

Community Health Needs Assessment

Prepared for

**MOUNT SINAI MORNINGSIDE
MOUNT SINAI WEST**

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 Mount Sinai Morningside & Mount Sinai West 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	19
DEMOGRAPHICS	19
ECONOMIC INDICATORS	28
<i>People in Poverty</i>	28
<i>Household Income</i>	30
<i>Unemployment Rate</i>	32
<i>Insurance Status</i>	34
<i>Crime</i>	39
<i>Housing and Homelessness</i>	41
<i>State of New York and New York City Budget Trends</i>	43
LOCAL HEALTH STATUS AND ACCESS INDICATORS	54
<i>County Health Rankings</i>	54
<i>New York State Department of Health</i>	59
<i>Youth Risk Behavior Surveillance System</i>	75
<i>New York Prevention Agenda 2019-2024</i>	76
<i>New York City Community Health Survey</i>	81
AMBULATORY CARE SENSITIVE CONDITIONS.....	83
<i>Borough/Neighborhood-Level Analysis</i>	83
<i>ACSC Conditions Analysis</i>	86
COMMUNITY NEED INDEX™, SOCIAL VULNERABILITY INDEX, 500 CITIES PROJECT, AND FOOD DESERTS.....	87
<i>Dignity Health Community Need Index</i>	87
<i>Social Vulnerability Index</i>	89
<i>500 Cities Project</i>	94
<i>Food Deserts (Lack of Access to Nutritious and Affordable Food)</i>	97
MEDICALLY UNDERSERVED AREAS AND POPULATIONS	98
HEALTH PROFESSIONAL SHORTAGE AREAS	100
DESCRIPTION OF OTHER FACILITIES AND RESOURCES WITHIN THE COMMUNITY	104
FINDINGS OF THE NYC HEALTH DEPARTMENT COMMUNITY HEALTH ASSESSMENT.....	108

CDC COVID-19 PREVALENCE AND MORTALITY FINDINGS109

PRIMARY DATA ASSESSMENT111

 SUMMARY OF INTERVIEW FINDINGS111

 ISSUES IDENTIFIED BY INTERVIEW PARTICIPANTS112

 ORGANIZATIONS PROVIDING COMMUNITY INPUT.....115

SOURCES116

APPENDIX - ACTIONS TAKEN SINCE PREVIOUS CHNA.....119

EXECUTIVE SUMMARY

Introduction

This community health needs assessment (CHNA) was conducted by Mount Sinai Morningside & Mount Sinai West (“MSM & MSW” or “the hospital”) to identify community health needs and to inform development of an implementation strategy to address identified significant needs.

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

Acronym	Entity
MSM	Mount Sinai Morningside, the campus in the Upper West Side neighborhood, Manhattan
MSW	Mount Sinai West, the campus in the Chelsea and Clinton neighborhood, Manhattan
MSM & MSW	Mount Sinai Morningside & Mount Sinai West, the hospital facility with two campuses in Manhattan

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 MSM & MSW accounts for nearly 50 percent of the hospital’s 2019 inpatient discharges and over 70 percent of the hospitals 2019 Emergency Room visits.

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, MSM & MSW collaborated with the Mount Sinai Health System and its following hospitals: The Mount Sinai Hospital & Mount Sinai Queens, Mount Sinai Beth Israel Hospital & Mount Sinai Brooklyn, and New York Eye & Ear Hospital. CHNAs for these hospitals were developed alongside the MSM & MSW 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.

- The suicide mortality rate for White residents was higher in Manhattan and New York City than the overall state rate (**Exhibit 47**).
- In the CDC's Youth Risk Behavior Surveillance System (YRBSS), respondents in 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 above 11 percent in the neighborhoods of Chelsea – Clinton and Washington Heights - Inwood (**Exhibit 50D**).
- There were many areas designated as Health Professional Shortage Areas for Mental Health in MSM & MSW neighborhoods (**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 populations in Central Harlem-Morningside Heights and Washington Heights-Inwood were greater than the state average (**Exhibit 18**).
- In the 2020 County Health Rankings, Manhattan was among the bottom counties in all of New York for Uninsured residents (**Exhibit 29A**).
- Rates for ambulatory care sensitive conditions (ACSCs) in Central Harlem – Morningside Heights and Washington Heights – Inwood 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 within the community (**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 neighborhood of the MWM & MSW community, the aged 65 and older cohort is expected to grow the most between 2019 and 2024, with a growth rate of 14.7 percent overall (**Exhibit 4**).
- The asthma hospitalization rates for residents aged 65 years or older in Manhattan and New York City were higher than the state average (**Exhibit 39**).
- ACSC discharges were higher for patients aged 65 years and older than any other cohort in the MSM & MSW community (**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, Manhattan ranked in the bottom half of counties in New York State for poor or fair health (**Exhibit 29A**).
- Rates of HIV and AIDS were more than 50 percent greater than the state average in Manhattan and New York City as a whole (**Exhibit 37**).
- Asthma hospitalizations and mortalities were significantly higher in 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 Manhattan indicated that they watched more television than state averages, and respondents were less physically active (**Exhibit 48**).
- The percentage of respondents who were overweight or obese in Washington Heights - Inwood 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 and 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, Manhattan ranked in the bottom half of all New York counties in Physical Environment. Manhattan also ranked in the bottom quartile in Air Pollution – Particulate Matter (**Exhibit 29A**).
- 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, Manhattan 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.

- Rates for ambulatory care sensitive conditions (ACSCs) in Central Harlem-Morningside Heights and Washington Heights-Inwood were comparatively 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 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 25 percent of households in Central Harlem-Morningside Heights and Washington Heights-Inwood had an annual income of less than \$25,000, compared to 20 percent nationwide (**Exhibit 14**).
- Unemployment rates in 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**).
- Manhattan ranked worse than state averages for children in poverty, high school graduation, and income inequality (**Exhibit 29B**).
- A number of ZIP codes in the MSM & MSW 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, including 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 Manhattan than the state and national averages (**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, Manhattan 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.

- Neighborhoods in the MSM & MSW community are racially and ethnically diverse. Over 50 percent of residents of Central Harlem-Morningside Heights were Black, and more than nearly 65 percent of residents in Washington Heights-Inwood were Hispanic or Latino (**Exhibit 6**).
- The populations that are linguistically isolated in the MSM & MSW community were significantly higher than the New York State and national averages (**Exhibit 10**).
- Nearly 32 percent of residents in MSM & MSW neighborhoods 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 Manhattan 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 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 Morningside & Mount Sinai West (MSM & MSW) and how it was determined.

MSM & MSW's community is comprised of 20 ZIP Codes encompassing sections of the borough of Manhattan (**Exhibit 1**). The community is divided into neighborhoods utilized by the New York State Department of Health;⁵ 4 of the 42 neighborhoods in New York City are in the MSM & MSW community.

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

Acronym	Entity
MSM	Mount Sinai Morningside, the campus in the Upper West Side neighborhood, Manhattan
MSW	Mount Sinai West, the campus in the Chelsea and Clinton neighborhood, Manhattan
MSM & MSW	Mount Sinai Morningside & Mount Sinai West, the hospital facility with two campuses in Manhattan

The MSM & MSW community was estimated to have a population of approximately 828,000 persons in 2018.

The community definition was validated based on the geographic origins of discharges from MSM & MSW. In 2019, the community collectively accounted for 47 percent of MSM & MSW's overall inpatient discharges (**Exhibit 1A**), 54 percent of MSM & MSW's New York City inpatient discharges, and 73 percent of MSM & MSW's Emergency Room visits (**Exhibit 1B**).

⁵ 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 Neighborhood 2018, and Inpatient Discharges, 2019

Neighborhood	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Central Harlem-Morningside Heights	182,658	4,977	11.7%	13.3%
Chelsea-Clinton	154,214	3,975	9.4%	10.6%
Upper West Side	219,326	7,817	18.4%	20.8%
Washington Heights-Inwood	271,606	3,375	8.0%	9.0%
Total MSM & MSW Community	827,804	20,144	47.5%	53.7%
Other New York City Discharges		17,383	41.0%	46.3%
Other non-New York City Discharges		4,872	11.5%	
Total Discharges		42,399	100.0%	

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

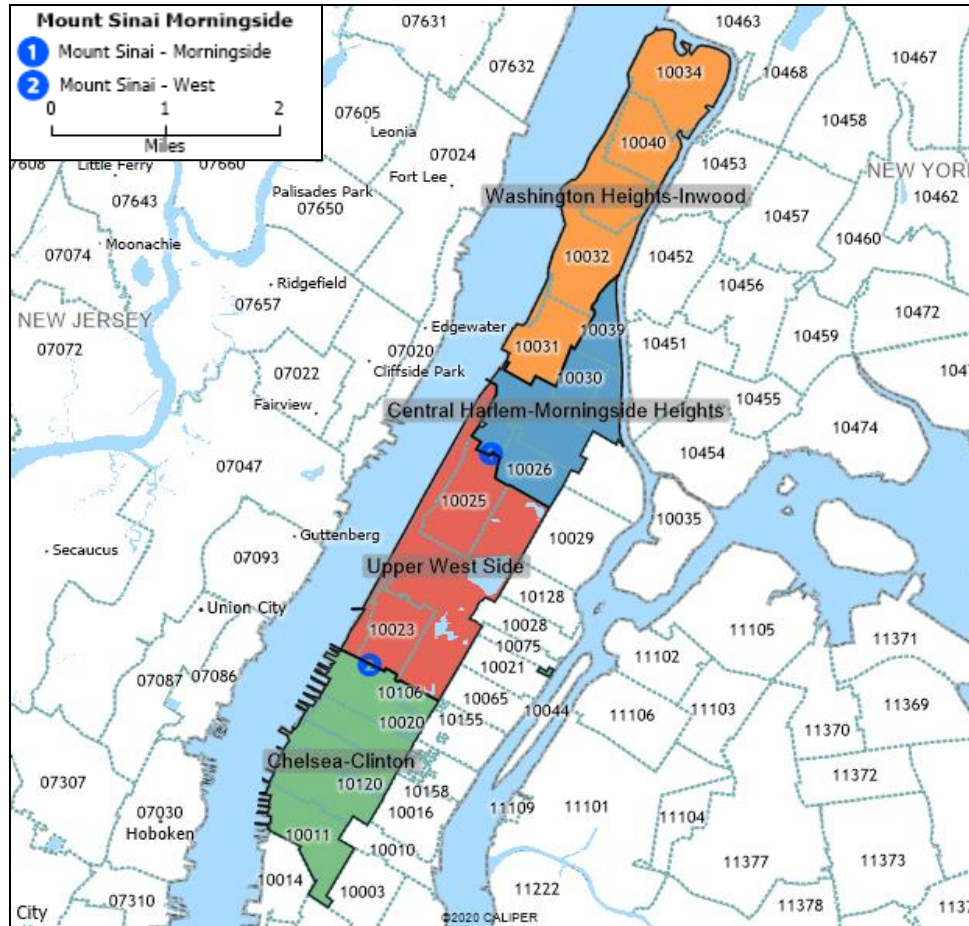
Exhibit 1B: Community Population by Neighborhood 2018, and ER Visits, 2019

Borough	2018 Population	2019 ER Visits	Percent of Total ER Visits	Percent of NYC ER Visits
Central Harlem-Morningside Heights	182,658	23,515	30.8%	32.1%
Chelsea-Clinton	154,214	957	1.3%	1.3%
Upper West Side	219,326	17,957	23.5%	24.5%
Washington Heights-Inwood	271,606	12,898	16.9%	17.6%
Total MSM & MSW Community	827,804	55,327	72.4%	75.4%
Other New York City ER Visits		18,033	23.6%	24.6%
Other non-New York City ER Visits		3,026	4.0%	
Total ER Visits		76,386	100.0%	

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

Exhibit 2 presents a map displaying the four neighborhoods that comprise the MSM & MSW community.

Exhibit 2: MSM & MSW 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 MSM & MSW community.

Demographics

Population characteristics and changes influence health issues in and services needed by communities. A total of 827,804 people were estimated to reside in the MSM & MSW community in 2018, with a projected population of 840,183 residents in 2024.

Exhibit 3 illustrates the total number of residents living in the community by neighborhood, and their distribution by sex and age in 2018.

Exhibit 3: Population by Age and Sex, 2018

Borough	Ages 0-19	Ages 20-44	Ages 45-64	Ages 65+	Total Population
Central Harlem-Morningside Heights	22.8%	43.0%	23.4%	10.8%	182,658
Male	24.0%	44.3%	23.7%	8.0%	82,376
Female	21.8%	42.0%	23.1%	13.1%	100,282
Chelsea-Clinton	9.5%	50.7%	25.4%	14.4%	154,214
Male	8.4%	51.5%	27.9%	12.3%	80,208
Female	10.7%	50.0%	22.7%	16.7%	74,006
Upper West Side	16.6%	37.2%	25.9%	20.3%	219,326
Male	17.5%	36.6%	27.4%	18.5%	98,002
Female	15.8%	37.8%	24.7%	21.7%	121,324
Washington Heights-Inwood	19.1%	43.8%	23.7%	13.4%	271,606
Male	20.3%	46.1%	22.9%	10.7%	134,086
Female	18.0%	41.6%	24.5%	16.0%	137,520
Total MSM & MSW Community	17.5%	43.2%	24.5%	14.8%	827,804
Male	18.0%	44.5%	25.2%	12.4%	394,672
Female	17.0%	42.0%	23.9%	17.0%	433,132

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

In 2018, all neighborhoods except for Chelsea-Clinton had a higher proportion of women in the community. Chelsea & Clinton also had a lower proportion of residents aged 0 to 19 years and a higher proportion of those aged 20 to 44 than any neighborhood in the community.

Exhibit 4 illustrates the total number of residents living in the community by 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	Total	2019 Population				2024 Population					Percent Change 2019-2024				
		0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+
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%
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%
Total	821,540	133,572	233,453	328,916	125,599	840,183	142,590	206,485	347,055	144,053	2.3%	6.8%	-11.6%	5.5%	14.7%

Source: HANYS via the Mount Sinai Health System.

The total population of the community is expected to grow 2.3 percent from 2019 to 2024. The neighborhood of Chelsea & Clinton is expected to grow most rapidly at 4.4 percent.

All neighborhoods are expected to experience an increase in population among the 0-17, 35-64, and 65+ cohorts. Additionally, all neighborhoods are expected to experience a decrease in population in the 18-34 cohort. The population aged 65 and older is expected to experience the highest growth rate in all neighborhoods.

Exhibit 6 indicates the distribution of the population by race in the MSM & MSW community.

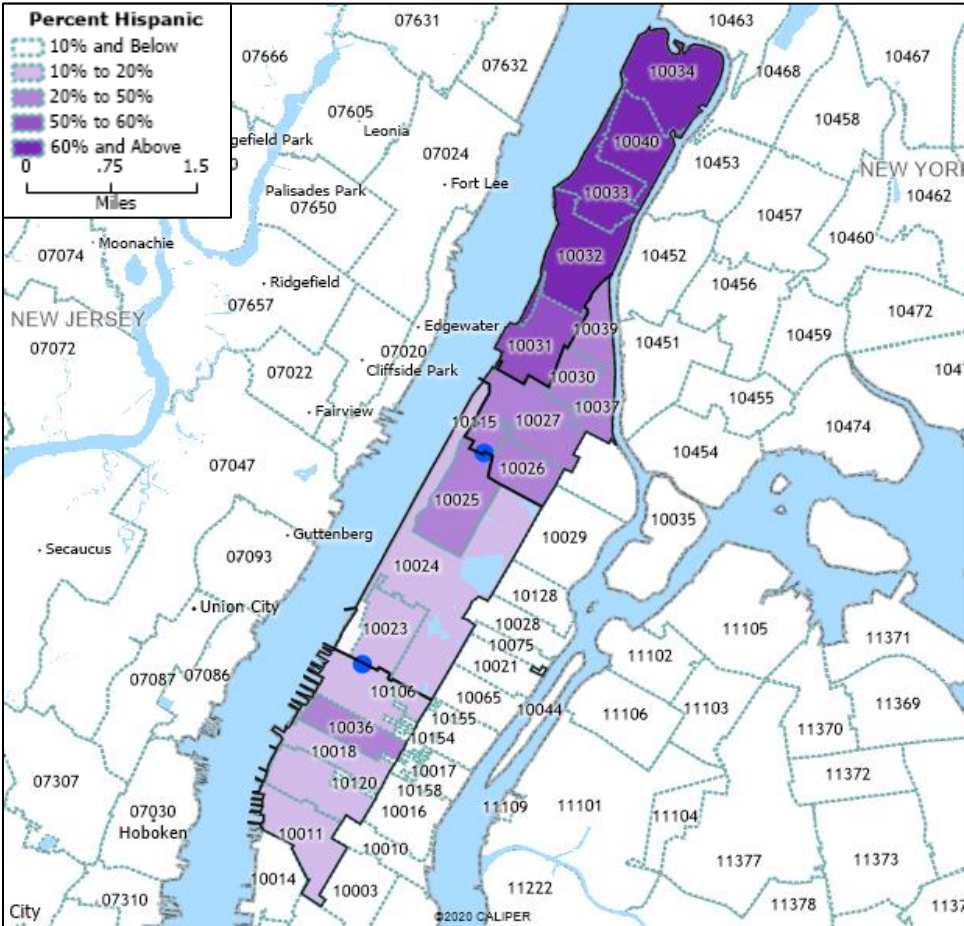
Exhibit 6: Distribution of Population by Race, 2018

Neighborhood	Total Population 2018	White	Black	Asian	Other Race*	Two or More Races	Hispanic or Latino (Any Race)
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%
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%
Total Community	827,804	48.8%	20.5%	8.0%	16.6%	6.0%	33.8%

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

The MSM & MSW community is very diverse. In 2018, 48.8 percent of the population was White, 20.5 percent was Black, 8.0 percent was Asian, and 33.8 percent was Hispanic (or Latino). Identifying diversity within the community is important to assess health disparities and barriers to health care access experienced by different populations, including various racial and ethnic groups.

