpline that “provides information about the policies, programs and practices of the Department of Education and its

schools,” administered by DYCD, is budgeted for FY 2021 at \$250,000, which is unchanged from FY 2020;

- The LGBTQ Inclusive Curriculum, the “DOE’s effort to support the needs of LGBTQ youth and address the intersectionality of race, sexual orientation and gender identity through DOE’s general curriculum,” administered by DOE and DYCD, is budgeted for FY 2021 at \$800,000, which is unchanged from FY 2020;
 - Physical Education and Fitness, help “to improve fitness levels and the overall health of students by providing physical activity and fitness programs,” administered by DOE and DYCD, is budgeted for FY 2021 at \$1,675,000, a decrease of \$500,000 from FY 2020;
 - Social and Emotional Supports for Students, “a range of social-emotional supports to students experiencing severe adversity and trauma including direct mental health services such as counseling, therapy, and crisis intervention,” administered by DOE, is budgeted for FY 2021 at \$1,827,275, a decrease of \$41,725 from FY 2020; and
 - Support for Educators, funding support for “professional development, training, and mentorship for educators and school leaders,” administered by DOE, is budgeted for FY 2021 at \$4,150,000, a decrease of \$409,500 from FY 2020.
- **Food Initiatives** – Initiatives are as follows:
 - Access to Healthy Food and Nutritional Education, support for “programs that expand access to healthy food and improve understanding of nutrition and wholesome food choices,” administered by the City University of New York (CUNY) and DYCD, is budgeted for FY 2021 at \$2,258,750, which is unchanged from FY 2020;
 - Food Access and Benefits, support for “technical assistance” “and SNAP eligibility screening, application, and recertification assistance,” administered by the Human Resources Administration (HRA), is budgeted for FY 2021 at \$725,000, which is unchanged from FY 2020; and
 - Food Pantries, support for “food and hygiene product purchases and operational expenses for food pantries and soup kitchens,” administered by DYCD, is budgeted for FY 2021 at \$5,659,000, which is unchanged from FY 2020.
 - **Health Services** – Initiatives are as follows:
 - Access Health, support to “culturally and linguistically competent community-based organizations to conduct outreach, support and education efforts,” administered by the DOHMH, is budgeted for FY 2021 at \$2,550,000, a decrease of \$450,000 from FY 2020;
 - Beating Hearts, funding to provide “automated external defibrillators (AEDs) to non-profit organizations that primarily serve youth and aging populations,” administered by DOHMH, is budgeted for FY 2021 at \$175,000, a decrease of \$175,000 from FY 2020;
 - Cancer Services, “various educational and supportive services for breast, colon, and ovarian cancer,” administered by DOHMH, is budgeted for FY 2021 at \$509,575, a decrease of \$89,925 from FY 2020;

- Child Health and Wellness, support for “child health and wellness through various programs and services,” administered by DOHMH, is budgeted for FY 2021 at \$549,100, which is a decrease of \$96,900 from FY 2020.
 - Ending the Epidemic, “prevention, education, outreach, and support services ... to decrease new HIV infections,” administered by DOHMH, is budgeted for FY 2021 at \$6,000,000, a decrease of \$1,735,000 from FY 2020;
 - HIV/AIDS Faith Based, support for “HIV/AIDS prevention, education, outreach, advocacy, and support services in local religious institutions,” administered by DOHMH, is budgeted for FY 2021 at \$961,350, a decrease of \$169,650 from FY 2020;
 - Maternal and Child Health Services, support for “range of maternal and child health services and coordination efforts that aid expectant mothers and women of childbearing age,” administered by DOHMH, is budgeted for FY 2021 at \$1,863,895, a decrease of \$328,923 from FY 2020;
 - Public Health Funding Backfill, “reimbursement [to organizations] for funding for six core services areas: Community Health Assessment, Family Health, Communicable Disease Control, Chronic Disease Prevention, Environmental Health, and Emergency Preparedness and Response,” administered by DOHMH, is budgeted for FY 2021 at \$3,967,743, a decrease of \$2,032,257 from FY 2020;
 - Reproductive & Sexual Health Services, “support of reproductive and sexual health services, including treatment, prevention, and education,” administered by DOHMH, is budgeted for FY 2021 at \$378,070, a decrease of \$216,718 from FY 2020; and
 - Viral Hepatitis Prevention, support for “programs and services intended to combat the spread of Hepatitis B/C and HIV as passed through intravenous drug use,” administered by DOHMH, is budgeted for FY 2021 at \$1,635,109, a decrease of \$288,549 from FY 2020.
- **Homeless Services** – Initiatives are as follows:
 - The Children and Families in NYC Homeless System, “comprehensive case management services incorporating trauma-informed care, evidence-based interventions, and aftercare programs to children and families in homeless shelters; administered by the Department of Homeless Services (DHS), is budgeted for FY 2021 at \$1,147,500, a decrease of \$202,500 from FY 2020; and
 - The Citywide Homeless Prevention Fund, support for “homelessness prevention programs that provide emergency grants to families in crisis at risk of eviction,” administered by HRA, is budgeted for FY 2021 at \$697,000, a decrease of \$123,000 from FY 2020.
- **Housing** –Initiatives are as follows:
 - Community Housing Preservation Strategies, support for “organizations that work on a neighborhood level to combat the loss of affordable housing,” administered by the Department of Housing Preservation and Development (HPD), is budgeted for FY 2021 at \$3,103,350, a decrease of \$547,650 from FY 2020;
 - Community Land Trust, support for “organizations that work on a neighborhood level to develop and expand the community land trust (CLT) model citywide,”

administered by HPD, is budgeted for FY 2021 at \$637,500, a decrease of \$112,500 from FY 2020;

- Financial Empowerment for NYC Renters, support for “financial empowerment program for New Yorkers looking to rent housing,” administered by HPD and the Department of Consumer Affairs (DCA), is budgeted for FY 2021 at \$382,500, a decrease of \$67,500 from FY 2020;
 - Foreclosure Prevention Programs, “funding to Neighborhood Restore Housing Development Fund Corporation (HDFC) and the Center for New York City Neighborhoods for foreclosure prevention programs,” administered by HPD, are budgeted for FY 2021 at \$3,325,000, which is unchanged from FY 2020;
 - The Home Loan Program, funding for “direct, low-interest home improvement loans to owners of one-to four-family homes in the five boroughs,” administered by HPD and HRA, is budgeted for FY 2021 at \$1,700,000, a decrease of \$300,000 from FY 2020;
 - Housing Court Answers, support for “anti-eviction education and referral services at the City's housing courts,” administered by HRA is budgeted for FY 2021 at \$650,000, which is unchanged from FY 2020;
 - The Housing Information Project (SHIP), “funding for the Furman Center at NYU to manage, maintain, and expand information available on the subsidized housing information database,” administered by HPD, is budgeted for FY 2021 at \$200,000, a decrease of \$100,000 from FY 2020; and
 - Stabilizing NYC, support to “combat the loss of affordable housing at the hands of predatory equity companies, administered by HPD, is budgeted for FY 2021 at \$2,550,000, a decrease of \$450,000 from FY 2020.
- **Immigrant Services** – Initiatives are as follows:
 - The CUNY Citizenship NOW! Program, support for “free immigration law services to assist immigrants on their path to U.S. citizenship,” administered by CUNY, is budgeted for FY 2021 at \$3,250,000, which is unchanged from FY 2020;
 - The Immigrant Health Initiative, support for “programs that focus on decreasing health disparities among foreign-born New Yorkers,” administered by DOHMH, is budgeted for FY 2021 at \$2,000,000, which is unchanged from FY 2020;
 - The Immigrant Opportunities Initiative, support for “legal services for recent immigrants to assist with applications for citizenship or permanent residency,” administered by HRA, is budgeted for FY 2021 at \$2,600,000, which is unchanged from FY 2020;
 - The New York Immigrant Family Unity Project, support for “legal representation for immigrants detained and facing deportation who cannot afford an attorney,” administered by HRA, is budgeted for FY 2021 at \$16,600,000, which is unchanged from FY 2020;
 - Unaccompanied Minors and Families, support for “legal counsel for children in removal proceedings, and social services to children appearing on the juvenile and surge dockets in New York Immigration court,” administered by HRA, is budgeted for FY 2021 at \$3,981,800, which is unchanged from FY 2020; and

- Key to the City, administered in FY 2020 by DYCD and budgeted at \$700,000, did not appear in the FY 2021 Adopted Expense Budget Schedule C.
- **Mental Health Services** – Initiatives are as follows:
 - Autism Awareness, support for “wraparound services for autistic children in after-school and summer programs and during school closings,” administered by DOHMH, is budgeted for FY 2021 at \$3,236,846, which is unchanged from FY 2020;
 - Children Under Five, support for “mental health treatment to children aged five years and younger,” administered by DOHMH, is budgeted for FY 2021 at \$851,700, which is unchanged from FY 2021;
 - Court-Involved Youth Mental Health, support for “programs that utilize risk assessment tools to identify juveniles in the arrest process who require mental health services and that provide family counseling and respite services to families of court-involved youth,” administered by DOHMH, is budgeted for FY 2021 at \$2,890,000, a decrease of \$510,000 from FY 2020;
 - Developmental, Psychological & Behavioral Health Services, support for “a range of programs and services that address the needs of individuals with chemical dependencies, developmental disabilities, and/or serious mental illnesses,” administered by DOHMH, is budgeted for FY 2021 at \$1,917,169, a decrease of \$338,324 from FY 2020;
 - Geriatric Mental Health, support to “organizations that provide a range of mental health services to older adults in ‘non-clinical settings,’” administered by DOHMH, is budgeted for FY 2021 at \$1,619,709, a decrease of \$285,831 from FY 2020;
 - LGBTQ Youth All-Borough Mental Health, support for “comprehensive mental health services for vulnerable LGBTQ youth throughout the City,” administered by DOHMH, is budgeted for FY 2021 at \$1,987,300, a decrease of \$330,700 from FY 2020;
 - Mental Health Services for Vulnerable Populations, support for “community-based organizations and advocacy networks that provide a range of mental health programs, services, trainings, and referrals throughout the City,” administered by DOHMH, is budgeted for FY 2021 at \$1,987,300, a decrease of \$330,700 from FY 2020;
 - Opioid Prevention and Treatment, support for “community-based organizations to conduct localized prevention and treatment efforts around opioid abuse,” administered by DOHMH, is budgeted for FY 2021 at \$2,975,000, a decrease of \$525,000 from FY 2020; and
 - Medicaid Redesign Transition, administered in FY 2020 by DOHMH at \$500,000, did not appear in the FY 2021 Adopted Expense Budget Schedule C.
- **Senior Services** – Initiatives are as follows:
 - Access to Critical Services for Seniors, “a range of emergency services for low-income seniors” administered by the Department for the Aging (DFTA), is budgeted for FY 2021 at \$800,000, a decrease of \$380,000 from FY 2020;

- Case management, “case management services for eligible seniors” administered by DFTA, is budgeted for FY 2021 at \$1,00,000, which is unchanged from FY 2020;
 - Elder Abuse Prevention Programs, “prevention programs that provide services to victims of elder abuse for organizations that specialize in serving immigrant populations” administered by DFTA, is budgeted for FY 2021 at \$335,000, which is unchanged from FY 2020;
 - The Elie Wiesel Holocaust Survivors Initiative, support for “Holocaust survivors living at or below the poverty line” administered by DFTA, is budgeted for FY 2021 at \$4,000,000, which is unchanged from FY 2020;
 - Information and Referral Services, support for “community-based organizations that provide information and referral services related to senior services” administered by DFTA, is budgeted for FY 2021 at \$407,811, which is unchanged from FY 2020;
 - LGBT Senior Services in Every Borough, support for “a variety of LGBT culturally competent services for seniors” administered by DFTA, is budgeted for FY 2021 at \$1,400,000, a decrease of \$100,000 from FY 2020;
 - Naturally Occurring Retirement Communities (NORCs), supportive programs within NORCs administered by DFTA, is budgeted for FY 2021 at \$5,400,325, an increase of \$75,000 from FY 2020;
 - Senior Centers for Immigrant Populations, senior center support for “culturally and linguistically accessible” operations and programs administered by DFTA, is budgeted for FY 2021 at \$1,500,000, which is unchanged from FY 2020;
 - Senior Centers, Programs, and Services Enhancement, operational support for “senior centers, and meal and nutrition programs” administered by DFTA, is budgeted for FY 2021 at \$3,376,670, a decrease of \$7,000 from FY 2020;
 - Social Adult Day Care, support for “non-medical adult day care services to individuals with cognitive or physical limitations” administered by DFTA, is budgeted for FY 2021 at \$1,505,556, which is unchanged from FY 2020;
 - Support Our Seniors, funding to “support senior services citywide” administered by DFTA, is budgeted for FY 2021 at \$5,100,000, which is unchanged from FY 2020;
 - Borough Presidents' Discretionary Funding Restoration, administered in FY 2020 by DFTA at \$1,129,774, did not appear in the FY 2021 Adopted Expense Budget Schedule C; and
 - Healthy Aging Initiative, administered in FY 2020 by DFTA at \$2,040,000, did not appear in the FY 2021 Adopted Expense Budget Schedule C.
- **Youth Services** – Initiatives are as follows:
 - The Afterschool Enrichment Initiative, “afterschool programs with high-quality arts and athletic activities, as well as academic enrichment and support” administered by multiple City agencies, is budgeted for FY 2021 at \$5,867,746, a decrease of \$911,485 from FY 2020;
 - Big Brothers Big Sisters of New York City, “mentoring services including high-school based professional opportunity days for at-risk youth” administered by

DYCD, is budgeted for FY 2021 at \$1,020,000, a decrease of \$180,000 from FY 2020;

- Civic Education in New York City Schools, “promotion of political participation” administered by DYCD, is budgeted for FY 2021 at \$467,500, which is a decrease of \$82,500 from FY 2020;
 - COMPASS, “programming for children in grades K-5 under the Comprehensive Afterschool System of New York City (COMPASS NYC)” administered by DYCD, is budgeted for FY 2021 at \$1,870,048, a decrease of \$181,552 from FY 2020;
 - The Sports Training and Rolemodels for Success Initiative (STARS), “afterschool programming promoting physical activity, healthy living, wellness and leadership” administered by DYCD, is budgeted for FY 2021 at \$1,251,200, a decrease of \$198,800 from FY 2020; and
 - The YouthBuild Project Initiative, a “program that gives young adults who have left high school without a diploma the opportunity to transform their life prospects and become responsible, contributing adults,” administered by DYCD, is budgeted for FY 2021 at \$1,715,000, a decrease of \$385,000 from FY 2020.
- **Young Women’s Initiative** – Initiatives are as follows:
 - The Dedicated Contraceptive Fund, “access to contraception, including Long-Acting Reversible Contraception (LARCs)” administered by DOHMH, is budgeted for FY 2021 at \$702,900, a decrease of \$78,100 from FY 2020;
 - The Initiative for Immigrant Survivors of Domestic Violence, “services specifically for immigrant survivors of domestic violence that may include interpretation, referrals, counseling and legal representation” administered by MOCJ, is budgeted for FY 2021 at \$477,000, a decrease of \$53,000 from FY 2020;
 - HRA Teen RAPP Enhancement, support for “the Grow, Rise, Lead (G.R.L) program” to empower adolescent girls administered by HRA, is budgeted for FY 2021 at \$225,000, a decrease of \$25,000 from FY 2020.
 - The Prevent Sexual Assault (PSA) Initiative for Young Adults, “prevention and intervention services to end sexual exploitation of young women, transgender, and LGBT youth,” administered by MOCJ, is budgeted for FY 2020 at \$315,000, a decrease of \$35,000 from FY 2020;
 - The Step In and Stop It Initiative to Address Bystander Intervention, “intervention programs, mediation, peer support, counseling and violence prevention,” administered by MOCJ, is budgeted for FY 2021 at \$156,600, a decrease of \$17,400 from FY 2020;
 - Work-Based Learning Internships, “paid internships for students enrolled in DOE Career and Technical Education Programs (CTE),” administered by DOE, is budgeted for FY 2021 at \$600,000, which is unchanged from FY 2020;
 - Wrap-Around Support for Transitional-Aged Foster Youth, administered by ACS, is budgeted for FY 2021 at \$1,038,500, a decrease of \$191,500 from FY 2020; and

- Young Women's Leadership Development, “leadership development training programs for young women and girls,” administered by DYCD, is budgeted for FY 2021 at \$1,444,950, a decrease of \$160,550 from FY 2020; and

Local Health Status and Access Indicators

This section examines health status and access to care data for the Mount Sinai community from several sources. The data include: (1) County Health Rankings, (2) New York State Department of Health, (3) Youth Risk Behavioral Surveillance System, (4) New York Prevention Agenda 2013-2017, and (5) New York City Community Survey.

Note: New York City analyzes the health of community districts. Included in these comprehensive profiles are assessments of health, housing, air quality, and food accessibility. These New York City Community Health Profiles can be accessed at: <https://www1.nyc.gov/site/doh/data/data-publications/profiles.page>.

County Health Rankings

County Health Rankings, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation, incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of “health factors” and “health outcomes.” These health factors and outcomes are composite measures based on several variables grouped into the following categories: health behaviors, clinical care, social and economic factors, and physical environment. *County Health Rankings* is updated annually. *County Health Rankings 2020* relies on data from 2012 to 2019, with most data from 2016 to 2018.

Exhibit 29A presents 2017 and 2020 rankings for each available indicator category. Rankings indicate how the county ranked in relation to all 62 counties in the New York, with 1 indicating the most favorable rankings and 62 the least favorable. The table also indicates if rankings fell between 2017 and 2020.

Note: County Health Rankings present data by county rather than borough. As each borough corresponds to a whole county, data are labeled with the borough name. Specifically, Kings County corresponds to the borough of Brooklyn, New York County corresponds to the borough of Manhattan, and Richmond County corresponds to the borough of Staten Island.

Exhibit 29A: County Rank among 62 New York Counties, 2017-2020

Measure	Bronx			Brooklyn			Manhattan			Queens			Staten Island		
	2017	2020	Fell	2017	2020	Fell	2017	2020	Fell	2017	2020	Fell	2017	2020	Fell
Health Outcomes	62	62		33	15		11	6		14	7		24	21	
Health Factors	62	62		57	53		11	11		33	20		28	19	
Length of Life	47	36		12	8		2	1		6	4		17	12	
Quality of Life	62	62		58	42		52	48		45	41		31	43	↓
Poor or fair health	62	62		59	60	↓	55	44		60	61	↓	38	40	↓
Poor physical health days	62	62		49	32		25	31	↓	45	30		30	43	↓
Poor mental health days	62	27		36	5		23	15		6	2		4	11	↓
Low birthweight	62	62		51	48		59	57		49	56	↓	50	52	↓
Health Behaviors	58	43		11	12	↓	3	7	↓	7	6		23	15	
Adult smoking	42	41		8	9	↓	3	4	↓	6	5		35	28	
Adult obesity	54	19		4	3		1	1		7	7		35	14	
Food environment index	60	55		61	61		36	24		23	8		5	4	
Physical inactivity	62	61		50	31		2	2		60	49		61	43	
Access to exercise opportunities	5	1		8	1		7	1		9	10	↓	6	6	
Excessive drinking	1	1		10	7		62	62		2	2		3	12	↓
Alcohol-impaired driving deaths	6	17	↓	7	9	↓	3	6	↓	14	18	↓	16	15	
Sexually transmitted infections	62	62		60	60		61	61		56	57	↓	33	40	↓
Teen births	61	58		42	37		22	13		27	27		16	15	
Clinical Care	62	62		56	60	↓	6	3		61	61		14	26	↓
Uninsured	61	61		59	59		43	48	↓	62	62		25	18	
Primary care physicians	35	30		28	24		3	3		27	26		10	8	
Dentists	33	31		21	18		1	1		13	13		18	17	
Mental health providers	31	29		26	23		1	1		44	45	↓	20	20	
Preventable hospital stays	31	55	↓	28	42	↓	3	3		17	25	↓	14	19	↓
Mammography screening	51	62	↓	53	61	↓	49	57	↓	56	60	↓	40	53	↓
Social & Economic Factors	62	62		61	59		44	31		37	23		36	30	
High school graduation	61	62	↓	60	61	↓	59	60	↓	58	56		53	51	
Some college	60	58		23	15		1	1		26	24		14	13	
Unemployment	62	61		40	26		15	6		18	4		37	22	
Children in poverty	62	62		61	59		50	40		24	14		17	14	
Income inequality	61	60		60	61	↓	62	62		51	50		56	58	↓
Children in single-parent households	62	62		50	41		61	52		26	22		13	11	
Social associations	62	62		59	59		13	11		60	60		61	61	
Violent crime	59	58		61	59		62	60		58	61	↓	60	62	↓
Injury deaths	6	7	↓	2	2		4	3		1	1		11	10	
Physical Environment	62	57		57	46		55	32		48	24		41	43	↓
Air pollution - particulate matter	59	58		58	57		62	61		29	18		56	55	
Severe housing problems	62	62		61	61		58	58		60	60		56	56	
Driving alone to work	3	3		2	2		1	1		4	4		5	5	
Long commute - driving alone	58	58		59	60	↓	62	62		60	61	↓	57	57	

Source: County Health Rankings, 2020.

In 2020, the Bronx ranked in the bottom 50th percentile among New York counties for 30 of the 40 indicators assessed. Of those 30 indicators ranking in the bottom 50th percentile, 27 of them ranked in the bottom quartile, specifically Health Outcomes, Health Factors, Quality of Life, Poor or fair health, Poor physical health days, Low birthweight, Food environment index, Physical inactivity, Sexually transmitted infections, Teen births, Clinical Care, Uninsured, Preventable hospital stays, Mammography screening, Social & Economic Factors, High school graduation, Some college, Unemployment, Children in poverty, Income inequality, Children in single-parent households, Social associations, Violent crime, Physical Environment, Air pollution - particulate matter, Severe housing problems, and Long commute - driving alone. Rankings for five indicators fell between 2017 and 2020.

Brooklyn ranked in the bottom 50th percentile among New York counties for 23 of the 40 indicators assessed. Of those 23 indicators ranking in the bottom 50th percentile, 17 of them ranked in the bottom quartile, specifically Health Factors, Poor or fair health, Low birthweight, Food environment index, Sexually transmitted infections, Clinical Care, Uninsured, Mammography screening, Social & Economic Factors, High school graduation, Children in poverty, Income inequality, Social associations, Violent crime, Air pollution - particulate matter, Severe housing problems, and Long commute - driving alone. Rankings for ten indicators fell between 2013 and 2017.

Manhattan ranked in the bottom 50th percentile among New York counties for 16 of the 40 indicators assessed. Of those 16 indicators ranking in the bottom 50th percentile, 13 of them ranked in the bottom quartile, specifically Quality of Life, Low birthweight, Excessive drinking, Sexually transmitted infections, Uninsured, Mammography screening, High school graduation, Income inequality, Children in single-parent households, Violent crime, Air pollution - particulate matter, Severe housing problems, and Long commute - driving alone. Rankings for seven indicators fell between the time periods.

Queens ranked in the bottom 50th percentile among New York counties for 15 of the 40 indicators assessed. Of those 15 indicators ranking in the bottom 50th percentile, 13 of them ranked in the bottom quartile, specifically Poor or fair health, Low birthweight, Physical inactivity, Sexually transmitted infections, Clinical Care, Uninsured, Mammography screening, High school graduation, Income inequality, Social associations, Violent crime, Severe housing problems, and Long commute - driving alone. Rankings for ten indicators fell between the time periods.

Staten Island ranked in the bottom 50th percentile among New York counties for 15 of the 40 indicators assessed. Of those 15 indicators ranking in the bottom 50th percentile, nine of them ranked in the bottom quartile, specifically Low birthweight, Mammography screening, High school graduation, Income inequality, Social associations, Violent crime, Air pollution - particulate matter, Severe housing problems, and Long commute - driving alone. Rankings for 13 indicators fell between the time periods.

Exhibit 29B provides data for each underlying indicator of the composite categories in the County Health Rankings.¹¹ The County Health Rankings methodology provides a comparison of counties within a state to one another.

It also is important to analyze how these same indicators compare to the state and national averages. For example, the community's violent crime rate was more than 50 percent worse than the state average, and the boroughs were shaded to reflect this relationship.

