

# **Community Health Needs Assessment**

*Prepared for*  
THE MOUNT SINAI HOSPITAL

*By*  
VERITÉ HEALTHCARE CONSULTING, LLC

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## ABOUT VERITÉ HEALTHCARE CONSULTING

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

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

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

More information on the firm and its qualifications can be found at [www.VeriteConsulting.com](http://www.VeriteConsulting.com).

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# EXECUTIVE SUMMARY

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## Introduction

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

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

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

This community health needs assessment (CHNA) was conducted by MSH to identify community health needs and to inform development of an implementation strategy to address identified significant needs.

## OBJECTIVES AND METHODOLOGY

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### 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.<sup>1</sup> 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.<sup>2</sup>

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.

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<sup>1</sup> Internal Revenue Code, Section 501(r).

<sup>2</sup> 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).<sup>3</sup> The community defined by MSH accounts for 80 percent of the hospital’s 2016 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.<sup>4</sup>

Input from 104 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 they were 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) recent assessments developed by other organizations, and (3) input from the key informants who participated in the interview process.

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<sup>3</sup> 501(r) Final Rule, 2014.

<sup>4</sup> 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.

## **Collaborating Organizations**

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

## **Information Gaps**

This CHNA relies on multiple data sources and community input gathered between June and December 2017. A number of data limitations should be recognized when interpreting results. For example, some data (e.g., County Health Rankings, Community Health Status Indicators, 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 2014. 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.



## Significant Community Health Needs

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

- Aging Population
- Access to Mental Health Care and Poor Mental Health Status
- Access to Primary Health Care Services by Individuals with Limited Resources
- Chronic Diseases and Contributing Lifestyle Factors
- 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.

### Aging Population

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

- In every borough of New York City, the aged 65 and older cohort is expected to grow the most between 2017 and 2022, with a growth rate of 16.8 percent overall (**Exhibit 4**).
- In County Health Rankings, all boroughs except Staten Island compared unfavorably to the state rate for the percent of female Medicare enrollees (ages 67-69) that received mammography screenings. The Bronx and Brooklyn also compared unfavorably for older adult preventable hospitalizations (**Exhibit 29B**).
- The asthma hospitalization rate for residents aged 65 years or older in the Bronx, Brooklyn, and New York City was more than 50 percent higher than the state average (**Exhibit 39**).
- ACSC discharges were higher for patients aged 65 years and over than any other cohort in New York City (**Exhibit 53**).
- Many interviewees identified the aging population as a primary concern in the community, particularly in regards to mobility, cognitive abilities, and issues with housing.

## Access to Mental Health Care and Poor Mental Health Status

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.

- The Bronx ranked last among all counties in New York for poor mental health days (**Exhibit 29A**).
- In County Health Rankings, the Bronx, Brooklyn, Queens, and Staten Island compared unfavorably to the state average for ratio of population to mental health providers (**Exhibit 29B**).
- Manhattan compared unfavorably to the state mortality rate for suicide (**Exhibit 30**).
- In the CDC's Youth Risk Behavior Surveillance System (YRBSS), respondents in the Bronx, Brooklyn, Manhattan, Queens, 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**).
- Over 24 percent of residents surveyed in the Bronx, Brooklyn, and Queens indicated that they experienced serious psychological distress (**Exhibit 50D**).
- There were many areas designated as Health Professional Shortage Areas for Mental Health, particularly in the Bronx and Brooklyn (**Exhibit 57C**).
- Many other community needs assessments in New York City identified mental health and illness as a priority in the community (**Exhibit 61**).
- Many interviewees identified mental health as an issue in the community, including anxiety, depression, and mental health's connection to substance abuse and homelessness. Isolation was also identified as an issue by participants, particularly among the elderly in the community.

## Access to Primary Health Care Services by Individuals with Limited Resources

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

- The uninsured population in the Bronx, Brooklyn, and Queens was greater than the state average (**Exhibit 18**).
- In County Health Rankings, the Bronx, Brooklyn, and Queens ranked in the bottom quartile of New York counties in Clinical Care (**Exhibit 29A**).
- Rates for ambulatory care sensitive conditions (ACSCs) in the Bronx and 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.
- Federally-designated Medically Underserved Areas (MUAs) and Primary Care Health Professional Shortage Areas (HPSAs) were present in the community (**Exhibits 56 and 57**).

- Interviewees identified several issues that restrict access to primary health care services as significant needs in the community, including misunderstanding the rapidly changing healthcare system, concerns about recent hospital changes, and insurance restrictions.

### Chronic Diseases and Contributing Lifestyle Factors

Chronic diseases in the community include obesity, diabetes, hypertension, heart disease, strokes, and asthma. Contributing lifestyle factors might also include sexually transmitted infections.

- In County Health Rankings, all five boroughs ranked in the bottom half for diabetes monitoring, and all boroughs besides Staten Island ranked in the bottom quartile for this indicator (**Exhibit 29A**).
- The mortality rates for heart disease in the Bronx, Brooklyn, Queens, Staten Island, and New York City as a whole were higher than the New York State average. Rates for diabetes were higher in the Bronx, Brooklyn, Staten Island, and New York City as a whole (**Exhibit 30**).
- Rates of HIV and AIDS were more than 50 percent greater than the state average in the Bronx, Brooklyn, Manhattan, and New York City as a whole (**Exhibit 37**).
- Asthma hospitalizations and mortalities were significantly higher in the Bronx, Brooklyn, Manhattan, and New York City as a whole than the state average (**Exhibit 39**).
- In the CDC’s Youth Risk Behavior Surveillance System (YRBSS), respondents in every borough indicated that they were less physically active and watched more television than state averages (**Exhibit 48**).
- The percentage of respondents who had ever had high blood pressure was higher in the Bronx, Brooklyn, and Queens than the city average. The percentage who were overweight or obese in the Bronx, Brooklyn, and Staten Island was higher than the city average (**Exhibit 50B**).
- Other community health needs assessments identified obesity and diabetes as significant health needs more than any other need in the community (**Exhibit 61**).
- Interviewees identified to several obstacles to healthy behaviors as issues in the community, particularly physical inactivity, lack of access to healthy foods, lack of preventive treatments, and tobacco use.

### 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 above 50 percent or greater than the state average (**Exhibit 23**).
- In County Health Rankings, the Bronx, Brooklyn, Manhattan, and Queens ranked in the bottom quartile of all New York counties in Physical Environment. The Bronx, Brooklyn, Manhattan, and Staten Island ranked in the bottom quartile in Air Pollution – Particulate Matter (**Exhibit 29A**).

- Asthma hospitalization rates were particularly high in the Bronx, Brooklyn, and New York City, possibly indicating issues with air quality and the surrounding environment **(Exhibit 39)**.
- Other community health needs assessments in New York City identified asthma and breathing issues and air quality as issues in the community **(Exhibit 61)**.
- Interviewees also identified environmental issues as a significant issue in the community, including air quality, traffic, noise, second-hand smoke, unsanitary conditions, and crime.

### Homelessness

Homelessness is increasing in the community. 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 increased by an estimated 39.3 percent between 2016 and 2017. The highest increases were in the Bronx and Queens, at 493.0 and 80.9 percent, respectively **(Exhibit 27)**.
- In County Health Rankings, each of the five boroughs ranked in the bottom quartile of all New York counties in Severe Housing Problems **(Exhibit 29A)**.
- Interviewees identified homeless as a significant concern in the community and indicated that the number of homeless individuals was increasing. Interviewees related the issue to poverty, mental health, and substance abuse. Women who are homeless were thought to be especially vulnerable to mistreatment and were reluctant to report incidences.

### 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 residents to be uncertain of how to access healthcare services.

- In County Health Rankings, the Bronx and Brooklyn ranked worse than the state average for preventable hospital stays **(Exhibit 29B)**.
- Rates for ambulatory care sensitive conditions (ACSCs) in the Bronx and Brooklyn were particularly high **(Exhibit 51)**. High rates indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.
- Many interviewees expressed 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 also expressed confusion about healthcare delivery options, insurance requirements and potential changes, and which providers residents could access.

## Poverty, Financial Hardship, and Basic Needs Insecurity

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

- Poverty rates in the Bronx, Brooklyn, and Manhattan were worse than the state and national averages. The poverty percentages for Black and Hispanic or Latino residents were particularly higher than state and national comparisons (**Exhibit 13**).
- Over 36 percent of households in the Bronx and over 27 percent in Brooklyn had an annual income of less than \$25,000 (**Exhibit 14**).
- Unemployment rates in the Bronx, Brooklyn, Staten Island, and New York City have been higher than state and national averages over recent history. Rates were particularly high for Black and Hispanic or Latino residents (**Exhibit 16**).
- The Bronx, Brooklyn, and Manhattan ranked worse than state averages for children in poverty, high school graduation, and income inequality (**Exhibit 29B**).
- A large portion of the MSH community ranked in the “Highest Need” category in Community Need Index (**Exhibit 54**).
- Financial pressures and hardships were identified by many interviewees as significant concerns in the community. Income inequality was thought to be increasing and, was a contributor to residents departing the community.

## Safe and Affordable Housing

Inadequate housing contributes to poor health outcomes. Demand for housing in the neighborhood is increasing rents and new housing units will be market rates. Moderate income residents may need affordable housing options to continue to live in the community. Inadequate security and maintenance of residential properties, including NYCHA units, negatively influence health.

- 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 state and national averages (**Exhibit 25**).
- The average number of years in public housing was longer in Manhattan than the New York City average (**Exhibit 26B**).
- In County Health Rankings, Brooklyn and Manhattan both ranked in the bottom quartile of all New York counties in Severe Housing Problems (**Exhibit 29A**).
- Interviewees identified housing issues as a significant need in the community, including high and increasing rents, forced over-occupancy of units, and poor maintenance.
- Housing that is adequate, safe, and affordable was identified by many community survey respondents as a significant need in the community (**Exhibit 63A**).
- Issues relating to housing were thought by many residents to be worsening over the past two to three years (**Exhibit 64**).

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

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.

- Many neighborhoods in the MSH community are racially and ethnically diverse. Over 33 percent of residents in the Bronx and Brooklyn were Black, and over 54 percent residents of the Bronx were Hispanic or Latino (**Exhibit 6**).
- The population that is linguistically isolated in the Bronx, Brooklyn, Manhattan, and Queens was significantly higher than the New York State and national averages (**Exhibit 10**).
- More than 47 percent of Queens residents and more than 37 percent of Brooklyn residents were foreign born, compared to 23 percent state wide and 13 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 identified disparities among health as a particular concern, noting that outcomes and experiences varied by age, gender, race/ethnicity, and socioeconomic status. Cohorts of residents where distrust may be especially evident are low-income people-of-color, immigrants who do not speak English, and LGBTQ individuals.

## 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, or sales were significantly higher in the Bronx, Brooklyn, Manhattan, Queens, and New York City than the state average (**Exhibit 24**).
- Manhattan ranked last among all counties in New York for excessive drinking (**Exhibit 29A**).
- The percentage of women who drank alcohol during the last three months of pregnancy was significantly higher in Manhattan than the New York City average (**Exhibit 46**).
- Drug-related hospitalizations were higher in the Bronx, Brooklyn, Manhattan, and Staten Island than the state average (**Exhibit 47**).
- The percentage of adults who reported binge drinking during the past month was higher in the Bronx, Manhattan, Staten Island, and New York City than the state average (**Exhibit 49C**).
- Many other CHNAs identified substance abuse as a prioritized need (**Exhibit 61**).
- Interviewees identified substance abuse as a significant issue in the community, including its relation to homelessness.

# CHNA DATA AND ANALYSIS

# DEFINITION OF COMMUNITY ASSESSED

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

MSH’s community is comprised of the entirety of New York City, including each of the five boroughs<sup>5</sup> (**Exhibit 1**). The community is divided into neighborhoods utilized by the New York State Department of Health;<sup>6</sup> with each of the 42 neighborhoods in New York City in the MSH community.

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

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

The MSH community was estimated to have a population of approximately 8.4 million persons in 2015.

The community definition was validated based on the geographic origins of discharges from MS – Manhattan and MS – Queens. In 2016, the community collectively accounted for 80 percent of MSH’s 65,868 inpatient discharges (**Exhibit 1**).

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

<sup>6</sup> 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](http://www.health.ny.gov/statistics/cancer/registry/appendix/neighborhoods.htm)



**Exhibit 1A: Community Population by Borough, 2015, and Inpatient Discharges, 2016**

Borough	2015 Population	2016 Discharges	Percent of Total Discharges	Percent of NYC Discharges
Bronx	1,430,052	5,728	8.7%	10.9%
Brooklyn	2,595,259	8,579	13.0%	16.3%
Manhattan	1,620,104	21,780	33.1%	41.4%
Queens	2,330,132	15,522	23.6%	29.5%
Staten Island	472,481	1,010	1.5%	1.9%
<b>Total</b>	<b>8,448,028</b>	<b>52,619</b>	<b>79.9%</b>	<b>100.0%</b>

Source: U.S. Census ACS 2015 5-year estimates and the Mount Sinai Health System.

**Exhibit 1B: Community Population – Bronx, 2015, and Inpatient Discharges, 2016**

Neighborhood	2015 Population	2016 Discharges	Percent of Total Discharges	Percent of NYC Discharges
<b>Bronx</b>	<b>1,430,052</b>	<b>5,728</b>	<b>8.7%</b>	<b>10.9%</b>
Bronx Park and Fordham	254,745	690	1.0%	1.3%
Central Bronx	213,356	820	1.2%	1.6%
High Bridge and Morrisania	215,615	1,210	1.8%	2.3%
Hunts Point and Mott Haven	141,085	1,060	1.6%	2.0%
Kingsbridge and Riverdale	93,708	488	0.7%	0.9%
Northeast Bronx	202,651	411	0.6%	0.8%
Southeast Bronx	308,892	1,049	1.6%	2.0%

Source: U.S. Census ACS 2015 5-year estimates and the Mount Sinai Health System.

**Exhibit 1C: Community Population – Brooklyn, 2015, and Inpatient Discharges, 2016**

Neighborhood	2015 Population	2016 Discharges	Percent of Total Discharges	Percent of NYC Discharges
<b>Brooklyn</b>	<b>2,595,259</b>	<b>8,579</b>	<b>13.0%</b>	<b>16.3%</b>
Borough Park	342,436	1,381	2.1%	2.6%
Bushwick and Williamsburg	222,360	955	1.4%	1.8%
Canarsie and Flatlands	207,112	522	0.8%	1.0%
Central Brooklyn	331,606	869	1.3%	1.7%
East New York and New Lots	188,504	522	0.8%	1.0%
Flatbush	302,525	736	1.1%	1.4%
Greenpoint	132,935	654	1.0%	1.2%
Northwest Brooklyn	246,166	1,326	2.0%	2.5%
Southern Brooklyn	280,786	1,026	1.6%	1.9%
Southwest Brooklyn	209,288	394	0.6%	0.7%
Sunset Park	131,541	194	0.3%	0.4%

Source: U.S. Census ACS 2015 5-year estimates and the Mount Sinai Health System.

**Exhibit 1D: Community Population – Manhattan, 2015, and Inpatient Discharges, 2016**

Neighborhood	2015 Population	2016 Discharges	Percent of Total Discharges	Percent of NYC Discharges
<b>Manhattan</b>	<b>1,620,104</b>	<b>21,780</b>	<b>33.1%</b>	<b>41.4%</b>
Central Harlem	177,406	3,194	4.8%	6.1%
Chelsea and Clinton	149,683	979	1.5%	1.9%
East Harlem	113,171	6,812	10.3%	12.9%
Gramercy Park and Murray Hill	129,167	897	1.4%	1.7%
Greenwich Village and Soho	82,305	396	0.6%	0.8%
Inwood and Washington Heights	269,556	1,294	2.0%	2.5%
Lower East Side	198,713	809	1.2%	1.5%
Lower Manhattan	58,084	368	0.6%	0.7%
Upper East Side	221,448	3,371	5.1%	6.4%
Upper West Side	220,571	3,660	5.6%	7.0%

Source: U.S. Census ACS 2015 5-year estimates and the Mount Sinai Health System.

**Exhibit 1E: Community Population – Queens, 2015, and Inpatient Discharges, 2016**

Neighborhood	2015 Population	2016 Discharges	Percent of Total Discharges	Percent of NYC Discharges
<b>Queens</b>	<b>2,330,132</b>	<b>15,522</b>	<b>23.6%</b>	<b>29.5%</b>
Central Queens	100,900	210	0.3%	0.4%
Jamaica	308,284	799	1.2%	1.5%
North Queens	261,157	689	1.0%	1.3%
Northeast Queens	90,957	151	0.2%	0.3%
Northwest Queens	207,808	7,361	11.2%	14.0%
Rockaways	118,917	284	0.4%	0.5%
Southeast Queens	227,805	304	0.5%	0.6%
Southwest Queens	289,601	768	1.2%	1.5%
West Central Queens	251,807	1,009	1.5%	1.9%
West Queens	472,896	3,947	6.0%	7.5%

Source: U.S. Census ACS 2015 5-year estimates and the Mount Sinai Health System.

**Exhibit 1F: Community Population – Staten Island, 2015, and Inpatient Discharges, 2016**

Neighborhood	2015 Population	2016 Discharges	Percent of Total Discharges	Percent of NYC Discharges
<b>Staten Island</b>	<b>472,481</b>	<b>1,010</b>	<b>1.5%</b>	<b>1.9%</b>
Mid-Island	87,600	252	0.4%	0.5%
Port Richmond	66,613	162	0.2%	0.3%
South Shore	195,020	336	0.5%	0.6%
Stapleton and St. George	123,248	260	0.4%	0.5%

Source: U.S. Census ACS 2015 5-year estimates and the Mount Sinai Health System.



## SECONDARY DATA ASSESSMENT

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

### Demographics

Population characteristics and changes influence health issues in and services needed by communities. A total of 8,426,743 people were estimated to reside in the MSH community in 2015, with a projected population of 8,924,861 residents in 2022.

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

**Exhibit 3: Population by Age and Sex, 2015**

Borough	Ages 0-19	Ages 20-44	Ages 45-64	Ages 65+	Total Population
<b>Bronx</b>	<b>28.8%</b>	<b>36.6%</b>	<b>23.6%</b>	<b>11.0%</b>	<b>1,428,357</b>
Male	14.7%	17.4%	10.7%	4.2%	672,447
Female	14.1%	19.2%	12.9%	6.8%	755,910
<b>Brooklyn</b>	<b>25.7%</b>	<b>39.0%</b>	<b>23.4%</b>	<b>11.9%</b>	<b>2,595,259</b>
Male	13.1%	18.8%	10.7%	4.7%	1,229,001
Female	12.6%	20.2%	12.7%	7.2%	1,366,258
<b>Manhattan</b>	<b>16.8%</b>	<b>45.0%</b>	<b>24.0%</b>	<b>14.1%</b>	<b>1,629,507</b>
Male	8.4%	21.5%	11.6%	5.7%	769,434
Female	8.4%	23.5%	12.4%	8.4%	860,073
<b>Queens</b>	<b>22.5%</b>	<b>37.6%</b>	<b>26.5%</b>	<b>13.4%</b>	<b>2,301,139</b>
Male	11.5%	18.7%	12.7%	5.5%	1,115,459
Female	11.0%	18.9%	13.8%	7.9%	1,185,680
<b>Staten Island</b>	<b>24.9%</b>	<b>33.0%</b>	<b>28.0%</b>	<b>14.1%</b>	<b>472,481</b>
Male	12.8%	16.3%	13.4%	5.9%	228,703
Female	12.1%	16.7%	14.6%	8.2%	243,778
<b>Total</b>	<b>23.6%</b>	<b>39.0%</b>	<b>24.7%</b>	<b>12.7%</b>	<b>8,426,743</b>
Male	12.0%	18.9%	11.6%	5.1%	4,015,044
Female	11.6%	20.1%	13.1%	7.6%	4,411,699

Source: U.S. Census Bureau, ACS 5 year estimates, 2011-2015.

In 2015, 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 3**).

**Exhibit 4** illustrates the total number of residents living in the community by borough and neighborhood, and their distribution by sex and age in 2017 and in 2022, comparing the projected growth rates of different cohorts in the community.

### Exhibit 4: Population by Age, 2017

Borough	2017 Population					2022 Population					Percent Change 2017-2022				
	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+	Total	0-17	18-34	35-64	65+
<b>Bronx</b>	<b>1,484,937</b>	<b>378,779</b>	<b>384,461</b>	<b>545,091</b>	<b>176,606</b>	<b>1,543,974</b>	<b>388,652</b>	<b>375,584</b>	<b>571,716</b>	<b>208,022</b>	<b>4.0%</b>	<b>2.6%</b>	<b>-2.3%</b>	<b>4.9%</b>	<b>17.8%</b>
Bronx Park and Fordham	264,661	70,068	71,806	96,534	26,253	273,642	71,934	67,844	102,050	31,814	3.4%	2.7%	-5.5%	5.7%	21.2%
Central Bronx	219,892	63,791	59,581	77,370	19,150	229,386	65,172	59,032	81,508	23,674	4.3%	2.2%	-0.9%	5.3%	23.6%
High Bridge and Morrisania	224,188	63,552	59,411	79,403	21,822	234,039	65,113	58,982	83,732	26,212	4.4%	2.5%	-0.7%	5.5%	20.1%
Hunts Point and Mott Haven	158,416	43,584	46,959	54,314	13,559	165,614	44,819	46,741	58,252	15,802	4.5%	2.8%	-0.5%	7.3%	16.5%
Kingsbridge and Riverdale	97,788	19,712	21,097	37,175	19,804	101,757	21,218	20,049	38,260	22,230	4.1%	7.6%	-5.0%	2.9%	12.3%
Northeast Bronx	206,512	44,574	48,340	79,731	33,867	215,787	45,431	48,330	82,401	39,625	4.5%	1.9%	0.0%	3.3%	17.0%
Southeast Bronx	313,480	73,498	77,267	120,564	42,151	323,749	74,965	74,606	125,513	48,665	3.3%	2.0%	-3.4%	4.1%	15.5%
<b>Brooklyn</b>	<b>2,667,447</b>	<b>633,017</b>	<b>692,772</b>	<b>999,052</b>	<b>342,606</b>	<b>2,766,777</b>	<b>672,283</b>	<b>643,819</b>	<b>1,052,256</b>	<b>398,419</b>	<b>3.7%</b>	<b>6.2%</b>	<b>-7.1%</b>	<b>5.3%</b>	<b>16.3%</b>
Borough Park	340,904	101,208	83,380	114,285	42,031	350,465	106,387	78,198	119,133	46,747	2.8%	5.1%	-6.2%	4.2%	11.2%
Bushwick and Williamsburg	270,359	71,923	81,430	92,865	24,141	286,894	76,320	77,933	103,640	29,001	6.1%	6.1%	-4.3%	11.6%	20.1%
Canarsie and Flatlands	203,527	44,469	48,696	79,563	30,799	209,507	46,212	47,132	79,587	36,576	2.9%	3.9%	-3.2%	0.0%	18.8%
Central Brooklyn	340,766	81,194	92,726	129,006	37,840	355,142	85,873	86,977	137,304	44,988	4.2%	5.8%	-6.2%	6.4%	18.9%
East New York and New Lots	203,731	55,067	55,408	72,482	20,774	213,678	57,790	54,253	76,451	25,184	4.9%	4.9%	-2.1%	5.5%	21.2%
Flatbush	313,819	71,908	77,764	121,015	43,132	321,078	75,494	71,294	123,621	50,669	2.3%	5.0%	-8.3%	2.2%	17.5%
Greenpoint	107,199	19,971	38,680	38,018	10,530	112,572	21,164	34,995	43,944	12,469	5.0%	6.0%	-9.5%	15.6%	18.4%
Northwest Brooklyn	246,134	51,397	67,845	100,679	26,213	257,462	57,081	59,640	109,857	30,884	4.6%	11.1%	-12.1%	9.1%	17.8%
Southern Brooklyn	299,688	61,147	64,941	113,806	59,794	308,726	65,756	60,265	115,252	67,453	3.0%	7.5%	-7.2%	1.3%	12.8%
Southwest Brooklyn	206,537	41,561	45,148	85,349	34,479	211,993	44,493	40,517	87,889	39,094	2.6%	7.1%	-10.3%	3.0%	13.4%
Sunset Park	134,783	33,172	36,754	51,984	12,873	139,260	35,713	32,615	55,578	15,354	3.3%	7.7%	-11.3%	6.9%	19.3%
<b>Manhattan</b>	<b>1,647,873</b>	<b>253,298</b>	<b>496,788</b>	<b>647,467</b>	<b>250,320</b>	<b>1,693,599</b>	<b>275,679</b>	<b>442,780</b>	<b>689,471</b>	<b>285,669</b>	<b>2.8%</b>	<b>8.8%</b>	<b>-10.9%</b>	<b>6.5%</b>	<b>14.1%</b>
Central Harlem	171,922	33,622	53,752	64,530	20,018	177,767	35,465	49,939	68,827	23,536	3.4%	5.5%	-7.1%	6.7%	17.6%
Chelsea and Clinton	158,186	15,309	51,343	69,386	22,148	166,045	17,590	45,262	76,581	26,612	5.0%	14.9%	-11.8%	10.4%	20.2%
East Harlem	115,807	24,054	35,129	41,625	14,999	119,378	25,102	32,883	44,588	16,805	3.1%	4.4%	-6.4%	7.1%	12.0%
Gramercy Park and Murray Hill	141,155	13,679	50,112	53,803	23,561	145,455	15,842	44,035	59,060	26,518	3.0%	15.8%	-12.1%	9.8%	12.6%
Greenwich Village and Soho	86,246	10,552	27,277	36,085	12,332	88,380	11,745	23,709	38,508	14,418	2.5%	11.3%	-13.1%	6.7%	16.9%
Inwood and Washington Heights	252,021	47,666	73,648	96,771	33,936	255,000	50,107	64,618	101,463	38,812	1.2%	5.1%	-12.3%	4.8%	14.4%
Lower East Side	203,308	25,238	69,333	77,140	31,597	207,264	26,681	62,240	82,164	36,179	1.9%	5.7%	-10.2%	6.5%	14.5%
Lower Manhattan	64,145	9,861	24,696	23,810	5,778	69,574	11,786	22,946	27,657	7,185	8.5%	19.5%	-7.1%	16.2%	24.4%
Upper East Side	226,370	35,911	58,391	89,102	42,966	231,050	39,792	51,586	92,587	47,085	2.1%	10.8%	-11.7%	3.9%	9.6%
Upper West Side	228,713	37,406	53,107	95,215	42,985	233,686	41,569	45,562	98,036	48,519	2.2%	11.1%	-14.2%	3.0%	12.9%
<b>Queens</b>	<b>2,349,382</b>	<b>485,911</b>	<b>559,195</b>	<b>964,784</b>	<b>339,492</b>	<b>2,436,533</b>	<b>509,414</b>	<b>513,665</b>	<b>1,011,184</b>	<b>402,270</b>	<b>3.7%</b>	<b>4.8%</b>	<b>-8.1%</b>	<b>4.8%</b>	<b>18.5%</b>
Central Queens	102,417	22,730	23,972	39,602	16,113	106,266	24,262	22,231	41,041	18,732	3.8%	6.7%	-7.3%	3.6%	16.3%
Jamaica	305,067	67,675	75,340	120,368	41,684	316,305	70,322	71,295	125,257	49,431	3.7%	3.9%	-5.4%	4.1%	18.6%
North Queens	237,801	41,355	47,801	104,086	44,559	248,056	43,994	43,309	107,815	52,938	4.3%	6.4%	-9.4%	3.6%	18.8%
Northeast Queens	93,497	16,484	18,689	40,418	17,906	97,091	16,786	18,576	40,571	21,158	3.8%	1.8%	-0.6%	0.4%	18.2%
Northwest Queens	219,133	35,879	65,800	91,426	26,028	227,000	38,113	57,050	101,600	30,237	3.6%	6.2%	-13.3%	11.1%	16.2%
Rockaways	126,205	32,624	28,888	45,672	19,021	132,851	34,166	28,983	47,309	22,393	5.3%	4.7%	0.3%	3.6%	17.7%
Southeast Queens	226,286	45,408	52,278	91,304	37,296	232,500	45,985	50,194	92,369	43,952	2.7%	1.3%	-4.0%	1.2%	17.8%
Southwest Queens	280,677	61,481	68,085	115,279	35,832	289,789	63,216	63,452	119,297	43,824	3.2%	2.8%	-6.8%	3.5%	22.3%
West Central Queens	260,177	51,841	54,837	110,855	42,644	269,801	55,547	48,747	115,877	49,630	3.7%	7.1%	-11.1%	4.5%	16.4%
West Queens	498,122	110,434	123,505	205,774	58,409	516,874	117,023	109,828	220,048	69,975	3.8%	6.0%	-11.1%	6.9%	19.8%

<b>Staten Island</b>	<b>476,264</b>	<b>103,725</b>	<b>104,988</b>	<b>192,913</b>	<b>74,638</b>	<b>483,978</b>	<b>101,453</b>	<b>104,519</b>	<b>190,177</b>	<b>87,829</b>	<b>1.6%</b>	<b>-2.2%</b>	<b>-0.4%</b>	<b>-1.4%</b>	<b>17.7%</b>
Mid-Island	86,099	17,496	17,846	34,933	15,824	87,164	17,268	17,440	34,097	18,359	1.2%	-1.3%	-2.3%	-2.4%	16.0%
Port Richmond	72,276	19,243	17,630	27,575	7,828	74,012	18,835	17,839	27,784	9,554	2.4%	-2.1%	1.2%	0.8%	22.0%
South Shore	192,687	39,553	40,594	80,524	32,016	196,291	38,425	41,340	78,783	37,743	1.9%	-2.9%	1.8%	-2.2%	17.9%
Stapleton and St. George	125,202	27,433	28,918	49,881	18,970	126,511	26,925	27,900	49,513	22,173	1.0%	-1.9%	-3.5%	-0.7%	16.9%
<b>Total</b>	<b>8,625,903</b>	<b>1,854,730</b>	<b>2,238,204</b>	<b>3,349,307</b>	<b>1,183,662</b>	<b>8,924,861</b>	<b>1,947,481</b>	<b>2,080,367</b>	<b>3,514,804</b>	<b>1,382,209</b>	<b>3.5%</b>	<b>5.0%</b>	<b>-7.1%</b>	<b>4.9%</b>	<b>16.8%</b>

Source: Truven Health Analytics 2017 via the Mount Sinai Health System.

The total population of all boroughs is expected to grow 3.5 percent from 2017 to 2022. All boroughs except Staten Island are expected to experience an increase in population among the 0-17, 35-64, and 65+ cohorts. Additionally, all boroughs are expected to experience a decrease in population in the 18-34 age cohort. The population aged 65 and older is expected to experience the highest growth rate in each of the boroughs (**Exhibit 4**).



