Community Health Needs Assessment

Prepared for
MOUNT SINAI BETH ISRAEL HOSPITAL
Mount Sinai Beth Israel
Mount Sinai Brooklyn

*By*VERITÉ HEALTHCARE CONSULTING, LLC

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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 Beth Israel 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.



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EXECUTIVE SUMMARY

Introduction

This community health needs assessment (CHNA) was conducted by the Mount Sinai Beth Israel Hospital ("MSBI" or "the hospital") to identify community health needs and to inform development of an implementation strategy to address identified significant needs.

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

Acronym	Entity
MSBI - Manhattan	Mount Sinai Beth Israel, the campus in Manhattan
MS - Brooklyn	Mount Sinai Brooklyn, the campus in Brooklyn
MSBI	Mount Sinai Beth Israel Hospital, the hospital facility with campuses in Manhattan and Brooklyn



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. 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)." The community defined by MSBI accounts for over 66 percent of the hospital's 2019 inpatient discharges.

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

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

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

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

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

Collaborating Organizations

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

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.



³ 501(r) Final Rule, 2014.

Information Gaps

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

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

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

Input on Previous CHNA

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



Prioritized Significant Community Health Needs

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

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

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

Access to Mental Health Care and Poor Mental Health Status

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

- In County Health Rankings, Brooklyn compared unfavorably to the state average for ratio of population to mental health providers (Exhibit 29B).
- The suicide mortality rate for White residents was higher in Manhattan and New York City than the overall state rate (**Exhibit 47**).
- In the CDC's Youth Risk Behavior Surveillance System (YRBSS), respondents in Brooklyn, Manhattan, and New York City as a whole were more likely to indicate that they felt sad every day for two weeks and stopped regular activities due to sadness (Exhibit 48).
- Nearly 10 percent of New York City residents surveyed reported experiencing current depression, with rates higher in various neighborhoods (**Exhibit 50D**).
- There were many areas designated as Health Professional Shortage Areas for Mental Health in Brooklyn MSBI 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 Brooklyn neighborhoods were greater than the state average (Exhibit 18).
- In the 2020 County Health Rankings, Brooklyn was among the bottom counties in all of New York for Clinical Care (Exhibit 29A).
- Rates for ambulatory care sensitive conditions (ACSCs) in Brooklyn were particularly high (**Exhibit 52**). High rates indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.
- The CDC's 500 Cities Project identified areas of unfavorable health outcomes throughout the community (**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 MSBI community, the aged 65 and older cohort is expected to grow the most between 2019 and 2024, with a growth rate of 14.5 percent overall (Exhibit 4).
- In County Health Rankings, Brooklyn compared unfavorably for older adult preventable hospitalizations (Exhibit 29B).
- The asthma hospitalization rates for residents aged 65 years or older in Brooklyn and New York City were more than 50 percent higher than the state average (**Exhibit 39**),
- ACSC discharges were higher for patients aged 65 years and older than any other cohort in the MSBI 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, both Brooklyn and Manhattan ranked in the bottom half of counties in New York State for poor or fair health (Exhibit 29A).
- The mortality rates for heart disease and for diabetes in Brooklyn and New York City as a whole were higher than the New York State average (**Exhibit 30**).
- Rates of HIV and AIDS were more than 50 percent greater than the state average in Brooklyn, Manhattan, and New York City as a whole (**Exhibit 37**).
- Asthma hospitalizations and mortalities were significantly higher in Brooklyn, Manhattan, and New York City as a whole than the state average (Exhibit 39).
- In the CDC's Youth Risk Behavior Surveillance System (YRBSS), respondents in both Brooklyn and 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 Brooklyn neighborhoods 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, Brooklyn and Manhattan ranked in the bottom half of all New York counties in Physical Environment. Brooklyn and 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, both Brooklyn and 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.

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

Poverty, Financial Hardship, and Basic Needs Insecurity

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

- Poverty rates in Brooklyn and Manhattan were worse than the state and national averages (**Exhibit 12**). The poverty percentages for Black and Hispanic or Latino residents were particularly higher than state and national comparisons (**Exhibit 13**).
- Over 26 percent of households in Brooklyn had an annual income of less than \$25,000, compared to 20 percent nationwide (**Exhibit 14**).
- Unemployment rates in Brooklyn and New York City have been higher than state and national averages over recent history (**Exhibit 16**). Rates were particularly high for Black and Hispanic or Latino residents (**Exhibit 17**).
- Brooklyn and 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 MSBI 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 Brooklyn and Manhattan than the national average (Exhibit 25).
- The average number of years in public housing was longer in Manhattan than the New York City average (Exhibit 26B).
- In County Health Rankings, both Brooklyn and 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.

- Many neighborhoods in the MSBI community are racially and ethnically diverse. Nearly 40 percent of residents of Brooklyn MSBI Neighborhoods were Black, and more than 20 percent of residents in the overall MSBI community were Asian (**Exhibit 6**).
- The populations that are linguistically isolated across Brooklyn and Manhattan neighborhoods in the MSBI community were significantly higher than the New York State and national averages (Exhibit 10).
- More than 35 percent of residents of Brooklyn MSBI 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 Brooklyn, 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 Mount Sinai Beth Israel Hospital (MSBI) and how it was determined.

MSBI's community is comprised of 40 ZIP Codes encompassing sections of both the boroughs of Brooklyn and Manhattan (**Exhibit 1**). The community is divided into neighborhoods utilized by the New York State Department of Health;⁵ 10 of the 42 neighborhoods in New York City are in the MSBI community.

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

Acronym	Entity
MSBI - Manhattan	Mount Sinai Beth Israel, the campus in Manhattan
MS - Brooklyn	Mount Sinai Brooklyn, the campus in Brooklyn
MSBI	Mount Sinai Beth Israel Hospital, the hospital facility with campuses in Manhattan and Brooklyn

The MSBI community was estimated to have a population of approximately 1.8 million persons in 2018.

The community definition was validated based on the geographic origins of discharges from MSBI - Manhattan and MS - Brooklyn. In 2019, the community collectively accounted for 66 percent of MSBI's 22,853 inpatient discharges (**Exhibit 1**).

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 1: Community Population, 2018, and Inpatient Discharges, 2019

Borough	2018 Population	2019 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Brooklyn MSBI Neighborhoods	1,161,740	8,576	37.5%	39.0%
Canarsie-Flatlands	209,241	3,419	15.0%	15.6%
Coney Island-Sheepshead Bay	290,239	2,412	10.6%	11.0%
East Flatbush-Flatbush	301,650	1,558	6.8%	7.1%
Greenpoint	139,116	632	2.8%	2.9%
Williamsburg-Bushwick	221,494	555	2.4%	2.5%
Manhattan MSBI Neighborhoods	616,541	6,598	28.9%	30.0%
Chelsea-Clinton	154,214	976	4.3%	4.4%
Gramercy Park-Murray	131,713	438	1.9%	2.0%
Greenwich Village-Soho	82,858	424	1.9%	1.9%
Lower Manhattan	60,156	188	0.8%	0.9%
Union Square-Lower East Side	187,600	4,572	20.0%	20.8%
Total	1,778,281	15,174	66.4%	69.1%

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



Exhibit 2A presents a map displaying the 10 neighborhoods that comprise the MSBI community.

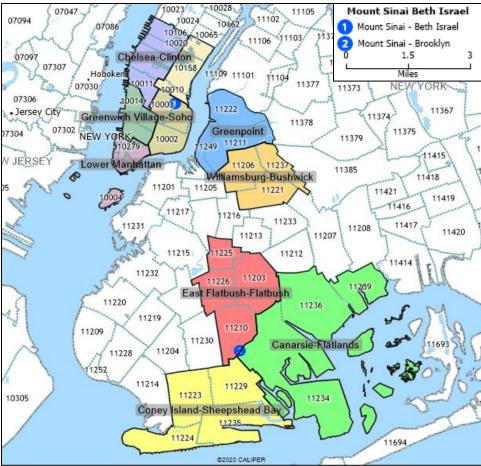


Exhibit 2A: MSBI Community

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

Exhibit 2B presents a map displaying the seven neighborhoods that are proximate to MSBI - Manhattan.

Mount Sinai Beth Israel Mount Sinai - Beth Israel 1.5 .75 Miles Chelsea-Clinton Gramercy Park-Murray Hoboken Greenwich Village-Soho Union Square-Lower East Side **NEW YORK** Greenpoint 10006 10038 Williamsburg-Bushwick

Exhibit 2B: MSBI Community - Neighborhoods near MSBI - Manhattan

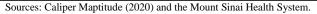


Exhibit 2C presents a map displaying the seven neighborhoods that are proximate to MS - Brooklyn.

Mount Sinai Beth Israel Mount Sinai - Brooklyn Miles East Flatbush-Flatbush Canarsie-Flatlands ey Island-Sheepshead Bay ©2020 CALIPER

Exhibit 2C: MSBI Community – Neighborhoods near MS - Brooklyn

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 MSBI community.

Demographics

Population characteristics and changes influence health issues in and services needed by communities. A total of 1,778,281 people were estimated to reside in the MSBI community in 2018, with a projected population of 1,906,197 residents in 2024.

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

Exhibit 3: Population by Age and Sex, 2018

Borough	Ages 0-19	Ages 20-44	Ages 45-64	Ages 65+	Total Population
Brooklyn MSBI Neighborhoods	24.2%	38.3%	23.1%	14.4%	1,161,740
Male	12.4%	18.6%	10.3%	5.8%	546,558
Female	11.9%	19.7%	12.8%	8.58%	615,182
Manhattan MSBI Neighborhoods	12.8%	48.4%	23.2%	15.5%	616,541
Male	6.1%	24.3%	12.0%	6.8%	303,282
Female	6.7%	24.2%	11.2%	8.8%	313,259
Total	20.3%	41.8%	23.1%	14.8%	1,778,281
Male	10.2%	20.6%	10.9%	6.2%	849,840
Female	10.1%	21.2%	12.3%	8.7%	928,441

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

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

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



Exhibit 4: Population by Age, 2019-2024

		2019 Population				2024 Population				Percent Change 2019-2024					
Borough	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+	Total
Brooklyn MSBI Community	264,642	308,290	440,983	175,928	1,189,843	276,280	283,788	458,036	200,816	1,218,920	4.4%	-7.9%	3.9%	14.1%	2.4%
Canarsie-Flatlands	43,096	49,180	77,075	32,356	201,707	44,394	46,027	76,786	37,530	204,737	3.0%	-6.4%	-0.4%	16.0%	1.5%
Coney Island-Sheepshead Bay	60,552	64,344	111,283	61,694	297,873	64,212	58,711	112,162	68,462	303,547	6.0%	-8.8%	0.8%	11.0%	1.9%
East Flatbush-Flatbush	70,160	76,325	118,559	45,375	310,419	72,937	69,106	120,203	52,001	314,247	4.0%	-9.5%	1.4%	14.6%	1.2%
Greenpoint	31,002	49,119	51,254	13,994	145,369	32,237	44,882	58,317	16,236	151,672	4.0%	-8.6%	13.8%	16.0%	4.3%
Williamsburg-Bushwick	59,832	69,322	82,812	22,509	234,475	62,500	65,062	90,568	26,587	244,717	4.5%	-6.1%	9.4%	18.1%	4.4%
Manhattan MSBI Community	75,783	222,597	266,471	101,187	666,038	82,675	197,728	290,416	116,458	687,277	9.1%	-11.2%	9.0%	15.1%	3.2%
Chelsea-Clinton	16,118	52,596	72,952	24,191	165,857	17,871	46,285	80,115	28,815	173,086	10.9%	-12.0%	9.8%	19.1%	4.4%
Gramercy Park-Murray	14,134	49,248	55,247	24,664	143,293	15,728	43,487	60,680	27,578	147,473	11.3%	-11.7%	9.8%	11.8%	2.9%
Greenwich Village-SoHo	10,766	26,814	36,570	13,050	87,200	11,683	23,452	39,019	15,015	89,169	8.5%	-12.5%	6.7%	15.1%	2.3%
Lower Manhattan	9,847	24,741	24,050	6,122	64,760	11,267	22,819	27,518	7,406	69,010	14.4%	-7.8%	14.4%	21.0%	6.6%
Union Square-Lower East Side	24,918	69,198	77,652	33,160	204,928	26,126	61,685	83,084	37,644	208,539	4.8%	-10.9%	7.0%	13.5%	1.8%
Total Community	340,425	530,887	707,454	277,115	1,855,881	358,955	481,516	748,452	317,274	1,906,197	5.4%	-9.3%	5.8%	14.5%	2.7%

Source: HANYS via the Mount Sinai Health System, 2020.

The total population of all neighborhoods in the community is expected to grow from 2019 to 2024. The neighborhoods of Lower Manhattan, Chelsea-Clinton, Bushwick-Williamsburg, and Greenpoint are expected to grow most rapidly.