¹¹County Health Rankings provides details about what each indicator measures, how it is defined, and data sources at http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf

Exhibit 29B: Borough Data Compared to State and U.S. Average, 2020

Indicator Category	Data	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York State	U.S.
Health Outcomes								
Length of Life	Years of potential life lost before age 75 per 100,000 population	6,695.8	5,111.1	3,925.2	4,306.4	5,567.4	5,456.4	6,900.0
Quality of Life	Percent of adults reporting fair or poor health	26.8%	18.1%	15.6%	18.5%	15.4%	16.6%	17.0%
	Average number of physically unhealthy days reported in past 30 days	4.7	3.6	3.6	3.6	3.7	3.5	3.8
	Average number of mentally unhealthy days reported in past 30 days	4.1	3.8	4.0	3.5	3.9	3.9	4.0
	Percent of live births with low birthweight (<2500 grams)	9.5%	7.8%	8.3%	8.2%	8.0%	7.9%	8.0%
Health Factors								
Health Behaviors								
Adult smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	15.9%	13.8%	12.4%	12.4%	15.4%	14.1%	17.0%
Adult obesity	Percent of adults that report a BMI >= 30	29.0%	22.6%	14.6%	23.3%	27.5%	25.5%	29.0%
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	7.7	7.5	8.3	8.7	9.1	9.1	7.6
Physical inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	31.3%	25.7%	17.5%	28.4%	27.3%	24.7%	23.0%
Access to exercise opportunities	Percent of population with adequate access to locations for physical activity	100.0%	100.0%	100.0%	98.0%	99.8%	93.2%	84.0%
Alcohol-impaired driving deaths	Percent of driving deaths with alcohol involvement	15.5%	11.5%	8.9%	16.1%	14.1%	20.9%	28.0%
Excessive drinking	Binge plus heavy drinking	16.0%	18.4%	24.8%	16.2%	18.8%	18.8%	19.0%
Sexually transmitted infections	Chlamydia rate per 100,000 population	1,203.9	798.0	1,001.4	611.4	358.9	588.5	524.6
Teen births*	Teen birth rate per 1,000 female population, ages 15-19	26.2	18.0	11.0	14.5	11.3	15.1	23.0
Clinical Care								
Uninsured	Percent of population under age 65 without health insurance	8.9%	8.0%	6.2%	10.2%	4.9%	6.6%	10.0%
Primary care physicians	Ratio of population to primary care physicians	1768:1	1554:1	754:1	1608:1	1029:1	1219:1	1,330:1
Dentists	Ratio of population to dentists	1965:1	1557:1	560:1	1358:1	1516:1	1217:1	1,450:1
Mental health providers	Ratio of population to mental health providers	486:1	456:1	116:1	615:1	436:1	346:1	400:1
Preventable hospital stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	5421.0	4793.0	3082.0	4174.0	4058.0	4203.0	4535.0
Mammography screening	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	33.0%	34.0%	39.0%	35.0%	41.0%	42.0%	42.0%
Flu vaccinations	Percent of fee-for-service Medicare enrollees that receive flu vaccination	38.0%	36.0%	46.0%	42.0%	43.0%	48.0%	46.0%

- Table Continued -

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Indicator Category	Data	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York State	U.S.
Social & Economic Factors								
High school graduation	Percent of ninth-grade cohort that graduates in four years	67.5%	74.5%	74.5%	77.9%	79.7%	81.8%	85.0%
Some college	Percent of adults aged 25-44 years with some post-secondary education	51.2%	67.4%	84.1%	64.6%	68.7%	68.2%	66.0%
Unemployment	Percent of population age 16+ unemployed but seeking work	5.7%	4.2%	3.7%	3.6%	4.1%	4.1%	3.9%
Children in poverty	Percent of children under age 18 in poverty	37.6%	26.0%	19.7%	15.2%	15.2%	18.8%	18.0%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	6.7	6.8	9.2	4.9	5.7	5.7	4.9
Children in single-parent households	Percent of children that live in a household headed by single parent	60.2%	36.3%	39.6%	32.1%	26.4%	34.0%	33.0%
Social associations	Number of associations per 10,000 population	2.6	5.0	12.9	4.6	4.1	8.0	9.3
Violent crime	Number of reported violent crime offenses per 100,000 population	586.1	586.2	586.4	597.8	597.9	379.0	386.0
Injury deaths	Injury mortality per 100,000	45.6	34.5	36.2	32.6	46.9	48.9	70.0
Physical Environment								
Air pollution - particulate matter+	The average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county	10.3	10.1	10.8	8.1	9.8	8.5	8.6
Severe housing problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	38.9%	34.4%	24.4%	32.1%	24.2%	23.9%	18.0%
Driving alone to work	Percent of the workforce that drives alone to work	23.4%	18.5%	6.0%	32.5%	56.6%	53.1%	76.0%
Long commute - driving alone	Among workers who commute in their car alone, the percent that commute more than 30 minutes	52.9%	60.3%	66.7%	61.4%	50.5%	38.1%	36.0%

Source: County Health Rankings, 2020

All boroughs in New York City compared unfavorably to the state average for physically unhealthy days, mammography screening, flu vaccinations, high school graduation, some college, violent crime, injury mortality, households with severe housing problems, and long commute – drive alone. Violent crime and injury mortality were particularly problematic, with every borough with rates greater than 50 percent the state average. Four of the five boroughs compared unfavorably for live births with low birthweight, physical inactivity, sexually transmitted infections, ratio of population to dentists, ratio of population to mental health providers, income inequality, and air pollution.

New York State Department of Health

The New York State Department of Health collects data regarding a number of health issues. **Exhibit 30** presents a summary of selected causes of death by borough. Data presented in **Exhibit 31** through **Exhibit 47** present more in depth data analyses pertaining to cancer, cardiovascular disease, obesity, communicable diseases, respiratory-related indicators, maternal and infant health, and injury and substance abuse. Data by race and ethnicity are included, where available.

Exhibit 30: Selected Causes of Death, Rates per 100,000 Population, 2017

Area	Diseases of the Heart	Malignant Neoplasms	Cerebro-vascular Disease	Acquired Immune Deficiency Syndrome (AIDS)	Pneumonia	Chronic Lower Respiratory Diseases (CLRD)	Accidents (Total)	Diabetes Mellitus	Homicide / Legal Intervention	Cirrhosis of the Liver	Suicide
Bronx	184.7	134.4	25.3	7.2	26.0	22.2	37.2	22.8	5.1	8.1	5.4
Brooklyn	183.5	134.5	19.1	4.7	22.0	15.9	24.3	23.2	4.8	6.1	5.3
Manhattan	129.2	112.8	16.8	3.5	11.0	16.2	21.1	12.3	2.0	4.7	8.0
Queens	171.4	117.5	18.5	1.5	15.9	15.7	22.1	13.8	2.1	5.2	5.4
Staten Island	224.9	147.6	16.1	2.6	19.6	29.9	36.1	19.8	2.7	5.0	7.5
New York City	170.9	125.8	19.2	3.8	18.3	17.7	25.6	18.0	3.4	5.8	6.0
New York State	165.7	136.6	23.8	2.0	15.8	28.0	35.0	16.3	3.0	6.9	8.0

Source: New York State Department of Health, 2020.

Rates are age-sex adjusted.

The Bronx, Brooklyn, Manhattan, and New York City as a whole were more than 50 percent worse than the state for AIDS mortality. Four of the five boroughs had high rates of heart disease mortality, AIDS mortality, and pneumonia mortality. The rate of pneumonia mortality was particularly high in the Bronx. The rates of homicide / legal intervention mortality were particularly high in the Bronx and Brooklyn.

Exhibit 31A: Cancer Indicators, 2013-2015

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
All Cancers							
Incidence per 100,000	453.1	448.0	461.1	426.0	524.7	450.0	485.6
Mortality rate per 100,000	150.8	143.1	135.2	127.6	153.5	138.9	149.2
Lip, oral cavity, and pharynx cancer							
Incidence per 100,000	9.9	9.2	11.3	9.0	9.7	9.7	10.9
Mortality rate per 100,000	2.5	2.1	2.6	1.9	1.3	2.2	2.1
Colon and rectum cancer							
Incidence per 100,000	40.9	41.4	35.9	40.1	41.5	39.9	39.3
Mortality rate per 100,000	15.3	13.3	12.2	12.7	16.2	13.4	13.1
Lung and bronchus cancer							
Incidence per 100,000	46.7	47.1	48.9	44.0	67.0	47.8	59.2
Mortality rate per 100,000	29.9	29.7	29.1	26.5	40.7	29.4	36.9
Female breast cancer							
Incidence per 100,000	112.8	119.6	141.7	116.5	134.2	122.8	132.8
Mortality rate per 100,000	21.0	21.4	19.3	17.7	17.2	19.6	19.2
Cervix uteri cancer							
Incidence per 100,000	9.6	9.5	7.2	9.5	8.0	9.0	7.8
Mortality rate per 100,000	3.4	3.0	2.1	2.6	2.8	2.8	2.2
Ovarian cancer							
Incidence per 100,000	10.1	11.6	12.8	12.2	13.3	11.9	12.2
Mortality rate per 100,000	5.7	6.9	7.3	5.6	6.4	6.4	7.1
Prostate cancer							
Incidence per 100,000	150.0	125.7	122.6	118.2	118.5	126.0	123.4
Mortality rate per 100,000	26.4	21.8	19.8	15.6	19.8	20.0	17.8
Melanoma							
Incidence per 100,000	0.9	0.9	1.2	1.2	2.3	1.1	1.9
Melanoma cancer mortality	28.2	22.0	28.3	19.0	19.0	23.2	22.1

Source: New York State Department of Health, 2020.
All rates are age-adjusted.

Overall, New York City and most of the boroughs compared unfavorably to the state for indicators related to many cancers. Queens compared relatively favorable to the state for most indicators (except for the incidence of colon and rectum cancer, as well as incidence and mortality for cervix uteri cancer).

Exhibit 31B: Cancer Screening Indicators, 2016

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
Screenings							
Percentage of women aged 50-74 years receiving breast cancer screening	84.0	79.8	78.6	81.0	75.1	80.4	79.7
Percentage of women (aged 50-74 years) who had a mammogram	76.1	71.8	75.0	75.7	64.7	74.1	71.2

Source: New York State Department of Health, 2020.

Overall, New York City and most boroughs compared favorably to the state for cancer screening indicators. Manhattan compared unfavorably to the state for breast cancer screenings. Staten Island compared unfavorably for both breast cancer screenings and mammograms.

Exhibit 32 presents cancer indicators by race and ethnicity.

Exhibit 32: Cancer Indicators by Race and Ethnicity, 2013-2015

Borough and Race/Ethnicity	Lung Cancer Incidence	Colorectal Cancer Mortality	Breast Cancer Mortality	Cervix Uteri Cancer Mortality
Bronx				
White	64.9	16.9	24.4	3.3
Black	53.1	17.6	28.3	3.8
Asian/Pacific	34.8	8.8	6.5	N/A
Hispanic	35.5	13.3	15.2	3.0
Total	46.7	15.3	21.0	3.4
Brooklyn				
White	54.8	13.1	21.3	2.0
Black	38.6	14.0	24.4	4.9
Asian/Pacific	60.7	11.4	7.8	N/A
Hispanic	34.9	13.4	22.7	2.8
Total	47.1	13.3	21.4	3.0
Manhattan				
White	49.7	10.0	18.2	1.1
Black	65.4	19.2	32.1	4.3
Asian/Pacific	50.2	11.7	13.7	N/A
Hispanic	35.0	12.1	15.6	2.9
Total	48.9	12.2	19.3	2.1
Queens				
White	58.4	15.0	22.4	2.8
Black	38.0	15.0	22.4	3.6
Asian/Pacific	40.8	8.7	11.0	2.2
Hispanic	24.2	9.6	10.0	2.1
Total	44.0	12.7	17.7	2.6
Staten Island				
White	72.7	16.2	19.6	2.8
Black	65.8	26.2	12.1	N/A
Asian/Pacific	44.4	9.7	N/A	N/A
Hispanic	38.7	12.1	10.7	N/A
Total	67.0	16.2	17.2	2.8
New York City				
White	57.0	13.4	20.7	2.1
Black	45.2	15.9	25.4	4.3
Asian/Pacific	47.1	9.9	10.2	1.8
Hispanic	32.5	12.1	15.3	2.7
Total	47.8	13.4	19.6	2.8
New York State				
White	66.7	13.2	19.5	1.9
Black	50.0	16.0	25.3	4.0
Asian/Pacific	42.3	9.3	10.1	1.7
Hispanic	32.7	11.1	14.0	2.5
Total	59.2	13.1	19.2	2.2

Source: New York State Department of Health, 2020.
All rates are age adjusted per 100,000 population.

In New York City, colorectal, breast, and cervix uteri cancer mortality rates were higher than the state average. Particularly problematic were the cervix uteri cancer mortality rates across the boroughs, especially for Black and Asian/Pacific residents. Colorectal and breast cancer mortality rates were higher for many residents across the community. The White population in Staten Island had higher rates of cancer for all indicators than the state average (**Exhibit 32**).

Exhibit 33 presents cardiovascular disease-related indicators by borough compared to the state.

Exhibit 33: Cardiovascular Disease Indicators, 2014-2016

Borough and Race/Ethnicity	Diseases of the Heart Mortality	Cerebrovascular Disease Mortality	Coronary Heart Disease Mortality	Congestive Heart Failure Mortality	Diabetes Mortality
Bronx	202.1	24.9	176.4	5.6	26.2
Brooklyn	196.3	19.7	176.1	5.8	24.0
Manhattan	143.9	19.1	121.9	5.3	14.8
Queens	180.2	22.3	159.2	5.8	15.8
Staten Island	241.9	17.2	223.0	4.0	19.4
New York City	184.3	21.0	162.7	5.6	19.8
New York State	178.1	25.6	136.2	13.0	17.0

Source: New York State Department of Health, 2020.
All rates are age-adjusted and per 100,000 population.

Across New York City, heart disease mortality, coronary heart disease mortality, and diabetes mortality were worse than the state average. The rate of coronary heart disease mortality was particularly high in Staten Island, and the rate of diabetes mortality was particularly high in the Bronx.

Exhibit 34 presents cardiovascular disease and diabetes indicators by borough, race, and ethnicity.

Exhibit 34: Cardiovascular Disease and Diabetes Mortality Rates by Race and Ethnicity, 2014-2016

Borough and Race/Ethnicity	Diseases of the Heart Mortality	Cerebrovascular Disease Mortality	Coronary Heart Disease Mortality	Congestive Heart Failure Mortality	Diabetes Mortality
Bronx					
White	244.1	21.0	217.4	6.5	18.5
Black	221.1	27.2	191.3	5.5	32.4
Asian/Pacific	88.4	11.0	76.4	2.5	7.3
Hispanic	153.5	23.7	133.9	4.5	25.5
Total	202.1	24.9	176.4	5.6	26.2
Brooklyn					
White	204.6	15.8	185.4	6.0	11.9
Black	199.8	22.8	178.7	5.0	40.6
Asian/Pacific	93.7	19.3	83.7	2.9	11.4
Hispanic	173.4	19.5	155.5	5.7	27.0
Total	196.3	19.7	176.1	5.8	24.0
Manhattan					
White	121.7	13.5	102.6	5.1	6.2
Black	252.6	30.3	219.9	7.1	34.8
Asian/Pacific	89.9	17.8	75.5	3.7	11.2
Hispanic	133.3	21.1	113.0	4.0	21.4
Total	143.9	19.1	121.9	5.3	14.8
Queens					
White	216.8	21.5	191.4	7.2	13.2
Black	200.4	24.8	177.3	5.9	27.4
Asian/Pacific	105.0	20.1	95.0	1.6	13.2
Hispanic	121.8	16.7	108.3	3.9	12.2
Total	180.2	22.3	159.2	5.8	15.8
Staten Island					
White	246.1	15.9	228.4	3.7	16.6
Black	271.5	21.6	250.1	4.5	45.2
Asian/Pacific	129.5	14.3	125.0	0.0	13.9
Hispanic	196.1	18.1	181.0	1.9	23.1
Total	241.9	17.2	223.0	4.0	19.4
New York City					
White	193.7	17.1	172.5	5.9	11.7
Black	212.2	25.2	187.3	5.6	35.1
Asian/Pacific	99.9	19.0	89.1	2.3	12.3
Hispanic	145.4	20.5	127.6	4.4	21.4
Total	184.3	21.0	162.7	5.6	19.8
New York State					
White	180.4	25.4	133.0	15.0	13.9
Black	207.7	27.8	173.9	8.7	32.7
Asian/Pacific	94.7	18.6	82.6	3.1	11.1
Hispanic	135.8	20.7	115.7	5.5	19.1
Total	178.1	25.6	136.2	13.0	17.0

Source: New York State Department of Health, 2020.

All rates are age adjusted per 100,000 population.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average

In the Bronx, the coronary heart disease mortality rate for White residents and overall diabetes mortality were more than 50 percent worse than the state average. In Brooklyn, diabetes mortality was particularly problematic for Black and Hispanic residents, and the coronary heart disease mortality rate in Brooklyn was worse than the state average for most population cohorts. In Staten Island, the coronary heart disease mortality rates for White, Black and overall cohorts were more than 50 percent worse than the state average for those population groups, as well as heart disease, congestive heart failure, and diabetes mortality rates for Black residents. For New York City overall, heart disease mortality, coronary heart disease mortality, and diabetes mortality was higher than state mortality rates.

Obesity increases the risk for many health conditions. Obesity measures, health behaviors that contribute to obesity, and obesity-related chronic diseases are reported in **Exhibit 35**.

Exhibit 35: Obesity-Related Indicators

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
% of pregnant women in WIC who were pre-pregnancy overweight or obese (BMI 25 or higher) [2010-2012]	56.2%	45.4%	46.7%	45.3%	53.3%	48.1%	50.8%
% obese (95th percentile or higher) children (aged 2-4 years) in WIC [2014-2016]	14.6%	11.7%	12.2%	13.8%	16.4%	13.0%	13.9%
% of WIC infants breastfeeding at least 6 months [2014-2016]	41.6%	56.1%	39.5%	45.6%	34.9%	47.5%	40.3%
Age-adjusted % of adults overweight or obese (BMI 25 or higher) [2016]	68.4%	58.2%	45.0%	55.5%	60.4%	56.5%	60.5%
Age-adjusted % of adults who participated in leisure time physical activity in the past 30 [2016]	63.4%	74.0%	79.1%	73.1%	67.6%	72.8%	74.0%
Age-adjusted % of adults with physician diagnosed diabetes [2016]	16.4%	11.9%	8.6%	9.4%	8.7%	11.1%	9.5%
Age-adjusted cardiovascular disease mortality rate per 100,000 [2014-2016]	251.4	233.3	179.0	218.2	275.2	222.8	220.2
Age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 [2014-2016]	24.9	19.7	19.1	22.3	17.2	21.0	25.6
Total mortality rate per 100,000 [2014-2016]	652.2	604.1	611.9	621.4	774.8	628.0	769.8

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average

Overall, New York City compared well to the state in many of the obesity indicators. The Bronx compared unfavorably to the state for many of the indicators, particularly physician diagnosed diabetes. Staten Island also compared unfavorably to the state for many of the indicators.

Exhibit 36 presents communicable disease incidence rates for the MSH community.

Exhibit 36: Communicable Disease Indicators

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
Pertussis incidence per 100,000 [2014-2016]	2.4	5.1	2.9	2.3	3.4	3.4	5.1
Mumps incidence per 100,000 [2014-2016]	1.6	0.9	3.1	1.4	0.7	1.5	1.1
Haemophilus influenza incidence per 100,000 [2014-2016]	1.5	1.2	1.4	1.1	1.4	1.3	1.5
Hepatitis A incidence per 100,000 2014-2016]	0.5	0.7	0.9	0.6	0.6	0.7	0.5
Acute hepatitis B incidence per 100,000 [2014-2016]	1.0	0.6	0.8	0.5	0.2	0.6	0.5
Tuberculosis incidence per 100,000 [2014-2016]	6.1	6.7	4.7	9.5	2.3	6.8	3.9
Salmonella incidence per 100,000 [2014-2016]	12.8	11.6	11.9	10.1	7.3	11.2	11.6
Shigella incidence per 100,000 [2014-2016]	4.0	7.9	7.6	4.3	1.3	5.8	3.9
Lyme disease incidence per 100,000 [2014-2016]	3.4	11.9	20.0	4.9	22.4	10.7	38.0
% of adults 65 years and older with flu immunization in the past year [2016]	67.0%	50.4%	66.3%	61.0%	53.3%	59.4%	59.5%
% of adults aged 65 years and older with pneumococcal immunization [2016]	68.5%	52.8%	70.3%	60.6%	61.7%	61.5%	69.3%

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than national average; dark grey denotes 50 percent worse than national average.

New York City compared unfavorably to the state in incidence rates for mumps, hepatitis A, acute hepatitis B, tuberculosis, shigella, percent of adults receiving the flu shot, and percent of senior adults receiving pneumococcal immunization. The Bronx, Brooklyn, Queens, and New York City overall were particularly unfavorable for tuberculosis incidences. Additionally, the Bronx was particularly unfavorable for hepatitis A, Brooklyn for shigella, and Manhattan for mumps, hepatitis A, and acute hepatitis B.

Exhibits 37 and 38 present prevalence and new diagnosis rates for HIV and AIDS.

Exhibit 37: Living HIV and AIDS Cases, Prevalence Rate per 100,000, 2018

Cohort	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
Male	1,996.6	1,241.3	2,329.5	819.7	445.2	1,507.8	798.9
Female	1,054.3	554.7	461.6	264.2	210.8	533.9	298.5
White	542.8	274.2	913.5	280.9	141.6	484.5	180.5
Black	2,157.7	1,596.3	3,070.1	996.8	1,316.0	1,851.1	1,450.0
Hispanic	1,345.1	1,193.5	1,674.7	826.7	575.0	1,278.2	1,038.9
Asian/Pacific Islander	126.0	94.9	237.9	102.6	36.4	122.3	100.7
Native American	85.5	146.1	505.3	87.9	278.4	171.0	72.0
Total	1,780.7	898.9	1,333.5	553.0	390.6	995.0	541.4

Source: New York State Department of Health, Bureau of HIV/AIDS Epidemiology, 2020.

All rates are age-adjusted.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average

The prevalence rate of HIV and AIDS in New York City as a whole was nearly twice as high as the state average in 2018. Manhattan compared particularly unfavorably, with the rate for every demographic cohort more than fifty percent higher than state averages. The Bronx and Brooklyn also compared unfavorably, with several cohorts more than fifty percent higher than state averages. Community rates were particularly high for male, black, and Hispanic cohorts.

As illustrated in **Exhibit 38**, the Bronx, Brooklyn, Manhattan, and New York City as a whole reported new HIV and AIDS case rates that were greater than 50 percent than the state average in 2018. The rates for Queens for new HIV and AIDS cases were higher than the state averages. New diagnoses among men, black residents, and Hispanic residents were particularly high.

Exhibit 38: Newly Diagnosed HIV and AIDS Cases, 2018

Borough and Demographic Cohort	HIV Diagnoses	AIDS Diagnoses	HIV Case Rate per 100,000	AIDS Case Rate per 100,000
Bronx				
Male	334	173	46.8	25.6
Female	140	93	18.4	12.5
White	13	4	10.8	3.5
Black	220	150	50.2	34.3
Hispanic	230	107	27.2	13.7
Asian/Pacific Islander	2	1	3.5	1.3
Total	474	266	32.1	18.7
Brooklyn				
Male	427	191	32.6	15.4
Female	135	60	10.1	4.5
White	66	17	6.0	1.7
Black	319	154	39.2	19.0
Hispanic	136	62	25.9	13.1
Asian/Pacific Islander	21	13	5.3	3.2
Total	562	251	20.8	9.6
Manhattan				
Male	333	129	36.2	15.2
Female	54	30	6.4	3.4
White	81	26	9.2	3.5
Black	135	65	58.3	29.1
Hispanic	135	52	28.7	11.4
Asian/Pacific Islander	22	8	7.9	2.6
Total	387	159	20.6	9.0
Queens				
Male	350	140	29.4	12.0
Female	61	37	4.9	3.0
White	29	14	4.6	2.4
Black	108	57	24.5	13.4
Hispanic	209	73	30.2	11.1
Asian/Pacific Islander	52	27	7.6	4.1
Total	411	177	17.0	7.4
Staten Island				
Male	26	10	11.4	4.6
Female	7	6	3.0	2.4
White	8	3	2.7	0.9
Black	19	9	41.2	20.2
Hispanic	6	4	7.2	4.7
Asian/Pacific Islander	-	-	-	-
Total	33	16	7.2	3.5
New York City				
Male	1,470	643	33.6	15.3
Female	397	226	8.9	5.1
White	197	64	6.5	2.3
Black	801	435	40.7	22.4
Hispanic	716	298	27.3	12.1
Asian/Pacific Islander	97	49	6.6	3.3
Total	1,867	869	20.8	10.0
New York State				
Male	1,955	881	19.9	9.1
Female	526	313	5.3	3.1
White	366	149	3.4	1.3
Black	1,021	540	33.3	18.1
Hispanic	894	398	22.6	10.8
Asian/Pacific Islander	105	55	5.2	2.7
Total	2,481	1,194	12.5	6.1

Source: New York State Department of Health, Bureau of HIV/AIDS Epidemiology, 2020. All rates are age-adjusted. Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average

Exhibit 39 presents data on chronic lower respiratory disease (CLRD) and asthma in the MSH community.

Exhibit 39: Respiratory-Related Indicators

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
Age-adjusted CLRD mortality rate per 100,000 [2014-2016]	25.1	17.4	17.9	18.1	28.2	19.5	28.9
Asthma hospitalization rate per 10,000 [2016]	39.4	13.9	11.6	10.2	13.1	16.7	10.8
Aged 0-4 years	123.5	50.4	51.5	38.6	41.3	61.1	43.5
Aged 5-14 years	60.1	27.9	29.9	18.1	14.0	31.4	18.7
Aged 0-17 years	72.3	32.3	35.7	22.4	19.8	37.6	23.5
Aged 5-64 years	32.0	10.5	9.2	7.5	11.4	13.2	8.7
Aged 15-24 years	18.2	6.9	7.6	5.5	7.9	9.1	5.5
Aged 25-44 years	19.3	4.4	4.1	3.8	11.5	6.8	5.6
Aged 45-64 years	39.4	11.8	11.4	8.3	11.9	15.2	9.2
Aged 65 years or older	37.9	14.3	10.8	12.7	11.3	16.4	8.9
Age-adjusted asthma mortality rate per 100,000 [2014-2016]	3.7	2.0	1.7	1.2	1.1	1.9	1.3
Age-adjusted % of adults with current asthma [2016]	8.9	9.3	8.8	7.8	9.0	8.7	9.6

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

Data indicate that asthma is a health problem in much of New York City, particularly in the Bronx. The Bronx's asthma hospitalization and mortality rates were more than 50 percent worse than the New York State average in 2016. Although not as severe as the Bronx, multiple asthma hospitalization and mortality rates in Brooklyn, Manhattan, and Staten Island were higher than the state rates. The entire community benchmarks favorably to the state for Chronic Lower Respiratory Disease (CLRD).

Exhibit 40 presents respiratory asthma and CLRD indicators by race and ethnicity.