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



Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS -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
Total MSM & MSW Community	15.1%	10.9%	18.1%
Central Harlem-Morningside Heights	17.6%	11.3%	11.9%
Chelsea-Clinton	5.8%	9.2%	10.0%
Upper West Side	6.2%	9.7%	9.1%
Washington Heights-Inwood	27.4%	12.6%	34.2%
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:

- Central Harlem-Morningside Heights and Washington Heights-Inwood 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. Washington Heights-Inwood was particularly unfavorable.
- Washington Heights-Inwood 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 U.S. average in every neighborhood and the community overall. The rate in Washington Heights-Inwood was particularly high. 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 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
Total MSM & MSW Community	827,804	4.7%	6.0%	2.0%	0.3%	18.2%	0.7%	31.9%
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%
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%
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. Washington Heights-Inwood had the highest percentage of foreign born residents in the community, at 44.9 percent. This neighborhood had a particularly high population of residents born in Latin America. The total MSM & MSW community had 31.9 percent of foreign born residents, higher than the state and national rates.

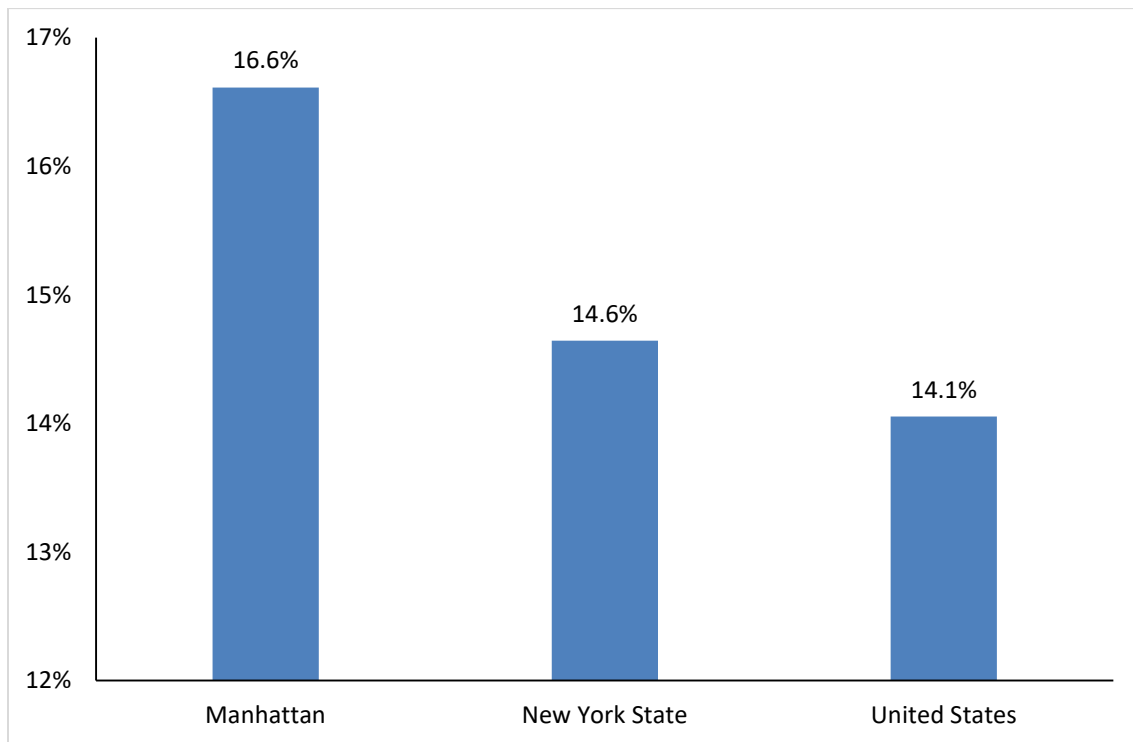
Economic Indicators

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. Manhattan reported a higher poverty rate than the New York State and U.S. averages (**Exhibit 12**).

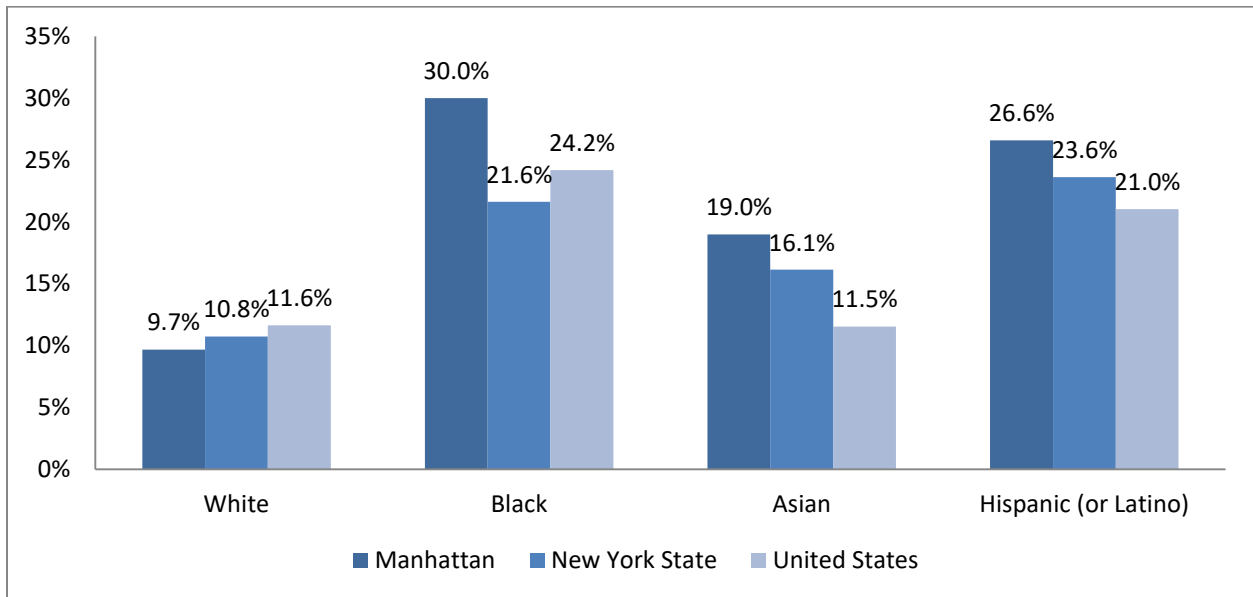
Exhibit 12: Percent of People in Poverty, 2014-2018



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.

In Manhattan, Black, Asian, and Hispanic or Latino populations had higher poverty rates compared to state and national averages. Non-White populations reported higher poverty rates than the White population in nearly all areas. Manhattan showed high disparities between White and non-White poverty rates.

Household Income

Household income is assessed by many public and private agencies to determine household needs for low-income assistance programs. In the community in 2018, 20.8 percent of all households 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

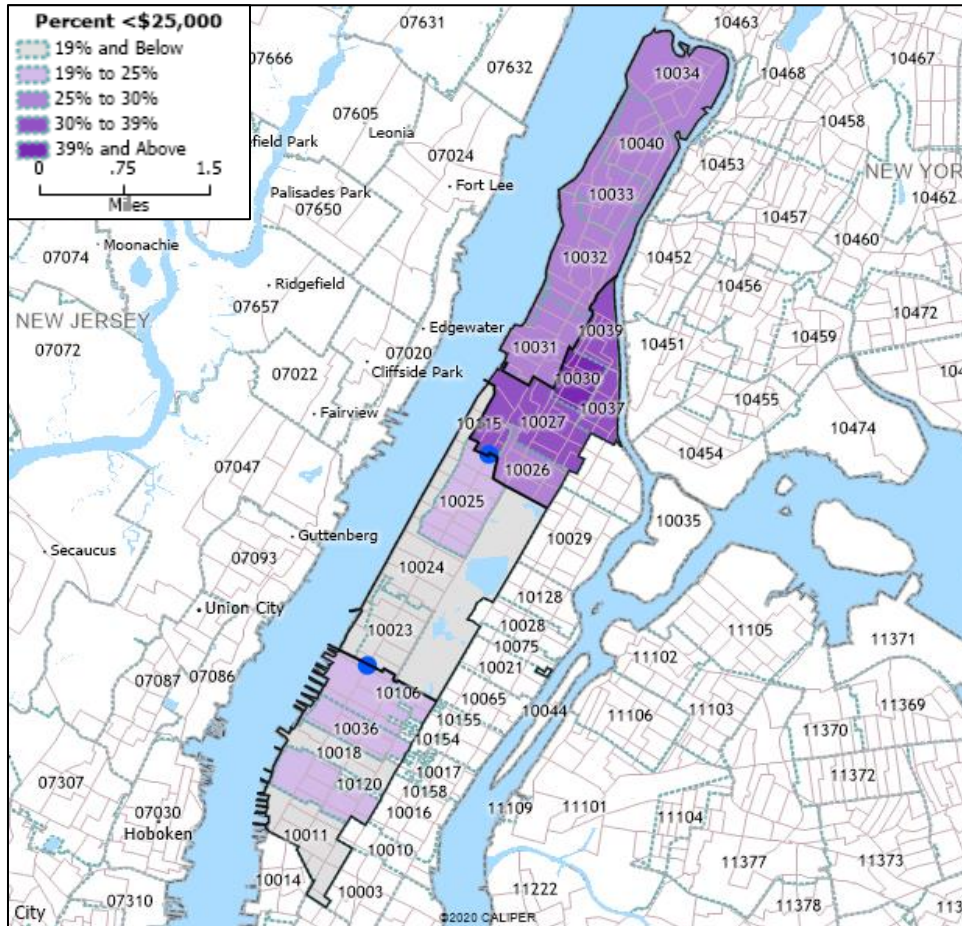
Borough and Neighborhood	Occupied Housing Units	Average Median Income	Percent less than \$25,000 per year	Percent less than \$50,000 per year
Total Community	386,593	87,677	20.8%	35.1%
Central Harlem-Morningside Heights	72,946	46,133	34.2%	52.7%
Chelsea-Clinton	88,265	106,526	18.2%	29.8%
Upper West Side	106,906	112,852	16.3%	27.0%
Washington Heights-Inwood	95,109	52,153	27.1%	48.2%
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 neighborhoods within the community. The percentage of households with incomes below \$25,000 was 34.2 percent in Central Harlem-Morningside Heights, for instance, compared to 16.3 percent in the Upper West Side.

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



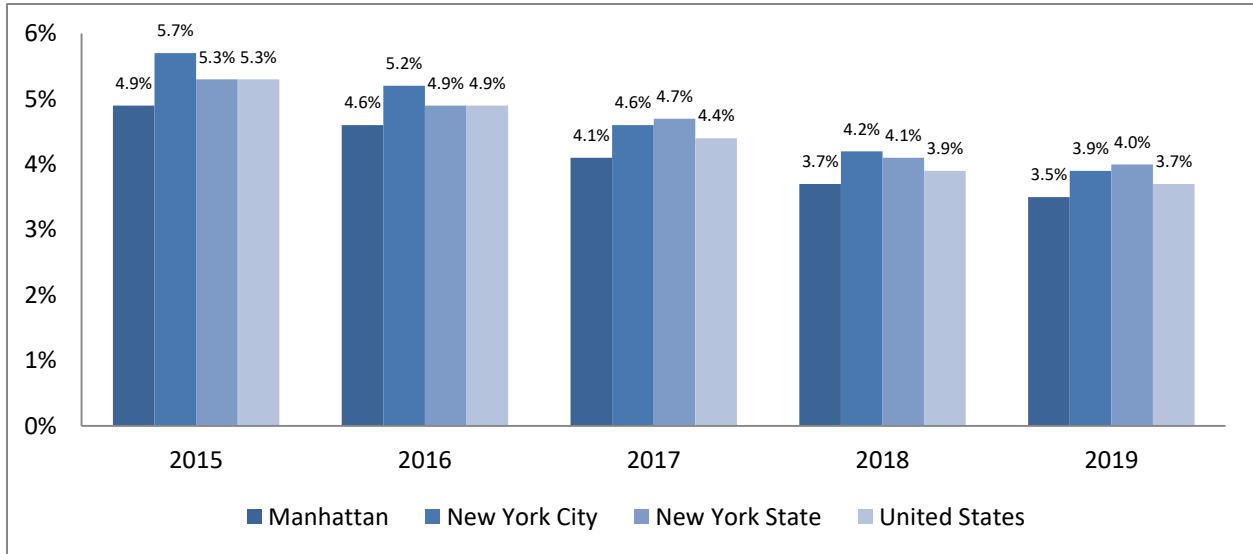
Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS 5-year estimates, 2014-2018.

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 Manhattan, with New York City, New York State, and national averages for comparison

Exhibit 16: Unemployment Rates, 2015-2019

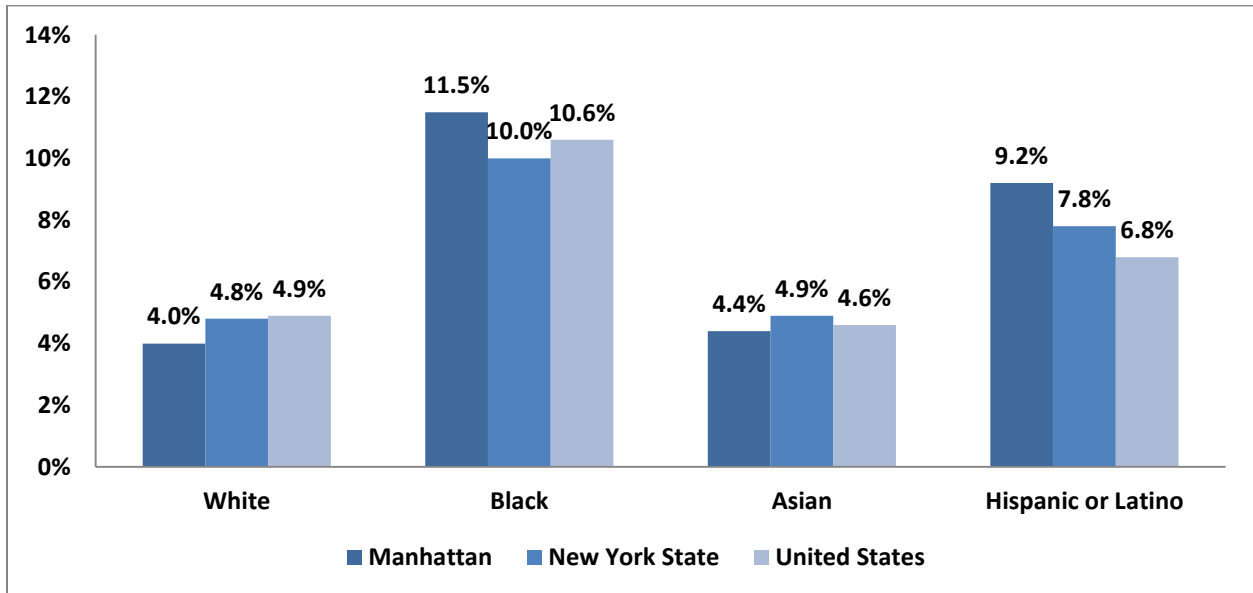


Source: U.S. Bureau of Labor Statistics, 2020.

Since 2015, Manhattan has experienced lower unemployment rates than New York City, New York State, and national averages. All areas show a decrease in unemployment from 2015 to 2019.

Exhibit 17 presents unemployment rates by race and ethnicity in Manhattan, with New York City, New York State, and national averages for comparison.

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



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

Black and Hispanic populations reported higher unemployment rates than other cohorts over the period 2014-2018. Manhattan had higher rates of unemployment in Black and Hispanic populations than state and national averages.

Insurance Status

Exhibit 18 displays the percent of the population in the MSM & MSW 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
Manhattan (as a whole)	5.8%
Central Harlem-Morningside Heights	7.4%
Chelsea-Clinton	4.5%
Upper West Side	3.7%
Washington Heights-Inwood	10.5%
New York	6.5%
United States	9.4%

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

The neighborhood of Washington Heights-Inwood had a higher uninsured rate than both the New York State and United States averages. Central Harlem had a higher rate of uninsured than the New York State and Manhattan averages.