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

### Exhibit 6: Distribution of Population by Race, 2015

Neighborhood	Total Population 2015	White	Black	Asian	Other Race*	Two or More Races	Hispanic or Latino (Any Race)
<b>Bronx</b>	<b>1,430,052</b>	<b>21.1%</b>	<b>33.0%</b>	<b>3.7%</b>	<b>38.6%</b>	<b>3.6%</b>	<b>54.9%</b>
Bronx Park and Fordham	254,745	17.9%	27.3%	5.0%	45.2%	4.5%	60.6%
Central Bronx	213,356	11.7%	31.9%	1.4%	52.1%	2.9%	68.0%
High Bridge and Morrisania	215,615	10.8%	38.0%	1.2%	46.8%	3.1%	61.9%
Hunts Point and Mott Haven	141,085	14.6%	30.1%	0.9%	51.8%	2.6%	71.9%
Kingsbridge and Riverdale	93,708	50.5%	13.2%	4.6%	27.1%	4.6%	42.6%
Northeast Bronx	202,651	16.9%	60.9%	3.0%	16.3%	3.0%	25.8%
Southeast Bronx	308,892	34.2%	24.2%	7.2%	30.2%	4.2%	51.2%
<b>Brooklyn</b>	<b>2,595,259</b>	<b>43.4%</b>	<b>33.5%</b>	<b>11.5%</b>	<b>9.2%</b>	<b>2.4%</b>	<b>19.6%</b>
Borough Park	342,436	64.4%	4.4%	21.5%	8.1%	1.7%	12.9%
Bushwick and Williamsburg	222,360	41.2%	35.0%	5.2%	15.4%	3.1%	47.2%
Canarsie and Flatlands	207,112	24.3%	66.3%	4.0%	4.0%	1.4%	8.8%
Central Brooklyn	331,606	16.4%	71.1%	2.7%	7.4%	2.5%	13.5%
East New York and New Lots	188,504	19.8%	59.7%	3.4%	14.8%	2.3%	37.2%
Flatbush	302,525	15.7%	73.3%	2.9%	5.9%	2.1%	10.4%
Greenpoint	132,935	79.1%	5.2%	5.1%	7.9%	2.7%	21.4%
Northwest Brooklyn	246,166	63.7%	14.9%	7.8%	8.9%	4.7%	18.4%
Southern Brooklyn	280,786	69.0%	6.9%	17.7%	4.9%	1.6%	11.4%
Southwest Brooklyn	209,288	62.5%	1.5%	27.5%	6.9%	1.7%	14.2%
Sunset Park	131,541	28.9%	3.0%	35.9%	29.3%	2.9%	45.5%
<b>Manhattan</b>	<b>1,620,104</b>	<b>56.6%</b>	<b>15.0%</b>	<b>11.7%</b>	<b>12.6%</b>	<b>4.1%</b>	<b>25.5%</b>
Central Harlem	177,406	21.5%	56.3%	5.4%	12.1%	4.6%	23.9%
Chelsea and Clinton	149,683	70.4%	6.3%	15.7%	4.2%	3.3%	14.6%
East Harlem	113,171	28.1%	33.0%	7.6%	28.3%	3.0%	47.8%
Gramercy Park and Murray Hill	129,167	75.6%	3.5%	16.0%	2.8%	2.1%	8.4%
Greenwich Village and Soho	82,305	73.3%	2.8%	17.9%	2.5%	3.5%	6.7%
Inwood and Washington Heights	269,556	34.3%	17.1%	2.9%	37.5%	8.1%	66.5%
Lower East Side	198,713	52.6%	7.2%	26.1%	10.9%	3.2%	20.6%
Lower Manhattan	58,084	64.4%	4.3%	23.1%	5.0%	3.2%	10.9%
Upper East Side	221,448	83.7%	3.3%	8.9%	1.4%	2.7%	8.0%
Upper West Side	220,571	74.3%	8.6%	9.0%	4.7%	3.5%	15.8%
<b>Queens</b>	<b>2,330,132</b>	<b>41.4%</b>	<b>18.5%</b>	<b>24.1%</b>	<b>12.6%</b>	<b>3.4%</b>	<b>27.8%</b>
Central Queens	100,900	45.8%	7.7%	36.1%	7.3%	3.1%	16.0%
Jamaica	308,284	11.9%	53.3%	17.0%	13.8%	4.0%	18.3%
North Queens	261,157	36.0%	2.2%	50.4%	8.6%	2.7%	16.6%
Northeast Queens	90,957	48.5%	2.4%	42.2%	4.2%	2.8%	11.4%
Northwest Queens	207,808	63.5%	6.5%	16.9%	9.9%	3.2%	27.1%
Rockaways	118,917	48.5%	38.3%	3.7%	7.2%	2.4%	23.9%
Southeast Queens	227,805	23.8%	52.1%	14.5%	5.9%	3.7%	11.8%
Southwest Queens	289,601	35.7%	11.7%	23.4%	23.4%	5.8%	33.6%
West Central Queens	251,807	73.4%	2.6%	16.0%	5.5%	2.5%	27.2%
West Queens	472,896	44.8%	7.0%	26.0%	19.6%	2.8%	51.8%
<b>Staten Island</b>	<b>472,481</b>	<b>75.3%</b>	<b>10.5%</b>	<b>8.0%</b>	<b>4.0%</b>	<b>2.2%</b>	<b>17.8%</b>
Mid-Island	87,600	77.3%	4.7%	13.7%	2.5%	1.8%	13.7%
Port Richmond	66,613	51.8%	28.4%	7.2%	8.8%	3.8%	34.7%
South Shore	195,020	91.3%	1.4%	5.1%	1.3%	1.0%	10.8%
Stapleton and St. George	123,248	61.4%	19.5%	9.1%	6.6%	3.4%	22.8%

Source: U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

\* "Other Race" includes the following Census-designated race groups: American Indian / Alaska Native, Native Hawaiian / Pacific Islander, and Some Other Race

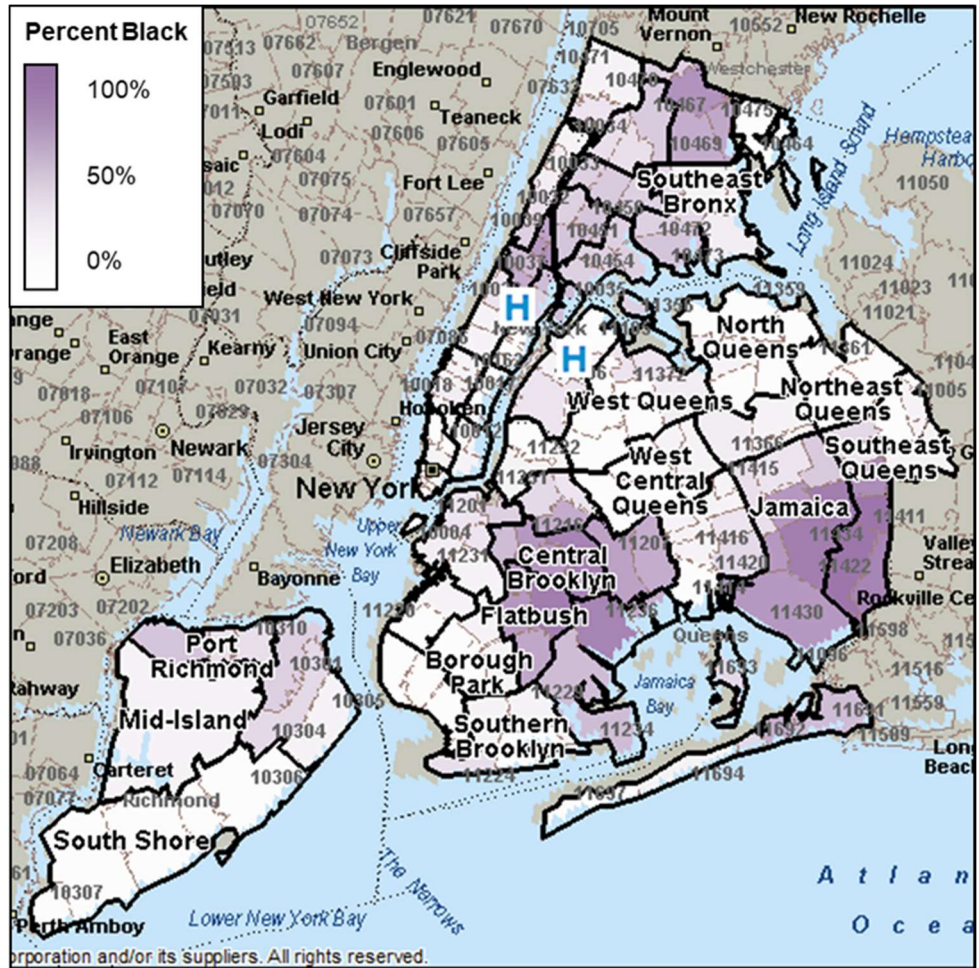
New York City and the MSH community are very diverse. Black populations were most prevalent in the Bronx and Brooklyn. Manhattan had a higher proportion of Asian residents, while the Bronx had a higher proportion of Hispanic (or Latino) residents. The diversity of the



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

The percentage of Black residents is highest in Brooklyn neighborhoods Flatbush, Central Brooklyn, and Canarsie and Flatlands. Asian residents are most concentrated in Queens’ neighborhoods, particularly in North Queens, Northeast Queens, and Central Queens. Hispanic residents are most concentrated in Bronx neighborhoods Hunts Point and Mott Haven and Central Bronx (Exhibits 7, 8, and 9).

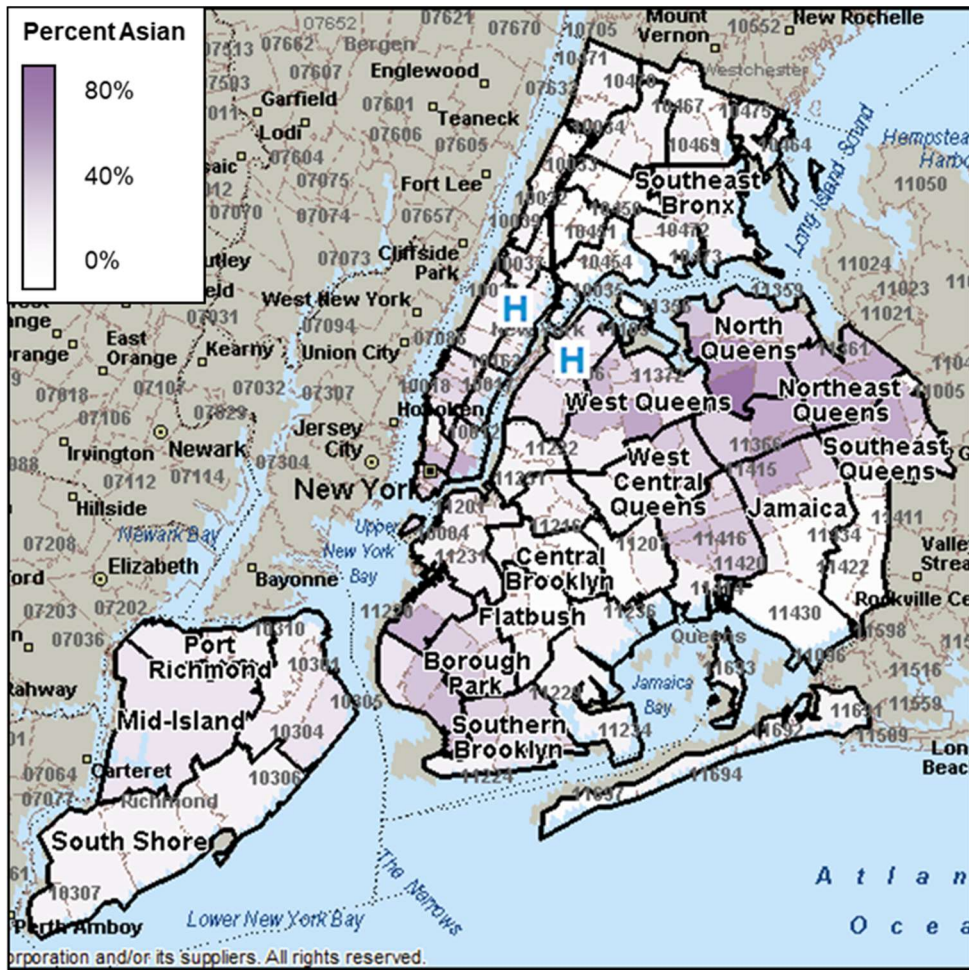
**Exhibit 7: Percent of Population – Black, 2015**



Sources: Microsoft MapPoint and U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

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.

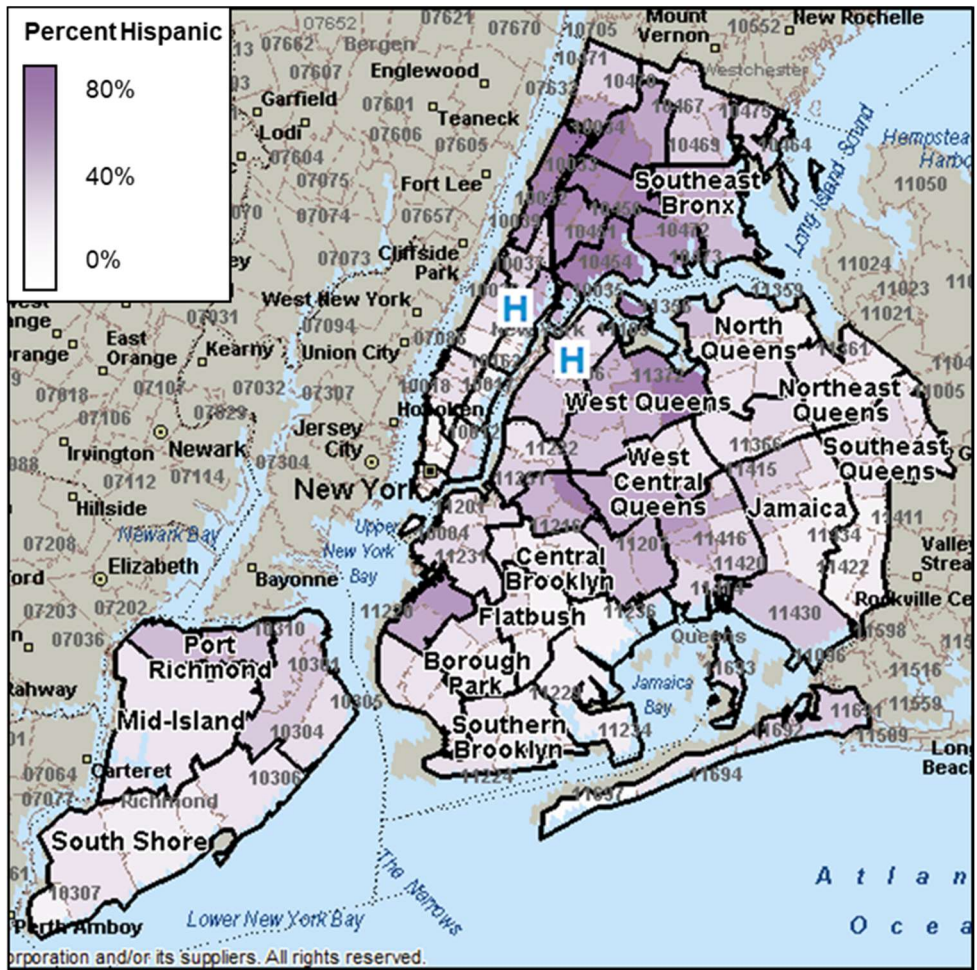
Exhibit 8: Percent of Population – Asian, 2015



Sources: Microsoft MapPoint and U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

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), 2015**



Sources: Microsoft MapPoint and U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

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, 2011-2015**

Borough and Neighborhood	Population 25+ without High School Diploma	Population with a Disability	Population Linguistically Isolated
<b>Bronx</b>	<b>14.1%</b>	<b>13.6%</b>	<b>25.9%</b>
Bronx Park and Fordham	14.9%	13.2%	31.3%
Central Bronx	18.1%	14.4%	31.6%
High Bridge and Morrisania	17.3%	15.4%	32.0%
Hunts Point and Mott Haven	18.5%	14.3%	34.8%
Kingsbridge and Riverdale	7.9%	11.7%	18.6%
Northeast Bronx	9.7%	13.0%	10.3%
Southeast Bronx	12.3%	12.7%	21.8%
<b>Brooklyn</b>	<b>10.4%</b>	<b>9.9%</b>	<b>23.6%</b>
Borough Park	11.1%	9.6%	37.4%
Bushwick and Williamsburg	16.0%	9.9%	25.4%
Canarsie and Flatlands	7.7%	9.9%	13.8%
Central Brooklyn	12.1%	10.6%	8.2%
East New York and New Lots	12.0%	10.2%	14.9%
Flatbush	8.5%	8.0%	14.0%
Greenpoint	7.6%	6.9%	20.8%
Northwest Brooklyn	6.0%	8.7%	10.0%
Southern Brooklyn	8.2%	14.1%	38.1%
Southwest Brooklyn	9.0%	10.5%	34.5%
Sunset Park	21.5%	8.2%	53.5%
<b>Manhattan</b>	<b>6.1%</b>	<b>9.8%</b>	<b>15.7%</b>
Central Harlem	11.4%	12.2%	12.4%
Chelsea and Clinton	2.8%	8.3%	9.6%
East Harlem	15.2%	14.0%	20.6%
Gramercy Park and Murray Hill	1.7%	7.0%	6.0%
Greenwich Village and Soho	2.6%	6.6%	10.3%
Inwood and Washington Heights	11.8%	11.4%	35.6%
Lower East Side	6.6%	11.9%	21.7%
Lower Manhattan	2.6%	5.8%	10.6%
Upper East Side	1.9%	7.4%	6.2%
Upper West Side	3.4%	9.1%	9.0%
<b>Queens</b>	<b>8.9%</b>	<b>9.5%</b>	<b>28.6%</b>
Central Queens	6.8%	8.4%	29.0%
Jamaica	9.5%	10.6%	17.4%
North Queens	9.5%	8.6%	48.1%
Northeast Queens	4.0%	8.7%	28.1%
Northwest Queens	7.0%	8.7%	25.6%
Rockaways	13.4%	16.9%	13.7%
Southeast Queens	6.9%	9.5%	12.1%
Southwest Queens	10.6%	10.0%	19.7%
West Central Queens	5.6%	8.9%	24.3%
West Queens	11.5%	8.0%	45.7%
<b>Staten Island</b>	<b>6.7%</b>	<b>9.9%</b>	<b>10.9%</b>
Mid-Island	6.1%	10.1%	9.5%
Port Richmond	9.9%	9.6%	12.4%
South Shore	5.4%	9.6%	7.7%
Stapleton and St. George	7.6%	10.4%	16.3%
<b>New York</b>	<b>7.7%</b>	<b>11.1%</b>	<b>13.5%</b>
<b>United States</b>	<b>7.6%</b>	<b>12.4%</b>	<b>8.6%</b>

Source: U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

Key findings include:

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

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

### Exhibit 11: World Region of Birth of Foreign Born Residents as a Percent of Total Population, 2011-2015

Borough and Neighborhood	Total Population	Europe	Asia	Africa	Oceania	Latin America	Northern America	Total Foreign Born
<b>Bronx</b>	<b>1,430,052</b>	<b>2.0%</b>	<b>2.6%</b>	<b>3.7%</b>	<b>0.0%</b>	<b>26.2%</b>	<b>0.1%</b>	<b>34.6%</b>
Bronx Park and Fordham	254,745	2.4%	4.0%	3.7%	0.0%	30.5%	0.1%	40.6%
Central Bronx	213,356	0.4%	1.1%	5.0%	0.0%	31.5%	0.0%	38.0%
High Bridge and Morrisania	215,615	0.2%	1.1%	5.9%	0.0%	29.1%	0.0%	36.3%
Hunts Point and Mott Haven	141,085	0.2%	0.7%	3.0%	0.0%	26.6%	0.0%	30.6%
Kingsbridge and Riverdale	93,708	5.9%	4.2%	1.2%	0.1%	17.9%	0.2%	29.5%
Northeast Bronx	202,651	3.0%	1.7%	3.9%	0.0%	27.5%	0.0%	36.2%
Southeast Bronx	308,892	2.8%	4.8%	2.1%	0.0%	18.4%	0.1%	28.2%
<b>Brooklyn</b>	<b>2,595,259</b>	<b>7.4%</b>	<b>10.1%</b>	<b>1.1%</b>	<b>0.1%</b>	<b>18.5%</b>	<b>0.2%</b>	<b>37.5%</b>
Borough Park	342,436	11.7%	19.7%	0.9%	0.0%	8.0%	0.3%	40.6%
Bushwick and Williamsburg	222,360	1.6%	4.1%	0.5%	0.1%	22.1%	0.1%	28.5%
Canarsie and Flatlands	207,112	4.1%	3.8%	1.2%	0.0%	32.0%	0.1%	41.2%
Central Brooklyn	331,606	1.5%	2.4%	1.6%	0.1%	23.7%	0.3%	29.5%
East New York and New Lots	188,504	0.4%	3.1%	1.8%	0.0%	30.9%	0.0%	36.2%
Flatbush	302,525	1.4%	2.7%	1.4%	0.0%	40.1%	0.3%	45.9%
Greenpoint	132,935	10.2%	4.1%	0.4%	0.3%	7.6%	0.6%	23.2%
Northwest Brooklyn	246,166	5.0%	5.3%	0.6%	0.3%	6.7%	0.7%	18.6%
Southern Brooklyn	280,786	25.4%	19.3%	0.8%	0.0%	5.0%	0.0%	50.6%
Southwest Brooklyn	209,288	13.8%	22.9%	1.7%	0.1%	5.4%	0.2%	44.0%
Sunset Park	131,541	2.5%	27.4%	1.0%	0.0%	20.9%	0.1%	52.1%
<b>Manhattan</b>	<b>1,620,104</b>	<b>5.5%</b>	<b>8.8%</b>	<b>1.3%</b>	<b>0.4%</b>	<b>12.3%</b>	<b>0.7%</b>	<b>28.9%</b>
Central Harlem	177,406	2.5%	4.5%	4.9%	0.1%	12.0%	0.3%	24.3%
Chelsea and Clinton	149,683	7.1%	11.2%	0.9%	0.6%	6.2%	1.3%	27.4%
East Harlem	113,171	2.1%	6.3%	1.8%	0.2%	15.4%	0.1%	25.9%
Gramercy Park and Murray Hill	129,167	7.8%	11.0%	0.9%	0.4%	3.3%	0.9%	24.3%
Greenwich Village and Soho	82,305	7.1%	13.1%	0.5%	1.2%	2.5%	1.4%	25.8%
Inwood and Washington Heights	269,556	2.4%	2.3%	0.9%	0.1%	39.8%	0.3%	45.7%
Lower East Side	198,713	4.7%	18.9%	0.4%	0.4%	4.9%	0.8%	30.1%
Lower Manhattan	58,084	8.6%	15.7%	0.6%	0.6%	3.6%	0.7%	29.7%
Upper East Side	221,448	9.1%	7.4%	0.9%	0.5%	3.9%	0.7%	22.7%
Upper West Side	220,571	6.6%	7.1%	0.6%	0.5%	7.5%	0.9%	23.2%
<b>Queens</b>	<b>2,330,132</b>	<b>5.6%</b>	<b>17.9%</b>	<b>1.1%</b>	<b>0.0%</b>	<b>22.7%</b>	<b>0.1%</b>	<b>47.4%</b>
Central Queens	100,900	5.3%	29.8%	0.7%	0.0%	8.4%	0.2%	44.4%
Jamaica	308,284	1.5%	11.0%	1.8%	0.0%	29.8%	0.1%	44.2%
North Queens	261,157	5.7%	40.7%	0.3%	0.0%	9.4%	0.1%	56.1%
Northeast Queens	90,957	5.7%	29.5%	0.6%	0.0%	5.8%	0.2%	41.8%
Northwest Queens	207,808	11.0%	13.2%	1.7%	0.1%	15.7%	0.4%	42.1%
Rockaways	118,917	4.2%	2.4%	2.0%	0.0%	18.3%	0.1%	27.0%
Southeast Queens	227,805	1.6%	9.3%	1.4%	0.0%	26.8%	0.1%	39.2%
Southwest Queens	289,601	3.3%	11.5%	0.5%	0.0%	32.7%	0.1%	48.2%
West Central Queens	251,807	15.7%	15.5%	1.1%	0.1%	11.4%	0.3%	44.0%
West Queens	472,896	3.9%	20.4%	1.1%	0.1%	33.7%	0.1%	59.2%
<b>Staten Island</b>	<b>472,481</b>	<b>7.7%</b>	<b>6.5%</b>	<b>2.0%</b>	<b>0.0%</b>	<b>5.3%</b>	<b>0.1%</b>	<b>21.6%</b>
Mid-Island	87,600	6.3%	11.1%	1.8%	0.0%	3.0%	0.1%	22.2%
Port Richmond	66,613	2.0%	5.7%	3.8%	0.0%	12.4%	0.1%	23.9%
South Shore	195,020	9.2%	4.0%	0.9%	0.0%	2.2%	0.1%	16.3%
Stapleton and St. George	123,248	9.3%	7.5%	3.1%	0.0%	8.2%	0.1%	28.3%
<b>New York State</b>	<b>19,673,174</b>	<b>3.8%</b>	<b>6.3%</b>	<b>0.9%</b>	<b>0.1%</b>	<b>11.1%</b>	<b>0.3%</b>	<b>22.5%</b>
<b>United States</b>	<b>316,515,021</b>	<b>1.5%</b>	<b>3.9%</b>	<b>0.6%</b>	<b>0.1%</b>	<b>6.8%</b>	<b>0.3%</b>	<b>13.2%</b>

Source: U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

In New York State in 2015, 22.5 percent of the population was foreign born compared to 13.2 percent in the U.S. as a whole. These New York State residents were primarily from Latin

America and Asia. Queens had the highest percentage of foreign born residents in the community, at 47.8 percent. Queens also had the largest percentage of the population that was born in Asia. The Bronx had the highest percentage of residents born in Latin America (**Exhibit 11**).

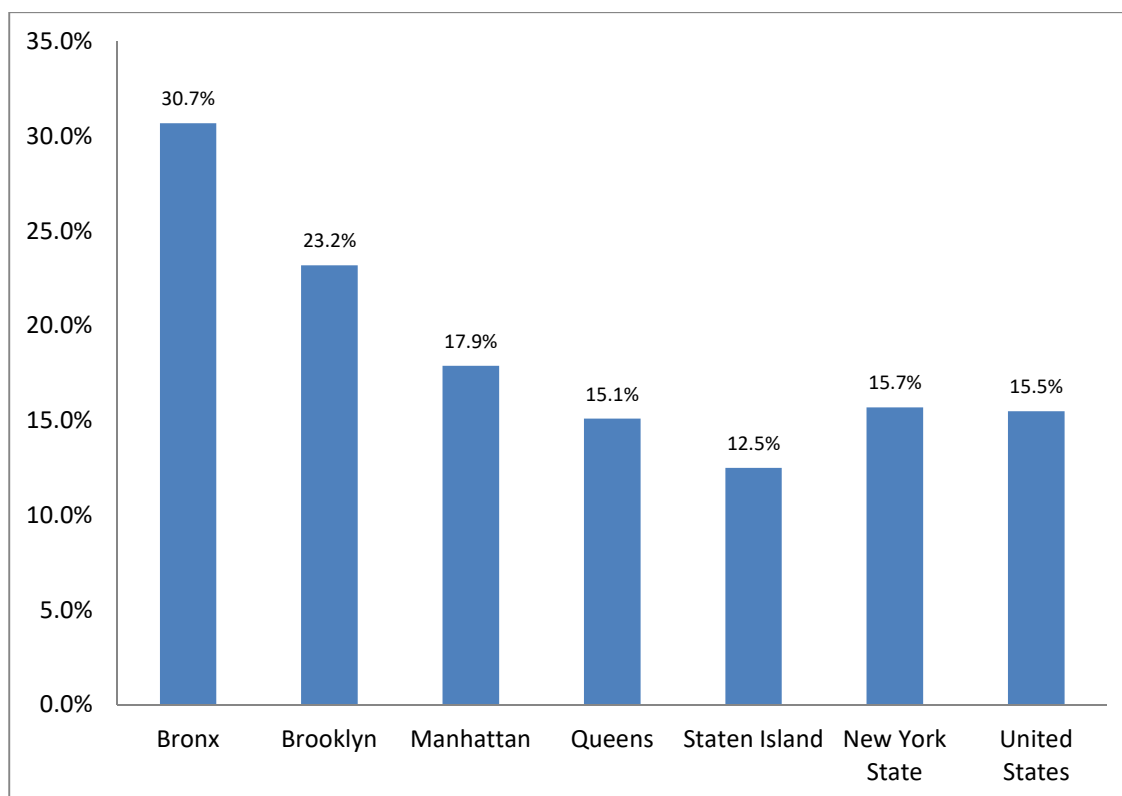
## Economic Indicators

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 2015 approximately 15.5 percent of people in the U.S., and 15.7 percent of people in New York State lived in poverty. The Bronx, Brooklyn, and Manhattan Boroughs reported higher poverty rates than the New York State and U.S. averages (**Exhibit 12**).

**Exhibit 12: Percent of People in Poverty, 2011-2015**

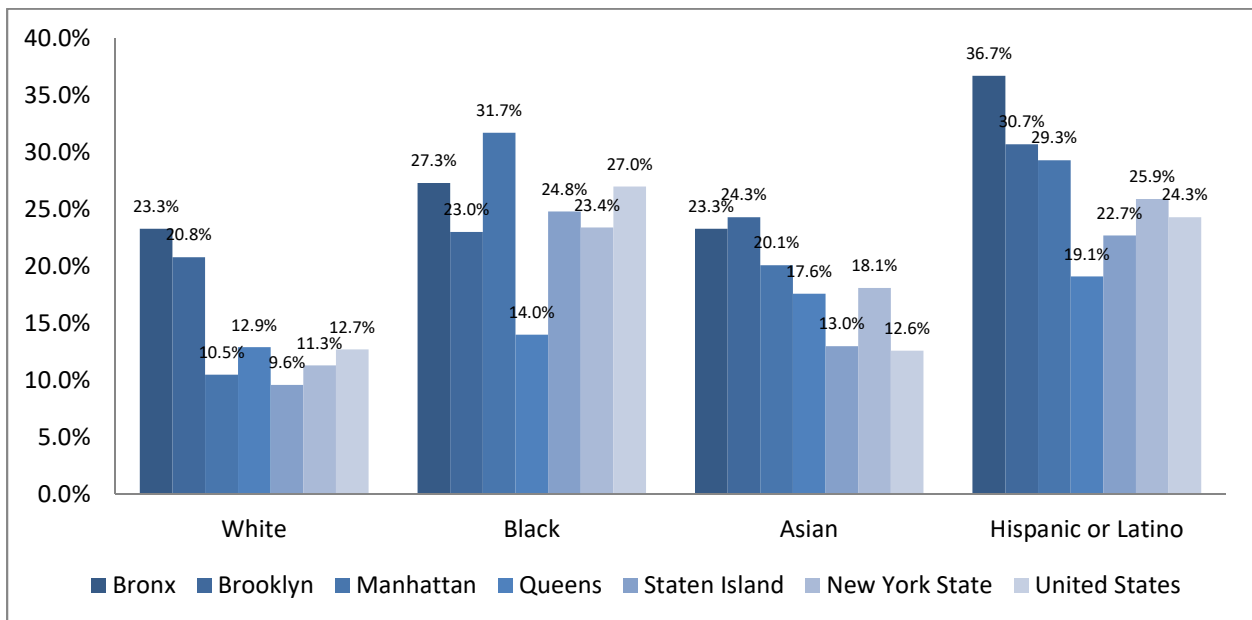


Source: U.S. Census Bureau, ACS 5-year estimates, 2011-2015.



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

**Exhibit 13: Percent of People in Poverty, by Borough and Race / Ethnicity, 2011-2015**



Source: U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

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

## Household Income

Household income is assessed by many public and private agencies to determine household needs for low-income assistance programs. In the five boroughs in 2015, 36.7 percent of all households in the Bronx and 27.7 percent of households in Brooklyn had incomes below \$25,000, an approximation of the federal poverty level (FPL) for a family of four (**Exhibit 14**).