Exhibit 40: Respiratory Indicators by Race and Ethnicity, 2012-2014

Borough and Race/Ethnicity	Asthma hospitalizations [2012-2014]	Asthma hospitalizations, aged 0-17 years [2012-2014]	Chronic lower respiratory disease mortality 2014-2016]	Chronic lower respiratory disease hospitalizations [2012-2014]
Bronx				
White	16.1	16.9	33.8	32.1
Black	52.7	95.8	23.3	67.4
Asian/Pacific	14.5	30.9	10.6	19.5
Hispanic	48.7	69.7	20.9	61.4
Total	54.7	87.4	25.1	71.2
Brooklyn				
White	7.0	5.8	17.2	18.6
Black	46.0	76.5	15.9	58.4
Asian/Pacific	5.0	4.7	13.8	9.7
Hispanic	37.6	37.3	21.8	50.5
Total	27.0	38.1	17.4	39.4
Manhattan				
White	4.5	8.3	14.4	9.3
Black	53.9	86.3	30.6	69.2
Asian/Pacific	3.9	5.6	11.4	8.0
Hispanic	28.1	31.6	17.8	37.0
Total	22.6	38.6	17.9	31.3
Queens				
White	9.8	13.6	25.3	23.2
Black	25.9	43.5	17.2	36.4
Asian/Pacific	5.9	10.7	10.4	9.9
Hispanic	17.0	26.5	9.5	24.3
Total	16.8	27.6	18.1	27.8
Staten Island				
White	11.1	9.3	29.4	32.7
Black	48.9	58.6	23.7	72.6
Asian/Pacific	2.7		15.4	6.2
Hispanic	27.0	19.5	19.8	37.2
Total	18.1	19.3	28.2	38.2
New York City				
White	7.8	8.9	21.1	19.6
Black	44.1	74.6	19.7	57.1
Asian/Pacific	5.6	9.2	11.7	9.8
Hispanic	33.8	44.3	17.4	44.2
Total	27.6	44.4	19.5	40.0
New York State				
White	7.3	8.9	33.1	21.9
Black	38.0	59.2	20.3	52.1
Asian/Pacific	5.4	8.9	10.9	9.3
Hispanic	28.0	33.5	16.4	40.1
Total	17.6	27.0	28.9	32.3

Source: New York State Department of Health, 2020.

Rates are per 10,000 population, except chronic lower respiratory disease mortality is per 100,000 population.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

Asthma hospitalizations were most severe for Black and Hispanic cohorts in New York City overall, as well as in each of the boroughs in the community. Asthma rates were particularly problematic for cohorts in the Bronx, Brooklyn, and Manhattan.

Exhibits 41 through **46** present data related to maternal and infant health. **Exhibit 41** portrays maternal and infant health indicators by borough, New York City, and New York State.

Exhibit 41: Maternal and Infant Health Indicators, 2014-2016

Borough	Premature Birth	Low Birth Weight	Late or No Prenatal Care	Infant Deaths Rate*	Teen Pregnancy Rate**
Bronx	11.6%	9.3%	10.6%	4.6	59.4
Brooklyn	10.0%	7.6%	5.8%	3.8	43.2
Manhattan	10.4%	8.0%	4.9%	3.3	32.4
Queens	10.1%	8.1%	7.2%	3.8	35.8
Staten Island	10.8%	7.6%	2.5%	3.5	27.9
New York City	10.4%	8.1%	6.7%	4.0	42.0
New York State	10.5%	7.8%	5.4%	4.6	29.8

Sources: New York State Department of Health, 2020.

*Infant deaths per 1,000 live births

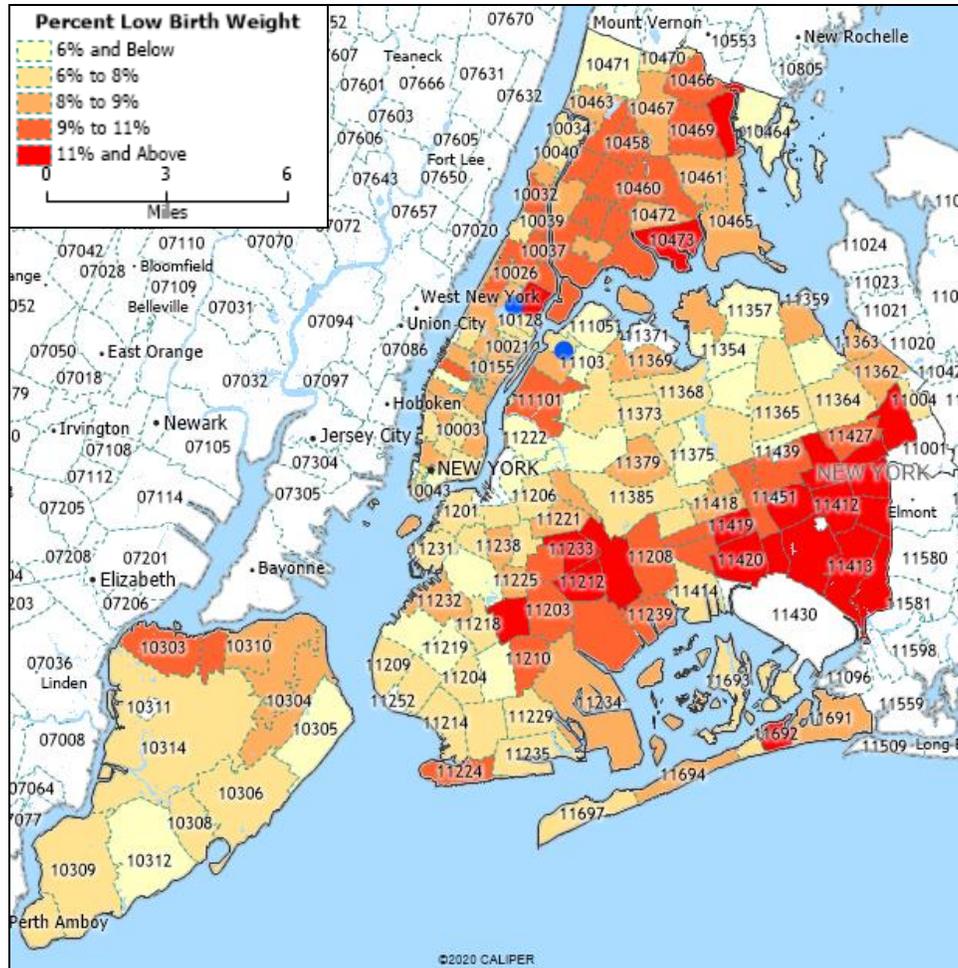
**Teen pregnancy rates are per 1,000 females ages 15-19

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

New York City compared unfavorably to New York State from 2014-2016 in low birth weights, late or no prenatal care, and teenage pregnancy rate. In the Bronx, the percent of residents with late or no prenatal care and teen pregnancy (ages 15-19) rates were particularly unfavorable. Teen pregnancy rates were higher in all boroughs, except for Staten Island, compared to the state rate.

Exhibits 42, 43, and 44 illustrate maternal and infant health indicators by ZIP Code. Exhibit 42 illustrates low birth weight births by ZIP Code.

Exhibit 42: Low Birth Weight Infants by ZIP Code, 2014-2016



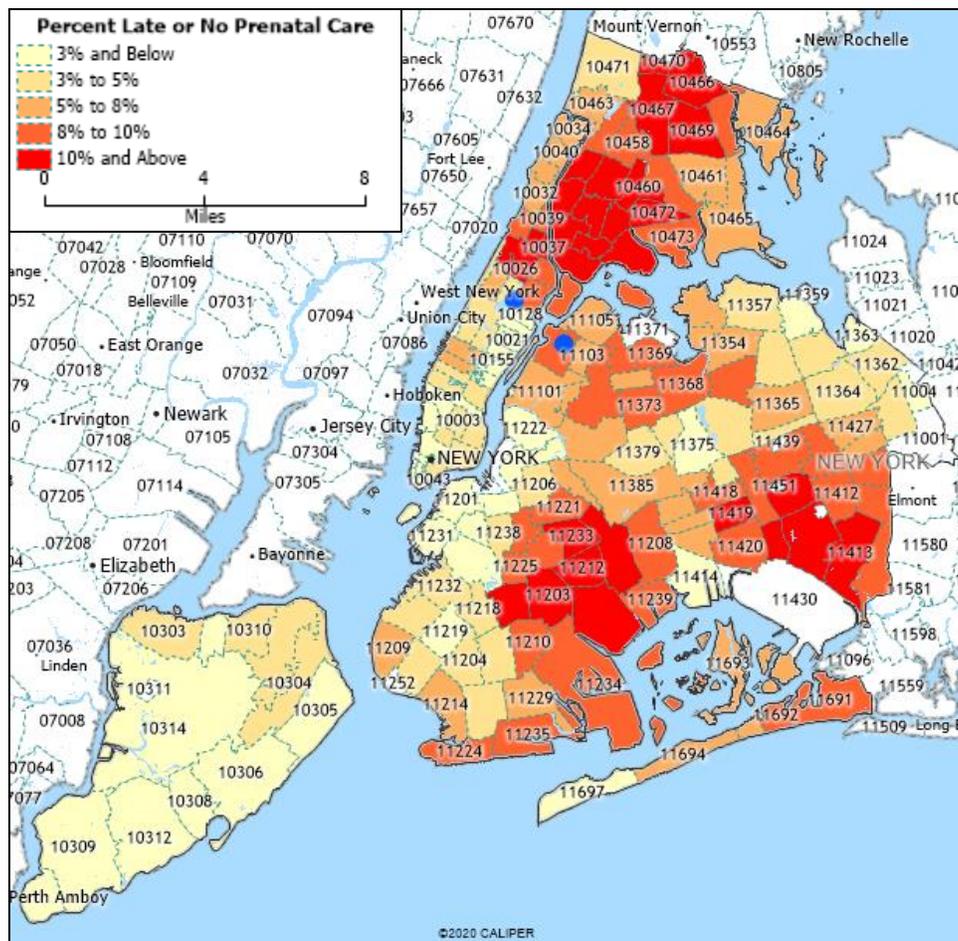
Sources: Caliper Maptitude (2020) and New York State Department of Health, 2020.

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Within the MSH community, areas that display high rates of low birthweight births are concentrated in the Bronx, Brooklyn, and Queens. Manhattan ZIP Code 10006 (Lower Manhattan), and Queens ZIP Codes 11433 (Jamaica), 11427 (Southeast Queens), and 11428 (Southeast Queens) each had low birth weight percentages above 13 percent.

Exhibit 43 illustrates late or no prenatal care by ZIP Code.

Exhibit 43: Mothers with Late or No Prenatal Care by ZIP Code, 2014-2016



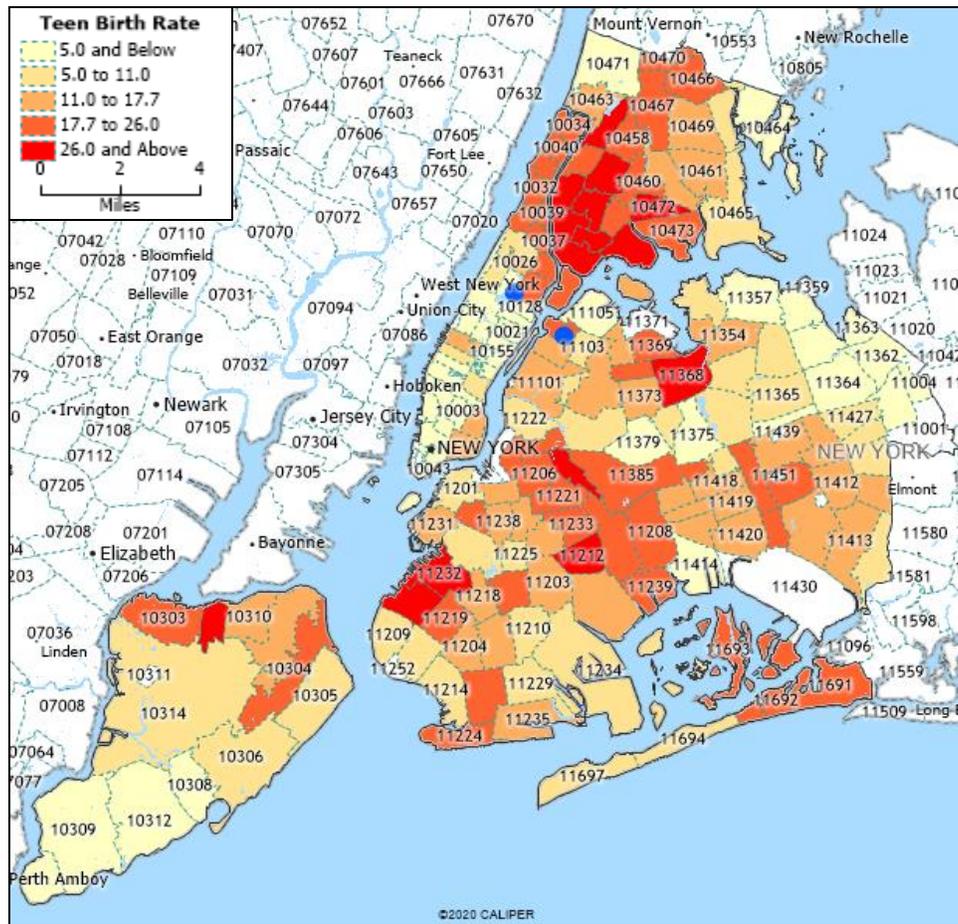
Sources: Caliper Maptitude (2020) and New York State Department of Health, 2020.

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Neighborhoods in the Bronx had high rates of late or no prenatal care. Bronx ZIP Codes 10474 and 10459 (Hunts Point and Mott Haven) both had rates above 14 percent.

Exhibit 44 illustrates teen pregnancy rates by ZIP Code.

Exhibit 44: Teen Pregnancy Rate 15-19 by ZIP Code, 2014-2016*



Sources: Caliper Maptitude (2020) and New York State Department of Health, 2020.

* Teen pregnancy rates are per 1,000 females ages 15-19

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Several locations throughout the community displayed high teen pregnancy rates. Bronx ZIP Codes 10454 (Hunts Point-Mott Haven), 10457 (Crotona-Tremont), and 10451 (High-Bridge-Morisania), Queens ZIP Code 11368 (West Queens), and Staten Island ZIP Code 10302 (Port Richmond) each had rates of 30 or more teen pregnancies for 1,000 females, ages 15-19.

Exhibit 45 presents maternal and child health indicators by race and ethnicity.

Exhibit 45: Maternal and Infant Health Indicators by Race and Ethnicity, 2014-2016

Borough and Race/Ethnicity	Percent Births with Early (1st Trimester) Prenatal Care	Percent Adequate Prenatal Care	Percent Premature Births (< 37 Weeks Gestation)	Percent Low Birthweight Births (< 2.5 Kg)	Teen (Age 15-17) Pregnancy Rate per 1,000	Infant Mortality per 1,000 Live Births
Bronx						
White	68.4%	70.7%	8.3%	7.7%	17.0	4.4
Black	53.0%	59.3%	10.8%	11.2%	30.9	6.7
Asian/Pacific	59.9%	69.5%	7.9%	10.7%	1.3	2.8
Hispanic	60.6%	66.8%	9.2%	8.3%	32.2	3.3
Total	58.9%	65.0%	9.6%	9.2%	31.4	4.8
Brooklyn						
White	80.3%	73.5%	5.8%	5.1%	3.5	2.3
Black	65.3%	65.8%	12.8%	12.0%	31.6	7.3
Asian/Pacific	80.4%	80.4%	8.0%	7.6%	1.8	2.0
Hispanic	74.6%	75.2%	9.4%	7.9%	30.9	3.4
Total	75.8%	73.1%	8.4%	7.6%	20.5	3.9
Manhattan						
White	86.5%	81.9%	7.6%	7.1%	9.0	2.3
Black	62.6%	64.6%	12.0%	12.6%	36.7	9.3
Asian/Pacific	83.6%	78.5%	6.9%	7.5%	1.5	1.1
Hispanic	69.6%	72.0%	9.3%	8.1%	24.7	3.1
Total	78.9%	76.8%	8.4%	8.1%	21.5	3.6
Queens						
White	84.8%	79.9%	7.0%	6.1%	5.3	3.9
Black	67.0%	68.1%	11.8%	11.8%	22.3	7.0
Asian/Pacific	73.3%	69.7%	7.9%	8.5%	1.7	2.1
Hispanic	72.8%	73.5%	8.3%	7.1%	24.9	2.7
Total	74.7%	72.9%	8.5%	8.1%	17.0	3.9
Staten Island						
White	89.8%	78.3%	8.0%	6.3%	5.3	2.6
Black	76.6%	71.5%	12.2%	11.6%	34.7	8.4
Asian/Pacific	85.1%	78.3%	7.9%	7.3%	0.4	5.2
Hispanic	80.3%	74.1%	9.9%	8.1%	26.1	2.0
Total	85.4%	76.4%	9.0%	7.6%	14.6	3.6
New York City						
White	82.8%	76.8%	6.7%	5.9%	5.7	2.7
Black	62.4%	64.5%	12.0%	11.8%	30.0	7.3
Asian/Pacific	76.6%	74.5%	7.8%	8.2%	1.6	2.0
Hispanic	68.7%	71.3%	9.0%	7.9%	28.8	3.1
Total	73.4%	72.3%	8.7%	8.1%	21.6	4.0
New York State						
White	81.8%	78.1%	7.8%	6.4%	5.9	3.7
Black	64.5%	65.5%	12.2%	12.2%	28.2	8.8
Asian/Pacific	76.7%	74.7%	8.0%	8.3%	1.6	2.2
Hispanic	69.6%	71.0%	9.1%	7.7%	25.9	3.6
Total	75.2%	74.0%	8.8%	7.9%	15.1	4.5

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

Overall, New York City rates of early prenatal care, adequate prenatal care, low birthweight births, and teen pregnancy compared unfavorably to state averages. In New York City, teen pregnancy rates for Black and Hispanic residents were greater than 50 percent the state averages.

Exhibit 46 presents data from the New York State Pregnancy Risk Assessment Monitoring System (PRAMS), which assesses maternal experiences and behaviors before, during, and after pregnancy. In 2017, the percentages of women who smoked during the last 3 months were more than double the New York City average for Black women and women with less than a high school education, as well as more than fifty percent higher for not married women.

Exhibit 46: PRAMS Indicators for New York City, 2017

Sociodemographic Characteristic	Women Who Drank Alcohol During 3 Months Before Pregnancy	Women Who Had Prenatal Care Counseling About Alcohol Use During Pregnancy	Women Who Report Ever Breastfeeding	Women Who Smoked During Last 3 Months of Pregnancy
Race / Ethnicity				
Non-Hispanic White	56.6%	89.2%	92.9%	0.9%
Non-Hispanic Black	44.8%	91.8%	93.2%	4.5%
Non-Hispanic Other	32.8%	89.4%	86.8%	1.3%
Hispanic	43.4%	91.1%	91.7%	1.1%
Education				
Less than high school	27.6%	90.3%	87.3%	5.0%
High school graduate	28.8%	87.1%	89.3%	1.8%
More than high school	57.7%	91.5%	93.4%	0.8%
Maternal Age				
Less than 20 years old
20-24 years old	35.0%	93.0%	91.4%	1.1%
25-34 years old	48.0%	90.3%	91.3%	2.0%
35 years old or more	50.9%	89.8%	91.4%	1.7%
Marital Status				
Married	46.6%	88.7%	93.2%	0.9%
Not Married	44.6%	92.9%	88.6%	3.1%
Medicaid Status				
On Medicaid	30.6%	91.2%	89.4%	2.1%
Not on Medicaid	61.9%	89.4%	93.6%	1.4%
New York City Total	45.8%	90.3%	91.5%	1.7%

Source: New York State Department of Health, Pregnancy Risk Assessment Monitoring System (PRAMS), 2020.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

Exhibit 47 presents injury and behavioral health indicators by race and ethnicity.

Exhibit 47: Injury and Substance Abuse/Mental Health Indicators by Race and Ethnicity, 2014-2016

Borough and Race/Ethnicity	Motor Vehicle-related Mortality	Unintentional Injury Mortality	Poisoning Hospitalizations	Suicide Mortality
Bronx				
White	4.5	46.5	12.6	11.9
Black	3.0	22.5	17.0	5.2
Asian/Pacific	1.5	10.2	2.7	3.1
Hispanic	3.5	26.2	11.7	4.6
Total	3.8	28.1	17.4	5.7
Brooklyn				
White	2.5	24.0	7.3	7.4
Black	3.6	18.1	11.4	3.3
Asian/Pacific	3.0	9.9	2.3	4.1
Hispanic	4.7	25.0	8.1	3.4
Total	3.9	21.9	9.2	5.0
Manhattan				
White	1.7	17.1	6.2	8.9
Black	2.6	28.7	24.4	4.4
Asian/Pacific	2.4	9.9	2.5	6.1
Hispanic	2.1	21.7	10.7	4.1
Total	2.3	20.5	11.8	7.3
Queens				
White	3.1	27.3	8.4	8.8
Black	4.7	18.9	8.2	3.7
Asian/Pacific	2.4	10.9	2.3	6.0
Hispanic	3.4	16.0	5.2	3.2
Total	3.8	19.5	7.3	5.8
Staten Island				
White	3.5	37.9	15.2	7.5
Black	8.5	31.5	17.3	3.7
Asian/Pacific	2.0	11.0	1.7	1.7
Hispanic	4.4	22.0	7.9	3.3
Total	4.7	33.7	13.6	6.1
New York City				
White	2.6	25.2	8.2	8.2
Black	3.7	20.7	13.5	4.0
Asian/Pacific	2.5	10.5	2.3	5.2
Hispanic	3.5	22.2	8.9	3.8
Total	3.6	22.5	10.7	5.9
New York State				
White	5.8	35.3	9.4	10.2
Black	4.5	23.5	13.2	4.3
Asian/Pacific	2.5	10.5	2.3	5.2
Hispanic	4.4	23.2	8.5	4.1
Total	5.3	30.2	10.4	8.0

Source: New York State Department of Health, 2020.

All rates are age adjusted. Mortality rates are per 100,000 population and hospitalization rates are per 10,000 population.

Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

Poisoning hospitalizations, including drug and alcohol overdose/poisoning hospitalizations, rates across the boroughs were higher than the state rate, particularly among Black residents of the Bronx, Manhattan, and Staten Island. The unintentional injury mortality rate for White populations in the Bronx was more than 50 percent worse than state average. Motor Vehicle-related mortality for Black residents of Staten Island was more than 50 percent worse than the state average.

Youth Risk Behavior Surveillance System

Data collected as part of the Centers for Disease Control and Prevention's (CDC) Youth Risk Behavior Surveillance System (YRBSS) are based on national, state, territorial, tribal, and neighborhood school-based surveys that gather data from young adults in grades 9 through 12 on health-risk behaviors such as drug and tobacco use, unhealthy dietary behaviors, sexual behavior, and the prevalence of asthma. The survey is conducted every two years.

New York City and borough-specific results from the 2017 Youth Risk Behavior Survey (YRBS) are available from the Centers for Disease Control and Prevention (CDC). Analysis of YRBS data can identify localized health issues and trends, and enable borough, state, or nationwide comparisons. **Exhibit 48** displays the prevalence of various indicators for the five boroughs, New York City, New York State, and the U.S.

Exhibit 48: YRBS Indicators and Variation from New York State and the U.S., 2017

Category	Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	NYC	New York	United States
Alcohol or Tobacco Use	Binge Drinking (5 or More Drinks in the Past Month)	5.2%	3.7%	5.7%	5.2%	6.5%	5.0%	10.8%	13.5%
	Consumed At Least One Alcoholic Drink in the Past Month	18.3%	16.1%	20.2%	17.5%	19.1%	17.9%	27.1%	29.8%
	Smoking in the Past Month	3.8%	4.4%	5.0%	6.1%	6.2%	5.0%	5.5%	8.8%
Asthma	Ever Been Told They Have Asthma	27.7%	22.7%	26.2%	21.4%	23.0%	23.9%	24.3%	22.5%
Mental Health	Attempted Suicide One or More Times During the Past 12 Months	11.5%	11.3%	9.3%	12.6%	6.9%	11.0%	10.1%	7.4%
	Felt Sad (Every Day for 2 weeks) & Stopped Regular Activities due to Sadness	32.8%	32.3%	32.7%	30.0%	29.3%	31.6%	30.4%	31.5%
Physical Activity	Not Physically Active for 60 Minutes Per Day for 7 Days Per Week	22.4%	19.1%	17.5%	16.7%	14.9%	18.4%	15.0%	15.4%
	Three or More Hours of TV Per Day on School Days	26.6%	22.2%	21.3%	22.1%	21.4%	22.6%	20.7%	20.7%
Sexual Behaviors	Ever Had Sexual Intercourse	33.5%	26.1%	25.8%	25.2%	22.3%	26.8%	30.6%	39.5%
	No Method of Contraception	23.7%	25.2%	22.0%	23.7%	28.8%	24.1%	15.6%	13.8%
Substance Abuse	Cocaine Use During Lifetime	4.7%	4.0%	3.6%	4.0%	4.1%	4.1%	4.9%	4.8%
	Heroin Use During Lifetime	4.4%	4.0%	2.6%	4.3%	4.3%	3.9%	3.9%	1.7%
	Marijuana Use in the Past Month	17.3%	15.7%	17.4%	15.6%	14.1%	16.2%	18.4%	19.8%
	Ever Injected an Illegal Drug	3.0%	3.4%	1.8%	2.5%	3.3%	2.7%	3.4%	1.5%
Violence	Physical Fight One or More Times During the Past 12 Months	29.6%	25.5%	21.4%	22.9%	21.5%	24.4%	20.8%	23.6%
	Electronically Bullied	12.9%	14.5%	13.8%	11.3%	15.3%	13.3%	17.6%	14.9%
	Bullied on School Property	15.8%	15.3%	15.8%	14.9%	16.4%	15.5%	21.7%	19.0%
	Did Not Go to School because Felt Unsafe at least Once in the Past 30 days	10.5%	9.2%	7.0%	8.4%	6.9%	8.6%	9.4%	6.7%
Weight and Nutrition	Did Not Eat Fruit in Past 7 Days	10.1%	9.0%	9.0%	9.4%	11.2%	9.4%	7.3%	5.6%
	Did Not Eat Breakfast in Past 7 Days	16.7%	15.1%	13.1%	14.6%	17.3%	15.0%	15.5%	14.1%
	One or More Sugary Drinks Consumed in the Past 7 Days	70.7%	61.8%	66.2%	67.6%	58.6%	65.5%	63.7%	72.2%
	Overweight or Obese	36.4%	29.0%	27.7%	28.5%	28.0%	29.9%	28.6%	30.4%

Source: Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System, 2020.
 Note: Light grey shading denotes worse than state average; dark grey denotes 50 percent worse than state average.