Exhibit 19 portrays the distribution of MSM & MSW 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: MSM & MSW Discharges by Neighborhood and Payer, 2018

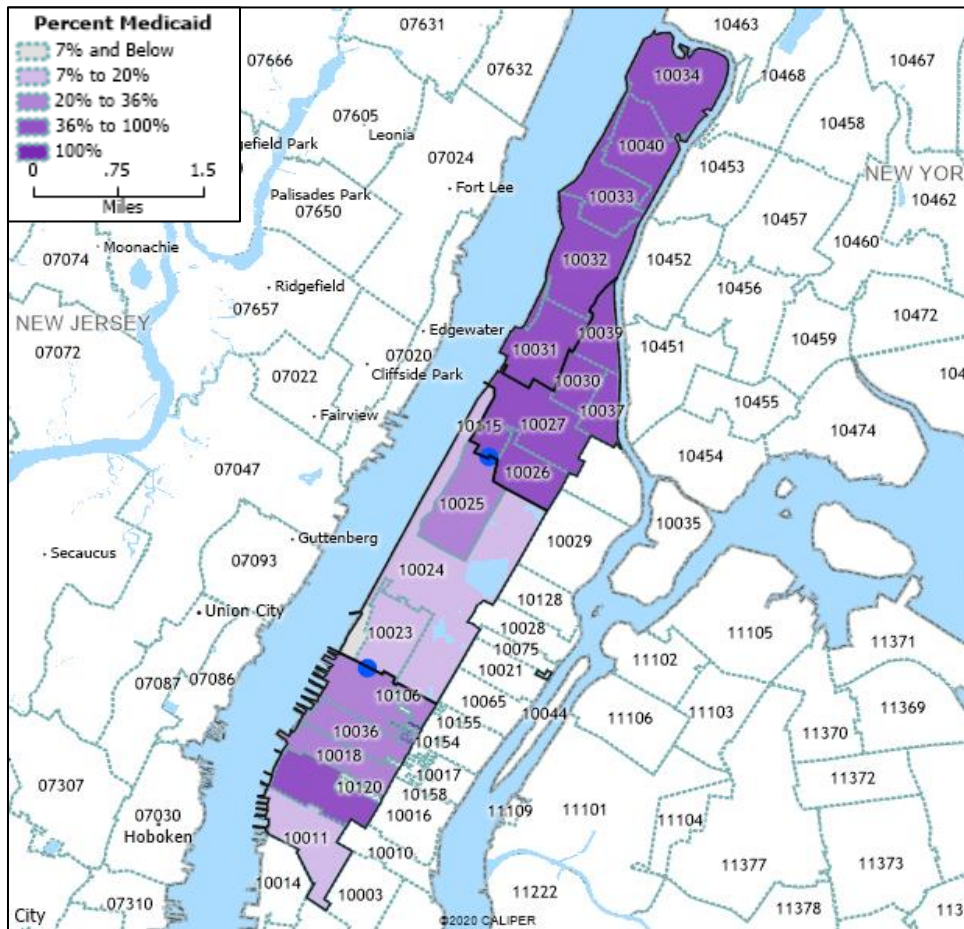
Borough	Private Insurance	Medicaid	Medicare	Self-Pay	Other
Manhattan	27.6%	32.2%	37.5%	1.4%	1.4%
Central Harlem-Morningside Heights	21.2%	41.9%	33.8%	2.0%	1.2%
Chelsea-Clinton	34.4%	27.5%	35.4%	1.8%	0.8%
Upper West Side	39.5%	14.5%	44.3%	0.9%	0.8%
Washington Heights-Inwood	19.8%	40.6%	36.4%	1.0%	2.3%
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 Chelsea-Clinton and the Upper West Side. Medicaid discharges were most prevalent in Central Harlem-Morningside Heights and Washington Heights-Inwood. The percent of Medicare discharges was highest in the Upper West Side. Self-pay discharges were relatively consistent across the community.

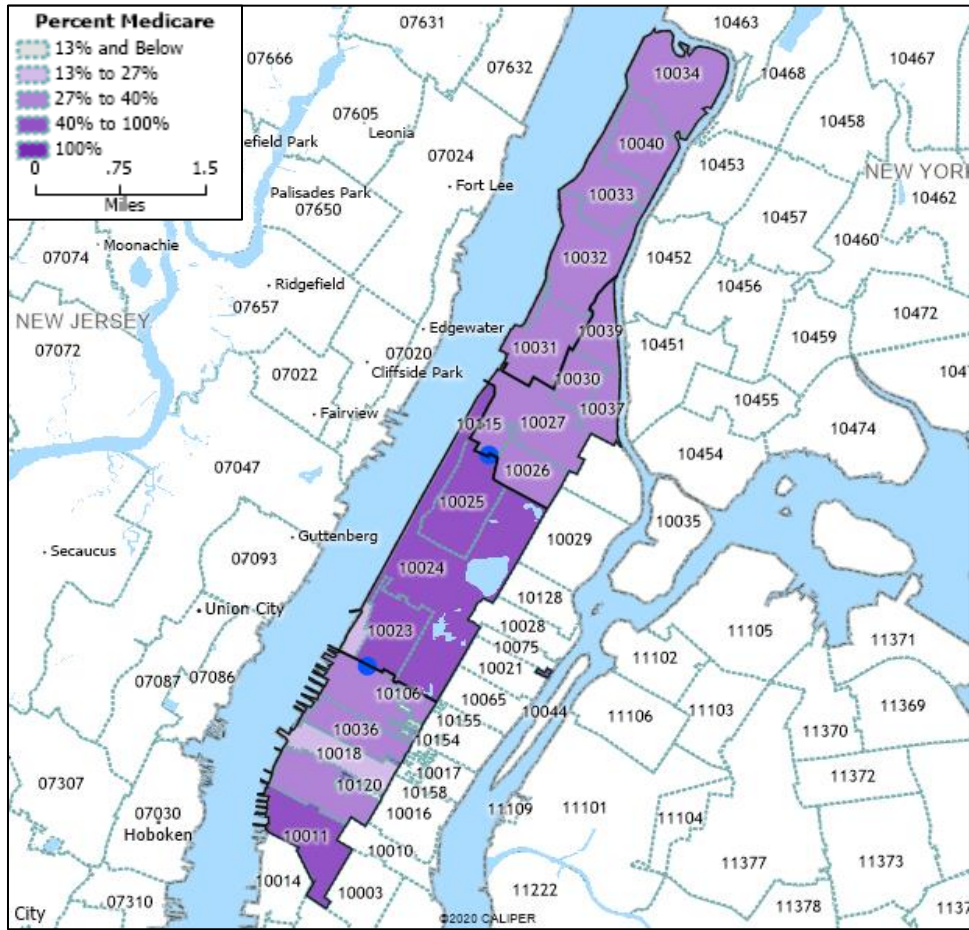
Exhibits 20, 21, and 22 present MSM & MSW community discharges at a ZIP Code level.

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.

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 the state average; dark grey denotes 50 percent worse than the 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
Manhattan	49	5.1	2,273	238.3	2,138	224.2
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 the state average; dark grey denotes 50 percent worse than the state average.

In Manhattan, 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, as well as higher than New York City overall. Young adults residing in Manhattan and New York City overall also exhibited high rates of arrests for property crime.

Housing and Homelessness

According to the U.S. Department of Housing and Urban Development (HUD), approximately 175,000 people in Manhattan lived in HUD-subsidized housing in 2019. **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	
Manhattan	173,331	\$22,520	\$522	\$1,194	39
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 Manhattan than the state and U.S. averages. The average months on the wait list for subsidized housing in Manhattan was higher than state and national averages as well.

The New York City Housing Authority (NYCHA) is responsible for administering the City's Public Housing program and certain Section 8 Programs.⁶ **Exhibit 26A** presents characteristics of NYCHA residents.

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
Manhattan	23.7%	42.4%	10.7%	23.7%	45.3%
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 the New York City average.

Of the NYCHA population, Manhattan residents are more likely to have a head of household that is over the age of 62 than New York City as a whole. Manhattan also reports a high percentage of NYCHA residents who are 62 years and older and living alone.

⁶ 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 26B presents additional characteristics of NYCHA residents.

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
Manhattan	2.2	\$25,871	25.8
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 was 2.2 persons in Manhattan and average gross income is approximately \$25,900. 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, 2017-2019

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 percent 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 2021⁷

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.”⁸ 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;

⁷ New York State Department of the Budget. (2020). *New York State Budget*. Retrieved 2020, from: <https://openbudget.ny.gov/spendingForm.html>

⁸ <https://openbudget.ny.gov/spendingForm.html>

- 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; and
- 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; and
 - The Office for People with Developmental Disabilities decreased by \$1.2 billion, or -38.3 percent.

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.”⁹

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

⁹ New York City Council Finance Division (2020), *Fiscal Year 2021 Adopted Expense Budget, Adjustment Summary / Schedule C*.

- 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.
- **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 2018 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 2018 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 2018 at \$2,550,000, a decrease of \$450,000 from FY 2010.

- **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 2018 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 2018 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 MSM & MSW 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 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, New York County corresponds to the borough of Manhattan.

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

Measure	Manhattan		
	2017	2020	Fell
Health Outcomes	11	6	
Health Factors	11	11	
Length of Life	2	1	
Quality of Life	52	48	
Poor or fair health	55	44	
Poor physical health days	25	31	↓
Poor mental health days	23	15	
Low birthweight	59	57	
Health Behaviors	3	7	↓
Adult smoking	3	4	↓
Adult obesity	1	1	
Food environment index	36	24	
Physical inactivity	2	2	
Access to exercise opportunities	7	1	
Excessive drinking	62	62	
Alcohol-impaired driving deaths	3	6	↓
Sexually transmitted infections	61	61	
Teen births	22	13	
Clinical Care	6	3	
Uninsured	43	48	↓
Primary care physicians	3	3	
Dentists	1	1	
Mental health providers	1	1	
Preventable hospital stays	3	3	
Mammography screening	49	57	↓
Social & Economic Factors	44	31	
High school graduation	59	60	↓
Some college	1	1	
Unemployment	15	6	
Children in poverty	50	40	
Income inequality	62	62	
Children in single-parent households	61	52	
Social associations	13	11	
Violent crime	62	60	
Injury deaths	4	3	
Physical Environment	55	32	
Air pollution - particulate matter	62	61	
Severe housing problems	58	58	
Driving alone to work	1	1	
Long commute - driving alone	62	62	

Source: County Health Rankings, 2020 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 births, 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.

Exhibit 29B provides data for each underlying indicator of the composite categories in the County Health Rankings.¹⁰ 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 borough was shaded to reflect this relationship.

¹⁰County 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	Manhattan	New York State	U.S.
Health Outcomes				
<u>Length of Life</u>	<u>Years of potential life lost before age 75 per 100,000 population</u>	3,925.2	5,456.4	6,900.0
<u>Quality of Life</u>	<u>Percent of adults reporting fair or poor health</u>	15.6%	16.6%	17.0%
	<u>Average number of physically unhealthy days reported in past 30 days</u>	3.6	3.5	3.8
	<u>Average number of mentally unhealthy days reported in past 30 days</u>	4.0	3.9	4.0
	<u>Percent of live births with low birthweight (<2500 grams)</u>	8.3%	7.9%	8.0%
Health Factors				
Health Behaviors				
Adult smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	12.4%	14.1%	17.0%
Adult obesity	Percent of adults that report a BMI >= 30	14.6%	25.5%	29.0%
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	8.3	9.1	7.6
Physical inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	17.5%	24.7%	23.0%
Access to exercise opportunities	Percent of population with adequate access to locations for physical activity	100.0%	93.2%	84.0%
Alcohol-impaired driving deaths	Percent of driving deaths with alcohol involvement	8.9%	20.9%	28.0%
Excessive drinking	Binge plus heavy drinking	24.8%	18.8%	19.0%
Sexually transmitted infections	Chlamydia rate per 100,000 population	1,001.4	588.5	524.6
Teen births	Teen birth rate per 1,000 female population, ages 15-19	11.0	15.1	23.0
Clinical Care				
Uninsured	Percent of population under age 65 without health insurance	6.2%	6.6%	10.0%
Primary care physicians	Ratio of population to primary care physicians	754:1	1219:1	1,330:1
Dentists	Ratio of population to dentists	560:1	1217:1	1,450:1
Mental health providers	Ratio of population to mental health providers	116:1	346:1	400:1
Preventable hospital stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	3,082.0	4,203.0	4,535.0
Mammography screening	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	39.0%	42.0%	42.0%
Flu vaccinations	Percent of fee-for-service Medicare enrollees that receive flu vaccination	46.0%	48.0%	46.0%

- Table Continued -

- Table continued from prior page -

Indicator Category	Data	Manhattan	New York State	U.S.
Social & Economic Factors				
High school graduation	Percent of ninth-grade cohort that graduates in four years	74.5%	81.8%	85.0%
Some college	Percent of adults aged 25-44 years with some post-secondary education	84.1%	68.2%	66.0%
Unemployment	Percent of population age 16+ unemployed but seeking work	3.7%	4.1%	3.9%
Children in poverty	Percent of children under age 18 in poverty	19.7%	18.8%	18.0%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	9.2	5.7	4.9
Children in single-parent households	Percent of children that live in a household headed by single parent	39.6%	34.0%	33.0%
Social associations	Number of associations per 10,000 population	12.9	8.0	9.3
Violent crime	Number of reported violent crime offenses per 100,000 population	586.4	379.0	386.0
Injury deaths	Injury mortality per 100,000	36.2	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	10.8	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	24.4%	23.9%	18.0%
Driving alone to work	Percent of the workforce that drives alone to work	6.0%	53.1%	76.0%
Long commute - driving alone	Among workers who commute in their car alone, the percent that commute more than 30 minutes	66.7%	38.1%	36.0%

Source: County Health Rankings, 2020

Manhattan was more than fifty percent worse than the state averages in chlamydia rate, income inequality, violent crime, injury deaths, and long commute – drive alone. Additionally, Manhattan compared unfavorably for physically unhealthy days, mentally unhealthy days, low birthweight births, excessive drinking, mammography screening, flu vaccinations, high school graduation, children in poverty, children in single-parent households, air pollution, and severe housing problems.

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. 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
Manhattan	129.2	112.8	16.8	3.5	11.0	16.2	21.1	12.3	2.0	4.7	8.0
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.

Manhattan and New York City as a whole were more than 50 percent worse than the state for AIDS mortality.

Exhibit 31A: Cancer Indicators, 2013-2015

Indicator	Manhattan	New York City	New York State
All Cancers			
Incidence per 100,000	461.1	450.0	485.6
Mortality rate per 100,000	135.2	138.9	149.2
Lip, oral cavity, and pharynx cancer			
Incidence per 100,000	11.3	9.7	10.9
Mortality rate per 100,000	2.6	2.2	2.1
Colon and rectum cancer			
Incidence per 100,000	35.9	39.9	39.3
Mortality rate per 100,000	12.2	13.4	13.1
Lung and bronchus cancer			
Incidence per 100,000	48.9	47.8	59.2
Mortality rate per 100,000	29.1	29.4	36.9
Female breast cancer			
Incidence per 100,000	141.7	122.8	132.8
Mortality rate per 100,000	19.3	19.6	19.2
Cervix uteri cancer			
Incidence per 100,000	7.2	9.0	7.8
Mortality rate per 100,000	2.1	2.8	2.2
Ovarian cancer			
Incidence per 100,000	12.8	11.9	12.2
Mortality rate per 100,000	7.3	6.4	7.1
Prostate cancer			
Incidence per 100,000	122.6	126.0	123.4
Mortality rate per 100,000	19.8	20.0	17.8
Melanoma			
Incidence per 100,000	1.2	1.1	1.9
Melanoma cancer mortality	28.3	23.2	22.1

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

Manhattan compared unfavorably in lip, oral cavity, and pharynx cancer incidence and mortality; female breast cancer incidence and mortality; ovarian cancer incidence and mortality; prostate cancer mortality; and melanoma mortality.

Exhibit 31B: Cancer Screening Indicators, 2016

Indicator	Manhattan	New York City	New York State
Screenings			
Percentage of women aged 50-74 years receiving breast cancer screening	78.6	80.4	79.7
Percentage of women (aged 50-74 years) who had a mammogram	75.0	74.1	71.2

Source: New York State Department of Health, 2020.

Manhattan compared unfavorably for breast cancer screening.

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
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	
Hispanic	35.0	12.1	15.6	2.9
Total	48.9	12.2	19.3	2.1
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 Manhattan, Black populations had higher rates of cancer for all indicators compared to overall New York State rates. Hispanic populations had higher rates of cervix uteri cancer mortality. Manhattan overall had higher rates of breast cancer mortality.

Exhibit 33 presents cardiovascular disease-related indicators in the community 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
Manhattan	143.9	19.1	121.9	5.3	14.8
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.

Manhattan compared favorably to the state for all cardiovascular disease indicators. In New York City, heart disease mortality, coronary heart disease mortality, and diabetes mortality were higher than New York State rates.

Exhibit 34 presents cardiovascular disease and diabetes indicators by area, 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
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
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 the state average; dark grey denotes 50 percent worse than the state average

Among racial and ethnic cohorts in Manhattan, the Black population exhibited the highest mortality rates for all indicators, and mortality rates were higher for four of the five indicators

compared to New York State rates. The Manhattan Hispanic population had higher diabetes mortality rate.