**Exhibit 14: Percent Low-Income Households by Borough and Neighborhood, 2015**

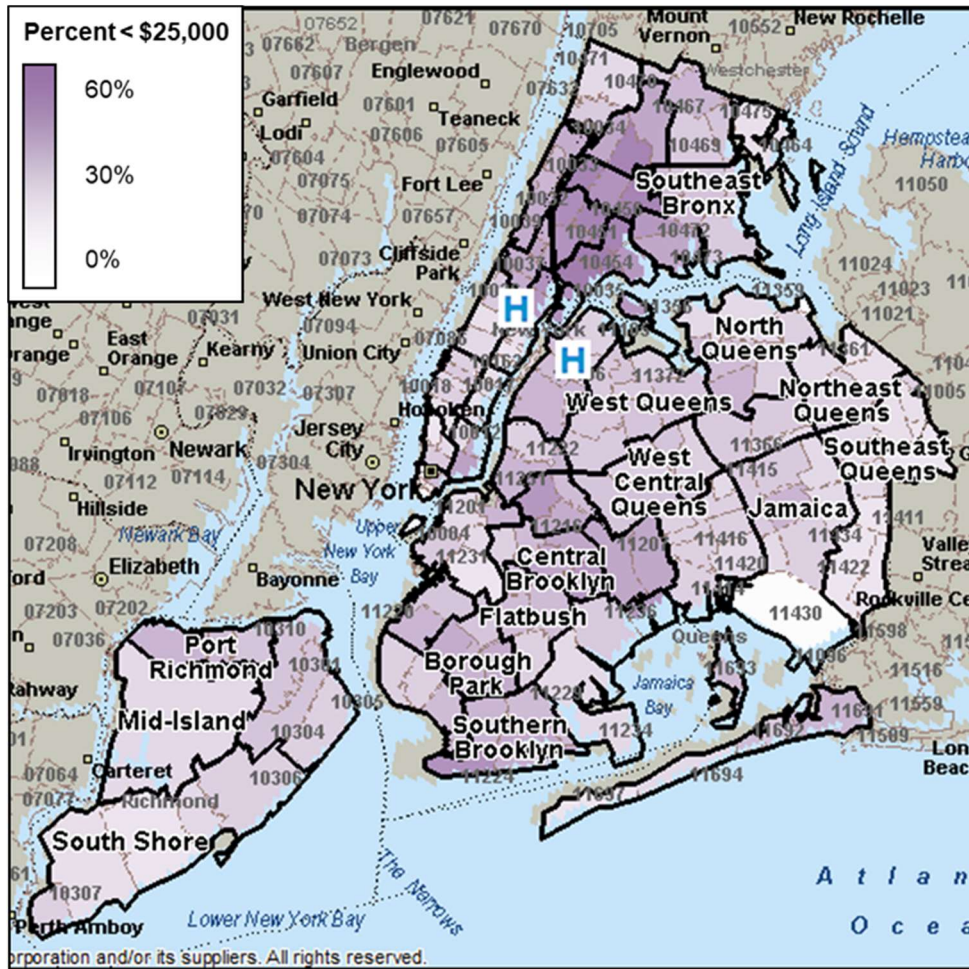
Borough and Neighborhood	Occupied Housing Units	Average Median Income	Percent less than \$25,000 per year	Percent less than \$50,000 per year
<b>Bronx</b>	<b>484,902</b>	<b>34,299</b>	<b>36.7%</b>	<b>57.8%</b>
Bronx Park and Fordham	86,158	32,818	40.6%	65.2%
Central Bronx	70,327	23,686	48.8%	69.6%
High Bridge and Morrisania	72,827	24,768	47.7%	71.1%
Hunts Point and Mott Haven	46,114	22,843	51.6%	73.9%
Kingsbridge and Riverdale	36,078	62,154	19.7%	38.2%
Northeast Bronx	68,923	49,100	25.0%	48.0%
Southeast Bronx	107,942	46,412	29.1%	49.0%
<b>Brooklyn</b>	<b>931,786</b>	<b>48,201</b>	<b>27.7%</b>	<b>46.8%</b>
Borough Park	106,432	44,591	29.5%	49.8%
Bushwick and Williamsburg	75,025	37,710	35.0%	56.5%
Canarsie and Flatlands	70,989	61,417	20.0%	39.4%
Central Brooklyn	128,951	41,674	32.8%	52.5%
East New York and New Lots	61,811	34,949	36.6%	58.0%
Flatbush	108,514	47,225	24.7%	46.0%
Greenpoint	54,070	59,963	26.3%	42.8%
Northwest Brooklyn	102,106	88,929	16.4%	28.0%
Southern Brooklyn	108,425	43,054	32.0%	51.0%
Southwest Brooklyn	77,280	57,782	22.3%	41.2%
Sunset Park	38,183	40,177	29.2%	54.4%
<b>Manhattan</b>	<b>750,419</b>	<b>72,871</b>	<b>21.6%</b>	<b>33.3%</b>
Central Harlem	69,095	39,030	34.8%	52.1%
Chelsea and Clinton	84,714	95,924	16.6%	27.6%
East Harlem	43,114	30,166	42.4%	59.0%
Gramercy Park and Murray Hill	72,489	109,681	14.1%	24.0%
Greenwich Village and Soho	42,814	105,482	14.5%	24.2%
Inwood and Washington Heights	92,446	41,901	31.1%	48.2%
Lower East Side	90,605	61,605	29.8%	42.7%
Lower Manhattan	27,159	126,503	14.9%	20.8%
Upper East Side	116,780	109,767	11.9%	21.0%
Upper West Side	107,736	98,398	16.3%	26.3%
<b>Queens</b>	<b>780,644</b>	<b>57,720</b>	<b>20.3%</b>	<b>39.5%</b>
Central Queens	34,599	59,836	20.5%	37.8%
Jamaica	94,091	56,341	19.5%	39.5%
North Queens	91,599	55,084	23.0%	43.9%
Northeast Queens	33,528	78,924	14.8%	29.7%
Northwest Queens	89,054	57,425	23.1%	42.7%
Rockaways	39,844	51,875	25.7%	42.5%
Southeast Queens	70,364	79,519	12.7%	28.3%
Southwest Queens	84,918	61,545	17.5%	36.8%
West Central Queens	100,220	62,399	20.9%	38.5%
West Queens	149,396	49,665	22.4%	46.2%
<b>Staten Island</b>	<b>165,784</b>	<b>73,197</b>	<b>18.0%</b>	<b>33.4%</b>
Mid-Island	31,294	77,331	14.2%	29.8%
Port Richmond	22,350	58,757	26.4%	40.8%
South Shore	68,582	83,439	14.2%	28.2%
Stapleton and St. George	43,558	60,669	22.3%	40.3%

Source: U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

There was significant variation in low-income households among boroughs and neighborhoods in New York City. The percentage of households with incomes below \$25,000 was 36.7 percent in the Bronx, for instance, compared to 18.0 percent for Staten Island. There was also considerable variation among within boroughs by neighborhoods. For example, the Manhattan neighborhood of East Harlem had 42.4 percent of households with incomes below \$25,000, while the Upper East Side neighborhood had 11.9 percent of households below this income level (**Exhibit 14**).

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

Exhibit 15: Percent Households Less Than \$25,000 Annual Income, 2015



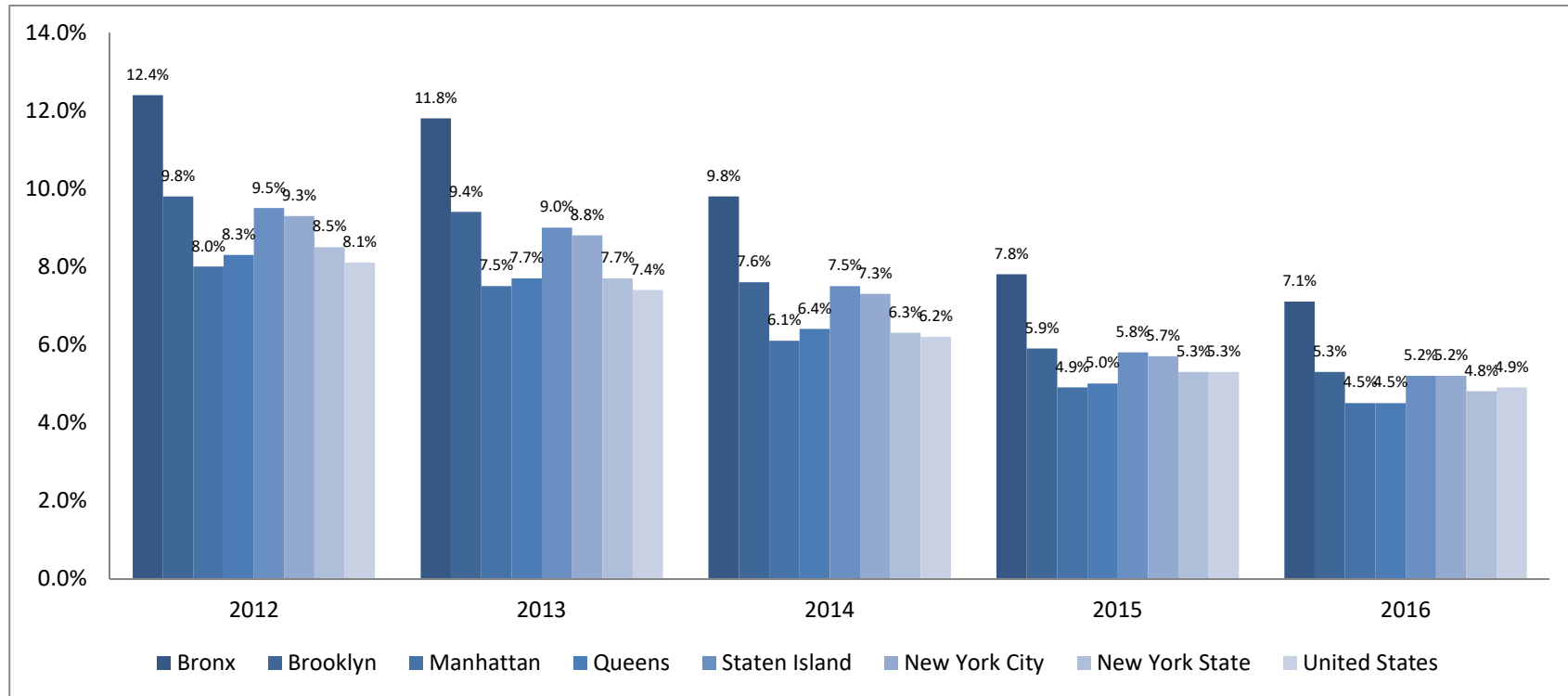
Sources: Microsoft MapPoint and U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

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, 2012-2016**

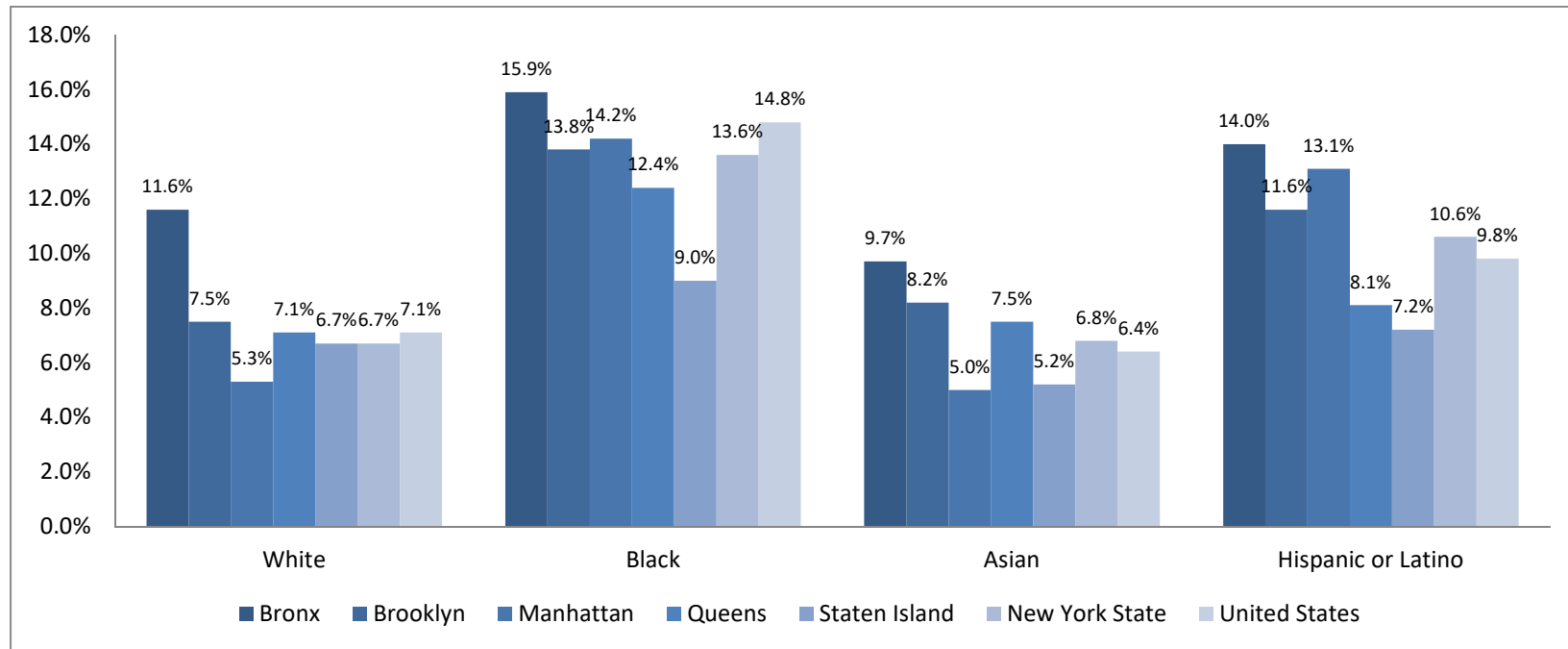


Source: U.S. Bureau of Labor Statistics, 2016.

New York City as a whole experienced higher unemployment rates than the state and national averages for each year from 2012 through 2016. The unemployment rate in the Bronx has been particularly high over the time period of 2012 to 2016. All areas show a decrease in unemployment from 2012 to 2016 (**Exhibit 16**).

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

**Exhibit 17: Unemployment Rates by Race and Ethnicity, 2011-2015**



Source: U.S. Census Bureau, ACS 5-year estimates, 2011-2015.

The Black and Hispanic populations reported higher unemployment rates than other cohorts over the period 2011-2015. Disparities were most evident in Manhattan. The Bronx, Brooklyn, and Manhattan had higher rates of unemployment in the Black and Hispanic population than the state average (**Exhibit 17**).

## Insurance Status

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

**Exhibit 18: Uninsured Population, 2011-2015**

Borough and Neighborhood	Uninsured Population
<b>Bronx</b>	<b>13.7%</b>
Bronx Park and Fordham	15.7%
Central Bronx	15.3%
High Bridge and Morrisania	14.1%
Hunts Point and Mott Haven	16.4%
Kingsbridge and Riverdale	9.4%
Northeast Bronx	10.8%
Southeast Bronx	12.4%
<b>Brooklyn</b>	<b>12.0%</b>
Borough Park	11.1%
Bushwick and Williamsburg	18.7%
Canarsie and Flatlands	8.9%
Central Brooklyn	12.7%
East New York and New Lots	11.9%
Flatbush	12.4%
Greenpoint	12.1%
Northwest Brooklyn	8.5%
Southern Brooklyn	9.5%
Southwest Brooklyn	10.3%
Sunset Park	20.4%
<b>Manhattan</b>	<b>8.9%</b>
Central Harlem	11.6%
Chelsea and Clinton	7.2%
East Harlem	14.7%
Gramercy Park and Murray Hill	4.7%
Greenwich Village and Soho	5.3%
Inwood and Washington Heights	15.5%
Lower East Side	8.6%
Lower Manhattan	5.1%
Upper East Side	5.0%
Upper West Side	5.8%
<b>Queens</b>	<b>15.6%</b>
Central Queens	9.9%
Jamaica	13.6%
North Queens	19.2%
Northeast Queens	9.4%
Northwest Queens	16.4%
Rockaways	10.2%
Southeast Queens	9.3%
Southwest Queens	13.9%
West Central Queens	12.1%
West Queens	24.1%
<b>Staten Island</b>	<b>7.2%</b>
Mid-Island	6.0%
Port Richmond	11.3%
South Shore	4.8%
Stapleton and St. George	9.7%
<b>New York State</b>	<b>9.7%</b>
<b>United States</b>	<b>13.0%</b>

Source: U.S. Census ACS 5-year estimates 2011-2015.

All boroughs except for Staten Island had a higher rate of uninsured residents than the New York State average. Additionally, the Bronx and Queens had uninsured rates higher than the United

States average. The neighborhoods of Sunset Park (Brooklyn) and West Queens (Queens) each had uninsured rates above 20 percent.

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

**Exhibit 19: MSH Discharges by Neighborhood and Payer, 2016**

Borough and Neighborhood	Private Insurance	Medicaid	Medicare	Self-Pay	Other
<b>Bronx</b>	<b>16.4%</b>	<b>48.7%</b>	<b>26.7%</b>	<b>6.9%</b>	<b>1.3%</b>
Bronx Park and Fordham	14.8%	50.7%	24.2%	9.2%	1.1%
Central Bronx	11.1%	59.0%	22.8%	5.9%	1.3%
High Bridge and Morrisania	11.6%	59.1%	24.2%	3.6%	1.5%
Hunts Point and Mott Haven	10.8%	57.9%	25.3%	4.6%	1.3%
Kingsbridge and Riverdale	24.1%	27.0%	44.1%	3.5%	1.3%
Northeast Bronx	24.7%	34.3%	31.4%	8.3%	1.3%
Southeast Bronx	22.7%	38.2%	27.8%	10.0%	1.4%
<b>Brooklyn</b>	<b>22.4%</b>	<b>39.5%</b>	<b>28.9%</b>	<b>6.9%</b>	<b>2.3%</b>
Borough Park	21.5%	44.5%	27.6%	5.5%	0.8%
Bushwick and Williamsburg	19.3%	49.0%	26.2%	3.2%	2.3%
Canarsie and Flatlands	26.4%	31.2%	36.2%	4.6%	1.6%
Central Brooklyn	18.6%	44.7%	27.0%	3.2%	6.5%
East New York and New Lots	15.1%	51.9%	25.7%	4.3%	3.0%
Flatbush	21.3%	41.8%	30.6%	4.9%	1.4%
Greenpoint	32.1%	36.8%	26.7%	3.2%	1.1%
Northwest Brooklyn	39.8%	27.3%	29.0%	2.4%	1.5%
Southern Brooklyn	18.8%	22.4%	32.9%	25.0%	0.9%
Southwest Brooklyn	26.9%	29.7%	33.4%	8.8%	1.2%
Sunset Park	20.7%	55.0%	19.1%	4.1%	1.2%
<b>Manhattan</b>	<b>27.8%</b>	<b>32.2%</b>	<b>35.4%</b>	<b>3.7%</b>	<b>0.9%</b>
Central Harlem	18.2%	46.1%	31.2%	3.4%	1.2%
Chelsea and Clinton	33.1%	27.7%	34.1%	4.2%	0.9%
East Harlem	13.0%	50.1%	32.0%	4.0%	0.9%
Gramercy Park and Murray Hill	35.3%	21.7%	33.8%	7.7%	1.5%
Greenwich Village and Soho	46.3%	15.1%	34.1%	2.9%	1.7%
Inwood and Washington Heights	17.5%	44.8%	33.2%	3.6%	1.0%
Lower East Side	21.8%	35.2%	39.2%	3.0%	0.8%
Lower Manhattan	47.5%	20.2%	28.0%	3.7%	0.7%
Upper East Side	45.1%	9.7%	40.5%	4.2%	0.4%
Upper West Side	38.9%	16.5%	42.3%	1.4%	0.8%
<b>Queens</b>	<b>23.9%</b>	<b>31.7%</b>	<b>29.8%</b>	<b>13.0%</b>	<b>1.7%</b>
Central Queens	31.0%	28.1%	32.0%	7.5%	1.4%
Jamaica	20.9%	31.9%	26.5%	19.4%	1.4%
North Queens	20.8%	36.4%	36.9%	4.8%	1.1%
Northeast Queens	35.0%	18.2%	43.3%	2.1%	1.4%
Northwest Queens	32.6%	26.5%	28.8%	10.9%	1.1%
Rockaways	18.5%	39.4%	37.9%	2.9%	1.2%
Southeast Queens	28.2%	27.7%	33.6%	8.7%	1.8%
Southwest Queens	23.2%	36.9%	27.2%	11.2%	1.5%
West Central Queens	31.1%	26.7%	35.6%	5.3%	1.3%
West Queens	17.3%	32.3%	19.3%	28.1%	2.9%
<b>Staten Island</b>	<b>29.0%</b>	<b>28.4%</b>	<b>38.5%</b>	<b>2.6%</b>	<b>1.5%</b>
Mid-Island	29.8%	21.1%	45.8%	2.0%	1.4%
Port Richmond	23.2%	42.3%	28.8%	4.4%	1.3%
South Shore	36.6%	19.1%	41.0%	1.7%	1.7%
Stapleton and St. George	22.2%	36.8%	36.3%	3.3%	1.4%

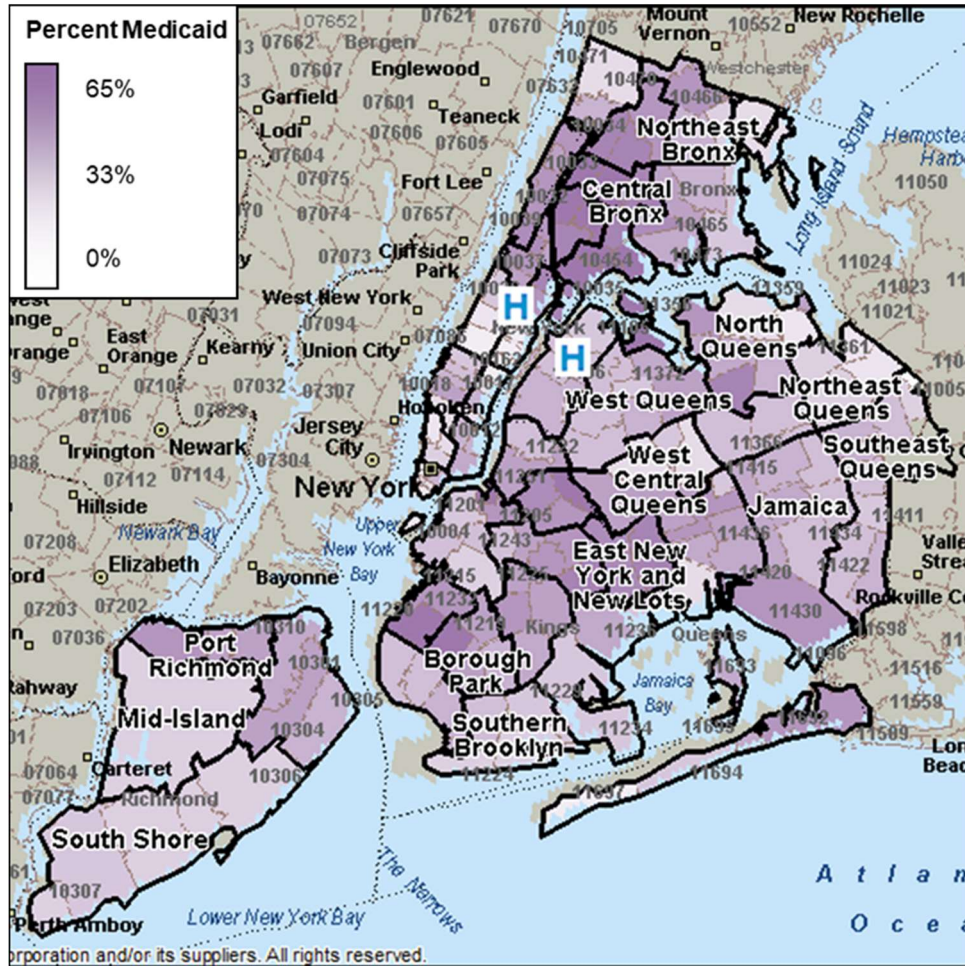
Source: Verité analysis of 2016 data from the New York State Department of Health, SPARCS dataset via the Mount Sinai Health System Health System



The highest percentages of discharges for private insurance were from Manhattan and Staten Island. Medicaid discharges were most prevalent in the Bronx and Brooklyn. Self-pay discharges were most concentrated in Queens.

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

Exhibit 20: Medicaid Discharges by ZIP Code, 2016



Source: Microsoft MapPoint and Verité analysis of 2016 data from the New York State Department of Health, SPARCS dataset via the Mount Sinai Health System.





## Crime

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

**Exhibit 23: Crime Rates per 100,000 Population, 2014-2015**

Indicator	New York City	New York State	United States
<b>Total Violent Crime</b>	585.8	379.7	383.2
Murder and Non-negligent Manslaughter	4.1	3.1	4.9
Rape	26.2	30.7	38.6
Robbery	198.2	120.9	101.9
Aggravated Assault	357.2	225.0	237.8
<b>Total Property Crime</b>	1,518.7	1,604.0	2,487.0
Burglary	164.9	223.7	491.4
Larceny-Theft	1,267.4	1,303.0	1,775.4
Motor Vehicle Theft	86.4	77.4	220.2

Source: Federal Bureau of Investigation, Uniform Crime Reporting Program, 2015.

New York City had comparatively high rates of violent crime in 2015, including murder and non-negligent manslaughter, robbery, and aggravated assault. The City compared well to the state for property crimes except for motor vehicle thefts (**Exhibit 23**).

**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, 2015**

Borough	Young Adults - Driving While Intoxicated		Young Adults Arrests - Drug Use/Possession/Sale Arrests		Young Adult Arrests - Property Crimes Arrests	
	Number	Rate	Number	Rate	Number	Rate
Bronx	40	3.2	3,268	260.7	1,464	116.8
Brooklyn	67	3.8	2,436	137.6	1,824	103.0
Manhattan	70	7.2	2,412	249.2	2,941	303.8
Queens	153	10.2	2,040	136.1	1,788	119.3
Staten Island	33	9.5	345	99.5	345	99.5
New York City	363	6.2	10,501	179.9	8,362	143.2
<b>New York State</b>	<b>3,334</b>	<b>21.4</b>	<b>17,155</b>	<b>110.2</b>	<b>19,664</b>	<b>126.3</b>

Source: NYS Division of Criminal Justice Services via Kids' Well-being Indicators Clearinghouse, 2015.  
Rates are per 10,000 young adults aged 16-21 years. Data were presented by county, see Introduction.

Young adult rates of driving while intoxicated compared well to the state. Drug use, possession, or sale arrest rates were more than 50 percent worse than the state average in the Bronx, Manhattan, and New York City as a whole. Young adults residing in Manhattan also exhibited high rates of arrests from property crime (**Exhibit 24**).

## Housing and Homelessness

According to the U.S. Department of Housing and Urban Development (HUD), approximately 800,000 people in the five boroughs lived in HUD-subsidized housing in 2016, with more than 50 percent of these residents living in Brooklyn and Manhattan. **Exhibit 25** provides average costs and wait times across all HUD programs.

**Exhibit 25: HUD-Subsidized Housing Estimates, All Programs, 2016**

Borough	People in Subsidized Housing	Average Household Income	Spending per Unit per Month		Average Months on Waiting List
			Average Household Contribution	Average Federal Contribution	
Bronx	249,780	\$18,263	\$444	\$888	58
Brooklyn	275,367	\$19,820	\$468	\$883	50
Manhattan	181,791	\$21,097	\$483	\$1,010	43
Queens	69,286	\$20,229	\$474	\$855	54
Staten Island	24,135	\$18,285	\$432	\$904	51
<b>New York State</b>	<b>1,173,703</b>	<b>\$18,350</b>	<b>\$437</b>	<b>\$842</b>	<b>42</b>
<b>United States</b>	<b>9,785,085</b>	<b>\$13,726</b>	<b>\$332</b>	<b>\$687</b>	<b>26</b>

Source: U.S. Department of Housing and Urban Development, 2016.

Household and federal rent contributions per housing unit were higher in all boroughs than the state and U.S. averages, except for Staten Island household contributions. The average months on the wait list for subsidized housing in each of the five 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.<sup>7</sup> Exhibit 26A presents characteristics of NYCHA residents by race and ethnicity.

**Exhibit 26A: Characteristics of Families and Individuals Served by NYCHA, 2017**

Race and Ethnicity	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
<b>Bronx</b>					
White	25.9%	47.4%	16.0%	21.8%	36.0%
Black	31.4%	32.6%	8.2%	31.1%	47.3%
Hispanic	28.7%	37.3%	9.9%	30.5%	45.9%
Asian	16.7%	41.9%	8.3%	16.9%	51.6%
Other	40.2%	23.5%	3.3%	42.5%	58.1%
<b>Total</b>	<b>29.7%</b>	<b>35.6%</b>	<b>9.3%</b>	<b>30.6%</b>	<b>46.4%</b>
<b>Brooklyn</b>					
White	20.8%	64.2%	18.7%	9.0%	34.6%
Black	29.5%	31.9%	8.3%	32.8%	47.9%
Hispanic	27.8%	36.8%	8.7%	28.9%	48.1%
Asian	20.1%	32.5%	2.1%	5.3%	78.3%
Other	41.5%	26.7%	4.6%	39.0%	55.7%
<b>Total</b>	<b>28.2%</b>	<b>35.5%</b>	<b>8.8%</b>	<b>29.3%</b>	<b>48.1%</b>
<b>Manhattan</b>					
White	18.0%	55.8%	20.8%	13.4%	36.7%
Black	27.4%	34.7%	9.6%	29.2%	44.6%
Hispanic	23.4%	44.4%	11.7%	23.9%	43.7%
Asian	13.0%	56.0%	8.0%	5.5%	58.5%
Other	40.9%	33.3%	4.6%	26.2%	53.9%
<b>Total</b>	<b>23.7%</b>	<b>42.4%</b>	<b>10.7%</b>	<b>23.7%</b>	<b>45.3%</b>
<b>Queens</b>					
White	15.9%	58.6%	20.5%	11.5%	33.7%
Black	29.4%	30.2%	8.6%	31.9%	49.1%
Hispanic	27.3%	34.5%	8.0%	29.3%	52.1%
Asian	11.2%	62.9%	10.3%	4.6%	48.4%
Other	39.5%	57.8%	13.7%	17.3%	39.9%
<b>Total</b>	<b>27.0%</b>	<b>36.0%</b>	<b>9.3%</b>	<b>27.7%</b>	<b>48.8%</b>
<b>Staten Island</b>					
White	17.4%	62.4%	26.9%	13.6%	22.8%
Black	37.1%	23.6%	6.8%	40.1%	50.0%
Hispanic	37.1%	29.1%	7.6%	37.1%	42.2%
Asian	10.2%	81.6%	26.9%	2.0%	20.4%
Other	32.9%	42.9%	9.6%	25.0%	35.7%
<b>Total</b>	<b>33.6%</b>	<b>35.0%</b>	<b>10.5%</b>	<b>32.6%</b>	<b>41.1%</b>
<b>New York City</b>					
White	19.7%	59.7%	19.9%	12.0%	33.9%
Black	29.7%	32.3%	8.6%	31.7%	47.2%
Hispanic	26.9%	39.2%	10.0%	28.0%	46.1%
Asian	14.6%	52.3%	7.0%	5.4%	60.5%
Other	40.5%	34.1%	6.0%	31.7%	52.2%
<b>Total</b>	<b>27.3%</b>	<b>37.6%</b>	<b>9.5%</b>	<b>27.9%</b>	<b>46.7%</b>

Source: New York City Housing Authority, Resident Data Book Summary, 2017.

<sup>7</sup> 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>

Of the NYCHA population, White families are more likely than other cohorts to have a head of household that is over the age of 62. Manhattan and Staten Island report a high percentage of NYCHA residents who are 62 years and older and living alone. In all boroughs, Black and Hispanic populations have higher percentages of single parent families compared to other cohorts. White families in NYCHA housing are less likely to have a member employed than other cohorts in the community (**Exhibit 26A**).

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

**Exhibit 26B: Characteristics of Families and Individuals Served by NYCHA, 2017**

Borough	Average NYCHA Family Size	Average Gross Income	Average Number of Years in Public Housing
Bronx	2.4	\$22,347	20.5
Brooklyn	2.3	\$23,609	21.0
Manhattan	2.2	\$24,639	24.9
Queens	2.2	\$24,884	20.9
Staten Island	2.3	\$21,302	16.7
<b>New York City</b>	<b>2.3</b>	<b>\$23,672</b>	<b>21.9</b>

Source: New York City Housing Authority, Resident Data Book Summary, 2017.

The average NYCHA family size ranges from 2.2 to 2.4 persons in the community and New York City and average gross income is approximately \$23,000. 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 22 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 2017 estimate.

**Exhibit 27: Unsheltered Individuals, 2005-2017**

Borough	Unsheltered 2005	Unsheltered 2016	Unsheltered 2017	Percent Change 2005-2017	Percent Change 2016-2017
<b>Surface Areas</b>	<b>3,550</b>	<b>1,221</b>	<b>2,080</b>	<b>-41.4%</b>	<b>70.4%</b>
Manhattan	1,805	813	1,220	-32.4%	50.1%
Bronx	587	43	255	-56.6%	493.0%
Brooklyn	592	210	363	-38.7%	72.9%
Queens	335	110	199	-40.6%	80.9%
Staten Island	231	45	43	-81.4%	-4.4%
<b>Subways</b>	<b>845</b>	<b>1,573</b>	<b>1,812</b>	<b>114.4%</b>	<b>15.2%</b>
<b>Total Unsheltered Individuals</b>	<b>4,395</b>	<b>2,794</b>	<b>3,892</b>	<b>-11.4%</b>	<b>39.3%</b>

Source: New York City Department of Homeless Services, 2017.



In 2017, an estimated 3,892 people in New York City were unsheltered, an 11 percent decrease from 2005 but a 39 percent increase from 2016. The percent increase in unsheltered individuals between 2016 and 2017 was particularly high in the Bronx, at nearly 500 percent.

New York City’s overall rate of homelessness (33.2 per 100,000) is lower than that of many other large cities (**Exhibit 28**).

**Exhibit 28: Homelessness Rate, Selected Cities, 2016**

City or Metropolitan Area	Total Population	Unsheltered Homeless	Rate per 100,000
San Francisco	870,887	4,358	500.4
Los Angeles City & County	10,137,915	32,781	323.4
Seattle/King County	2,149,970	4,505	209.5
District of Columbia	681,170	318	46.7
Chicago	2,704,958	1,243	46.0
Philadelphia	1,567,872	705	45.0
Miami/Dade County	2,712,945	982	36.2
<b>New York City</b>	<b>8,537,673</b>	<b>2,838</b>	<b>33.2</b>
Boston	673,184	167	24.8

Source: Verité analysis of data from the U.S. Department of Housing and Urban Development, 2017, and the U.S. Census, 2017.

## 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 2017 and FY 2018<sup>8</sup>

The State of New York’s FY 2017-2018 budget includes both funding increases and decreases from FY 2016-2017 for health-related services. Changes include:

- **Health**
  - The overall health budget increased \$841 million, or 4.1 percent;
  - The Office for the Aging budget decreased \$1.77 million, or 1.4 percent;
  - The Department of Health budget increased \$845 million, or 4.1 percent; and
  - The Office of the Medicaid Inspector General decreased \$1.96 million, or 9.5 percent.
- **Social Welfare**
  - The Social Welfare budget increased by \$24.4 million, or 0.7 percent;
  - The Office of Children and Family Services budget decreased \$68.2 million, or 3.5 percent;
  - The Office of Temporary and Disability Assistance budget increased \$84 million, or 6.2 percent.

<sup>8</sup> New York State Department of the Budget. (2013). *New York State Budget*. Retrieved 2013, from: [http://openbudget.ny.gov/overview/overview\\_SpendGrowth.html](http://openbudget.ny.gov/overview/overview_SpendGrowth.html)

- **Mental Hygiene**

- The overall Mental Hygiene budget increased \$41.9 million, or by 0.6 percent;
- The Office of Alcoholism and Substance Abuse Services increased \$23.7 million, or 5.6 percent;
- The Justice Center for the Protection of People with Special Needs budget was increased by \$2.0 million, or 5.1 percent;
- The Office of Mental Health budget increased \$152,000, or by 0.0 percent;
- Funding for the Department of Mental Hygiene’s budget of \$227,000 was eliminated; and
- The Office for People with Developmental Disabilities increased \$16.3 million, or 0.6 percent.