The percentages of youth not using contraception were more than 50 percent worse for New York City, the Bronx, Brooklyn, Queens, and Staten Island, as compared to New York State. New York City and all boroughs have problematic rates of indicators related to mental health, physical activity, violence, and weight and nutrition. The percentage of youth in Staten Island not eating fruit was more than 50 percent worse than the state average, and the percentage was higher for New York City overall, as well as for the other boroughs.

New York Prevention Agenda 2019-2024

The New York Prevention Agenda is the state's health improvement plan for 2019-2024. Five priority areas were identified to improve the health of state residents and to reduce disparities:

- Prevent chronic diseases;
- Promote a healthy and safe environment;
- Promote healthy women, infants, and children;
- Promote well-being and prevent mental and substance use disorders; and
- Prevent communicable diseases.

The state developed tracking indicators or goals for indicators relating to each priority area. Baseline data are available for each borough along with a target for the year 2024. **Exhibits 49A, 49B, 49C, and 49D** compare each borough's baseline data to the 2024 target.

All of the boroughs in New York City had a large number of indicators that were worse than the 2024 target. Each of the five boroughs was worse than the 2024 target for the following indicators (**Exhibits 49A, 49B, 49C, and 49D**):

- Percentage of adults (aged 18-64) with health insurance;
- Percentage of adults who have a regular health care provider;
- Rate of assault-related hospitalizations;
- Work-related emergency department (ED) visits (Ratio of Black non-Hispanics to White non-Hispanics);
- Crash-related pedestrian fatalities, rate per 100,000 population;
- Youth, aged 5-18 years, with persistent asthma who were not dispensed appropriate asthma controller medications for at least 50% of the treatment period;
- Percentage of births that are preterm;
- Percentage of families participating in the Early Intervention Program who meet the state's standard for the NY Impact on Family Scale; and
- Economy score.

Exhibit 49A: Prevention Agenda 2019-2024 Indicators Compared to Objectives

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State	NYS Target
Improve Health Status and Reduce Health Disparities									
Percentage of premature deaths (before age 65 years)	2017	32.8%	27.3%	22.0%	23.8%	24.7%	26.2%	23.4%	22.8%
Premature deaths (before age 65 years), difference in percentages between Black non-Hispanics and White non-Hispanics	2017	22.0	15.9	15.8	16.9	32.1	17.8	17.6	17.3
Premature deaths (before age 65 years), difference in percentages between Hispanics and White non-Hispanics	2017	19.6	16.2	10.3	16.7	21.7	16.1	16.5	16.2
Age-adjusted preventable hospitalizations rate per 10,000 - Aged 18+ years	2017	226.9	138.6	107.0	117.9	135.1	139.8	129.1	115.0
Potentially preventable hospitalizations among adults, difference in age-adjusted rates per 10,000 between Black non-Hispanics and White non-Hispanics	2017	109.4	110.5	172.0	49.7	137.1	114.4	108.4	94.0
Potentially preventable hospitalizations among adults, difference in age-adjusted rates per 10,000 between Hispanics and White non-Hispanics	2017	41.2	34.8	47.5	-1.4	27.3	42.8	23.8	23.9
Percentage of adults with health insurance, aged 18-64 years	2017	88.6%	90.1%	93.2%	87.6%	94.1%		92.0%	97.0%
Adults who have a regular health care provider, age-adjusted percentage	2016	78.7%	79.9%	77.7%	83.4%	82.4%	80.2%	82.6%	86.7%
Promote a Healthy and Safe Environment									
Hospitalizations due to falls among adults, rate per 10,000 population, aged 65+ years	2017	144.6	127.4	182.5	169.9	219.9	159.7	180.6	173.7
Assault-related hospitalizations, rate per 10,000 population	2017	8.5	3.9	3.7	3.2	3.9	4.5	3.2	3.0
Assault-related hospitalizations, ratio of rates between Black non-Hispanics and White non-Hispanics	2017	1.9	6.3	8.9	4.0	4.3	5.1	5.6	5.5
Assault-related hospitalizations, ratio of rates between Hispanics and White non-Hispanics	2017	0.9	3.3	3.4	2.2	2.1	2.7	2.6	2.5
Assault-related hospitalizations, ratio of rates between low-income ZIP Codes and non-low-income ZIP Codes	2017	2.4	1.6	2.3	1.5	4.2	2.2	2.9	2.7
Firearm assault-related hospitalizations, rate per 10,000 population	2017	0.9	0.4	0.2	0.3	0.2	0.4	0.3	0.4
Work-related emergency department (ED) visits, ratio of rates between Black non-Hispanics and White non-Hispanics	2017	1.4	1.7	4.1	1.3	1.5	1.9	1.4	1.3
Crash-related pedestrian fatalities, rate per 100,000 population	2016	2.4	1.5	1.7	1.7	1.9	1.8	1.6	1.4
Percentage of people who commute to work using alternate modes of transportation (e.g., public transportation, carpool, bike/walk) or who telecommute	2013-2017	75.6%	80.6%	90.5%	67.2%	43.1%	76.4%	45.8%	47.9%

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than state target; dark grey denotes 50 percent worse than state target.

Exhibit 49B: Prevention Agenda 2019-2024 Indicators Compared to Objectives

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State	NYS Target
Prevent Chronic Diseases									
Percentage of children with obesity, among children aged 2-4 years participating in the WIC program	2017	14.8%	11.7%	13.1%	13.1%	16.6%	13.1%	13.9%	13.0%
Percentage of children and adolescents with obesity	2016-2017	23.9%	19.4%	16.5%	20.1%	19.4%	20.2%	-	19.4%
Percentage of adults with obesity	2016	31.7%	24.8%	16.9%	20.7%	22.5%	23.0%	25.5%	24.2%
Percentage of adults with an annual household income less than \$25,000 with obesity	2016	31.9%	30.6%	31.9%	18.5%	32.3%	28.0%	30.5%	29.0%
Percentage of adults with an annual household income less than \$25,000 who consume one or more sugary drinks per day	2016	33.6%	33.7%	33.1%	23.1%	24.4%	30.4%	31.7%	28.5%
Percentage of adults with an annual household income less than \$25,000 with perceived food security	2016	49.4%	52.8%	54.7%	57.1%	44.2%	53.2%	55.8%	61.4%
Percentage of adults who participate in leisure-time physical activity	2016	62.8%	73.6%	79.7%	72.3%	67.2%	72.4%	73.7%	77.4%
Percentage of adults with disabilities who participate in leisure-time physical activity	2016	51.8%	57.5%	63.6%	58.3%	55.2%	57.4%	56.2%	61.8%
Percentage of adults who participate in leisure-time physical activity, aged 65+ years	2016	60.8%	71.6%	76.4%	69.9%	64.9%	70.1%	69.0%	75.9%
Prevalence of cigarette smoking among adults	2016	11.4%	13.2%	9.6%	10.9%	12.8%	11.5%	14.2%	11.0%
Percentage of cigarette smoking among adults with income less than \$25,000	2016	12.9%	15.6%	15.1%	14.8%	9.0%	14.4%	19.8%	15.3%
Percentage of adults who receive a colorectal cancer screening based on the most recent guidelines, aged 50-64 years	2016	68.1%	61.5%	60.2%	61.5%	57.0%	62.1%	63.1%	66.3%
Percentage of adults who had a test for high blood sugar or diabetes within the past three years, aged 45+ years	2016	64.4%	66.2%	67.1%	74.1%	69.9%	68.8%	68.3%	71.7%
Percentage of adults with annual household income less than \$25,000 who had a test for high blood sugar or diabetes within the past three years, aged 45+ years	2016	64.2%	60.7%	70.9%	70.5%	56.4%	65.8%	64.2%	67.4%
Asthma emergency department visits, rate per 10,000, aged 0-17 years	2017	385.8	170.4	240.4	140.9	88.3	211.1	126.7	131.1
Percentage of members who were identified as having persistent asthma and were dispensed appropriate asthma controller medications for at least 50% of the treatment period, aged 5-18 years	2017	57.0%	56.0%	58.0%	54.0%	57.0%	57.0%	57.0%	59.0%
Percentage of adults with hypertension who are currently taking medicine to manage their high blood pressure	2016	81.0%	70.6%	75.4%	78.6%	70.3%	75.6%	76.9%	80.7%
Percentage of adults with chronic conditions (arthritis, asthma, CVD, diabetes, CKD, cancer) who have taken a course or class to learn how to manage their condition	2016	19.9%	9.5%	9.1%	16.1%	6.4%	13.0%	10.1%	10.6%

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than state target; dark grey denotes 50 percent worse than state target.

Exhibit 49C: Prevention Agenda 2019-2024 Indicators Compared to Objectives

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State	NYS Target
Promote Healthy Women, Infants, and Children									
Percentage of women with a preventive medical visit in the past year, aged 18-44 years	2016	88.6%	72.3%	69.3%	79.6%	68.7%	76.0%	73.3%	80.6%
Percentage of women with a preventive medical visit in the past year, aged 45+ years	2016	86.9%	84.0%	80.7%	87.5%	84.1%	84.8%	83.3%	85.0%
Percentage of women who report ever talking with a health care provider about ways to prepare for a healthy pregnancy, aged 18-44 years	2016	50.3%	31.2%	26.6%	28.2%	41.7%	34.0%	35.3%	38.1%
Maternal mortality, rate per 100,000 live births	2015-2017	30.5	23.1	21.2	14.5	18.7	21.7	18.9	16.0
Infant mortality, rate per 1,000 live births	2017	5.3	3.9	3.2	4.1	7.3	4.2	4.5	4.0
Percentage of births that are preterm	2017	10.1%	8.5%	8.4%	8.8%	9.2%	8.9%	9.0%	8.3%
Infants born with neonatal abstinence syndrome and/or affected by maternal use of drugs of addiction, rate per 1,000 newborn discharges	2017	8.6	3.1	3.8	2.2	9.9	4.4	10.1	9.1
Percentage of infants who are exclusively breastfed in the hospital among all infants	2017	30.2%	42.3%	62.0%	42.5%	29.1%	42.7%	47.3%	51.7%
Percentage of infants who are exclusively breastfed in the hospital among Hispanic infants	2017	26.8%	38.0%	37.5%	43.4%	26.2%	34.9%	35.6%	37.4%
Percentage of infants who are exclusively breastfed in the hospital among Black non-Hispanic infants	2017	31.3%	29.1%	43.2%	45.0%	19.7%	33.9%	33.9%	38.4%
Percentage of infants supplemented with formula in the hospital among breastfed infants	2017	67.8%	55.0%	35.3%	54.1%	64.1%	54.2%	46.6%	41.9%
Percentage of infants enrolled in WIC who are breastfed at 6 months among all WIC infants	2017	41.1%	59.5%	41.3%	47.7%	35.9%	0.0%	42.0%	45.5%
Suicide mortality among youth, rate per 100,000, aged 15-19 years	2015-2017	4.4	2.8				3.2	5.4	4.7
Percentage of families participating in the Early Intervention Program who meet the state's standard for the NY Impact on Family Scale	July 2017-June 2018	67.8%	64.8%	71.7%	60.5%	64.3%	65.0%	67.0%	73.9%
Percentage of residents served by community water systems that have optimally fluoridated water	2017	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	70.8%	77.5%

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than state target; dark grey denotes 50 percent worse than state target.

Exhibit 49D: Prevention Agenda 2019-2024 Indicators Compared to Objectives

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State	NYS Target
Promote Well-Being and Prevent Mental and Substance Use Disorders									
Opportunity Index Score	2018	41.7	52.7	63.3	55.1	57.1	-	56.9	59.2
Frequent mental distress during the past month among adults, age-adjusted percentage	2016	13.7	10.5	9.8	8.5	10.7	10.3	10.7	10.7
Economy Score	2018	24.4	36.2	51.6	49.1	51.8	-	50.8	52.3
Community Score	2018	52.9	56.9	71.4	59.6	59.8	-	57.9	61.3
Binge drinking during the past month among adults, age-adjusted percentage	2016	14.5%	16.3%	22.4%	15.7%	18.7%	17.3%	18.3%	16.4%
Overdose deaths involving any opioids, age-adjusted rate per 100,000 population	2017	19.3	10.7	11.0	9.1	21.8	12.1	16.6	14.3
Patients who received at least one buprenorphine prescription for opioid use disorder, age-adjusted rate per 100,000 population	2018	200.5	155.6	181.0	116.0	538.0	175.8	378.7	415.6
Opioid analgesic prescriptions for pain, age-adjusted rate per 1,000 population	2018	283.3	189.8	216.0	178.2	353.5	216.2	326.6	350.0
Emergency department visits (including outpatients and admitted patients) involving any opioid overdose, age-adjusted rate per 100,000 population	2017	70.7	31.7	37.4	22.0	74.8	38.2	62.1	53.3
Percentage of adults who have experienced two or more adverse childhood experiences (ACEs)	2016	35.0%	39.4%	35.0%	28.2%	29.5%	34.6%	35.6%	33.8%
Suicide mortality, age-adjusted rate per 100,000 population	2015-2017	5.9	5.2	7.4	5.7	6.7	5.9	8.0	7.0

Source: New York State Department of Health, 2020.

Note: Light grey shading denotes worse than state target; dark grey denotes 50 percent worse than state target.

New York City Community Health Survey

The New York City Department of Health and Mental Hygiene (DOHMH) conducts an annual survey of City residents regarding health behaviors and chronic diseases. The survey sample size is approximately 10,000 adults aged 18 years and older. Data are available at a city, borough, and neighborhood level. **Exhibits 50A, 50B, 50C, and 50D** present selected indicators related to health care access, chronic conditions, health behaviors, and mental health by borough and neighborhood.

Exhibit 50A summarizes access indicators for MSH neighborhoods.

Exhibit 50A: NYC Community Health Survey, Access Indicators, 2017

Borough and Neighborhood	Percentage Who Had Medicaid	Percentage Who Had Medicare	Percentage Who Were Uninsured	Did Not Receive Medical Care	No PCP
Bronx	35.5%	15.8%	12.7%	13.1%	16.2%
Kingsbridge - Riverdale	14.3%	15.7%	7.2%	8.5%	13.5%
Northeast Bronx	23.8%	14.0%	7.5%	15.5%	7.5%
Fordham - Bronx Park	43.0%	14.2%	12.6%	10.6%	15.8%
Pelham - Throgs Neck	24.1%	16.3%	15.0%	14.2%	20.7%
Crotona - Tremont	46.4%	17.5%	13.5%	12.9%	15.2%
Brooklyn	26.7%	16.1%	12.1%	11.7%	14.9%
Greenpoint	33.5%	21.7%	7.3%	8.8%	18.7%
Downtown - Heights - Slope	14.2%	12.3%	7.0%	12.7%	11.5%
Bedford Stuyvesant - Crown Heights	32.6%	13.5%	10.5%	11.8%	17.0%
East New York	35.6%	17.3%	10.0%	6.9%	13.9%
Sunset Park	29.9%	13.9%	28.0%	13.4%	20.7%
Borough Park	32.8%	16.4%	8.4%	10.3%	15.5%
East Flatbush - Flatbush	24.7%	16.4%	13.4%	12.1%	12.7%
Canarsie - Flatlands	15.0%	17.3%	14.4%	12.4%	10.8%
Bensonhurst - Bay Ridge	23.6%	15.4%	13.4%	8.7%	16.7%
Coney Island - Sheepshead Bay	25.3%	18.6%	10.6%	12.4%	14.1%
Williamsburg - Bushwick	32.1%	14.1%	16.1%	17.0%	15.8%
Manhattan	16.7%	17.0%	7.7%	8.7%	15.6%
Washington Heights - Inwood	34.4%	16.0%	12.0%	9.1%	18.8%
Central Harlem - Morningside Heights	18.0%	19.5%	6.9%	9.7%	16.2%
East Harlem	40.0%	20.5%	6.8%	8.2%	9.9%
Upper West Side	13.7%	17.6%	0.0%	8.2%	14.6%
Upper East Side	5.7%	13.3%	3.6%	7.5%	10.5%
Chelsea - Clinton	6.7%	16.6%	12.6%	8.1%	22.6%
Union Square - Lower East Side	17.7%	20.5%	7.3%	10.5%	14.3%
Queens	21.2%	15.7%	14.8%	8.6%	16.0%
Long Island City - Astoria	15.6%	14.9%	10.6%	10.6%	22.4%
West Queens	27.4%	13.1%	22.7%	9.5%	21.0%
Flushing - Clearview	27.9%	16.7%	10.6%	4.4%	9.1%
Bayside - Little Neck	22.1%	17.5%	5.6%	7.4%	8.9%
Rockaway	22.2%	16.5%	11.2%	16.9%	17.7%
Ridgewood - Forest Hills	17.5%	13.8%	21.2%	8.2%	20.6%
Southwest Queens	20.8%	17.4%	11.2%	8.1%	11.4%
Jamaica	19.9%	15.0%	15.7%	10.9%	14.8%
Southeast Queens	12.1%	18.4%	9.3%	5.5%	10.9%
Staten Island	12.9%	15.8%	8.7%	10.5%	8.3%
Port Richmond	17.6%	16.8%	7.8%	10.4%	5.7%
Willowbrook	9.9%	15.5%	9.0%	10.6%	10.1%
New York City	23.8%	16.1%	11.8%	10.3%	15.2%

Source: New York City Department of Health and Mental Hygiene, 2020.

Overall, residents of the Bronx were more likely to have Medicaid, be uninsured, not receive medical care, and have no primary care physician than the New York City averages. Brooklyn residents were more likely to have Medicaid, be uninsured, and have no primary care physician than City averages. Manhattan residents were more likely to have Medicare and have no primary care physician than City averages. Queens residents were more likely to be uninsured and not have a primary care physician than City averages. Staten Island residents were more likely to not receive medical care than City averages.

Exhibit 50B summarizes chronic conditions within MSH neighborhoods.

Exhibit 50B: NYC Community Health Survey, Chronic Conditions, 2017

Borough and Neighborhood	Ever Been Told Had Asthma	Ever Had High Blood Pressure	Ever Told You Have Diabetes	Overweight and Obese
Bronx	6.8%	34.2%	17.5%	69.9%
Kingsbridge - Riverdale	0.0%	29.7%	8.2%	54.0%
Northeast Bronx	5.6%	28.8%	16.3%	69.4%
Fordham - Bronx Park	8.1%	32.7%	20.7%	65.5%
Pelham - Throgs Neck	7.2%	32.2%	15.0%	69.1%
Crotona - Tremont	7.0%	39.0%	19.0%	76.0%
Brooklyn	3.7%	28.0%	11.6%	58.5%
Greenpoint	1.7%	20.4%	9.0%	52.4%
Downtown - Heights - Slope	4.3%	23.5%	6.8%	46.0%
Bedford Stuyvesant - Crown Heights	7.5%	34.5%	12.3%	68.0%
East New York	3.6%	37.2%	15.2%	66.3%
Sunset Park	2.9%	27.4%	7.9%	49.7%
Borough Park	2.2%	23.4%	9.0%	56.3%
East Flatbush - Flatbush	4.0%	30.1%	15.6%	63.8%
Canarsie - Flatlands	3.8%	26.8%	11.9%	60.3%
Bensonhurst - Bay Ridge	2.2%	24.0%	9.0%	49.6%
Coney Island - Sheepshead Bay	2.5%	26.6%	12.2%	58.4%
Williamsburg - Bushwick	2.2%	32.8%	14.9%	62.0%
Manhattan	4.6%	23.9%	7.3%	44.6%
Washington Heights - Inwood	7.2%	32.8%	12.1%	61.3%
Central Harlem - Morningside Heights	1.9%	37.4%	11.9%	53.6%
East Harlem	0.0%	38.4%	16.4%	63.3%
Upper West Side	1.1%	20.1%	2.3%	42.6%
Upper East Side	4.2%	17.9%	4.5%	37.6%
Chelsea - Clinton	3.7%	18.3%	4.5%	37.4%
Union Square - Lower East Side	5.1%	22.7%	9.2%	38.4%
Queens	3.9%	27.3%	11.5%	57.8%
Long Island City - Astoria	5.4%	22.8%	9.9%	58.4%
West Queens	2.5%	23.5%	11.2%	53.7%
Flushing - Clearview	3.8%	27.9%	9.2%	47.8%
Bayside - Little Neck	1.9%	23.9%	7.7%	50.7%
Rockaway	7.4%	32.5%	10.2%	76.4%
Ridgewood - Forest Hills	4.8%	26.4%	9.5%	58.2%
Southwest Queens	2.9%	29.0%	14.0%	60.1%
Jamaica	6.0%	36.8%	15.0%	67.0%
Southeast Queens	0.0%	28.5%	16.2%	56.7%
Staten Island	1.7%	28.6%	10.6%	60.5%
Port Richmond	2.0%	28.2%	15.1%	64.3%
Willowbrook	1.4%	29.1%	7.6%	58.2%
New York City	4.3%	28.0%	11.5%	57.3%

Source: New York City Department of Health and Mental Hygiene, 2020.

Overall, residents of the Bronx had higher percentages for each of the four indicators than the New York City averages. Brooklyn residents were more likely to have ever had high blood pressure and diabetes, and be overweight and obese by City averages. Manhattan residents were more likely to have ever had asthma. Queens residents were more likely to have been overweight or obese than the City average. Staten Island residents were more likely to have ever had high blood pressure and have been overweight or obese than the City averages.

Exhibit 50C summarizes health behaviors within MSH neighborhoods.

Exhibit 50C: NYC Community Health Survey, Health Behaviors, 2017

Borough and Neighborhood	Binge Drinker*	Current Smoker	No Exercise in the Past 30 Days	Consumed on Average One or More Sugary Beverage	Consumed 0 Servings of Fruit and/or Vegetables Yesterday**
Bronx	13.9%	13.6%	30.1%	32.0%	17.8%
Kingsbridge - Riverdale	20.6%	14.8%	21.2%	23.2%	12.0%
Northeast Bronx	11.0%	9.7%	36.6%	27.3%	9.1%
Fordham - Bronx Park	17.2%	10.3%	29.0%	32.5%	20.5%
Pelham - Throgs Neck	11.8%	15.9%	26.0%	32.3%	18.1%
Crotona - Tremont	14.0%	13.9%	31.6%	34.5%	21.0%
Brooklyn	15.5%	13.6%	28.3%	22.8%	11.0%
Greenpoint	17.9%	9.7%	25.8%	19.9%	9.1%
Downtown - Heights - Slope	25.3%	11.6%	17.0%	12.9%	9.4%
Bedford Stuyvesant - Crown Heights	16.1%	19.2%	28.1%	28.8%	16.6%
East New York	13.0%	17.1%	27.6%	31.6%	18.3%
Sunset Park	14.3%	15.4%	34.6%	22.8%	13.9%
Borough Park	9.7%	9.8%	35.2%	14.6%	3.5%
East Flatbush - Flatbush	15.6%	9.8%	22.1%	28.9%	17.9%
Canarsie - Flatlands	7.1%	11.2%	31.5%	31.8%	14.5%
Bensonhurst - Bay Ridge	16.1%	11.9%	29.6%	16.4%	1.8%
Coney Island - Sheepshead Bay	13.1%	16.8%	30.7%	17.5%	6.9%
Williamsburg - Bushwick	22.4%	19.5%	25.0%	30.1%	13.2%
Manhattan	25.1%	12.0%	16.7%	16.6%	10.0%
Washington Heights - Inwood	19.3%	12.2%	24.5%	25.1%	16.7%
Central Harlem - Morningside Heights	25.9%	16.9%	26.5%	32.7%	11.5%
East Harlem	19.2%	18.7%	19.9%	26.7%	10.7%
Upper West Side	24.7%	14.0%	8.5%	16.2%	13.5%
Upper East Side	22.5%	7.6%	10.7%	10.2%	8.4%
Chelsea - Clinton	33.2%	12.5%	18.6%	10.0%	8.7%
Union Square - Lower East Side	30.5%	12.4%	14.9%	9.7%	6.2%
Queens	15.1%	12.2%	26.0%	21.4%	11.2%
Long Island City - Astoria	19.9%	13.9%	21.1%	21.2%	5.4%
West Queens	14.2%	11.2%	28.4%	21.1%	6.7%
Flushing - Clearview	12.0%	18.6%	24.2%	17.0%	10.5%
Bayside - Little Neck	12.3%	11.6%	25.5%	12.8%	12.9%
Rockaway	23.3%	17.3%	25.3%	23.9%	13.9%
Ridgewood - Forest Hills	16.0%	11.4%	27.7%	17.6%	11.4%
Southwest Queens	18.7%	12.7%	28.9%	24.7%	13.9%
Jamaica	14.1%	11.2%	28.6%	31.3%	22.7%
Southeast Queens	10.7%	6.8%	14.2%	20.0%	13.2%
Staten Island	18.5%	24.0%	28.8%	30.3%	8.3%
Port Richmond	22.0%	19.7%	28.9%	36.0%	8.6%
Willowbrook	15.9%	26.8%	28.5%	26.4%	7.8%
New York City	17.3%	13.4%	25.5%	23.0%	11.8%

Source: New York City Department of Health and Mental Hygiene, 2020. *Binge drinking is defined as five or more drinks on one occasion for males and four or more drinks on one occasion for females. **A serving equals one medium apple, a handful of broccoli, or a cup of carrots

Overall, residents of the Bronx had higher percentages of current smoking, no exercise in the past 30 days, consumption of sugary beverages, and consuming no servings of fruits and vegetables than New York City averages. Brooklyn residents had higher percentages of current smoking and no exercise in the past 30 days. Manhattan residents had higher percentages of binge drinking. Queens residents had higher percentages of no exercise in the past 30 days.

Staten Island residents had higher percentages of binge drinking, current smoking, no exercise in the last 30 days, and consumption of sugary beverages than City averages.

Exhibit 50D summarizes mental health indicators within MSH neighborhoods.