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	Manhattan	New York City	New York State
% of pregnant women in WIC who were pre-pregnancy overweight or obese (BMI 25 or higher) [2010-2012]	46.7%	48.1%	50.8%
% obese (95th percentile or higher) children (aged 2-4 years) in WIC [2014-2016]	12.2%	13.0%	13.9%
% of WIC infants breastfeeding at least 6 months [2014-2016]	39.5%	47.5%	40.3%
Age-adjusted % of adults overweight or obese (BMI 25 or higher) [2016]	45.0%	56.5%	60.5%
Age-adjusted % of adults who participated in leisure time physical activity in the past 30 [2016]	79.1%	72.8%	74.0%
Age-adjusted % of adults with physician diagnosed diabetes [2016]	8.6%	11.1%	9.5%
Age-adjusted cardiovascular disease mortality rate per 100,000 [2014-2016]	179.0	222.8	220.2
Age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 [2014-2016]	19.1	21.0	25.6
Total mortality rate per 100,000 [2014-2016]	611.9	628.0	769.8

Source: New York State Department of Health, 2020.

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

Overall, Manhattan compared well to New York State in many of the obesity indicators, except for the percent of WIC infants breastfeeding at least 6 months. New York City compared unfavorably for participating in physical activity, physician diagnosed diabetes, and cardiovascular disease mortality.

Exhibit 36 presents communicable disease incidence rates for the MSM & MSW community.

Exhibit 36: Communicable Disease Indicators

Indicator	Manhattan	New York City	New York State
Pertussis incidence per 100,000 [2014-2016]	2.9	3.4	5.1
Mumps incidence per 100,000 [2014-2016]	3.1	1.5	1.1
Haemophilus influenza incidence per 100,000 [2014-2016]	1.4	1.3	1.5
Hepatitis A incidence per 100,000 2014-2016]	0.9	0.7	0.5
Acute hepatitis B incidence per 100,000 [2014-2016]	0.8	0.6	0.5
Tuberculosis incidence per 100,000 [2014-2016]	4.7	6.8	3.9
Salmonella incidence per 100,000 [2014-2016]	11.9	11.2	11.6
Shigella incidence per 100,000 [2014-2016]	7.6	5.8	3.9
Lyme disease incidence per 100,000 [2014-2016]	20.0	10.7	38.0
% of adults 65 years and older with flu immunization in the past year [2016]	66.3%	59.4%	59.5%
% of adults aged 65 years and older with pneumococcal immunization [2016]	70.3%	61.5%	69.3%

Source: New York State Department of Health, 2020.

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

Manhattan compared unfavorably to state rates for many communicable disease indicators, with incidence rates of mumps, hepatitis A, hepatitis B, and shigella more than 50 percent higher than New York State averages. Manhattan also compared unfavorably to the state in incidence rates for tuberculosis and salmonella.

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	Manhattan	New York City	New York State
Male	2,329.5	1,507.8	798.9
Female	461.6	533.9	298.5
White	913.5	484.5	180.5
Black	3,070.1	1,851.1	1,450.0
Hispanic	1,674.7	1,278.2	1,038.9
Asian/Pacific Islander	237.9	122.3	100.7
Native American	505.3	171.0	72.0
Total	1,333.5	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 the state average; dark grey denotes 50 percent worse than the 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. Rates were particularly high for male, black, and Hispanic cohorts.

As illustrated in **Exhibit 38**, 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. 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
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
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 the state average

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

Exhibit 39: Respiratory-Related Indicators

Indicator	Manhattan	New York City	New York State
Age-adjusted CLRD mortality rate per 100,000 [2014-2016]	17.9	19.5	28.9
Asthma hospitalization rate per 10,000 [2016]	11.6	16.7	10.8
Aged 0-4 years	51.5	61.1	43.5
Aged 5-14 years	29.9	31.4	18.7
Aged 0-17 years	35.7	37.6	23.5
Aged 5-64 years	9.2	13.2	8.7
Aged 15-24 years	7.6	9.1	5.5
Aged 25-44 years	4.1	6.8	5.6
Aged 45-64 years	11.4	15.2	9.2
Aged 65 years or older	10.8	16.4	8.9
Age-adjusted asthma mortality rate per 100,000 [2014-2016]	1.7	1.9	1.3
Age-adjusted % of adults with current asthma [2016]	8.8	8.7	9.6

Source: New York State Department of Health, 2020.

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

Data indicate that asthma is a health problem in Manhattan and New York City. Multiple asthma hospitalization and mortality rates in Manhattan were higher than the state rates. Both Manhattan and New York City benchmark 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]
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
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 the state average; dark grey denotes 50 percent worse than the state average.

Asthma and CLRD hospitalizations were most severe for Black and Hispanic cohorts in Manhattan and New York City overall. The chronic lower respiratory disease mortality rate for Black residents was higher than the state rate.

Exhibits 41 through **46** present data related to maternal and infant health. **Exhibit 41** portrays maternal and infant health indicators for Manhattan, 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**
Manhattan	10.4%	8.0%	4.9%	3.3	32.4
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

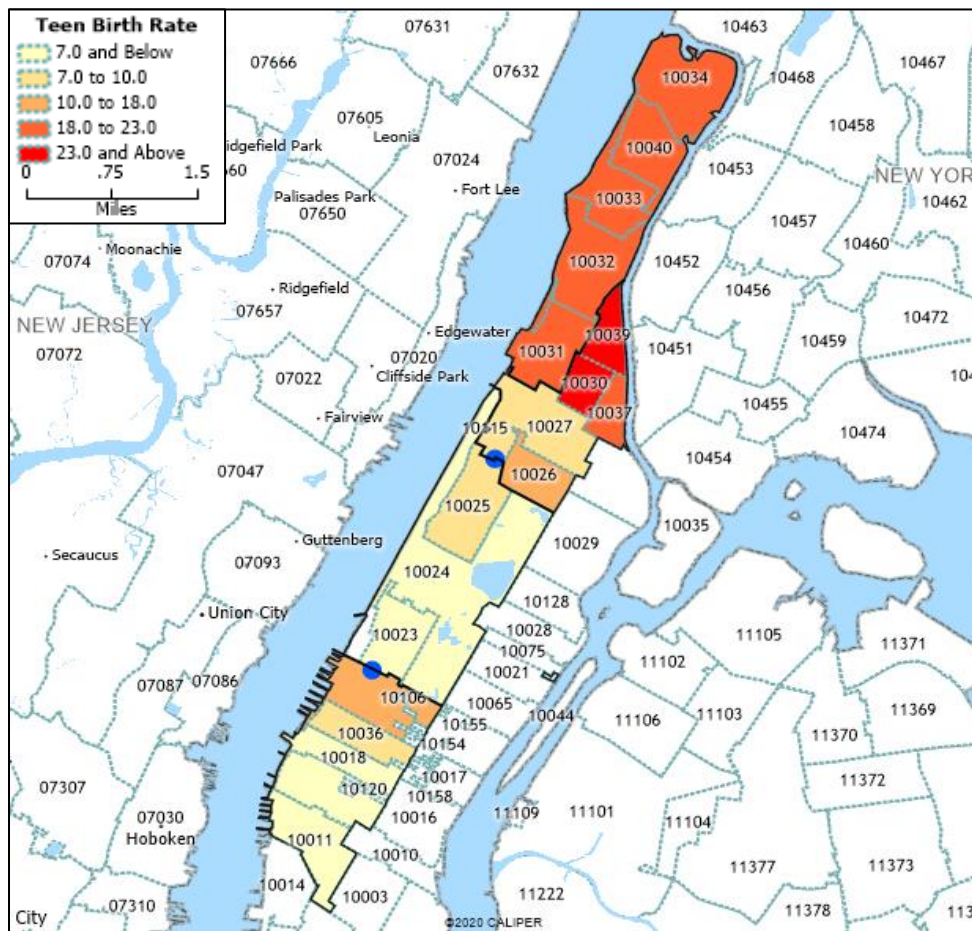
Note: Light grey shading denotes worse than the state average; dark grey denotes 50 percent worse than the state average.

Teen pregnancy (ages 15-19) rates and low birth weight births were higher in Manhattan and New York City, compared to the state. New York City also compared unfavorably to New York State for late or no prenatal care.

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

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, particularly in Central Harlem - Morningside Heights and Washington Heights-Inwood.

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
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
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 the state average; dark grey denotes 50 percent worse than the state average.

In Manhattan and New York City overall, maternal and infant health indicators for Black and Hispanic residents compared unfavorably to state averages. 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 of pregnancy 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 the state average; dark grey denotes 50 percent worse than the 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
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
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 the state average; dark grey denotes 50 percent worse than the state average.

Disparities are evident in the number of poisoning hospitalizations for Black and Hispanic populations in Manhattan from 2014-2016. In Manhattan, the suicide mortality rate was higher for the White population than the overall New York State rate.

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 Manhattan, 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	Manhattan	NYC	New York	United States
Alcohol or Tobacco Use	Binge Drinking (5 or More Drinks in the Past Month)	5.7%	5.0%	10.8%	13.5%
	Consumed At Least One Alcoholic Drink in the Past Month	20.2%	17.9%	27.1%	29.8%
	Smoking in the Past Month	5.0%	5.0%	5.5%	8.8%
Asthma	Ever Been Told They Have Asthma	26.2%	23.9%	24.3%	22.5%
Mental Health	Attempted Suicide One or More Times During the Past 12 Months	9.3%	11.0%	10.1%	7.4%
	Felt Sad (Every Day for 2 weeks) & Stopped Regular Activities due to Sadness	32.7%	31.6%	30.4%	31.5%
Physical Activity	Not Physically Active for 60 Minutes Per Day for 7 Days Per Week	17.5%	18.4%	15.0%	15.4%
	Three or More Hours of TV Per Day on School Days	21.3%	22.6%	20.7%	20.7%
Sexual Behaviors	Ever Had Sexual Intercourse	25.8%	26.8%	30.6%	39.5%
	No Method of Contraception	22.0%	24.1%	15.6%	13.8%
Substance Abuse	Cocaine Use During Lifetime	3.6%	4.1%	4.9%	4.8%
	Heroin Use During Lifetime	2.6%	3.9%	3.9%	1.7%
	Marijuana Use in the Past Month	17.4%	16.2%	18.4%	19.8%
	Ever Injected an Illegal Drug	1.8%	2.7%	3.4%	1.5%
Violence	Physical Fight One or More Times During the Past 12 Months	21.4%	24.4%	20.8%	23.6%
	Electronically Bullied	13.8%	13.3%	17.6%	14.9%
	Bullied on School Property	15.8%	15.5%	21.7%	19.0%
	Did Not Go to School because Felt Unsafe at least Once in the Past 30 days	7.0%	8.6%	9.4%	6.7%
Weight and Nutrition	Did Not Eat Fruit in Past 7 Days	9.0%	9.4%	7.3%	5.6%
	Did Not Eat Breakfast in Past 7 Days	13.1%	15.0%	15.5%	14.1%
	One or More Sugary Drinks Consumed in the Past 7 Days	66.2%	65.5%	63.7%	72.2%
	Overweight or Obese	27.7%	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 the state average; dark grey denotes 50 percent worse than the state average.

Manhattan exhibited comparatively high percentages of asthma, youth who felt sad and stopped regular activities due to sadness, physical inactivity, hours of TV per day on school days, no method of contraception, physical fighting, lack of fruit consumption, and sugary drink consumption.

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 Manhattan's baseline data to the 2024 target.

Manhattan had a large number of indicators that were worse than the 2024 target, including 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	Manhattan	New York City	New York State	NYS Target
Improve Health Status and Reduce Health Disparities					
Percentage of premature deaths (before age 65 years)	2017	22.0%	26.2%	23.4%	22.8%
Premature deaths (before age 65 years), difference in percentages between Black non-Hispanics and White non-Hispanics	2017	15.8	17.8	17.6	17.3
Premature deaths (before age 65 years), difference in percentages between Hispanics and White non-Hispanics	2017	10.3	16.1	16.5	16.2
Age-adjusted preventable hospitalizations rate per 10,000 - Aged 18+ years	2017	107.0	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	172.0	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	47.5	42.8	23.8	23.9
Percentage of adults with health insurance, aged 18-64 years	2017	93.2%		92.0%	97.0%
Adults who have a regular health care provider, age-adjusted percentage	2016	77.7%	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	182.5	159.7	180.6	173.7
Assault-related hospitalizations, rate per 10,000 population	2017	3.7	4.5	3.2	3.0
Assault-related hospitalizations, ratio of rates between Black non-Hispanics and White non-Hispanics	2017	8.9	5.1	5.6	5.5
Assault-related hospitalizations, ratio of rates between Hispanics and White non-Hispanics	2017	3.4	2.7	2.6	2.5
Assault-related hospitalizations, ratio of rates between low-income ZIP Codes and non-low-income ZIP Codes	2017	2.3	2.2	2.9	2.7
Firearm assault-related hospitalizations, rate per 10,000 population	2017	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	4.1	1.9	1.4	1.3
Crash-related pedestrian fatalities, rate per 100,000 population	2016	1.7	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	90.5%	76.4%	45.8%	47.9%

Source: New York State Department of Health, 2020.

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

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

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Manhattan	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	13.1%	13.1%	13.9%	13.0%
Percentage of children and adolescents with obesity	2016-2017	16.5%	20.2%	-	19.4%
Percentage of adults with obesity	2016	16.9%	23.0%	25.5%	24.2%
Percentage of adults with an annual household income less than \$25,000 with obesity	2016	31.9%	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	33.1%	30.4%	31.7%	28.5%
Percentage of adults with an annual household income less than \$25,000 with perceived food security	2016	54.7%	53.2%	55.8%	61.4%
Percentage of adults who participate in leisure-time physical activity	2016	79.7%	72.4%	73.7%	77.4%
Percentage of adults with disabilities who participate in leisure-time physical activity	2016	63.6%	57.4%	56.2%	61.8%
Percentage of adults who participate in leisure-time physical activity, aged 65+ years	2016	76.4%	70.1%	69.0%	75.9%
Prevalence of cigarette smoking among adults	2016	9.6%	11.5%	14.2%	11.0%
Percentage of cigarette smoking among adults with income less than \$25,000	2016	15.1%	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	60.2%	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	67.1%	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	70.9%	65.8%	64.2%	67.4%
Asthma emergency department visits, rate per 10,000, aged 0-17 years	2017	240.4	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	58.0%	57.0%	57.0%	59.0%
Percentage of adults with hypertension who are currently taking medicine to manage their high blood pressure	2016	75.4%	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	9.1%	13.0%	10.1%	10.6%

Source: New York State Department of Health, 2020.

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

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

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Manhattan	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	69.3%	76.0%	73.3%	80.6%
Percentage of women with a preventive medical visit in the past year, aged 45+ years	2016	80.7%	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	26.6%	34.0%	35.3%	38.1%
Maternal mortality, rate per 100,000 live births	2015-2017	21.2	21.7	18.9	16.0
Infant mortality, rate per 1,000 live births	2017	3.2	4.2	4.5	4.0
Percentage of births that are preterm	2017	8.4%	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	3.8	4.4	10.1	9.1
Percentage of infants who are exclusively breastfed in the hospital among all infants	2017	62.0%	42.7%	47.3%	51.7%
Percentage of infants who are exclusively breastfed in the hospital among Hispanic infants	2017	37.5%	34.9%	35.6%	37.4%
Percentage of infants who are exclusively breastfed in the hospital among Black non-Hispanic infants	2017	43.2%	33.9%	33.9%	38.4%
Percentage of infants supplemented with formula in the hospital among breastfed infants	2017	35.3%	54.2%	46.6%	41.9%
Percentage of infants enrolled in WIC who are breastfed at 6 months among all WIC infants	2017	41.3%	0.0%	42.0%	45.5%
Suicide mortality among youth, rate per 100,000, aged 15-19 years	2015-2017		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	71.7%	65.0%	67.0%	73.9%
Percentage of residents served by community water systems that have optimally fluoridated water	2017	100.0%	100.0%	70.8%	77.5%

Source: New York State Department of Health, 2020.

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

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

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Manhattan	New York City	New York State	NYS Target
Promote Well-Being and Prevent Mental and Substance Use Disorders					
Opportunity Index Score	2018	63.3	-	56.9	59.2
Frequent mental distress during the past month among adults, age-adjusted percentage	2016	9.8	10.3	10.7	10.7
Economy Score	2018	51.6	-	50.8	52.3
Community Score	2018	71.4	-	57.9	61.3
Binge drinking during the past month among adults, age-adjusted percentage	2016	22.4%	17.3%	18.3%	16.4%
Overdose deaths involving any opioids, age-adjusted rate per 100,000 population	2017	11.0	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	181.0	175.8	378.7	415.6
Opioid analgesic prescriptions for pain, age-adjusted rate per 1,000 population	2018	216.0	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	37.4	38.2	62.1	53.3
Percentage of adults who have experienced two or more adverse childhood experiences (ACEs)	2016	35.0%	34.6%	35.6%	33.8%
Suicide mortality, age-adjusted rate per 100,000 population	2015-2017	7.4	5.9	8.0	7.0

Source: New York State Department of Health, 2020.

