

New York City Health Provider Partnership Queens Community Needs Assessment

Final Draft November 14, 2014

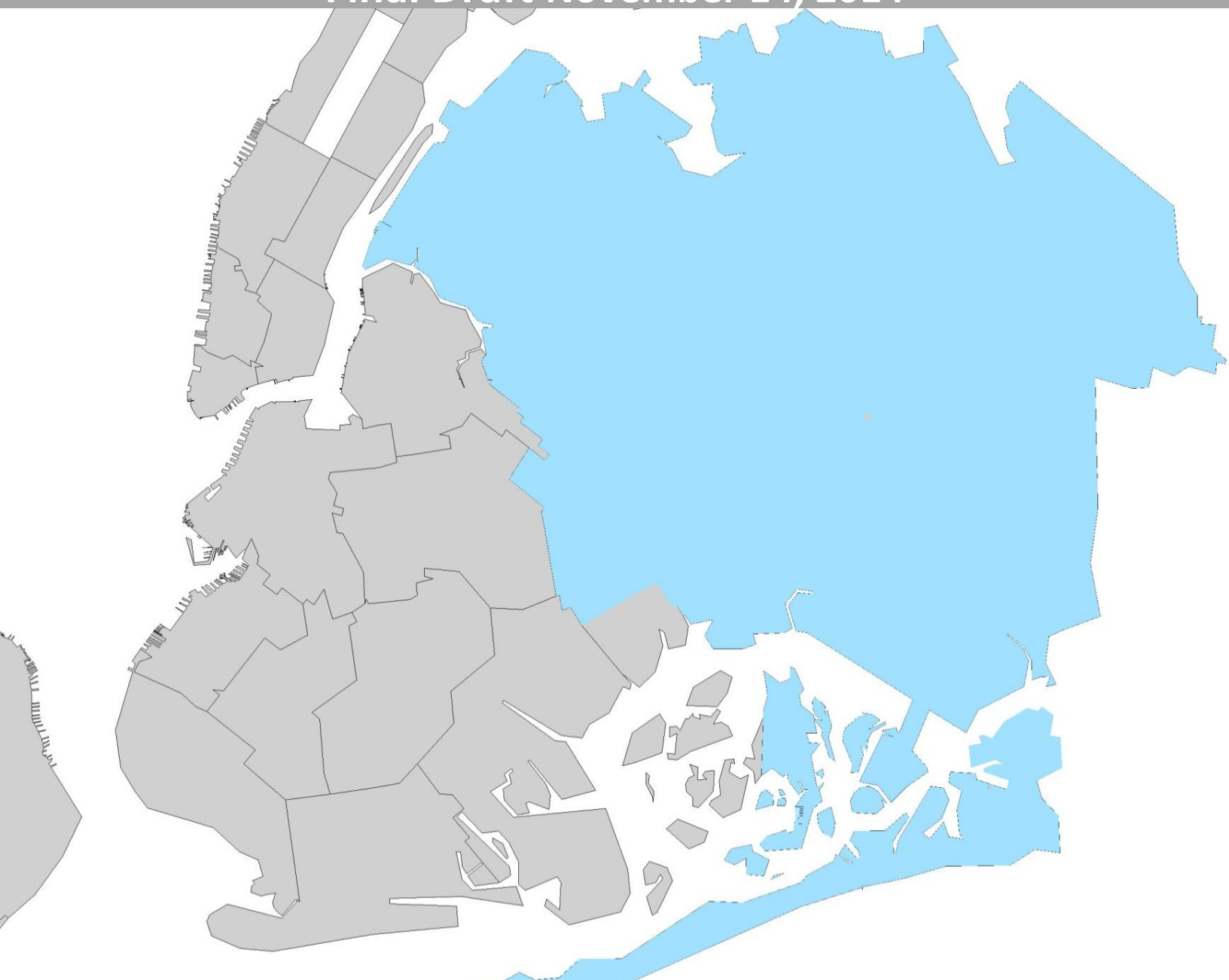


TABLE OF CONTENTS

Overview	1
Introduction	6
Background	6
Section A. Description of Health Care Resources and Community Resources	8
Section i. Description of Health Care Resources.....	8
Section ii. Description of Community Based Resources	19
Section iii Domain 2 Metrics	30
Section B. Description of the Community to be Served	31
Section i: Demographics of the Medicaid and Uninsured Populations in Queens	31
Section ii: Health Status	52
ASTHMA/RESPIRATORY CONDITIONS.....	67
MENTAL HEALTH	70
DIABETES	82
CARDIOVASCULAR DISEASE/HEART HEALTH/STROKE	86
HIV/AIDS and STDs	89
CANCER	92
PAIN MANAGEMENT AND PALLIATIVE CARE	93
MATERNAL/CHILD HEALTH	94
OVERWEIGHT/OBESITY/HEALTHYEATING/EXERCISE	96
TOBACCO USE/CESSATION.....	97
DRUG OVERDOSES	98
Section iii: Domain 3 and 4 Metrics	102
Domain 3 Metrics: Clinical Improvement	102
Section C: Identification of the Main Health and Health Services Challenges.....	110
SECTION D: SUMMARY OF THE ASSETS AND RESOURCES THAT CAN BE MOBILIZED	117
Section F: Documentation of the Process and Methods	119
Methods: Primary Data	119
Partnering with Community-based Organizations	121
Methods: Secondary Data	121
Appendices.....	128
Bibliography	129

OVERVIEW

The goal of the Delivery System Reform Incentive Payment (DSRIP) program is to promote community-level collaborations and health system reform to reduce avoidable inpatient admissions and emergency room visits by 25% over five years for the Medicaid and uninsured populations in New York State. To inform the DSRIP project planning process, the Performing Provider Systems (PPS) is required to complete a Community Needs Assessment (CNA) to identify critical health priorities in local communities, and to identify both resources and existing gaps in care to implement interventions that achieve meaningful health system transformation.

The specific aims of the CNA process are to:

- Describe health care provider and community resources,
- Describe communities served by the Queens PPS,
- Identify the main health and health service challenges facing the community, and
- Summarize the assets, resources and needs for the DSRIP projects.

This CNA was sponsored by the following: Elmhurst Hospital Center and Queens Hospital Center, PPS providers in the Queens hub of the New York City Health and Hospitals Corporation (HHC) PPS, and Jamaica Hospital Medical Center and Flushing Hospital Medical Center of the Medisys Health Network (Medisys) PPS.

HHC and Medisys contracted with the New York Academy of Medicine (NYAM) to collaborate and collectively conduct the primary data collection and analysis, which consisted of focus groups, key informant interviews and community surveys. HHC's Corporate Planning Services performed a comprehensive secondary data analysis using numerous unique data sources related to demographics, socioeconomic characteristics, health outcomes and health care utilization in the borough.

While this assessment is for the borough of Queens, this report focuses on the Queens Service Area, the contiguous area that contains the largest concentrations of HHC and Medisys patients in Queens who are beneficiaries of Medicaid and other low income medical supports and the uninsured. The Rockaways meet "hot spot" criteria, yet residents do not use PPS clinical services in a significant way. Several ZIP Codes at the eastern border of the borough have relatively low numbers of uninsured or Medicaid-covered lives, better health outcomes and with more consistent utilization of health care services in neighboring Nassau County. These areas were therefore not included in the Queens PPS service area. Using this same logic, two Brooklyn ZIP Codes at the eastern-most portion of the borough in East New York, 11207 and 11208, are included in the Queens Service Area based on residents' travel patterns to Queens providers for care as well as the high level of need in these communities. For a complete list of neighborhoods and ZIP Codes that are included in the Queens Service Area, see Appendix A., Map 1, UHF Neighborhood Map by ZIP Code.

Methods

To ensure that the perspective of community members and stakeholders were incorporated into the reported findings, and to respond to specific questions that could not be sufficiently addressed through secondary source data alone, NYAM collected and analyzed primary data, including 22 key informant interviews (involving 28 individuals), 18 focus groups with community members and other stakeholders, and approximately 600 community surveys (Appendix D).¹

NYAM designed the primary data protocol in collaboration with the Queens sponsors using standard research methods consistent with New York State Department of Health DSRIP CNA guidance. Key informant interviews, focus groups, and survey questions focused on community conditions conducive to health promotion, primary health concerns, available programming and services, disparities in access and use, and recommendations regarding strategies to promote improved health. The data were collected, with IRB approval, in partnership with numerous community organizations that were identified in collaboration with PPS representatives and that represented a range of targeted neighborhoods and populations, such as older adults, immigrant populations, and people with disabilities. NYAM also used street outreach for survey administration, focusing on neighborhoods identified as having large numbers of Medicaid and/or uninsured populations. The data collection materials were translated into ten languages. The data were analyzed using standard qualitative and quantitative analytic methods. Common themes are highlighted throughout the report. HHC's Office of Corporate Planning Services conducted a review of secondary source data, including an analysis of more than 70 data sets, and a review of the literature, including existing hospital community health needs assessments and community reports (Section F).²

Summary of Findings

The borough of Queens is the second most populous borough in New York City and is considered one of "the most diverse places on Earth."³ If each borough were an independent city, Queens would be the nation's fourth most populous city, following Los Angeles, Chicago and Brooklyn.