Exhibit 50D: NYC Community Health Survey, Mental Health Indicators, 2017

Borough and Neighborhood	Current Depression	No mental health treatment (among those with depression)
Bronx	13.4%	60.9%
Kingsbridge - Riverdale	14.2%	79.3%
Northeast Bronx	9.5%	80.6%
Fordham - Bronx Park	14.0%	64.4%
Pelham - Throgs Neck	8.9%	60.1%
Crotona - Tremont	16.9%	55.5%
Brooklyn	8.4%	61.2%
Greenpoint	6.6%	50.7%
Downtown - Heights - Slope	3.3%	0.0%
Bedford Stuyvesant - Crown Heights	11.3%	74.9%
East New York	10.9%	77.1%
Sunset Park	5.1%	0.0%
Borough Park	5.3%	80.1%
East Flatbush - Flatbush	8.6%	64.3%
Canarsie - Flatlands	10.1%	67.1%
Bensonhurst - Bay Ridge	5.2%	0.0%
Coney Island - Sheepshead Bay	13.7%	32.0%
Williamsburg - Bushwick	8.7%	62.8%
Manhattan	9.8%	45.0%
Washington Heights - Inwood	12.7%	50.4%
Central Harlem - Morningside Heights	5.3%	53.4%
East Harlem	21.4%	0.0%
Upper West Side	8.2%	37.8%
Upper East Side	8.0%	0.0%
Chelsea - Clinton	11.3%	58.2%
Union Square - Lower East Side	10.6%	41.7%
Queens	7.7%	59.1%
Long Island City - Astoria	7.9%	33.2%
West Queens	3.9%	0.0%
Flushing - Clearview	8.8%	51.9%
Bayside - Little Neck	6.6%	73.7%
Rockaway	13.7%	56.4%
Ridgewood - Forest Hills	10.7%	44.3%
Southwest Queens	6.7%	0.0%
Jamaica	12.0%	0.0%
Southeast Queens	3.9%	56.9%
Staten Island	9.3%	63.5%
Port Richmond	9.7%	0.0%
Willowbrook	8.8%	0.0%
New York City	9.3%	57.3%

Source: New York City Department of Health and Mental Hygiene, 2020.

Overall, Bronx residents had higher percentages for each of the two indicators than the New York City averages. Residents of Brooklyn, Queens, and Staten Island had a higher percentage of residents with no mental health treatment (among those with depression) than the City

average. Manhattan residents had a higher percentage of residents with depression than the City average.

Ambulatory Care Sensitive Conditions

This section examines the frequency of discharges for Ambulatory Care Sensitive Conditions (ACSCs) from MSH’s community.

ACSCs are health “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”¹² As such, rates of hospitalization for these conditions can “provide insight into the quality of the health care system outside of the hospital,” including the accessibility and utilization of primary care, preventive care and health education, as well as the ability to navigate to these services. Among these conditions are: diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma. Disproportionately high rates of discharges for ACSC indicate potential problems with the availability or accessibility of ambulatory care and preventive services, and can suggest areas for improvement in the community’s health care system and ways to improve outcomes.

Borough/Neighborhood-Level Analysis

Exhibit 51 indicates the percentage of adult discharges from all hospitals in the MSH community that were for ACSCs, by payer.

Exhibit 51: Adult Discharges for ACSC by Borough and Payer, 2019

Borough	Private	Medicaid	Medicare	Self-Pay / Other	Total
Bronx	7.4%	9.8%	16.6%	1.2%	11.9%
Brooklyn	3.7%	7.7%	16.1%	2.3%	10.4%
Manhattan	1.3%	7.3%	12.6%	0.5%	8.3%
Queens	3.6%	6.4%	13.7%	0.7%	8.9%
Staten Island	2.9%	5.1%	11.4%	0.0%	7.7%
Total	3.8%	7.8%	14.6%	1.2%	9.8%

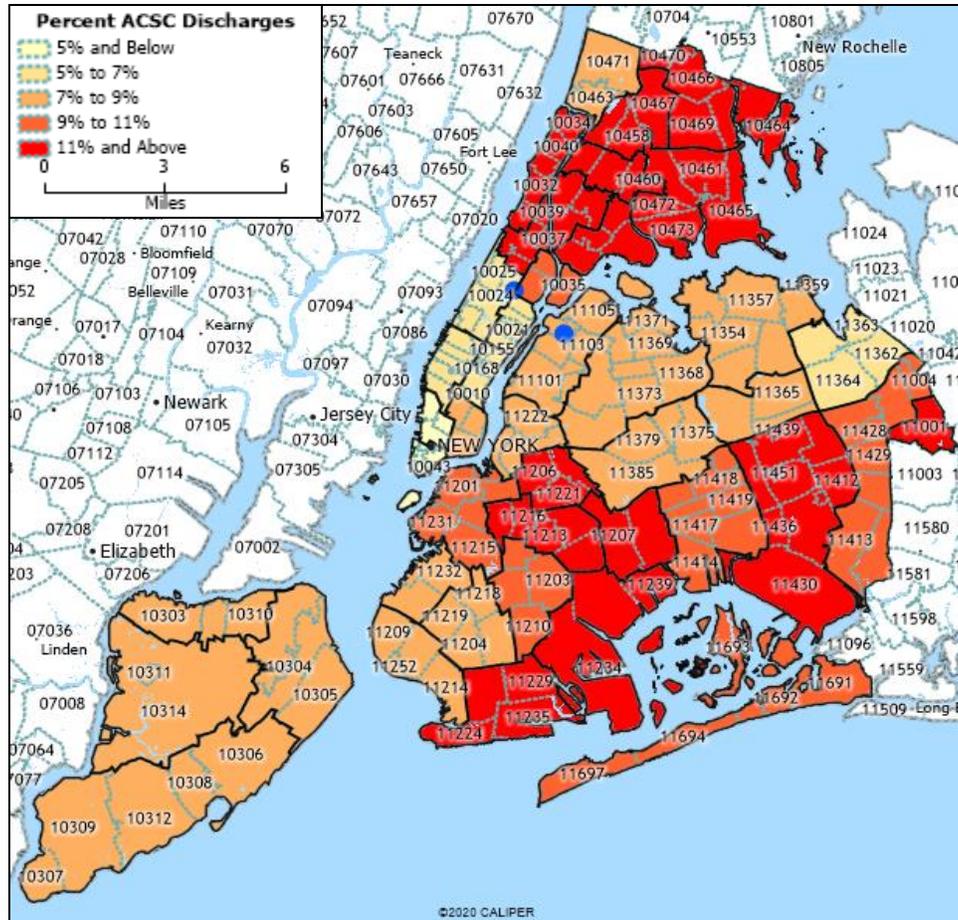
Source: DataGen®, Inc., 2020

The table indicates that 9.8 percent of adult discharges in the community were for ACSCs in 2019. Medicare patients and patients from the Bronx had the highest proportions of discharges for ACSCs.

¹²Agency for Healthcare Research and Quality (AHRQ), *Prevention Quality Indicators Overview*. Retrieved 2020, from: https://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx.

Exhibit 52A illustrates the percent of adult discharges from all hospitals in the community that were for ACSCs, by neighborhood.

Exhibit 52A: Adult Discharges for ACSC by Neighborhood, 2018



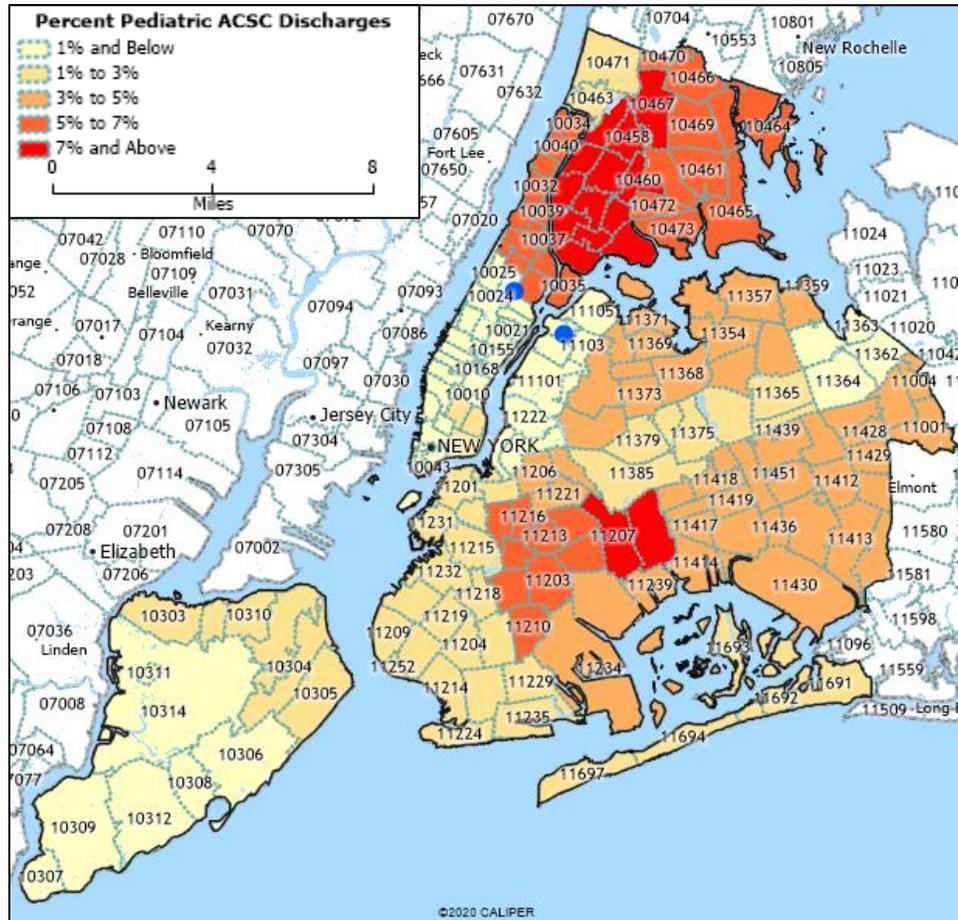
Sources: Caliper Maptitude (2020) and DataGen®, Inc., 2020

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

The ACSC discharge rates were higher in the Bronx and Brooklyn, particularly in neighborhoods Bedford Stuyvesant-Crown Heights, Crotona-Tremont, High-Bridge-Morrisania, Hunts Point-Mott Haven, and Pelham-Throgs Neck, all with rates over 12 percent.

Exhibit 52B illustrates the percent of pediatric discharges from all hospitals in the community that were for ACSCs, by neighborhood.

Exhibit 52B: Pediatric Discharges for ACSC by Neighborhood, 2018



Sources: Caliper Maptitude (2020) and DataGen®, Inc., 2020

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

ACSC Conditions Analysis

Exhibit 53 displays the frequency and percentage of all hospital discharges of residents in the MSH community for ACSC by age and condition. For each condition, the percentage figures indicate the proportion of discharges in each age cohort.

Exhibit 53: ACSC Discharges of MSH Community Members from all hospitals by Condition and Age, 2018

Condition	0 to 17	18 to 39	40 to 64	65+	Total
Heart Failure	0.0%	1.2%	30.0%	68.9%	26,946
COPD or Asthma in Older Adults	0.0%	0.0%	47.6%	52.4%	15,770
Diabetes Long-Term Complications	0.0%	4.9%	50.8%	44.4%	9,291
Urinary Tract Infection	0.0%	6.3%	13.8%	79.8%	6,459
Community-Acquired Pneumonia	0.0%	5.3%	30.4%	64.3%	5,562
Hypertension	0.0%	3.5%	43.7%	52.8%	5,238
Uncontrolled Diabetes	0.0%	4.4%	32.1%	63.4%	3,761
Pediatric Asthma	100.0%	0.0%	0.0%	0.0%	3,647
Diabetes Short-Term Complications	0.0%	37.5%	43.9%	18.6%	3,555
Lower-Extremity Amputation - Patients with Diabetes	0.0%	0.0%	44.3%	55.7%	1,552
Pediatric Gastroenteritis	100.0%	0.0%	0.0%	0.0%	1,287
Asthma in Younger Adults	0.0%	100.0%	0.0%	0.0%	987
Pediatric Diabetes Short-Term Complications	100.0%	0.0%	0.0%	0.0%	72
Pediatric Urinary Tract Infection	100.0%	0.0%	0.0%	0.0%	221

Source: DataGen®, Inc., 2020

The top five ACSC conditions in the MSH community by number of discharges were heart failure, COPD or asthma in older adults, diabetes long-term complications, urinary tract infection, and community-acquired pneumonia. Patients aged 65 years and over had the highest percentage of discharges for ACSC conditions, followed by the 40 to 64 year old cohort.

Community Need Index™, Social Vulnerability Index, 500 Cities Project, and Food Deserts

Dignity Health Community Need Index

Dignity Health, a California-based hospital system, developed and has made widely available for public use a *Community Need Index*™ that measures barriers to health care access by borough/county and ZIP Code.¹³ The index is based on five social and economic indicators:

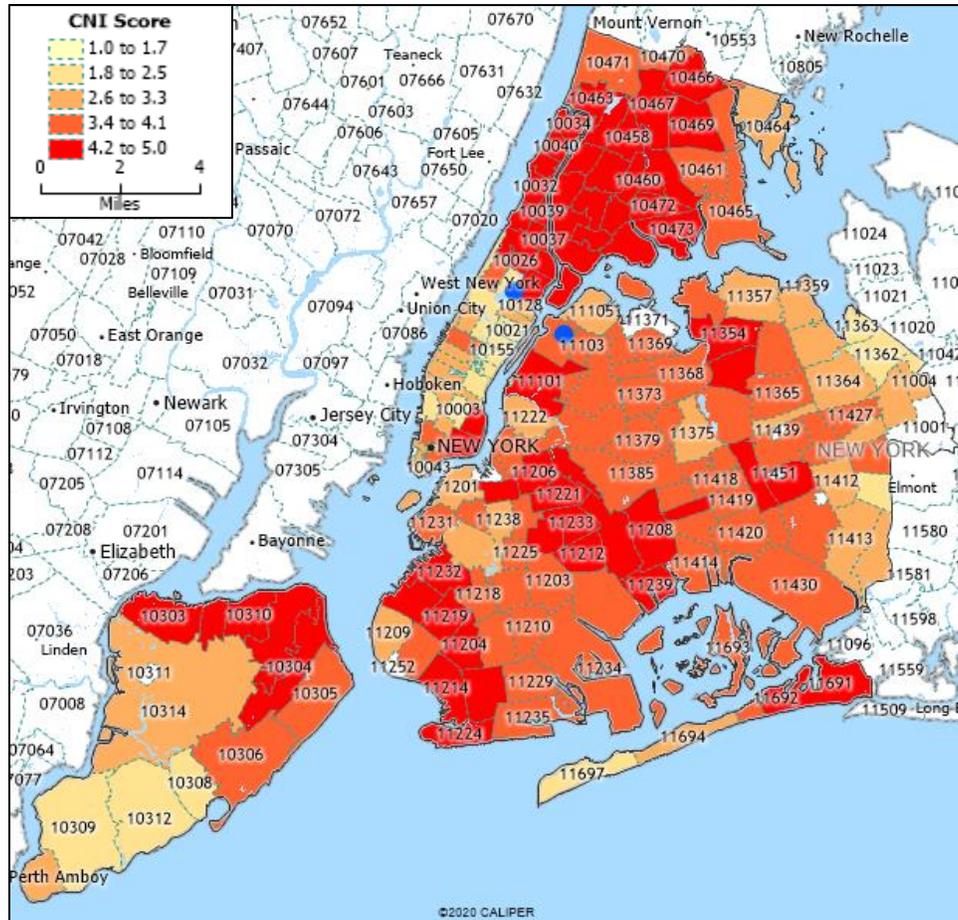
- The percentage of elders, children, and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured and unemployed residents; and
- The percentage of the population renting houses.

The *Community Need Index*™ calculates a score for each ZIP Code based on these indicators. Scores range from “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0).

¹³Dignity Health. (n.d.). *Community Needs Index*. Retrieved 2013, from: <http://cni.chw-interactive.org/>

Exhibit 54 presents the *Community Need Index™* (CNI) score of each ZIP Code in the MSH community.

Exhibit 54: Community Need Index™ Score by ZIP Code



Sources: Caliper Maptitude (2020) and Dignity Health, 2020.

Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

A large portion of the community ranked in the “Highest Need” category. Nine ZIP Codes – all located in the Bronx – received a score of “5.0”, the highest on the CNI scale. In all of New York City, 63 ZIP Codes received a score in the “Highest Need” category, representing 35 percent of all New York City ZIP Codes.

Social Vulnerability Index

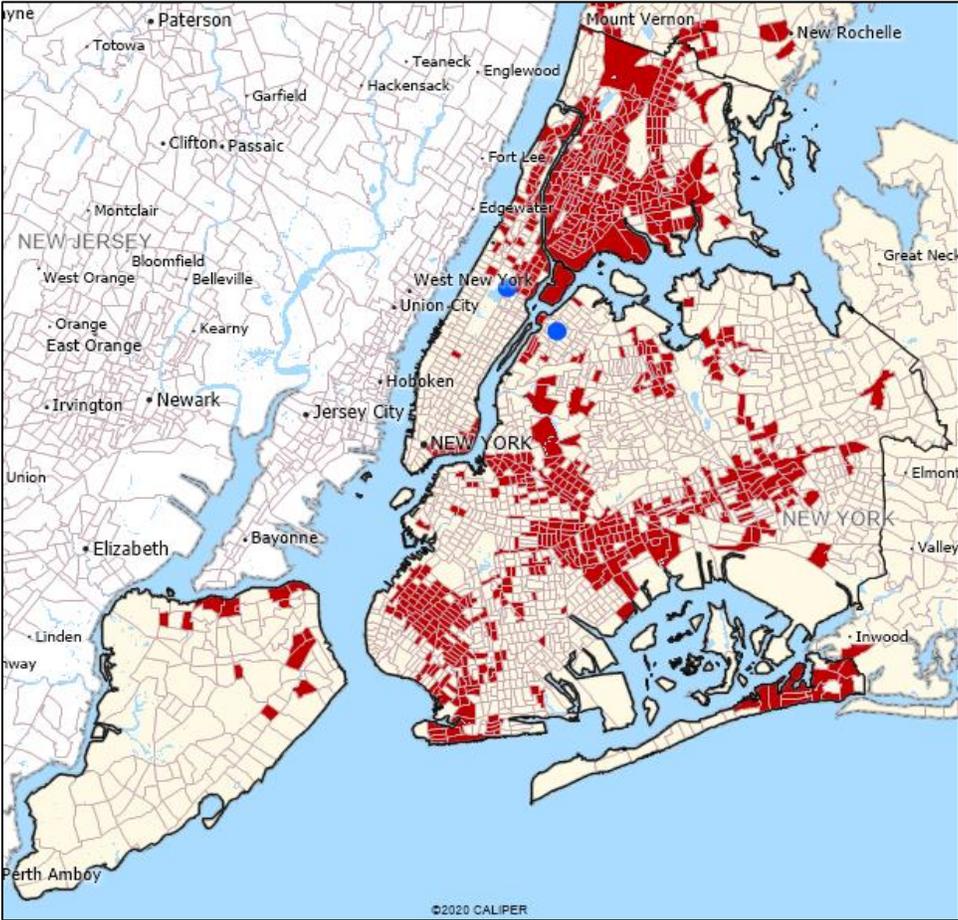
The CDC has developed the *Social Vulnerability Index* (CDC SVI) that assesses the “potential negative effects on communities caused by external stresses on human health.”¹⁴ The CDC SVI is determined from fifteen variables reported by the U.S. Census Bureau. Variables are grouped into the following four themes:

- Socioeconomic status;
- Household composition;
- Race, Ethnicity, and Language; and
- Housing and transportation.

Exhibit 55A identifies the top quartile of CDC SVI for socioeconomic vulnerability for census tracts in New York City.

¹⁴ CDC. Social Vulnerability Index. Retrieved from <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

Exhibit 55A: Top Quartile Census Tracts for Socioeconomic Vulnerability

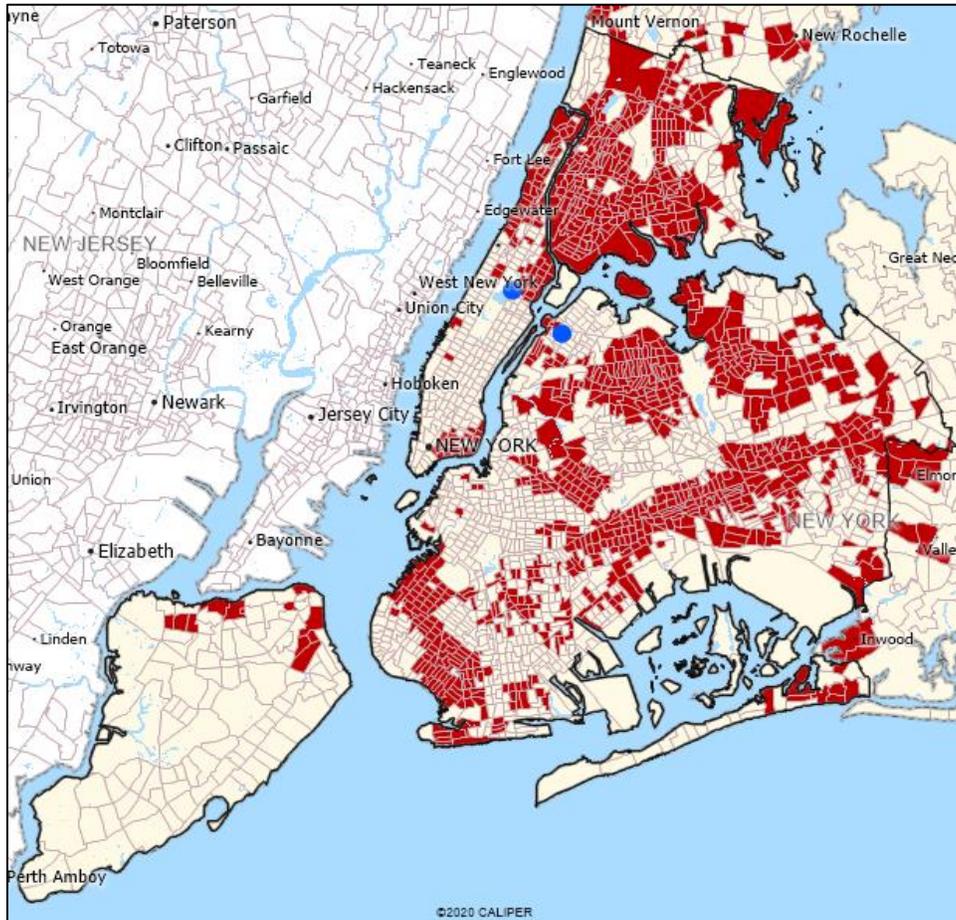


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts in the top quartile for socioeconomic vulnerability are present throughout the community, with concentrations in the Bronx and parts of Queens and Brooklyn.

Exhibit 55C identifies the top quartile of CDC SVI for minority vulnerability for census tracts in New York City.

Exhibit 55C: Top Quartile Census Tracts for Minority Vulnerability

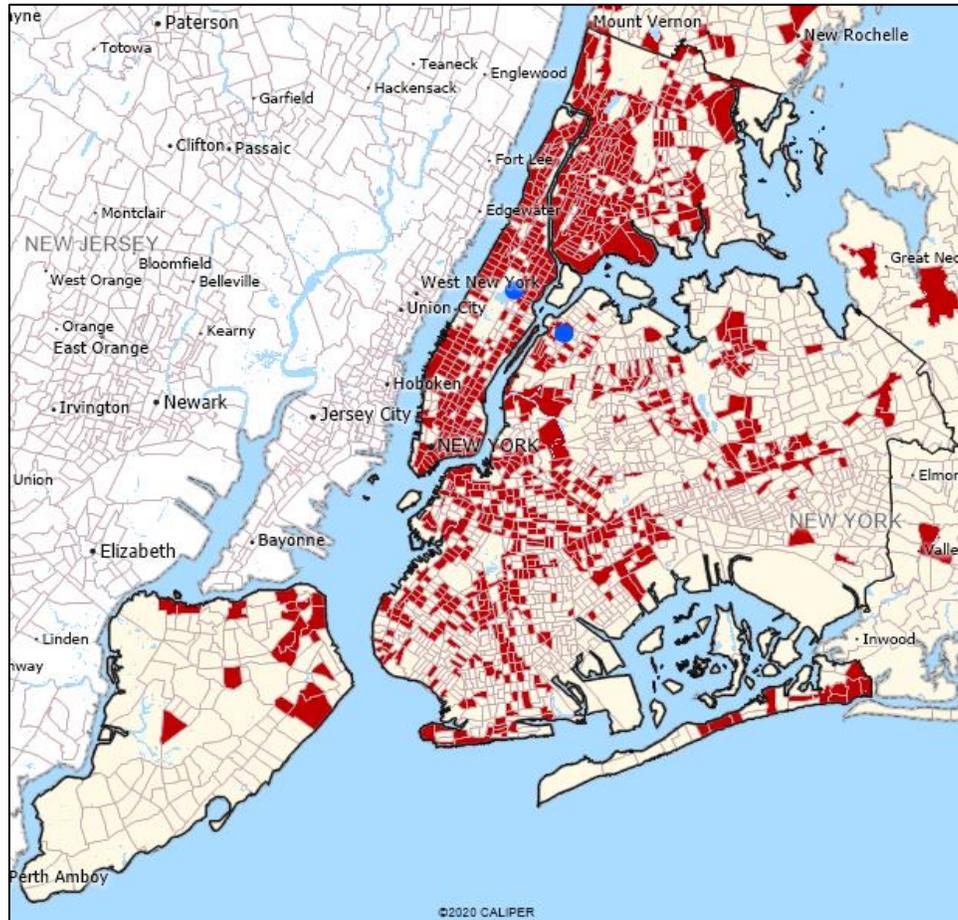


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts in the top quartile for minority vulnerability are present throughout the community, with concentrations in the Bronx and parts of Queens and Brooklyn.

Exhibit 55D identifies the top quartile of CDC SVI for housing vulnerability for census tracts in New York City.