Most 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. The population aged 65 and older is expected to experience the highest growth rate in every neighborhood.



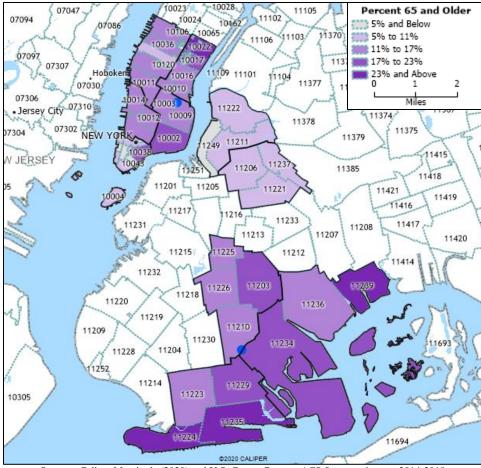


Exhibit 5: Residents Aged 65+, 2018

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

The proportion of the population 65 years of age and older varies by ZIP Code. The ZIP Codes of 11239 (Canarsie-Flatlands), 10022 (Gramercy Park-Murray), and 11224 (Coney Island-Sheepshead Bay) had comparatively high proportions of this population cohort, each above 25 percent.

Exhibit 6 indicates the distribution of the population by race in the MSBI 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)
Brooklyn Community	1,161,740	41.7%	38.9%	7.8%	8.9%	2.7%	18.3%
Canarsie-Flatlands	209,241	23.7%	66.2%	4.5%	4.0%	1.6%	9.4%
Coney Island-Sheepshead Bay	290,239	64.3%	7.4%	18.0%	7.4%	2.9%	13.3%
East Flatbush-Flatbush	301,650	18.4%	70.4%	2.9%	6.1%	2.2%	10.5%
Greenpoint	139,116	76.6%	5.9%	5.5%	8.6%	3.5%	21.7%
Williamsburg-Bushwick	221,494	38.7%	32.1%	5.6%	19.9%	3.7%	41.8%
Manhattan Community	616,541	66.2%	5.5%	20.1%	4.9%	3.2%	13.7%
Chelsea-Clinton	154,214	69.7%	6.0%	16.9%	4.2%	3.2%	15.3%
Gramercy Park-Murray	131,713	75.3%	3.4%	17.4%	1.4%	2.6%	7.5%
Greenwich Village-SoHo	82,858	73.2%	2.7%	18.6%	1.7%	3.8%	6.4%
Lower Manhattan	60,156	65.8%	5.0%	23.0%	2.3%	3.9%	10.3%
Union Square-Lower East Side	187,600	54.1%	7.9%	24.5%	10.1%	3.3%	20.9%
Total Community	1,778,281	50.2%	27.3%	12.1%	7.5%	2.9%	16.7%

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 MSBI community is very diverse. In 2018, 50.2 percent of the population was White, 27.3 percent was Black, 12.1 percent was Asian, and 16.7 percent was Hispanic (or Latino). Black populations were most prevalent in Brooklyn, and Manhattan had a higher proportion of Asian residents. 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.

The percentage of Black residents is highest in East Flatbush-Flatbush, Canarsie-Flatlands, and Williamsburg-Bushwick. Asian residents are most concentrated in Manhattan ZIP Codes, particularly in Lower Manhattan and Union Square-Lower East Side. Hispanic residents are most concentrated in Williamsburg-Bushwick (**Exhibits 7**, **8**, and **9**).

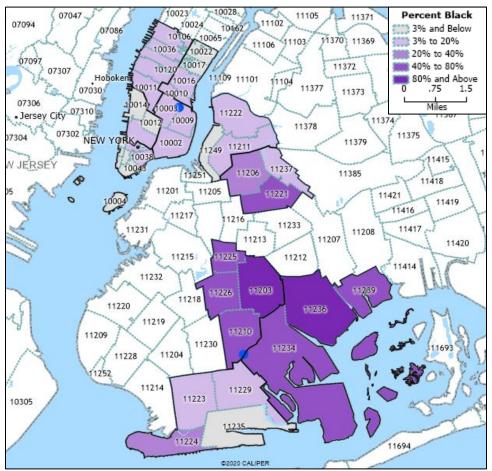


Exhibit 7: Percent of Population – Black, 2018

Sources: Caliper Maptitude (2020) and U.S. Census Bureau, ACS 5-year estimates, 2014-2018. Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.



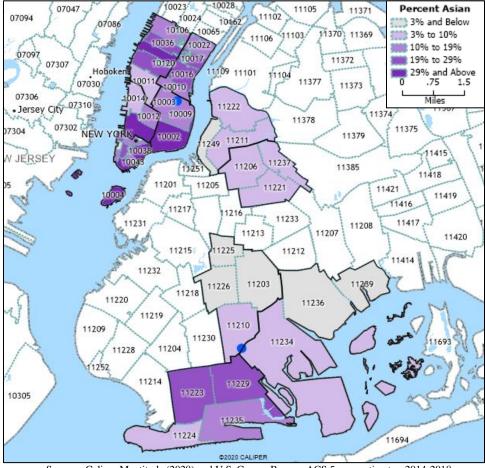


Exhibit 8: Percent of Population - Asian, 2018

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

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

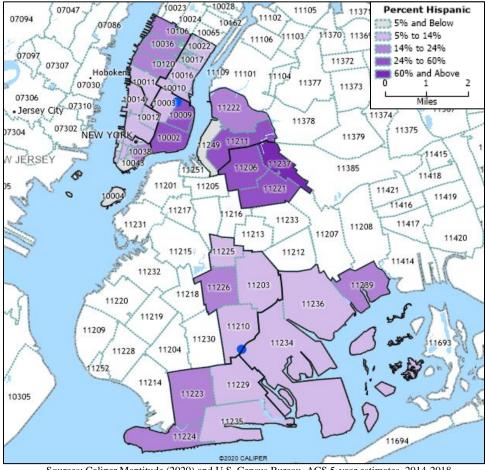


Exhibit 9: Percent of Population - Hispanic (or Latino), 2018

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

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

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

Exhibit 10: Other Socioeconomic Indicators, 2014-2018

Borough and Neighborhood	Population 25+ without High School Diploma	Population with a Disability	Population Linguistically Isolated
Brooklyn MSBI Neighborhoods	16.5%	10.2%	21.7%
Canarsie-Flatlands	12.4%	9.5%	12.3%
Coney Island-Sheepshead Bay	17.1%	13.6%	40.5%
East Flatbush-Flatbush	13.7%	7.9%	11.7%
Greenpoint	14.8%	8.4%	19.1%
Williamsburg-Bushwick	24.9%	10.5%	21.3%
Manhattan MSBI Neighborhoods	14.8%	10.1%	19.2%
Chelsea-Clinton	5.8%	9.2%	10.0%
Gramercy Park-Murray	3.3%	7.4%	6.7%
Greenwich Village-Soho	8.6%	7.1%	10.0%
Lower Manhattan	8.6%	5.4%	11.2%
Union Square-Lower East Side	18.9%	11.9%	20.8%
Washington Heights-Inwood	27.4%	12.6%	34.2%
Total MSBI Community	15.7%	10.1%	20.6%
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 the national average; dark grey denotes 50 percent worse than the national average

Key findings include:

- The Brooklyn MSBI Community 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, particularly in Williamsburg-Bushwick.
- The percentage of residents who were linguistically isolated was higher than the national average in nearly every neighborhood in the MSBI Community. Linguistic isolation is defined as the population aged five and older who speak a language other than English and speak English less than "very well."



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

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

Borough and Neighborhood	Total Population	Europe	Asia	Africa	Oceania	Latin America	Northern America	Total Foreign Born
Brooklyn MSBI Neighborhoods	1,161,740	8.5%	8.1%	1.1%	0.1%	21.1%	0.2%	39.1%
Canarsie-Flatlands	209,241	3.9%	4.2%	1.2%	0.0%	31.5%	0.1%	41.0%
Coney Island-Sheepshead Bay	290,239	23.5%	21.1%	0.8%	0.0%	5.5%	0.1%	51.1%
East Flatbush-Flatbush	301,650	1.6%	2.7%	2.1%	0.1%	37.3%	0.2%	43.9%
Greenpoint	139,116	9.3%	4.6%	0.4%	0.4%	6.9%	0.7%	22.2%
Williamsburg-Bushwick	221,494	2.3%	4.2%	0.6%	0.1%	18.3%	0.1%	25.7%
Manhattan MSBI Neighborhoods	616,541	6.7%	14.6%	0.7%	0.6%	4.3%	1.0%	28.0%
Chelsea-Clinton	154,214	7.8%	12.9%	1.2%	0.7%	6.7%	1.3%	30.6%
Gramercy Park-Murray	131,713	7.1%	11.8%	0.8%	0.4%	3.1%	0.9%	24.0%
Greenwich Village-Soho	82,858	6.5%	13.7%	0.6%	1.2%	1.8%	1.5%	25.4%
Lower Manhattan	60,156	8.9%	15.8%	0.4%	0.5%	3.1%	0.8%	29.4%
Union Square-Lower East Side	187,600	4.9%	18.1%	0.3%	0.5%	4.8%	0.8%	29.5%
Total MSBI Community	1,778,281	7.9%	10.4%	1.0%	0.3%	15.3%	0.5%	35.3%
New York	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 City residents were primarily from Latin America and Asia. The Brooklyn MSBI Community had the higher percentage of foreign born residents in the community, at 39.1 percent. Canarsie-Flatlands, Coney Island-Sheepshead Bay, and East Flatbush-Flatbush in particular had high foreign-born populations, each greater than 40 percent. The Manhattan MSBI Community had 28.0 percent of foreign born residents. Across the total MSBI community, the highest percentage of foreign born residents was from Latin America followed by Asia.



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. Both Brooklyn and Manhattan reported higher poverty rates than the New York State and U.S. averages (**Exhibit 12**).

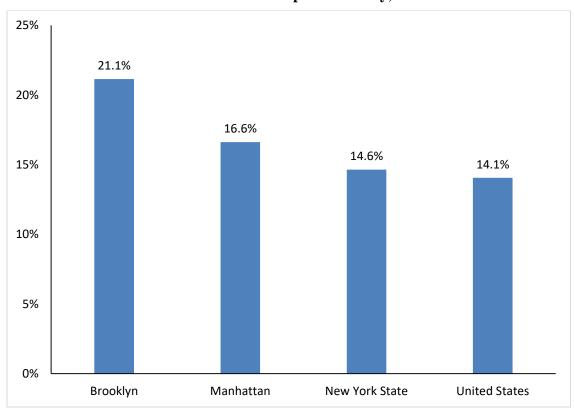


Exhibit 12: Percent of People in Poverty, 2014-2018

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

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

35% 30.0% 28.9% 30% 26.6% 24.2% 23.6% 25% 21.6% 21.0% 21.2% 21.0% 18.9% 19.0% 20% 16.1% 15% 9.7% ^{10.8%}^{11.6%} 11.5% 10% 5% 0% White **Black** Asian Hispanic (or Latino) ■ Brooklyn Manhattan ■ New York State United States

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 Brooklyn, White, Asian, and Hispanic or Latino populations had higher poverty rates compared to state and national averages. 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. 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 (**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
Brooklyn MSBI Community	427,938	57,460	25.8%	45.9%
Canarsie-Flatlands	71,881	69,933	19.4%	38.2%
Coney Island-Sheepshead Bay	109,898	50,960	30.0%	50.1%
East Flatbush-Flatbush	110,866	55,468	22.4%	45.6%
Greenpoint	56,640	75,456	22.3%	37.4%
Williamsburg-Bushwick	78,653	44,995	33.0%	53.5%
Manhattan MSBI Neighborhoods	320,750	102,678	19.0%	30.7%
Chelsea-Clinton	88,265	106,526	18.2%	29.8%
Gramercy Park-Murray	73,260	123,153	12.6%	22.3%
Greenwich Village-Soho	42,256	115,594	14.6%	25.7%
Lower Manhattan	27,577	132,831	13.8%	20.7%
Union Square-Lower East Side	89,392	66,692	28.6%	44.0%
Total MSBI Community	748,688	160,139	22.9%	39.4%
New York	7,316,537	65,323	20.7%	39.8%
United States	119,730,128	60,293	20.2%	42.2%

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

There was significant variation in low-income households among boroughs and neighborhoods in the MSBI community. The percentage of households with incomes below \$25,000 was 28.6 percent in Union Square-Lower East Side, for instance, compared to 19.0 percent for the Manhattan MSBI Community. Over 30 percent of households in the Brooklyn neighborhoods of Coney Island-Sheepshead Bay and Williamsburg-Bushwick had incomes less than \$25,000; these areas also had the lowest average household incomes.