Queens has 2.3 million residents that reflect a myriad of cultures and backgrounds--48% are foreign born and 56% speak languages other than English at home, including but not limited to Spanish, numerous Chinese and Southeast Asian dialects, Korean, Greek, Tagalog, Polish and Russian. The highest proportion of non-White residents identify as Hispanic (28%) and Asian (25%). There are also significant numbers of recent immigrants from Eastern European countries, including Poland, Latvia, the Ukraine and Russia.⁴

¹ NYAM collected primary data from July-September, 2014. See Appendix D.

² See Section F: Documentation of the Process and Methods of this report for a detailed list of data sets, and the Bibliography for a list of CHNAs and other reports reviewed.

³ *From Africa to Astoria by Way of Everywhere*, National Geographic, August 17, 2009.

⁴ 2013 U.S. Census, Queens County QuickFacts, accessed September 9, 2014.

While Queens may not demonstrate some of the clear-cut socioeconomic and health disparities evident in other city boroughs, its vast racial and ethnic diversity and high concentrations of recent immigrants in smaller, concentrated neighborhoods within the borough pose difficult challenges to health care access and to attaining positive health outcomes. There are vast cultural and linguistic barriers as well as legal issues relating to immigration status that preclude easy access to health care services. Many recently arrived residents are unfamiliar with the health care service delivery system—American concepts of health insurance, co-pays, covered benefits and scheduled appointments for routine care are alien to many people who may have had minimal contact with formal health care systems.

The geography of Queens often isolates communities within the borough. Queens is the city's largest borough geographically, incorporating 112 square miles of both densely populated urban neighborhoods in the west to more expansive, suburban-style areas in the east. Its subway system runs primarily east/west across the northern part of the borough and only as far east as Jamaica. For users of public transportation not in the subway corridors, there is a network of buses. While the Queens PPS hospitals are located along subway lines, residents face challenges trying to access more local, community-based providers that lie geographically north, south or east of the subway corridor.

People who rely on safety net providers for health care are typically eligible for Medicaid or are uninsured. Forty-one percent of Queens residents, or 916,000 individuals, are covered by Medicaid, and the borough's uninsured rate (18%, or 393,995) far exceeds the city's overall rate of 14%. More striking is the fact that 72% of the uninsured are foreign born, and 47% have Limited English proficiency (LEP), adding to barriers faced when attempting to access health care services. It is not clear if the extent of the uninsured rate is due to a lack of proper documentation to qualify for publicly funded health insurance, a lack of understanding of available benefits, or a combination of both. The fact remains that there are specific communities where, despite high numbers of residents whose incomes would qualify them for Medicaid⁵ or subsidized coverage available through the NYS Health Exchange, the uninsured rate remains high.

Overall, Queens residents are not glaringly more unhealthy than city boroughs overall. Nevertheless, many neighborhoods included in the Queens PPS Service Area have chronic disease prevalences (e.g., diabetes, cardiovascular disease, respiratory diseases including asthma/COPD, cancer, and high rates of obesity⁶) as well as utilization rates of Emergency Department and Inpatient services similar to other medically underserved communities in the city. Medicaid beneficiaries who account for the largest proportion of preventable admissions are concentrated in the areas of West Queens, Jamaica, and East New York, although pockets of health disparities exist at sub-ZIP Code levels in other neighborhoods throughout the borough.⁷ These areas also account for the highest proportion of potentially preventable

⁵ 30% of Queens residents have incomes at or below 200% of the Federal Poverty Level (2010 U.S. Census)

⁶ RWJ County Health Rankings, 2014, available at http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2014_NY_v2.pdf, accessed September 2014.

⁷ HHC data analysis is at the ZIP Code level, the smallest boundary level for which data is available. The neighborhood names cited are United Hospital Fund (UHF) neighborhood designations, commonly used by the

emergency room visits (PPV), with rates 10-50% higher than in Queens overall. These areas in the borough consistently have higher rates of household poverty, unemployment, and low levels of education insurance.

Health utilization statistics point to several UHF neighborhoods in Queens where there are disproportionately high rates of chronic illness that are considered ambulatory care sensitive (ACS) conditions--that is, responsive to treatment in a primary care setting that emphasizes self-management and control of environmental and lifestyle factors that contribute to these conditions. Jamaica, Southeast Queens, the Rockaways and East New York generally have higher rates of utilization related to Respiratory, Cardiovascular, Diabetes and Behavioral Health Clinical Risk Group diagnoses than in the rest of the borough or the city overall, which supports the need for DSRIP Domain 3 interventions aimed at clinical improvement in these areas.

Moreover, residents in targeted Queens communities exhibit higher rates of population risk factors that contribute to poor health. These risk factors include smoking, poor diet and lack of exercise, overweight/obesity, and alcohol and substance use.

Implications for Project Selections

Domain 2 System Transformation Projects

As shown in Section B of this report, while Queens on average has a relatively low rate of potentially preventable inpatient admissions, emergency room visits, and potentially preventable readmissions for physical chronic conditions, community level disparities suggest that the inpatient, outpatient, behavioral health and social services delivery systems can reduce the rates of preventable service utilization and poor health outcomes by implementing targeted DSRIP Domain 2 system transformation projects that improve care coordination and communication across provider systems.

There is a particular need to reduce admissions and readmissions for behavioral health conditions in the Queens Service Area. Given the co-morbidities prevalent among people with a behavioral health diagnosis, efforts must be undertaken to integrate physical and behavioral health care systems in primary care and hospital-based settings to improve follow-up after discharge and reduce readmission rates for behavioral health conditions.

The high rate of uninsured and foreign born supports the need for projects that connect individuals with the established health care community. An enhanced health home model could improve the patient experience by engaging people in more-regular preventive health care to improve health outcomes and lower hospital-based healthcare expenditures.

Domain 3 Clinical Improvement Projects

As shown in Section B, Queens as a whole has lower rates than the city overall for prevalence, admissions, and emergency visits among Medicaid beneficiaries with cardiovascular disease, asthma, mental health, and substance abuse. However, the substantial variation within neighborhoods supports the need for interventions that address these chronic conditions targeted by DSRIP.

Offering palliative care services is critical to meeting the clinical standards for the treatment of populations with one or more chronic conditions, while operating with a patient-centered strategic focus. Considering that our PPS's local population is aging (highly correlated with an increase in prevalence of chronic conditions) and there currently is a high prevalence of one or more chronic conditions in our PPS's service area, there is substantial opportunity for both cost savings, via the reduction of hospital-based utilization, and for clinical improvement.

Domain 4 Population Health Projects

Domain 4 projects are intended to promote population health and reduce health risks. A review of the population health needs and resources have led us to prioritize improving the mental health and substance abuse infrastructure, and HIV care. As shown in Section B, a high proportion of Queens residents reported moderate to severe psychological distress, binge or heavy alcohol drinking, and smoking. Queens overall has lower incidence and diagnosis rates of HIV, Chlamydia and Gonorrhea as compared to New York City as a whole, however disparities within communities show hot spots with high prevalence of HIV and STDs.

INTRODUCTION

Background

In April 2014, New York State finalized a waiver amendment from the Centers for Medicaid and Medicare Services that allows for reinvestment of approximately \$8 billion in projected savings resulting from the State's Medicaid Redesign Team reforms. These funds will be used to support transformation of the health care system in New York State to promote clinical and population health. The majority of the funds will be distributed through a Delivery System Reform Incentive Payment (DSRIP) program. A central part of DSRIP is the formation of Performing Provider Systems (PPS)--collaborative partnerships between hospitals, community-based organizations, and other health care providers across the full spectrum of care. The goal of DSRIP is to advance innovative projects designed to transform the safety net health care delivery system, improve population health and reduce avoidable hospitalizations.