Exhibit 55D: Top Quartile Census Tracts for Housing Vulnerability



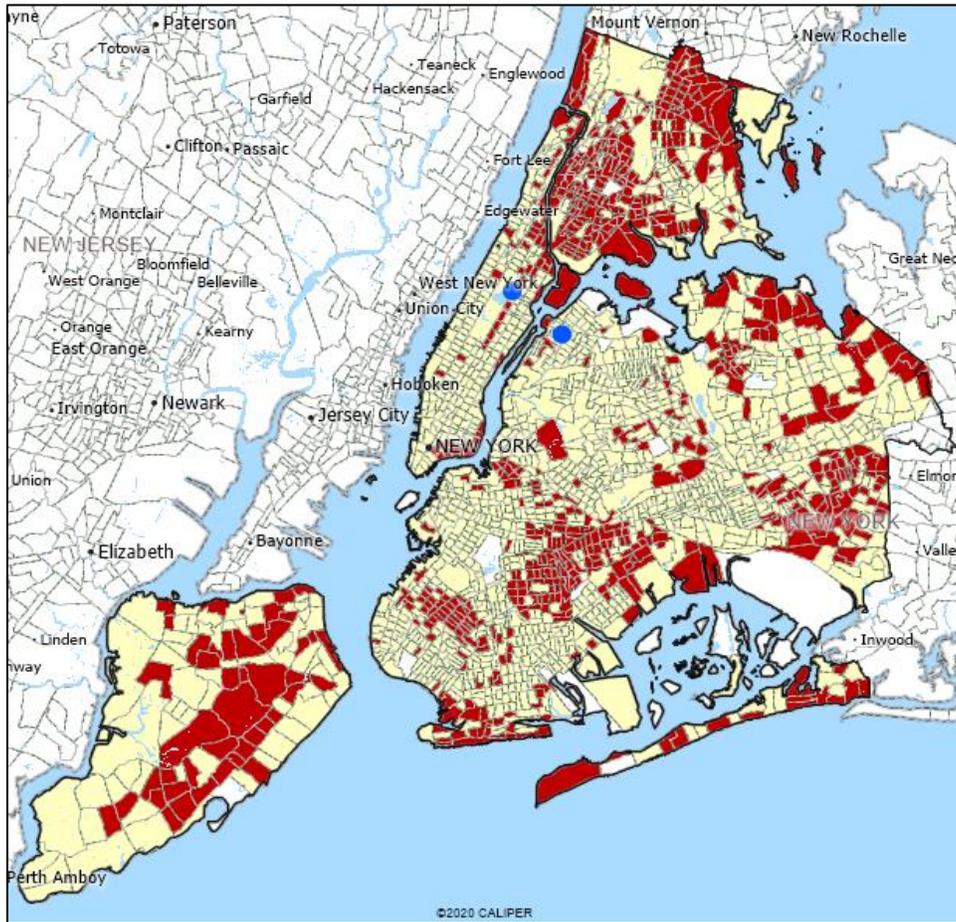
Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts in the top quartile for housing vulnerability are present throughout the community, with concentrations in Bronx and Manhattan.

500 Cities Project

The CDC, in collaboration with the Robert Wood Johnson Foundation, initiated the 500 Cities Project to provide city and census tract-level data for chronic disease risk factors, health outcomes, and clinical preventive service use for the largest 500 cities in the United States. Statistics are derived from BRFSS. Data only are available for census tracts that are located in the 500 cities. **Exhibit 56A** identifies census tracts that compare unfavorably for overall health outcomes.

Exhibit 56A: Locations of Unfavorable Health Outcomes, 2019

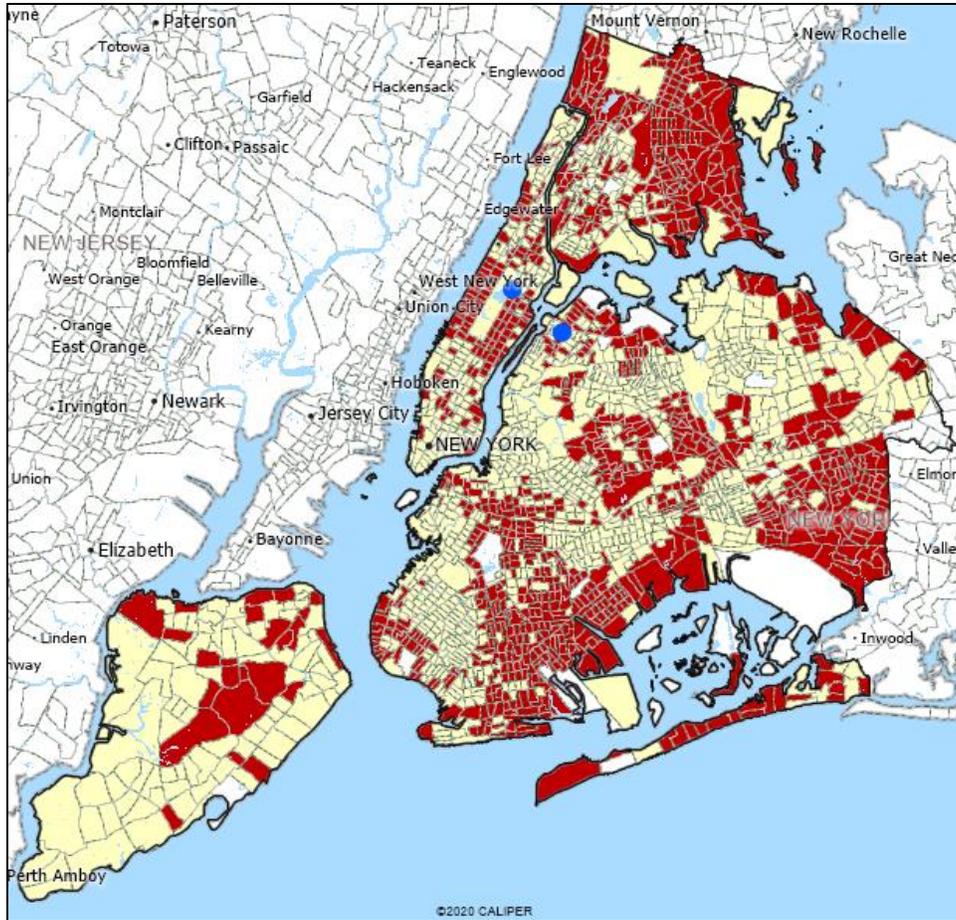


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts with unfavorable health outcomes are present throughout the community, with concentrations in the Bronx, Brooklyn, and Staten Island.

Exhibit 56B identifies census tracts that compare unfavorably for prevention indicators, such as cancer screening rates.

Exhibit 56B: Locations of Unfavorable Prevention Indicators, 2019

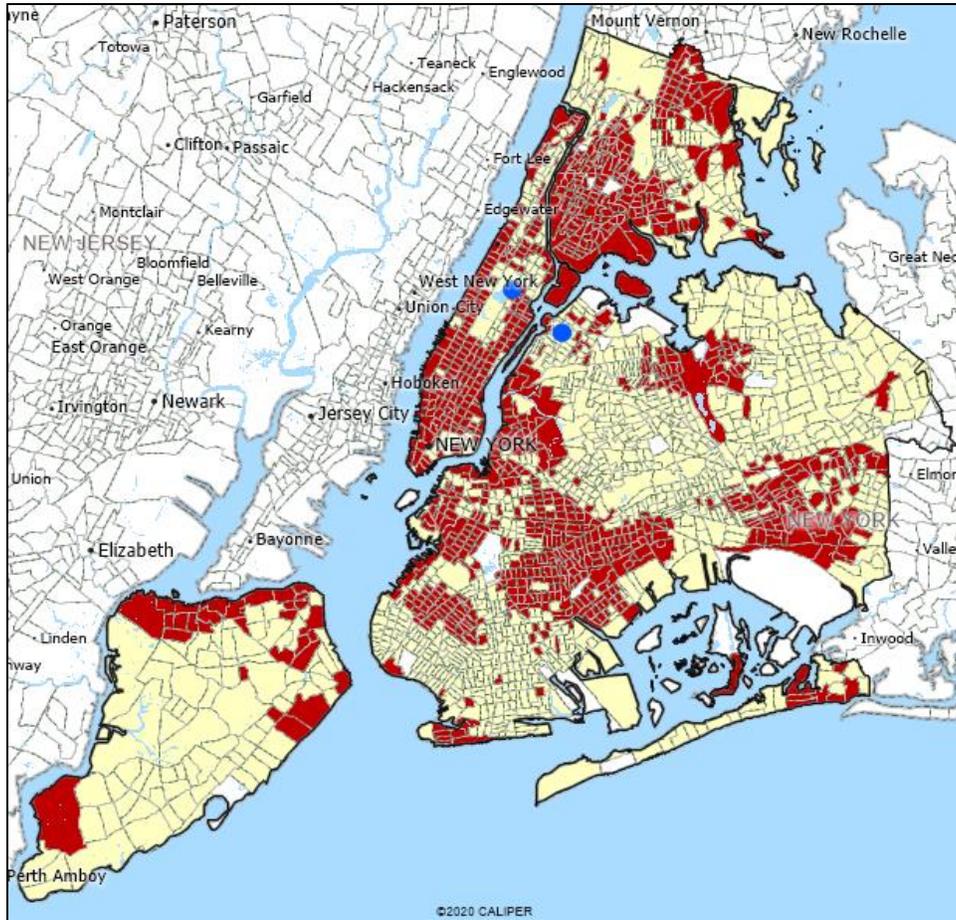


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts with unfavorable prevention outcomes are present throughout the community, with concentrations in each of the five boroughs.

Exhibit 56C identifies census tracts that compare unfavorably for overall health behaviors.

Exhibit 56C: Locations of Unfavorable Health Behaviors, 2019



Sources: Caliper Maptitude (2020) and CDC, 2020.

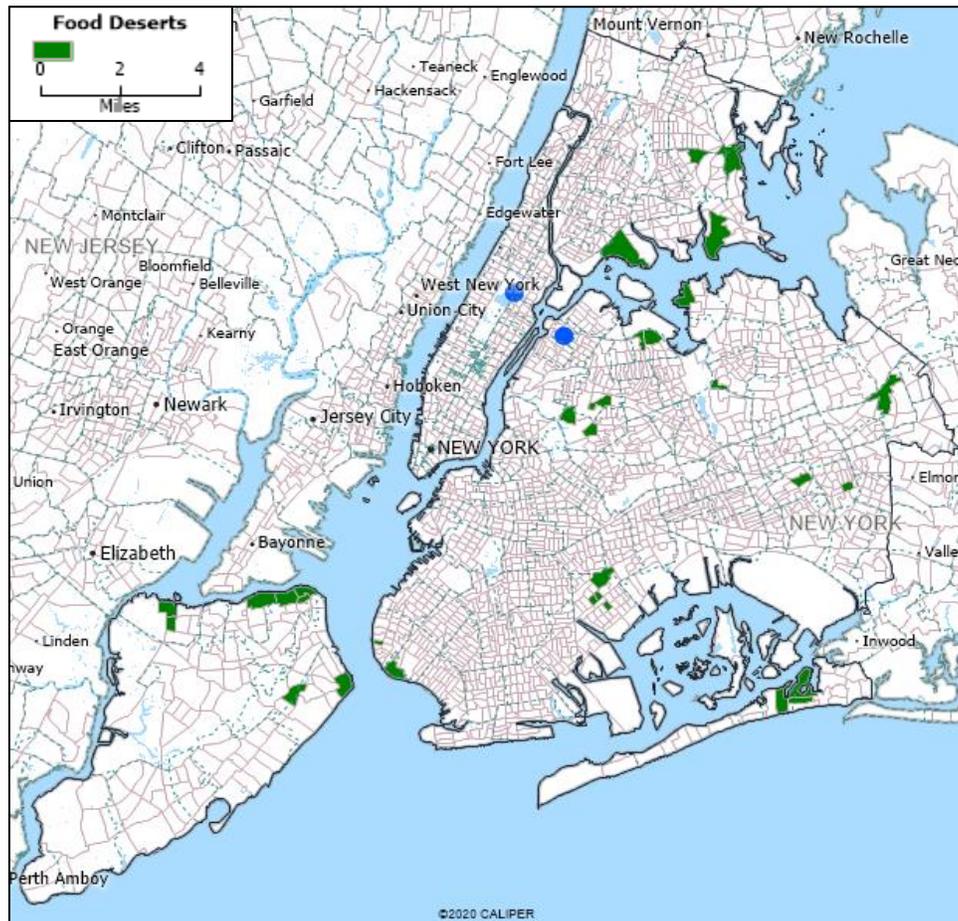
Census tracts with unfavorable health behaviors are present throughout the community, with concentrations in the Bronx, Manhattan, and parts of Brooklyn.

Food Deserts (Lack of Access to Nutritious and Affordable Food)

The U.S. Department of Agriculture’s Economic Research Service estimates the number of people in each census tract that live in a “food desert,” defined as low-income areas more than one-half mile from a supermarket or large grocery store in urban areas and more than 10 miles from a supermarket or large grocery store in rural areas. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these food deserts.

Exhibit 57 illustrates the location of food deserts in the MSH community.

Exhibit 57: Food Deserts by Census Tract, 2015



Source: Caliper Maptitude (2020) and Economic Research Services, U.S. Department of Agriculture, 2020

Food deserts are present within the MSH community, with pockets in all boroughs except for Manhattan.

Medically Underserved Areas and Populations

HRSA calculates an Index of Medical Underservice (IMU) score for communities across the U.S. The IMU score calculation includes the ratio of primary medical care physicians per 1,000 persons, the infant mortality rate, the percentage of the population with incomes below the poverty level, and the percentage of the population greater than age 64. IMU scores range from zero to 100, where 100 represents the least underserved and zero represents the most underserved.¹⁵

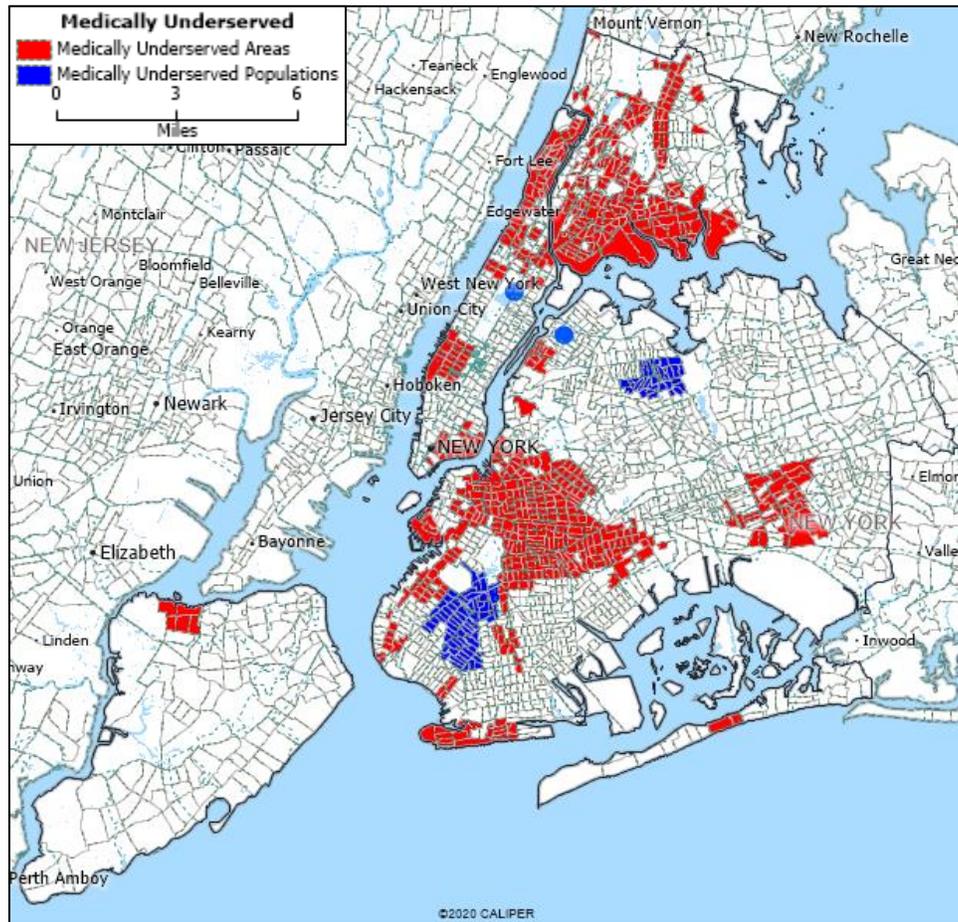
Any area or population receiving an IMU score of 62.0 or less qualifies for Medically Underserved Area (MUA) or Medically Underserved Population (MUP) designation. Federally Qualified Health Centers (FQHCs) may be established to serve MUAs and MUPs. Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. When a population group does not qualify for MUP status based on the IMU score, a MUP designation is made if “unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the state where the requested population resides.”¹⁶

Exhibit 58 shows parts of the community designated by HRSA as medically underserved.

¹⁵ U.S. Health Resources and Services Administration. (n.d.) *Guidelines for Medically Underserved Area and Population Designation*. Retrieved 2013, from <http://bhpr.hrsa.gov/shortage/muaps/index.html>.

¹⁶ *Ibid.*

Exhibit 58: Location of Federally Designated as Medically Underserved Areas and Medically Underserved Populations, 2020



Sources: Caliper Maptitude (2020) and HRSA, 2020.

Census tracts throughout the community have been designated as Medically Underserved Areas, particularly in the Bronx and Brooklyn. Medically Underserved Populations appear in Queens and Brooklyn.

Health Professional Shortage Areas

An area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is found to be present.

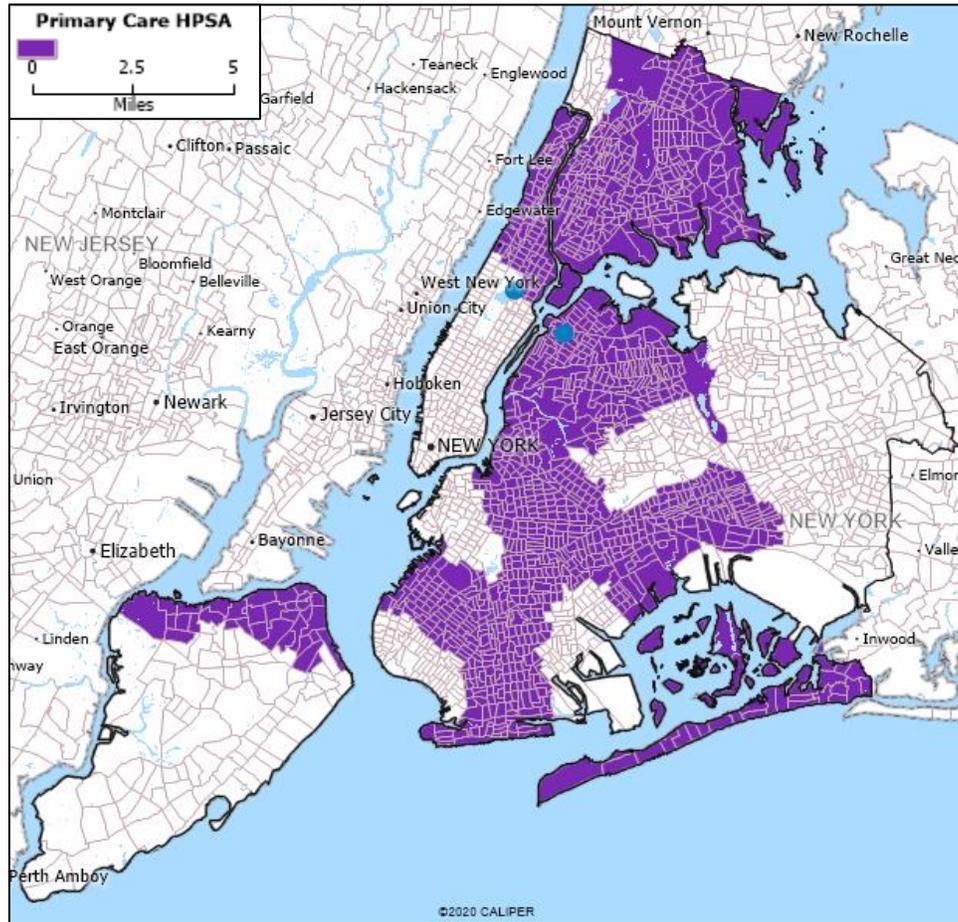
In addition to areas and populations that can be designated as HPSAs, a facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental health services.

HPSAs can be: “(1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility.”¹⁷

Areas and populations in the MSH community are designated as HPSAs (**Exhibit 59**)

¹⁷ U.S. Health Resources and Services Administration, Bureau of Health Professionals. (n.d.). *Health Professional Shortage Area Designation Criteria*. Retrieved 2013, from <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/index.html>

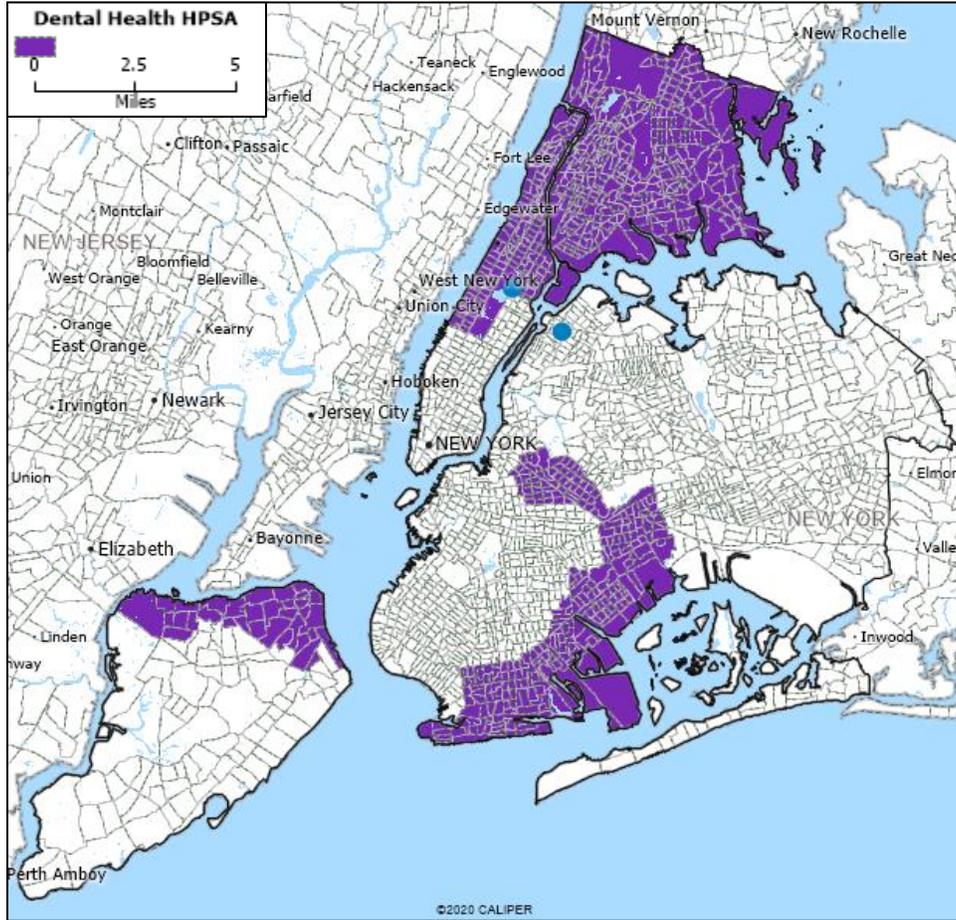
Exhibit 59A: Location of Federally Designated Primary Care HPSA Census Tracts in the MSH Community, 2020



Sources: Caliper Maptitude (2020) and HRSA, 2020.

Census tracts designated as Primary Care HPSAs are located throughout the community, with concentrations in the Bronx, Brooklyn, and Queens.

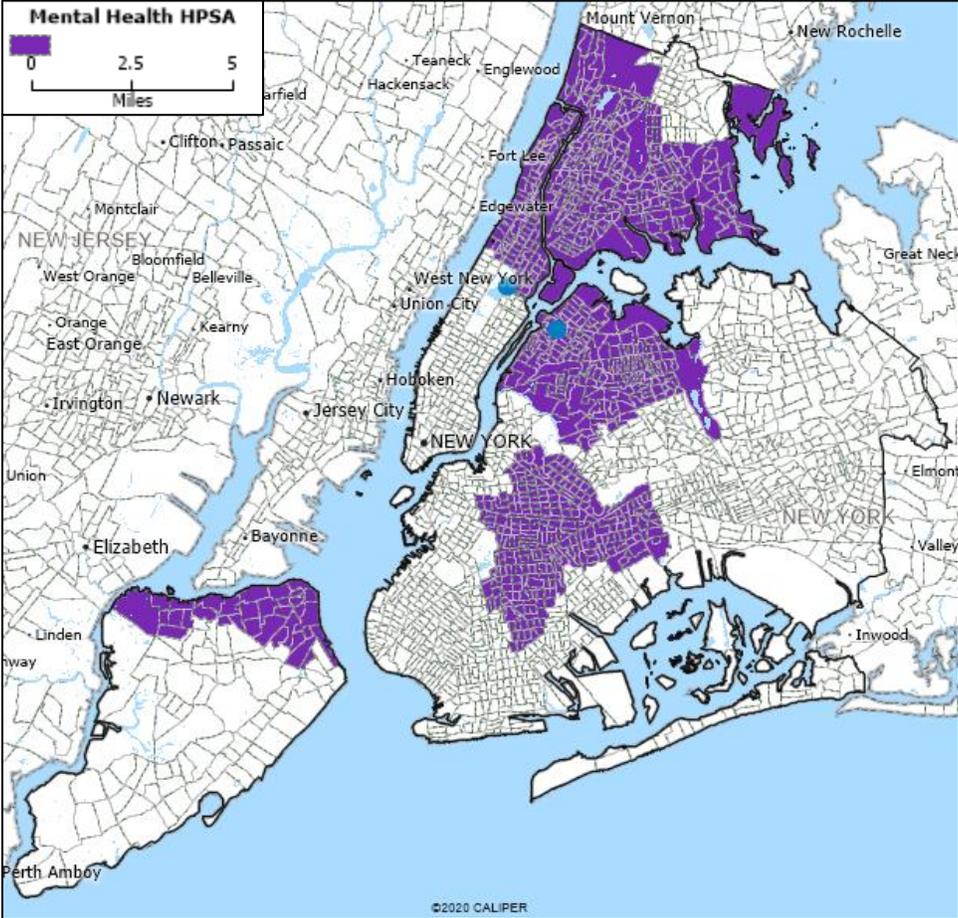
Exhibit 59B: Location of Federally Designated Dental Health HPSA Census Tracts in the MSH Community, 2020



Sources: Caliper Maptitude (2020) and HRSA, 2020.