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

Percent <\$25,000 🕽 7% and Below 10106 10065 7% to 14% 14% to 22% 22% to 39% 39% and Above • Jersey City 07310 ©2020 CALIPER

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

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

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

Unemployment Rate

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

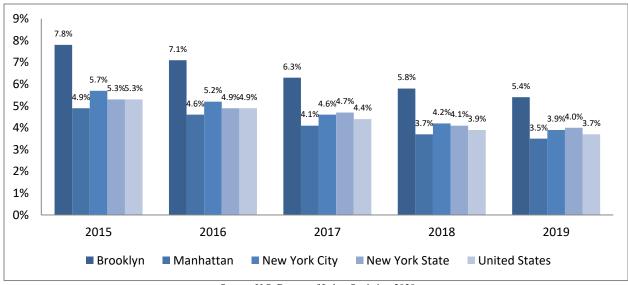


Exhibit 16: Unemployment Rates, 2015-2019

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

Brooklyn and New York City as a whole experienced higher unemployment rates than national averages for each year from 2015 through 2019. 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 each borough.

14% 11.5% 12% 10.6% 10.0% 9.7% 10% 9.2% 8.5% 7.8% 8% 6.8% 5.8% 5.2% 6% 4.4% ^{4.9%} 4.6% 4.8% 4.9% 4% 2% 0% White **Black** Asian Hispanic or Latino ■ Brooklyn ■ New York State United States ■ Manhattan

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. Differences in unemployment rates were most evident in Manhattan. Brooklyn and Manhattan had higher rates of unemployment in the Hispanic population than the state average. The White unemployment rate also was higher than the state and national averages in Brooklyn.



Insurance Status

Exhibit 18 displays the percent of the population in the MSBI 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
Brooklyn MSBI Community	8.4%
Canarsie-Flatlands	6.8%
Coney Island-Sheepshead Bay	7.8%
East Flatbush-Flatbush	8.7%
Greenpoint	6.8%
Williamsburg-Bushwick	11.5%
Manhattan MSBI Community	4.3%
Chelsea-Clinton	4.5%
Gramercy Park-Murray	3.0%
Greenwich Village-SoHo	4.5%
Lower Manhattan	3.3%
Union Square-Lower East Side	5.2%
Total MSBI Community	7.8%
Brooklyn (entire borough)	8.2%
Manhattan (entire borough)	5.8%
New York	6.5%
United States	9.4%

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

The neighborhood of Williamsburg-Bushwick had a higher uninsured rate than both the New York State and United States averages. All Brooklyn MSBI Community neighborhoods had higher rates of uninsured than the New York State average. All Manhattan MSBI Community neighborhoods had lower rates of uninsured residents than Manhattan, state, and national rates.

Exhibit 19: MSBI Discharges by Neighborhood and Payer, 2018

Borough	Private Insurance	Medicaid	Medicare	Self-Pay	Other
Brooklyn MSBI Community	26.7%	34.0%	36.4%	1.5%	1.3%
Canarsie-Flatlands	30.5%	27.9%	38.2%	1.5%	1.9%
Coney Island-Sheepshead Bay	23.1%	29.8%	45.4%	0.8%	0.9%
East Flatbush-Flatbush	28.0%	34.7%	33.2%	2.3%	1.7%
Greenpoint	37.5%	34.4%	26.2%	1.0%	0.8%
Williamsburg-Bushwick	21.0%	45.9%	30.4%	1.7%	1.0%
Manhattan MSBI Community	36.9%	23.7%	36.6%	1.9%	1.0%
Chelsea-Clinton	34.4%	27.5%	35.4%	1.8%	0.8%
Gramercy Park-Murray	38.1%	22.2%	35.0%	3.6%	1.1%
Greenwich Village-SoHo	48.4%	12.4%	36.4%	1.4%	1.5%
Lower Manhattan	57.5%	15.7%	24.4%	0.8%	1.6%
Union Square-Lower East Side	28.7%	27.4%	42.2%	1.1%	0.6%
Total MSBI Community	29.8%	30.9%	36.5%	1.6%	1.2%

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

The highest percentages of discharges for private insurance and self-pay were from Manhattan. Medicaid discharges were most prevalent in Brooklyn.



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

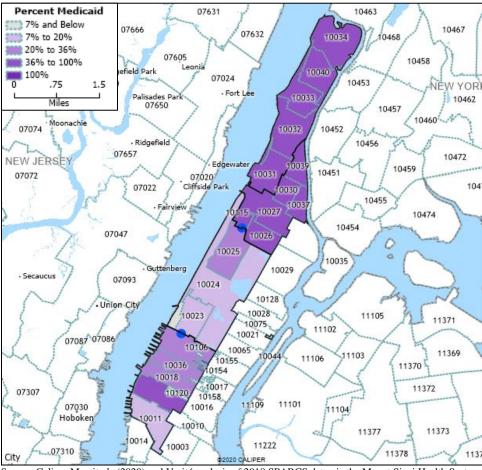


Exhibit 20A: Medicaid Discharges by ZIP Code, 2018

Percent Medicare 13% and Below 13% to 27% 27% to 40% ## 40% to 100% efield Park 100% .75 1.5 NEW YOR · Fort I Palisades Park Miles Ridgefield NEW JERSEY Cliffside Park 15 10027 · Union City 07087 07086 Hoboken City

Exhibit 20B: Medicare Discharges by ZIP Code, 2018

Percent Self-Pay 🗦 0.7% and Below 0.7% to 1.2% 1.2% to 1.9% 1.9% to 2.7% 2.7% and Above .75 1.5 gefield Park NEW YOR · Fort I Palisades Park Ridgefield NEW JERSEY Cliffside Park · Union City 07087 07086 Hoboken City

Exhibit 21: Self-Pay Discharges by ZIP Code, 2016

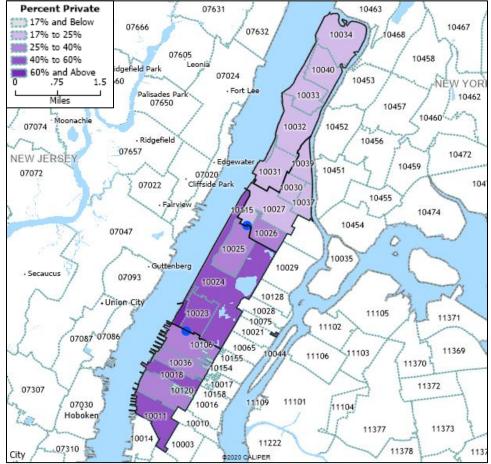


Exhibit 22: Private Discharges by ZIP Code, 2018

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

	Young Adults - Driving While Intoxicated		Young Adult A		Young Adult Arrests - Property Crimes Arrests		
Borough	Number	Rate	Number	Rate	Number	Rate	
Brooklyn	54	3.2	2,602	153.6	1,612	95.1	
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.

Young adult rates of driving while intoxicated compared well to the state. Drug use, possession, or sale arrest rates were more than 50 percent worse than the state average in Manhattan, and higher in Brooklyn and 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 750,000 people in the five boroughs lived in HUD-subsidized housing in 2019, with more than 65 percent of these residents living in the Bronx and Brooklyn. **Exhibit 25** provides average costs and wait times across all HUD programs.

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

			Spending per U		
Borough	People in Subsidized Housing	Average Household Income	Average Household Contribution	Average Federal Contribution	Average Months on Waiting List
Brooklyn	258,536	\$21,471	\$509	\$1,061	30
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 both Brooklyn and Manhattan than the state and U.S. averages. The average months on the waiting list for subsidized housing in the two boroughs were 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
Brooklyn	28.2%	35.5%	8.8%	29.3%	48.1%
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 New York City average.

Brooklyn has a greater percentage of NYCHA residents who are under 18 than New York City overall. Manhattan has a greater percentage of families with a head of household who is 62 years and older than New York City overall. Approximately ten percent of NYCHA residents are 62 and older and living alone. Approximately thirty percent of NYCHA households are

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



single-parent families with children. Nearly half of NYCHA households in the MSBI Community has at least one family member who is employed.

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

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

Borough	Average Family Size	All Average Total Gross Income	All Families Average Years in Public Housing
Brooklyn	2.3	\$25,200	22.3
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 ranges from 2.2 to 2.3 persons in the community and New York City, and average gross income is approximately \$25,000. Manhattan residents served by NYCHA report longer tenures in public housing at an average of 25 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." 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;
- o The Office for the Aging budget decreased \$2.0 million, or -0.8 percent;
- o The Department of Health budget increased \$3.5 billion, or 4.8 percent; and
- The Office of the Medicaid Inspector General decreased \$2.3 million, or 5.1 percent.

• Social Welfare

- The overall Social Welfare budget increased by \$1.2 billion, or 13.3 percent;
- The Office of Children and Family Services budget increased \$666.5 million, or 25.5 percent;
- The Division of Housing and Community Renewal budget increased \$313.0 million, or 59.6 percent;



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 Temporary and Disability Assistance budget increased \$215.6 million, or 4.2 percent.

• Mental Hygiene

- o The overall Mental Hygiene budget decreased \$957.1 million, or by -13.9 percent;
- The Office of Addiction Services and Supports budget increased \$124.8 million, or 21.6 percent;
- The Justice Center for the Protection of People with Special Needs budget was increased by \$1.0 million, or 1.5 percent;
- The Office of Mental Health budget increased by \$144.7 million, or by 4.8 percent;
- The Office for People with Developmental Disabilities decreased by \$1.2 billion, or -38.3 percent.

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
- Food Initiatives
- Health Services
- Homeless Services

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



- 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
- o 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:

- o 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;
- o 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:
- o 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;
- O 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
- O 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;
- O 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
- o 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;
- O 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:

- o 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;
- o 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 \$3,3250,000, 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:
- o 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 afterschool 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;
- o 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:

- o 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;
- o 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.



Local Health Status and Access Indicators

This section examines health status and access to care data for the MSBI 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, Kings County corresponds to the borough of Brooklyn and New York County corresponds to the borough of Manhattan.



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

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

Source: County Health Rankings, 2020.

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

Manhattan ranked in the bottom 50th percentile among New York counties for 16 of the 40 indicators assessed. Of those 16 indicators ranking in the bottom 50th percentile, 13 of them ranked in the bottom quartile, specifically Quality of Life, Low birthweight, Excessive drinking,



Sexually transmitted infections, Uninsured, Mammography screening, High school graduation, Income inequality, Children in single-parent households, Violent crime, Air pollution - particulate matter, Severe housing problems, and Long commute - driving alone. Rankings for seven indictors 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 boroughs were 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	Brooklyn	Manhattan	New York State	U.S.
	HEALTH OUTCOMES				
Length of Life	Years of potential life lost before age 75 per 100,000 population	5,111.1	3,925.2	5,456.4	6,900.0
	Percent of adults reporting fair or poor health	18.1%	15.6%	16.6%	17.0%
Quality of Life	Average number of physically unhealthy days reported in past 30 days	3.6	3.6	3.5	3.8
Quality of Life	Average number of mentally unhealthy days reported in past 30 days	3.8	4.0	3.9	4.0
	Percent of live births with low birthweight (<2500 grams)	7.8%	8.3%	7.9%	8.0%
	HEALTH FACTORS				
HEALTH BEHAVIORS					
Adult smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	13.8%	12.4%	14.1%	17.0%
Adult obesity	Percent of adults that report a BMI >= 30	22.6%	14.6%	25.5%	29.0%
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	7.5	8.3	9.1	7.6
Physical inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	25.7%	17.5%	24.7%	23.0%
Access to exercise opportunities	Percent of population with adequate access to locations for physical activity	100.0%	100.0%	93.2%	84.0%
Alcohol-impaired driving deaths	Percent of driving deaths with alcohol involvement	11.5%	8.9%	20.9%	28.0%
Excessive drinking	Binge plus heavy drinking	18.4%	24.8%	18.8%	19.0%
Sexually transmitted infections	Chlamydia rate per 100,000 population	798.0	1,001.4	588.5	524.6
Teen births*	Teen birth rate per 1,000 female population, ages 15-19	18.0	11.0	15.1	23.0
Clinical Care					
Uninsured	Percent of population under age 65 without health insurance	8.0%	6.2%	6.6%	10.0%
Primary care physicians	Ratio of population to primary care physicians	1,554:1	754:1	1,219:1	1,330:1
Dentists	Ratio of population to dentists	1,557:1	560:1	1,217:1	1,450:1
Mental health providers	Ratio of population to mental health providers	456:1	116:1	346:1	400:1
Preventable hospital stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	4,793.0	3,082.0	4,203.0	4,535.0
Mammography screening*	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	34.0%	39.0%	42.0%	42.0%
Flu vaccinations	Percent of fee-for-service Medicare enrollees that receive flu vaccination	36.0%	46.0%	48.0%	46.0%

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Indicator Category	Data	Brooklyn	Manhattan	New York State	U.S.
Social & Economic Factors					
High school graduation	Percent of ninth-grade cohort that graduates in four years	74.5%	74.5%	81.8%	85.0%
Some college	Percent of adults aged 25-44 years with some post-secondary education	67.4%	84.1%	68.2%	66.0%
Unemployment	Percent of population age 16+ unemployed but seeking work	4.2%	3.7%	4.1%	3.9%
Children in poverty	Percent of children under age 18 in poverty	26.0%	19.7%	18.8%	18.0%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	6.8	9.2	5.7	4.9
Children in single-parent households	Percent of children that live in a household headed by single parent	36.3%	39.6%	34.0%	33.0%
Social associations	Number of associations per 10,000 population	5.0	12.9	8.0	9.3
Violent crime	Number of reported violent crime offenses per 100,000 population	586.2	586.4	379.0	386.0
Injury deaths	Injury mortality per 100,000	34.5	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	10.1	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	34.4%	24.4%	23.9%	18.0%
Driving alone to work	Percent of the workforce that drives alone to work	18.5%	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	60.3%	66.7%	38.1%	36.0%

Source: County Health Rankings, 2020

Both Brooklyn and Manhattan compared unfavorably to the state average for physically unhealthy days, food environment index, sexually transmitted infections, mammography screening, flu vaccinations, high school graduation, children in poverty, income inequality, children in single-parent households, violent crime, air pollution - particulate matter, severe housing problems, and long commute - driving alone. Violent crime was particularly problematic, with borough rates greater than 50 percent the state average.