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

Exhibit 50A summarizes access indicators for MSM & MSW 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
Manhattan	16.7%	17.0%	7.7%	8.7%	15.6%
Central Harlem - Morningside Heights	18.0%	19.5%	6.9%	9.7%	16.2%
Chelsea - Clinton	6.7%	16.6%	12.6%	8.1%	22.6%
Upper East Side	5.7%	13.3%	3.6%	7.5%	10.5%
Washington Heights - Inwood	34.4%	16.0%	12.0%	9.1%	18.8%
New York City	23.8%	16.1%	11.8%	10.3%	15.2%

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

Residents of Central Harlem - Morningside Heights are more likely to have Medicare and less likely to have a Primary Care Provider (PCP) than City residents overall. Residents of Chelsea-Clinton are more likely to have Medicare and be uninsured, and less likely to have a PCP than City residents overall. Residents of Washington Heights - Inwood are more likely to have Medicaid and be uninsured, and less likely to have a PCP than City residents overall.

Exhibit 50B summarizes chronic conditions within MSM & MSW 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
Manhattan	4.6%	23.9%	7.3%	44.6%
Central Harlem - Morningside Heights	1.9%	37.4%	11.9%	53.6%
Chelsea - Clinton	3.7%	18.3%	4.5%	37.4%
Upper West Side	1.1%	20.1%	2.3%	42.6%
Washington Heights - Inwood	7.2%	32.8%	12.1%	61.3%
New York City	4.3%	28.0%	11.5%	57.3%

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

Residents of Central Harlem - Morningside Heights are more likely to have ever had high blood pressure and ever told they have diabetes and City residents overall. Residents of Washington Heights – Inwood are more likely to have ever been told they have asthma, ever had high blood pressure, ever told they have diabetes, and be overweight and obese than City residents overall.

Exhibit 50C summarizes health behaviors within MSM & MSW 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**
Manhattan	25.1%	12.0%	16.7%	16.6%	10.0%
Central Harlem - Morningside Heights	25.9%	16.9%	26.5%	32.7%	11.5%
Chelsea - Clinton	33.2%	12.5%	18.6%	10.0%	8.7%
Upper West Side	24.7%	14.0%	8.5%	16.2%	13.5%
Washington Heights - Inwood	19.3%	12.2%	24.5%	25.1%	16.7%
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

Residents of Central Harlem - Morningside Heights are more likely binge drink, smoke, not exercise in the last 30 days, and consume sugary beverages than City residents overall. Residents of Chelsea - Clinton are more likely binge drink. Residents of the Upper West Side are more likely to binge drink, smoke, and not consume fruits and/or vegetables. Residents of Washington Heights – Inwood are more likely to binge drink, consume sugary beverages, and not consume fruits and/or vegetables.

Exhibit 50D summarizes mental health indicators within MSM & MSW neighborhoods.

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

Borough and Neighborhood	Current Depression	No mental health treatment (among those with depression)
Manhattan	9.8%	45.0%
Central Harlem - Morningside Heights	5.3%	53.4%
Chelsea - Clinton	11.3%	58.2%
Upper West Side	8.2%	37.8%
Washington Heights - Inwood	12.7%	50.4%
New York City	9.3%	57.3%

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

Residents of Chelsea - Clinton are more likely to report current depression and have no mental health treatment than City residents overall. Residents of Washington Heights – Inwood are more likely to report depression.

Ambulatory Care Sensitive Conditions

This section examines the frequency of discharges for Ambulatory Care Sensitive Conditions (ACSCs) from MSM & MSW’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.”¹¹ 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 MSM & MSW community that were for ACSCs, by payer.

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

Neighborhood	Private	Medicaid	Medicare	Self-Pay / Other	Total
Central Harlem-Morningside Heights	5.2%	9.4%	16.5%	3.7%	11.5%
Chelsea-Clinton	0.0%	5.0%	10.9%	0.0%	6.2%
Upper West Side	0.5%	4.6%	9.8%	0.0%	6.3%
Washington Heights-Inwood	3.8%	8.9%	16.9%	0.0%	11.4%
Community Total	2.1%	7.8%	13.7%	1.0%	9.2%

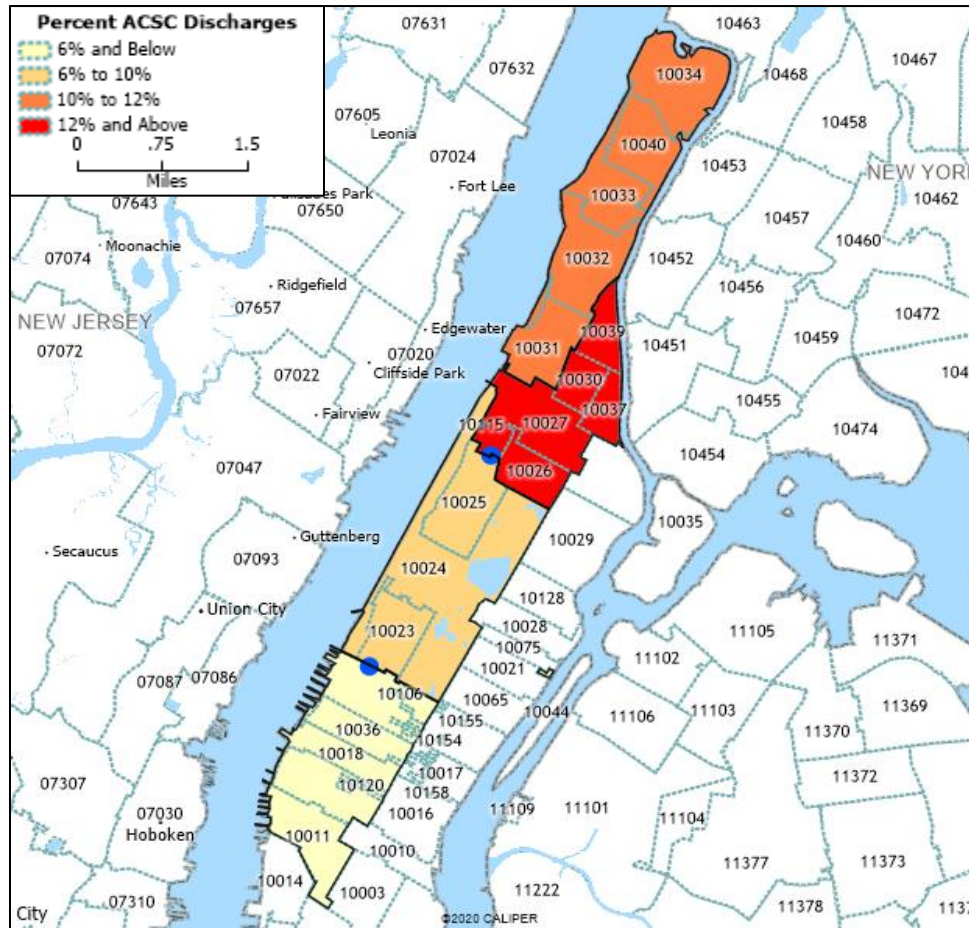
Source: DataGen®, Inc., 2020

The table indicates that 9.2 percent of adult discharges in the community were for ACSCs in 2019. Medicare patients had the highest proportions of discharges for ACSCs, and Central Harlem – Morningside Heights and Washington Heights – Inwood had higher proportions among community neighborhoods.

¹¹Agency 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 percentage of adult discharges from all hospitals in the community that were for ACSCs, by neighborhood.

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



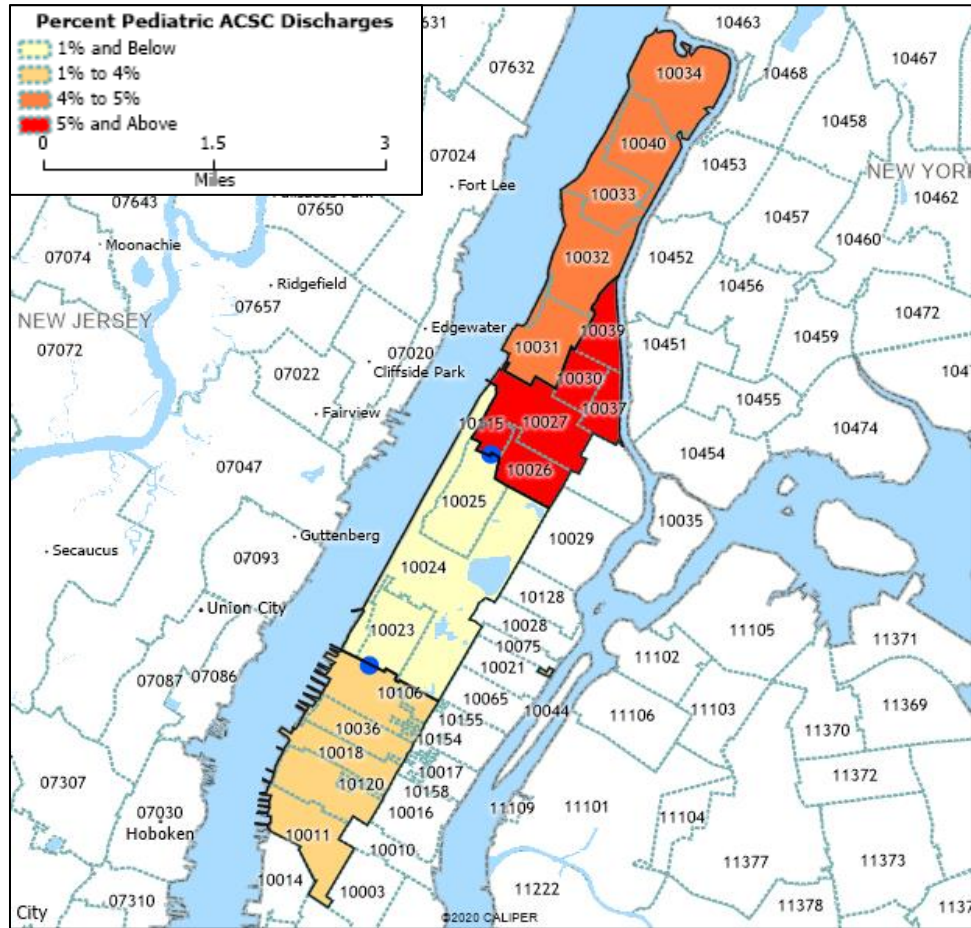
Sources: Caliper Maptitude (2020) and DataGen®, Inc., 2020

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 adult discharge percentages were higher in Central Harlem – Morningside Heights and Washington Heights – Inwood.

Exhibit 52B illustrates the percentage 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.

The ACSC pediatric discharge percentages were also higher in Central Harlem – Morningside Heights and Washington Heights – Inwood.

ACSC Conditions Analysis

Exhibit 53 displays the frequency and percentage of all hospital discharges of residents in the MSM & MSW 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 MSM & MSW 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%	1.3%	29.6%	69.1%	2,334
COPD or Asthma in Older Adults	0.0%	0.0%	49.0%	51.0%	1,184
Diabetes Long-Term Complications	0.0%	5.5%	45.7%	48.8%	886
Urinary Tract Infection	0.0%	3.4%	10.4%	86.1%	498
Hypertension	0.0%	2.7%	40.7%	56.6%	489
Community-Acquired Pneumonia	0.0%	5.7%	24.2%	70.2%	459
Diabetes Short-Term Complications	0.0%	38.8%	37.7%	23.5%	366
Pediatric Asthma	100.0%	0.0%	0.0%	0.0%	301
Uncontrolled Diabetes	0.0%	4.8%	20.3%	74.9%	291
Lower-Extremity Amputation - Patients with Diabetes	0.0%	0.0%	28.0%	72.0%	118
Asthma in Younger Adults	0.0%	100.0%	0.0%	0.0%	76
Pediatric Gastroenteritis	100.0%	0.0%	0.0%	0.0%	43

Source: DataGen®, Inc., 2020

The top five ACSC conditions in the MSM & MSW community by number of discharges were heart failure, COPD or asthma in older adults, diabetes long-term complications, urinary tract infection, and hypertension. 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.¹² The index is based on five social and economic indicators:

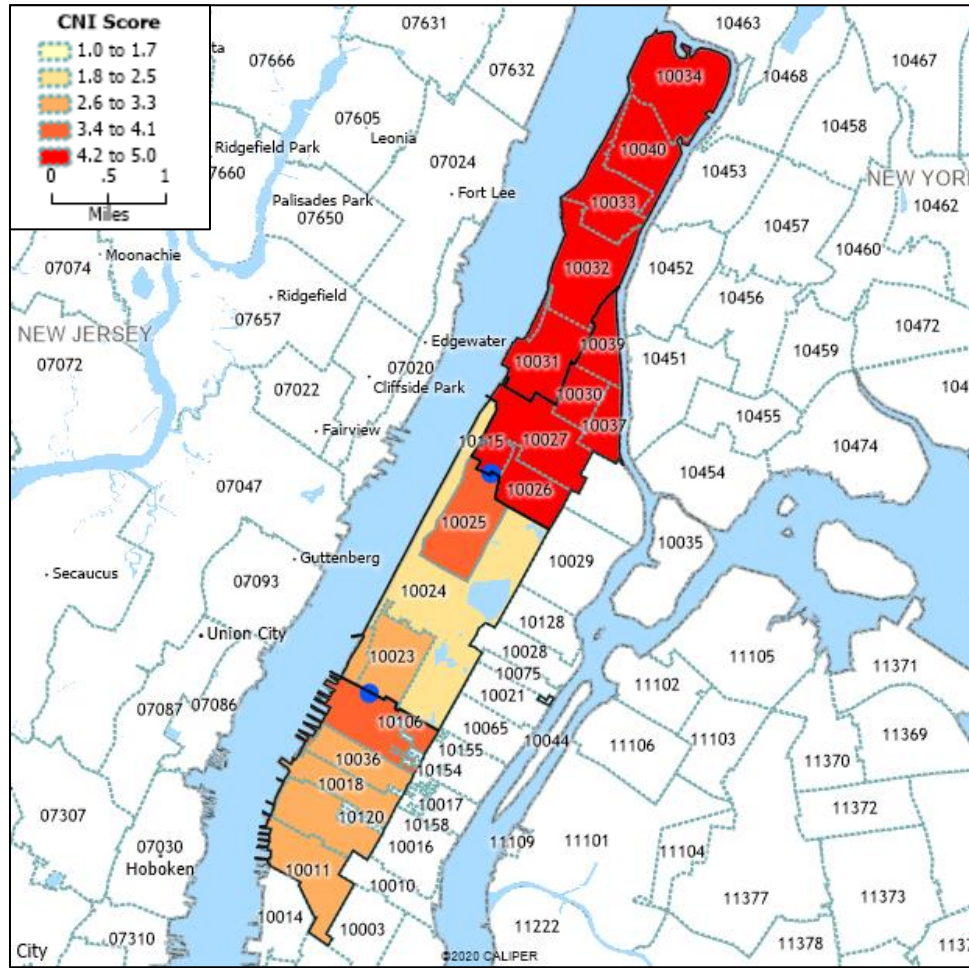
- The percentage of elders, children, and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured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

¹²Dignity 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 MSM & MSW 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. Each ZIP Code in Washington Heights – Inwood and Central Harlem – Morningside Heights received a score in the “Highest Need” category (at least 4.2).

Social Vulnerability Index

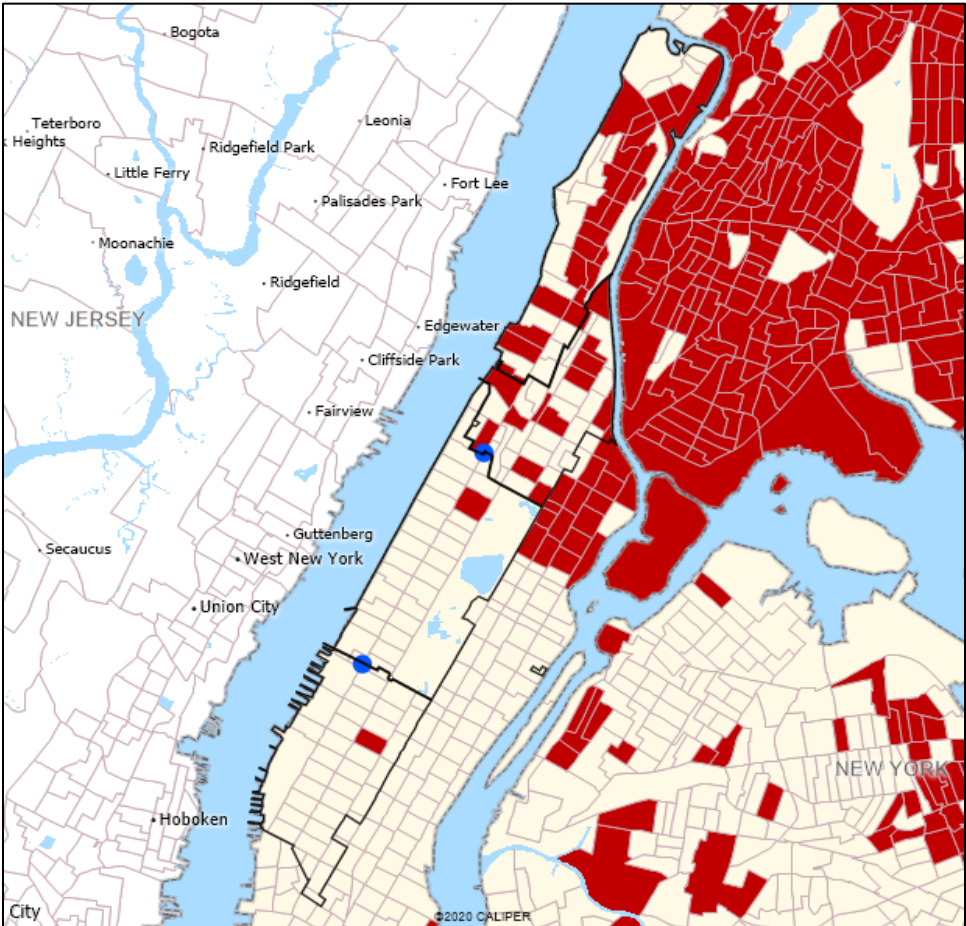
The CDC has developed the *Social Vulnerability Index* (CDC SVI) that assesses the “potential negative effects on communities caused by external stresses on human health.”¹³ The CDC SVI is determined from fifteen variables reported by the U.S. Census Bureau. Variables are grouped into the following four 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 the MSM & MSW community.