Census tracts designated as Dental Health HPSAs are located throughout the community, with concentrations in the Bronx and Brooklyn and parts of Manhattan and Staten Island.

Exhibit 59C: Location of Federally Designated Mental Health HPSA Census Tracts in the MSH Community, 2020



Sources: Caliper Maptitude (2020) and HRSA, 2020.

Census tracts designated as Mental Health HPSAs are located throughout the community, with concentrations in the Bronx and parts of the other boroughs.

Description of Other Facilities and Resources within the Community

The MSH community contains a variety of resources that are available to meet the health needs identified in this CHNA. These resources include facilities designated as HPSAs, hospitals, FQHCs, health professionals, and other agencies and organizations. Multiple facilities in the community are designated as HPSA facilities (**Exhibit 60**).

Exhibit 60: List of HPSA Facilities in the MSH Community

Borough	Facility Type	Primary Care	Dental Health	Mental Health
Bronx				
Brightpoint Health	Federally Qualified Health Center	•	•	
Bronx Community Health Network	Federally Qualified Health Center	•	•	•
Bronx Lebanon Integrated Service System Inc	Federally Qualified Health Center	•	•	•
HELP/PSI Services Corporation	Federally Qualified Health Center			•
Hunts Point Multi-Service Center, Inc.	Federally Qualified Health Center	•	•	•
Inwood Avenue Clinic	Federally Qualified Health Center			•
Jacobi Women's Health Center	Other Facility	•		
La Casa De Salud Inc.	Federally Qualified Health Center	•	•	•
Montefiore Medical Center	Federally Qualified Health Center	•	•	•
Montefiore North Division Mental Health Clinic	Other Facility			•
Morris Heights Health Center Inc	Federally Qualified Health Center	•	•	•
Soundview Health Center	Federally Qualified Health Center	•	•	•
Tremont Health Center (FP/Ped)	Other Facility	•		
Union Community Health Center, Inc.	Federally Qualified Health Center	•	•	•
Urban Health Plan, Inc.	Federally Qualified Health Center	•	•	•
Vocational Instruction Project	Federally Qualified Health Center	•	•	•
Brooklyn				
Bedford Stuyvesant Family Health Center, Inc.	Federally Qualified Health Center	•	•	•
Brooklyn Plaza Medical Center	Federally Qualified Health Center	•	•	•
Brownsville Community Development Corporation	Federally Qualified Health Center	•	•	•
Community Health Initiatives Inc.	Federally Qualified Health Center	•	•	•
Ezra Medical Center	Federally Qualified Health Center	•	•	•
Housing Works Health Services III, Inc.	Federally Qualified Health Center	•	•	•
ICL Healthcare Choices, Inc.	Federally Qualified Health Center	•	•	•
Joan Malin Brooklyn Health Center of Brooklyn	Other Facility	•		
Kings County Hospital Center	State Mental Hospital			•
Lasante Health Center, Inc.	FHQC Look A Like	•	•	•
LBJ Health	Federally Qualified Health Center	•	•	
Lyndon B. Johnson Health Center	Federally Qualified Health Center			•
MDC-Brooklyn	Correctional Facility	•	•	•
ODA Primary Health Care Center, Inc.	Federally Qualified Health Center	•	•	•
Sunset Park Health Council, Inc.	Federally Qualified Health Center	•	•	•
Woodhull Mental Health Center	State Mental Hospital			•

Exhibit 60 (Continued): List of HPSA Facilities in the MSH Community

Borough	Facility Type	Primary Care	Dental Health	Mental Health
Manhattan				
AHRC Health Care Inc.	Federally Qualified Health Center	•	•	•
American Indian Community House	Indian Health Organizations	•	•	•
APICHA COMMUNITY HEALTH CENTER	Federally Qualified Health Center	•	•	•
Asian & Pacific Islander Coalition (APICHA)	FHQC Look A Like	•		
Asian & Pacific Islander Coalition on HIV/AIDS	FHQC Look A Like		•	•
Bellevue Hospital	State Mental Hospital			•
Betances Health Center	Federally Qualified Health Center	•	•	•
Bowery Residents Community	Federally Qualified Health Center	•	•	•
Callen-Lorde Community Health Center	Federally Qualified Health Center			•
Care For The Homeless	Federally Qualified Health Center	•	•	•
Charles B. Wang Community Health Center, Inc.	Federally Qualified Health Center	•	•	•
Community Health Project, Inc.	Federally Qualified Health Center	•	•	•
Community Healthcare Network	Federally Qualified Health Center	•	•	•
Community Healthcare Network, Inc.	Federally Qualified Health Center	•	•	•
East Harlem Council For Human Services, Inc.	Federally Qualified Health Center	•	•	•
Family Academy	Federally Qualified Health Center		•	
Harlem United Community AIDS Center	Federally Qualified Health Center	•	•	•
Heritage Health And Housing, Inc.	Federally Qualified Health Center	•	•	•
Institute For Family Health, The	Federally Qualified Health Center	•	•	•
Margaret Sanger Health Center	Other Facility	•		
Metropolitan Correctional Center (MCC)	Correctional Facility	•	•	•
Morningside Clinic	Other Facility	•		
Mount Sinai Adolescent Health Center	Other Facility	•		
New York City Health and Hospitals Corporation	Federally Qualified Health Center	•	•	•
New York Health and Hospitals Corporation	FHQC Look A Like	•	•	•
Project Renewal, Inc.	Federally Qualified Health Center	•	•	•
Ryan, William F Community Health Center Inc	Federally Qualified Health Center	•	•	•
Settlement Health And Medical Services, Inc.	Federally Qualified Health Center	•	•	•
St. Vincent's Health Care for the Homeless	Federally Qualified Health Center	•	•	•
The New York Presbyterian Hospital	Federally Qualified Health Center	•	•	•
Under 21	Federally Qualified Health Center	•	•	•
Upper Room Aids Ministry, Inc.	Federally Qualified Health Center	•	•	•

Exhibit 60 (Continued): List of HPSA Facilities in the MSH Community

Borough	Facility Type	Primary Care	Dental Health	Mental Health
Queens				
Damian Family Care Centers, Inc.	Federally Qualified Health Center	•	•	•
Diane L. Max Health Center of Queens	Other Facility	•		
Floating Hospital Incorporated	Federally Qualified Health Center	•	•	•
Hunts Point Multi-Service Center, Inc.	Federally Qualified Health Center			•
New York Indian Council, Inc	Indian Health Organizations	•	•	•
Project Samaritan Health Services	FHQC Look A Like	•		
The Addabbo Joseph P Family Health Center Inc	Federally Qualified Health Center	•	•	•
The Floating Hospital	Federally Qualified Health Center		•	
Staten Island				
Arthur Kill Correctional Facility	Correctional Facility			•
Beacon Christian Community Health Center	Federally Qualified Health Center	•	•	•
Community Health Center of Richmond	FHQC Look A Like	•		
Community Health Center Of Richmond, Inc.	Federally Qualified Health Center	•	•	•

Source: Health Resources and Services Administration, 2020.

There are numerous locations for community residents to receive hospital services in New York City. **Exhibit 61** lists 59 hospital locations where community residents can receive services across all boroughs in New York City.

Exhibit 61: Hospitals in the MSH Community

Borough	Hospital Name
Bronx	BronxCare Hospital Center
Bronx	Calvary Hospital Inc
Bronx	Jacobi Medical Center
Bronx	Lincoln Medical & Mental Health Center
Bronx	Montefiore Med Center - Jack D Weiler Hosp of A Einstein College Div
Bronx	Montefiore Medical Center - Henry & Lucy Moses Div
Bronx	Montefiore Medical Center - Montefiore Westchester Square
Bronx	Montefiore Medical Center-Wakefield Hospital
Bronx	North Central Bronx Hospital
Bronx	St. Barnabas Hospital Health System
Brooklyn	Brookdale Hospital Medical Center
Brooklyn	Brooklyn Hospital Center - Downtown Campus
Brooklyn	Coney Island Hospital
Brooklyn	Interfaith Medical Center
Brooklyn	Kings County Hospital Center
Brooklyn	Kingsbrook Jewish Medical Center
Brooklyn	Maimonides Medical Center
Brooklyn	Mount Sinai Brooklyn
Brooklyn	New York Community Hospital of Brooklyn, Inc
Brooklyn	New York-Presbyterian Brooklyn Methodist Hospital
Brooklyn	NYU Langone Health-Cobble Hill
Brooklyn	NYU Langone Hospital-Brooklyn
Brooklyn	University Hospital of Brooklyn
Brooklyn	Woodhull Medical & Mental Health Center
Brooklyn	Wyckoff Heights Medical Center

-- Table continued on next page --

Exhibit 61 (Continued): Hospitals in the MSH Community

Borough	Hospital Name
Manhattan	Bellevue Hospital Center
Manhattan	David H. Koch Center For Cancer Care
Manhattan	Harlem Hospital Center
Manhattan	Henry J. Carter Specialty Hospital
Manhattan	Hospital for Special Surgery
Manhattan	Lenox Health Greenwich Village
Manhattan	Lenox Hill Hospital
Manhattan	Memorial Hospital for Cancer and Allied Diseases
Manhattan	Metropolitan Hospital Center
Manhattan	Mount Sinai Beth Israel
Manhattan	Mount Sinai Hospital
Manhattan	Mount Sinai Morningside
Manhattan	Mount Sinai West
Manhattan	New York Eye and Ear Infirmary of Mount Sinai
Manhattan	New York-Presbyterian Hospital - Allen Hospital
Manhattan	New York-Presbyterian Hospital - Columbia Presbyterian Center
Manhattan	New York-Presbyterian Hospital - New York Weill Cornell Center
Manhattan	New York-Presbyterian/Lower Manhattan Hospital
Manhattan	NYU Langone Hospitals
Manhattan	NYU Langone Orthopedic Hospital
Manhattan	Rockefeller University Hospital
Queens	Elmhurst Hospital Center
Queens	Flushing Hospital Medical Center
Queens	Jamaica Hospital Medical Center
Queens	Long Island Jewish Forest Hills
Queens	Long Island Jewish Medical Center
Queens	Mount Sinai Hospital - Mount Sinai Hospital of Queens
Queens	New York-Presbyterian/Queens
Queens	Queens Hospital Center
Queens	St Johns Episcopal Hospital So Shore
Staten Island	Richmond University Medical Center
Staten Island	RUMC-Bayley Seton
Staten Island	Staten Island University Hosp-North
Staten Island	Staten Island University Hosp-South

Source: New York State Department of Health, 2020.

Federally Qualified Health Centers (FQHCs) were created by Congress to promote access to ambulatory care in areas designated as “medically underserved.” These clinics receive cost-based reimbursement for Medicare and many also receive grant funding under Section 330 of the Public Health Service Act. FQHCs also receive a prospective payment rate for Medicaid services based on reasonable costs. There are 477 FQHC site locations in the five boroughs of New York City, many of which also are designated as HPSAs.

Exhibit 62 presents the rates of primary care physicians, mental health providers, and dentists in the community per 100,000 population. The rates of primary care, mental health providers, and dentists per 100,000 population are higher in Manhattan, compared to the state. In the Bronx, Brooklyn, and Queens, rates for primary care physicians, mental health providers, and dentists were lower than the state averages. Rates for mental health providers and dentists were lower in Staten Island than the state averages.

Exhibit 62: Health Professionals Rates per 100,000 Population by Borough

Borough	Primary Care Physician		Mental Health Provider		Dentists	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
Bronx	832	56.6	729	50.9	2,945	205.6
Brooklyn	1,705	64.4	1,659	64.2	5,670	219.5
Manhattan	2,209	132.7	2,907	178.5	13,986	858.7
Queens	1,467	62.2	1,678	73.6	3,703	162.5
Staten Island	466	97.2	314	65.9	1,091	229.1
New York State	16,288	82.1	16,052	82.1	56,523	289.2

Source: Data provided by County Health Rankings, 2020.

A wide range of other agencies and organizations is available in the community to assist in meeting health needs. The New York City Department of Health and Mental Hygiene (NYC Health) provides information about and resources available for a wide range of issues at <https://www1.nyc.gov/site/doh/health/health-topics.page>.

In addition, lists of available resources have been compiled by community foundations, hospitals, and agencies. Lists of available resources include the following:

- Brooklyn Community Pride Center Programs
<https://lgbtbrooklyn.org/programs/>
- Coalition for the Homeless Resource Guide
<http://www.coalitionforthehomeless.org/resource-guide>
- Vibrant Emotional Health (formerly the Mental Health Association of New York City (MHA-NYC))
<https://www.vibrant.org/what-we-do/>
- New York City Guide to Suicide Prevention, Services, and Resources
<https://samaritansnyc.org/nyc-resource-guide/>

- New York City – Mayor's Office to End Domestic and Gender-Based Violence (ENDGBV)
<https://www1.nyc.gov/site/ocdv/about/about-endgbv.page>
- The New York City Free Clinic
<https://nycfreeclinic.com/>
- Weill Cornell Center for Human Rights Mental Health Services Guide
<http://www.wcchr.com/resources/mental-health-resources-nyc>
- United Way of New York City
<https://unitedwaynyc.org/find-help/>

In addition to organizations listed in the resource guides, community resources that assist residents in meeting health needs include:

- Local chapters of national organizations, such as the Alzheimer's Association, American Cancer Society, American Heart Association, American Red Cross, Habitat for Humanity, YMCA, and YWCA
- Local places of worship
- Local first responders, including fire departments, police departments, and Emergency Medical Services (EMS)
- Local FQHCs and HPSA facilities (**Exhibit 58**)
- Local government agencies, Chambers of Commerce, and City Councils
- Local schools, colleges, and universities
- The New York City Department of Health and Mental Hygiene (DOHMH)

Findings of the NYC Health Department Community Health Assessment

In 2019, the New York City Department of Health and Mental Hygiene (NYC Health Department) prepared its 2019-2021 Community Health Assessment and Community Health Improvement Plan: Take Care New York 2024 (TCNY 2024). TCNY 2024 is the NYC Health Department's "blueprint for advancing health equity and giving everyone the chance to lead a healthier life."¹⁸ The two TCNY 2024 prevention priorities are (1) Prevent Chronic Diseases, and (2) Promote Healthy Women, Infants, and Children. Goals and objectives of these two prevention priorities are below.

- 1. Chronic Disease Preventive Care and Management.** Promotion of evidence-based chronic diseases prevention and management, include the following objectives:
 - a. Increase percentage of adults with adequately controlled hypertension;
 - b. Increase percentage of adult Black patients with adequately controlled hypertension;
 - c. Decrease percentage of adults with poor control of diabetes;
 - d. Decrease percentage of adult Black Medicaid patients with poor control of diabetes;
 - e. Maintain fruit and vegetable consumption levels among low-income residents.

- 2. Perinatal and Infant Health.** Reducing infant mortality and morbidity by decreasing the Sudden Unexpected Infant Death (SUID) mortality rate, including the following objectives:
 - a. Increase percentage of infants sleeping in an environment that meets American Academy of Pediatrics recommendations; and
 - b. Increase percentage of women reporting that their baby is most often laid down to sleep on their back.

¹⁸ 2019-2021 Community Health Assessment and Community Health Improvement Plan: Take Care New York 2024, New York City Department of Health and Mental Hygiene. See <https://www1.nyc.gov/assets/doh/downloads/pdf/tcny/community-health-assessment-plan.pdf>.

CDC COVID-19 Prevalence and Mortality Findings

The Centers for Disease Control and Prevention (CDC) provides information, data, and guidance regarding the COVID-19 pandemic. The pandemic also has exposed the significance of problems associated with long-standing community health issues, including racial health inequities, chronic disease, access to health services, mental health, and related issues.

Part of the CDC's work has included identifying certain populations that are most at risk for severe illness and death due to the pandemic. To date, the CDC's work has yielded the outlined below.

Underlying medical conditions may contribute. People with certain underlying medical conditions are at increased risk for severe illness and outcomes from COVID-19, including the following:¹⁹

- Cancer;
- Chronic kidney disease;
- Chronic obstructive pulmonary disease (COPD);
- Immunocompromised state from organ transplant;
- Obesity;
- Serious heart conditions, including heart failure, coronary artery disease, or cardiomyopathies;
- Sickle cell disease; and
- Type 2 diabetes mellitus.

Based on what is known at this time, people with other conditions might be at an increased risk for severe illness and outcomes from COVID-19, including:²⁰

- Asthma (moderate-to-severe);
- Cerebrovascular disease (affects blood vessels and blood supply to the brain);
- Cystic fibrosis;
- Hypertension or high blood pressure;
- Immunocompromised state from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines;
- Neurologic conditions, such as dementia;
- Liver disease;
- Pregnancy;
- Pulmonary fibrosis (having damaged or scarred lung tissues);
- Smoking;
- Thalassemia (a type of blood disorder); and
- Type 1 diabetes mellitus.

¹⁹ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

²⁰ Ibid.

Older adults are at-risk. Older adults and the elderly are disproportionately at risk of severe illness and death from COVID-19. Risks increase with age, and those aged 85 and older are at the highest risk. At present time, eight out of 10 COVID-19 deaths have been in adults aged 65 or older.²¹

Men are at-risk. Data thus far indicate that men are more likely to die from COVID-19 than women. While the reasons for this disparity are unclear, a variety of biological factors, behavioral influences, and psychosocial elements may contribute.²²

Racial and ethnic minorities are at-risk. According to the CDC, “Long-standing systemic health and social inequities have put some members of racial and ethnic minority groups at increased risk of getting COVID-19 or experiencing severe illness, regardless of age.” Evidence points to higher rates of hospitalization or death among racial and ethnic minority groups, including non-Hispanic Black persons, Hispanics and Latinos, and American Indians or Alaska Natives.²³

- Non-Hispanic American Indian or Alaska Native persons incidence rate is approximately five times greater than non-Hispanic White persons.
- Non-Hispanic Black persons incidence rate is approximately five times greater than non-Hispanic White persons.
- Hispanic or Latino persons incidence rate is approximately four times greater than non-Hispanic White persons.

In explaining these differences of COVID-19 incidence, the CDC states “Health differences between racial and ethnic groups result from inequities in living, working, health, and social conditions that have persisted across generations.”²⁴

²¹ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html>

²² https://www.cdc.gov/pcd/issues/2020/20_0247.htm

²³ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>

²⁴ *Ibid.*

PRIMARY DATA ASSESSMENT

Summary of Interview Findings

Key informant stakeholders were engaged by video conference calls, telephone calls, and email exchanges initiated by Verité Healthcare Consulting from September through November 2020.²⁵ The interviews were designed to obtain input on health needs from persons who represent the broad interests of the community served by Mount Sinai Hospital.

Twenty-one interview sessions were held with 55 individuals representing numerous organizations. Interviewees included: individuals with special knowledge of or experts in public health; local public health department representatives with information and expertise relevant to the health needs of the community; and individuals and organizations serving or representing medically underserved, low-income, and minority populations. The organizations that provided input are listed after the discussion of issues identified in the interviews.

Interviews were conducted using a structured discussion guide. Informants were asked to discuss pre-COVID-19 community health issues and encouraged to think broadly about the social, behavioral, and other determinants of health. Interviewees were next asked to consider COVID-19-related issues associated with health status, health care access and services, chronic health conditions, populations with special needs, and health disparities.

The frequency with which specific issues were mentioned and interviewees' perceptions of the severity (how serious or significant) and scope (how widespread) of each concern were assessed. The following health status issues and contributing factors were reported to be of greatest concern.

²⁵ In-person stakeholder engagement sessions were initially planned. Verité Healthcare Consulting shifted to virtual stakeholder sessions to reduce risks of potential COVID-19 transmission.

Issues Identified by Interview Participants

All participants discussed the immediate and profound impact of COVID-19 on the community. Participants indicated the significance of the following community health needs related to the pandemic:

- COVID-19-related illness and deaths have impacted all communities;
- The pandemic’s uncertainty and severity changed the community rapidly, especially affecting seniors, low-income residents, racial and ethnic minorities, healthcare providers, and school children;
- The economic impact of quarantines and social-distancing has increased basic needs instability, housing insecurity, and homelessness;
- Anxiety and self-isolation have impacted the mental health of many community members, as have perceptions of increased crime and decreased street safety, leading to increased substance misuse;
- Evolving understanding and changing protocols among providers have increased difficulty in navigating the healthcare system, and has illuminated the “digital divide;”
- Long-term pandemic impact is projected to include increased chronic disease burdens because of delayed preventive and management services; and
- Community resources, including providers and community-based organizations, have been challenged with increased demand and decreased revenues.

Discussion is below.

COVID-19-related illness and deaths have impacted all communities. With its emergence in New York City in March 2020, COVID-19 was responsible for the illness and deaths of New York City residents across all communities. Delays in testing may have understated illnesses and deaths, particularly in the early stages of the pandemic. Estimates may continue to be understated due to hesitancy to access services by some members of the community, particularly undocumented residents and those without health insurance.

The pandemic’s uncertainty and severity changed the community rapidly, especially affecting seniors, low-income residents, racial and ethnic minorities, healthcare providers, and school children. As a novel coronavirus, effective treatment plans for COVID-19 were minimal, but well known was its ability to spread rapidly, along with its severe symptoms and high mortality rates. Mandated quarantines and closures, combined with self-imposed isolation, restricted typical daily activities, including work, socialization, shopping, and accessing services.

Seniors were especially impacted due to comorbidities and interactions in communal environments, such as senior centers. Communal environments increased access to the virus and comorbidities increased illness severity and mortality. Both mandates and fear increased self-isolation, resulting in diminished social interactions and postponed medical care.

Low-income residents faced increased exposure to the virus due to front-line jobs as essential workers, use of public transportation, high density housing, and the inability to afford protective equipment, such as masks. Health care access issues, such as lack of insurance and deportation

fears among undocumented residents, restricted treatment options. These issues also disproportionately impacted racial and ethnic minorities, given the disparities observed in poverty by race and ethnicity in New York City.

Healthcare providers were greatly impacted by the professional demands of high-severity patients, shifting treatment guidance, increased work hours, and supply constraints. High patient mortality rates, along with deaths of colleagues, were emotionally challenging for providers.

School-age children were also impacted. Shifting to virtual classrooms was identified as a potential impediment to learning. Isolation was identified as limiting social development. Environmental impacts also are a concern with children as a result of the pandemic. As children were kept inside more, the incidence of asthma was believed to worsen due to poor housing conditions in many communities.

The economic impact of quarantines and social-distancing has increased basic needs instability, housing insecurity, and homelessness.

The impact of quarantines and lifestyle changes from social distancing has impacted the New York City economy. Decreased economic activity has resulted in reductions in earnings and job losses, including corresponding employee benefits. As a result, more community members are experiencing basic needs instability, including access to food and health care.

Reduced household income also has increased housing instability, which was a pre-pandemic concern for some community members due to increasing housing costs of both new and existing housing units. This housing instability may worsen with the ending restrictions on evictions for non-payment of rent.

The resumption of evictions was forecasted to increase homelessness, already an issue within the community. Furthermore, participants indicated that homelessness has increased as individuals from outside the area migrated to New York City due to the economic downturns in their home communities. Additionally, New York City's relocation of homeless residents from shelters to hotels throughout the area has increased the visibility of homelessness and the density in specific communities.

Anxiety and self-isolation have impacted the mental health of many community members, as have perceptions of increased crime and decreased street safety, leading to increased substance misuse. Everyday stress increased dramatically with the pandemic because of fear of contracting the virus and uncertainty about precautions effective in reducing potential exposure. Strains on mental health were especially evident for hospitalized patients and family members who were physically isolated from one another to reduce the spread of the disease.

The pandemic has also changed community patterns. Quarantines and other restrictions reduced sidewalk foot traffic and relocation of housing for homeless residents impacted community members' sense of safety. Participants reported spikes in crime since the beginning of the pandemic.

The aggregate impact of community changes, combined with daily stressors and self-isolation, is worsened mental health status for some community members. Pre-pandemic management options have been interrupted, including services with mental health professionals and informal activities, such as reduced access to outdoor activities and socialization. To cope with COVID-19 changes, some community members have increased misuse of alcohol and drugs.

Evolving understanding and changing protocols have increased difficulty in navigating healthcare system, and has illuminated the “digital divide.” Information, recommendations, and protocols changed as understanding about COVID-19 developed. Shifting information included how to access health care services. As a result, some community members avoided seeking services from hospitals and may remain skeptical about the safety of emergency rooms and other hospital departments. Some community members appear to have shifted to other health care resources, such as urgent care centers and clinics, but the range of services provided by these health care providers can be limited.

Shifts in the healthcare system also include increased utilization of virtual provider visits. Many residents described the benefits of virtual visits in accessing care, expressing an expectation that they would continue long-term for the benefit of the community. However, not all community members can access providers remotely due to technical barriers described as the “digital divide.” Some low-income residents lack the appropriate technology and band-width necessary to communicate remotely. Some seniors may lack both the technology and experience with the technical infrastructure. Community members with disabilities may be unable to utilize virtual services because of physical limitations.

Long-term pandemic impact is projected to include increased chronic disease burdens because of delayed preventive and management services. Prior to the pandemic, chronic diseases were problematic within the community. Specific chronic diseases identified by participants as significant within the community include arthritis, asthma, cancers, cardiovascular disease, diabetes, hypertension, kidney disease, and pulmonary issues. Comorbidities were cited as particularly problematic, due to an aging population and the impact of obesity.

COVID-19 was projected to worsen the severity of chronic diseases because of postponed or foregone medical care. While a backlog of unmet needs was projected, participants suggested that the complications might be more significant than predicted due to the unknown severity of healthcare needs that are hidden due to self-isolation.

Community resources, including providers and community-based organizations, have been challenged with increased demand and decreased revenues. Health care providers and community based organizations have been challenged by increased demand for services. These changes in service volumes have been met with increased costs, such as costs for staffing and supplies. Simultaneously, revenues have been adversely impacted by economic downturns and the ability to provide fundraising programming, such as annual galas. Reduced service levels and reductions in staffing are projected. COVID-19 may be fatal for some local organizations.