Brooklyn compared unfavorably to state averages for nearly every indicator under clinical care, social and economic factors, and physical environment. Additionally, Manhattan had particularly high rates of sexually transmitted infections and income inequality.



New York State Department of Health

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

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

Area	Diseases of the Heart	Malignant Neoplasms	Cerebro- vascular Disease	Acquired Immune Deficiency Syndrome (AIDS)	Pneumonia	Chronic Lower Respiratory Diseases (CLRD)	Accidents (Total)	Diabetes Mellitus	Homicide / Legal Intervention	Cirrhosis of the Liver	Suicide
Brooklyn	183.5	134.5	19.1	4.7	22.0	15.9	24.3	23.2	4.8	6.1	5.3
Manhattan	129.2	112.8	16.8	3.5	11.0	16.2	21.1	12.3	2.0	4.7	8.0
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.

Brooklyn, Manhattan, and New York City as a whole were more than 50 percent worse than the state for AIDS mortality. Brooklyn also had a particularly higher rate for homicide / legal intervention, and higher rates of heart disease, pneumonia, and diabetes deaths.



Exhibit 31A: Cancer Indicators, 2013-2015

Indicator	Brooklyn	Manhattan	New York City	New York State		
All Cancers						
Incidence per 100,000	448.0	461.1	450.0	485.6		
Mortality rate per 100,000	143.1	135.2	138.9	149.2		
Lip, oral cavity, and pharynx car	icer					
Incidence per 100,000	9.2	11.3	9.7	10.9		
Mortality rate per 100,000	2.1	2.6	2.2	2.1		
Colon and rectum cancer						
Incidence per 100,000	41.4	35.9	39.9	39.3		
Mortality rate per 100,000	13.3	12.2	13.4	13.1		
Lung and bronchus cancer						
Incidence per 100,000	47.1	48.9	47.8	59.2		
Mortality rate per 100,000	29.7	29.1	29.4	36.9		
Female breast cancer						
Incidence per 100,000	119.6	141.7	122.8	132.8		
Mortality rate per 100,000	21.4	19.3	19.6	19.2		
Cervix uteri cancer						
Incidence per 100,000	9.5	7.2	9.0	7.8		
Mortality rate per 100,000	3.0	2.1	2.8	2.2		
Ovarian cancer						
Incidence per 100,000	11.6	12.8	11.9	12.2		
Mortality rate per 100,000	6.9	7.3	6.4	7.1		
Prostate cancer	Prostate cancer					
Incidence per 100,000	125.7	122.6	126.0	123.4		
Mortality rate per 100,000	21.8	19.8	20.0	17.8		
Melanoma						
Incidence per 100,000	0.9	1.2	1.1	1.9		
Melanoma cancer mortality	22.0	28.3	23.2	22.1		

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

Overall, Brooklyn, Manhattan, and New York City as a whole compared unfavorably to the state for indicators related to many cancers. The overall rate for all cancers in each borough was lower than the state rate.



Exhibit 31B: Cancer Screening Indicators, 2016

Indicator	Brooklyn	Manhattan	New York City	New York State
Screenings				
Percentage of women aged 50-74 years receiving breast cancer screening	79.8	78.6	80.4	79.7
Percentage of women (aged 50-74 years) who had a mammogram	71.8	75.0	74.1	71.2

Source: New York State Department of Health, 2020.

Overall, Brooklyn, Manhattan, and New York City compared favorably to the state for cancer screening indicators. Manhattan compared unfavorably to the state for breast cancer screenings.

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	
Brooklyn					
White	54.8	13.1	21.3	2.0	
Black	38.6	14.0	24.4	4.9	
Asian/Pacific	60.7	11.4	7.8	N/A	
Hispanic	34.9	13.4	22.7	2.8	
Total	47.1	13.3	21.4	3.0	
Manhattan					
White	49.7	10.0	18.2	1.1	
Black	65.4	19.2	32.1	4.3	
Asian/Pacific	50.2	11.7	13.7	N/A	
Hispanic	35.0	12.1	15.6	2.9	
Total	48.9	12.2	19.3	2.1	
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 and New York City, colorectal, breast, and cervix uteri cancer mortality rates were higher than the state average. Particularly problematic were the cervix uteri cancer mortality rates across the MSBI Community, especially for Black residents.

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

Exhibit 33: Cardiovascular Disease Indicators, 2014-2016

Borough and Race/Ethnicity	Diseases of the Heart Mortality	Cerebrovascular Disease Mortality	Coronary Heart Disease Mortality	Congestive Heart Failure Mortality	Diabetes Mortality
Brooklyn	196.3	19.7	176.1	5.8	24.0
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.

Brooklyn and New York City compared unfavorably, with heart disease mortality, coronary heart disease mortality, and diabetes mortality rates greater than the state rates.



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

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

Borough and Race/Ethnicity	Diseases of the Heart Mortality	Cerebrovascular Disease Mortality	Coronary Heart Disease Mortality	Congestive Heart Failure Mortality	Diabetes Mortality
Brooklyn					
White	204.6	15.8	185.4	6.0	11.9
Black	199.8	22.8	178.7	5.0	40.6
Asian/Pacific	93.7	19.3	83.7	2.9	11.4
Hispanic	173.4	19.5	155.5	5.7	27.0
Total	196.3	19.7	176.1	5.8	24.0
Manhattan					
White	121.7	13.5	102.6	5.1	6.2
Black	252.6	30.3	219.9	7.1	34.8
Asian/Pacific	89.9	17.8	75.5	3.7	11.2
Hispanic	133.3	21.1	113.0	4.0	21.4
Total	143.9	19.1	121.9	5.3	14.8
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

In Brooklyn, diabetes mortality was particularly problematic for Black and Hispanic residents, and the coronary heart disease mortality rate in Brooklyn was worse than the state average for most population cohorts. For New York City overall, heart disease mortality, coronary heart disease mortality, and diabetes mortality was higher than state mortality rates.



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

Exhibit 35: Obesity-Related Indicators

Indicator	Brooklyn	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]	45.4%	46.7%	48.1%	50.8%
% obese (95th percentile or higher) children (aged 2-4 years) in WIC [2014-2016]	11.7%	12.2%	13.0%	13.9%
% of WIC infants breastfeeding at least 6 months [2014-2016]	56.1%	39.5%	47.5%	40.3%
Age-adjusted % of adults overweight or obese (BMI 25 or higher) [2016]	58.2%	45.0%	56.5%	60.5%
Age-adjusted % of adults who participated in leisure time physical activity in the past 30 [2016]	74.0%	79.1%	72.8%	74.0%
Age-adjusted % of adults with physician diagnosed diabetes [2016]	11.9%	8.6%	11.1%	9.5%
Age-adjusted cardiovascular disease mortality rate per 100,000 [2014-2016]	233.3	179.0	222.8	220.2
Age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000 [2014-2016]	19.7	19.1	21.0	25.6
Total mortality rate per 100,000 [2014-2016]	604.1	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, Brooklyn, Manhattan, and New York City compared well to the state in many of the obesity indicators.



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

Exhibit 36: Communicable Disease Indicators

Indicator	Brooklyn	Manhattan	New York City	New York State
Pertussis incidence per 100,000 [2014-2016]	5.1	2.9	3.4	5.1
Mumps incidence per 100,000 [2014-2016]	0.9	3.1	1.5	1.1
Haemophilus influenza incidence per 100,000 [2014-2016]	1.2	1.4	1.3	1.5
Hepatitis A incidence per 100,000 2014-2016]	0.7	0.9	0.7	0.5
Acute hepatitis B incidence per 100,000 [2014-2016]	0.6	0.8	0.6	0.5
Tuberculosis incidence per 100,000 [2014-2016]	6.7	4.7	6.8	3.9
Salmonella incidence per 100,000 [2014-2016]	11.6	11.9	11.2	11.6
Shigella incidence per 100,000 [2014-2016]	7.9	7.6	5.8	3.9
Lyme disease incidence per 100,000 [2014-2016]	11.9	20.0	10.7	38.0
% of adults 65 years and older with flu immunization in the past year [2016]	50.4%	66.3%	59.4%	59.5%
% of adults aged 65 years and older with pneumococcal immunization [2016]	52.8%	70.3%	61.5%	69.3%

Source: New York State Department of Health, 2020.

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

New York City compared unfavorably to the state for several communicable disease indicators. Brooklyn compared particularly unfavorably for tuberculosis and shigella incidences. Manhattan compared particularly unfavorably for mumps, hepatitis A, acute hepatitis B, and shigella.



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	Brooklyn	Manhattan	New York City	New York State
Male	1,241.3	2,329.5	1,507.8	798.9
Female	554.7	461.6	533.9	298.5
White	274.2	913.5	484.5	180.5
Black	1,596.3	3,070.1	1,851.1	1,450.0
Hispanic	1,193.5	1,674.7	1,278.2	1,038.9
Asian/Pacific Islander	94.9	237.9	122.3	100.7
Native American	146.1	505.3	171.0	72.0
Total	898.9	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. Brooklyn also compared unfavorably, with several cohorts more than fifty percent higher than state averages. Community rates were particularly high for male, black, and Hispanic cohorts.



As illustrated in **Exhibit 38**, Brooklyn, Manhattan, and New York City as a whole reported new HIV and AIDs case rates that were greater than 50 percent than the state average in 2018. 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	raphic HIV AIDS Diagnoses Diagnoses		HIV Case Rate per 100,000	AIDS Case Rate per 100,000
Brooklyn				_00,000
Male	427	191	32.6	15.4
Female	135	60	10.1	4.5
White	66	17	6.0	1.7
Black	319	154	39.2	19.0
Hispanic	136	62	25.9	13.1
Asian/Pacific Islander	21	13	5.3	3.2
Total	562	251	20.8	9.6
Manhattan				
Male	333	129	36.2	15.2
Female	54	30	6.4	3.4
White	81	26	9.2	3.5
Black	135	65	58.3	29.1
Hispanic	135	52	28.7	11.4
Asian/Pacific Islander	22	8	7.9	2.6
Total	387	159	20.6	9.0
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 the 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 MSBI community.

Exhibit 39: Respiratory-Related Indicators

Indicator	Brooklyn	Manhattan	New York City	New York State
Age-adjusted CLRD mortality rate				
per 100,000 [2014-2016]	17.4	17.9	19.5	28.9
Asthma hospitalization rate				
per 10,000 [2016]	13.9	11.6	16.7	10.8
Aged 0-4 years	50.4	51.5	61.1	43.5
Aged 5-14 years	27.9	29.9	31.4	18.7
Aged 0-17 years	32.3	35.7	37.6	23.5
Aged 5-64 years	10.5	9.2	13.2	8.7
Aged 15-24 years	6.9	7.6	9.1	5.5
Aged 25-44 years	4.4	4.1	6.8	5.6
Aged 45-64 years	11.8	11.4	15.2	9.2
Aged 65 years or older	14.3	10.8	16.4	8.9
Age-adjusted asthma mortality rate				
per 100,000 [2014-2016]	2.0	1.7	1.9	1.3
Age-adjusted % of adults with current asthma				
[2016]	9.3	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 much of New York City, as well as much of the MSBI Community. Multiple asthma hospitalization and mortality rates in Brooklyn and Manhattan were higher than the state rates. The entire community benchmarks favorably to the state for Chronic Lower Respiratory Disease (CLRD).