### **New York City Budget Changes between FY 2017 and FY 2018**

The New York City Council developed its budget for FY 2018 to be prepared for “an unexpected financial downturn, as well as the possibility of devastating federal cuts to vital services.” The Council developed the budget to “bolster essential City programs and services that support New Yorkers, especially the most vulnerable.”<sup>9</sup>

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 2018 budget categories that related to health are as follows:

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

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<sup>9</sup> New York City Council Finance Division (2017), *Fiscal Year 2018 Adopted Expense Budget, Adjustment Summary / Schedule C*.

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

- **Anti-Poverty** – Initiatives “address income disparities throughout the five boroughs.”
  - Anti-Poverty Initiatives, administered through multiple City agencies, is budgeted in FY 2018 at \$2,800,000, which is unchanged from FY 2017.
  
- **Children’s Services** – “Initiatives support child care programs and reflect the Council’s goal of increasing access to early childhood education programs.”
  - Discretionary Child Care programs, administered through the Administration for Children's Services (ACS) is budgeted in FY 2018 at \$9,855,190, an increase of \$500,121 from FY 2017;
  - The City’s First Readers program, administered through the Department of Youth and Community Development (DYCD), is budgeted for FY 2018 at \$4,242,000, an increase of \$1,450,000 from FY 2017; and
  - Child Care Vouchers, administered in FY 2017 by ACS and budgeted at \$3,000,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C.
  
- **Community Development** – The Council continues “funding to community-based organizations that support a broad range of community and capacity-building efforts.”
  - The Adult Literacy Initiative, administered by DYCD, is budgeted for FY 2018 at \$6,000,000, which is unchanged from FY 2017;
  - The Communities of Color Nonprofit Stabilization Fund, administered by DYCD, is budgeted for FY 2018 at \$3,700,000, an increase of \$1,200,000 from FY 2017;
  - The Digital Inclusion and Literacy Initiative, administered by DYCD, is budgeted for FY 2018 at \$3,060,000, an increase of \$1,020,000 from FY 2017;
  - The Diversity, Inclusion and Equity in Tech Initiative, administered by DYCD and the New York City Housing Authority (NYCHA) is budgeted for FY 2018 at \$700,000, new funding for this programmatic area as the Initiative did not appear in the FY 2017 Adopted Expense Budget Schedule C; and
  - The Social Justice Postgraduate Fellowship, administered by the Department of Citywide Administrative Services (DCAS), is budgeted for FY 2018 at \$900,000, an increase of \$300,000 from FY 2017.
  
- **Criminal Justice Services** – Continued funding “reflects the Council’s steadfast vision of reducing incarceration costs, promoting increased equality, and seeking highly innovative paths for criminal justice reform.”
  - Alternatives to Incarceration, administered by the Mayor’s Office of Criminal Justice (MOCJ), is budgeted for FY 2018 at \$6,407,000, an increase of \$775,000 from FY 2017;
  - The Bail Fund, administered by MOCJ, is budgeted for FY 2018 at \$1,400,000, which is unchanged from FY 2017;
  - The Center for Court Innovation, administered by MOCJ, is budgeted for FY 2018 at \$1,710,000, an increase of \$1,210,000 from FY 2017;
  - The Initiative to Combat Sexual Assault, administered by MOCJ, is budgeted for FY 2018 at \$1,348,000, which is unchanged from FY 2017;

- Support for Victims of Human Trafficking, administered by MOCJ, is budgeted for FY 2018 at \$1,000,000, an increase of \$250,000 from FY 2017; and
  - Video Visitation, administered by the Brooklyn Public Library (BPL), the New York Public Library (NYPL), and the Queens Borough Public Library (QBPL), is budgeted for FY 2018 at \$600,000, new funding for this programmatic area as the Initiative did not appear in the FY 2017 Adopted Expense Budget Schedule C.
- **Domestic Violence Services** – The Council’s funding “supports services for survivors of domestic violence and their families, which includes prevention, case management, crisis intervention, legal services, referrals, counseling, education, technical assistance, training, and community outreach.”
    - The Domestic Violence and Empowerment (DoVE) Initiative, administered by MOCJ, is budgeted for FY 2018 at \$7,805,000, an increase of \$1,500,000 from FY 2017; and
    - The Supportive Alternatives to Violent Encounters (SAVE), administered by ACS, the Human Resources Administration (HRA), and MOCJ, is budgeted for FY 2018 at \$1,950,000, which is unchanged from FY 2017.
- **Education** –The Council’s “initiatives provide direct benefits that support school budgets and students’ needs, ... including mental health services for students, dropout prevention programs, LGBTQ inclusive curriculum, and STEM education.”
    - Bridge to Tomorrow, administered in FY 2017 by the Department of Education (DOE) and budgeted at \$1,150,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
    - The Child Mind Institute, administered by DOE, is budgeted for FY 2018 at \$500,000, which is unchanged from FY 2017;
    - Community Schools, administered by DOE, is budgeted for FY 2018 at \$2,250,000, an increase of \$1,025,000 from FY 2017;
    - The Dropout Prevention and Intervention Initiative, administered by DOE, is budgeted for FY 2018 at \$1,585,000, a decrease of \$10,000 from FY 2017;
    - Educational Programs for Students, administered by DOE, is budgeted for FY 2018 at \$3,890,000, an increase of \$915,000 from FY 2017;
    - The Jill Chaifetz Helpline, administered by DYCD, is budgeted for FY 2018 at \$245,000, which is unchanged from FY 2017;
    - The LGBTQ Inclusive Curriculum, administered by DOE, is budgeted for FY 2018 at \$200,000, an increase of \$45,000 from FY 2017;
    - Physical Education and Fitness, administered by DOE / Department of Youth and Community Development (DYCD), is budgeted for FY 2018 at \$1,925,000, which is unchanged from FY 2017;
    - The Restorative Justice Program, administered by DOE, is budgeted for FY 2018 at \$1,300,000, which is unchanged from FY 2017;
    - Support for Educators, administered by DOE, is budgeted for FY 2018 at \$20,804,500, an increase of \$8,060,000 from FY 2017; and
    - The Urban Advantage, administered by DOE, is budgeted for FY 2018 at 3,500,000, which is unchanged from FY 2017.

- **Food Initiatives** – The Council’s “food initiatives support critical programs that assist low-income New Yorkers in accessing food and federal benefits ... including school pantries, as well as programs that help low income New Yorkers access Earned Income Tax Credits (EITC) and Supplemental Nutrition Assistance Program (SNAP) benefits.”
  - Access to Healthy Food and Nutritional Education, administered by DYCD, is budgeted for FY 2018 at \$930,000, which is unchanged from FY 2017;
  - The Food Access and Benefits, administered by HRA, is budgeted for FY 2018 at \$725,000, which is unchanged from FY 2017; and
  - The Food Pantries, administered by DYCD, is budgeted for FY 2018 at \$4,000,000, which is unchanged from FY 2017.
  
- **Health Services** –“Health Services initiatives funded by the Council in Fiscal 2018 demonstrate the Council’s commitment to reducing health disparities and promoting health equity throughout the five boroughs.”
  - Access Health, administered by the Department of Health and Mental Hygiene (DOHMH), is budgeted for FY 2018 at \$1,187,000, an increase of \$117,000 from FY 2017;
  - Beating Hearts, administered by DOHMH, is budgeted for FY 2018 at \$350,000, which is unchanged from FY 2017;
  - Cancer Services, administered by DOHMH, is budgeted for FY 2018 at \$790,500, which is unchanged from FY 2017;
  - Child Health and Wellness, administered by DOHMH, is budgeted for FY 2018 at \$646,000, which is unchanged from FY 2017;
  - Ending the Epidemic, administered by DOHMH, is budgeted for FY 2018 at \$6,295,000, an increase of 700000 from FY 2017;
  - HIV/AIDS Faith Based, administered by DOHMH, is budgeted for FY 2018 at \$1,360,000, a decrease of \$200,000 from FY 2017;
  - Maternal Health Services, administered by DOHMH, is budgeted for FY 2018 at \$1,192,818, a decrease of \$237,182 from FY 2017;
  - The Nurse Family Partnership, administered by DOHMH, is budgeted for FY 2018 at \$2,000,000, which is unchanged from FY 2017;
  - Reproductive & Sexual Health Services, administered by DOHMH, is budgeted for FY 2018 at \$344,788, an increase of \$84,788 from FY 2017; and
  - Viral Hepatitis Prevention, administered by DOHMH, is budgeted for FY 2018 at \$1,423,658, an increase of \$237,182 from FY 2017.
  
- **Homeless Services** – The Council’s initiatives include “emergency grants to families in financial crisis and at risk of eviction to keep them in their homes ... [and] an innovative approach to addressing the mental health and emotional needs of families.”
  - The Children and Families in NYC Homeless System, administered by the Department of Homeless Services (DHS), is budgeted for FY 2018 at \$1,000,000, which is unchanged from FY 2017; and
  - The Citywide Homeless Prevention Fund, administered by DHS, is budgeted for FY 2018 at \$820,000, which is unchanged from FY 2017.

- **Housing** –Council funding provides “a critical resource to ensure that communities access the tools, resources, and programming necessary to address local housing needs.”
  - Community Housing Preservation Strategies, administered by the Department of Housing Preservation and Development (HPD), is budgeted for FY 2018 at \$3,651,000, which is unchanged from FY 2017;
  - Financial Empowerment for NYC Renters, administered by HPD and the Department of Consumer Affairs (DCA), is budgeted for FY 2018 at \$450,000, which is unchanged from FY 2017;
  - The Foreclosure Buyback Initiative, administered by HPD, is budgeted for FY 2018 at \$1,000,000, which is unchanged from FY 2017;
  - The Housing Information Project (SHIP), administered by HPD, is budgeted for FY 2018 at \$300,000, which is unchanged from FY 2017;
  - The HPD Alternative Enforcement Program (AEP), administered by HPD, is budgeted for FY 2018 at \$750,000, which is unchanged from FY 2017;
  - The Home Loan Program, administered by HPD and HRA, is budgeted for FY 2018 at \$1,500,000, which is unchanged from FY 2017;
  - The Mortgage Foreclosure Prevention Program, administered by HPD, is budgeted for FY 2018 at \$1,000,000, which is unchanged from FY 2017; and
  - Stabilizing NYC, administered by HPD, is budgeted for FY 2018 at \$2,500,000, an increase of \$500,000 from FY 2017.
  
- **Immigrant Services** – The Council included funds for “immigrant services that reflect the Council’s continued commitment to ensuring that immigrant New Yorkers have access to legal assistance for both detained and non-detained persons, health services, and other wraparound services.”
  - The CUNY Citizenship NOW! Program, administered by the City University of New York (CUNY), is budgeted for FY 2018 at \$2,000,000, which is unchanged from FY 2017;
  - The Immigrant Health Initiative, administered by DOHMH, is budgeted for FY 2018 at \$1,500,000, which is unchanged from FY 2017;
  - The Immigrant Opportunities Initiative, administered by HRA, is budgeted for FY 2018 at \$2,600,000, which is unchanged from FY 2017;
  - Key to the City, administered by DYCD, is budgeted for FY 2018 at \$700,000, new funding for this programmatic area as Key to the City did not appear in the FY 2017 Adopted Expense Budget Schedule C; and
  - The Immigrant Resource Center, administered by DYCD, is budgeted for FY 2018 at \$500,000, a decrease of \$5,730,000 from FY 2017;
  - The New York Immigrant Family Unity Project, administered by HRA, is budgeted for FY 2018 at \$10,000,000, an increase of \$9,300,000 from FY 2017; and
  - Unaccompanied Minors and Families, administered by HRA, is budgeted for FY 2018 at \$2,000,000, an increase of \$1,500,000 from FY 2017.

- **Mental Health Services** – “The Mental Health Services initiatives funded by the Council demonstrate the Council’s commitment to supporting the mental health needs of New Yorkers, particularly the most vulnerable and marginalized populations, such as isolated seniors, court-involved youth, and traumatized children.”
  - Autism Awareness, administered by DOHMH, is budgeted for FY 2018 at \$3,236,846, a decrease of \$78,540 from FY 2017;
  - Children Under Five, administered by DOHMH, is budgeted for FY 2018 at \$1,002,000, which is unchanged from FY 2017;
  - Court-Involved Youth Mental Health, administered by DOHMH, is budgeted for FY 2018 at \$2,050,000, an increase of \$150,000 from FY 2017;
  - Developmental, Psychological & Behavioral Health Services, administered by DOHMH, is budgeted for FY 2018 at \$2,179,390, an increase of \$40,000 from FY 2017;
  - Geriatric Mental Health, administered by DOHMH, is budgeted for FY 2018 at \$1,905,540, an increase of \$78,540 from FY 2017;
  - LGBTQ Youth All-Borough Mental Health, administered by DOHMH, is budgeted for FY 2018 at \$1,200,000, an increase of \$200,000 from FY 2017;
  - Medicaid Redesign Transition, administered by DOHMH, is budgeted for FY 2018 at \$500,000, which is unchanged from FY 2017; and
  - Mental Health Services for Vulnerable Populations, administered by DOHMH, is budgeted for FY 2018 at \$1,218,000, an increase of \$125,000 from FY 2017.
  
- **Senior Services** – Initiatives for seniors include “innovative services for niche senior populations, including Holocaust Survivors, immigrants, and LGBT seniors” as well as “senior center programming and elder abuse prevention.”
  - Access to Critical Services for Seniors, administered by the Department for the Aging (DFTA), is budgeted for FY 2018 at 1180000, which is unchanged from FY 2017;
  - Borough Presidents' Discretionary Funding Restoration, administered by DFTA, is budgeted for FY 2018 at \$1,129,774, which is unchanged from FY 2017;
  - DFTA Core Services Enhancement, administered in FY 2017 by DFTA and budgeted at \$660,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
  - Elder Abuse Enhancement, administered by DFTA, is budgeted for FY 2018 at \$335,000, which is unchanged from FY 2017;
  - The Healthy Aging Initiative, administered by DFTA, is budgeted for FY 2018 at \$1,810,000, which is unchanged from FY 2017;
  - The Elie Wiesel Holocaust Survivors Initiative, administered by DFTA, is budgeted for FY 2018 at \$3,000,000, an increase of \$500,000 from FY 2017;
  - Information and Referral Services, administered by DFTA, is budgeted for FY 2018 at \$407,811, which is unchanged from FY 2017;
  - LGBT Senior Services in Every Borough, administered by DFTA, is budgeted for FY 2018 at \$1,500,000, which is unchanged from FY 2017;
  - Naturally Occurring Retirement Communities (NORCs), administered by DFTA, is budgeted for FY 2018 at \$3,850,000, which is unchanged from FY 2017;

- Support Our Seniors, administered by DFTA, is budgeted for FY 2018 at \$3,060,000, an increase of \$1,020,000 from FY 2017;
  - Senior Centers for Immigrant Populations, administered by DFTA, is budgeted for FY 2018 at \$1,500,000, which is unchanged from FY 2017;
  - Senior Centers, Programs, and Services Enhancement, administered by DFTA, is budgeted for FY 2018 at \$3,000,000, a decrease of \$5,78,000 from FY 2017; and
  - Social Adult Day Care Enhancement, administered by DFTA, is budgeted for FY 2018 at \$1,055,556, an increase of \$105,556 from FY 2017.
- **Youth Services** – The City budget continues funding for “community-based organizations that support a broad range of youth services.”
    - The Afterschool Enrichment Initiative, administered by DYCD, is budgeted for FY 2018 at \$5,725,000, an increase of \$300,000 from FY 2017;
    - Anti-Violence Youth Programs, administered in FY 2017 by DYCD and budgeted at \$250,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
    - Big Brothers Big Sisters of New York City, administered by DYCD, is budgeted for FY 2018 at \$1,200,000, which is unchanged from FY 2017;
    - Civic Education in New York City Schools, administered by DYCD, is budgeted for FY 2018 at \$500,000, which is unchanged from FY 2017;
    - COMPASS, administered by DYCD, is budgeted for FY 2018 at \$1,813,600, a decrease of \$6,186,400 from FY 2017;
    - The Sports Training and Rolemodels for Success Initiative, administered by DYCD, is budgeted for FY 2018 at \$1,200,000, which is unchanged from FY 2017;
    - Student Voter Registration Day, administered in FY 2017 by DYCD and budgeted at \$400,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
    - The Year-Round Employment Program, administered by DYCD, is budgeted for FY 2018 at \$8,000,000, a decrease of \$3,000,000 from FY 2017; and
    - The YouthBuild Project Initiative, administered by DYCD, is budgeted for FY 2018 at \$2,100,000, which is unchanged from FY 2017.
- **Young Women’s Initiative** – The City Council continues support for the Young Women’s Initiative, which seeks “to build a blueprint for investing in the future of young women and girls in New York City over the long-term, especially those of color.”
    - The Dedicated Contraceptive Fund, administered by DOHMH, is budgeted for FY 2018 at \$400,000, which is unchanged from FY 2017;
    - Wrap-Around Support for Transitional-Aged Foster Youth, administered by HRA, is budgeted for FY 2018 at \$500,000, which is unchanged from FY 2017;
    - Gender Equity Liaisons, administered in 2017 by DOHMH, DOE, DYCD, HPD, and HRA and budgeted at \$500,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
    - The Expand Transgender Healthcare Training, administered by the Health and Hospitals Corporation (H+H), is budgeted for FY 2018 at \$150,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;



- The Initiative for Immigrant Survivors of Domestic Violence, administered by MOCJ, is budgeted for FY 2018 at \$250,000, which is unchanged from FY 2017;
- The Power Action Change Empowerment (PACE) Initiative for Young Adults, administered in FY 2017 by MOCJ and budgeted at \$250,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
- The Post-Arrest Diversion Program, administered by SIDA, is budgeted for FY 2018 at \$1,025,000, an increase of \$775,000 from FY 2017;
- The Prevent Sexual Assault (PSA) Initiative for Young Adults, administered by MOCJ, is budgeted for FY 2018 at \$225,000, a decrease of \$25,000 from FY 2017;
- The Step In and Stop It Initiative to Address Bystander Intervention, administered by MOCJ, is budgeted for FY 2018 at \$154,000, a decrease of \$96,000 from FY 2017;
- Transgender Specific Healthcare Training, administered in FY 2017 by H+H and budgeted at \$250,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
- HRA Teen RAPP Enhancement, administered by HRA, is budgeted for FY 2018 at \$250,000, new funding for this programmatic area as HRA Teen RAPP Enhancement did not appear in the FY 2017 Adopted Expense Budget Schedule C;
- The Warrant Reduction Events, administered in FY 2017 by District Attorneys and budgeted at \$175,000, did not appear in the FY 2018 Adopted Expense Budget Schedule C;
- Work-Based Learning Internships, administered by DOE, is budgeted for FY 2018 at \$600,000, which is unchanged from FY 2017;
- Young Women's Leadership Development, administered by DYCD, is budgeted for FY 2018 at \$946,000, an increase of \$121,000 from FY 2017; and
- The ACS Youth Health Initiative, administered by ACS, is budgeted for FY 2018 at \$500,000, which is unchanged from FY 2017.

## Local Health Status and Access Indicators

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

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

### County Health Rankings

*County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation, incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of “health factors” and “health outcomes.” These health factors and outcomes are composite measures based on several variables grouped into the following categories: health behaviors, clinical care,<sup>10</sup> social and economic factors, and physical environment.<sup>11</sup> *County Health Rankings* is updated annually. *County Health Rankings 2017* relies on data from 2006 to 2015, with most data from 2011 to 2015.

**Exhibit 29A** presents 2013 and 2017 rankings for each available indicator category. Rankings indicate how the county ranked in relation to all 62 counties in the New York, with 1 indicating the most favorable rankings and 62 the least favorable. The table also indicates if rankings fell between 2013 and 2017.

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

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<sup>10</sup>A composite measure of Access to Care, which examines the percent of the population without health insurance and ratio of population to primary care physicians, and Quality of Care, which examines the hospitalization rate for ambulatory care sensitive conditions, whether diabetic Medicare patients are receiving HbA1C screening, and percent of chronically ill Medicare enrollees in hospice care in the last 8 months of life.

<sup>11</sup>A composite measure that examines Environmental Quality, which measures the number of air pollution-particulate matter days and air pollution-ozone days, and Built Environment, which measures access to healthy foods and recreational facilities and the percent of restaurants that are fast food.

### Exhibit 29A: County Rank among 62 New York Counties, 2013-2017

Indicator	Bronx			Brooklyn			Manhattan			Queens			Staten Island		
	2013	2017	Rank Change	2013	2017	Rank Change	2013	2017	Rank Change	2013	2017	Rank Change	2013	2017	Rank Change
<b>Health Outcomes</b>	62	62		49	33		21	11		19	14		24	24	
<b>Health Factors</b>	62	62		59	57		10	11	↓	47	33		27	28	↓
<b>Length of Life</b>	60	47		44	12		9	2		7	6		24	17	
<b>Quality of Life</b>	62	62		58	58		54	52		49	45		38	31	
Poor physical health days	47	62	↓	35	49	↓	27	25		16	45	↓	11	30	↓
Poor mental health days	42	62	↓	34	36	↓	36	23		28	6		36	4	
Drug Overdose Deaths	-	28		-	4		-	19		-	3		-	43	
<b>Health Behaviors</b>	47	58	↓	13	11		2	3	↓	6	7	↓	22	23	↓
Adult Smoking	19	42	↓	11	8		5	3		7	6		25	35	↓
Adult Obesity	22	54	↓	7	4		1	1		4	7	↓	24	35	↓
Excessive Drinking	15	1		8	10	↓	47	62	↓	11	2		33	3	
Sexually Transmitted Infections	62	62		61	60		59	61	↓	57	56		43	33	
Teen Births	61	61		51	42		32	22		29	27		20	16	
<b>Clinical Care</b>	61	62	↓	58	56		10	6		60	61	↓	13	14	↓
Primary Care Physicians	44	35		28	28		3	3		24	27	↓	9	10	↓
Dentists	27	33	↓	18	21	↓	1	1		11	13	↓	14	18	↓
Mental Health Providers	33	31		21	26	↓	1	1		25	44	↓	20	20	
Preventable Hospital Stays	47	31		40	28		6	3		20	17		13	14	↓
Diabetes Monitoring	62	62		39	49	↓	61	60		47	47		49	39	
<b>Social &amp; Economic Factors</b>	62	62		61	61		52	44		54	37		39	36	
Some College	59	60	↓	26	23		1	1		24	26	↓	17	14	
Unemployment	62	62		55	40		10	15	↓	30	18		35	37	↓
Social Associations	58	62	↓	56	59	↓	54	13		57	60	↓	45	61	↓
Injury Deaths	2	6	↓	3	2		1	4	↓	4	1		7	11	↓
<b>Physical Environment</b>	59	62	↓	49	57	↓	1	55	↓	42	48	↓	48	41	
Air pollution - particulate matter	43	59	↓	51	58	↓	48	62	↓	47	29		53	56	↓
Severe Housing Problems	-	62		-	61		-	58		-	60		-	56	

Source: County Health Rankings, 2017.

In 2017, the Bronx ranked in the bottom 50<sup>th</sup> percentile among New York counties for 22 of the 27 indicators assessed. Of those 22 indicators ranking in the bottom 50<sup>th</sup> percentile, 19 of them ranked in the bottom quartile, including Health Outcomes Index, Health Factors Index, Length of Life, Quality of Life, Health Behaviors, Clinical Care, Social and Economic Factors, and Physical Environment. Rankings for 12 indicators fell between 2013 and 2017.

Brooklyn ranked in the bottom 50<sup>th</sup> percentile among New York counties for 15 of the 27 indicators assessed. Of those 15 indicators ranking in the bottom 50<sup>th</sup> percentile, 11 of them ranked in the bottom quartile, including Health Factors Index, Quality of Life, Clinical Care, Social and Economic Factors, and Physical Environment. Rankings for 9 indicators fell between 2013 and 2017.

Manhattan ranked in the bottom 50<sup>th</sup> percentile among New York counties for 8 of the 27 indicators assessed. Of those 8 indicators ranking in the bottom 50<sup>th</sup> percentile, 7 of them ranked in the bottom quartile, including Quality of Life and Physical Environment. Rankings for 8 indicators fell between the time periods.

Queens ranked in the bottom 50<sup>th</sup> percentile among New York counties for 11 of the 27 indicators assessed. Of those 11 indicators ranking in the bottom 50<sup>th</sup> percentile, 6 of them ranked in the bottom quartile, including Clinical Care and Physical Environment. Rankings for 10 indicators fell between the time periods.

Staten Island ranked in the bottom 50<sup>th</sup> percentile among New York counties for 11 of the 27 indicators assessed. Of those 11 indicators ranking in the bottom 50<sup>th</sup> percentile, 3 of them ranked in the bottom quartile, including Air Pollution and Severe Housing Problems. Rankings for 13 indicators fell between the time periods.

**Exhibit 29B** provides data for each underlying indicator of the composite categories in the County Health Rankings.<sup>12</sup> 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.

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<sup>12</sup>County 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](http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf)

## Exhibit 29B: Borough Data Compared to State and U.S. Average, 2017

Indicator Category	Data	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York State	U.S.
<b>Health Outcomes</b>								
Length of Life	Years of potential life lost before age 75 per 100,000 population	6,719.5	5,371.1	4,165.3	4,437.2	5,541.0	5,339.1	6,600.0
Quality of Life	Percent of adults reporting fair or poor health	27.5%	17.1%	15.2%	17.3%	14.1%	16.2%	15.0%
	Average number of physically unhealthy days reported in past 30 days	4.8	3.9	3.6	3.8	3.7	3.8	3.6
	Average number of mentally unhealthy days reported in past 30 days	4.4	3.8	3.7	3.5	3.4	3.7	3.7
	Percent of live births with low birthweight (<2500 grams)	9.6%	8.2%	8.6%	8.1%	8.2%	8.1%	8.0%
<b>Health Factors</b>								
<b>Health Behaviors</b>								
Adult Smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	17.5%	13.8%	11.9%	13.0%	16.8%	15.2%	18.0%
Adult Obesity	Percent of adults that report a BMI >= 30	30.4%	22.7%	14.7%	23.8%	28.2%	24.6%	28.0%
Food Environment Index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	7.1	6.8	7.8	8.2	8.7	8.0	7.3
Physical Inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	31.1%	25.9%	17.5%	28.0%	29.0%	24.0%	22.0%
Access to Exercise Opportunities	Percent of population with adequate access to locations for physical activity	98.6%	96.8%	98.4%	95.5%	98.5%	90.7%	84.0%
Alcohol Impaired Driving Deaths	Percent of driving deaths with alcohol involvement	11.5%	13.1%	7.9%	17.5%	18.1%	23.0%	30.0%
Excessive Drinking	Binge plus heavy drinking	14.3%	17.7%	23.8%	15.4%	17.1%	18.2%	18.0%
STDs	Chlamydia rate per 100,000 population	1,139.6	686.1	771.8	525.4	296.0	502.8	456.1
Teen Births	Teen birth rate per 1,000 female population, ages 15-19	37.3	25.9	18.7	20.3	16.2	21.1	32.0
<b>Clinical Care</b>								
Uninsured	Percent of population under age 65 without health insurance	13.9%	12.4%	8.9%	15.9%	7.9%	10.1%	14.0%
Primary Care Physicians	Ratio of population to primary care physicians	1895:1	1602:1	723:1	1525:1	1073:1	1199:1	1,320:1
Dentists	Ratio of population to dentists	2115:1	1656:1	579:1	1411:1	1561:1	1275:1	1,520:1
Mental Health Providers	Ratio of population to mental health providers	607:1	573:1	137:1	755:1	520:1	417:1	500:1
Preventable Hospital Stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	51.4	50.4	35.4	44.9	43.8	47.6	50.0
Diabetic Screening	Percent of diabetic Medicare enrollees that receive HbA1c monitoring	76.7%	85.0%	81.1%	85.3%	86.4%	85.9%	85.0%
Mammography Screening	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	58.6%	57.7%	60.1%	55.7%	62.5%	62.1%	63.0%

Indicator Category	Data	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York State	U.S.
<b>Health Factors</b>								
<b>Social &amp; Economic Factors</b>								
High School Graduation	Percent of ninth-grade cohort that graduates in four years	59.9%	68.8%	69.6%	70.8%	79.0%	79.3%	83.0%
Some College	Percent of adults aged 25-44 years with some post-secondary education	50.4%	63.9%	83.3%	62.7%	67.6%	66.7%	64.0%
Unemployment	Percent of population age 16+ unemployed but seeking work	7.7%	5.9%	4.8%	5.0%	5.8%	5.3%	5.3%
Children in poverty	Percent of children under age 18 in poverty	42.6%	31.5%	24.9%	19.6%	18.3%	22.3%	21.0%
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	6.5	6.4	8.8	4.9	5.2	5.7	5.0
Children in single-parent households	Percent of children that live in a household headed by single parent	61.6%	38.3%	41.8%	33.3%	28.2%	34.9%	34.0%
Social Associations	Number of associations per 10,000 population	2.7	4.6	13.1	4.6	4.2	7.9	9.4
Violent Crime	Number of reported violent crime offenses per 100,000 population	620.8	620.9	621.1	620.7	620.9	394.1	380.0
Injury Deaths	Injury mortality per 100,000	38.9	32.3	33.1	30.6	44.5	44.0	62.0
<b>Physical Environment</b>								
Air Pollution	The average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county	10.5	10.2	11.1	8.6	10.0	8.6	8.7
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	38.5%	34.7%	25.4%	33.1%	24.6%	24.3%	19.0%
Drive Alone to Work	Percent of the workforce that drives alone to work	22.5%	18.6%	6.1%	31.6%	56.4%	53.2%	76.0%
Long Commute- Drive Alone	Among workers who commute in their car alone, the percent that commute more than 30 minutes	50.1%	55.2%	64.9%	57.5%	48.3%	36.3%	34.0%

Source: County Health Rankings, 2017

All boroughs in New York City compared unfavorably to the state average for percent of live births with low birthweight, high school graduation rate, violent crime rate, severe housing problems, and long commute – drive alone. Violent crime was particularly problematic, with every borough with rates greater than 50 percent the state average. Four of the five boroughs compared unfavorably for physical inactivity, chlamydia rate, ratio of population to dentists, ratio of population to mental health providers, diabetic screening, mammography screening, social associations rate, and air pollution.

## New York State Department of Health

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

**Exhibit 30: Selected Causes of Death, Rates per 100,000 Population, 2014**

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	All Other Causes	Suicide
Bronx	202.4	155.4	22.4	11.2	27.3	24.0	20.2	23.3	175.5	4.7
Brooklyn	182.7	140.8	19.7	5.9	26.3	18.2	19.7	24.8	138.8	5.0
Manhattan	137.2	132.3	18.0	6.0	16.5	19.0	18.8	14.8	143.2	8.6
Queens	171.6	127.4	21.3	2.1	23.8	19.1	17.2	16.1	132.8	6.3
Staten Island	234.0	149.3	16.3	3.3	21.9	28.3	29.4	18.1	129.5	6.3
New York City	175.9	137.9	20.0	5.5	23.4	20.2	19.3	19.6	143.2	6.1
<b>New York State</b>	<b>171.0</b>	<b>145.9</b>	<b>24.9</b>	<b>2.8</b>	<b>17.8</b>	<b>27.9</b>	<b>25.6</b>	<b>16.7</b>	<b>180.2</b>	<b>8.3</b>

Source: New York State Department of Health, 2017.  
Rates are age adjusted.

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

### Exhibit 31: Cancer Indicators, 2013-2014

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
<b>All cancers</b>							
Incidence per 100,000	430.3	448.6	503.3	474.1	569.7	470.0	550.9
Mortality rate per 100,000	145.0	149.5	155.3	149.9	169.6	151.1	180.7
<b>Lip, oral cavity, and pharynx cancer</b>							
Incidence per 100,000	9.4	9.3	11.4	10.1	11.3	10.1	12.1
Mortality rate per 100,000	2.2	2.6	2.8	2.0	2.3	2.4	2.5
<b>Colon and rectum cancer</b>							
Incidence per 100,000	38.3	43.1	38.3	46.5	50.2	42.7	46.7
Mortality rate per 100,000	15.5	16.3	13.8	16.3	17.7	15.8	16.6
<b>Lung and bronchus cancer</b>							
Incidence per 100,000	46.0	48.2	55.2	51.7	69.1	51.3	69.6
Mortality rate per 100,000	31.5	32.3	34.3	32.4	46.9	33.4	46.4
<b>Female breast cancer</b>							
Incidence per 100,000	112.7	121.2	147.7	128.1	157.0	128.8	149.1
Mortality rate per 100,000	23.6	25.0	24.4	22.0	26.1	23.9	26.3
<b>Cervix uteri cancer</b>							
Incidence per 100,000	9.6	10.7	7.3	11.3	6.3	9.8	8.3
Mortality rate per 100,000	3.1	3.2	2.6	3.5	2.3	3.1	2.7
<b>Ovarian cancer</b>							
Incidence per 100,000	10.4	12.3	15.3	14.8	13.5	13.3	14.9
Mortality rate per 100,000	5.1	7.5	9.0	9.7	10.2	8.1	9.5
<b>Prostate cancer</b>							
Incidence per 100,000	146.4	134.9	145.0	142.7	144.2	141.4	156.7
Mortality rate per 100,000	18.1	18.5	19.7	17.0	13.6	18.0	18.3
<b>Melanoma cancer mortality</b>							
Mortality rate per 100,000	0.8	1.4	1.7	1.6	1.4	1.4	2.5
<b>Screenings</b>							
% of women 18 years and older with pap smear in past 3 years (2008-2009)	-	-	-	-	-	71.9	74.2
% of women 40 years and older with mammography screening in past 2 years (2008-2009)	79.6	77.3	70.5	72.5	77.3	74.9	77.8

Source: New York State Department of Health, 2017.  
All rates are age-adjusted.