Organizations Providing Community Input

Twenty-one interview sessions were held with 55 individuals representing 24 organizations. Organizations represented by these individuals are as follows:

- Catholic Charities;
- Children's Aid;
- Hatzolah Lower East Side;
- Icahn School of Medicine at Mount Sinai;
- Lighthouse Guild;
- Lower East Side Power Partnership;
- Manhattan Community Board 3;
- Manhattan Community Board 4;
- Manhattan Community Board 6;
- Manhattan Community Board 7;
- Mount Sinai - Mount Sinai Queens - Community Advisory Board;
- Mount Sinai Beth Israel Heritage Initiative;
- Mount Sinai Brooklyn;
- Mount Sinai Health System;
- Mount Sinai Hospital;
- Mount Sinai Morningside;
- Mount Sinai Queens;
- New York City Department of Health and Mental Hygiene;
- Russian American Foundation;
- SHAREing & CAREing;
- Stuyvesant Town Peter Cooper Village Tenants Association;
- The Mount Sinai Beth Israel Downtown Community Advisory Board;
- The Mount Sinai Health System; and
- The Mount Sinai Morningside/West Community Advisory Board.

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APPENDIX - Actions Taken Since Previous CHNA²⁶

The Mount Sinai Hospital and Mount Sinai Queens campuses use evidence-based approaches in the delivery of healthcare services with the aim of achieving healthy outcomes for the community served. Each hospital campus undertakes periodic monitoring of its programs to measure and determine their effectiveness and ensure that best practices continue to be applied.

Given that the process for evaluating the impact of various services and programs on population health is longitudinal by nature, significant changes in health outcomes may not manifest for several community health needs assessment cycles. Each hospital campus continues to evaluate the cumulative impact. In its previous CHNA report, the Mount Sinai Hospital and Mount Sinai Queens identified a number of community health needs. The section below lists these health needs and related action items.

1. Aging Population

The 2017 CHNA found that the aging population will increase needed support for healthcare, housing, transportation, and nutrition assistance. The corresponding Implementation Strategy identified this need as one that would not be targeted for (direct) intervention. This decision was based on the following criteria:

- MSH, together with the Mount Sinai Health System, has core competencies related to direct medical services and lacks core competencies in housing, transportation, and nutrition assistance;
- Resource constraints dictate interventions than can be implemented; and
- Other community resources are responding to this issue, including the New York City Department for the Aging and initiatives funded by the New York City Council.

Also as noted in the Implementation Strategy, healthcare activities were planned that directly and indirectly impacted an aging population, as are described below.

Health professions education. The health professions education activities of MSH respond to both the current and future community health needs for chronic disease treatment and prevention. MSH actively participates in over 145 residency and fellowship programs. Current residency and fellowship programs that are especially related to aging issues include the following:

- Geriatric Medicine Fellowship,
- Geriatric Psychiatry Fellowship,
- Integrated Geriatrics and Palliative Medicine Fellowship,
- LEAP into Geriatrics Leadership Fellowship; and
- Rheumatology Fellowship.

²⁶ Source: Mount Sinai Health System

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$177,255,733 in costs for health professions education. Continued applications to these programs and continued accreditation are external indicators of the positive impact of this action on the community health need.

Social Work Services. Social Workers are part of the health care team in nearly every part of The Mount Sinai Hospital and its medical practices. Social Workers can help patients and their families during and after hospitalization, including assistance with managing medical care.

Patient and family acceptance, as well as integration within the professional care team, are indicators that the social work services contribute value. Local, national, and international recognition of social workers at Mount Sinai are external indicators of the positive impact of this action on the community health need.

Navigation Services. As people age, they often need different kinds of care and a geriatric patient may require more referrals with increased interdisciplinary coordination. To help patients and caregivers navigate the health care system, Mount Sinai fosters a multidisciplinary team-based approach with its geriatrics team of physicians, nurses, and social workers, and facilitates collaboration with others to develop effective treatment plans. Care is focused on both the physical and emotional well-being of patients receiving services. Discharge planning considers each patient's unique needs. Patient and family acceptance, as well as integration within the professional care team, are indicators that the navigation services contribute value.

Geriatrics Services. The Mount Sinai Geriatrics Services provides patient- and family-centered care through programs contained within the Martha Stewart Center for Living, such as Phyllis and Lee Coffey Geriatrics Associates, a primary care practice that specializes in caring for older adults. The practice provides a centralized source of patient care, referrals to other physicians, programs for caregivers and the community, and a full range of complementary and integrative therapies to supplement traditional medical interventions.

Demand for geriatrics services demonstrates that community members value this activity. The ranking of the Geriatrics program of Mount Sinai Hospital by U.S. News & World Report is an external indicator of the positive impact of this action on the community health need.

The Brookdale Department of Geriatrics and Palliative Medicine

The Brookdale Department of Geriatrics and Palliative Medicine supports many innovative programs for older adults, such as Mobile Acute Care for the Elderly, the Visiting Doctors Program, an affiliation with the Jewish Home and Hospital for long-term care services, and the Geriatric Research, Education and Clinical Center - James J. Peters VA Medical Center.

Continued interest in programs by patients and providers is indicative of the positive impact of this action on the community health need.

2. Access to Mental Health Care and Poor Mental Health Status

The 2017 MSH CHNA found that the mental health status is poor for many residents because of day-to-day pressures, substance abuse, and psychiatric disorders. The supply of mental health providers is insufficient to meet the demand for mental health services.

Planned activities to increase access to mental health care and improve the mental health status of community residents, as well as evaluation of these activities, are described below.

Health professions education. The health professions education activities of MSH respond to both the current and future community mental health needs. MSH actively participates in over 145 residency and fellowship programs. Current residency and fellowship programs that are especially related to mental health care services include the following:

- Child and Adolescent Psychiatry Fellowship,
- Geriatric Psychiatry Fellowship,
- Psychiatry Residency,
- Transgender Psychiatry Fellowship Program, and
- Triple Board Residency [Pediatrics, General Psychiatry, and Child and Adolescent Psychiatry].

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$177,255,733 in costs for health professions education. Continued applications to these and other programs, as well as continued accreditation, are external indicators of the positive impact of this action on the community health need.

Mental Health Services. Mental health care services are available at the hospital campuses, outpatient facilities, and physician practices throughout the community. As part of the Mount Sinai Health System, integrated resources such as electronic health records facilitate the referral of patients to needed services provided by other Mount Sinai Health System hospitals and health professionals.

Continued interest in programs by patients and providers is indicative of the positive impact of this action on the community health need.

3. Access to Primary Health Care Services by Individuals with Limited Resources

The 2017 MSH CHNA found that New York City has a robust health provider network. However, access to this network can be limited to individuals with limited financial resources, including lack of health insurance and relatively high deductibles / co-pays.

Planned activities to increase access to primary health care for individuals with limited resources and the evaluation of these activities are described below.

Health professions education. The health professions education activities of MSH respond to both the current and future community health needs for professional services. MSH actively participates in over 145 residency and fellowship programs. Current residency and fellowship programs that are especially related to primary health care services include the following:

- Adolescent Medicine Fellowship,
- Emergency Medicine Residency,
- Emergency Medicine Simulation Fellowship,
- Family Planning Fellowship - Mount Sinai Hospital,
- General Dentistry Residency,
- General Internal Medicine Fellowship,
- General Surgery Residency,
- Global Women's Health Fellowship - Mount Sinai Hospital,
- Internal Medicine Residency,
- Obstetrics Gynecology Residency,
- Pediatric Dentistry Residency,
- Pediatrics Emergency Medicine Fellowship,
- Pediatrics Residency, and
- Physical Medicine and Rehabilitation Residency.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$177,255,733 in costs for health professions education. Continued applications to these and other programs, as well as continued accreditation, are external indicators of the positive impact of this action on the community health need.

Primary Health Care Services. The hospital provides primary care at its campuses, as well as physician practices throughout Manhattan. The hospital, together with The Mount Sinai Health System, is a leader in providing quality health care to its patients regardless of their ability to pay. Continued interest in programs by patients and providers is indicative of the positive impact of this action on the community health need.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$28,849,238 in financial assistance costs related to services provided. In addition, Mount Sinai reported \$153,333,129 in unreimbursed costs for services provided to Medicaid enrollees.

4. Chronic Diseases and Contributing Lifestyle Factors

The 2017 MSH CHNA found that chronic diseases prevalent in the community include obesity, diabetes, hypertension, heart disease, strokes, and asthma. Contributing lifestyle factors might also include sexually transmitted infections. Planned activities to help reduce the incidence of and manage current chronic disease, including increasing healthy life factors, are described below.

Health professions education. The health professions education activities of MSH respond to both the current and future community health needs for chronic disease treatment and prevention. MSH actively participates in over 145 residency and fellowship programs. Current residency and fellowship programs that are especially related to chronic disease services include the following:

- Advanced Endoscopy Fellowship,
- Advanced Fellowship in Inflammatory Bowel Disease,
- Advanced Heart Failure and Transplant Cardiology Fellowship,
- Allergy and Immunology Fellowship,
- Anesthesiology Residency,
- Body MRI Fellowship,
- Breast Imaging Fellowship,
- Breast Pathology Fellowship,
- Cardiology Clinical Track Fellowship,
- Cardiology Electrophysiology Fellowship,
- Cardiology Heart Failure and Transplantation Fellowship,
- Cardiology Vascular Medicine Fellowship,
- Cardiothoracic Anesthesia Fellowships,
- Cerebrovascular Disease-Stroke Fellowship,
- Chest Fellowship,
- Clinical Genetics Laboratory Training Program,
- Clinical Informatics Fellowship,
- Clinical Laparoscopic Surgery Fellowship,
- Clinical Neurophysiology Fellowship (EMG and EEG Tracks),
- Cognitive Neurology Fellowship,
- Colon and Rectal Surgery Fellowship,
- Critical Care Anesthesiology Fellowship,
- Critical Care Medicine Fellowship,
- Cytopathology Fellowship,
- Dermatology Residency,
- Dermatopathology Fellowship,
- Diagnostic Radiology Residency,
- Endocrinology, Diabetes, and Bone Disease Fellowship,
- ENT Pathology Fellowship,
- Epilepsy Fellowship,
- Facial Plastic Surgery Fellowship,

- Female Pelvic Medicine and Reconstructive Surgery Fellowship,
- Foot and Ankle Fellowship,
- Gastroenterology Fellowship,
- Gastrointestinal Pathology Fellowship,
- General Preventive Medicine Residency,
- Gynecologic Oncology Fellowship,
- Gynecologic Pathology Fellowship,
- Hand and Elbow Fellowship,
- Head and Neck Oncology, Microvascular Reconstructive Surgery Fellowship,
- Headache Medicine Fellowship,
- Hematology and Medical Oncology Fellowship,
- Hemopathology Fellowship,
- Independent ACGME Thoracic Fellowship Program,
- Infectious Diseases Fellowship,
- Integrated Thoracic Surgery Residency Program,
- Interventional Cardiology Fellowship,
- Interventional Radiology-Integrated Residency,
- Laryngology Fellowship,
- Liver Pathology Fellowship,
- Liver Transplant Anesthesia Fellowship,
- Maternal-Fetal Medicine Fellowship,
- Medical Genetics Residency and Fellowship Training Programs,
- Minimally Invasive Pelvic Surgery Fellowship,
- Minimally Invasive Urology Fellowship Program,
- Mohs Micrographic Surgery and Dermatologic Oncology Fellowship Program at Mount Sinai,
- Molecular Genetic Pathology Fellowship,
- Movement Disorders Fellowship,
- Multiple Sclerosis Fellowship,
- Musculoskeletal Radiology Fellowship,
- Neonatal-Perinatal Medicine Fellowship,
- Nephrology Fellowship,
- Neuro-AIDS Fellowship,
- Neuroanesthesia Fellowship - Mount Sinai Hospital,
- Neurocritical Care Fellowship,
- Neuroendovascular Surgery Fellowship,
- Neurology Research Residency,
- Neurology Residency,
- Neurology Residency plus PhD Program,
- Neuromuscular Medicine Fellowship,
- Neuropathology Fellowship,
- Neuroradiology Fellowship,
- Neurosurgery Residency,
- Nuclear Medicine Residency,

- Obstetric Anesthesiology Fellowship,
- Occupational and Environmental Medicine Residency,
- Ophthalmology Residency,
- Oral and Maxillofacial Pathology Residency,
- Oral and Maxillofacial Surgery (OMFS) Residency Program,
- Orthopaedic Residency,
- Orthopaedic Sports and Spine Rehabilitation Fellowship,
- Otolaryngology Residency,
- Pain Medicine Fellowship,
- Pathology Residency,
- Pediatrics Cardiology Fellowship,
- Pediatrics Endocrinology Fellowship,
- Pediatrics Gastroenterology Fellowship,
- Pediatrics Infectious Diseases Fellowship,
- Pediatrics Nephrology Fellowship,
- Plastic and Reconstructive Surgery Residency,
- Podiatric Medicine and Surgery Residency,
- Postdoctoral Fellowship in Clinical Neuropsychology and Rehabilitation Research,
- Procedural Dermatology Fellowship,
- Psychosomatic Medicine Fellowship,
- Pulmonary Critical Care and Sleep Medicine Fellowship,
- Radiation Oncology Residency,
- Regional Anesthesiology,
- Renal/Genitourinary Pathology Fellowship,
- Reproductive Endocrinology and Infertility Fellowship,
- Shoulder Fellowship,
- Spinal Cord Injury Fellowship,
- Spine Fellowship,
- Sports Medicine and Interventional Spine Fellowship,
- Surgical Oncology Fellowship,
- Transplant Hepatology Fellowship,
- Transplant Nephrology Fellowship,
- Transplant Surgery Fellowship,
- Urology Residency,
- Vascular and Interventional Radiology Fellowship,
- Vascular Diagnostic and Intervention Fellowship,
- Vascular Surgery Fellowship,
- Vascular Surgery Residency, and
- Visiting Fellowship in Dermatology at Icahn School of Medicine, Department of Dermatology.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$177,255,733 in costs for health professions education. Continued applications to these and

other programs, as well as continued accreditation, are external indicators of the positive impact of this action on the community health need.

Chronic Disease Services. The hospital provides specialty care at its campuses, as well as physician practices throughout Manhattan. The hospital, together with The Mount Sinai Health System, is a leader in providing quality health care to its patients regardless of their ability to pay. Specific chronic disease services include the following:

- Clinical nutrition;
- Diabetes care;
- Infectious care treatment;
- Renal care;
- Pulmonary care; and
- Sleep health.

Continued interest in programs by patients and providers are indicative of the positive impact of this action on the community health need. In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$28,849,238 in financial assistance costs related to services provided. In addition, Mount Sinai reported \$153,333,129 in unreimbursed costs for services provided to Medicaid enrollees.

5. Environmental Determinants of Health

The CHNA found that residents experience considerable traffic, pollution, crime, and noise, and that transportation is difficult for individuals with limited mobility. The corresponding Implementation Strategy identified this need as one that would not be targeted for (direct) intervention. This decision was based on the following criteria:

- MSH, together with the Mount Sinai Health System, has core competencies related to direct medical services and lacks core competencies in traffic, pollution, crime, and noise;
- Resource constraints dictate interventions than can be implemented; and
- Other community resources are responding to this issue, including the New York City Department of Environmental Protection and the New York City Department of Transportation.

Also as noted in the Implementation Strategy, a planned healthcare activity that directly and indirectly related to environmental determinants of health is described below.

Health professions education. The health professions education activities of MSH respond to both the current and future community health needs for chronic disease treatment and prevention. MSH actively participates in over 145 residency and fellowship programs. A residency and fellowship program that especially related to environmental issues is as follows:

- T32 Pediatric Environmental Health Fellowship

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$177,255,733 in costs for health professions education. Continued applications to this and other programs, as well as continued accreditation, are external indicators of the positive impact of this action on the community health need.

6. Homelessness

The CHNA found that homelessness is increasing in the community, and that homelessness is complex and intertwines other issues including affordable housing, access to mental health care, substance abuse, and poverty. The corresponding Implementation Strategy identified this need as one that would not be targeted for (direct) intervention. This decision was based on the following criteria:

- MSH, together with the Mount Sinai Health System, has core competencies related to direct medical services and lacks core competencies in short-term shelter and long-term housing;
- Resource constraints dictate interventions than can be implemented; and
- Other community resources are responding to this issue, including the New York City Department of Homeless Services.

Also as noted in the Implementation Strategy, a planned healthcare activity that directly and indirectly related to Homelessness is described below.

Financial Assistance and Billing and Collections Policy. The Mount Sinai Hospital, together with the other MSHS hospitals, recognizes that many of the patients served may be unable to access quality health care services without financial assistance. Its Financial Assistance Policy across hospital facilities and providers and robust social services can help low-income patients manage treatment while remaining in their homes.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$28,849,238 in financial assistance costs related to services provided. In addition, Mount Sinai reported \$153,333,129 in unreimbursed costs for services provided to Medicaid enrollees.

7. Navigating a Changing Health Care Provider Environment

The CHNA found that many changes in the health care provider environment are leading to anxiety by residents, and that residents may be uncertain of how to access healthcare services. The corresponding Implementation Strategy identified this need as one that would not be targeted for (direct) intervention. This decision was based on the following criteria:

- MSH, together with the Mount Sinai Health System, has expertise and resources related to medical services, but insurance coverage and financial resources are predominant factors related to accessing an evolving healthcare provider options;
- The resulting lack of proven interventions, combined with finite resources, restrict planned interventions in the 2018-2020 time period; and
- Other resources in the community have greater abilities to assist in navigation, notably insurance providers.

Also as noted in the Implementation Strategy, planned healthcare activities that directly and indirectly related to navigation are described below.

Social Work. Social workers are part of the health care team in nearly every part of MSH and these professionals can help patients and their families during and after hospitalization, including assistance with managing medical care. For geriatric patients and families, MSH fosters a multidisciplinary team-based approach with its geriatrics team of physicians, nurses, and social workers, and facilitates collaboration with others to develop effective treatment plans. Further, Mount Sinai maintains numerous options for patients seeking services, including the following:

Translation Services. The Mount Sinai Hospital provides over the phone and in-person interpreter services, 24 hours a day, at no cost to patients. Included in translation services are sign language interpreters and telecommunication devices for the deaf (TDD). The New York State Patients' Bill of Rights is available in Braille as well as in English and Spanish on closed-circuit television.

Numerous ways to connect with MSH. Community members can initiate communication with Mount Sinai with multiple methods, including the following:

- Mount Sinai Now – physician interactions through online consultation, video visit, or text;
- Online scheduling of physician appointments;
- Telephone switchboard – Continuously staffed operators who connect patients with relevant services; and
- MountSinai.org – the MSH website that provides information about the hospital’s services and other details.

8. Poverty, Financial Hardship, and Basic Needs Insecurity

The CHNA found that lower-income residents can experience considerable difficulty in accessing basic needs, primary care access can be limited due to the relatively high cost of deductibles / co-pays, and unmet mental health needs may be an issue due to daily stress. The corresponding Implementation Strategy identified this need as one that would not be targeted for (direct) intervention. This decision was based on the following criteria:

- MSH, together with the Mount Sinai Health System, has expertise and resources related to medical service and lacks core competencies in economic development;
- Resource constraints dictate interventions than can be implemented; and
- Other community resources are responding to this issue, notably insurance providers.

Planned activities indirectly related to Poverty, Financial Hardship, and Basic Needs Insecurity are described below.

Financial Assistance and Billing and Collections Policy. MSH, together with the other MSHS hospitals, recognizes that many of the patients served may be unable to access quality health care services without financial assistance. Its Financial Assistance Policy across hospital facilities

and providers and robust social services can help low-income patients manage treatment while remaining in their homes.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$28,849,238 in financial assistance costs related to services provided. In addition, Mount Sinai reported \$153,333,129 in unreimbursed costs for services provided to Medicaid enrollees.

Resource, Entitlement and Advocacy Program (REAP). The REAP program is part of the Department of Social Work Services at The Mount Sinai Hospital. REAP helps patients of the Mount Sinai Health System apply for government health insurance programs such as Medicaid, Child Health Plus, and qualified health plans through the New York State of Health insurance marketplace.

Direction to community resources. Mount Sinai helps direct patients to available resources that can help with insurance and/or public benefits. These available resources include insurance and Medicaid resources, Access NYC, Food Stamps – NYC, Home Energy Assistance Program (HEAP), the Social Security Administration, and the US Department of Veterans Affairs. Available resources also include programs targeted to patient caregivers, abuse and neglect interventions, assistance with legal issues, resources for persons with disabilities, and assistance with accessing prescription drugs.

9. Safe and Affordable Housing

The CHNA found that increased safe and affordable housing, including security and maintenance of existing residential units, is needed within the community. The corresponding Implementation Strategy identified this need as one that would not be targeted for (direct) intervention. This decision was based on the following criteria:

- MSH, together with the Mount Sinai Health System, has expertise and resources related to medical services and lacks of core competencies in residential housing;
- Resource constraints dictate interventions than can be implemented; and
- Other community resources are responding to this issue, including the New York City Department of Housing Preservation and Development and the New York City Housing Authority.

A planned activity indirectly related to Safe and Affordable Housing is described below.

Referrals to Community Resources. MSH refers patients to various community resources. As part of the Mount Sinai Health System, integrated resources help MSH respond to patients in need. For example, robust social services can direct patients to community organizations that assist with housing needs.

10. Socio-Economic, Racial, Cultural, Ethnic, and Linguistic Barriers to Care

The 2017 MSH CHNA found that access to care may be limited by residents who do not feel welcomed by providers. Insufficient cultural competence and language limitations are barriers to foreign-born residents. For some U.S.-born residents, barriers may be influenced by real or perceived differences in services based on race, ethnicity, socioeconomic background, sexual orientation, and/or other issues. LGBTQ residents may be especially likely to perceive and/or experience access barriers.

Planned activities to help reduce barriers to care are described below.

Social Work Services at Mount Sinai Hospital. Social Workers are part of the health care team in nearly every part of The Mount Sinai Hospital and its medical practices. Social Workers can help patients and their families during and after hospitalization, including assistance with managing medical care.

Patient and family acceptance, as well as integration within the professional care team, are indicators of the positive impact of this action on the community health need. Local, national, and international recognition of social workers at Mount Sinai are external indicators of success.

Translation Services. MSH provides over the phone and in-person interpreter services, 24 hours a day, at no cost to patients. Included in translation services are sign language interpreters and telecommunication devices for the deaf (TDD). The New York State Patients' Bill of Rights is available in Braille as well as in English and Spanish on closed-circuit television.

Patient Representatives. MSH patient representatives are available to assist patients and family members with any questions, complaints, or concerns regarding health care or services. Patient representatives are also available to provide information regarding patients' rights as well as hospital policies and procedures.

LGBT Services. The Mount Sinai Health System is dedicated to meeting the health care needs of the lesbian, gay, bisexual, and transgender (LGBT) community. In addition to medical and educational services, The Mount Sinai Hospital and the Mount Sinai Health System take an active role in promoting LGBT health equity and access to care, and join with other organizations committed to addressing the needs of the LGBT community.

Center for Transgender Medicine and Surgery. The Mount Sinai Center for Transgender Medicine and Surgery (CTMS) delivers advanced care for trans and gender non-conforming people. The CTMS team is a comprehensive group of providers who have expertise in primary care, hormone therapy, behavioral health support, gender-affirming surgeries, and other supportive services. Thus, patients at CTMS can receive primary care, as well as see specialists in the areas of endocrinology, behavioral health, plastic surgery, urology, gynecology, and more.

11. Substance Abuse

The 2017 MSH CHNA found that substance abuse in the community includes alcohol and multiple illegal substances. Alcohol abuse is evidenced by binge drinking in local bars and opioid abuse disproportionately impacts homeless individuals.

Planned activities to help manage and reduce substance abuse are described below. These activities are in addition to the MSH activities that impact multiple needs.

Health professions education. The health professions education activities of MSH respond to both the current and future community health needs for substance abuse treatment. MSH actively participates in nearly 140 residency and fellowship programs. Current residency and fellowship programs that are especially related to substance abuse services include the following:

- Child and Adolescent Psychiatry Fellowship,
- Geriatric Psychiatry Fellowship,
- Psychiatry Residency,
- Transgender Psychiatry Fellowship Program, and
- Triple Board Residency [Pediatrics, General Psychiatry, and Child and Adolescent Psychiatry].

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai reported \$177,255,733 in costs for health professions education. Continued applications to this and other programs, as well as continued accreditation, are external indicators of the positive impact of this action on the community health need.

Substance Abuse Services. Substance abuse services are available at the hospital campuses, outpatient facilities, and physician practices throughout the community. As part of the Mount Sinai Health System, integrated resources such as electronic health records facilitate the referral of patients to needed services provided by other Mount Sinai hospitals and health professionals. Specific substance abuse services available include ones listed below.

- **Inpatient addiction services.** The Addiction Institute at Mount Sinai provides inpatient treatment and is often the beginning of the recovery process for many patients. Inpatient treatment is designed to help an individual develop the basic skills that they will need to achieve a successful recovery from addiction. Inpatient programs are offered at two Addiction Institute at Mount Sinai (AIMS) inpatient locations, Mount Sinai West and Mount Sinai Beth Israel.
- **Detoxification Services.** Detoxification (Detox) Services at the Addiction Institute at Mount Sinai are treatments for acute withdrawal that require immediate attention. Treatment includes engagement, assessment, motivation, and referral. Detox is the first step to long-term treatment. Specialized detox services to pregnant women are provided.
- **Inpatient rehabilitation services.** Inpatient rehabilitation (inpatient rehab), an intensive treatment modality that provides patients with a 24/7 structured therapeutic setting, is

provided. Inpatient rehab is generally the first step in the recovery process after detox. Patients participating in the inpatient program are put on a routine that includes teaching them how to experience life without drugs or alcohol.

- **Outpatient treatment services.** Outpatient programs are provided as not all individuals require the intensity of inpatient services. Specific outpatient services include evaluation, ambulatory detoxification; outpatient day and evening services; DWI screening, assessment, and referral; brief therapy; and psychiatric services.