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

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

Borough and Race/Ethnicity	Asthma hospitalizations [2012-2014]	Asthma hospitalizations, aged 0-17 years [2012-2014]	Chronic lower respiratory disease mortality 2014-2016]	Chronic lower respiratory disease hospitalizations [2012-2014]
Brooklyn				
White	7.0	5.8	17.2	18.6
Black	46.0	76.5	15.9	58.4
Asian/Pacific	5.0	4.7	13.8	9.7
Hispanic	37.6	37.3	21.8	50.5
Total	27.0	38.1	17.4	39.4
Manhattan				
White	4.5	8.3	14.4	9.3
Black	53.9	86.3	30.6	69.2
Asian/Pacific	3.9	5.6	11.4	8.0
Hispanic	28.1	31.6	17.8	37.0
Total	22.6	38.6	17.9	31.3
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 hospitalizations were most severe for Black and Hispanic cohorts in New York City overall, as well as in both boroughs of the community.



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

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

Borough	Premature Birth	Low Birth Weight	Late or No Prenatal Care	Infant Deaths Rate*	Teen Pregnancy Rate**
Brooklyn	10.0%	7.6%	5.8%	3.8	43.2
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 were higher in Brooklyn, Manhattan, and New York City, compared to the state. Low birth weight averages were higher in Manhattan and New York City, as was late or prenatal care in Brooklyn and New York City, compared to the state.



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

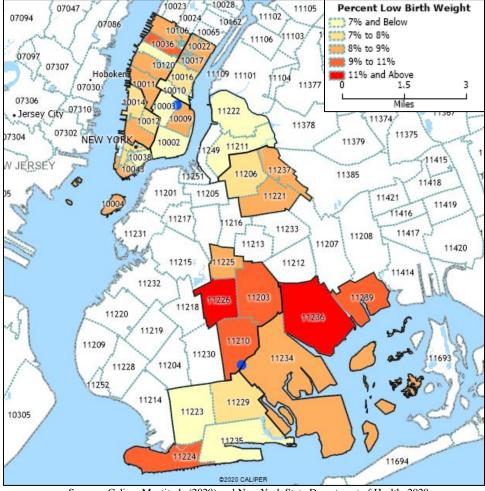


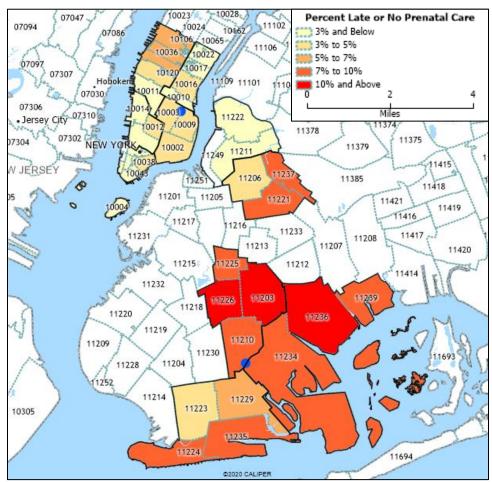
Exhibit 42: Low Birth Weight Infants by ZIP Code, 2014-2016

Sources: Caliper Maptitude (2020) and New York State Department of Health, 2020. Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

Within the MSBI community, areas that display high rates of low birthweight births are concentrated in the Brooklyn neighborhoods of Canarsie-Flatlands, Coney Island-Sheepshead Bay, and East Flatbush-Flatbush.

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

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



Sources: Caliper Maptitude (2020) and New York State Department of Health, 2020. Note that density of shading on this map is not comparable to the density of shading of other maps. The legend is specific to this map.

The Brooklyn neighborhoods of Canarsie-Flatlands and East Flatbush-Flatbush experienced high rates of mothers who received late or no prenatal care.

Exhibit 44 illustrates teen pregnancy rates by ZIP Code.

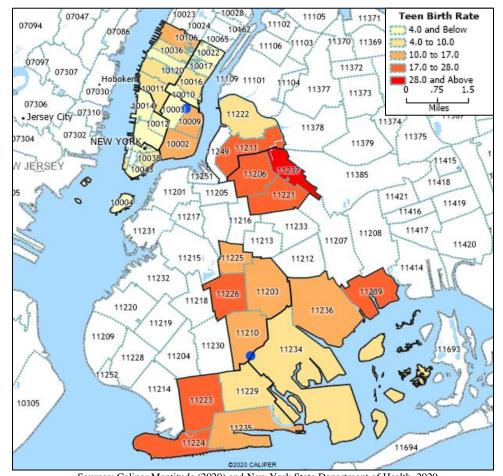


Exhibit 44: Teen Pregnancy Rate 15-19 by ZIP Code, 2014-2016*

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. Brooklyn ZIP Codes 11237 (Williamsburg-Bushwick), 11224 (Coney Island-Sheepshead Bay), and 11226 (East Flatbush-Flatbush) each had rates of more than 20 teen pregnancies for 1,000 females, ages 15-19.

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

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

Borough and Race/Ethnicity	Percent Births with Early (1st Trimester) Prenatal Care	Percent Adequate Prenatal Care	Percent Premature Births (< 37 Weeks Gestation)	Percent Low Birthweight Births (< 2.5 Kg)	Teen (Age 15- 17) Pregnancy Rate per 1,000	Infant Mortality per 1,000 Live Births
Brooklyn						
White	80.3%	73.5%	5.8%	5.1%	3.5	2.3
Black	65.3%	65.8%	12.8%	12.0%	31.6	7.3
Asian/Pacific	80.4%	80.4%	8.0%	7.6%	1.8	2.0
Hispanic	74.6%	75.2%	9.4%	7.9%	30.9	3.4
Total	75.8%	73.1%	8.4%	7.6%	20.5	3.9
Manhattan						
White	86.5%	81.9%	7.6%	7.1%	9.0	2.3
Black	62.6%	64.6%	12.0%	12.6%	36.7	9.3
Asian/Pacific	83.6%	78.5%	6.9%	7.5%	1.5	1.1
Hispanic	69.6%	72.0%	9.3%	8.1%	24.7	3.1
Total	78.9%	76.8%	8.4%	8.1%	21.5	3.6
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 Brooklyn, Manhattan, and New York City, teen pregnancy rates for Black and Hispanic residents were greater than 50 percent the state averages. Also for Brooklyn, Manhattan, and New York City, maternal and infant health indicators for Black and Hispanic cohorts compared unfavorably to state indicators.



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 month 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
Brooklyn				
White	2.5	24.0	7.3	7.4
Black	3.6	18.1	11.4	3.3
Asian/Pacific	3.0	9.9	2.3	4.1
Hispanic	4.7	25.0	8.1	3.4
Total	3.9	21.9	9.2	5.0
Manhattan				
White	1.7	17.1	6.2	8.9
Black	2.6	28.7	24.4	4.4
Asian/Pacific	2.4	9.9	2.5	6.1
Hispanic	2.1	21.7	10.7	4.1
Total	2.3	20.5	11.8	7.3
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.

Poisoning hospitalization, which includes drug poisoning, rates for both boroughs were higher than the state rate, particularly among Black residents of Manhattan. The suicide mortality rates for White populations in Manhattan and New York City were higher than the state average.



Youth Risk Behavior Surveillance System

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

New York City and borough-specific results from the 2017 Youth Risk Behavior Survey (YRBS) are available from the Centers for Disease Control and Prevention (CDC). Analysis of YRBS data can identify localized health issues and trends, and enable borough, state, or nation-wide comparisons. **Exhibit 48** displays the prevalence of various indicators for Brooklyn, 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	Brooklyn	Manhattan	NYC	New York	United States
	Binge Drinking (5 or More Drinks in the Past Month)	3.7%	5.7%	5.0%	10.8%	13.5%
Alcohol or Tobacco Use	Consumed At Least One Alcoholic Drink in the Past Month	16.1%	20.2%	17.9%	27.1%	29.8%
Smoking in the Past Month		4.4%	5.0%	5.0%	5.5%	8.8%
Asthma	Ever Been Told They Have Asthma	22.7%	26.2%	23.9%	24.3%	22.5%
Mental Health	Attempted Suicide One or More Times During the Past 12 Months	11.3%	9.3%	11.0%	10.1%	7.4%
Mental Health	Felt Sad (Every Day for 2 weeks) & Stopped Regular Activities due to Sadness	32.3%	32.7%	31.6%	30.4%	31.5%
Physical Activity	Not Physically Active for 60 Minutes Per Day for 7 Days Per Week	19.1%	17.5%	18.4%	15.0%	15.4%
	Three or More Hours of TV Per Day on School Days	22.2%	21.3%	22.6%	20.7%	20.7%
Carried Dahardana	Ever Had Sexual Intercourse	26.1%	25.8%	26.8%	30.6%	39.5%
Sexual Behaviors	No Method of Contraception	25.2%	22.0%	24.1%	15.6%	13.8%
	Cocaine Use During Lifetime	4.0%	3.6%	4.1%	4.9%	4.8%
Culatanas Abusa	Heroin Use During Lifetime	4.0%	2.6%	3.9%	3.9%	1.7%
Substance Abuse	Marijuana Use in the Past Month	15.7%	17.4%	16.2%	18.4%	19.8%
	Ever Injected an Illegal Drug	3.4%	1.8%	2.7%	3.4%	1.5%
	Physical Fight One or More Times During the Past 12 Months	25.5%	21.4%	24.4%	20.8%	23.6%
Nº alaman	Electronically Bullied	14.5%	13.8%	13.3%	17.6%	14.9%
Violence	Bullied on School Property	15.3%	15.8%	15.5%	21.7%	19.0%
	Did Not Go to School because Felt Unsafe at least Once in the Past 30 days	9.2%	7.0%	8.6%	9.4%	6.7%
	Did Not Eat Fruit in Past 7 Days	9.0%	9.0%	9.4%	7.3%	5.6%
	Did Not Eat Breakfast in Past 7 Days	15.1%	13.1%	15.0%	15.5%	14.1%
Weight and Nutrition	One or More Sugary Drinks Consumed in the Past 7 Days	61.8%	66.2%	65.5%	63.7%	72.2%
	Overweight or Obese	29.0%	27.7%	29.9%	28.6%	30.4%

Source: Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System, 2020.



The percentages of youth not using contraception were more than 50 percent worse for Brooklyn and New York City, as compared to New York State, and higher for Manhattan. Brooklyn, Manhattan, and New York City have problematic indicators related to mental health, physical activity, violence, and weight and nutrition. The percentage of youth not eating fruit was higher for Brooklyn, Manhattan, and New York City overall, as compared to the state.

New York Prevention Agenda 2019-2024

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

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

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

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

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



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

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Brooklyn	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	27.3%	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	15.9	15.8	17.8	17.6	17.3			
Premature deaths (before age 65 years), difference in percentages between Hispanics and White non-Hispanics	2017	16.2	10.3	16.1	16.5	16.2			
Age-adjusted preventable hospitalizations rate per 10,000 - Aged 18+ years	2017	138.6	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	110.5	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	34.8	47.5	42.8	23.8	23.9			
Percentage of adults with health insurance, aged 18-64 years	2017	90.1%	93.2%		92.0%	97.0%			
Adults who have a regular health care provider, age-adjusted percentage	2016	79.9%	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	127.4	182.5	159.7	180.6	173.7			
Assault-related hospitalizations, rate per 10,000 population	2017	3.9	3.7	4.5	3.2	3.0			
Assault-related hospitalizations, ratio of rates between Black non- Hispanics and White non-Hispanics	2017	6.3	8.9	5.1	5.6	5.5			
Assault-related hospitalizations, ratio of rates between Hispanics and White non-Hispanics	2017	3.3	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	1.6	2.3	2.2	2.9	2.7			
Firearm assault-related hospitalizations, rate per 10,000 population	2017	0.4	0.2	0.4	0.3	0.4			
Work-related emergency department (ED) visits, ratio of rates between Black non-Hispanics and White non-Hispanics	2017	1.7	4.1	1.9	1.4	1.3			
Crash-related pedestrian fatalities, rate per 100,000 population	2016	1.5	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	80.6%	90.5%	76.4%	45.8%	47.9%			