Overall, New York City compared favorably to the state for cancer incidence and mortality indicators, with all indicators except cervix uteri cancer, pap smear percentage, and



mammography screening better than the state average (**Exhibit 31**). Mammography screening was also problematic across the community and city.

**Exhibit 32** presents cancer indicators by race and ethnicity.

**Exhibit 32: Cancer Indicators by Race and Ethnicity, 2011-2013**

Borough and Race/Ethnicity	Lung Cancer Incidence	Colorectal Cancer Mortality	Breast Cancer Mortality	Cervix Uteri Cancer Mortality
<b>Bronx</b>				
White	66.2	20.4	26.5	-
Black	58.0	19.2	26.9	3.9
Asian/Pacific	39.1	-	-	-
Hispanic	36.6	14.2	15.8	3.0
Total	49.5	16.6	21.5	3.2
<b>Kings</b>				
White	56.2	13.8	22.0	1.9
Black	43.9	19.0	28.6	4.8
Asian/Pacific	59.6	12.1	8.9	-
Hispanic	32.6	16.8	18.9	3.8
Total	49.0	15.9	22.8	3.1
<b>Manhattan</b>				
White	52.8	9.7	21.0	1.5
Black	69.3	20.0	29.9	5.3
Asian/Pacific	45.5	13.0	10.7	-
Hispanic	35.1	12.4	15.9	2.6
Total	50.6	12.2	20.2	2.5
<b>Queens</b>				
White	63.0	16.6	21.7	2.2
Black	42.0	14.9	25.8	5.7
Asian/Pacific	39.6	10.4	8.5	2.4
Hispanic	26.5	11.0	12.3	3.4
Total	46.7	14.2	18.3	3.1
<b>Staten Island</b>				
White	69.4	16.0	20.6	2.1
Black	55.3	26.6	31.0	-
Asian/Pacific	31.6	-	-	-
Hispanic	36.0	13.1	11.7	-
Total	62.8	15.8	19.6	2.2
<b>New York City</b>				
White	59.0	14.2	21.7	1.9
Black	49.7	18.3	27.8	4.8
Asian/Pacific	45.0	10.7	8.9	1.9
Hispanic	33.0	13.6	15.5	3.3
Total	49.7	14.7	20.7	2.9
<b>New York State</b>				
White	68.2	13.8	20.7	2.0
Black	53.6	17.6	27.6	4.4
Asian/Pacific	41.5	10.2	8.8	1.8
Hispanic	32.9	12.6	15.0	3.0
Total	60.9	14.0	20.5	2.4

Source: New York State Department of Health, 2017.  
All rates are age adjusted per 100,000 population.

In New York City, Colorectal, Breast, and Cervix Uteri cancer mortality rates were higher than the state average. Asian/Pacific and Hispanic populations New York City had higher rates of cancer for all indicators than the state average. The colorectal cancer mortality rate for black residents in Staten Island was particularly problematic (**Exhibit 32**).

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

**Exhibit 33: Cardiovascular Disease Indicators, 2012-2014**

Area	Diseases of the Heart Mortality	Cerebrovascular Disease Mortality	Coronary Heart Disease Mortality	Congestive Heart Failure Mortality
Bronx	208.9	21.8	185.9	4.9
Brooklyn	195.1	18.9	175.9	5.5
Manhattan	142.7	18.0	122.1	5.3
Queens	178.6	21.1	159.5	5.8
Staten Island	242.2	17.1	225.1	2.6
New York City	184.2	19.7	164.2	5.3
<b>New York State</b>	<b>180.1</b>	<b>25.6</b>	<b>140.7</b>	<b>12.2</b>

Source: New York State Department of Health, 2017.  
All rates are age-adjusted and per 100,000 population.

Across New York City, heart disease mortality and coronary heart disease mortality was worse than the state average. The rate of coronary heart disease mortality was particularly high in Staten Island (**Exhibit 33**).

**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, 2012-2014**

Borough and Race/Ethnicity	Diseases of the Heart Mortality	Cerebrovascular Disease Mortality	Coronary Heart Disease Mortality	Congestive Heart Failure Mortality	Diabetes Mortality
<b>Bronx</b>					
White	257.2	16.6	231.4	6.5	17.9
Black	224.9	23.9	197.0	4.6	32.2
Asian/Pacific	100.1	10.7	88.3	-	11.2
Hispanic	156.7	23.1	140.6	3.7	24.2
Total	208.9	21.8	185.9	4.9	25.1
<b>Brooklyn</b>					
White	202.7	14.6	183.6	5.8	13.5
Black	205.7	22.7	184.1	5.5	42.7
Asian/Pacific	91.5	19.7	83.4	2.0	12.7
Hispanic	171.6	20.3	154.8	5.3	31.6
Total	195.1	18.9	175.9	5.5	25.4
<b>Manhattan</b>					
White	124.0	13.5	105.7	5.1	6.8
Black	241.7	29.0	209.1	7.3	36.9
Asian/Pacific	93.7	18.2	77.7	3.9	12.0
Hispanic	126.7	19.5	108.7	4.1	20.7
Total	142.7	18.0	122.1	5.3	15.3
<b>Queens</b>					
White	212.2	20.7	188.9	7.3	13.7
Black	207.1	24.0	185.5	6.0	30.1
Asian/Pacific	101.2	19.6	92.6	1.9	13.8
Hispanic	118.8	17.0	107.1	3.7	12.8
Total	178.6	21.1	159.5	5.8	16.8
<b>Staten Island</b>					
White	251.5	16.9	233.6	2.8	19.1
Black	267.7	20.2	247.5	-	33.7
Asian/Pacific	113.0	12.3	107.3	-	12.5
Hispanic	199.3	15.7	187.2	-	16.2
Total	242.2	17.1	225.1	2.6	19.7
<b>New York City</b>					
White	194.8	16.4	174.4	5.8	12.8
Black	215.5	24.2	191.1	5.7	36.6
Asian/Pacific	98.1	18.8	87.9	2.3	13.2
Hispanic	143.8	20.1	128.3	4.1	21.8
Total	184.2	19.7	164.2	5.3	20.4
<b>New York State</b>					
White	182.8	25.5	138.4	13.9	14.2
Black	213.1	28.1	180.8	8.2	34.4
Asian/Pacific	95.3	19.0	83.7	3.5	12.1
Hispanic	136.2	20.8	118.2	5.1	20.0
Total	180.1	25.6	140.7	12.2	17.4

Source: New York State Department of Health, 2017.  
All rates are age adjusted per 100,000 population.

In the Bronx, the coronary heart disease mortality rate for White residents was more than 50 percent worse than the state average. The diabetes mortality rate for Hispanic residents in Brooklyn was more than 50 percent worse than the state average for that population group. The coronary heart disease mortality rate in Staten Island for White, Hispanic, and overall was more than 50 percent worse than the state average for those population groups. Black and Hispanic populations typically had higher diabetes mortality rates than White populations (**Exhibit 34**).

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, 2010-2014**

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
% of pregnant women in WIC who were pre-pregnancy overweight or obese (BMI 25 or higher)	56.2%	45.4%	46.7%	45.3%	53.3%	48.1%	50.8%
% obese (95th percentile or higher) children in WIC (ages 2-4 years)	14.6%	12.4%	12.8%	15.6%	16.3%	13.7%	14.3%
% of WIC mothers breastfeeding at 6 months	42.4%	52.1%	39.4%	45.2%	36.6%	46.1%	38.2%
Age-adjusted % of adults overweight or obese (BMI 25 or higher) (2013-2014)	67.1%	58.6%	45.1%	60.6%	63.9%	58.0%	60.5%
Age-adjusted % of adults who did not participate in leisure time physical activity in last 30 days (2013-2014)	33.6%	27.9%	22.1%	30.2%	28.9%	28.2%	27.1%
Age-adjusted % of adults with physician-diagnosed diabetes (2013-2014)	13.8%	13.3%	7.9%	12.4%	7.3%	11.6%	8.9%
Age-adjusted cardiovascular disease mortality rate per 100,000	255.7	242.6	184.4	219.0	276.2	227.4	228.0
Age-adjusted cerebrovascular disease (stroke) mortality rate per 100,000	21.5	19.5	19.3	20.4	17.4	19.9	26.2
Mortality rate per 100,000	26.3	25.5	15.4	16.7	20.3	20.6	17.6

Source: New York State Department of Health, 2017.

Overall, New York City compared well to the state in many of the obesity indicators. The Bronx compared unfavorably to the state for all indicators except for stroke mortality rate, and was particularly unfavorable in diabetes. Four of the five boroughs and New York City overall compared unfavorably to the state in WIC mothers breastfeeding at 6 months and the percent of adults who did not participate in leisure time physical activity.

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

**Exhibit 36: Communicable Disease Indicators, 2011-2014**

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
Pertussis incidence per 100,000	2.8	2.5	3.6	2.0	14.4	3.3	8.8
Mumps incidence per 100,000	0.1	0.3	0.5	0.2	0.3	0.3	0.2
H. influenza incidence per 100,000	2.1	1.5	1.9	1.6	1.2	1.7	1.7
Hepatitis A incidence per 100,000	0.5	0.8	0.9	1.0	1.1	0.8	0.7
Acute hepatitis B incidence per 100,000	0.9	0.7	1.0	0.9	0.6	0.9	0.6
Tuberculosis incidence per 100,000	6.9	7.9	6.2	10.8	4.3	8.0	4.5
Salmonella incidence per 100,000	15.2	15.1	12.6	12.8	10.1	13.7	12.9
Shigella incidence per 100,000	3.3	8.6	5.8	3.4	1.6	5.3	4.8
% of adults 65 years and older with flu shot in last year (2013-2014)	61.8%	55.9%	56.7%	62.0%	66.4%	59.2%	72.4%
% of adults 65 years and older who ever received pneumonia shot	50.3%	44.6%	60.0%	58.6%	62.3%	53.8%	65.1%

Source: New York State Department of Health, 2013, New York City Department of Health and Mental Hygiene, 2013, and Cornell University, Program of Applied Demographics, 2017.

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

**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, 2015**

Cohort	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
Male	1,990.1	1,262.8	2,541.8	822.4	440.8	1,532.5	811.1
Female	1,096.9	581.1	518.3	288.3	212.6	563.5	313.4
White	512.3	286.9	1,058.8	305.6	137.8	530.3	193.6
Black	2,147.4	1,654.6	3,358.2	1,119.9	1,231.2	1,908.3	1,527.3
Hispanic	1,403.2	1,198.3	1,748.1	810.8	627.0	1,290.8	1,068.6
Asian/Pacific Islander	123.8	81.8	236.8	82.4	38.3	107.9	89.0
Native American	123.8	128.9	630.9	118.5	584.7	210.8	92.6
Total	1,735.5	922.0	1,442.7	572.6	396.9	1,021.6	554.7

Source: New York State Department of Health, Bureau of HIV/AIDS Epidemiology, 2015.  
All rates are age-adjusted.

The prevalence rate of HIV and AIDS in New York City as a whole was nearly twice as high as the state average in 2015. Manhattan compared particularly unfavorably, with the rate for every demographic cohort more than fifty percent higher than state averages. Rates were particularly high in the community for the male, black, and Hispanic cohorts.

As illustrated in **Exhibit 38**, the Bronx, Brooklyn, Manhattan, and New York City as a whole reported new HIV and AIDS case rates that were greater than 50 percent than the state average in 2015. The rates for Queens for new HIV and AIDS cases were higher than the state averages. New diagnoses among men, black residents, and Hispanic residents were particularly high.

### Exhibit 38: Newly Diagnosed HIV and AIDS Cases, 2015

Borough and Demographic Cohort	HIV Diagnoses	AIDS Diagnoses	HIV Case Rate per 100,000	AIDS Case Rate per 100,000
<b>Bronx</b>				
Male	376	190	52.1	28.9
Female	165	90	21.4	12.0
White	14	9	10.2	6.4
Black	252	141	54.9	32.1
Hispanic	253	122	30.4	15.8
Asian/Pacific Islander	9	3	15.0	4.8
Total	541	280	36.0	19.8
<b>Brooklyn</b>				
Male	548	239	40.3	18.3
Female	136	102	9.5	7.6
White	91	24	8.8	2.4
Black	381	230	44.4	27.1
Hispanic	179	74	31.4	14.7
Asian/Pacific Islander	6	2	1.5	0.4
Total	684	341	24.2	12.7
<b>Manhattan</b>				
Male	536	195	56.0	23.1
Female	66	37	6.6	4.2
White	162	61	17.4	7.6
Black	167	75	67.2	32.5
Hispanic	211	68	43.4	15.5
Asian/Pacific Islander	19	7	7.2	3.0
Total	602	232	30.3	13.4
<b>Queens</b>				
Male	427	192	33.8	15.5
Female	75	38	5.8	3.1
White	73	22	11.4	3.4
Black	129	81	28.3	18.4
Hispanic	218	91	29.6	12.6
Asian/Pacific Islander	52	23	7.5	3.3
Total	502	230	19.7	9.2
<b>Staten Island</b>				
Male	30	14	13.0	5.7
Female	15	7	6.1	2.6
White	9	4	3.4	1.2
Black	21	7	43.7	15.5
Hispanic	11	9	11.3	11.4
Asian/Pacific Islander	-	-	-	-
Total	45	21	9.6	4.1
<b>New York City</b>				
Male	1917	830	42.2	19.4
Female	457	274	9.7	6.1
White	349	120	11.5	4.3
Black	950	534	45.9	26.6
Hispanic	872	364	32.2	14.5
Asian/Pacific Islander	86	35	6.0	2.5
Total	2374	1104	25.4	12.4
<b>New York State</b>				
Male	2515	1094	25.0	11.1
Female	640	381	6.2	3.7
White	592	250	5.4	2.2
Black	1240	656	39.3	21.8
Hispanic	1056	446	26.5	12.2
Asian/Pacific Islander	96	38	4.8	2.0
Total	3155	1475	15.5	7.3

Source: New York State Department of Health, Bureau of HIV/AIDS Epidemiology, 2017.  
All rates are age-adjusted.



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

### Exhibit 39: Respiratory-Related Indicators, 2011-2013

Indicator	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State
Age-adjusted CLRD mortality rate per 100,000	25.7	19.3	18.1	19.1	30.3	20.6	30.7
Asthma hospitalization rate per 10,000	55.5	28.2	20.8	17.0	19.5	27.8	18.2
Ages 0-4 years	146.7	63.1	56.1	50.5	33.6	73.8	50.5
Ages 5-14 years	69.0	31.4	32.3	20.5	14.8	35.5	20.5
Ages 0-17 years	84.6	38.7	38.1	27.5	18.3	43.9	26.6
Ages 5-64 years	43.2	21.0	15.1	11.9	16.5	20.9	13.8
Ages 15-24 years	21.8	10.4	9.2	6.4	8.1	11.3	6.8
Ages 25-44 years	26.3	10.2	6.6	5.8	12.2	10.7	8.6
Ages 45-64 years	62.6	36.0	26.2	18.0	25.3	32.5	19.7
Ages 65 years or older	83.6	56.2	41.0	32.5	31.6	48.6	29.4
Age-adjusted asthma mortality rate per 100,000	3.6	2.1	1.9	1.3	1.1	2.0	1.3
Age-adjusted % of adults with current asthma (2013-2014)	13.0	7.9	8.5	7.1	13.1	8.8	10.1

Source: New York State Department of Health, 2017.

Data indicate that asthma is a health problem in the community, particularly in the Bronx and Brooklyn. The Bronx and Brooklyn's asthma hospitalization and mortality rates were more than 50 percent worse than the New York State average from 2011-2013. Although not as severe as Brooklyn, asthma hospitalization and mortality rates in Manhattan and hospitalization rates in Staten Island were higher than the state rates. The entire community benchmarks favorably to the state for 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	Asthma hospitalizations, aged 0-17 years	Chronic lower respiratory disease mortality	Chronic lower respiratory disease hospitalizations
<b>Bronx</b>				
White	16.1	16.9	34.4	32.1
Black	52.7	95.8	24.4	67.4
Asian/Pacific	14.5	30.9	11.2	19.5
Hispanic	48.7	69.7	19.2	61.4
Total	54.7	87.4	24.9	71.2
<b>Brooklyn</b>				
White	7.0	5.8	19.6	18.6
Black	46.0	76.5	17.8	58.4
Asian/Pacific	5.0	4.7	13.8	9.7
Hispanic	37.6	37.3	22.0	50.5
Total	27.0	38.1	19.0	39.4
<b>Manhattan</b>				
White	4.5	8.3	14.9	9.3
Black	53.9	86.3	29.9	69.2
Asian/Pacific	3.9	5.6	12.7	8.0
Hispanic	28.1	31.6	19.1	37.0
Total	22.6	38.6	18.3	31.3
<b>Queens</b>				
White	9.8	13.6	25.3	23.2
Black	25.9	43.5	19.5	36.4
Asian/Pacific	5.9	10.7	10.8	9.9
Hispanic	17.0	26.5	10.7	24.3
Total	16.8	27.6	18.9	27.8
<b>Staten Island</b>				
White	11.1	9.3	31.7	32.7
Black	48.9	58.6	33.1	72.6
Asian/Pacific	2.7	-	12.0	6.2
Hispanic	27.0	19.5	24.0	37.2
Total	18.1	19.3	29.9	38.2
<b>New York City</b>				
White	7.8	8.9	22.4	19.6
Black	44.1	74.6	21.3	57.1
Asian/Pacific	5.6	9.2	12.1	9.8
Hispanic	33.8	44.3	17.7	44.2
Total	27.6	44.4	20.4	40.0
<b>New York State</b>				
White	7.3	8.9	34.0	21.9
Black	38.0	59.2	22.1	52.1
Asian/Pacific	5.4	8.9	11.5	9.3
Hispanic	28.0	33.5	16.4	40.1
Total	17.6	27.0	29.8	32.3

Source: New York State Department of Health, 2017.  
All rates are per 100,000 population.

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

**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, 2012-2014**

Borough	Premature Births	Low Birth Weight	Late or No Prenatal Care	Infant Death Rate*	Teen Pregnancy Rate 15-19**
Bronx	12.0%	9.3%	11.5%	5.4	72.9
Brooklyn	10.5%	7.8%	6.0%	3.9	50.8
Manhattan	10.6%	8.4%	5.1%	3.2	40.8
Queens	10.4%	8.0%	7.7%	4.2	43.9
Staten Island	11.1%	7.9%	2.6%	4.8	31.4
New York City	10.8%	8.2%	7.2%	4.2	52.3
<b>New York State</b>	<b>10.8%</b>	<b>7.9%</b>	<b>5.6%</b>	<b>4.8</b>	<b>36.0</b>

Sources: New York State Department of Health, 2017.

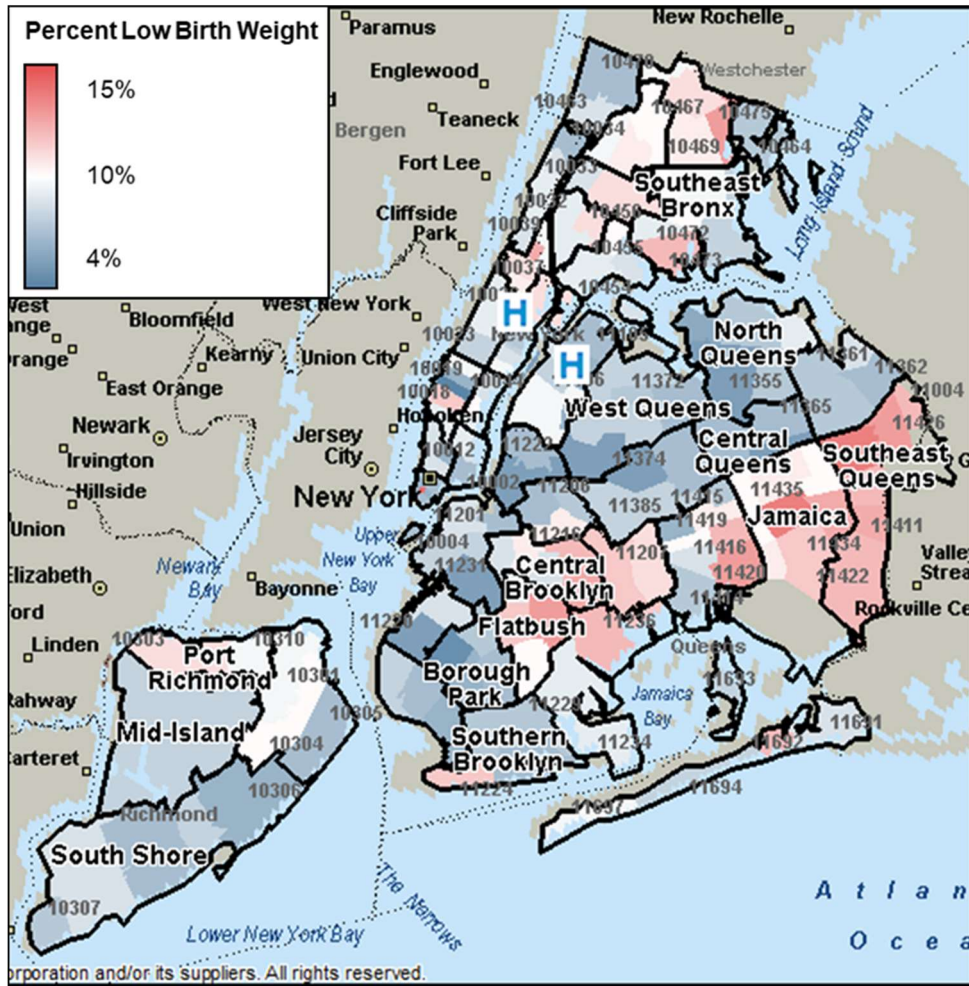
\*Infant deaths per 1,000 live births

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

New York City compared unfavorably to New York State from 2012-2014 in low birth weights, late or no prenatal care, and teenage pregnancy rate. In the Bronx, the percent of residents with late or no prenatal care and teen pregnancy (ages 15-19) rates were particularly unfavorable. The Bronx also compared unfavorably for all maternal and infant health indicators. Teen pregnancy rates were higher in all boroughs, except for Staten Island, compared to the state rate.

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

**Exhibit 42: Low Birth Weight Infants by ZIP Code, 2012-2014**

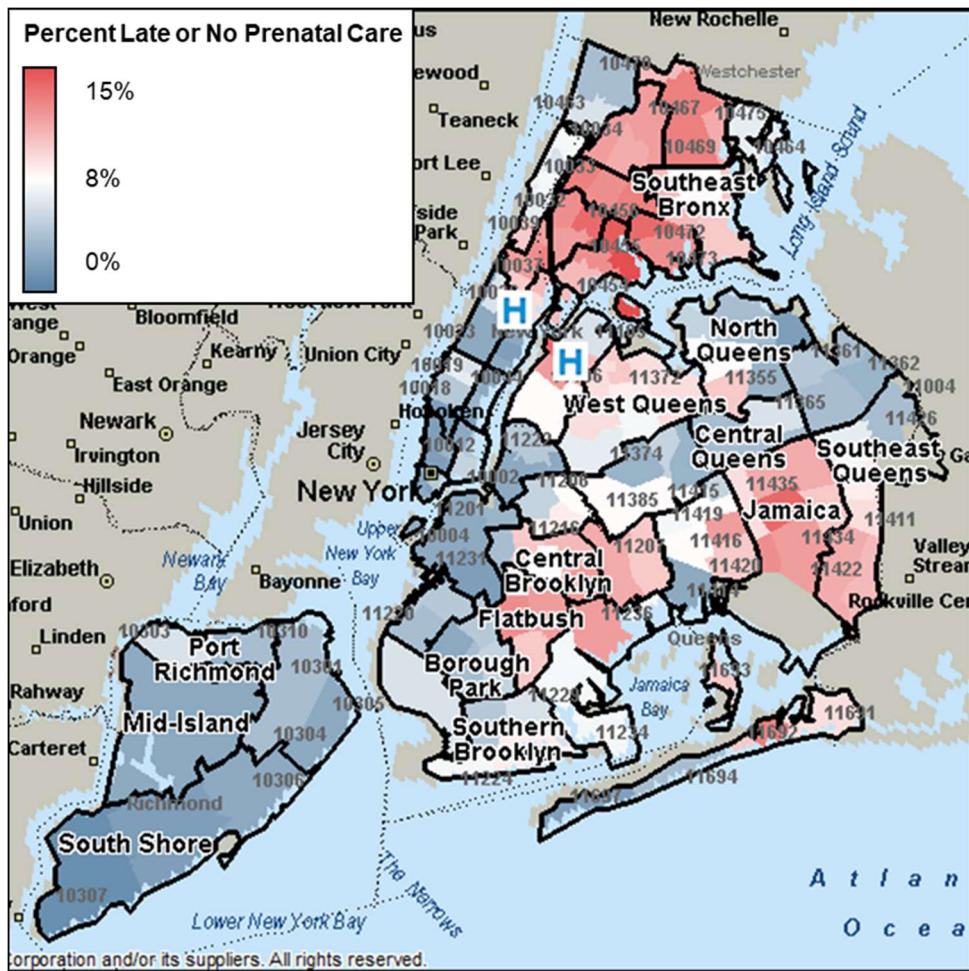


Sources: Microsoft MapPoint and New York State Department of Health, 2017.

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

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

Exhibit 43: Mothers with Late or No Prenatal Care by ZIP Code, 2012-2014

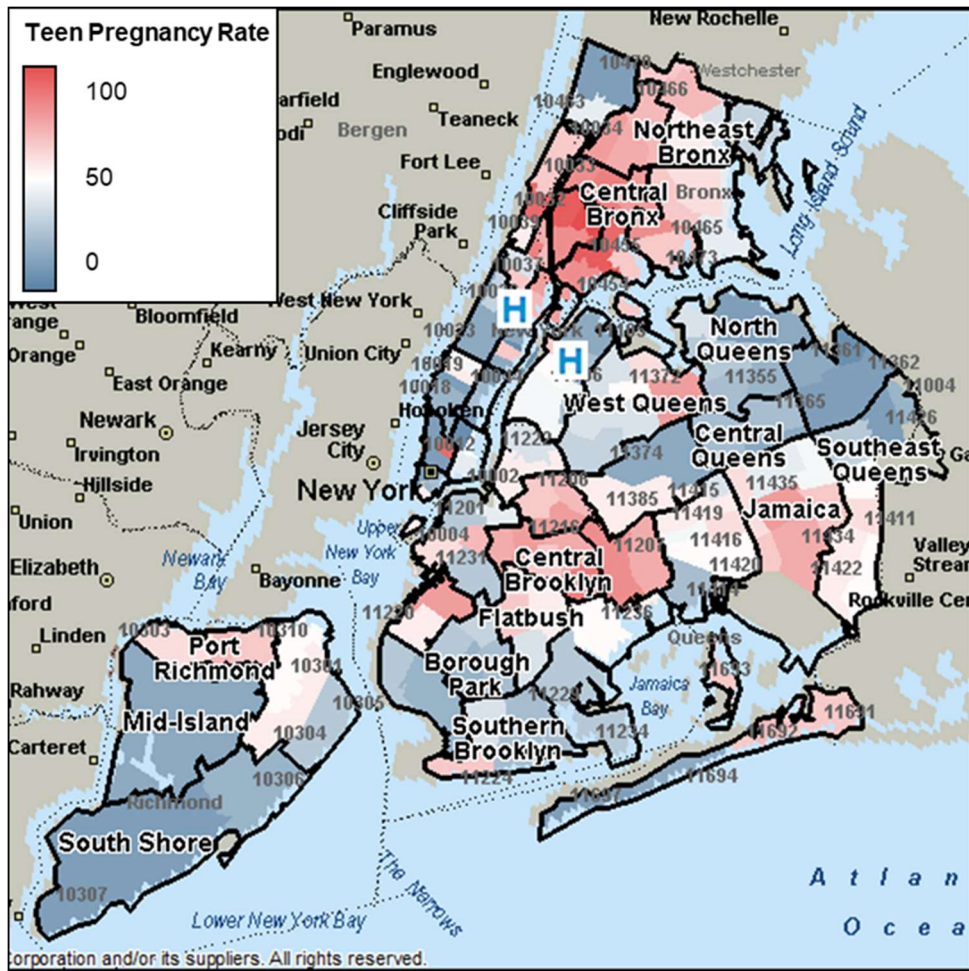


Sources: Microsoft MapPoint and New York State Department of Health, 2017.

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

Exhibit 44 illustrates teen pregnancy rates by ZIP Code.

**Exhibit 44: Teen Pregnancy Rate 15-19 by ZIP Code, 2012-2014\***



\*Teen pregnancy rates are per 1,000 females ages 15-19  
 Sources: Microsoft MapPoint and New York State Department of Health, 2017.

Several locations throughout the community displayed high teen pregnancy rates. ZIP Codes 10456 (High Bridge and Morrisania), 10452 (High Bridge and Morrisania), 10455 (Hunts Point and Mott Haven), and 10012 (Greenwich Village and Soho) each had rates of 90 or higher.

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

**Exhibit 45: Maternal and Infant Health Indicators by Race and Ethnicity, 2012-2014**

Borough and Race/Ethnicity	Percent Births with Early (1st Trimester) Prenatal Care	Percent Adequate Prenatal Care (Kotelchuck Index)	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
<b>Bronx</b>						
White	69.3%	66.2%	10.2%	7.6%	19.9	3.8
Black	52.8%	49.0%	13.2%	11.4%	44.1	7.3
Asian/Pacific	61.3%	59.7%	9.8%	10.1%	-	-
Hispanic	59.8%	55.8%	11.7%	8.4%	43.2	4.0
Total	58.4%	54.6%	12.0%	9.3%	43.1	5.5
<b>Brooklyn</b>						
White	79.1%	73.7%	7.4%	5.4%	4.6	2.4
Black	65.9%	61.6%	15.8%	12.4%	44.1	6.7
Asian/Pacific	76.5%	75.5%	8.9%	6.9%	1.8	1.7
Hispanic	71.7%	71.4%	12.0%	7.6%	40.0	3.8
Total	74.0%	70.5%	10.5%	7.8%	28.3	3.9
<b>Manhattan</b>						
White	81.9%	78.2%	9.4%	7.6%	11.9	2.1
Black	61.9%	57.9%	15.0%	12.7%	56.6	7.2
Asian/Pacific	76.9%	72.5%	9.3%	7.8%	-	-
Hispanic	69.2%	65.9%	11.4%	8.1%	32.6	3.1
Total	75.3%	71.6%	10.6%	8.4%	31.7	3.2
<b>Queens</b>						
White	82.7%	77.8%	8.5%	6.3%	5.9	3.7
Black	65.8%	61.5%	13.7%	11.4%	32.7	7.8
Asian/Pacific	72.0%	66.9%	9.2%	8.3%	1.9	2.8
Hispanic	69.8%	68.4%	11.1%	7.2%	33.4	2.8
Total	72.7%	68.9%	10.4%	8.0%	23.0	4.2
<b>Staten Island</b>						
White	89.0%	81.2%	9.5%	6.5%	7.0	2.6
Black	74.9%	68.6%	16.0%	12.5%	55.1	13.0
Asian/Pacific	82.2%	75.9%	10.0%	8.6%	-	-
Hispanic	81.2%	74.4%	12.3%	8.2%	31.9	4.9
Total	84.7%	77.4%	11.1%	7.9%	19.4	4.7
<b>New York City</b>						
White	80.8%	75.8%	8.3%	6.2%	7.1	2.6
Black	62.3%	58.1%	14.6%	12.0%	43.1	7.3
Asian/Pacific	73.9%	70.4%	9.2%	7.9%	1.7	2.2
Hispanic	67.1%	64.6%	11.6%	7.8%	38.1	3.6
Total	71.6%	67.7%	10.8%	8.2%	29.8	4.2
<b>New York State</b>						
White	80.0%	75.1%	9.4%	6.6%	7.5	3.9
Black	63.5%	58.1%	15.0%	12.3%	38.5	8.9
Asian/Pacific	74.2%	70.1%	9.4%	8.0%	2.0	2.4
Hispanic	68.0%	64.0%	11.7%	7.6%	32.9	4.0
Total	73.7%	69.0%	10.8%	7.9%	19.6	4.8

Source: New York State Department of Health, 2017.

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

were also greater than 50 percent the state averages for White residents and overall in the Bronx, as well as White residents and overall in Manhattan.

**Exhibit 46** presents data from the New York City Pregnancy Risk Assessment Monitoring System (PRAMS), which assesses maternal experiences and behaviors before, during, and after pregnancy. In 2014, the percentage of women who drank alcohol during the last three months of pregnancy in Manhattan was more than double the New York City average. The percentages of White women and college graduates who drank alcohol during the last three months of pregnancy were approximately double the New York City average, while Hispanic populations and those with a high school diploma were more likely to smoke during pregnancy.