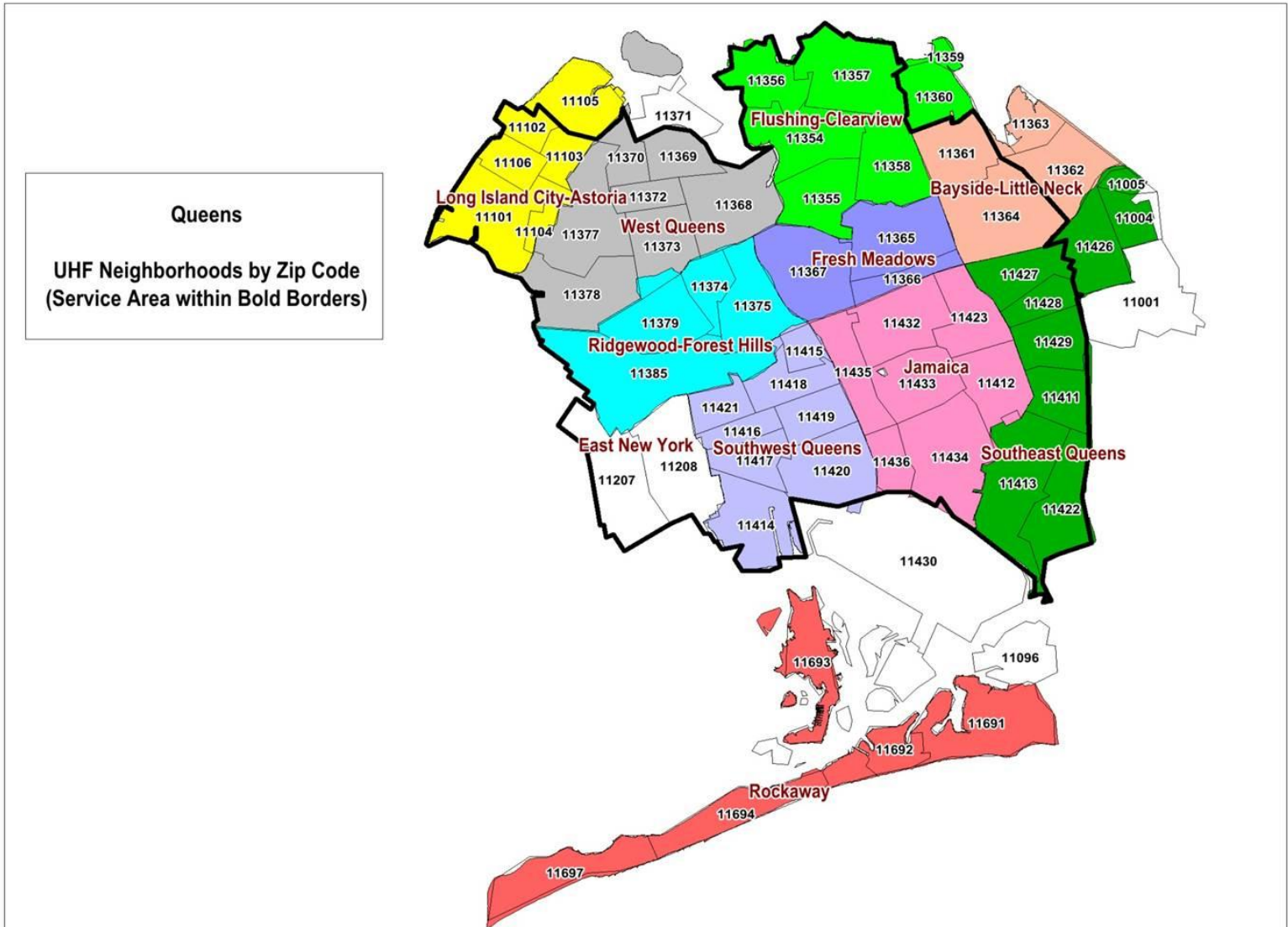
To inform the DSRIP project planning process, a PPS is required to complete a Community Needs Assessment (CNA). The New York City Health and Hospitals Corporation (HHC) and Medisys Health Network (Medisys) contracted with New York Academy of Medicine (NYAM) to collaborate and collectively conduct a CNA in Queens. The CNA is governed and monitored by a Steering Committee consisting of representatives from each of the following: Elmhurst Hospital Center, Queens Hospital Center and Jamaica Hospital Medical Center and Flushing Hospital Medical Center.

The specific aims of the CNA process are to:

- Describe health care and community resources,
- Describe communities served by the PPSs,
- Identify the main health and health service challenges facing the community, and
- Summarize the assets, resources and needs for the DSRIP projects.

This report follows the New York State Department of Health (NYSDOH) CNA Guidance dated June 6, 2014, and the section headers A-F, therein, and all SDOH webinars and presentations that followed. Also attached here are appendices including Appendix A. Maps of Queens, Appendix B. Tables, Charts and Graphs, and Appendix C. Primary Data Collection Instruments and Appendix D, Primary Data Collection Findings. In addition to these appendices, HHC will provide an electronic version of the tables with ZIP Code (or UHF neighborhood, or Community District) level data, as available.

Map 1: Queens Neighborhoods and Queens Service Area



SECTION A. DESCRIPTION OF HEALTH CARE RESOURCES AND COMMUNITY RESOURCES

Section i. Description of Health Care Resources

In Queens, a large proportion of community members that were surveyed appear to be engaged regularly in primary and preventive care (Appendix C, Primary Data). Nearly 77% of survey respondents reported having a primary care provider or personal doctor, and 77% reported that there's a place they usually go to for health care, when it is not an emergency. Of those that reported having a place they usually go for health care, 64% received primary care at a doctor's office, 7% went to a hospital outpatient clinic, 4% went to a community/family health center, and 12% went to a specialist physician office. Eighty-seven percent of respondents reported that they typically receive care within Queens, while nearly 7% reported that they receive care in Manhattan. Within the last year, 76% of respondents reported having a routine check-up and 58% had seen a dentist. More than one-quarter of respondents (27.5%) reported they had visited the hospital emergency room at least once in the past year.⁸

Access to health care continues to be a factor for a large percent of the Queens population. Nearly one quarter (24%) of the respondents reported that there was a time in the last 12 months when they needed, "health care or health services but did not get it." The most common reasons were lack of insurance (41%), "couldn't get an appointment soon or at the right time" (17%), cost of co-pays (13%), conflicting or competing responsibilities, such as work, family (8%), and concerns about language and translation issues (6.5%).⁹

Hospitals

Within the Queens Service Area there are two HHC and five voluntary nonprofit, general acute care hospitals (Table 1). Combined, these seven hospitals have 2,522 certified beds and an occupancy rate of 82%. HHC facilities account for 792 of these certified beds, with an average occupancy rate of 86%. The safety net payer mix for these hospitals (proportion of Medicaid beneficiaries and uninsured discharges to total discharges) range from 30% and 32% of discharges at Forest Hills and New York Hospital Queens, respectively, to 66% and 67% at HHC's Elmhurst and Queens Hospitals, respectively.¹⁰

Also located in Queens but outside of the PPS Queens Service Area are two additional voluntary hospitals, St. John's Episcopal and Long Island Jewish Medical Center. Four other general acute care hospitals in Queens closed over the past decade (Peninsula Hospital, Mary Immaculate and St John's Hospital, Parkway Hospital, and St. Joseph's Hospital), which has reduced not only the number of inpatient beds in the borough but affiliated outpatient and ancillary services.

⁸ Survey data collected and analyzed by NYAM, Sept., 2014.

⁹ Ibid.

¹⁰ Hospital Institutional Cost Report, 2012.

Table 1 - Queens Hospitals

Hospital Name	Hospital Type	Certified Beds	Occupancy Rate	Safety Net Payer Mix
Elmhurst Hospital	HHC	545	84%	66%
Queens Hospital	HHC	247	90%	67%
Flushing Hospital	Voluntary	293	84%	53%
Jamaica Hospital	Voluntary	424	75%	53%
Mt. Sinai Queens	Voluntary	192	82%	31%
Forest Hills Hospital	Voluntary	302	63%	30%
NY Hospital Queens	Voluntary	519	92%	32%
St. John's Episcopal	Voluntary	224	93%	49%
L.I. Jewish	Voluntary	983	80%	33%

Source: Hospital Institutional Cost Reports, 2012

Ambulatory Surgical Centers

There are eight DSRIP-defined safety net sites in the Queens Service Area.¹¹

Urgent Care Centers and Retail Clinics

With the proliferation in New York City of urgent care centers and retail clinics, including those in pharmacies, the state of New York in January 2014 noted, "the shift to ambulatory care is giving rise to new delivery structures, such as retail clinics and urgent care centers."¹² The council made recommendations regarding both retail clinics and urgent care, which it defined as, "for the treatment of acute episodic illness or minor traumas."

Because there is no state standardized definition or regulation of "urgent care centers," a definitive count is difficult to complete. A review of HITE SITE database and a web-based search identified nine urgent care centers in Queens. Because the centers target insured patients, urgent care centers tend to be concentrated in higher-income communities.¹³

Health Homes

There are three New York State Department of Health-designated health homes in Queens that provide care management and service integration to Medicaid beneficiaries with complex chronic medical and

¹¹ DSRIP defines non-hospital based safety net providers that are not participating as part of a state-designated health home as having at least 35% of all patient volume in their primary lines of business and associated with Medicaid, uninsured and Dual Eligible individuals.