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

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Brooklyn	Manhattan	New York City	New York State	NYS Target
Prevent Chronic Diseases						
Percentage of children with obesity, among children aged 2-4 years	2017	11.7%	13.1%	13.1%	13.9%	13.0%
participating in the WIC program	2017	11.770		13.170	13.570	13.070
Percentage of children and adolescents with obesity	2016-2017	19.4%	16.5%	20.2%	-	19.4%
Percentage of adults with obesity	2016	24.8%	16.9%	23.0%	25.5%	24.2%
Percentage of adults with an annual household income less than \$25,000 with obesity	2016	30.6%	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	33.7%	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	52.8%	54.7%	53.2%	55.8%	61.4%
Percentage of adults who participate in leisure-time physical activity	2016	73.6%	79.7%	72.4%	73.7%	77.4%
Percentage of adults with disabilities who participate in leisure-time physical activity	2016	57.5%	63.6%	57.4%	56.2%	61.8%
Percentage of adults who participate in leisure-time physical activity, aged 65+ years	2016	71.6%	76.4%	70.1%	69.0%	75.9%
Prevalence of cigarette smoking among adults	2016	13.2%	9.6%	11.5%	14.2%	11.0%
Percentage of cigarette smoking among adults with income less than \$25,000	2016	15.6%	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	61.5%	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	66.2%	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	60.7%	70.9%	65.8%	64.2%	67.4%
Asthma emergency department visits, rate per 10,000, aged 0-17 years	2017	170.4	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	56.0%	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	70.6%	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 Source: New York S	2016	9.5%	9.1%	13.0%	10.1%	10.6%



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

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Brooklyn	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	72.3%	69.3%	76.0%	73.3%	80.6%
Percentage of women with a preventive medical visit in the past year, aged 45+ years	2016	84.0%	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	31.2%	26.6%	34.0%	35.3%	38.1%
Maternal mortality, rate per 100,000 live births	2015-2017	23.1	21.2	21.7	18.9	16.0
Infant mortality, rate per 1,000 live births	2017	3.9	3.2	4.2	4.5	4.0
Percentage of births that are preterm	2017	8.5%	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	3.1	3.8	4.4	10.1	9.1
Percentage of infants who are exclusively breastfed in the hospital among all infants	2017	42.3%	62.0%	42.7%	47.3%	51.7%
Percentage of infants who are exclusively breastfed in the hospital among Hispanic infants	2017	38.0%	37.5%	34.9%	35.6%	37.4%
Percentage of infants who are exclusively breastfed in the hospital among Black non-Hispanic infants	2017	29.1%	43.2%	33.9%	33.9%	38.4%
Percentage of infants supplemented with formula in the hospital among breastfed infants	2017	55.0%	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	59.5%	41.3%	0.0%	42.0%	45.5%
Suicide mortality among youth, rate per 100,000, aged 15-19 years	2015-2017	2.8		3.2	5.4	4.7
Percentage of families participating in the Early Intervention Program who meet the state's standard for the NY Impact on Family Scale	July 2017- June 2018	64.8%	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%	100.0%	70.8%	77.5%



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

Prevention Agenda 2019-2024 Priority Areas and Indicators	Data Years	Brooklyn	Manhattan	New York City	New York State	NYS Target
Promote Well-Being and Prevent Mental and Substance Use Disorder	's					
Opportunity Index Score	2018	52.7	63.3	-	56.9	59.2
Frequent mental distress during the past month among adults, age- adjusted percentage	2016	10.5	9.8	10.3	10.7	10.7
Economy Score	2018	36.2	51.6	-	50.8	52.3
Community Score	2018	56.9	71.4	-	57.9	61.3
Binge drinking during the past month among adults, age-adjusted percentage	2016	16.3%	22.4%	17.3%	18.3%	16.4%
Overdose deaths involving any opioids, age-adjusted rate per 100,000 population	2017	10.7	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	155.6	181.0	175.8	378.7	415.6
Opioid analgesic prescriptions for pain, age-adjusted rate per 1,000 population	2018	189.8	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	31.7	37.4	38.2	62.1	53.3
Percentage of adults who have experienced two or more adverse childhood experiences (ACEs)	2016	39.4%	35.0%	34.6%	35.6%	33.8%
Suicide mortality, age-adjusted rate per 100,000 population	2015-2017	5.2	7.4	5.9	8.0	7.0



New York City Community Health Survey

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

Exhibit 50A summarizes access indicators for MSBI 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
Brooklyn	26.7%	16.1%	12.1%	11.7%	14.9%
Canarsie - Flatlands	15.0%	17.3%	14.4%	12.4%	10.8%
Coney Island - Sheepshead Bay	25.3%	18.6%	10.6%	12.4%	14.1%
East Flatbush - Flatbush	24.7%	16.4%	13.4%	12.1%	12.7%
Greenpoint	33.5%	21.7%	7.3%	8.8%	18.7%
Williamsburg - Bushwick	32.1%	14.1%	16.1%	17.0%	15.8%
Manhattan	16.7%	17.0%	7.7%	8.7%	15.6%
Chelsea - Clinton	6.7%	16.6%	12.6%	8.1%	22.6%
Gramercy Park-Murray*	5.7%	13.3%	3.6%	7.5%	10.5%
Greenwich Village-SoHo	-	-	=	-	-
Lower Manhatan	-	-	-	-	-
Union Square - Lower East Side	17.7%	20.5%	7.3%	10.5%	14.3%
New York City	23.8%	16.1%	11.8%	10.3%	15.2%

Source: New York City Department of Health and Mental Hygiene, 2020. *Combined with the Upper East Side

Overall, Brooklyn residents were more likely to have Medicaid, be uninsured, not receive medical care, and have no primary care physician than City averages; approximately one-third of residents of Greenpoint and Williamsburg – Bushwick had Medicaid. Manhattan residents were more likely to have Medicare and have no primary care physician than City averages.



Exhibit 50B summarizes chronic conditions within MSBI 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
Brooklyn	3.7%	28.0%	11.6%	58.5%
Canarsie - Flatlands	3.8%	26.8%	11.9%	60.3%
Coney Island - Sheepshead Bay	2.5%	26.6%	12.2%	58.4%
Greenpoint	1.7%	20.4%	9.0%	52.4%
East Flatbush - Flatbush	4.0%	30.1%	15.6%	63.8%
Williamsburg - Bushwick	2.2%	32.8%	14.9%	62.0%
Manhattan	4.6%	23.9%	7.3%	44.6%
Chelsea - Clinton	3.7%	18.3%	4.5%	37.4%
Gramercy Park-Murray*	4.2%	17.9%	4.5%	37.6%
Greenwich Village-SoHo	-	-	-	-
Lower Manhattan	-	-	-	-
Union Square - Lower East Side	5.1%	22.7%	9.2%	38.4%
New York City	4.3%	28.0%	11.5%	57.3%

Source: New York City Department of Health and Mental Hygiene, 2020.
*Combined with the Upper East Side

Overall, Brooklyn residents were more likely to have ever had diabetes and be overweight and obese than City averages. Manhattan residents were more likely to have ever had asthma.

Exhibit 50C summarizes health behaviors within MSBI 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**
Brooklyn	15.5%	13.6%	28.3%	22.8%	11.0%
Canarsie - Flatlands	7.1%	11.2%	31.5%	31.8%	14.5%
Coney Island - Sheepshead Bay	13.1%	16.8%	30.7%	17.5%	6.9%
Greenpoint	17.9%	9.7%	25.8%	19.9%	9.1%
East Flatbush - Flatbush	15.6%	9.8%	22.1%	28.9%	17.9%
Williamsburg - Bushwick	22.4%	19.5%	25.0%	30.1%	13.2%
Manhattan	25.1%	12.0%	16.7%	16.6%	10.0%
Chelsea - Clinton	33.2%	12.5%	18.6%	10.0%	8.7%
Gramercy Park-Murray***	22.5%	7.6%	10.7%	10.2%	8.4%
Greenwich Village-SoHo	=	-	-	=	=
Lower Manhattan	-	-	-	-	-
Union Square - Lower East Side	30.5%	12.4%	14.9%	9.7%	6.2%
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.

***Combined with the Upper East Side

Overall, Brooklyn residents had higher percentages of current smoking and no exercise in the past 30 days. Manhattan residents had higher percentages of binge drinking, with approximately one-third of Chelsea - Clinton reporting binge drinking.



Exhibit 50D summarizes mental health indicators within MSBI neighborhoods.

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

Borough and Neighborhood	Current Depression	No mental health treatment (among those with depression)
Brooklyn	8.4%	61.2%
Canarsie - Flatlands	10.1%	67.1%
Coney Island - Sheepshead Bay	13.7%	32.0%
Greenpoint	6.6%	50.7%
East Flatbush - Flatbush	8.6%	64.3%
Williamsburg - Bushwick	8.7%	62.8%
Manhattan	9.8%	45.0%
Chelsea - Clinton	11.3%	58.2%
Gramercy Park-Murray*	8.0%	0.0%
Greenwich Village-SoHo	-	-
Lower Manhattan	-	-
Union Square - Lower East Side	10.6%	41.7%
New York City	9.3%	57.3%

Source: New York City Department of Health and Mental Hygiene, 2020. *Combined with the Upper East Side

Overall, Brooklyn had a higher percentage of residents with no mental health treatment (among those with depression) than the City average. Manhattan residents had a higher percentage of residents with depression than the City average.

Ambulatory Care Sensitive Conditions

This section examines the frequency of discharges for Ambulatory Care Sensitive Conditions (ACSCs) from MSBI'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." 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 MSBI community that were for ACSCs, by payer.

Exhibit 51: Adult Discharges for ACC by Neighborhood and Payer, 2019

Neighborhood	Private	Medicaid	Medicare	Self-Pay / Other	Total
Brooklyn MSBI Neighborhoods	4.2%	7.9%	16.3%	3.1%	10.8%
Canarsie-Flatlands	6.0%	8.5%	15.8%	0.0%	11.2%
Coney Island-Sheepshead Bay	4.0%	7.0%	16.4%	0.0%	11.4%
East Flatbush-Flatbush	4.9%	8.2%	16.0%	5.8%	10.7%
Greenpoint	0.0%	4.4%	15.7%	0.0%	7.2%
Williamsburg-Bushwick	4.0%	9.4%	18.0%	5.2%	11.5%
Manhattan MSBI Neighborhoods	0.2%	5.2%	11.2%	0.0%	6.5%
Chelsea-Clinton	0.0%	5.0%	10.9%	0.0%	6.2%
Gramercy Park-Murray	0.0%	5.9%	10.1%	0.0%	5.8%
Greenwich Village-SoHo	0.0%	0.0%	8.3%	0.0%	3.9%
Lower Manhattan	0.0%	3.8%	10.5%	0.0%	4.6%
Union Square-Lower East Side	1.1%	6.0%	13.1%	0.0%	8.6%
Total	2.6%	7.2%	14.7%	2.2%	9.5%

Source: DataGen®, Inc., 2020

¹¹Agency for Healthcare Research and Quality (AHRQ), *Prevention Quality Indicators Overview*. Retrieved 2020, from: https://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx.



The table indicates that 9.5 percent of adult discharges in the community were for ACSCs in 2019. Medicare patients and patients from Brooklyn neighborhoods had the highest proportions of discharges for ACSCs.

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

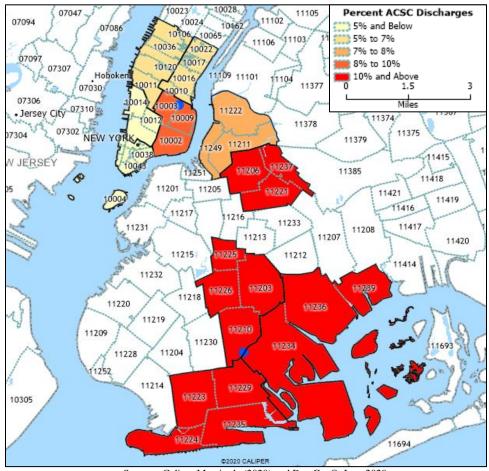


Exhibit 52A: Adult Discharges for ACSC by Neighborhood, 2018

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

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

The ACSC discharge rates were higher in neighborhoods near MS - Brooklyn. In the Brooklyn neighborhoods of Canarsie-Flatlands, Coney Island-Sheepshead Bay, East Flatbush-Flatbush, and Williamsburg-Bushwick, ACSCs were more than ten percent of discharges.

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

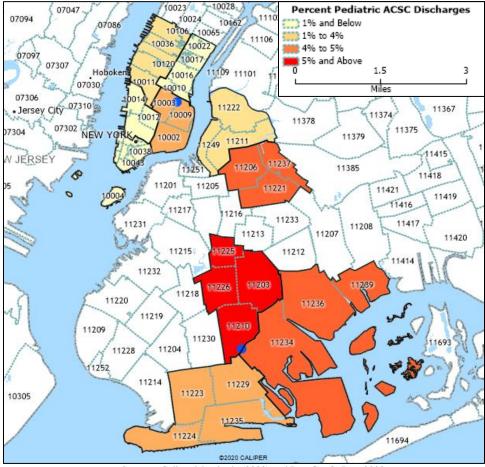


Exhibit 52B: Pediatric Discharges for ACSC by Neighborhood, 2018

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

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

The Pediatric ACSC discharge rates were higher in neighborhoods near MS - Brooklyn. In the Brooklyn neighborhood of East Flatbush-Flatbush, Pediatric ACSCs were more than five percent of discharges.