**Exhibit 46: NYC PRAMS Indicators, 2014**

Sociodemographic Characteristic	Women Who Drank Alcohol During Last 3 Months of Pregnancy	Women Who Report Ever Breastfeeding	Women Who Smoked During Last 3 Months of Pregnancy
<b>Borough</b>			
Manhattan	21.4%	96.9%	1.0%
Bronx	5.4%	92.7%	3.2%
Brooklyn	9.5%	91.7%	2.0%
Queens	6.7%	91.0%	1.8%
Staten Island	4.9%	82.1%	3.0%
<b>Race / Ethnicity</b>			
White non-Latina	17.6%	93.6%	1.9%
Black non-Latina	4.8%	92.6%	2.0%
Latina	6.5%	92.6%	2.5%
Asian/Pacific Islander	6.6%	87.4%	1.6%
<b>Education</b>			
Not a High School Graduate	2.3%	85.8%	2.0%
High School Graduate	4.1%	89.9%	3.4%
Some College	6.5%	92.1%	1.0%
College Graduate	18.6%	96.4%	1.6%
<b>New York City Total</b>	<b>9.8%</b>	<b>92.1%</b>	<b>2.0%</b>

Source: New York City Department of Health and Mental Hygiene, Pregnancy Risk Assessment Monitoring System (PRAMS), 2014.  
Data are weighted and are based on responses of 1,308 NYC women giving birth in 2014.



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, 2012-2014**

Borough and Race/Ethnicity	Motor Vehicle-related Mortality	Unintentional Injury Mortality	Drug-related Hospitalizations	Suicide Mortality
<b>Bronx</b>				
White	5.1	34.4	48.7	10.2
Black	2.8	18.2	38.1	4.7
Asian/Pacific	-	7.5	2.7	-
Hispanic	3.3	19.3	29.4	4.5
Total	3.4	21.2	45.2	5.3
<b>Brooklyn</b>				
White	2.8	20.5	18.3	6.7
Black	4.2	16.4	26.2	2.9
Asian/Pacific	3.8	9.9	2.1	4.1
Hispanic	4.5	20.0	25.8	4.1
Total	3.7	18.0	23.3	4.8
<b>Manhattan</b>				
White	2.0	15.4	14.4	9.0
Black	2.7	24.8	93.4	4.0
Asian/Pacific	2.3	11.1	2.3	5.2
Hispanic	2.9	17.9	31.4	6.4
Total	2.4	17.5	33.8	7.7
<b>Queens</b>				
White	3.4	25.2	14.5	8.9
Black	4.6	16.4	13.1	3.5
Asian/Pacific	3.6	10.8	1.7	6.5
Hispanic	3.9	14.5	7.2	3.4
Total	4.0	17.2	10.6	5.9
<b>Staten Island</b>				
White	3.1	35.9	52.9	8.0
Black	7.4	28.2	34.2	-
Asian/Pacific	-	9.4	2.4	-
Hispanic	-	21.8	20.4	-
Total	3.6	30.7	42.3	6.1
<b>New York City</b>				
White	2.8	22.3	20.8	8.1
Black	3.9	18.0	33.8	3.5
Asian/Pacific	3.3	10.6	1.9	5.4
Hispanic	3.6	17.9	22.6	4.4
Total	3.4	18.9	26.1	5.8
<b>New York State</b>				
White	6.4	30.2	20.2	10.1
Black	4.7	19.8	30.9	3.7
Asian/Pacific	3.1	10.4	2.0	5.2
Hispanic	4.8	19.7	19.5	4.5
Total	5.7	25.9	22.6	7.9

Source: New York State Department of Health, 2017.

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

The drug-related hospitalizations rates for the Bronx, Brooklyn, Manhattan, Staten Island, and New York City overall were all higher than the state rate from 2012 to 2014. The hospitalization rate for the Black and Hispanic populations in Manhattan were more than 50 percent worse than state averages for those cohorts. The hospitalization rate for the White and Hispanic populations in the Bronx, the Black and Hispanic populations in Manhattan, and the White population in Staten Island were more than 50 percent worse than state averages for those cohorts. In New York City overall, the drug-related hospitalization rates for the Black and Hispanic populations were higher than other cohorts. Although the boroughs compared favorably to the state for suicide mortality, rates were consistently highest in the White population.

### **Youth Risk Behavior Survey**

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.

The New York City Department of Health and Mental Hygiene released borough-level results from their 2015 Youth Risk Behavior Survey (YRBS), a part of the CDC's YRBSS. Analysis of YRBS data can identify localized health issues and trends, and enable borough, state, or nationwide comparisons. **Exhibit 48** compares the prevalence of various indicators for Brooklyn, Manhattan, and New York City to New York State and the U.S.

### Exhibit 48: YRBS Indicators and Variation from New York State and the U.S., 2015

Indicator		Bronx	Brooklyn	Manhattan	Queens	Staten Island	NYC	NYS	U.S.
Alcohol or Tobacco Use	Binge Drinking (5 or More Drinks in the Past Month)	7.7%	5.2%	12.0%	9.4%	11.2%	8.5%	15.6%	17.7%
	Consumed At Least One Alcoholic Drink in the Past Month	19.1%	17.7%	26.3%	21.0%	22.6%	20.9%	29.7%	32.8%
	Smoking in the Past Month	3.2%	5.9%	5.3%	7.3%	7.4%	5.8%	8.8%	10.8%
Asthma	Ever Been Told They Have Asthma	30.6%	20.4%	26.6%	21.7%	29.3%	24.2%	25.6%	22.8%
General Physical or Mental Health	Attempted Suicide One or More Times During the Past 12 Months	8.9%	7.1%	8.2%	8.8%	10.1%	8.3%	9.9%	8.6%
	Felt Sad (Every Day for 2 weeks) & Stopped Regular Activities due to Sadness	29.5%	29.2%	29.8%	30.1%	25.4%	29.4%	28.6%	29.9%
Physical Activity	Not Physically Active for 60 Minutes Per Day for 7 Days Per Week	19.9%	21.2%	19.6%	20.1%	23.3%	20.5%	18.8%	14.3%
	Three or More Hours of Leisure Computer Use Per Day on School Days	47.1%	47.3%	42.6%	46.2%	40.4%	45.6%	37.2%	41.7%
	Three or More Hours of TV Per Day on School Days	32.9%	30.6%	26.4%	27.8%	22.1%	28.9%	24.2%	24.7%
Sexual Behavior and Orientation	Ever Had Sexual Intercourse	30.0%	25.5%	29.5%	26.3%	22.8%	27.2%	30.4%	41.2%
	No Method of Contraception	24.7%	16.9%	17.1%	14.3%	17.7%	17.7%	15.1%	13.8%
Substance Abuse	Cocaine Use During Lifetime	4.1%	3.7%	4.4%	4.4%	7.9%	4.4%	7.6%	5.2%
	Heroin Use During Lifetime	3.1%	2.0%	2.3%	2.1%	6.0%	2.5%	4.8%	2.1%
	Marijuana Use in the Past Month	13.6%	14.1%	21.6%	14.7%	17.5%	15.9%	19.3%	21.7%
Violence	Experienced sexual dating violence	9.8%	11.1%	11.6%	11.9%	15.6%	11.4%	14.7%	10.6%
	Experienced physical dating violence	10.9%	12.7%	11.3%	12.4%	13.2%	12.0%	11.5%	9.6%
Weight and Nutrition	One or More Sugary Drinks Consumed in the Past 7 Days	73.7%	73.0%	67.4%	71.4%	63.3%	71.0%	65.9%	73.8%
	Overweight or Obese	32.9%	26.4%	28.7%	26.0%	27.8%	27.9%	27.0%	29.9%

Source: Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System via the New York City Department of Health and Mental Hygiene, 2017.

Overall, youth in the community compared well to New York averages for risk behaviors; no New York City-wide indicator was more than 50 percent worse than the state. All boroughs had comparatively high rates of physical inactivity and computer usage. Four out of the five boroughs had comparatively high rates of feeling sadness and stopping activity due to sadness, television watching, not using contraceptives, and drinking sugary drinks.

### **New York Prevention Agenda 2013-2017**

The New York Prevention Agenda is the state's health improvement plan for 2013-2017. 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 mental health and prevent substance abuse; and
- Prevent HIV, sexually transmitted diseases, vaccine-preventable diseases and healthcare-associated infections action plan.

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 2017. **Exhibit 49 A, B, and C** compares each borough's baseline data to the 2017 target.

All of the boroughs in New York City had a large number of indicators that were worse than the 2017 target. Each of the five boroughs was worse than the 2017 target for the following indicators (**Exhibit 49A, B, and C**):

- Percentage of premature deaths;
- Premature deaths (Ratio of Black non-Hispanics to White non-Hispanics);
- Percentage of adults (aged 18-64) with health insurance;
- Percentage of adults who have a regular health care provider;
- Percentage of cigarette smoking among adults;
- Rate of hospitalizations for short-term complications of diabetes;
- Percentage of adults with flu immunization;
- Primary and secondary syphilis case rate;
- Percentage of children who have had the recommended number of well child visits in government sponsored insurance programs;
- Percentage of children (aged under 19 years) with health insurance;
- Unintended pregnancy (Ratio of Black non-Hispanic to White non-Hispanic); and
- Unintended pregnancy (Ratio of Hispanics to White non-Hispanics).

### Exhibit 49A: Prevention Agenda 2013-2017 Indicators Compared to Objectives

Prevention Agenda 2013-2017 Priority Areas and Indicators	Data Year(s)	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State	NYS Target
<b>Improve Health Status and Reduce Health Disparities</b>									
Percentage of premature deaths (before age 65 years)	2015	33.8%	27.9%	22.0%	23.6%	24.8%	26.4%	23.3%	<b>21.8%</b>
Premature deaths: Ratio of Black non-Hispanics to White non-Hispanics	2013-2015	2.4	2.0	1.9	2.0	2.3	2.1	1.9	<b>1.9</b>
Premature deaths: Ratio of Hispanics to White non-Hispanics	2013-2015	2.3	2.0	1.6	2.1	1.9	2.0	1.9	<b>1.9</b>
Age-adjusted preventable hospitalizations rate per 10,000 - Aged 18+ years	2014	221.9	147.5	111.0	108.5	118.5	138.7	119.5	<b>122.0</b>
Preventable hospitalizations: Ratio of Black non-Hispanics to White non-Hispanics	2012-2014	1.8	2.2	4.8	1.7	2.2	2.4	2.2	<b>1.9</b>
Preventable hospitalizations: Ratio of Hispanics to White non-Hispanics	2012-2014	1.4	1.8	2.8	1.0	1.1	1.7	1.4	<b>1.4</b>
Percentage of adults (aged 18-64) with health insurance	2015	85.4%	87.0%	91.0%	84.0%	92.2%	0.0%	89.8%	<b>100.0%</b>
Age-adjusted percentage of adults who have a regular health care provider - Aged 18+ years	2012	78.7%	81.4%	82.4%	82.0%	87.3%	81.7%	82.0%	<b>90.8%</b>
<b>Promote a Healthy and Safe Environment</b>									
Rate of hospitalizations due to falls per 10,000 - Aged 65+ years	2014	176.8	156.4	180.7	176.2	236.4	175.3	183.6	<b>204.6</b>
Rate of emergency department visits due to falls per 10,000 - Aged 1-4 years	2014	496.5	406.6	429.6	424.6	502.8	437.0	440.1	<b>429.1</b>
Assault-related hospitalization rate per 10,000 population	2012-2014	10.9	5.7	4.8	3.8	5.2	5.9	3.6	<b>4.3</b>
Assault-related hospitalization: Ratio of Black non-Hispanics to White non-Hispanics	2012-2014	3.3	5.4	11.3	3.9	6.4	11.5	7.0	<b>6.7</b>
Assault-related hospitalization: Ratio of Hispanics to White non-Hispanics	2012-2014	2.0	2.9	4.2	2.4	1.8	4.0	3.2	<b>2.8</b>
Assault-related hospitalization: Ratio of low-income ZIP codes to non-low-income ZIP codes	2012-2014	2.2	1.8	2.7	1.5	3.5	2.4	3.3	<b>2.9</b>
Percentage of employed civilian workers age 16 and over who use alternate modes of transportation to work or work from home	2011-2015	76.0%	80.4%	90.2%	67.4%	42.9%	76.3%	46.1%	<b>49.2%</b>
Percentage of residents served by community water systems with optimally fluoridated water	2016	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	71.1%	<b>78.5%</b>

Source: New York State Department of Health, 2017.

### Exhibit 49B: Prevention Agenda 2013-2017 Indicators Compared to Objectives

Prevention Agenda 2013-2017 Priority Areas and Indicators	Data Year(s)	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State	NYS Target
<b>Prevent Chronic Diseases</b>									
Percentage of adults who are obese	2012	31.8%	26.8%	14.5%	22.3%	32.6%	24.1%	25.0%	23.2%
Percentage of children and adolescents who are obese	2012-2013	24.2%	21.2%	18.8%	20.7%	20.9%	21.4%	21.4%	19.7%
Percentage of cigarette smoking among adults	2012	15.8%	16.1%	15.6%	14.9%	16.6%	15.6%	15.2%	12.3%
Asthma emergency department visit rate per 10,000 population	2014	277.2	131.5	121.0	74.2	75.5	135.3	86.2	75.1
Asthma emergency department visit rate per 10,000 - Aged 0-4 years	2014	652.2	229.7	278.1	185.6	130.4	301.9	205.7	196.5
Age-adjusted heart attack hospitalization rate per 10,000 population	2014	12.9	14.5	9.4	12.5	14.0	12.6	14.0	14.0
Rate of hospitalizations for short-term complications of diabetes per 10,000 - Aged 6-17 years	2012-2014	4.5	3.3	3.8	2.3	2.4	3.3	2.9	3.1
Rate of hospitalizations for short-term complications of diabetes per 10,000 - Aged 18+ years	2012-2014	12.3	7.6	5.7	5.4	5.3	7.2	6.6	4.9
<b>Prevent HIV/STDs, Vaccine Preventable Diseases and Healthcare-Associated Infections</b>									
Percentage of adults with flu immunization - Aged 65+ years	2012	62.4%	55.9%	69.2%	60.6%	67.6%	61.8%	59.7%	70.0%
Newly diagnosed HIV case rate per 100,000 population	2013-2015	38.2	28.3	41.3	21.7	10.2	29.7	15.9	16.1
Difference in rates (Black and White) of newly diagnosed HIV cases	2013-2015	47.3	42.5	54.1	21.5	34.4	38.0	36.1	46.8
Difference in rates (Hispanic and White) of newly diagnosed HIV cases	2013-2015	21.6	22.9	26.8	23.3	14.0	22.0	23.1	26.6
Gonorrhea case rate per 100,000 women - Aged 15-44 years	2015	381.4	249.2	177.9	138.9	142.8	222.8	201.8	183.4
Gonorrhea case rate per 100,000 men - Aged 15-44 years	2015	688.4	540.5	1050.4	321.8	168.6	594.0	377.6	199.5
Chlamydia case rate per 100,000 women - Aged 15-44 years	2015	3210.5	1822.0	1552.3	1458.8	1163.1	1873.5	1575.7	1458.0
Primary and secondary syphilis case rate per 100,000 men	2015	48.7	30.1	69.0	17.6	7.0	35.9	20.3	10.1
Primary and secondary syphilis case rate per 100,000 women	2015	2.0	1.4	1.4	0.7*	0.4*	1.2	0.7	0.4

Source: New York State Department of Health, 2017.

### Exhibit 49C: Prevention Agenda 2013-2017 Indicators Compared to Objectives

Prevention Agenda 2013-2017 Priority Areas and Indicators	Data Year(s)	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City	New York State	NYS Target
<b>Promote Healthy Women, Infants, and Children</b>									
Percentage of preterm births	2015	11.4%	10.0%	10.4%	10.4%	10.6%	10.5%	10.5%	10.2%
Premature births: Ratio of Black non-Hispanics to White non-Hispanics	2013-2015	1.3	2.2	1.5	1.6	1.7	1.8	1.7	1.4
Premature births: Ratio of Hispanics to White non-Hispanics	2013-2015	1.1	1.7	1.1	1.3	1.3	1.4	1.3	1.1
Premature births: Ratio of Medicaid births to non-Medicaid births	2013-2015	0.9	1.1	1.1	1.0	1.1	1.0	1.1	1.0
Maternal mortality rate per 100,000 births	2013-2015	36.2	20.1	18.3	22.0	12.6*	22.9	20.9	21.0
Percentage of children who have had the recommended number of well child visits in government sponsored insurance programs	2015	72.0%	73.1%	72.3%	76.5%	70.7%	73.5%	72.0%	76.9%
Percentage of children (aged under 19 years) with health insurance	2015	97.6%	97.6%	97.6%	96.9%	97.5%	0.0%	97.4%	100.0%
Adolescent pregnancy rate per 1,000 females - Aged 15-17 years	2014	36.4	23.3	26.4	20.4	17.6	25.3	17.0	25.6
Adolescent pregnancy: Ratio of Black non-Hispanics to White non-Hispanics	2012-2014	2.2	9.7	4.8	5.5	7.9	6.0	5.3	4.9
Adolescent pregnancy: Ratio of Hispanics to White non-Hispanics	2012-2014	2.2	8.8	2.8	5.7	4.6	5.3	4.7	4.1
Percentage of unintended pregnancy among live births	2015	27.9%	19.9%	16.5%	23.8%	21.2%	21.9%	23.7%	23.8%
Unintended pregnancy: Ratio of Black non-Hispanic to White non-Hispanic	2015	2.0	4.3	4.3	2.7	2.9	3.6	2.2	1.9
Unintended pregnancy: Ratio of Hispanics to White non-Hispanics	2015	1.7	3.3	3.7	2.2	2.4	2.9	1.7	1.4
Unintended pregnancy: Ratio of Medicaid births to non-Medicaid births	2015	1.2	1.7	3.0	1.7	2.2	1.8	1.8	1.5
<b>Promote Mental Health and Prevent Substance Abuse</b>									
Age-adjusted percentage of adult binge drinking during the past month	2012	18.5%	16.4%	26.2%	18.0%	22.1%	19.6%	17.8%	18.4%
Age-adjusted suicide death rate per 100,000 population	2013-2015	5.6	4.9	7.7	5.7	5.8	5.8	7.9	5.9

Source: New York State Department of Health, 2017.

## 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/neighborhood level. **Exhibits 50 A, B, C, and D** present selected indicators related to health care access, chronic conditions, health behaviors, and mental health by borough and neighborhood.

**Exhibit 50A** summarizes access indicators for MSH neighborhoods.



## Exhibit 50A: NYC Community Health Survey, Access Indicators, 2015

Borough and Neighborhood	4+ Day Wait for PCP Visit	Percentage Who Had Medicaid	Percentage Who Had Medicare	Percentage Who Were Uninsured	Did Not Receive Medical Care	No PCP
<b>Bronx</b>	<b>22.8%</b>	<b>37.5%</b>	<b>15.6%</b>	<b>12.2%</b>	<b>10.8%</b>	<b>16.8%</b>
Kingsbridge – Riverdale	28.1%	40.5%	13.0%	2.7%	2.5%	16.8%
Northeast Bronx	24.5%	23.8%	14.2%	10.3%	8.3%	9.6%
Fordham - Bronx Park	22.9%	39.0%	12.8%	18.0%	11.0%	24.1%
Pelham - Throgs Neck	21.4%	28.9%	20.8%	11.8%	12.7%	15.8%
Crotona - Tremont & High Bridge - Morrisania	21.8%	46.0%	14.5%	11.9%	12.2%	16.6%
<b>Brooklyn</b>	<b>15.7%</b>	<b>28.9%</b>	<b>14.3%</b>	<b>12.3%</b>	<b>10.2%</b>	<b>17.2%</b>
Greenpoint	23.6%	37.5%	16.9%	8.6%	15.5%	18.0%
Downtown - Heights - Slope	16.7%	14.1%	13.9%	10.3%	8.1%	18.4%
Bedford Stuyvesant - Crown Heights	14.9%	32.1%	13.7%	11.4%	15.0%	15.7%
East New York	24.4%	38.4%	15.9%	3.8%	8.6%	14.6%
Sunset Park	8.7%	27.7%	15.3%	27.4%	5.0%	24.7%
Borough Park	10.5%	33.1%	14.9%	16.0%	9.1%	20.7%
East Flatbush - Flatbush	14.4%	24.4%	14.5%	14.3%	6.7%	14.6%
Canarsie - Flatlands	14.2%	19.5%	11.5%	8.5%	8.7%	9.7%
Bensonhurst - Bay Ridge	21.1%	23.9%	14.6%	13.2%	7.8%	26.0%
Coney Island - Sheepshead Bay	10.9%	32.3%	14.4%	11.3%	11.6%	10.6%
Williamsburg - Bushwick	20.0%	36.7%	14.6%	10.4%	15.1%	20.1%
<b>Manhattan</b>	<b>19.7%</b>	<b>17.9%</b>	<b>14.9%</b>	<b>9.9%</b>	<b>10.4%</b>	<b>16.3%</b>
Washington Heights - Inwood	25.8%	24.1%	15.7%	18.7%	17.0%	21.1%
Central Harlem - Morningside Heights	24.0%	25.3%	11.8%	5.3%	7.2%	13.9%
East Harlem	15.6%	36.4%	13.4%	14.7%	16.8%	20.7%
Upper West Side	10.1%	11.8%	15.9%	7.8%	9.5%	10.2%
Upper East Side & Gramercy Park - Murray Hill	22.1%	6.8%	13.4%	7.8%	9.3%	18.7%
Chelsea - Clinton & Greenwich Village - Soho	20.0%	17.2%	15.6%	12.2%	10.6%	18.4%
Union Square - Lower East Side & Lower Manhattan	18.2%	21.7%	17.3%	5.2%	6.9%	11.4%
<b>Queens</b>	<b>17.8%</b>	<b>24.1%</b>	<b>14.9%</b>	<b>16.2%</b>	<b>9.2%</b>	<b>16.6%</b>
Long Island City - Astoria	23.2%	27.1%	18.7%	9.6%	10.6%	15.4%
West Queens	19.3%	29.2%	12.4%	29.0%	10.9%	27.7%
Flushing - Clearview	11.1%	32.4%	16.9%	12.8%	9.2%	11.7%
Bayside - Little Neck & Fresh Meadows	18.7%	16.3%	15.2%	7.5%	12.1%	6.9%
Rockaway	9.5%	27.0%	14.6%	8.4%	3.5%	13.3%
Ridgewood - Forest Hills	20.1%	21.8%	14.6%	17.6%	5.5%	15.0%
Southwest Queens	23.0%	23.6%	19.2%	9.5%	6.7%	13.2%
Jamaica	14.4%	18.7%	11.4%	19.6%	12.0%	16.9%
Southeast Queens	14.9%	12.8%	11.8%	9.5%	8.7%	12.3%
<b>Staten Island</b>	<b>12.1%</b>	<b>16.6%</b>	<b>15.6%</b>	<b>6.3%</b>	<b>6.4%</b>	<b>7.4%</b>
Port Richmond & Stapleton - St. George	16.9%	29.2%	14.5%	10.1%	8.5%	11.0%
Willowbrook & South Beach - Tottenville	9.3%	8.2%	16.2%	4.1%	5.0%	5.1%
<b>New York City</b>	<b>18.0%</b>	<b>25.8%</b>	<b>15.0%</b>	<b>12.6%</b>	<b>9.9%</b>	<b>16.3%</b>

Source: New York City Department of Health and Mental Hygiene, 2015.

Overall, residents of the Bronx had higher percentages for each of the six indicators than the New York City averages. Brooklyn residents were more likely to have Medicaid, not receive medical care, and have no primary care physician than city averages. Manhattan residents were more likely to wait four or more days for a primary care visit and not receive medical care. Queens residents were more likely to be uninsured and not have a primary care physician than city averages. Staten Island residents were more likely to have Medicare than city averages.

**Exhibit 50B** summarizes chronic conditions within MSH neighborhoods.

## Exhibit 50B: NYC Community Health Survey, Chronic Conditions, 2015

Borough and Neighborhood	Ever Had High Blood Pressure	Ever Told You Have Diabetes	Overweight and Obese
<b>Bronx</b>	<b>34.6%</b>	<b>15.4%</b>	<b>66.8%</b>
Kingsbridge - Riverdale	38.3%	8.7%	64.7%
Northeast Bronx	33.2%	10.1%	66.3%
Fordham - Bronx Park	33.0%	18.4%	64.2%
Pelham - Throgs Neck	33.4%	11.9%	67.1%
Crotona - Tremont & High Bridge - Morrisania	35.8%	20.2%	68.4%
<b>Brooklyn</b>	<b>30.5%</b>	<b>12.4%</b>	<b>58.7%</b>
Greenpoint	22.3%	9.4%	52.4%
Downtown - Heights - Slope	25.1%	4.6%	43.0%
Bedford Stuyvesant - Crown Heights	38.0%	13.6%	70.1%
East New York	32.1%	21.7%	68.1%
Sunset Park	26.0%	12.1%	50.3%
Borough Park	24.6%	8.8%	51.3%
East Flatbush - Flatbush	34.8%	13.7%	69.0%
Canarsie - Flatlands	38.5%	13.9%	65.1%
Bensonhurst - Bay Ridge	23.5%	10.3%	50.7%
Coney Island - Sheepshead Bay	30.7%	13.7%	55.9%
Williamsburg - Bushwick	31.8%	15.0%	62.0%
<b>Manhattan</b>	<b>23.8%</b>	<b>9.0%</b>	<b>47.1%</b>
Washington Heights - Inwood	28.9%	14.1%	62.9%
Central Harlem - Morningside Heights	33.8%	13.7%	60.0%
East Harlem	34.2%	23.1%	64.8%
Upper West Side	18.8%	6.9%	42.8%
Upper East Side & Gramercy Park - Murray Hill	21.4%	4.1%	41.9%
Chelsea - Clinton & Greenwich Village - Soho	16.8%	4.8%	39.2%
Union Square - Lower East Side & Lower Manhattan	23.1%	9.3%	35.4%
<b>Queens</b>	<b>29.0%</b>	<b>11.9%</b>	<b>56.7%</b>
Long Island City - Astoria	25.8%	9.8%	57.2%
West Queens	25.9%	9.6%	58.2%
Flushing - Clearview	23.4%	10.7%	43.0%
Bayside - Little Neck & Fresh Meadows	27.3%	14.2%	53.5%
Rockaway	37.4%	13.9%	63.1%
Ridgewood - Forest Hills	28.5%	5.1%	51.4%
Southwest Queens	32.0%	20.4%	59.4%
Jamaica	34.0%	13.6%	65.0%
Southeast Queens	34.3%	12.2%	64.6%
<b>Staten Island</b>	<b>24.8%</b>	<b>7.2%</b>	<b>60.6%</b>
Port Richmond & Stapleton - St. George	26.8%	9.0%	62.5%
Willowbrook & South Beach - Tottenville	23.6%	6.2%	59.6%
<b>New York City</b>	<b>28.8%</b>	<b>11.6%</b>	<b>57.2%</b>

Source: New York City Department of Health and Mental Hygiene, 2015.

Overall, residents of the Bronx and Brooklyn had higher percentages for each of the three indicators than the New York City averages. Queens residents were more likely to have ever had

high blood pressure and diabetes than city averages. Staten Island residents were more likely to have been overweight or obese than the city average.

**Exhibit 50C** summarizes health behaviors within MSH neighborhoods.

## Exhibit 50C: NYC Community Health Survey, Health Behaviors, 2015

Borough and Neighborhood	Binge Drinker*	Current Smoker	No Exercise in the Past 30 Days	Consumed on Average More than One Sugary Beverage	Consumed 0 Servings of Fruit and/or Vegetables Yesterday**
<b>Bronx</b>	<b>13.2%</b>	<b>14.4%</b>	<b>27.5%</b>	<b>32.2%</b>	<b>15.6%</b>
Kingsbridge - Riverdale	24.0%	8.3%	16.6%	20.9%	6.3%
Northeast Bronx	11.2%	12.3%	27.6%	26.1%	9.9%
Fordham - Bronx Park	13.8%	10.4%	28.8%	28.6%	16.9%
Pelham - Throgs Neck	12.7%	16.5%	26.8%	36.9%	18.8%
Crotona - Tremont & High Bridge - Morrisania	12.3%	17.0%	29.6%	35.3%	16.7%
<b>Brooklyn</b>	<b>15.8%</b>	<b>14.8%</b>	<b>27.3%</b>	<b>22.9%</b>	<b>13.7%</b>
Greenpoint	21.0%	20.7%	22.1%	8.2%	9.4%
Downtown - Heights - Slope	25.4%	13.5%	18.8%	13.5%	4.6%
Bedford Stuyvesant - Crown Heights	19.5%	17.9%	27.2%	27.9%	14.4%
East New York	15.0%	12.3%	27.7%	26.4%	18.8%
Sunset Park	14.2%	15.3%	32.9%	21.0%	12.3%
Borough Park	11.7%	15.1%	30.2%	22.7%	10.8%
East Flatbush - Flatbush	13.2%	9.4%	27.1%	33.6%	24.8%
Canarsie - Flatlands	13.9%	8.0%	23.6%	22.5%	19.7%
Bensonhurst - Bay Ridge	13.2%	15.2%	27.0%	19.5%	7.5%
Coney Island - Sheepshead Bay	10.0%	18.4%	31.6%	18.5%	9.2%
Williamsburg - Bushwick	17.3%	18.0%	30.3%	28.0%	19.2%
<b>Manhattan</b>	<b>26.5%</b>	<b>13.2%</b>	<b>18.0%</b>	<b>17.4%</b>	<b>9.5%</b>
Washington Heights - Inwood	27.2%	12.0%	23.2%	26.3%	15.6%
Central Harlem - Morningside Heights	21.4%	12.8%	25.8%	28.2%	12.0%
East Harlem	17.0%	16.8%	34.1%	26.8%	15.9%
Upper West Side	20.4%	13.0%	8.9%	11.3%	7.1%
Upper East Side & Gramercy Park - Murray Hill	36.2%	10.2%	12.4%	14.3%	6.5%
Chelsea - Clinton & Greenwich Village - Soho	25.4%	13.2%	15.8%	13.1%	9.2%
Union Square - Lower East Side & Lower Manhattan	25.3%	17.0%	20.2%	12.6%	7.0%
<b>Queens</b>	<b>14.5%</b>	<b>13.9%</b>	<b>28.4%</b>	<b>24.6%</b>	<b>10.7%</b>
Long Island City - Astoria	23.3%	19.1%	19.8%	26.0%	14.6%
West Queens	15.2%	17.8%	26.4%	26.1%	12.5%
Flushing - Clearview	11.8%	11.5%	32.3%	17.5%	5.9%
Bayside - Little Neck & Fresh Meadows	11.2%	9.1%	24.9%	18.4%	6.4%
Rockaway	12.5%	16.0%	30.5%	21.4%	10.6%
Ridgewood - Forest Hills	18.7%	18.8%	29.5%	20.3%	7.9%
Southwest Queens	16.8%	12.8%	32.7%	27.5%	13.4%
Jamaica	9.7%	6.7%	32.9%	34.4%	11.7%
Southeast Queens	9.7%	11.0%	25.8%	24.4%	11.0%
<b>Staten Island</b>	<b>16.8%</b>	<b>17.5%</b>	<b>21.0%</b>	<b>25.5%</b>	<b>10.7%</b>
Port Richmond & Stapleton - St. George	10.1%	17.5%	21.5%	27.7%	16.1%
Willowbrook & South Beach - Tottenville	21.4%	17.5%	20.7%	24.0%	7.2%
<b>New York City</b>	<b>17.2%</b>	<b>14.3%</b>	<b>25.5%</b>	<b>23.7%</b>	<b>12.1%</b>

Source: New York City Department of Health and Mental Hygiene, 2015.

\*Binge drinking is defined as five or more drinks on one occasion for males and four or more drinks on one occasion for females.