¹³ CDC. Social Vulnerability Index. Retrieved from <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

Exhibit 55A: Top Quartile Census Tracts for Socioeconomic Vulnerability

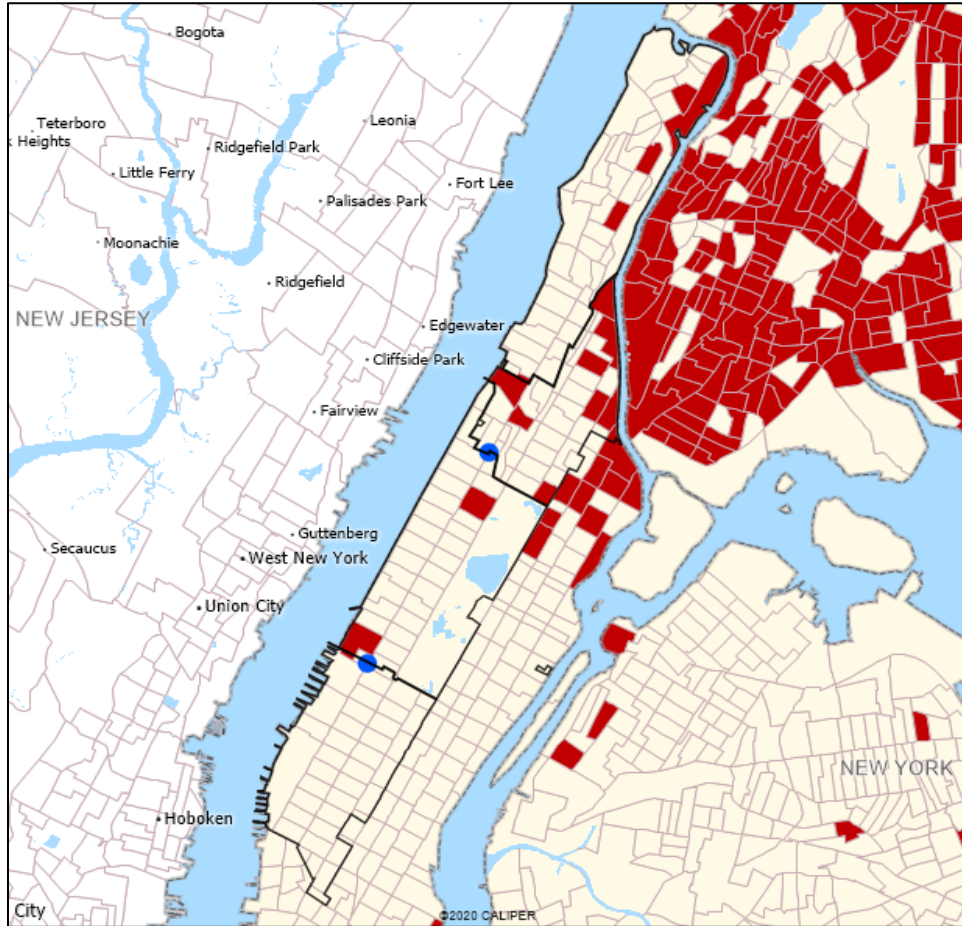


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts in the top quartile for socioeconomic vulnerability are present throughout the community, with concentrations in Washington Heights – Inwood and Central Harlem – Morningside Heights.

Exhibit 55B identifies the top quartile of CDC SVI for household vulnerability for census tracts in the MSM & MSW community.

Exhibit 55B: Top Quartile Census Tracts for Household Vulnerability

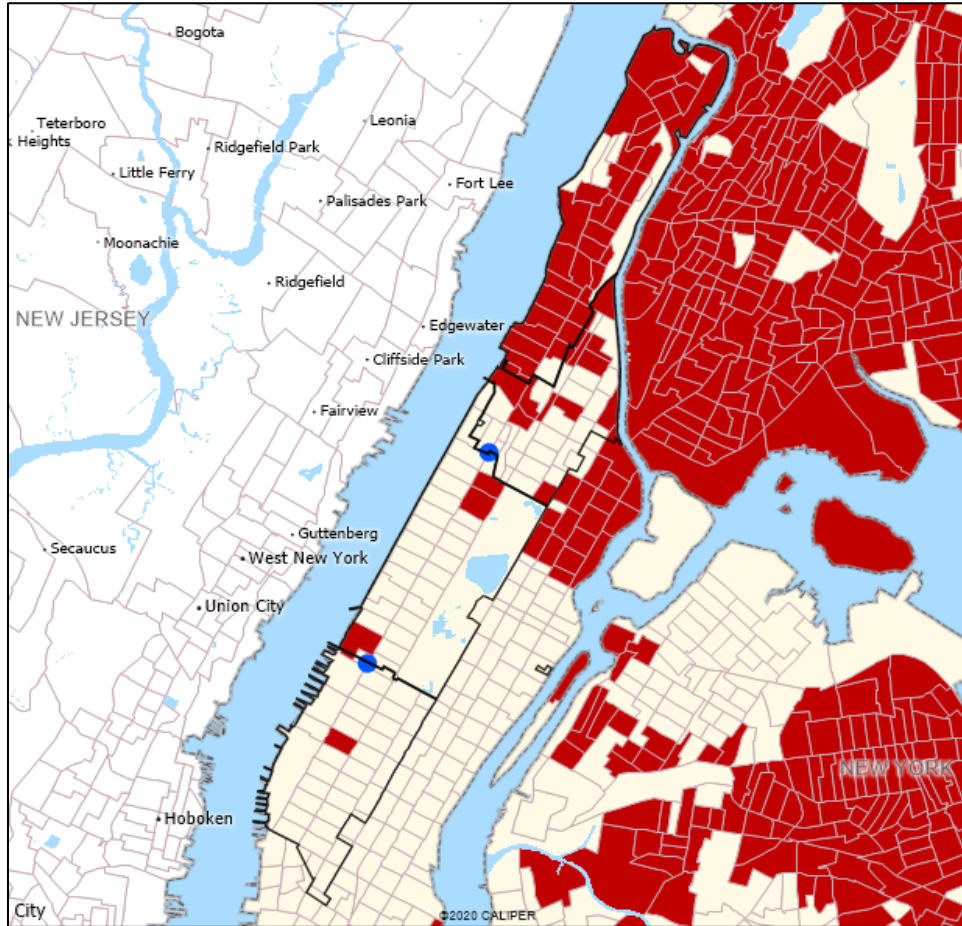


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts in the top quartile for household vulnerability are present throughout the community, with concentrations in Washington Heights – Inwood and Central Harlem – Morningside Heights.

Exhibit 55C identifies the top quartile of CDC SVI for minority vulnerability for census tracts in the MSM & MSW community.

Exhibit 55C: Top Quartile Census Tracts for Minority Vulnerability

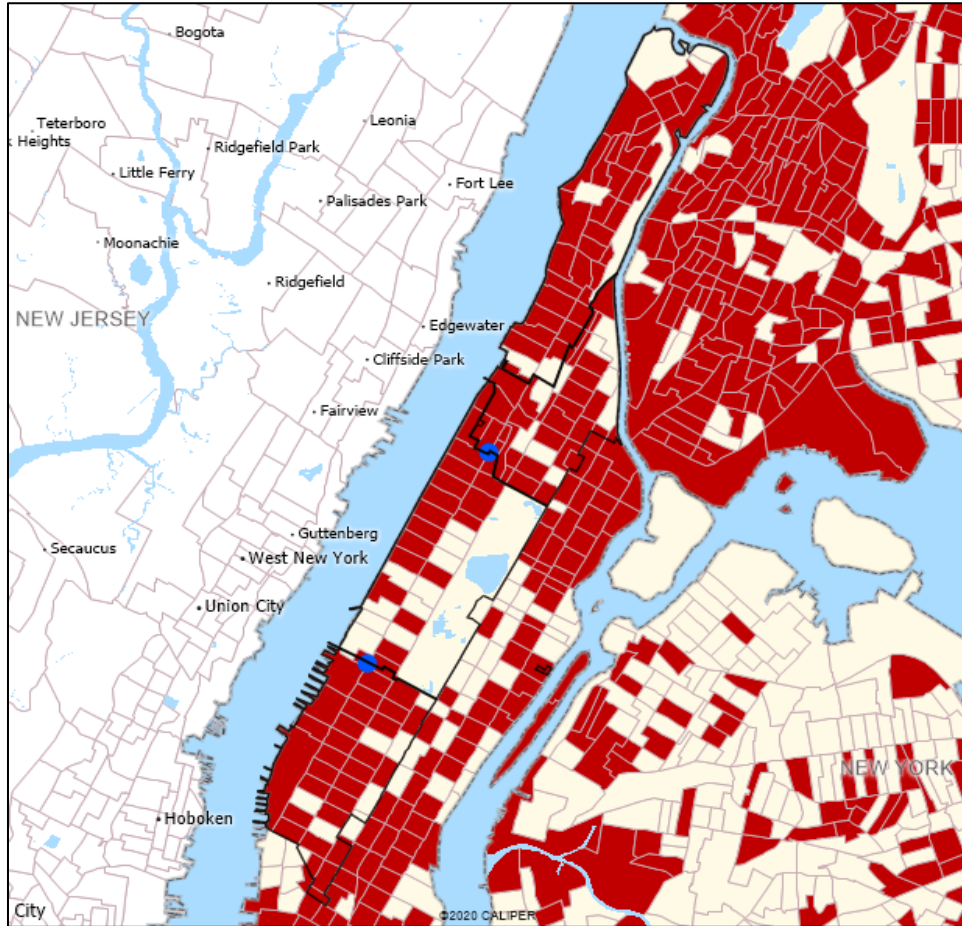


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts in the top quartile for minority vulnerability are present throughout the community, with concentrations in Washington Heights – Inwood and Central Harlem – Morningside Heights.

Exhibit 55D identifies the top quartile of CDC SVI for housing vulnerability for census tracts in the MSM & MSW community.

Exhibit 55D: Top Quartile Census Tracts for Housing Vulnerability



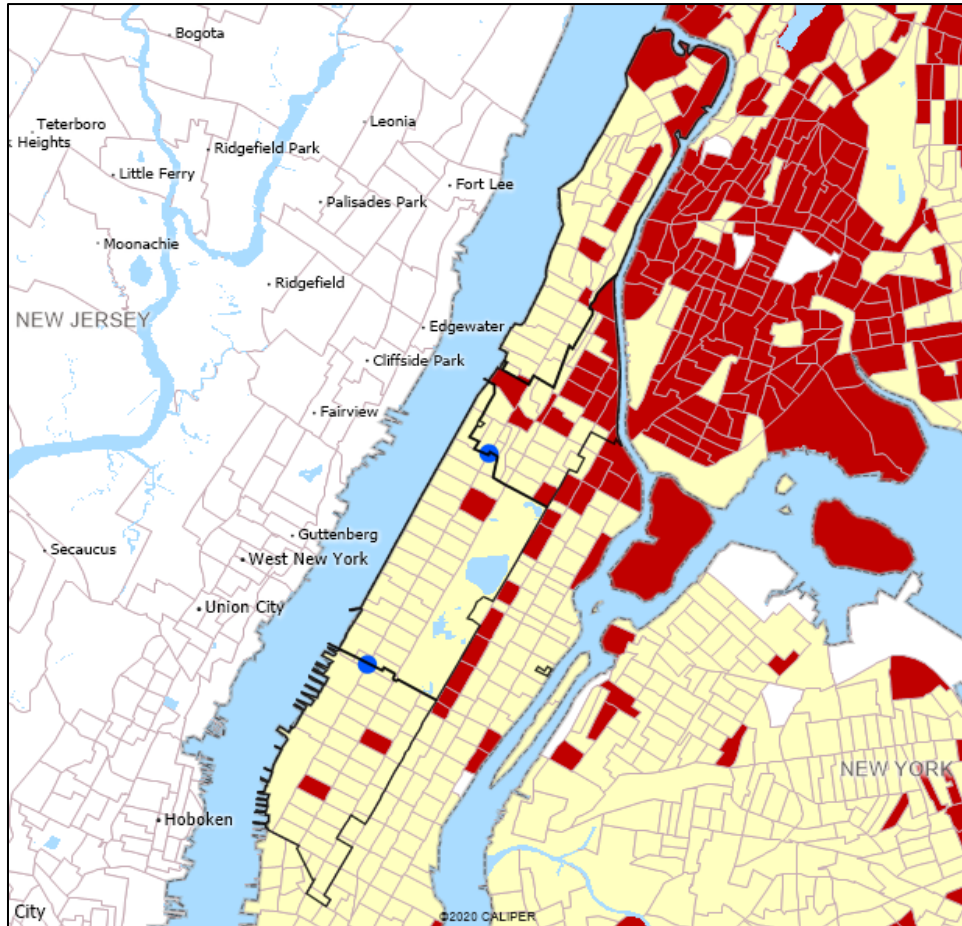
Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts in the top quartile for housing vulnerability are present throughout the community, with concentrations in all four community neighborhoods.

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

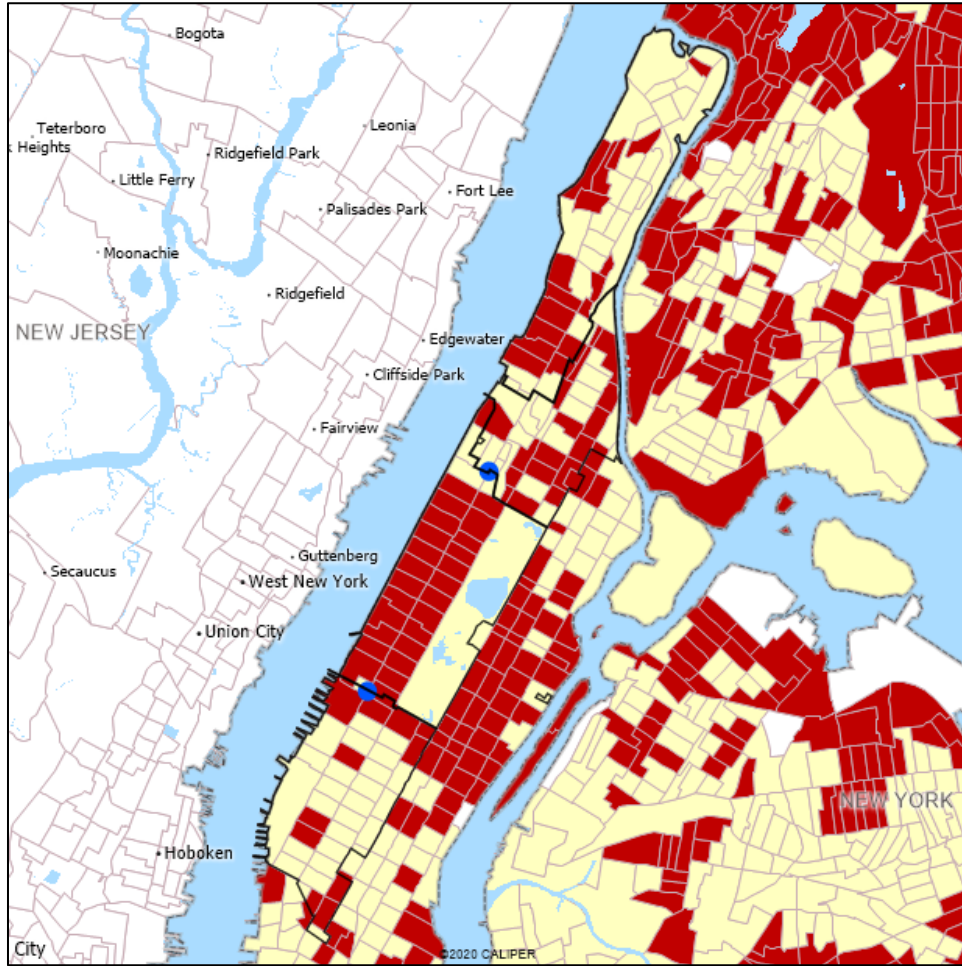


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts with unfavorable health outcomes are present throughout the community, with concentrations in Washington Heights – Inwood and Central Harlem – Morningside Heights.