ACSC Conditions Analysis

Exhibit 53 displays the frequency and percentage of all hospital discharges of residents in the MSBI 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 MSBI 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%	1.0%	28.0%	70.9%	5,581
COPD or Asthma in Older Adults	0.0%	0.0%	42.5%	57.5%	2,568
Diabetes Long-Term Complications	0.0%	4.4%	48.6%	47.0%	1,548
Urinary Tract Infection	0.0%	1.3%	4.5%	94.2%	1,082
Community-Acquired Pneumonia	0.0%	2.9%	22.3%	74.8%	1,052
Hypertension	0.0%	0.0%	40.6%	59.4%	834
Uncontrolled Diabetes	0.0%	0.0%	24.9%	75.1%	586
Pediatric Asthma	100.0%	0.0%	0.0%	0.0%	546
Diabetes Short-Term Complications	0.0%	38.4%	40.3%	21.3%	578
Lower-Extremity Amputation - Patients with Diabetes	0.0%	0.0%	28.6%	71.4%	224
Pediatric Gastroenteritis	100.0%	0.0%	0.0%	0.0%	140
Asthma in Younger Adults	0.0%	100.0%	0.0%	0.0%	103
Pediatric Urinary Tract Infection	100.0%	0.0%	0.0%	0.0%	29

Source: DataGen®, Inc.., 2020

The top five ACSC conditions in the MSBI community by number of discharges were heart failure, COPD or asthma in older adults, diabetes long-term complications, urinary tract infection, and community-acquired pneumonia. Patients aged 65 years and older 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*TM 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*TM (CNI) score of each ZIP Code in the MSBI community.

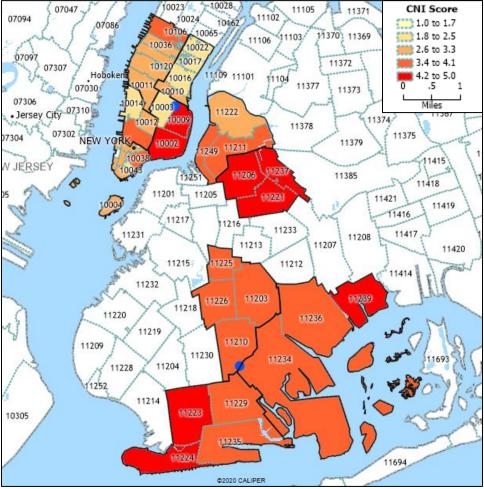


Exhibit 54: Community Need IndexTM Score by ZIP Code

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. ZIP Codes in the neighborhoods of Canarsie-Flatlands, Coney Island-Sheepshead Bay, Union Square-Lower East Side, Union Square-Lower East Side, and Williamsburg-Bushwick demonstrated the highest need.

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." The CDC SVI is determined from fifteen variables reported by the U.S. Census Bureau. Variables are grouped into the following four themes:

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

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

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



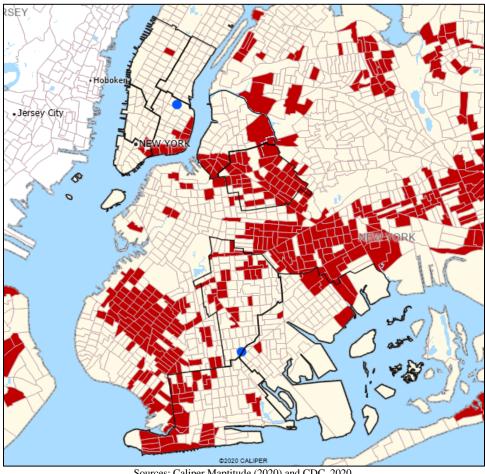


Exhibit 55A: Top Quartile Census Tracts for Socioeconomic Vulnerability

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

Census tracts with unfavorable health outcomes are present throughout the community, with concentrations in the neighborhoods of Coney Island-Sheepshead Bay, Greenpoint, Union Square-Lower East Side, and Williamsburg-Bushwick.



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

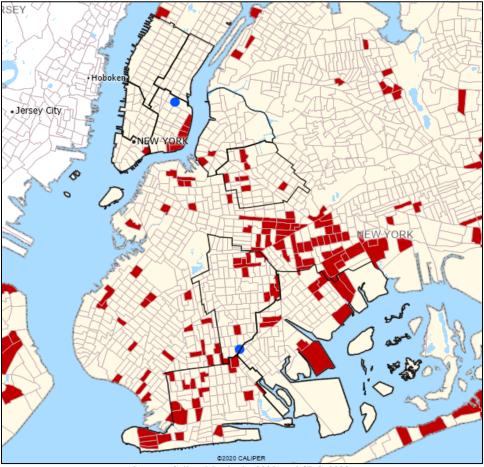


Exhibit 55B: Top Quartile Census Tracts for Household Vulnerability

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

Census tracts in the top quartile for household vulnerability are present throughout the community, particularly in Brooklyn neighborhoods.

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

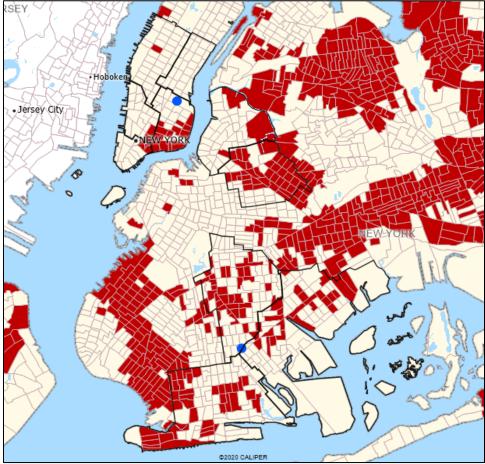


Exhibit 55C: Top Quartile Census Tracts for Minority Vulnerability

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

Census tracts with unfavorable health outcomes are present throughout the community, with concentrations in the neighborhoods of Coney Island-Sheepshead Bay, Union Square-Lower East Side, and Williamsburg-Bushwick.

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

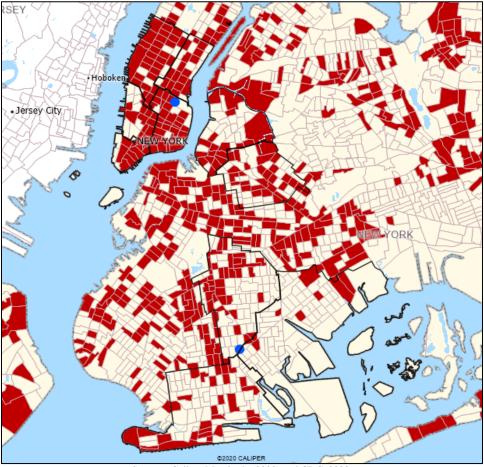


Exhibit 55D: Top Quartile Census Tracts for Housing Vulnerability

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

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

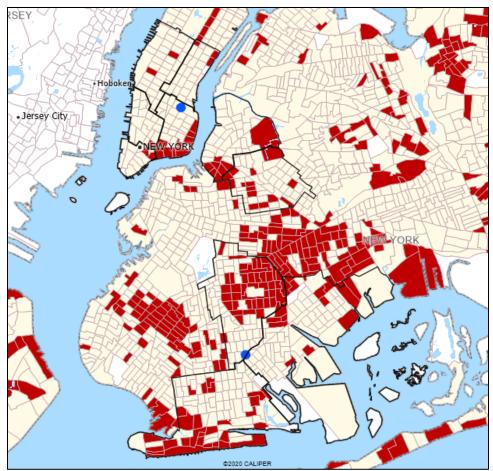


Exhibit 56A: Locations of Unfavorable Health Outcomes, 2019

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

Census tracts with unfavorable health outcomes are present throughout the community, with concentrations in the neighborhoods of Greenpoint, Union Square-Lower East Side, and Williamsburg-Bushwick.



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

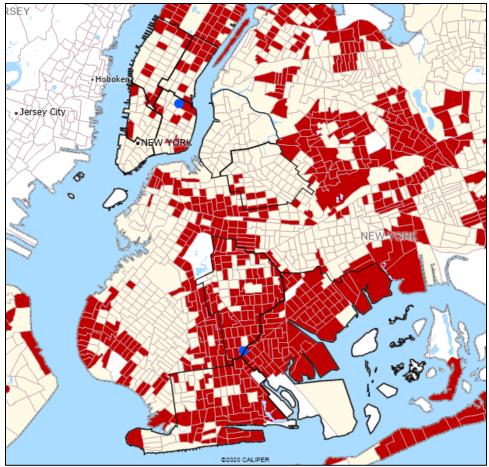


Exhibit 56B: Locations of Unfavorable Prevention Indicators, 2019

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

Census tracts with unfavorable prevention outcomes are present throughout the community, with concentrations in neighborhoods proximate to MS - Brooklyn.

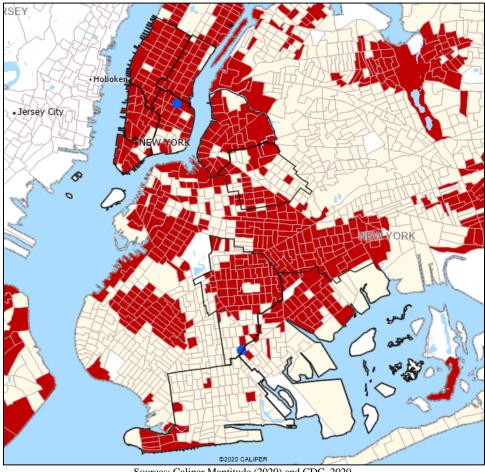


Exhibit 56C: Locations of Unfavorable Health Behaviors, 2019

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

Census tracts with unfavorable health behaviors are present throughout the community with concentrations in neighborhoods proximate to MSBI - Manhattan.



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 MSBI community.

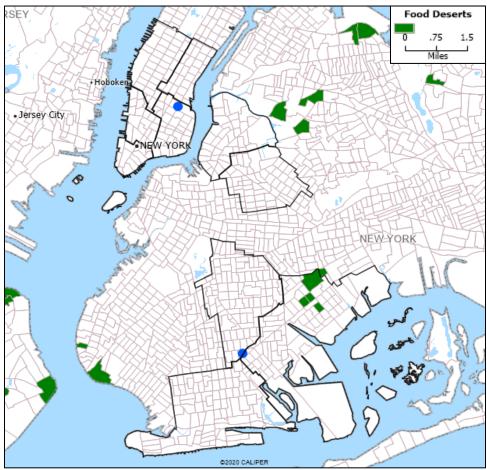


Exhibit 57: Food Deserts by Census Tract, 2015

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

Food deserts are present in Canarsie & Flatlands (Brooklyn) within the MSBI community.



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

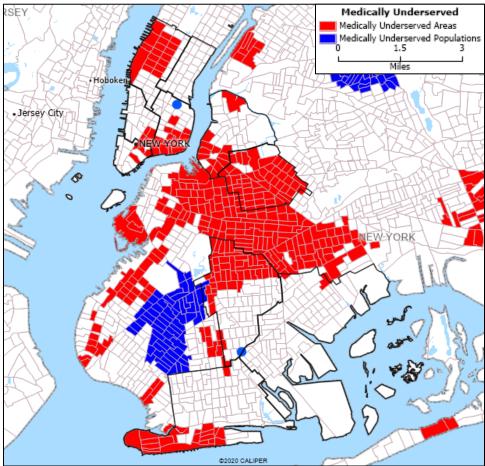
Exhibit 58 shows parts of the community designated by HRSA as medically underserved.

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.



Mount Sinai Beth Israel Community Health Needs Assessment

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



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

Census tracts throughout the community have been designated as Medically Underserved Areas.

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.

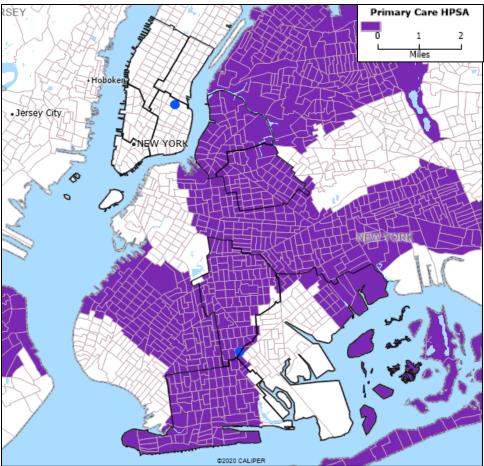
HPSAs can be: "(1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility." ¹⁶

Areas and populations in the MSBI 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



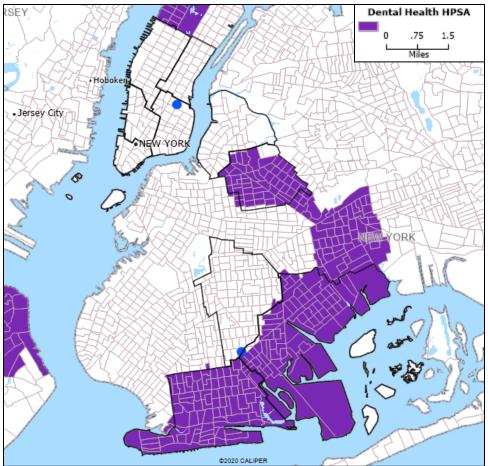
Exhibit 59A: Location of Federally Designated Primary Care HPSA Census Tracts in the MSBI Community, 2020



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

Census tracts located in Brooklyn community neighborhoods have been designated as Primary Care HPSAs.