\*\*A serving equals one medium apple, a handful of broccoli, or a cup of carrots

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

**Exhibit 50D** summarizes mental health indicators within MSH neighborhoods.

## Exhibit 50D: NYC Community Health Survey, Mental Health Indicators, 2015

Borough and Neighborhood	Serious Psychological Distress	Did not receive Mental Health Services	Received Mental Health Treatment
<b>Bronx</b>	<b>26.1%</b>	<b>6.6%</b>	<b>51.6%</b>
Kingsbridge - Riverdale	4.3%	4.3%	0.0%
Northeast Bronx	4.9%	4.9%	59.4%
Fordham - Bronx Park	7.2%	7.2%	57.4%
Pelham - Throgs Neck	5.9%	5.9%	40.6%
Crotona - Tremont & High Bridge - Morrisania	7.7%	7.7%	52.1%
<b>Brooklyn</b>	<b>24.2%</b>	<b>6.1%</b>	<b>47.2%</b>
Greenpoint	3.0%	3.0%	0.0%
Downtown - Heights - Slope	3.4%	3.4%	50.1%
Bedford Stuyvesant - Crown Heights	5.3%	5.3%	34.9%
East New York	6.0%	6.0%	57.3%
Sunset Park	4.8%	4.8%	17.5%
Borough Park	5.3%	5.3%	46.7%
East Flatbush - Flatbush	6.1%	6.1%	20.9%
Canarsie - Flatlands	6.0%	6.0%	63.9%
Bensonhurst - Bay Ridge	5.5%	5.5%	0.0%
Coney Island - Sheepshead Bay	10.1%	10.1%	63.2%
Williamsburg - Bushwick	8.0%	8.0%	41.5%
<b>Manhattan</b>	<b>16.4%</b>	<b>5.1%</b>	<b>40.2%</b>
Washington Heights - Inwood	9.0%	9.0%	17.0%
Central Harlem - Morningside Heights	3.7%	3.7%	50.7%
East Harlem	10.4%	10.4%	60.4%
Upper West Side	1.3%	1.3%	0.0%
Upper East Side & Gramercy Park - Murray Hill	3.7%	3.7%	0.0%
Chelsea - Clinton & Greenwich Village - Soho	4.8%	4.8%	70.5%
Union Square - Lower East Side & Lower Manhattan	5.9%	5.9%	44.8%
<b>Queens</b>	<b>24.9%</b>	<b>4.6%</b>	<b>40.9%</b>
Long Island City - Astoria	12.1%	12.1%	46.2%
West Queens	4.9%	4.9%	38.8%
Flushing - Clearview	2.7%	2.7%	17.8%
Bayside - Little Neck & Fresh Meadows	2.2%	2.2%	48.4%
Rockaway	2.1%	2.1%	41.9%
Ridgewood - Forest Hills	3.6%	3.6%	57.9%
Southwest Queens	3.2%	3.2%	43.3%
Jamaica	0.0%	0.0%	49.5%
Southeast Queens	5.1%	5.1%	0.0%
<b>Staten Island</b>	<b>14.7%</b>	<b>6.7%</b>	<b>34.5%</b>
Port Richmond & Stapleton - St. George	6.7%	6.7%	28.1%
Willowbrook & South Beach - Tottenville	0.0%	0.0%	63.3%
<b>New York City</b>	<b>22.6%</b>	<b>5.4%</b>	<b>45.9%</b>

Source: New York City Department of Health and Mental Hygiene, 2015.

Overall, residents of the Bronx and Brooklyn had higher percentages for each of the three indicators than the New York City averages. Queens had a higher percentage of residents with

serious psychological distress. Staten Island had a higher percentage of residents with serious psychological distress that did not receive mental health services.

## Ambulatory Care Sensitive Conditions

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

ACSCs are health “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”<sup>13</sup> 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 discharges from all hospitals in the MSH community that were for ACSCs, by payer.

**Exhibit 51: Discharges for ACSC by Borough and Payer, 2016**

Borough	Private	Medicaid	Medicare	Self-Pay	Other	Total
Bronx	10.1%	10.9%	17.7%	12.1%	2.9%	13.4%
Brooklyn	6.6%	8.9%	17.2%	10.5%	4.7%	11.8%
Manhattan	4.9%	8.9%	14.3%	7.6%	4.1%	10.4%
Queens	6.7%	8.5%	15.8%	9.6%	4.1%	11.1%
Staten Island	6.5%	9.3%	13.9%	9.7%	3.5%	10.8%
<b>Total</b>	<b>6.8%</b>	<b>9.3%</b>	<b>16.2%</b>	<b>10.1%</b>	<b>4.0%</b>	<b>11.7%</b>

Source: DataGen, a HANYS solutions company, 2017.

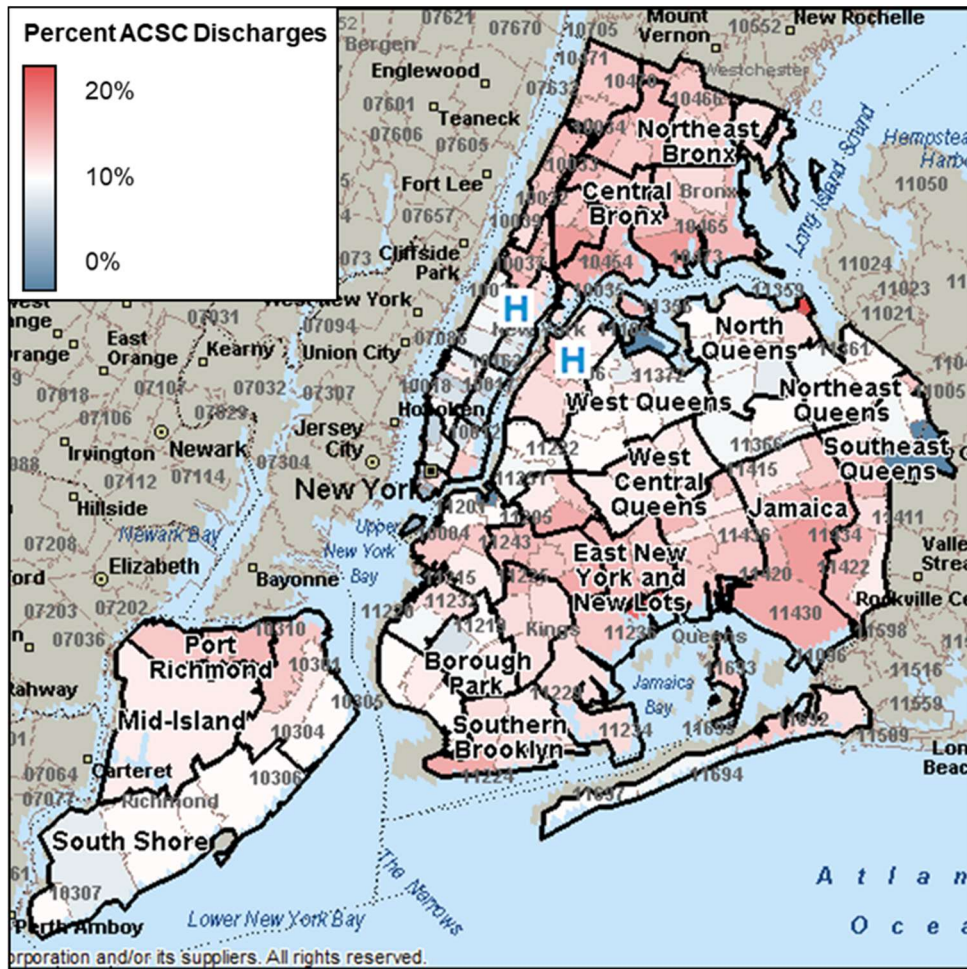
The table indicates that 11.7 percent of discharges in the community were for ACSCs in 2016. Medicare patients and patients from the Bronx had the highest proportions of discharges for ACSCs (**Exhibit 51**).

<sup>13</sup>Agency for Healthcare Research and Quality (AHRQ). (2013). *Prevention Quality Indicators*. Retrieved 2013, from: <http://archive.ahrq.gov/data/hcup/factbk5/factbk5d.htm>



**Exhibit 52** illustrates the rate of discharges from all hospitals in the community that were for ACSCs, by neighborhood by 100,000 residents 18 years and older.

**Exhibit 52: Discharges for ACSC by Neighborhood, 2015**



Sources: Microsoft MapPoint and DataGen, a HANYS solutions company, 2017.

The ACSC discharge rates were higher in the Bronx and Brooklyn, particularly in ZIP Codes 11359 (North Queens) and 11239 (Canarsie & Flatlands), both with rates over 18 percent.

## ACSC Conditions Analysis

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

**Exhibit 53: ACSC Discharges of MSH Community Members from all hospitals by Condition and Age, 2016**

Condition	0 to 17	18 to 39	40 to 64	65+	Total
Heart Failure	0.0%	2.1%	30.8%	67.2%	24,164
COPD or asthma in older adults	0.0%	0.0%	48.6%	51.4%	18,984
Bacterial pneumonia	0.0%	9.3%	33.4%	57.3%	9,964
Urinary tract infection	0.0%	11.3%	20.9%	67.9%	9,282
Dehydration	0.0%	8.9%	27.1%	64.0%	7,196
Diabetes long-term complication	0.0%	10.6%	53.9%	35.5%	6,798
Perforated appendix	0.0%	54.8%	33.8%	11.4%	5,773
Pediatric asthma	100.0%	0.0%	0.0%	0.0%	5,319
Diabetes short-term complication	0.0%	33.2%	39.1%	27.7%	5,101
Uncontrolled diabetes	0.0%	9.3%	37.4%	53.4%	4,610
Hypertension	0.0%	7.8%	42.0%	50.2%	3,921
Asthma in younger adults	0.0%	100.0%	0.0%	0.0%	1,817
Pediatric gastroenteritis	100.0%	0.0%	0.0%	0.0%	1,774
Pediatric perforated appendix	100.0%	0.0%	0.0%	0.0%	1,591
Pediatric urinary tract infection	100.0%	0.0%	0.0%	0.0%	588
Pediatric diabetes short-term complications	100.0%	0.0%	0.0%	0.0%	395

Source: DataGen, a HANYS solutions company, 2017.

The top five ACSC conditions in the MSH community by number of discharges were heart failure, COPD or asthma in older adults, bacterial pneumonia, urinary tract infection, and dehydration.

Patients aged 65 years and over had the highest percentage of discharges for ACSC conditions, followed by the 40 to 64 year old cohort (**Exhibit 53**).

## Community Need Index™ and Food Deserts

### Dignity Health Community Need Index

Dignity Health, a California-based hospital system, developed and has made widely available for public use a *Community Need Index*™ that measures barriers to health care access by borough/county and ZIP Code.<sup>14</sup> 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.

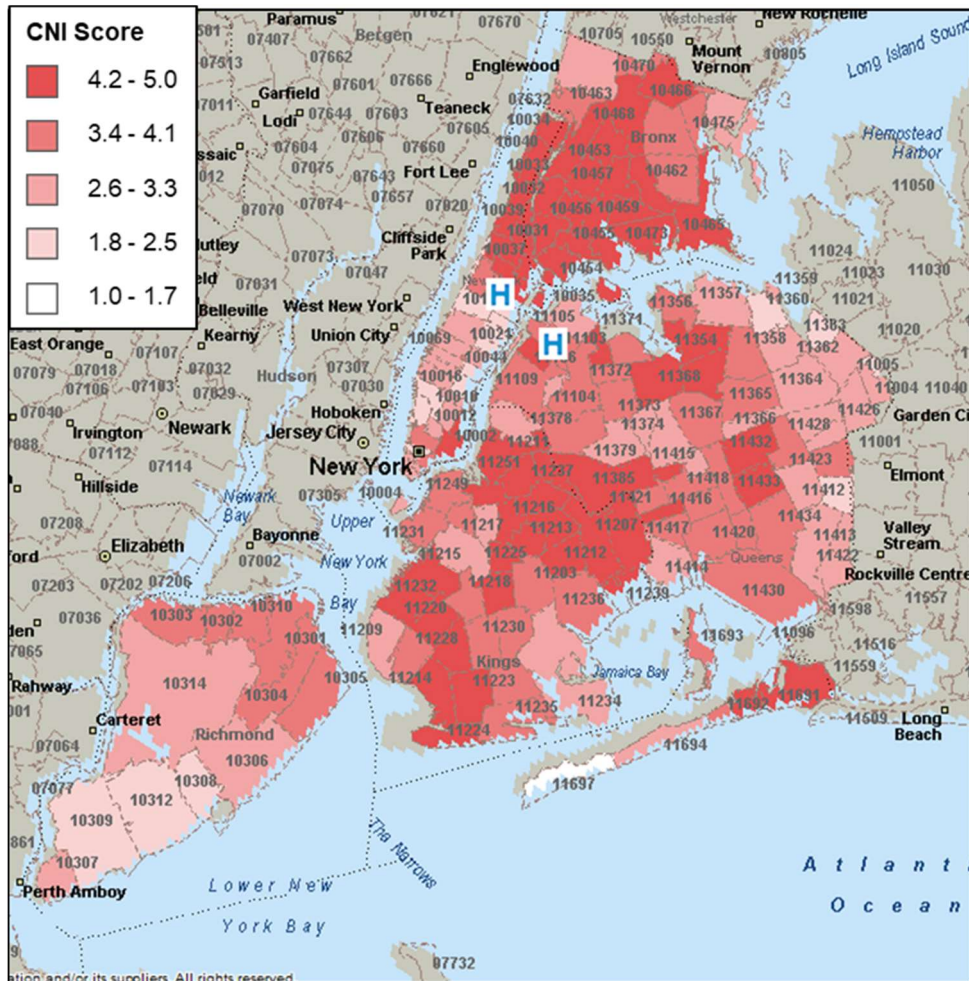
The *Community Need Index*™ calculates a score for each ZIP Code based on these indicators. Scores range from “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0).

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<sup>14</sup>Dignity Health. (n.d.). *Community Needs Index*. Retrieved 2013, from: <http://cni.chw-interactive.org/>

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

Exhibit 54: Community Need Index<sup>TM</sup> Score by ZIP Code



Sources: Microsoft MapPoint and Dignity Health, 2017.

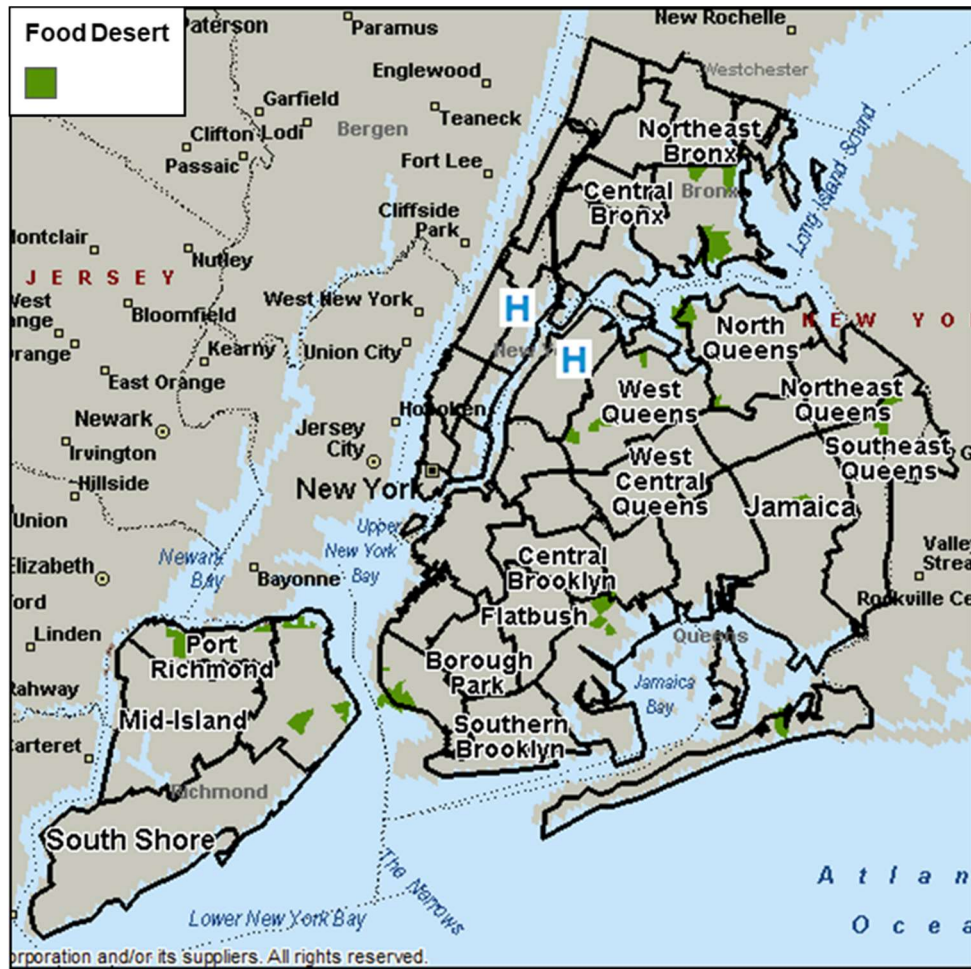
A large portion of the community ranked in the “Highest Need” category. 13 ZIP Codes – all located in the Bronx – received a score of “5.0”, the highest on the CNI scale. In all of New York City, 64 ZIP Codes received a score in the “Highest Need” category, representing 34 percent of all New York City ZIP Codes (**Exhibit 54**).

## 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 55 illustrates the location of food deserts in the MSH community.

Exhibit 55: Food Deserts by Census Tract, 2015



Source: Economic Research Services, U.S. Department of Agriculture, 2015

Food deserts are present within the MSH community, with pockets in all boroughs except for Manhattan (Exhibit 55).

## 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.<sup>15</sup>

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.”<sup>16</sup>

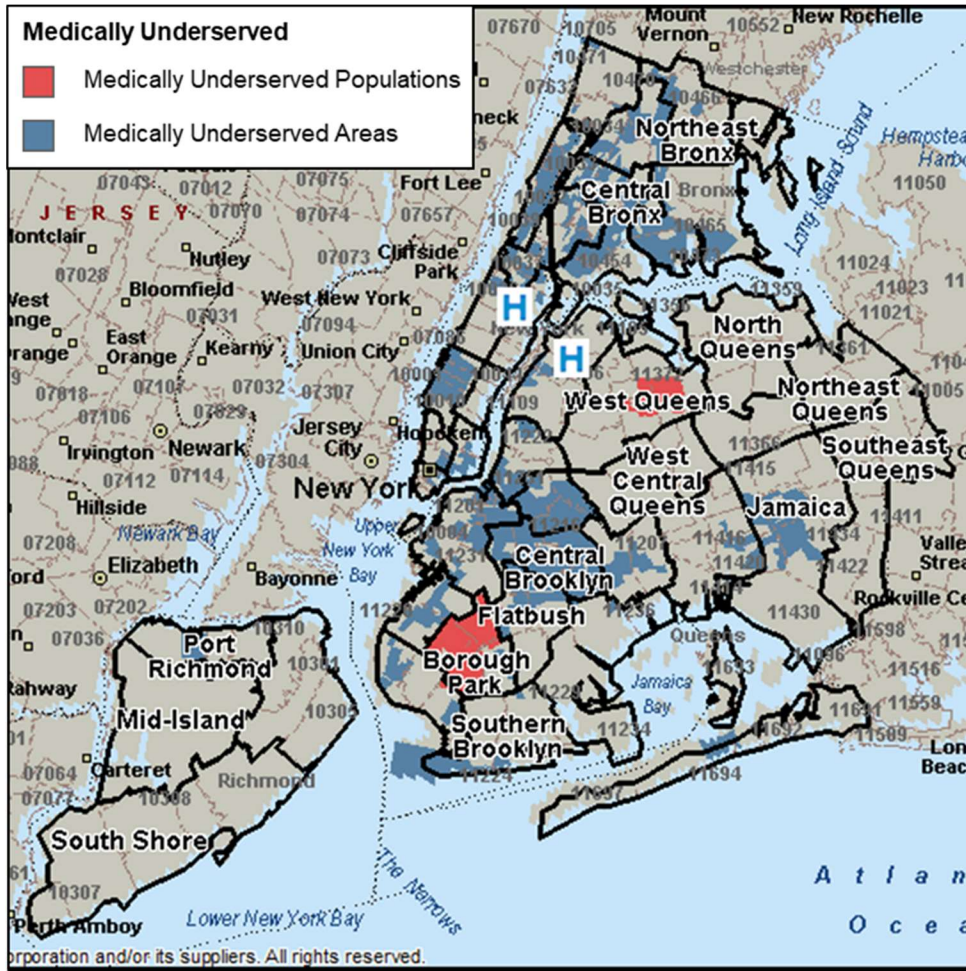
**Exhibit 56** shows parts of the community designated by HRSA as medically underserved. Census tracts throughout the community have been designated as Medically Underserved Areas, particularly in the Bronx and Brooklyn. Medically Underserved Populations appear in Queens and Brooklyn.

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<sup>15</sup> 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/maups/index.html>.

<sup>16</sup> *Ibid.*

**Exhibit 56: Location of Federally Designated Areas and Populations in the MSH Community, 2017**



Sources: Microsoft MapPoint and HRSA, 2017.

## 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.”<sup>17</sup>

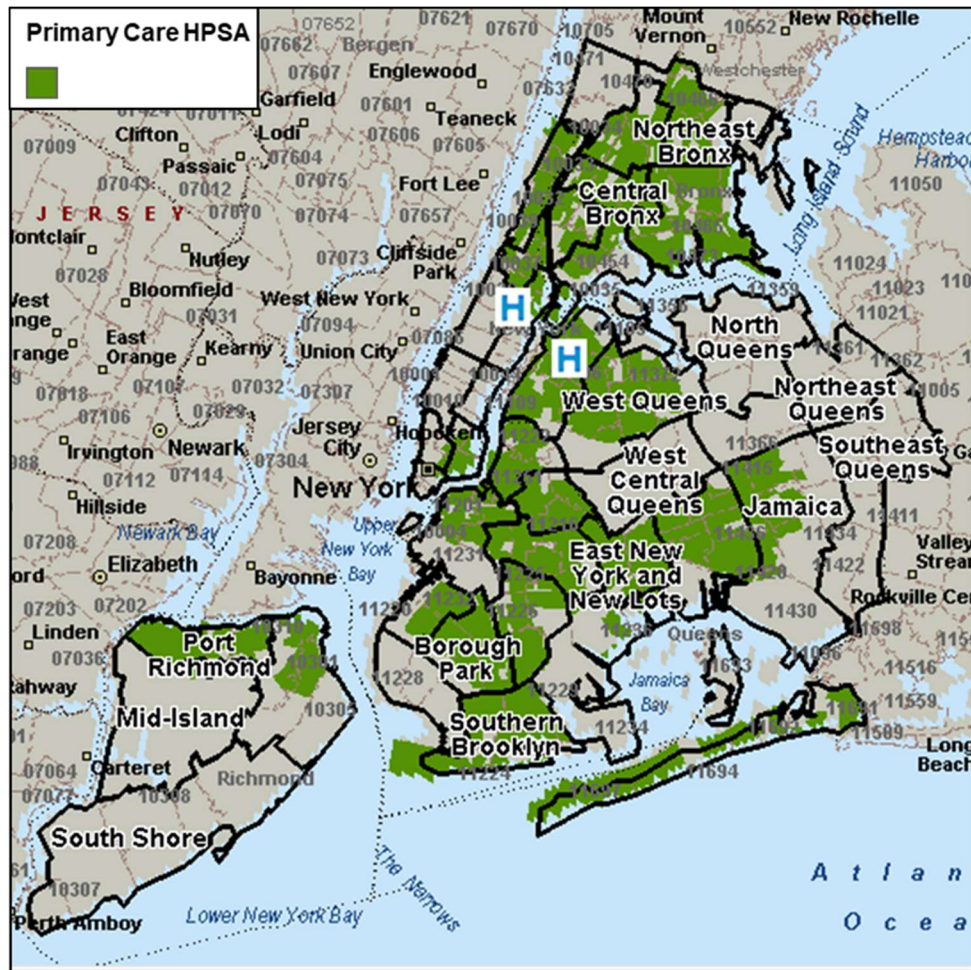
Areas and populations in the MSH community are designated as HPSAs (**Exhibit 57**)

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<sup>17</sup> 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>

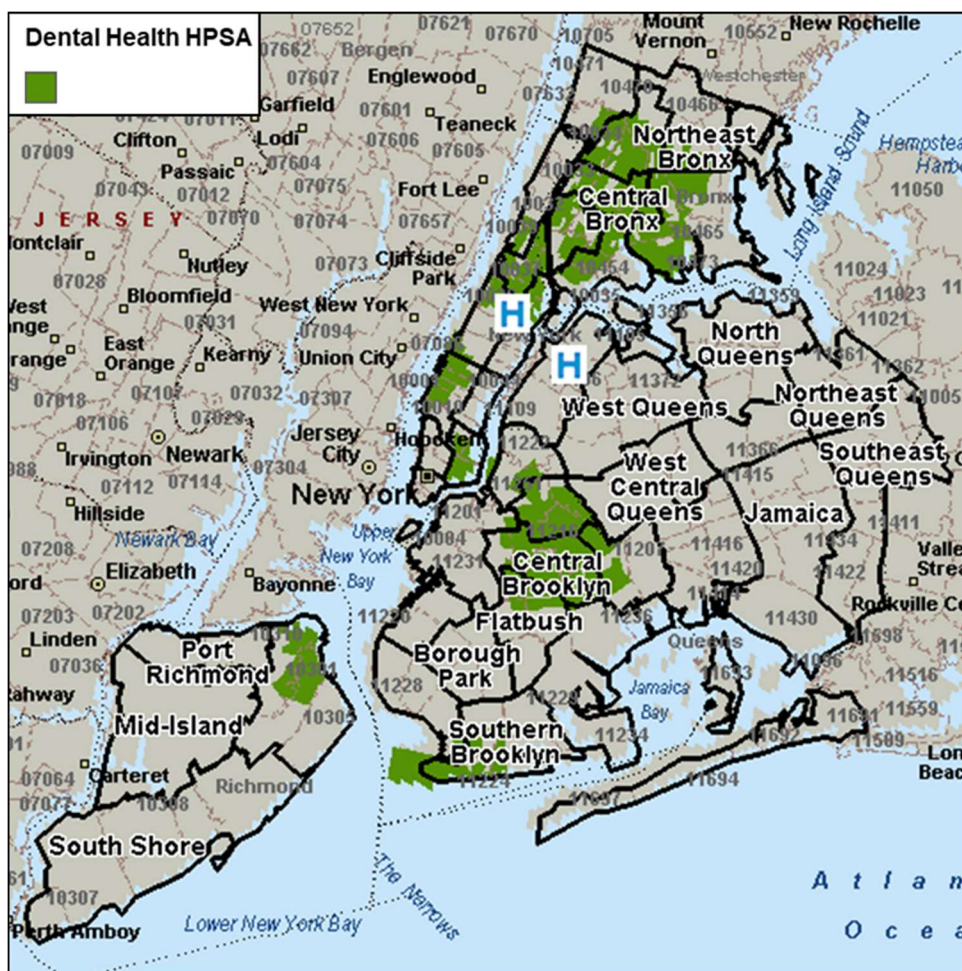


**Exhibit 57A: Location of Federally Designated Primary Care HPSA Census Tracts in the MSH Community, 2017**



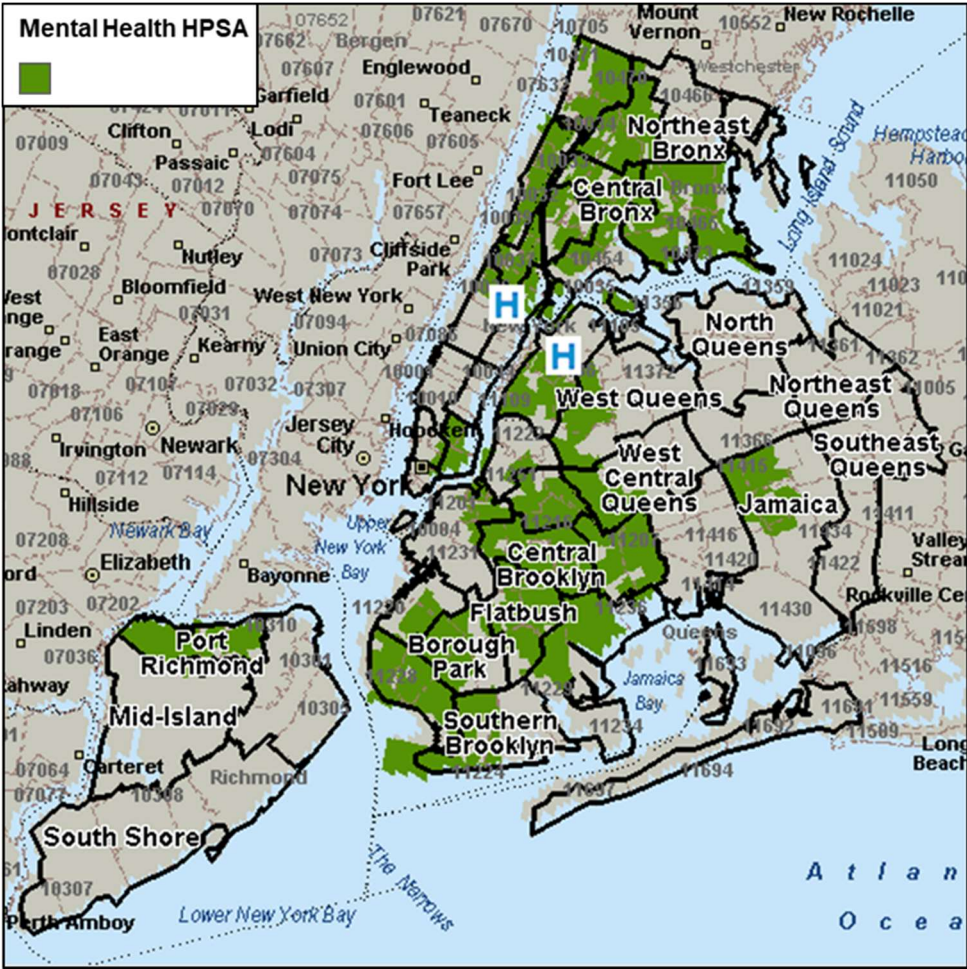
Sources: Microsoft MapPoint and HRSA, 2017.

### Exhibit 57B: Location of Federally Designated Dental Health HPSA Census Tracts in the MSH Community, 2017



Sources: Microsoft MapPoint and HRSA, 2017.

**Exhibit 57C: Location of Federally Designated Mental Health HPSA Census Tracts in the MSH Community, 2017**



Sources: Microsoft MapPoint and HRSA, 2017.

## Description of Other Facilities and Resources within the Community

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

Multiple facilities in the community are designated as HPSA facilities (**Exhibit 58**).

**Exhibit 58: List of HPSA Facilities in the MSH Community**

HPSA Name	Facility Type	Primary Care	Dental	Mental
<b>Bronx</b>				
Bronx Community Health Network	Comprehensive Health Center	•	•	•
Bronx Lebanon Integrated Services System	Comprehensive Health Center	•	•	•
HELP/PSI Services Corporation	Comprehensive Health Center	•	•	•
Hunts Point Multi-Service Center, Inc.	FHQC Look A Like	•	•	
Montefiore North Division Mental Health Clinic	Other Facility			•
Morris Heights Health Center, Inc.	Comprehensive Health Center	•	•	•
Union Community Health Center	Comprehensive Health Center	•	•	•
Urban Health Plan, Inc.	Comprehensive Health Center	•	•	•
<b>Brooklyn</b>				
Bedford Stuyvesant	Comprehensive Health Center	•	•	•
Brooklyn Plaza Medical Center	Comprehensive Health Center	•	•	•
Brownsville Community	Comprehensive Health Center	•	•	•
Ezra Medical Center	Comprehensive Health Center	•	•	•
Housing Works, Inc.	Comprehensive Health Center	•	•	•
ICL Healthcare Choices, Inc.	Comprehensive Health Center	•	•	•
Kings County Hospital Center	State Mental Hospital			•
Metropolitan Detention Center - Brooklyn	Correctional Facility	•	•	•
ODA Primary Care Health	Comprehensive Health Center	•	•	•
Sunset Park Family Health	Comprehensive Health Center	•	•	•
Woodhull Mental Health Center	State Mental Hospital			•

Source: Health Resources and Services Administration, 2017.

**Exhibit 58 (Continued): List of HPSA Facilities in the MSH Community**

HP SA Name	Facility Type	Primary Care	Dental	Mental
<b>Manhattan</b>				
Ahrc Health Care, Inc.	Comprehensive Health Center	•	•	•
American Indian Community House	Native American Tribal Population	•		•
Asian & Pacific Islander Coalition on HIV/AIDS (AP)	FHQC Look A Like	•	•	•
Bellevue Hospital	State Mental Hospital			•
Betances Health Center	Comprehensive Health Center	•	•	•
Boriken Neighborhood	Comprehensive Health Center	•	•	•
Charles B. Wang Community Health Center, Inc.	Comprehensive Health Center	•	•	•
Community Healthcare Network	Comprehensive Health Center	•	•	•
Covenant House	Comprehensive Health Center	•	•	•
Health Care for the Homeless	Comprehensive Health Center	•	•	•
Heritage Health and Housing, Inc.	Comprehensive Health Center	•	•	•
Institute for Family Health	Comprehensive Health Center	•	•	•
MCC-New York	Correctional Facility	•	•	•
Morningside Clinic	Other Facility	•		
Mount Sinai Adolescent Health Center	Other Facility	•		
New York Children's Health Project	Comprehensive Health Center	•	•	•
New York Health and Hospitals Corporation	FHQC Look A Like	•	•	•
Project Renewal	Comprehensive Health Center	•	•	•
Settlement Health	Comprehensive Health Center	•	•	•
The Floating Hospital	Comprehensive Health Center		•	
Upper Room AIDS Ministry, Inc.	Comprehensive Health Center	•	•	•
William F. Ryan Community Health Center	Comprehensive Health Center	•	•	•
<b>Queens</b>				
Hunts Point Multi-Service Center, Inc.	FHQC Look A Like			•
J. P. Addabbo Family	Comprehensive Health Center	•	•	•
Project Samaritan Health Services	Comprehensive Health Center	•	•	•
The Floating Hospital	Comprehensive Health Center	•		•
<b>Staten Island</b>				
Beacon Christian Community Health Center	Comprehensive Health Center	•	•	•
Community Health Center of Richmond	Comprehensive Health Center	•	•	•

Source: Health Resources and Services Administration, 2017.