¹² NYS Public Health and Planning Council: Oversight of Ambulatory Care Services, accessed September 15, 2014, http://www.health.ny.gov/facilities/public_health_and_health_planning_council/meetings/2014-01-07/docs/ambulatory_care_services_recommendations.pdf

¹³ Greater New York Hospital Foundation Health Information Tool for Empowerment (HITE), as of August 2014.

behavioral health conditions. They are affiliated with North Shore-Long Island Jewish, Queens Coordinated Care Partners, and HHC.

Federal Designation as an Underserved Area

The federal Health Resources and Services Administration (HRSA) has two types of designations to identify an area as being an underserved area or having a shortage of providers, Medically Underserved Area (MUA) and Healthcare Provider Shortage Area (HPSA).

A MUA designation applied to a neighborhood or collection of census tracts is based on four factors: the ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over.

A HPSA is a collection of census tracts that has been designated as having a shortage of health professionals. There are three categories of HPSAs: primary care (shortage of primary care clinicians), dental (shortage of oral health professionals), and mental health (shortage of mental health professionals). HPSAs are designated using several criteria, including population-to-clinician ratios. This ratio is usually 3,500 to 1 for primary care, 5,000 to 1 for dental health care, and 30,000 to 1 for mental health care (HRSA).

According to a report prepared for HHC by the Center for Health Workforce Studies, November 2013, New York City has 51 neighborhoods with the MUA designation with a combined population of 3.1 million. Queens has seven MUA neighborhoods with a combined population of less than 100,000. These neighborhoods are in Elmhurst, Jamaica, Long Island City, and Rockaway. Queens also has four Primary Care HPSA designated neighborhoods (Rockaway, Elmhurst, Long Island City, and South Jamaica, one Mental Health HPSA (Long Island City/Woodside). There is no Dental HPSA in Queens.

Primary Care Providers

Institutional Primary Care Providers, including FQHCs

There are three main types of institutional providers (“clinics”) offering primary care: hospital-based extension clinics, Federally Qualified Health Centers (FQHCs), and comprehensive care Diagnostic and Treatment Centers (D&TCs). In the Queens Service Area there are 109 total clinics: 30 D&TCs including extension sites, 12 FQHCs including extension sites (FQHCs offer sliding fee discounts to individuals based on income, with no or nominal fee to individuals with incomes below 100% of the federal poverty level), and 67 hospital-based clinics (including extension sites).

The number of clinics per neighborhood ranges from one in Bayside-Little Neck, to 20 in East New York, and 32 in Jamaica. Sixteen of the 49 zip codes in the Queens SA have no clinics, including one of two ZIP Codes in Bayside-Little Neck (11364), one of seven 7 ZIP Codes in Jamaica (11412), two of the five ZIP Codes in Flushing-Clearview (11357, 11358), four of six 6 ZIP Codes in Southeast Queens (11411, 11422, 11427, 11428), three of nine ZIP Codes in Southwest Queens (11419, 11420, 11421), and three of seven ZIP Codes in West Queens (11369, 11370, 11378).

In proportion to the number of Medicaid beneficiaries and uninsured residents, of the 10 neighborhoods in the Queens SA, the three with the lowest ratio of clinics to residents, in order are: West Queens, Bayside-Little Neck, and Flushing-Clearview. The top three neighborhoods are East New York, Jamaica, and Fresh Meadows (table 2).

Table 2: Queens Service Area Clinics (includes FQHCs, D&TCs, Hospital Based, and their Extension Sites), Medicaid Beneficiaries, and Uninsured Populations by Neighborhood

	Clinics	Medicaid Beneficiaries	Uninsured	Medicaid + Uninsured	Clinics to Medicaid + Uninsured
West Queens	13	229,864	122,803	352,667	10.6
Bayside-Little Neck	1	15,741	7,311	23,052	13.7
Flushing-Clearview	7	114,149	48,068	162,217	14.6
Southwest Queens	7	118,100	46,120	164,220	15.2
Southeast Queens	3	50,703	19,418	70,121	15.4
Ridgewood-Forest Hills	9	76,645	35,403	112,048	25.4
Long Island City-Astoria	11	62,149	30,486	92,635	36.1
Fresh Meadows	6	34,868	11,065	45,933	54.2
Jamaica	32	134,200	44,132	178,332	72.5
East New York	20	117,543	26,339	143,882	75.9
Queens Service Area	109	953,962	391,145	1,345,107	27.9

Source: NYS Department of Health, 2012

Primary Care private providers

An analysis of Medicaid claims data by the Center for Health Workforce Studies has identified 2,315 primary care physicians in the Queens Service Area, of which 26% are pediatricians, 12% Obstetricians/gynecologists, and 62% other categories of primary care physicians (such as family practice and internal medicine).¹⁴

Among pediatric physicians, roughly half (54%) have a significant Medicaid panels (at least 30% of patients) and 26% have a significant uninsured panel (at least 10%). Among other PCPs (excluding OB/GYN), 33% have a significant Medicaid panel and 27% have a significant uninsured panel.¹⁵

The number of pediatricians serving Medicaid beneficiaries below age 17 vary by neighborhood, with East New York and Southeast Queens having fewer than 35 pediatricians per 100,000 Medicaid beneficiaries under age 17. The greatest proportion of pediatricians to pediatric population is in Flushing-Clearview, followed by Ridgewood-Forest Hills and Southwest Queens, which all have in excess of 112 Medicaid pediatricians per Medicaid beneficiaries under age 17, a factor of 3.3 greater than the lowest Queens SA neighborhood. The proportion of Significant Medicaid Other PCPs to total Medicaid beneficiaries is the lowest in East New York with 25 Medicaid Other PCPs per 100,000 Medicaid

¹⁴ Physician Data: Center for Health Workforce Studies, Analysis of Physician Re-registration Data, 2009-2012.

¹⁵ Ibid. Note that these two categories, significant Medicaid and significant uninsured, are not mutually exclusive.

beneficiaries, and the highest in West Queens, Flushing-Clearview, and Jamaica, which all have in excess of 50 Medicaid Other PCPs per 100,000 Medicaid beneficiaries, a factor more than 2 times greater than East New York.

Physician Extenders

In the Queens Service Area, there were 47 DSRIP-defined safety net Nurse Practitioners and Physician Assistants and 16 certified Nurse Midwives who served a minimum of 35% uninsured and Medicaid beneficiaries.¹⁶

Specialty Medical Providers

The number of specialty physicians by borough is as follows (table 3):

Table 3: Specialty Physicians by Borough

	Bronx	Brooklyn	Manhattan	Queens
Cardio Pulmonary	326	493	1044	361
Endocrine / Diabetes	70	71	223	56
Ear, Nose, Throat	57	67	190	73
Eye	110	196	531	206
Infectious Disease	95	74	199	49
Nephrology	102	112	204	67
Oncology	103	120	325	103

Source and notes: New York State Dept. of Health Provider Network Data System (PNDS). 2014. Specialty physicians are defined as having a Specialist designation, Provider Type of MD or DO, and is based on primary specialty. Specialty and service code are as follows: Cardiopulmonary (62, 928, 68, 929, 151, 940, 157, 942, 243, 650, 651, 652, 653, 925 and 927); Endocrine/Diabetes (63, 516, 902, 156, 903, 944, 961); Ear Nose and Throat (120, 121, 935); Eye (100, 958, 101, 919); Infectious Disease (66, 966186, 980, 249, 308, 303, 430-432); Nephrology (67, 954, 154, 941); Oncology (241, 242, 244, 245, 933, 934).

In addition, Queens has a variety of non-MD (or non-DO) specialty providers:

Table 4: Medical Specialists by Borough

	Bronx	Brooklyn	Manhattan	Queens
Acupuncturist	4	16	36	24
Audiologist	23	46	71	26
Chiropractor	59	101	104	121
Occupational Therapist	51	114	67	43
Physical Therapist	370	539	231	306
Speech-Language Pathologist	25	142	100	49
Optometrist	100	215	325	214
Durable Medical Equipment Supplier	36	117	59	67

¹⁶ New York State Dept. of Health website, accessed Sept. 2014.