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

Exhibit 56B: Locations of Unfavorable Prevention Indicators, 2019

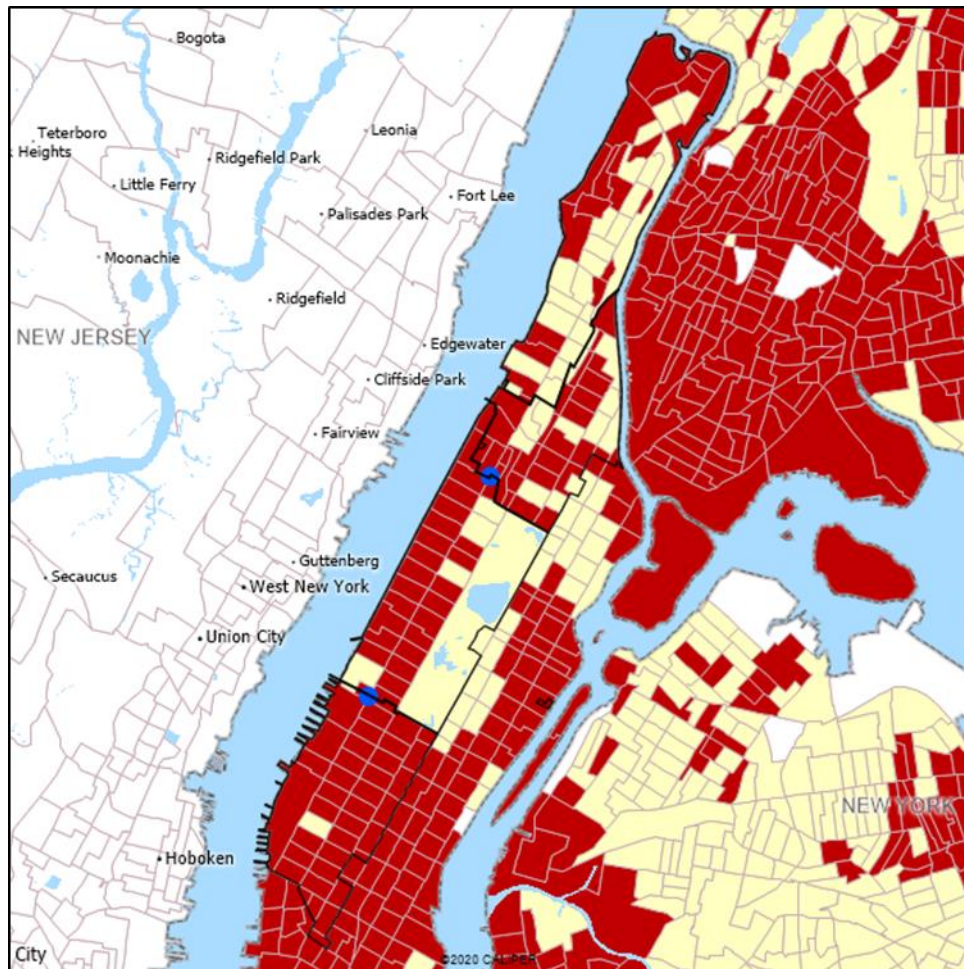


Sources: Caliper Maptitude (2020) and CDC, 2020.

Census tracts with unfavorable prevention outcomes are present throughout the community, with a particularly large concentration in the Upper West Side.

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.

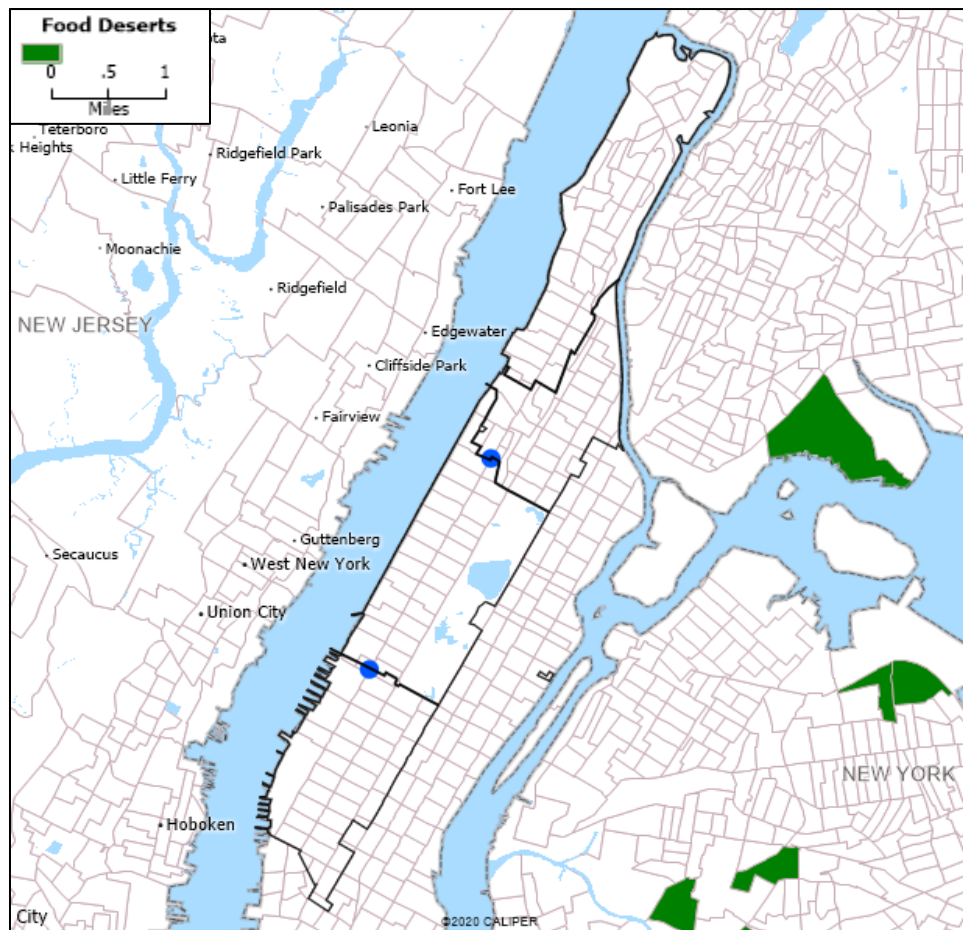
Census tracts with unfavorable health behaviors are present throughout the community, with particularly large concentrations in Chelsea & Clinton and the Upper West Side.

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 MSM & MSW community.

Exhibit 57: Food Deserts by Census Tract, 2015



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

No census tracts in the MSM & MSW community are designated as food deserts.

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.¹⁴

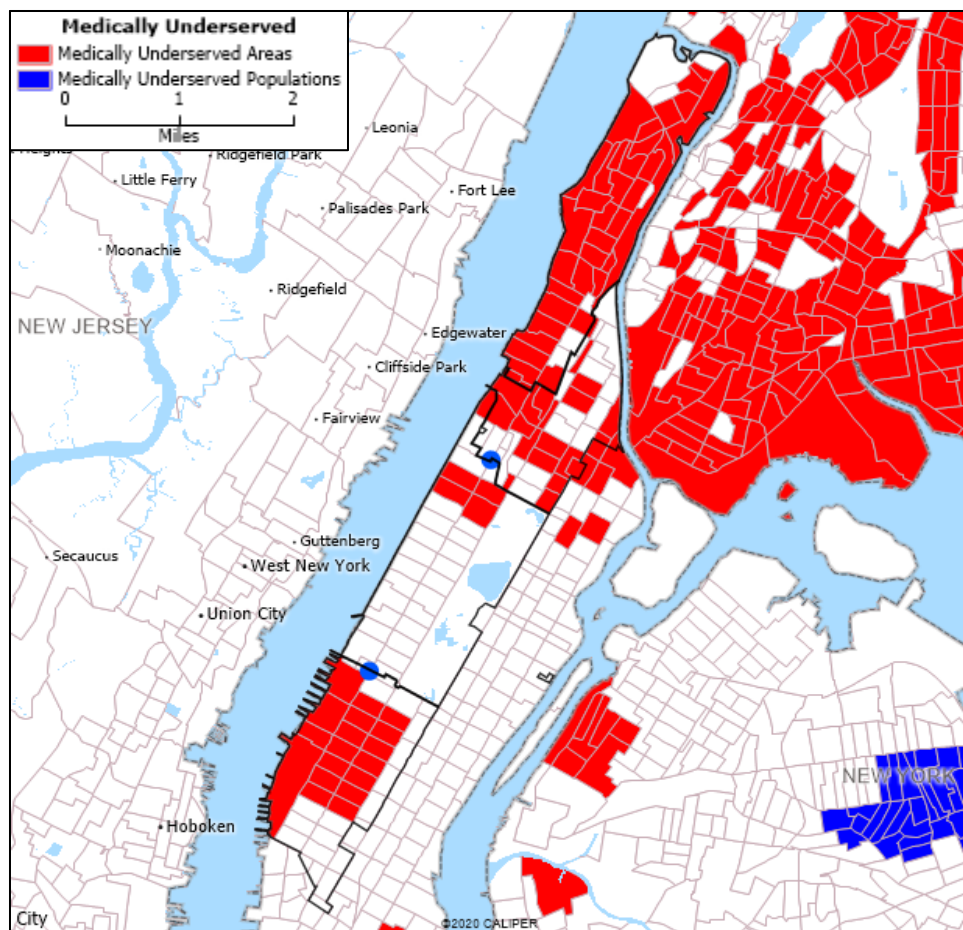
Any area or population receiving an IMU score of 62.0 or less qualifies for Medically Underserved Area (MUA) or Medically Underserved Population (MUP) designation. Federally Qualified Health Centers (FQHCs) may be established to serve MUAs and MUPs. Populations receiving MUP designation include groups 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.”¹⁵

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

¹⁴ 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>.

¹⁵ *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 Chelsea & Clinton, Washington Heights – Inwood, and Central Harlem – Morningside Heights.

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.

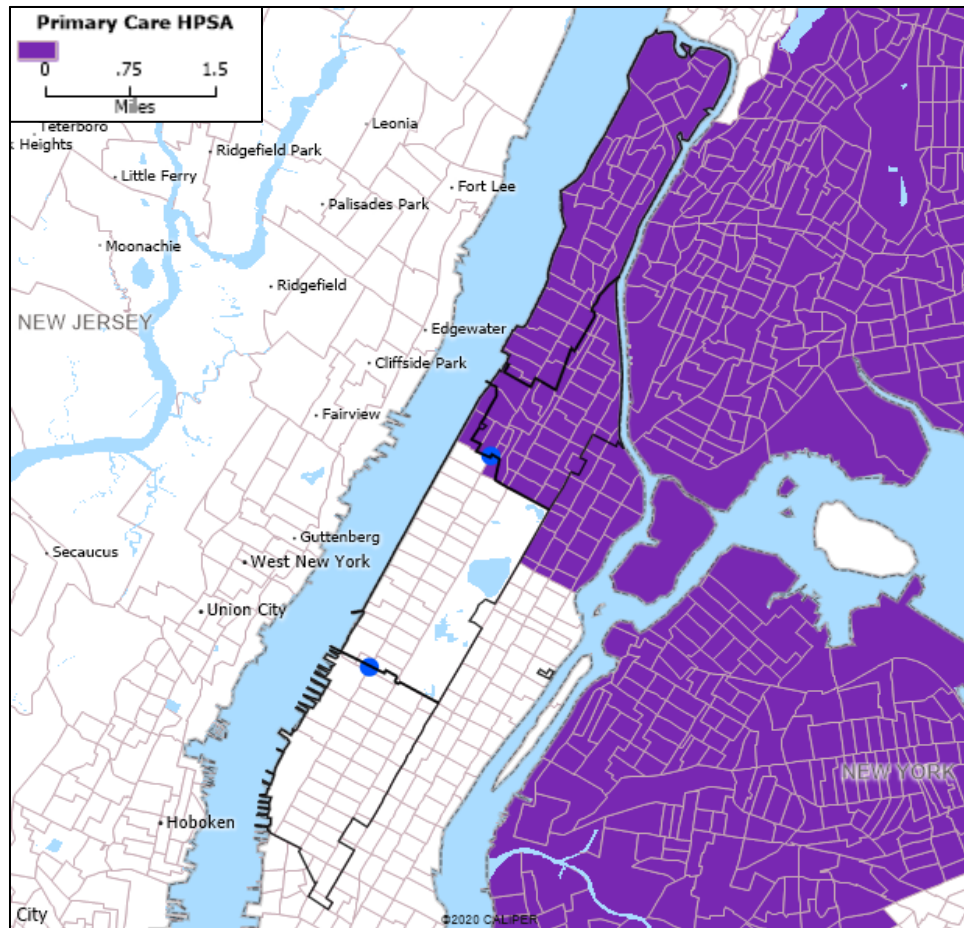
In addition to areas and populations that can be designated as HPSAs, a facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental 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.”¹⁶

Areas and populations in the MSM & MSW community are designated as HPSAs (**Exhibit 59**)

¹⁶ 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>

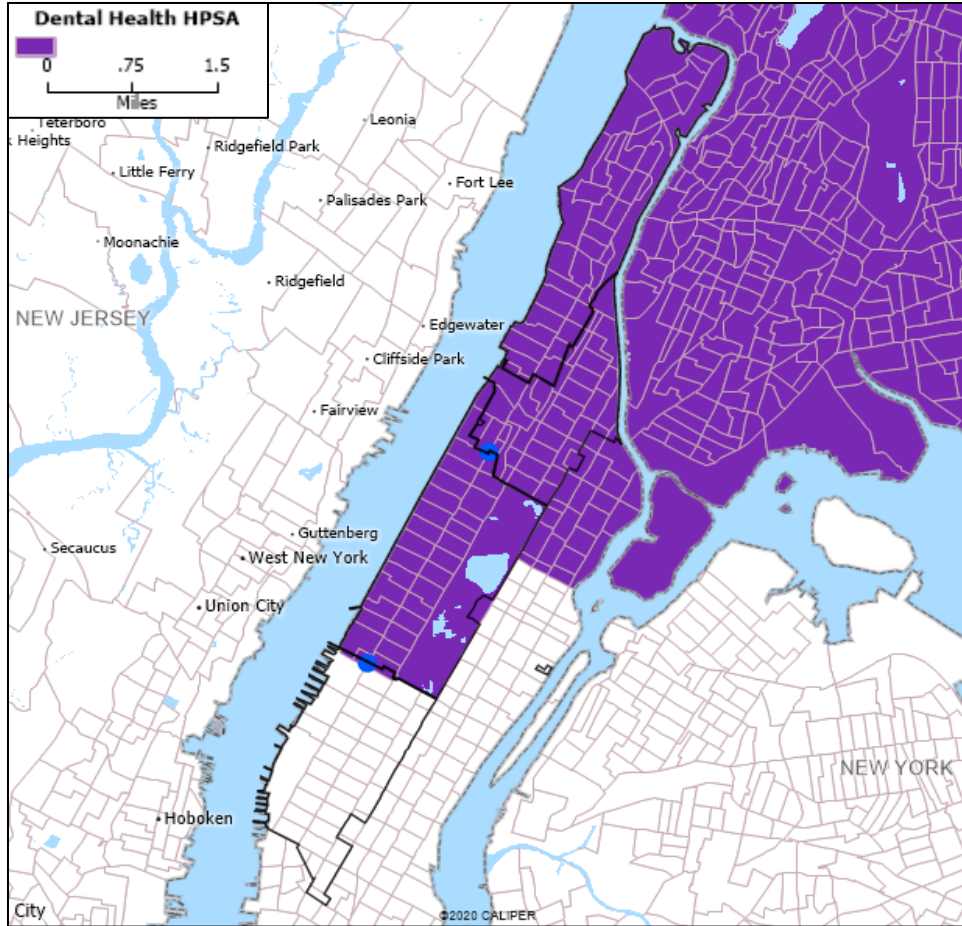
Exhibit 59A: Location of Federally Designated Primary Care HPSA Census Tracts in the MSM & MSW Community, 2020



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

Census tracts designated as Primary Care HPSAs are located throughout the community, with concentrations in Washington Heights – Inwood and Central Harlem – Morningside Heights.