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

### **Exhibit 59: Hospitals in the MSH Community**

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

**Exhibit 59 (Continued): Hospitals in the MSH Community**

<b>Borough</b>	<b>Hospital Name</b>
Manhattan	Bellevue Hospital Center
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 St. Luke's
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 Hospital for Joint Diseases
Manhattan	NYU Hospitals Center
Manhattan	Rockefeller University Hospital
Queens	Elmhurst Hospital Center
Queens	Flushing Hospital Medical Center
Queens	Jamaica Hospital Medical Center
Queens	Long Island Jewish Forest Hills
Queens	Long Island Jewish Medical Center
Queens	Mount Sinai Hospital - Mount Sinai Hospital of Queens
Queens	New York-Presbyterian/Queens
Queens	Queens Hospital Center
Queens	St Johns Episcopal Hospital So Shore
Staten Island	Richmond University Medical Center
Staten Island	RUMC-Bayley Seton
Staten Island	Staten Island University Hosp-North
Staten Island	Staten Island University Hosp-South

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 370 FQHC site locations in the five boroughs of New York City, many of which also are designated as HPSAs. Some of the largest FQHCs include Community Healthcare Network, The Institute for Family Health, HELP/PSI, Access Community Health Center, the Joseph P. Addabbo Family Health Center, the William F. Ryan Community Health Network, and Lutheran HealthCare.

**Exhibit 60** presents the rates of primary care physicians, mental health providers, and dentists in the community per 100,000 population. The rates of primary care, mental health providers, and dentists per 100,000 population are higher in Manhattan, compared to the state. In the Bronx, Brooklyn, and Queens, rates for primary care physicians, mental health providers, and dentists were lower than the state averages. Rates for mental health providers and dentists were lower in Staten Island than the state averages.

**Exhibit 60: Health Professionals Rates per 100,000 Population by Borough**

Borough	Primary Care Physicians		Mental Health Providers		Dentists	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
Bronx	759	52.8	2,399	164.7	688	47.3
Brooklyn	1,637	62.4	4,605	174.5	1,592	60.4
Manhattan	2,263	138.3	11,983	729.9	2,840	172.7
Queens	1,522	65.6	3,097	132.5	1,658	70.9
Staten Island	441	93.2	913	192.3	304	64.1
<b>New York State</b>	<b>16,474</b>	<b>83.4</b>	<b>47,493</b>	<b>239.8</b>	<b>15,530</b>	<b>78.4</b>

Source: Data provided by County Health Rankings, 2012.

A wide range of other agencies and organizations is available in the community to assist in meeting health needs. Lists of available resources have been compiled by community foundations, hospitals, and agencies and can be found at the following web addresses:

- United Way of New York City  
<http://www.unitedwaynyc.org/who-we-are/get-help>
- Brooklyn Community Pride Center Resources:  
<http://www.lgbtbrooklyn.org/resources>
- CAI Global Ryan White Part B Mental Health Providers and Other Mental Health Resources:  
<http://www.caiglobal.org/aimh/RWB%20MH%20Providers%20and%20MH%20resources.pdf>
- Coalition for the Homeless Resource Guide:  
<http://www.coalitionforthehomeless.org/resource-guide>



- The Elmezzi Foundation Family Youth Guide:  
<http://elmezzi.org/family-youth-guide/>
- Mental Health Association of New York City Services:  
<https://mhaofnyc.org/what-we-do/>
- New York City Guide to Suicide Prevention, Services, and Resources:  
<http://samaritansnyc.org/nyc-resource-guide/>
- New York City – Mayor’s Office to Combat Domestic Violence:  
<http://www1.nyc.gov/site/ocdv/index.page>
- NYU Langone Medical Center Free and Low Cost Health Resources in New York City:  
<http://nycfreeclinic.med.nyu.edu/information-for-patients/health-resources>
- Parent Guide News Parent & Child Resources:  
[http://www.parentguidenews.com/Search/SpecialNeeds\\_ParentChildResources](http://www.parentguidenews.com/Search/SpecialNeeds_ParentChildResources)
- Weill Cornell Center for Human Rights Mental Health Services Guide:  
<http://www.wcchr.com/resources/mental-health-resources-nyc>

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 Other Recent Community Health Needs Assessments

### Exhibit 61: Other Community Health Needs Assessments in New York City

Significant Need Identified	Total
Obesity	19
Diabetes	17
Mental Health/Illness	13
Hypertension	12
Heart Disease	11
Substance Abuse	11
High Cholesterol	9
Stroke	9
Cancer	6
Smoking or Tobacco Use	6
HIV	6
Maternal and Infant Health	6
Chronic Disease	6
Asthma and Breathing Issues	5
Access to Preventive Services	5
STDs	5
Injuries	4
Domestic Violence/ Violence	4
Air Quality	4
Inadequate Nutrition	4
Access to Primary Care	3
Reproductive Health	3
Exercise	3
Vaccine Preventable Disease	3
Healthcare Associated Infections	3

Source: Verité analysis of other New York City Community Health Needs Assessments<sup>18</sup>, 2017.

<sup>18</sup> Other assessments reviewed include: Flushing Hospital Medical Center, Interfaith Medical Center, Jamaica Hospital Medical Center, Kingsbrook Jewish Medical Center, Maimonides Medical Center, Montefiore Medical Center, NYCHH Bellevue , NYCHH Carter, NYCHH Coney Island, NYCHH Elmhurst, NYCHH Harlem, NYCHH Jacobi, NYCHH Kings County, NYCHH Lincoln, NYCHH Metropolitan, NYCHH North Central Bronx, NYCHH Queens, NYCHH Woodhull, New York Methodist Hospital, Memorial Sloan Kettering, New York Presbyterian Hospital , NYU Langone Medical Center, Richmond University Medical Center, St. John's Episcopal Hospital, Wyckoff Heights Medical Center, Hospital for Special Surgery, Northwell Health New York County, and Rockefeller University Hospital.

# PRIMARY DATA ASSESSMENT

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## Summary of Interview Findings

Key informant interviews were conducted face-to-face and by telephone by Verité Healthcare Consulting from September through December 2017. The interviews were designed to obtain input on health needs from persons who represent the broad interests of the community served by Mount Sinai Hospital.

Forty-nine interview sessions were held with 104 individuals representing numerous organizations. Interviewees included: individuals with special knowledge of or expertise in public health; local public health department representative 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 community health issues and encouraged to think broadly about the social, behavioral, and other determinants of health. Interviewees were asked about issues related to 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. They are grouped by topic with the topics presented in alphabetical order.

## Issues Identified by Interview Participants

**Robust health care services exist.** Interview participants indicated that health care services in New York City are prevalent and readily accessible for individuals with comprehensive health insurance and/or the means to pay out-of-pocket for services. Provider options are especially prevalent in Manhattan, as residents of other boroughs often chose to travel to Manhattan for services. The city is also dense with transportation options to travel to providers, except for residents that have mobility, financial, and/or other limitations. The populations of rapidly growing areas, notably Long Island City, may be expanding more quickly than the providers practicing in these areas.

**Rapidly changing healthcare system.** A number of interview participants suggested that the health care delivery system is rapidly evolving. Changes include more services provided in an ambulatory setting rather than on an inpatient basis, development of “Centers of Excellence” to improve outcomes, decreasing lengths of stay for hospitalizations, emergence of urgent care centers and other on-demand options, and continuing advances in technology.

Although residents may appreciate the benefits of advances, interviewees indicated that there is dissatisfaction and fear with other changes, such as increased transportation effort to travel to Centers of Excellence. Concerns are worsened by misinformation about changes, as well as gaps between residents’ expectations and service delivery options. Along with these changes, uncertainty about the potential changes to health insurance access offered by the Affordable Care Act (ACA) is creating stress and anxiety as some residents are worried about continued insurance coverage.

Similarly, some provider interviewees are concerned that ACA changes may destabilize the health care system. Also, some members of the health care system are reluctant to shift from an older, doctor-centric model of care to a broader team approach that includes more emphasis on nurse-led clinics and community health workers. Hampering collaboration is different electronic medical systems at different providers, which are not able to communicate efficiently. Increasing expectations of health care providers, including “customer service” expectations of patients, result in some providers leaving the health system prematurely.

Further, interview participants suggested that consolidation within the health care delivery system may increase efficiency and improve continuity of care. However, consolidation may negatively impact vulnerable populations if the relationship with smaller-scale providers, with whom trust has developed over a long period, is altered when these providers become part of a larger system.

**Insurance restrictions.** The role of insurance rules that limit the care that some residents receive was discussed by a number of interview participants. These limitations may return residents to the community prematurely and lead to a revolving door of care. Compounding the issue is changing insurance requirements, provider participation, and high co-pays and deductibles. Further, some residents may not understand coverages and responsibilities of their policies, and may choose plans unwisely, based on promises of sales representatives rather than careful analysis. The impact of insurance restrictions and unknown coverage is that some

residents forego services, such as ambulance transport, because they do not know the cost and fear that they will not be able to afford the service provided. Additionally, lags and lapses in coverage complicate delivery of services.

**Consumer confusion.** Interview participants suggested that as healthcare delivery options and insurance requirements rapidly change, many people may not know which provider to choose for specific needs at specific times. People rarely learn to navigate the system pre-need and the cognitive ability to understand the system may be challenged during times of need. Navigation assistance and care coordination is needed, but coordinators and case workers are overwhelmed and have limited authority over health care decisions.

Interview participants also suggested that the process to implement care across a fragmented system can be cumbersome and time-consuming, including multi-level telephone trees, long lags to care, appointment times that interfere with school and work, and location of services. Language may further add to the challenge, including spoken dialects and written language barriers.

Interview participants noted that navigation needs vary by individual, depending on their knowledge base, experiences, and emotional status. Navigation assistance is needed for many residents in the community, including young adults, who may have little understanding how to access services, patient expectations, and insurance coverage options.

**Disparities.** Many interview participants universally discussed the differences in outcomes and experiences among residents, with variation by age, gender, race/ethnicity, and socioeconomic status. As a result, some residents distrust and may delay or refuse care because of real or perceived treatment disparities, language barriers, and lack of cultural competence from providers. Cohorts of residents where distrust may be especially evident are low-income people-of-color, immigrants who do not speak English, and LGBTQ individuals.

Interviewees indicated that residents who have experienced or perceived disparities are observant for biases in care delivery and compare treatment with other patients. As a result, LGBTQ residents may travel further for care because they wish to conceal their sexual orientation or gender identity their neighborhood. Other residents, notably transgender individuals, may forego needed care or request the participation of patient advocates.

Interview participants also suggested that residents with disabilities are also vulnerable to limited provider options. Some residents are unable to receive services in facilities with stairs, narrow hallways, and/or equipment without transfer assistance.

**Mental health and substance abuse needs.** Interview participants focused on considerable mental health issues in the community, including anxiety and depression, as well as substance abuse, including opioids and hidden alcoholism. Interviewees suggested that unmet mental health and substance abuse needs may be particularly problematic for less-than-affluent residents, where these twin ` are evident in the increasing number of homeless people.

Interviews suggested that mental health issues and treatment needs may vary by community cohorts. Seniors may be especially likely to suffer from depression. Although stigma around

mental illness remains in many populations, culturally competent education and treatment were noted as needed in the Hispanic and Chinese communities. Additionally, children are negatively impacted by unmet mental health needs of parents.

**Aging population.** Interview participants indicated that the community is aging, but that seniors are a diverse group and age does not determine needs. Needs can change rapidly, however, and diminished capacity may not be evident until there is a sentinel event. Support needs vary by mobility, hearing and vision ability, and cognitive levels. Polypharmacy issues can be significant. Hoarding may reduce some senior residents' acceptance of support.

For vulnerable seniors, interviewees stated that transportation can be a challenge due to stairs in the subway system and street traffic, including bicycles. Handicapped access transportation can be problematic. Additionally, outcome goals of longevity, rather than shorter, but higher quality life, are adding artificial demands to health care services.

**Changing population.** Most interview participants stated that the number of residents in the community is increasing. New residents include students, younger adults, families, and new residents from other countries. The existing population is changing, too, as LGBTQ residents become more visible and residents migrate for more affordable housing. The impact of these changes may be increased need for culturally competent health care options as there is much diversity in a small geographic area.

**Isolation.** Some interview participants suggested that increasing disconnectedness with other members of the community is leading to isolation and depression for many residents, including both seniors and gay men. Seniors may need organized activities to get them out of their insular environment.

**Obstacles to healthy behaviors.** Interview participants indicated that some residents may simply not know how to be healthy. For others, entertainment options, including television and video games, may increase physical inactivity. Although upscale grocery stores have increased in the area, individuals with limited financial means have fewer choices, as more moderately priced grocery stores have closed. Additional prevention programs are needed to help residents respond to these obstacles.

Some participants suggested that cultural norms may contribute to poor nutrition, inactivity, and acceptance of medical examinations and/or treatments. Misinformation and lack of education may also be contributing factors. Also contributing to unhealthy behaviors can be the higher cost of healthier food, abundance of fast food options, large portion sizes, and nutritional content of prepared meals.

Interviewees also stated that tobacco use is an increasing unhealthy behavior. Tobacco use has expanded from traditional cigarettes and now includes hookahs and e-cigarettes. Smoking rates are high in the Chinese community and use is increasing in teens.

**Financial pressures.** Many participants indicated that gentrification and income inequality are increasing and that lower-income residents are facing greater pressures to afford housing and food. As a result, some residents depart from the community. Costs of health care are also issues for some residents due to higher insurance deductibles and co-pays.

Healthcare providers, too, were thought to face financial pressures, especially with increasing rental rates in the area for their practices. As a result, some providers leave their practice or join systems because rents are unaffordable.

**Safe and affordable housing needs.** Interview participants indicated that high and increasing rents are resulting in overcrowding as some residents double or triple up their occupancy to afford rents. The health of some residents may be at-risk for asthma and other conditions due to pest infestation and/or poor building maintenance, including water, heat, and elevator access. Maintenance and security are particularly important issues for senior residents of NYC Housing Authority units.

**Environment issues.** Environmental factors including poor air quality, traffic, noise, second-hand smoke, unsanitary conditions, crime, and a resulting negative impact on residents' health, were reported by some interview participants. In addition to direct impacts, such as asthma, these factors have an indirect influence through increased stress.

Bike lanes are another environmental issue reported by some interviewees. The lack of warning noise of bicycles and the failure of cyclists to follow traffic signals increases the number of accidents and can greatly increase some residents' fear of bicyclist-pedestrian accidents, particularly among elderly residents.

**Homelessness.** Many respondents indicated that the number of homeless community members appears to be increasing. Homelessness is a particularly difficult issue because it frequently includes issues relating to poverty, mental health, and substance abuse. Homeless women are especially vulnerable to mistreatment and are reluctant to report incidences. Individual who live in shelters are at risk for communicable disease.

## Organizations Providing Community Input

Forty-nine interview sessions were held with 104 individuals representing 40 organizations. Individuals associated with these organizations are below.

Organizations Interviewed	
ACMH Inc.	Morningside Heights Residents' Association
Astoria Blue Feather Early Learning Center	Mount Sinai - Mount Sinai Queens
BRC Senior Services Center	Mount Sinai - Mount Sinai Queens - Community Advisory Board
Callen-Lorde Community Health Center	Mount Sinai Beth Israel - Mount Sinai Brooklyn
Center for Independence of the Disabled in NY	Mount Sinai Community Advisory Council
Consolidated Edison, Inc.	Mount Sinai Health System
Coordinated Behavioral Care (CBC)	Mount Sinai St. Luke's - Mount Sinai West
Dominican Women's Development Center	MSSL & MSW
Educational Alliance	New York City Department of Health and Mental Hygiene
Hearing Loss Association of America, New York City Chapter	New York Common Pantry
Hellenic American Neighborhood Action Committee	New York Eye & Ear Infirmary of Mount Sinai
Instituto Duartiano de Nueva York	New York Political Club New Generation
La Academia Mundial de Bomberos Inc EEUU	Queens Community Board 1
Long Island City Partnership	Residents of the New York City Housing Authority
Lower Eastside Power Partnership	SHAREing & CAREing
Manhattan Community Board 3	STRIVE New York
Manhattan Community Board 4	Stuyvesant Town Peter Cooper Village Tenants Association
Manhattan Community Board 5	Union Square Partnership
Manhattan Community Board 6	William F. Ryan Community Health Center
Manhattan Community Board 7	William F. Ryan Community Health Network

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



## SOURCES

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- DataGen, a HANYS solutions company. Analysis of 2016 inpatient hospital discharge data.
- Dignity Health. *Community Needs Index*. Retrieved 2017, from <http://cni.chw-interactive.org/>.
- Federal Bureau of Investigation, Uniform Crime Reporting Program. *Crime Rates [2014-2015]*. Retrieved 2017, from: <http://www.fbi.gov/about-us/cjis/ucr/ucr>.
- Internal Revenue Code, Section 501(r).
- Internal Revenue Service. *Instructions for IRS form 990 Schedule H, 2015*.
- New York City Council Finance Division. *The City Council of the City of New York, Fiscal Year 2018 Adopted Expense Budget, Adjustment Summary / Schedule C [2017]*. Retrieved 2017, from <https://council.nyc.gov/budget/wp-content/uploads/sites/54/2017/03/FY-2018-Schedule-C-Cover-Template-FINAL-MERGE.pdf>.
- New York City Department of Health and Mental Hygiene. *Community Health Survey*. Retrieved 2017, from <https://a816-healthpsi.nyc.gov/epiquery/CHS/CHSXIndex.html>.
- New York City Department of Health and Mental Hygiene, Division of Family and Child Health. *Pregnancy Risk Assessment Monitoring System (PRAMS) [2014 data]*.
- New York City Department of Homeless Services. *HOPE 2013 NYC Street Survey and HOPE: The NYC Street Survey, 2017 Results*.
- New York City Housing Authority (NYCHA). *About NYCHA Fact Sheet [April 2017]*. Retrieved 2017, from: <https://www1.nyc.gov/assets/nycha/downloads/pdf/factsheet.pdf>.
- New York City Housing Authority (NYCHA). *Resident Data Book Summary [2017]*. Retrieved 2017, from <https://data.cityofnewyork.us/Housing-Development/NYCHA-Resident-Data-Book-Summary/5r5y-pvs3>.
- New York State, Bureau of Health Informatics, Division of Information and Statistics. *Vital Statistics Suicide Deaths by Age-Group, Race/Ethnicity, Resident County, Region and Gender: Beginning 2003*. Retrieved 2017, from <https://health.data.ny.gov/Health/Vital-Statistics-Suicide-Deaths-by-Age-Group-Race-/j6fz-a4ta/data>.
- New York State, Bureau of HIV/AIDS Epidemiology, AIDS Institute, and New York State Department of Public Health. *New York State HIV/AIDS Annual Surveillance Report, for Cases Diagnosed through December 2015*. Retrieved 2017 from [https://www.health.ny.gov/diseases/aids/general/statistics/annual/2015/2015\\_annual\\_surveillance\\_report.pdf](https://www.health.ny.gov/diseases/aids/general/statistics/annual/2015/2015_annual_surveillance_report.pdf).
- New York State, Department of the Budget. *New York State Budget [2017]*. Retrieved 2017, from: [http://openbudget.ny.gov/overview/overview\\_SpendGrowth.html](http://openbudget.ny.gov/overview/overview_SpendGrowth.html).

- New York State, Department of Health. *County Health Indicators by Race/Ethnicity (CHIRE)*. Retrieved 2017, from <https://www.health.ny.gov/statistics/community/minority/county/index.htm>.
- New York State, Department of Health. *Hospitals by Region/County and Service*. Retrieved 2017, from [https://profiles.health.ny.gov/hospital/county\\_or\\_region/region:new+york+metro++new+york+city](https://profiles.health.ny.gov/hospital/county_or_region/region:new+york+metro++new+york+city).
- New York State, Department of Health. *New York State County/ZIP Code Perinatal Data Profile - 2012-2014*. Retrieved 2017, from <https://www.health.ny.gov/statistics/chac/perinatal/county/2012-2014/index.htm>.
- New York State, Department of Health. *Prevention Agenda 2013-2018*. Retrieved from [https://webbi1.health.ny.gov/SASStoredProcess/guest?\\_program=/EBI/PHIG/apps/dashboard/pa\\_dashboard&p=st](https://webbi1.health.ny.gov/SASStoredProcess/guest?_program=/EBI/PHIG/apps/dashboard/pa_dashboard&p=st).
- New York State, Department of Health. *Statewide Planning and Research Cooperative System (SPARCS) Inpatient and Outpatient Data File [2016]*.
- New York State, Division of Criminal Justice Services and Kids' Well-being Indicators Clearinghouse. *Young Adult Crime Rates [2015]*. Retrieved 2017, from: [http://www.nyskwic.org/get\\_data/indicator\\_data.cfm](http://www.nyskwic.org/get_data/indicator_data.cfm).
- New York State, Office of Public Health Practice. *Community Health Obesity and Diabetes Related Indicators: 2008 - 2012*. Retrieved 2017, from <https://health.data.ny.gov/Health/Community-Health-Obesity-and-Diabetes-Related-Indi/tchg-ruva>.
- New York State, Public Health Information Group. *Community Health Indicator Reports (CHIRS): Latest Data*. Retrieved 2017, from <https://health.data.ny.gov/Health/Community-Health-Indicator-Reports-CHIRS-Latest-Da/54ci-sdfi/data>.
- NYC Health Department, the Department of Education and the National Centers for Disease Control and Prevention. NYC Youth Risk Behavior Survey (YRBS) [2015]. Retrieved 2017, from <https://nccd.cdc.gov/youthonline/app/Default.aspx>.
- SKDKnickerbocker. Mount Sinai Community Poll [Findings] (2017).
- The Mount Sinai Health System. 2016 Discharge Data.
- Truven Health Analytics. Population Estimates (2017) and Projections (2022).
- United Hospital Fund (UHF). Neighborhood definitions.
- U.S. Bureau of Labor Statistics. *Unemployment Rates [2012-2016]*. Retrieved 2017, from: <http://www.bls.gov/>.

- U.S. Census Bureau. *Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2016*. Retrieved 2017, from: <http://www.census.gov/>
- U.S. Census Bureau. *Demographic Data: ACS 5 Year Estimates [2015]*. Retrieved 2017, from: <http://www.census.gov/>.
- U.S. Department of Agriculture, Economic Research Service. *Food Access Research Atlas [2015]*. Retrieved 2017, from <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data/>.
- U.S. Department of Health & Human Services, Health Resources & Services Administration. Shortage Areas. Retrieved 2017, from <https://datawarehouse.hrsa.gov/data/datadownload.aspx>.
- U.S. Department of Housing and Urban Development. *Point-in-Time (PIT) estimates and national PIT estimates of homelessness [2007-2016]*. Retrieved 2017, from <https://www.hudexchange.info/resource/3031/pit-and-hic-data-since-2007/>.
- U.S. Department of Housing and Urban Development. *Subsidized Households [2016]*. Retrieved 2017, from: <https://www.huduser.gov/portal/datasets/assthsg.html>.
- University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation. *County Health Rankings: Mobilizing Action Toward Community Health [2013 and 2017]*. Retrieved 2017, from: <http://www.countyhealthrankings.org/>.

## APPENDIX - Actions Taken Since Previous CHNA<sup>19</sup>

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

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

### 1. Aging Population (Seniors and Skilled Nursing Facilities)

Mount Sinai does not operate nursing homes, but works with community partners to inform residents of options and ease transition to such facilities. Specific community service programs include ones listed below.

Navigation Services - As people age, they often need different kinds of care and a geriatric patient may require more referrals with increased interdisciplinary coordination. Navigating the health care system can be frustrating and exhausting for both the patient, and caregivers. The Mount Sinai Hospital provides a model for geriatric medicine that can change the way community members think about and experience aging.

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

The Brookdale Department of Geriatrics and Palliative Medicine supports many innovative programs for older adults, such as the following:

- Mobile Acute Care for the Elderly, which manages inpatient care and maintains close contact with a patient's other doctors;
- The Visiting Doctors Program, which brings high-quality medical care to the homes of patients with complex, serious illnesses;
- The Jewish Home and Hospital long-term care services through an affiliation the 1,300-bed teaching nursing home; and
- The Geriatric Research, Education and Clinical Center - James J. Peters VA Medical Center provides a range of geriatric and palliative care for veterans.

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<sup>19</sup> Source: Mount Sinai Health System

2. Access to Preventive and Primary Care and Health Insurance (Access to Care, Neurology, Cardiology, Orthopedics, Pediatrics, Emergency Services, Health Education, Programs)

The hospital 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 providing quality health care to its patients regardless of their ability to pay. Specific community service programs include the following:

May Center for Mount Sinai Doctors - Located on Manhattan's Upper East Side, the May Center for Mount Sinai Doctors offers local community residents an option for primary and specialty care. In addition to medical services, emotional support is also provided during times of need. The May Center provides a full range of services including primary care, pediatrics, dermatology, and geriatrics.

Mount Sinai Doctors 234 East 85th Street –Mount Sinai Doctors - East 85th Street is a multispecialty medical practice located in the Yorkville neighborhood of Manhattan's Upper East Side. Physicians and staff members work together in a highly collaborative environment to provide quality care to patients of all ages. Available services include primary care to children and adults, as well as, prenatal care and an array of other specialties.

Mount Sinai Doctors - Mount Sinai Doctors, which includes primary care physicians as well as specialists, is located in the new Mount Sinai Queens Ambulatory Pavilion at 25-20 30th Avenue in Astoria, adjacent to the Mount Sinai Queens hospital.

Additional practices include Steinway Medical Group and Mount Sinai Queens Family Health Associates in Astoria. Mount Sinai Doctors Jackson Heights has offices in Jackson Heights and Long Island City. Mount Sinai Medical Associates has offices in Forest Hills.

### 3. Access to Mental Health Care / Poor Mental Health Status

The hospital provides both inpatient and outpatient mental health services at its MSBI campus. Specific community service programs include the following:

Mount Sinai's Department of Psychiatry - The Department of Psychiatry and Behavioral Sciences at Mount Sinai Beth Israel provides comprehensive inpatient and outpatient services. Its training programs in psychiatry and psychology contribute substantially to the community's mental health resources. Treatment offerings are enhanced by research activity, which seeks to develop the next generation of therapies, from advanced device-based treatments to new psychotropic medications. Specific services include treatment for the following:

- Alzheimer's disease;
- Attention Deficit Hyperactivity Disorder (ADHD);
- Autism Spectrum disorders;
- Eating disorders;
- Mood disorders (such as depression and bipolar disorder);
- Obsessive-Compulsive Disorder (OCD);
- Personality and Impulse Control disorders;
- Post-Traumatic Stress Disorder (PTSD);
- Schizophrenia;
- Substance abuse; and
- Tourette's Disorder.

#### 4. Substance abuse

The Addiction Institute at Mount Sinai provides inpatient treatment is often the beginning of the recovery process for many patients. Inpatient treatment is designed to help an individual develop the basic skills that they will need to achieve a successful recovery from addiction. Inpatient programs are offered at two Addiction Institute at Mount Sinai (AIMS) inpatient locations, Mount Sinai West and Mount Sinai Beth Israel. Specific community services include ones listed below.

Evaluation - At the Addiction Institute at Mount Sinai, treatment begins with a sensitive consultation and comprehensive assessment. Assessments and clinical decisions are made by a team of physicians, physician assistants, nurses, psychologists, and substance abuse counselors. Specific evaluation services include the following:

- Triage and monitoring for withdrawal, medical, and psychiatric problems;
- History and physical examination;
- Diagnostic lab tests and urine toxicology;
- Biopsychosocial assessment using;;
- Addiction Severity Index (ASI);
- Brief Symptom Inventory (BSI);
- ASAM Placement Criteria (APC);
- Family evaluation;
- Psychiatric evaluation;
- Development of initial treatment plan;
- Feedback session with patient and/or family;
- Telephone and/or written report to referral source; and
- Insurance analysis and pre-certification

Detoxification (Detox) Services at the Addiction Institute at Mount Sinai are treatments for acute withdrawal require immediate attention. Treatment includes engagement, assessment, motivation, and referral. Detox is the first step to long-term treatment. Specialized detox services to pregnant women are provided.

Inpatient rehabilitation (inpatient rehab), an intensive treatment modality that provides patients with a 24/7 structured therapeutic setting, is provided. Inpatient rehab is generally the first step in the recovery process after detox. Patients participating in the inpatient program are put on a routine that includes teaching them how to experience life without drugs or alcohol.

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

5. Chronic Diseases and Contributing Lifestyle Factors (Diabetes, Asthma, Obesity, Hypertension, Pulmonary/Respiratory, Asthma Treatment, HIV/AIDS, Kidney Disease)

The Mount Sinai 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 provides diabetes-related specialty care with endocrinology specialists and community education programs. The hospital also maintains close affiliation with the Mount Sinai Diabetes Institute, which maintains a team of doctors, nurses, and certified diabetes educators who are dedicated to providing comprehensive and integrated care. Specific community service programs include ones listed below.

The Mount Sinai Clinical Diabetes Institute provides highly specialized care for people with diabetes and related conditions. The Institute's network includes diabetes physicians, clinical diabetes educators, and allied specialists. The Institute works to prevent and manage diabetes, as well as complications from diabetes. Specific programs include the one below.

- Self-management classes provided by the Clinical Diabetes Institute includes free diabetes education classes for both type 1 and type 2 diabetes. Multicultural and multilingual certified diabetes instructors teach the classes. The curriculum helps individuals learn how to control diabetes and prevent complications. The type 1 class reviews carbohydrate counting, insulin dosing, insulin to carbohydrate ratios, correction factors, dosing basal/long acting insulin, effects of exercise on blood sugars, and many other topics. The type 2 diabetes classes review a variety of topics including hypoglycemic protocol, general healthy eating, stress and relaxation tips, and medications/insulins used for glycemic control.
- Nutrition Counseling is provided. The Institute's registered dietician teaches diabetes self-management and provides medical nutrition therapy. Dietary recommendations are based on the latest guidelines and tailored to other medical conditions, cultural food preferences, and personal circumstances.
- In-Office Hemoglobin A1C Testing provides an estimate of an individual's average blood sugar level over the last three months. Using novel technology, the A1C level is provided within six minutes from a drop of blood.
- Insulin Pump Therapy management allows for particular fine-tuning of an individual treatment regimen and eliminates the need for insulin injections.
- Continuous Glucose Monitoring (CGM) uses under-the-skin sensors to measure glucose levels continuously, 24 hours a day. CGM information about how medication, food, and exercise are affecting your blood glucose levels, which allows for adjustments in the treatment regime.
- Diabetes Prevention Program/Viva Fitness is a program with the YMCA of Greater New York that is targeted to adults who are at risk for diabetes or who have a diagnosis of prediabetes. This program is designed to reduce the risk for type 2 diabetes through education and motivation.
- The High-Risk Ob/Gyn Program provides diabetes education to pregnant women with diabetes is provided by obstetrics/gynecology departments throughout the Mount Sinai Health System.



The Jack Martin Fund Clinic on the Upper East Side, provides primary outpatient and inpatient treatment for adults and children with infectious diseases. It is a New York State Department of Health Designated AIDS Center. Specific services include the following:

- Medical, mental health, social services and case management;
- Tuberculosis screening and treatment;
- Psychological assessment and counseling
- Pre- and post-test HIV counseling;
- AIDS prevention education and risk reduction;
- Access to clinical drug trials;
- Immediate access to a nurse, by phone, during regular clinic hours;
- Urgent Care Program for ill patients who do not require hospitalization;
- Routine gynecological care for HIV-positive women.
- Support groups
- Adherence program
- Sub-specialty care, including dermatology, hepatitis C co-infection, neurology/neuropsychology, nephrology, ophthalmology, pediatrics, and psychiatry;
- Psychiatric services; and
- Support groups, including HIV basics, legal aid, nutrition, safer sex, entitlements, stress management, parenting, HIV and pregnancy, and adherence.

Mount Sinai Renal Services provides treatment of kidney diseases and is one of largest, most comprehensive kidney disease treatment, research, and education centers in the world. The Division of Nephrology at Mount Sinai provides comprehensive evaluation and treatment programs for all types of adult and pediatric kidney diseases and disorders.

The Mount Sinai Health System offers services from a nationally recognized pulmonology programs. At the Mount Sinai–National Jewish Respiratory Institute, an affiliation with National Jewish Health, pulmonologists use a multidisciplinary approach with specialists in areas such as cardiology, allergy, gastroenterology, rheumatology, ear, nose, and throat, and thoracic surgery. These services are integrated with Mount Sinai’s programs in personalized medicine, genomics, and research are included to enhance quality and outcomes.

The sleep center provides services in-house diagnostic facility as well as a home sleep-program to diagnose and treat sleeping disorders. Access to emerging treatments is available from research activities with the Icahn School of Medicine at Mount Sinai.

The Mount Sinai Queens pulmonology team specializes in treating a range of diseases and conditions that affect the lungs and respiratory tract such as chronic obstructive pulmonary disease (COPD), asthma and lung cancer. Board certified pulmonologists, critical care physicians and surgeons, are available to treat emergent cases 24 hours a day, seven days a week.