	Bronx	Brooklyn	Manhattan	Queens
Hospital and Clinic Based Labs	14	20	47	10

Source and notes: New York State Dept. of Health Provider Network Data System (PNDS). 2014. Based on Provider Type codes. Duplicates within were deleted only if within same specialty. Hospital and Clinic Based Laboratories NYSDOH HCRA providers, as of 9/01/2014. <http://www.health.ny.gov/regulations/hcra/provider.htm>

Dental Providers

There are 195 DSRIP defined safety net dentists serving the 953,000 Medicaid beneficiaries in the Queens Service Area. East New York has 6 dentists per 100,000 beneficiaries while West Queens and Long Island City-Astoria each have 30 dentists per 100,000 beneficiaries. There is at least one DSRIP defined safety net dentist in 40 of the 49 Queens Service Area ZIP Codes.¹⁷

Rehabilitative services, including physical therapy, occupational therapy, speech therapy and inpatient rehabilitation

In the Queens Service Area, there are approximately 26 physical therapy/rehabilitative service providers, 17 of which focus on caring for seniors and six who focus on people with development disabilities.¹⁸

Behavioral Health Services: Mental Health

Psychiatrists

The Queens Service Area has 336 psychiatrists, of which 46% have a patient panel consisting of at least 10% uninsured and 56% have a panel of at least 30% Medicaid (categories are not mutually exclusive) serving 28,300 Queens Service Area Medicaid beneficiaries diagnosed with a mental disease and disorder.¹⁹ The proportion of high Medicaid psychiatrists to Medicaid beneficiaries has a large variation by neighborhood. Fresh Meadows (ZIP Codes 11365, 11366, 11367) has no Medicaid psychiatrists, and East New York has 5 Medicaid psychiatrists serving 5,700 beneficiaries or 0.9 per 1,000 beneficiaries. Ridgewood-Forest Hills, and Southeast Queens both have in excess of 10 psychiatrists per 1,000 beneficiaries.

Emergency Services

Emergency services provide rapid psychiatric and/or medical stabilization, and ensure the safety of persons who present a risk to themselves or others. Queens has three Comprehensive Psychiatric

¹⁷ New York State Dept. of Health website, accessed Sept. 2014.

¹⁸ Greater New York Hospital Foundation Health Information Tool for Empowerment (HITE) data, as of August 2014.

¹⁹ Center for Health Workforce Studies, Analysis of Physician Re-registration Data, 2009-2012.

Emergency Programs (CPEP), one Crisis Intervention program, and three Home Based Crisis Intervention programs.²⁰

Inpatient

Six Queens general care hospitals have inpatient psychiatric units. Queens also has two state psychiatric hospitals (Creedmoor Psychiatric Center, New York City Children's Center), and one residential treatment facility for children (Ottolie Home for Children).²¹

Outpatient

Queens has eight Assertive Community Treatment programs (ACT). ACT Teams provide mobile intensive treatment and support to people with psychiatric disabilities, with a focus on improving quality of life. It also has 52 Clinic Treatment programs (including 36 offering services for families or children), five Continuing Day Treatment programs, four Day Treatment programs, four partial hospitalization programs, two Intensive Psychiatric Rehabilitation Treatment programs, and six Personalized Recovery Oriented Services.²²

Residential

These programs maximize offer access to housing opportunities, particularly for persons with a history of repeated psychiatric hospitalizations, homelessness, involvement with the criminal justice system, and co-occurring substance abuse. Residential programs are also offered to children to provide short-term residential assessment, treatment, and aftercare planning.²³

Queens has 34 licensed residential treatment programs in congregate, apartment and single room residences where on-site interventions are goal-oriented, intensive, and usually of limited duration. This includes seven programs offering apartments, six programs for children and youth community residence, 12 programs offering congregate residencies, and nine programs offering Single Room Occupancy (SRO) residences. Queens also has 58 unlicensed supported housing programs that offer long term or permanent housing in a setting where residents can access support services. This includes 54 programs that are community services that do not provide rental assistance and four that are SRO.²⁴

Support

²⁰ New York Office of Mental Health website, accessed Oct., 2014.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

Queens has 32 Care Coordination programs, three School based mental health programs, one prison-based forensics mental health program, 12 General Support, 17 Self-Help programs, and 12 Vocational programs.²⁵

Behavioral Health Services: Alcohol and Substance Abuse

Prevention

Queens has 14 providers of Prevention services, including eight that are by the NYC Department of Education. These providers offer a range of services including evidence-based education programs, skills development workshops, training sessions for parents, teachers, and other professionals, positive alternative activities for youth, and policy change and enforcement efforts to reduce underage drinking.²⁶

Inpatient and Residential

Queens has two providers of inpatient treatment programs offering rehabilitation services, seven intensive residential programs, one supportive living program, and two community residential programs.²⁷

Outpatient

Queens has 39 outpatient clinics, five crisis programs, and five methadone treatment programs.²⁸

Primary data collected for the CNA, however, suggest that access to mental health services, particularly culturally competent care, is limited, as is mental health services for children and adolescents. In the words of one primary care provider:

We often throw our hands up because it is so difficult to find [adolescent mental health] providers.

According to some providers, services that are available might also be unknown to community organizations and residents—or they might be unaware of processes for accessing them. In addition, behavioral health issues generally carry greater stigma than other health concerns, which tends to limit use of services. Key informants and focus group participants both reported that many affected individuals and families try to address problems internally—or not at all.

According to providers interviewed as part of the primary data collection activities, the system is fragmented, with possibly poorer integration within behavioral health services than between physical

²⁵ Ibid.

²⁶ New York State Office of Alcoholism and Substance Abuse Services (OASAS) website. Accessed Oct. 2014.

²⁷ Ibid.

²⁸ Ibid.

and behavioral health. Behavioral health services are reported to be highly regulated by multiple agencies including the Office for People with Developmental Disabilities (OPWDD), Office for Alcoholism and Substance Abuse Services (OASAS), and the Office of Mental Health (OMH). Patient care was described as being restricted according to the funding and regulatory agency—despite the frequency of co-occurring disorders. As a result, a mental health provider may be limited by the severity of illness that can be treated, the age of the patient, and other factors. As one key informant explained:

Historically, your systems like OMH and OASAS, up until very recently, they really worked in silos. So if you came into a mental health clinic and in your intake appointment, you said, “You know, I smoke pot a couple times a week,” a red flag would go up. You talk to your supervisor and they say, “They have to go to substance abuse.” So until those doors really become integrated, I mean really become integrated in treatment and acceptance and a model of care, we’re going to continue to run into these types of challenges because it’s very fragmented. (Key informant, multiservice organization).

According to some providers, available services may be simply unknown to community organizations and residents—or they might be unaware of processes for accessing them.

Specialty Medical Programs

Pain Management Services

There are five facilities in Queens that provide specialty pain management services to the uninsured and persons with Medicaid and other low income medical supports.²⁹ The facilities include health centers hospitals, home health agencies, and nursing homes. In addition, there are 67 physicians, three nurse practitioners and one person in an unspecified “other” category who offer pain management services for the uninsured and those persons with Medicaid or other low income medical support.³⁰ However, only seven provide services in their offices 40 hours a week or more. Additional organizations or other individuals providing pain management services in the borough may exist, but no exhaustive directory of such services could be identified.

Hospice Care

There are eight hospice programs serving residents of Queens: Calvary Home Health Agency and Hospice Care, Caring Hospice Services of New York, Comprehensive Community Hospice of Parker Jewish Institute, Hospice Care of Long Island- Queens South Shore, Hospice of New York, MJHS Hospice and Palliative Care, Staten Island University Hospital University Hospice, and VNS of New York Hospice and Palliative Care.³¹ In addition, there are six programs in Queens offering palliative care services that include Jamaica Hospital Medical Center, St. Mary Hospital for Children, VNSNY Pediatric Palliative Care,

²⁹ Greater New York Hospital Foundation. Accessed Oct. 7, 2014 from www.hitesite.org.

³⁰ New York State Department of Health Provider Network Data System. July 2013.

³¹ Hospice and Palliative Care Association of New York State. Accessed Oct. 7, 2014 at www.hpcanys.org.

Calvary Home Health Agency and Hospice Care, MJHS Hospice and Palliative Care, and VNS of New York Hospice and Palliative Care.

School Based Health Centers

The Queens Service Area has 13 school-based health centers.

Skilled nursing homes, Assisted Living

There are 59 nursing homes with a total bed capacity of 12,326 throughout Queens.³² Within the Queens Service Area, there are 45 nursing homes and a total bed capacity of 9,721. In addition, there are a total of 645 home health and hospice care agencies serving Queens County, including 36 certified health home agencies, 12 long-term home health care programs, eight hospices and 589 licensed home care services agencies.³³ Sixteen adult care facilities are also located in the Queens Service Area with a total bed capacity of 2,755.