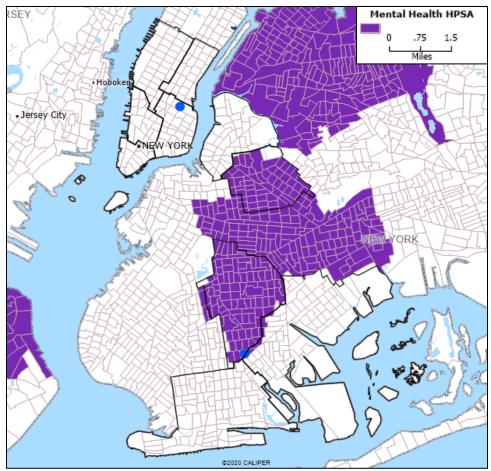
Exhibit 59B: Location of Federally Designated Dental Health HPSA Census Tracts in the MSBI Community, 2020



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

Census tracts located in Brooklyn community neighborhoods have been designated as Dental Care HPSAs.

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



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

Census tracts designated as Mental Health HPSAs are concentrated in the Brooklyn neighborhoods of East Flatbush-Flatbush and Williamsburg-Bushwick.

Description of Other Facilities and Resources within the Community

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

Exhibit 60: List of HPSA Facilities in the MSBI Community

Borough	Facility Type	Primary Care	Dental Health	Mental Health
Brooklyn				
Bedford Stuyvesant Family Health Center, Inc.	Federally Qualified Health Center	• •		•
Brooklyn Plaza Medical Center	Federally Qualified Health Center	•	•	•
Brownsville Community Development Corporation	ty Development Corporation Federally Qualified Health Center •		•	•
Community Health Initiatives Inc.	Federally Qualified Health Center	•	•	•
Ezra Medical Center	cal Center Federally Qualified Health Center		•	•
Housing Works Health Services III, Inc.	Federally Qualified Health Center	ederally Qualified Health Center •		•
ICL Healthcare Choices, Inc.	Federally Qualified Health Center	•	•	•
Joan Malin Brooklyn Health Center of Brooklyn	Other Facility	•		
Kings County Hospital Center	State Mental Hospital			•
Lasante Health Center, Inc.	FHQC Look A Like	•	•	•
LBJ Health	Federally Qualified Health Center	•	•	
Lyndon B. Johnson Health Center	Federally Qualified Health Center			•
MDC-Brooklyn	Correctional Facility	•	•	•
ODA Primary Health Care Center, Inc.	Federally Qualified Health Center	er •		•
Sunset Park Health Council, Inc.	Federally Qualified Health Center	•	•	•
Woodhull Mental Health Center	State Mental Hospital			•

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Exhibit 60 (Continued): List of HPSA Facilities in the MSBI 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	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 36 hospital locations where community residents can receive services across all neighborhoods in Brooklyn and Manhattan. There are currently 15 hospital facilities in Brooklyn and 21 hospital facilities in Manhattan.

Exhibit 61: Hospitals in the MSBI Community

Borough	Hospital Name			
Brooklyn	Brookdale Hospital Medical Center			
Brooklyn	Brooklyn Hospital Center - Downtown Campus			
Brooklyn	Coney Island Hospital			
Brooklyn	Interfaith Medical Center			
Brooklyn	Kings County Hospital Center			
Brooklyn	Kingsbrook Jewish Medical Center			
Brooklyn	Maimonides Medical Center			
Brooklyn	Mount Sinai Brooklyn			
Brooklyn	New York Community Hospital of Brooklyn, Inc			
Brooklyn	New York-Presbyterian Brooklyn Methodist Hospital			
Brooklyn	NYU Langone Health-Cobble Hill			
Brooklyn	NYU Langone Hospital-Brooklyn			
Brooklyn	University Hospital of Brooklyn			
Brooklyn	Woodhull Medical & Mental Health Center			
Brooklyn	Wyckoff Heights Medical Center			
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. In Brooklyn, rates for primary care physicians, mental health providers, and dentists were lower than the state averages.

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

Borough	Primary Care Physician		Mental Health Provider		Dentists	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
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
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." 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 Indiana 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

 23 *Ibid*.

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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

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 Mount Sinai Beth Israel.

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 MSBI community, representatives of these organizations provided insight that was applicable to different populations within the MSBI community, such as children and youth, seniors, and foreign-born residents.



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APPENDIX - Actions Taken Since Previous CHNA²⁵

Mount Sinai Beth Israel Hospital and Mount Sinai Brooklyn 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 Beth Israel Hospital and Mount Sinai Brooklyn identified a number of community health needs. The section below lists these health needs and related action items.

1. Aging Population

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

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

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

Health professions education. The health professions education activities of MSBI respond to both the current and future community health needs for chronic disease treatment and prevention. MSBI actively participates in over 30 residency and fellowship programs. Current residency and fellowship programs that are especially related to aging issues include the following:

- Geriatric Psychiatry Fellowship; and
- Internal Medicine Residency.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$25,622,371 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.



²⁵ Source: Mount Sinai Health System

Patient representatives. At MSBI, 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 MSBI. Utilization of patient representative services is indicative of the positive impact of this action on the community health need.

Senior nursing. MSBI provided a Registered Nurse to work with the senior residents of the Naturally Occurring Retirement Community (NORC) Co-op Village and Sage Senior Center. Senior resident utilization of these services is indicative of the positive impact of this action on the community health need.

Senior Health. At Mount Sinai Doctors Senior Health, primary care doctors, nurse practitioners, and social workers specializing in geriatrics help adults age 65 and older achieve independence and a healthier, better quality of life. Support services are available for residents and caregivers. When appropriate, medical care and social services are provided in the home. Continued interest in Mount Sinai Doctors Senior Health by patients and providers is indicative of the positive impact of this action on the community health need.

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

The 2017 MSBI 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 MSBI respond to both the current and future community mental health needs. MSBI actively participates in over 30 residency and fellowship programs. Current residency and fellowship programs that are especially related to mental health care services are as follows:

- Clinical Psychology Internship Program;
- Geriatric Psychiatry Fellowship;
- Psychiatry Residency; and
- Psychosomatic Medicine Fellowship.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$25,622,371 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 Health System 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.



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

The 2017 MSBI 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 MSBI respond to both the current and future community health needs for professional services. MSBI actively participates in over 30 residency and fellowship programs. Current residency and fellowship programs that are especially related to primary health care services are as follows:

- Emergency Medicine Residency;
- Family Medicine Residency;
- Internal Medicine Residency;
- Mount Sinai Beth Israel Residency in Urban Family Medicine; and
- Obstetrics and Gynecology Residency The Brooklyn Hospital.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$25,622,371 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 Care Services. MSBI provides significant specialty care services for both inpatient and outpatient services, including but not limited to breast health, cardiology, diabetes services, gastroenterology, general surgery, and orthopedics. The hospital provides primary care at its campuses, as well as physician practices throughout Manhattan and Brooklyn, and maintains affiliation agreements with City MD and CVS Minute Clinics. 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. In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$9,518,839 in financial assistance costs related to services provided. MSBI also reported \$52,093,054 in unreimbursed costs for services provided to Medicaid enrollees. In addition, MSBI reported \$64,716,719 in Subsidized Health Services.



4. Chronic Diseases and Contributing Lifestyle Factors

The 2017 MSBI 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 MSBI respond to both the current and future community health needs for chronic disease treatment and prevention. MSBI actively participates in over 30 residency and fellowship programs. Current residency and fellowship programs that are especially related to chronic disease services are as follows:

- Breast Imaging Fellowship;
- Breast Surgery Fellowship;
- Cardiology Fellowship;
- Endocrinology and Diabetes Fellowship;
- Gastroenterology Fellowship;
- General Surgery Residency;
- General Surgery Residency;
- Hand Surgery Fellowship;
- Hematology and Medical Oncology Fellowship Beth Israel;
- Infectious Diseases Fellowship;
- Interventional Cardiology;
- Interventional Cardiology Fellowship;
- Interventional Endoscopy Fellowship:
- Micrographic Surgery and Dermatologic Oncology Fellowship at Mount Sinai Beth Israel;
- Movement Disorders Fellowship;
- Nephrology Fellowship;
- Neurology Residency;
- Oral and Maxillofacial Surgery (OMFS) Residency Program;
- Oral and Maxillofacial Surgery (OMFS) Residency Program;
- Orthopaedic Shoulder and Elbow Fellowship;
- Pain Medicine Fellowship;
- PGY1 Pharmacy Residency Program;
- Podiatric Medicine and Surgery Residency; and
- Pulmonary Critical Care Medicine Fellowship.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$25,622,371 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.



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

Support groups. Caring experts lead support groups at MSBI 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.

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:

- MSBI, 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. MSBI 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:

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

In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$9,518,839 in financial assistance costs related to services provided. MSBI also reported \$52,093,054 in unreimbursed costs for services provided to Medicaid enrollees. In addition, MSBI reported \$64,716,719 in Subsidized Health Services.

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:

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

Also as noted in the Implementation Strategy, planned healthcare activities that directly and indirectly related to Navigating a Changing Health Care Provider Environment are described below.



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

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

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

The Preventable Admissions Care Team. The Preventable Admissions Care Team (PACT) is an intensive, short-term transitional care program for patients at high risk for a 30-day readmission. Patients, covered by Medicare FFS or Healthfirst insurance, are identified based on assessed risk for 30-day readmission. Interventions include phone calls, accompaniments, and home visits. The PACT program is integrated with other care coordination initiatives at Mount Sinai Health System.

Mount Sinai Access. MSBI participates in Mount Sinai Access, a 24/7 concierge service available to assist physicians, patients, and family members connect with Mount Sinai specialists. Mount Sinai Access is staffed by nurses who work closely with physicians to arrange an outpatient appointment or peer to peer consultation as quickly as possible. Services are targeted to patients and families, as well as physicians to help coordinate patient care.

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:

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



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

In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$9,518,839 in financial assistance costs related to services provided. MSBI also reported \$52,093,054 in unreimbursed costs for services provided to Medicaid enrollees. In addition, MSBI reported \$64,716,719 in Subsidized Health Services.

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:

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

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

LGBT Services. The Mount Sinai Health System is dedicated to meeting the health care needs of the lesbian, gay, bisexual, and transgender (LGBT) community. In addition to medical and educational services, Mount Sinai Beth Israel Hospital and the Mount Sinai Health System take



an active role in promoting LGBT health equity and access to care, and join with other organizations committed to addressing the needs of the LGBT community. LGBT services at MSBI and/or other Mount Sinai locations include extensive counseling and mental health support via transgender confirming resources.

Asian Services. The health needs of the Asian American community are honored with easy and seamless access to high quality inpatient and outpatient care as well as support services. Asian-American patients admitted to the hospital will find an environment that honors culture, traditions, and language with Asian physicians specializing in hospital medicine, experienced multi-lingual medical interpreters, a dedicated social worker, free newspapers, and multi-lingual signs. Additionally, efforts are made to recruit multi-lingual employees and provide training to non-Asian staff to enhance employee understanding of the culture and family dynamics of the Asian-American community.

Jewish Services. The goal of the Heritage Initiative is to promote cultural sensitivity to the Jewish community at all Beth Israel inpatient and outpatient sites. Specific services of the Heritage initiative include helping patients connect with organizations that serve the Jewish community, providing resources to help patients and their families during Shabbos, furnishing space for religious services, offering genetic counseling and testing, and serving kosher meals.

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

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

Patient and family acceptance, as well as integration within the professional care team, are indicators of the positive impacts of these actions on the community health need.

11. Substance Abuse

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

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

Health professions education. The health professions education activities of MSBI respond to both the current and future community health needs for substance abuse treatment. MSBI actively participates in nearly 30 residency and fellowship programs. Current residency and fellowship programs that are especially related to substance abuse services are as follows:



- Clinical Psychology Internship Program;
- Pain Medicine Fellowship;
- Psychiatry Residency; and
- Psychosomatic Medicine Fellowship.

In its Form 990 for year ending December 31, 2018, as filed with the IRS, MSBI reported \$25,622,371 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.

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.