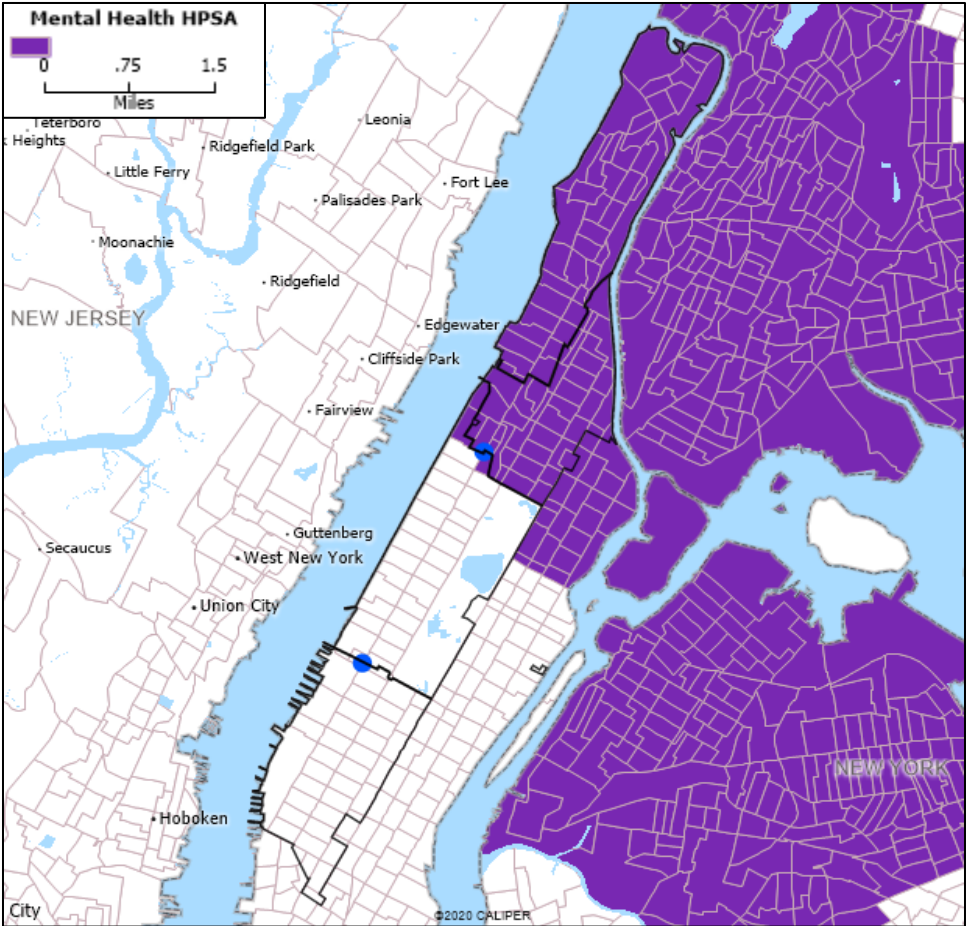
Exhibit 59B: Location of Federally Designated Dental Health HPSA Census Tracts in the MSM & MSW Community, 2020



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

Census tracts designated as Dental Health HPSAs are located throughout the community, with concentrations in Washington Heights – Inwood, Central Harlem – Morningside Heights, and the Upper West Side.

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



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

Census tracts designated as Mental Health HPSAs are located throughout the community, with concentrations in Washington Heights – Inwood and Central Harlem – Morningside Heights.

Description of Other Facilities and Resources within the Community

The MSM & MSW 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 Manhattan are designated as HPSA facilities (**Exhibit 60**).

Exhibit 60: List of HPSA Facilities in the MSM & MSW 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	•	•	•

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 21 hospital locations where community residents can receive services in Manhattan.

Exhibit 61: Hospitals in the MSM & MSW 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

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.

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."¹⁷ 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.

¹⁷ 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:¹⁸

- 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:¹⁹

- 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.

¹⁸ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

¹⁹ 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.²⁰

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.²¹

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.²²

- 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.”²³

²⁰ <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html>

²¹ https://www.cdc.gov/pcd/issues/2020/20_0247.htm

²² <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>

²³ *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 2020.²⁴ The interviews were designed to obtain input on health needs from persons who represent the broad interests of the community served by MSM & MSW.

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.

²⁴ 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.

Note: Interviews were conducted in collaboration with the CHNAs developed for other hospitals in the Mount Sinai Health System. Although some participating organizations serve residents of a different geographic area than the MSM & MSW community, representatives of these organizations provided insight that was applicable to different populations within the MSM & MSW community, such as children and youth, seniors, and foreign-born residents.

SOURCES

- City Council of the City of New York. *The City Council of the City of New York, Fiscal Year 2021 Adopted Expense Budget, Adjustment Summary / Schedule C [2020]*. Retrieved 2020, from <https://council.nyc.gov/budget/wp-content/uploads/sites/54/2020/06/Fiscal-2021-Schedule-C-Cover-REPORT-Final.pdf>.
- DataGen®, Inc.. Analysis of 2019 inpatient hospital discharge data.
- Dignity Health. *Community Needs Index*. Retrieved 2020, from <http://cni.chw-interactive.org/>.
- Federal Bureau of Investigation, Uniform Crime Reporting Program. *2018 Crime in the United States*. Retrieved 2020, from: <https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/topic-pages/offenses-known-to-law-enforcement>.
- Internal Revenue Code, Section 501(r).
- Internal Revenue Service. *Instructions for IRS form 990 Schedule H, 2015*.
- New York City Department of Health and Mental Hygiene. *Community Health Survey*. Retrieved 2020, from https://apps.health.ny.gov/public/tabvis/PHIG_Public/prams/reports/downloaddata.xlsx.
- New York City Department of Homeless Services. *HOPE 2019: NYC 2019 HOPE Results and HOPE 2018: NYC 2018 HOPE Results*.
- New York City Housing Authority (NYCHA). *NYCHA Resident Data Book Summary [February 7, 2020]*. Retrieved 2020 from: <https://data.cityofnewyork.us/Housing-Development/NYCHA-Resident-Data-Book-Summary/5r5y-pvs3>.
- New York State, Bureau of HIV/AIDS Epidemiology, AIDS Institute, New York State Department of Public Health. *New York State HIV/AIDS Annual Surveillance Report, for Persons Diagnosed through December 2018*. Retrieved 2018 from https://www.health.ny.gov/diseases/aids/general/statistics/annual/2018/2018_annual_surveillance_report.pdf
- New York State, Department of Health. *Community Health Indicator Reports (CHIRS)*. Retrieved 2020, from https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/chir_dashboard/chir_dashboard
- New York State, Department of Health. *County Health Indicators by Race/Ethnicity (CHIRE)*. Retrieved 2020, from <https://www.health.ny.gov/statistics/community/minority/county/>.
- New York State, Department of Health. *Hospitals by Region/County and Service*. Retrieved 2017, from

https://profiles.health.ny.gov/hospital/county_or_region/region:new+york+metro+-+new+york+city.

New York State, Department of Health. *New York State County/ZIP Code Perinatal Data Profile - 2014-2016*. Retrieved 2020, from <https://www.health.ny.gov/statistics/chac/perinatal/county/2014-2016/index.htm>.

New York State, Department of Health. *Prevention Agenda 2019-2024: New York State's Health Improvement Plan*. Retrieved from https://web11.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/dashboard/pa_dashboard&p=sh.

New York State, Division of the Budget. *New York State Budget [2020-21]*. Retrieved 2020, from: <https://openbudget.ny.gov/spendingForm.html> and <https://openbudget.ny.gov/openbudgetdata/SpendingData.xlsx>.

New York State, Kids' Well-being Indicators Clearinghouse. *Juvenile Justice [2017]*. Retrieved 2020, from: https://www.nyskwic.org/get_data/indicator_data.cfm.

The Mount Sinai Health System. 2019 discharge and ambulatory service data.

Healthcare Association of New York State (HANYS), Demographic Expert. Population Estimates (2019) and Projections (2024).

U.S. Bureau of Labor Statistics. *Unemployment Rates [2015-2019]*. Retrieved 2020, from: <http://www.bls.gov/>.

U.S. Census Bureau. *Demographic Data: ACS 5 Year Estimates [2018]*. Retrieved 2020, from: <http://www.census.gov/>.

U.S. Centers for Disease Control and Prevention. High School Youth Risk Behavior Survey (YRBS) [2017]. Retrieved 2020, from <https://nccd.cdc.gov/youthonline/app/Results.aspx?LID=NY>.

U.S. Department of Agriculture, Economic Research Service. *Food Access Research Atlas [2015]*. Retrieved 2020, from <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data/>.

U.S. Department of Health & Human Services, Health Resources & Services Administration. Shortage Areas. Retrieved 2020, from <https://data.hrsa.gov/data/download>.

U.S. Department of Housing and Urban Development. *Assisted Housing: National and Local [2019]*. Retrieved 2020, from https://www.huduser.gov/portal/datasets/assthsg.html#2009-2019_data.

U.S. Department of Housing and Urban Development. *PIT [Point in Time] and HIC [Housing Inventory Count] Data Since 2007*. Retrieved 2020, from <https://www.hudexchange.info/resource/3031/pit-and-hic-data-since-2007/>.

University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation.
County Health Rankings [2017 and 2020]. Retrieved 2020, from:
<https://www.countyhealthrankings.org/>.

APPENDIX - Actions Taken Since Previous CHNA²⁵

Mount Sinai Morningside and Mount Sinai West 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, Mount Sinai Morningside & Mount Sinai West identified a number of community health needs.²⁶ 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:

- MSM & MSW, 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 related to Aging Population, as are described below.

Health professions education. The health professions education activities of MSM & MSW respond to both the current and future community health needs for chronic disease treatment and prevention. MSM & MSW actively participates in over 40 residency and fellowship programs. Current residency and fellowship programs that are impact aging populations are as follows:

- Internal Medicine Residency (at MSM); and
- Internal Medicine Residency (at MSW).

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai Morningside & Mount Sinai West reported \$16,459,525 in costs for health professions

²⁵ Source: Mount Sinai Health System

²⁶ In the prior CHNA and Implementation, Mount Sinai Morningside was referred to as Mount Sinai St. Luke's Hospital. The two hospital campuses were named "St Luke's-Roosevelt Hospital Center" in prior tax filings.

education. Continued applications to these programs and continued accreditation are external indicators of the positive impact of this action on the community health need.

Inpatient Geropsychiatry. MSW's geropsychiatry inpatient unit offers a secure, quality health care option for adults age 55 and older with a psychiatric diagnosis. Demand for geriatrics geropsychiatry services demonstrates the positive impact of this action on the community health need.

Addiction in Seniors. At The Addiction Institute of New York, MSM & MSW staff members provide the best possible treatments to help individuals from pre-birth to old age recover from substance addictions, such as alcohol, heroin, cocaine, nicotine, and other addictions; and offer a wide possible range of inpatient, outpatient, residential, and school programs for all levels of severity of illness and socioeconomic status. Demand for geriatric addiction services demonstrates the positive impact of this action on the community health need.

Senior Citizens Services Program. The Senior Citizens Services Program is tailored to meet the specific needs of the older individual. The program utilizes a holistic treatment approach that looks at the unique psychological, social, and health problems of older patients. Case management services are provided to help patients live independently in the community. Participation in the program by community members demonstrates the positive impact of this action on the community health need.

NORC Program at Lincoln Square Neighborhood Houses. MSW provides a registered nurse to the Naturally Occurring Retirement Community (NORC) Program at Lincoln Square Neighborhood Houses. The program includes monitoring of senior residents in the complex to prosper and successfully age in place. The program has seen modest increases since the last CHNA submission. Participation in the program by community members demonstrates the positive impact of this action on the community health need.

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

The 2017 MSM & MSW 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 MSM & MSW respond to both the current and future community mental health needs. MSM & MSW actively participates in over 45 residency and fellowship programs. Current residency and fellowship programs that are especially related to mental health care services are as follows:

- Addiction Psychiatry Fellowship;
- Consultation-Liaison Psychiatry Fellowship (at MSM);
- Consultation-Liaison Psychiatry Fellowship (at MSW); and
- Psychiatry Residency.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai Morningside & Mount Sinai West reported \$16,459,525 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.

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 hospital and health professionals

Continued interest in programs by patients and providers are 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 MSM & MSW 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 MSM & MSW respond to both the current and future community health needs for professional services. MSM & MSW actively participates in over 40 residency and fellowship programs. Current residency and fellowship programs that are especially related to primary health care services are as follows:

- Emergency Medicine Administration Fellowship;
- Emergency Medicine Global Health Fellowship;
- Emergency Medicine Global Health Residency - Mount Sinai Roosevelt;
- Emergency Medicine Residency;
- Emergency Medicine Residency;
- Emergency Medicine Simulation Fellowship;
- Emergency Medicine Ultrasound Fellowship;
- Emergency Ultrasound Fellowship;
- General Surgery Residency;
- Internal Medicine Residency (at MSM);
- Internal Medicine Residency (at MSW);
- Obstetrics and Gynecology Residency – Mount Sinai West; and
- PGY1 Pharmacy Residency Program

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai Morningside & Mount Sinai West reported \$16,459,525 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.

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. Demand for primary health care services by community members demonstrates the positive impact of this action on the community health need.

4. Chronic Diseases and Contributing Lifestyle Factors

The 2017 MSM & MSW 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 MSM & MSW respond to both the current and future community health needs for chronic disease treatment and prevention. MSM & MSW actively participates in over 145 residency and fellowship programs. Current residency and fellowship programs that are especially related to chronic disease services are as follows:

- Anesthesiology Residency;
- Breast Surgery Fellowship;
- Cardiology Fellowship;
- Cardiology Fellowship;
- Colon and Rectal Surgery Fellowship;
- Diagnostic Radiology Residency (at MSM);
- Diagnostic Radiology Residency (at MSW);
- Endocrinology and Diabetes Fellowship;
- Gastroenterology Fellowship (at MSM);
- Gastroenterology Fellowship (at MSW);
- Hand Fellowship;
- Infectious Diseases Fellowship (at MSM);
- Infectious Diseases Fellowship (at MSW);
- Interventional Cardiology;
- Interventional Cardiology Fellowship;
- Maternal-Fetal Medicine Fellowship – Mount Sinai West;
- Nephrology Fellowship (at MSM);
- Nephrology Fellowship (at MSW);
- Obstetric Anesthesiology Fellowship;
- Oral and Maxillofacial Surgery (OMFS) Residency Program;
- Pain Medicine Fellowship;
- Pathology Residency;
- Pulmonary Critical Care Medicine Fellowship (at MSM);
- Pulmonary Critical Care Medicine Fellowship (at MSW); and
- Regional Anesthesiology Fellowship.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, Mount Sinai Morningside & Mount Sinai West reported \$16,459,525 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.

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

Support groups. Caring experts lead support groups at Mount Sinai Morningside & Mount Sinai West to provide a safe, supportive environment to help patients through their journeys. Continued participation in support groups by community members are indicative of the positive impact of this action on the community health need.

Stroke Awareness. The Stroke Center works with the American Stroke Association to increase awareness of how to defend against stroke. Continued interest in awareness activities are indicative of the positive impact of this action on the community health need.

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:

- MSM & MSW, 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.

Referrals to Health Care Services. The MSM & MSW hospital refers patients to various providers of health care services. As part of the Mount Sinai Health System, the continuum of care can be enhanced with referrals to effective services provided by other Mount Sinai hospital facilities and Mount Sinai health professionals. For example, pediatric patients in need of specialized clinical consultation can be referred to the T32 Pediatric Environmental Health Research Fellowship at Mount Sinai Hospital.

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:

- MSM & MSW, 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. Mount Sinai Morningside & Mount Sinai West, together with the other Mount Sinai Health System 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 Morningside & Mount Sinai West reported \$16,246,881 in financial assistance costs related to services provided. In addition, Mount Sinai Morningside & Mount Sinai West reported \$88,023,391 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:

- MSM & MSW, 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.

Activities indirectly related to Navigation are described below. These activities are in addition to the MSM & MSW activities that impact multiple needs.

Language Services. Free language interpretation services are available to patients and their families. Language services are provided through a combination of multilingual staff interpreters, contractors, and over-the-phone interpretation. Utilization of language interpretation services is indicative of the positive impact of this action on the community health need.

Patient Representatives. At Mount Sinai Morningside & Mount Sinai West, patient representatives were available to help patients and their families with any problems, complaints, or concerns that may arise about health care or with services at Mount Sinai West. Utilization of patient representative services is indicative of the positive impact of this action on the community health need.

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:

- MSM & MSW, 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. MSM & MSW, together with the other Mount Sinai Health System 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 Morningside & Mount Sinai West reported \$16,246,881 in financial assistance costs related to services provided. In addition, Mount Sinai Morningside & Mount Sinai West reported \$88,023,391 in unreimbursed costs for services provided to Medicaid enrollees.

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:

- MSM & MSW, 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. MSM & MSW refers patients to various community resources. As part of the Mount Sinai Health System, integrated resources help MSM & MSW 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 MSM & MSW 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.

Language Services. Free language interpretation services are available to patients and their families. Language services are provided through a combination of multilingual staff interpreters, contractors, and over-the-phone interpretation. Utilization of language interpretation services is indicative of the positive impact of this action on the community health need.

Patient Representatives. At Mount Sinai Morningside & Mount Sinai West, patient representatives were available to help patients and their families with any problems, complaints, or concerns that may arise about health care or with services at Mount Sinai West. Utilization of patient representative services is indicative of the positive impact of this action on the community health need.

11. Substance Abuse

The 2017 MSM & MSW 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.

A planned activity to help manage and reduce substance abuse is described below. These activities are in addition to the MSM & MSW activities that impact multiple needs.

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