Seven of these facilities have Assisted Living Programs (ALP), with a total capacity of 1,054 beds. Individuals, who are medically eligible for nursing home placement but do not require continual nursing care, can be served via an ALP. ALPs primarily serve residents who are also Medicaid beneficiaries although private-pay patients can also be admitted to such programs. ALPs provide personal care, room, board, housekeeping and a range of home health and medical services. Assisted Living Residencies (ALRs) provide services similar to ALPs, but Medicaid and Medicare will not pay for an individual to reside in an ALR.³⁴ There is one ALR in Queens with a bed capacity of 175, enhanced ALR bed capacity of 25 and special needs ALR bed capacity of 21.³⁵ The majority of the ALRs, ALPs and nursing home facilities appear to be concentrated in Forest Hills, Kew Gardens and Rego Park. There is only one adult care facility in Western Queens, located in Long Island City.

Home Care Services

There are 38 certified home health agencies (CHHAs) providing residents of Queens with part-time, intermittent health care and support services.³⁶

Specialty Developmental Disability Services

The borough of Queens has 392 developmental disability services programs. One hundred are non-residential and the 292 are residential.³⁷

³² New York State Department of Health, "New York State Nursing Home Profile," as of October, 2014

³³ Ibid.

³⁴ New York State Office for the Aging, <http://www.aging.ny.gov/LivableNY/ResourceManual/Housing/III1s.pdf>, accessed November 3, 2014

³⁵ New York State Department of Health, "Adult Day Care Centers in Queens County," as of October, 2014.

³⁶ New York State Dept. of Health website. Accessed Oct. 2014.

Specialty providers such as Vision Care and Durable Medical Equipment

Please see Table 4.

Pharmacies

Queens has 97 DSRIP defined safety net pharmacies, whose total prescriptions are at least 35% Medicaid. These pharmacies account for 5.0 million prescriptions, with 53% being Medicaid. Total prescriptions for these pharmacies range from 2,300 to 283,106 (average 90,188) per year.³⁸

Local Health Departments

The New York City Department of Health and Mental Hygiene is the local health department for New York City including Queens. The department's offices are based in Queens. The department has district public health offices (DPHO) in the Bronx, Brooklyn and in Manhattan. These are local health offices dedicated on working to promote health equity and reduce health disparities across New York City by targeting resources, programs, and attention to high-need neighborhoods.

Managed care organizations

Twenty plans service serve residents of Queens, including eight commercial plans, 13 Medicaid plans, 11 Child Health Plus plans, 10 Family Health Plus plans, and three HIV SNPs Health Plans.³⁹

Foster Children Agencies

Queens has 90 Administration for Children's Services (ACS) Community Partners providing preventive and family treatment and rehabilitation services throughout the borough, and one ACS Child Protective Borough Office, located in Jamaica.⁴⁰

Area Health Education Centers (AHECs)

The Queens Long Island Area Health Education Center (BQLI-AHEC), is located in Downtown Queens and hosts the following programs: Community Health Experience, a summer program for medical school students interested in gaining exposure to community and public health experiences through placement in a community organization and specialized lecture series; the Medical Academy of Science and Health (MASH), a camp promoting health professions to students in grades 6 to 9; the Summer Health Internship Program, a summer internship placement program for high school and college students; Student/Resident Experiences and Rotations in Community Health (SEARCH), a program for health

³⁷ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE). October, 2014.

³⁸ New York State Dept. of Health website. Accessed Oct. 2014.

³⁹ NYSDOH County Directory of Managed Care Plans.

⁴⁰ Administration for Children's Services (ACS) "ACS Community Partners" <http://www.buildingcpi.org/>. Accessed November 7, 2014.

profession students and residents; and the Nursing Club, which exposes high school students to health professions including, but not limited to nursing.⁴¹

Section ii. Description of Community Based Resources

Regarding community resources in Queens, respondents expressed concern about capacity (small staff and budgets), quality and health care linkages to those services that might benefit their patients.

Housing services, including advocacy groups and housing providers, including those for the homeless population

Queens has approximately 82 non-profit or public agencies and community based organizations that provide housing services of varying types. These include intake and community centers; housing programs including emergency shelters, transitional housing programs, temporary housing, community residences, SROs and supportive housing programs; case management agencies; public and non-profit clinics; and advocacy, empowerment and counseling/support organizations. Many of these agencies provide housing services to special populations, including but not limited to pregnant teens, people with mental illness, disabilities and/or substance use, people living with HIV/AIDS (PLWHA), homeless mothers with children, homeless veterans, older adults, and adolescents aging out of foster care.⁴² There are 22 NYCHA developments and 13 NYCHA community centers in the Queens Service Area.⁴³

Financial Assistance and Support Including Food and Clothing

Queens has 91 programs that provide some type of financial assistance and information to their participants, including the 284,000 Queens residents whose income is below 100% of the federal poverty level (FPL). Some of these organizations serve special populations that include but is not limited to: people with developmental disabilities, low-income homeowners, people with mental illness, older adults, pregnant women, mothers and children, immigrants, families at risk of eviction and older adults.⁴⁴ Southeast Queens and West Queens have fewer than 20 programs per 100,000 residents with incomes below 100% of Federal Poverty Level (FPL), and Jamaica and Long Island City-Astoria both have greater than 60 programs per 100,000. Bayside-Little Neck and Fresh Meadows do not have any such programs and both have more than 18,000 residents in poverty.

⁴¹ Brooklyn- Queens-Long Island Area Health Education Center. Accessed Oct. 2014.

⁴² Ibid.

⁴³ New York City Housing Authority (NYCHA) "NYCHA Development Data Book," as of 2014. New York City Housing Authority "Directory of NYCHA Community Facilities," as of 2013.

⁴⁴ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE). Oct. 2014.

Queens has six Financial Empowerment Centers offer free individual, professional financial counseling, located in Jamaica, Jackson Heights, Woodside and Long Island City, and 17 WIC programs.⁴⁵

Food pantries, community gardens, farmer's markets

There are 69 food banks, food pantries, and/or soup kitchens in Queens.⁴⁶ CNA respondents noted an increase in farmers markets and more nutritious food available through food pantries, as well as nutrition and exercise programs, with 76% of survey respondents overall reporting that healthy food was “available” or “very available.” This observation, however, varied by neighborhood, with residents in Jamaica least likely to report great availability of healthy food (62%). As one health care provider in Jamaica explained, “We preach to our patients and they go home and they don’t have much in the way of good options.” Despite a perception of food availability, health education is still needed for Queens residents; 39% of respondents reported a need for nutrition education, and 46% reported a need for education regarding exercise and physical health.

Primary data collected suggests that access to healthy affordable food may be challenging for certain at-risk populations, include ethnic groups and/or the elderly, as these key informant interviews demonstrate:

We actually got many outreach programs in the communities especially in Asian.... We used to give them diet and all those and we went to the India day parades and all, so basically what happened was after they took our pamphlet and all, they just went and ate fried food and all that. (Key Informant, Primary Care Providers)

[The] community also is facing this kind of assumption that Asians are healthier than others because our food eating patterns are different, but in fact, actually Korean food is very spicy and salty. So, I think that’s another kind of health concern... very, very high sodium, salty, spicy food, that’s the Korean food, but it involves a lot of vegetables and good mix of meat and fish and things like that, I think. (Key Informant, Korean CBO)

And also one of the issues on the physical side that have, that are connected with isolation is poor nutrition. A person oftentimes when they're alone has no incentive to cook or to eat. And we find that many of the clients are nutritionally compromised. And we also have identified that there's a food insecurity because of lack of available funds to maybe buy the groceries that they need, you know, so people are making those decisions every day about, “Well, what can I buy, what can I afford with my limited amount of income for this month?” And oftentimes nutrition suffers in that mix because they'll get their medication instead of buying the food. And sometimes we found they won't get their medication either. (Key Informant, Older adults)

⁴⁵ New York City Housing Authority (NYCHA) “NYCHA Development Data Book,” as of 2014. New York City Housing Authority “Directory of NYCHA Community Facilities,” as of 2013.

⁴⁶ Food Bank for New York City “Food Bank Locator,” Accessed July 2014.

Specialty Educational Programs for Special Needs Children

The city's Department of Education's District 75 provides citywide educational, vocational, and behavior support programs for students who are on the autism spectrum, have significant cognitive delays, are severely emotionally challenged, sensory impaired and/or have multiple disabilities. District 75 consists of 56 school organizations, home and hospital instruction and vision and hearing services. Schools and programs are located at more than 310 sites in the Bronx, Brooklyn, Manhattan, Queens and Staten Island.⁴⁷

Community Outreach Agencies

Queens has 19 organizations including community service organizations, health centers, public colleges and care management agencies, among others, that conduct outreach activities ranging from mobile food programs to medication management outreach to at-risk individuals with mental health concerns. They serve many different populations including but not limited to: at-risk youth including youthful offenders, low-income children and families, older adults, immigrants and people who speak English as a second language (ESL), active and former drug users, people living with mental illness, PLWHA and victims and survivors of domestic violence.⁴⁸

Transportation services

There are approximately 21 organizations in Queens that provide varying types of transportation services. Four of these organizations provide transportation for seniors and one provides transportation services for the disabled.⁴⁹ Access-a-Ride is the Metropolitan Transit Authority's (MTA) para-transit service, available to those certified as eligible due to mobility restrictions. Transit services are particularly important in Queens as large portions of the borough are not accessible by subway and there are no trains that travel north-south, meaning that many trips outside a particular neighborhood require both bus and subway travel. As suggested in several key informant interviews, securing or providing appropriate transportation is critical to ensure that vulnerable populations receive healthcare services:

We have transportation services that allow many seniors access to the centers because otherwise they'd have no other way of getting here. We provide transportation to medical appointments. And not only do we provide the transportation, but right as I came in to the agency last October, we launched an escort program. So in addition to providing the actual transportation, we now will assist by providing a companion to travel with the senior because what we were finding was that both in physical frailty as well as cognitive frailty, seniors needed more assistance because they often became disoriented or needed that help in navigating through the holes ... and even in medical

⁴⁷ The New York City Department of Education website. Accessed October 22, 2014.

⁴⁸ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE). Oct. 2014.

⁴⁹ Ibid.

buildings, you know, it's very difficult. And even though you may have been there before, sometimes it looks different. So what was happening is that the drivers, because they are very kind, compassionate human beings, although they were told never to leave the vehicle, were leaving their vehicles because seniors were like having major anxiety, um, not knowing where they were going, not knowing how they were going to get there, and a little unsteady and feeling insecure. So to alleviate the burden on the driver because that's not really their role and to better serve our clients, we instituted this escort service which has been an overwhelming success. (Key informant, older adults)

Queens is a very large borough, and it's connected well with the public transportation, but still, if it's going to take you one bus ride and then the subway and then something, right? You are discouraged. You won't go...and especially if you're feeling sick. (Key Informant, South Asian community)

Religious Service Organizations

New York City contains tremendous diversity in the numbers of faith-based organizations, many of which provide charity care and volunteer services. According to the Bureau of Labor Statistics, 33 percent of all adults who volunteer do so for a religious service organization. While there is no single database that lists all locales of worship and connected service organizations, The New York State Department of Health catalogued the various programs and services provided by faith-based organizations in a 2012 resource directory, though this is not a comprehensive listing of faith-based services or ministries in New York City as the organizations have to request a listing.⁵⁰ In Queens, there are 29 Christian churches of various denominations, four Interdenominational churches and one Muslim organization that provide a variety of services which include emergency assistance funding, employment and housing referrals, food pantries and HIV care support. A review of UJA-Federation of New York website found that there are over 20 Jewish community-based organizations throughout New York City that provide relief services and support.⁵¹

Not for Profit Health and Welfare Agencies

Not for profit health and welfare agencies provide a variety of social services and disseminate essential information to the community at no fee, including recreational activities tailored for various age groups, direct service delivery (meals, clothing and toiletries), printed materials about specific illnesses or risk factors, health workshops, hosting of support groups and legal and medical referrals. Examples of voluntary health and welfare organizations are the YMCA, the United Way, and the

⁵⁰ Faith-based Ministries and Services Resource Directory, https://www.health.ny.gov/diseases/aids/consumers/faith_communities/directory_instruction.htm, accessed October 28, 2014.

⁵¹ UJA-Federation of New York, <http://www.ujafedny.org/who-we-are/our-network-of-agencies/network-agencies-directory/>, accessed October 28, 2014.

American Heart Association. There are approximately 350 non-profit health and welfare programs throughout Queens.⁵²

Disability-related resources

Serving individuals with developmental disabilities is considered to be challenging in the changing healthcare environment, as they may also have multiple co-morbidities, providers are not trained to recognize or address behaviors associated with developmental disabilities, and special accommodations may be required (e.g., to visit length) due to issues around comprehension and caregiver involvement. Among the agencies that provide specialized services is AHRC NYC, with offices in all five boroughs that provide a host of services to persons with disabilities that include developmental and intellectual disorders, autism spectrum disorders and traumatic brain injury. The services include medical care integrated with social and other supports. For persons with other types of disabilities, including mobility-related and neurological disabilities, an important agency in Queens is the Center for Independence of the Disabled. An additional 12 sites in Queens provide educational, mental health, employment/vocational training and general health services for disabled individuals.

Self-Advocacy and Family Support Organizations for Individuals with Disabilities

Individuals with disabilities and their families are often in need of specific services and support in ensuring they are able to live independently and achieve any and all goals. Those services may include linkages to other organizations that can assist with education, care services and other resources. The New York State Department of Health has four councils, three offices and a number of workgroups dedicated to policymaking and the development of resources and networks of organizations with similar missions, including early intervention programs and developmental and physical disabilities. New York State also operates four centers, staffed by experienced parents and professionals. These centers provide information and training to families with children with disabilities, professionals working with said families and other community members.⁵³

There are a number of nonprofit organizations that provide support to individuals with disabilities and their families. The types of services offered include psychological testing, vocational rehabilitation, educational and recreational services, counseling and adult day care and home care services, if needed. AHRC, for example, has 33 offices throughout New York City that serve individuals of all ages with developmental disabilities, including seven programs in Manhattan, eight in the Bronx, four in

⁵² Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of October, 2014.

⁵³ NYSDOH. www.health.ny.gov/community/infants/early_intervention/related_links.html, accessed on October 30, 2014

Queens and four in Brooklyn.⁵⁴ In addition, there are web-based resources, such as Access New York, for individuals seeking information about accessible travel options as well as other inquiries.⁵⁵

Youth Development Programs

Two hundred and seven Department of Youth and Community Development funded programs are located in the Queens Service Area. They are of the following types: 127 after-school programs; 11 literacy, reading and writing programs, 17 family support programs; 28 employment and/or internship programs; 21 immigration legal aid organizations, and 3 runaway and homeless youth programs, among others.⁵⁶

The New York City Department of Education (DOE) operates Passage Academy, a full time educational program that tailors its curriculum to the needs of youth in detention. The New York City Administration for Children's Services (ACS) and the Department of Juvenile Justice merged on December 7, 2010. The Division of Youth and Family Justice (DYFJ) was formed as a result of this merger to provide juvenile justice services. DYFJ offers case management services for youths in secure detention and chapel services. The DOE and Administration for Children's Services (ACS) partnered to create FirstStepNYC, an early childhood center and leadership institute for infants up to children aged five years old which is open to all New York City residents. The New York City Housing Authority (NYCHA) has committed to working with the DOE and the Mayor's Office to increase the literacy skills of children who live in NYCHA housing.⁵⁷

There are approximately 82 organizations including public libraries, social service organizations, community centers, recreation centers, and other types of community-based organizations that offer tutoring, family support and after-school and/or youth group services in Queens. The majority of the programs and organizations are located in Flushing, Corona, Jamaica and Long Island City.⁵⁸

LGBT Resources

New York City has a large number of organizations that provide resources for Lesbian, Gay, Bisexual and Transgender persons, as well as individuals in other categories such as gender, queer or questioning including the Callen-Lorde Community Health Center, which has earned the Human Rights Campaign's

⁵⁴ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of October, 2014.

⁵⁵ Ibid.

⁵⁶ The Department of Youth and Community Development, www.nyc.gov/html/youthlanding/youthlanding.shtml, accessed October 31, 2014.

⁵⁷ NYC Resources, www.nyc.gov, accessed November 5, 2014.

⁵⁸ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE), as of October, 2014.

designation of “leader in LGBT healthcare equality.” Nineteen facilities in the city are listed as “leaders” for 2014, including Elmhurst Hospital in Queens and nine others HHC facilities.⁵⁹

Other resources available in the city include the Transgender Legal Defense and Education Fund, the LGBT Community Center; Lambda Legal, the nation's oldest and largest legal organization working for the civil rights of lesbians, gay men, and people with HIV/AIDS; various community centers in the boroughs, SAGE for older LGBT persons, and PFLAG NYC which provides information for parents, family, friends, schools and teachers of lesbian, gay, bisexual, transgender people children and adults.⁶⁰

Libraries with Open Access Computers

All New York City public libraries provide open access computers to its customers, enabling users to access a myriad of websites including health information. Access requires that the individual be a resident of the borough in which library is located and have a library card and PIN to log onto a computer. In some cases, individuals can purchase a daily pass in order to log onto a computer. The Queens PPS service area contains approximately 54 libraries, all operated by the Queens Library and offering customers open access to computers.⁶¹

Community Service Organizations

Queens has 234 organizations or programs that provide a variety of social services to Queens residents, including faith-based fellowship, support to seniors in areas such as housing, recreational activities and nutrition, assistance to at-risk youth, employment referrals and career development help, and health-related support (i.e., fitness classes). Many are also ethnic community-based organizations which provide specific populations with critical services as well as facilitate applications for residency and/or citizenship.⁶²

Education

There are approximately 332 public and charter schools in Queens, including 204 public elementary schools, 49 public middle schools and 79 public high schools.⁶³ Queens also has 171 private/parochial schools.⁶⁴ In addition, there are five public colleges located in Queens: LaGuardia Community College, Queens College, Queensborough Community College, York College, and the School of Law at Queens College.

⁵⁹ To see the complete list of “Leaders in LGBT healthcare equality,” see http://www.hrc.org/hei/leaders-in-lgbt-healthcare-equality#.VE_IMDTF98E.

⁶⁰ A resource list for LGBT and questioning youth can be accessed at <http://www.nyc.gov/html/acs/downloads/pdf/lgbtq/LGBTQ-Youth-Community-Resource-Guide.pdf>

⁶¹ Queens Library, <http://www.queenslibrary.org/services/computers-wifi/computers>, accessed October 24, 2014

⁶² Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE), as of October, 2014

⁶³ New York City Department of City Planning “Selected Facilities and Program Sites,” as of October, 2014.

⁶⁴ Ibid.

There are also 115 community-based organizations in Queens providing education services such as GED/High School Equivalency (HSE) preparation, ESL, career counseling, cultural programming, health education and tutoring and recreational activities. Some of these organizations offer education services to special populations including children with serious emotional disturbances, children with cerebral palsy, at-risk youth, and immigrants, refugees and asylees.⁶⁵

Local Governmental Social Service Programs

New York City has in place numerous governmental social service programs and offices to assist its residents obtain essential services. For example, New York City has a website, *Access New York* which assists users in completing screening questionnaires for over 30 support programs.⁶⁶ The New York City Human Resources Administration has a small number of offices throughout the Queens Service Area to meet the needs of Queens residents. There are five job centers in Long Island City and Jamaica which are available to assist individuals in providing essential cash assistance and identifying work opportunities, including public assistance recipients over the age of 60 and families in need of cash assistance. The job center located on Honeywell Street serves homeless individuals and families citywide, by conducting application interviews; executing eligibility determinations; offering employment services; affording linkages to employment; and, working collaboratively with the Department of Homeless Services (DHS). Two Supplemental Nutrition Assistance Programs (SNAP) centers in Long Island City and Jamaica are available to assist families in need with their applications for financial support with groceries. A third center is located in Arverne which outside of the DSRIP Queens Service Area. For those residents who would like to apply for Medicaid benefits, there is a Medicaid office with Certified Application Counselors (CACs) available to assist with the Medicaid application in Long Island City.⁶⁷

Through Resident Employment Services (RES), the New York City Housing Authority (NYCHA) provides information about education and training opportunities for its residents. Moreover, there are 55 senior centers throughout Queens which are operated by community-based organizations but are funded in part by the New York City Department for the Aging.⁶⁸ Seniors are able to participate in exercise classes and other recreational activities, are served a hot lunch or join a health discussion group. Workforce 1 provides individuals living in Queens with job referrals if their employment was affected by Hurricane Sandy. There are two Workforce1 Career Centers in Queens in the areas of Jamaica and Far Rockaway.⁶⁹ The latter center is not located in the Queens DSRIP Service Area. Although broadband service is almost universally available in the entire city and particularly in Manhattan, there is still

⁶⁵ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of October, 2014.

⁶⁶ AccessNYC, https://a858-ihss.nyc.gov/ihss1/en_US/IHSS_homePage.do, accessed October 29, 2014

⁶⁷ The New York City Human Resources Administration, <http://www.nyc.gov/html/hra/>, accessed October 29, 2014

⁶⁸ New York City Department of City Planning "Selected Facilities and Program Sites," as of June, 2014.

⁶⁹ Workforce1, <http://www.nyc.gov/html/sbs/wf1/html/home/home.shtml>, accessed October 29, 2014

a digital divide exists in terms of broadband adoption.⁷⁰ This divide is especially evident among lower-income residents and seniors. A number of community-based organizations, such as senior centers, the Parks Department and NYCHA community centers are working with the Department of Information Technology and Telecommunications to ensure that broadband capacity is built.

Family Support and Training

The Mental Health Association of New York City operates five Family Resource Centers citywide that provide individual and group-based family support services to parents/caregivers of children and youth (birth to age 24) identified as having or at risk for developing emotional, behavioral or mental health challenges using a family or youth peer model. Services include emotional support, assistance with navigating systems, and skill development through educational workshops. The Manhattan offices are on West 125th Street and pm Broadway in Lower Manhattan. Services are provided in English, Spanish, Mandarin and Cantonese.⁷¹

NAMI, a peer and family mental health advocacy organization

The National Alliance on Mental Illness of New York City, Inc. (NAMI-NYC Metro) is a grassroots organization that provides support, education, and advocacy for families and individuals of all ethnic and socioeconomic backgrounds who live with mental illness. It is the largest affiliate of the National Alliance on Mental Illness and works with state and national affiliates, and with other stakeholders in the community, to educate the public, advocate for legislation, reduce stigma and improve the mental health system. It offers free support, education, and advocacy services throughout the New York metropolitan area.⁷²

Individual Employment Support Services

Queens has 317 programs that provide employment/vocational support services (skill training and certification, education services) to varying populations including but not limited to: people with developmental disabilities, people who are homeless or formerly homeless, people who are homebound, high-risk adolescents, unemployed women and people with mental illness. The ratio of programs to the number of residents with less than a high school education range varies by neighborhood, ranging from Bayside-Little Neck, and Southwest Queens at 5.6 programs per 10,000 individuals to Jamaica and Long Island City-Astoria with an excess of 20 programs per 10,000 individuals.⁷³

⁷⁰ The New York City Department of Information Technology & Telecommunications, <http://www.nyc.gov/html/doitt/html/home/home.shtml>, accessed October 29, 2014

⁷¹ Mental Health Association of New York City website, accessed Oct. 2014. <http://www.mhaofnyc.org>.

⁷² NAMI. Accessed Oct. 2014. <http://www.nami.org>.

⁷³ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE), as of October, 2014.

Peer Support (Recovery Coaches)

Peer supports (recovery coaches) provide assistance to individuals managing a chronic health condition (e.g., substance abuse recovery, diabetes, HIV/AIDS or hepatitis C) in staying engaged in treatment over time and in resolving obstacles that may arise. These obstacles can be psychological, physiological or structural; without the support of trained said recovery coaches, these obstacles may impede individuals' ability to succeed in handling their conditions. Queens has approximately 19 organizations, including healthcare facilities and community-based organizations that connect clients with recovery coaches, peer groups and mentoring to assist the clients in managing their health condition.⁷⁴

Reentry Organizations and Alternatives to Incarceration

There are approximately 40 organizations that offer criminal justice offender services located in Queens. These services include: civic engagement, linkage to employment and educational services, transitional and supportive housing, recreational events, mental health care, HIV/AIDS services, peer education, peer support, case management and substance use treatment.⁷⁵

HIV-Related Services

Queens has 25 agencies with 180 service sites that offer HIV related services, including Ryan White and CDC Prevention programs. These services include HIV Prevention and Outreach efforts such as sexual and behavioral health for HIV prevention, condom distribution, harm reduction, testing and linkage to care, and syringe exchange.^{76, 77}

Resources for Aging Population

Queens has 93 programs serving its 244,000 older population (over age 65) with services for people with conditions that include dementia and Alzheimer's disease. The ratio of programs to older population varies by neighborhood, ranging from Bayside-Little Neck having 2 programs and an elderly population of 9,400, to Long Island City-Astoria having 12 programs and a population of 18,200.⁷⁸

Resources for Immigrants

⁷⁴ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE). Oct. 2014

⁷⁵ Ibid.

⁷⁶ Public Health Solutions Service Site Locator. <http://www.healthsolutions.org/hivcare/?event=page.locations> Services as of August 2014.

⁷⁷ HIV Health and Human Services Planning Council of New York, DOHMH. Needs Assessment for HIV Services New York Eligible Metropolitan Area Ryan White Part A 2014.

http://www.nyhiv.org/pdfs/Needs%20Assessment_Full%20Final.pdf

⁷⁸ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

Programs for immigrants include services such as education, advocacy, health care information, health insurance enrollment, and legal services. Queens has 91 programs serving its 991,000 foreign born population.⁷⁹ The ratio of programs to foreign born residents range by neighborhood from Southeast Queens and Southwest Queens with fewer than 2 programs per 100,000 foreign born population to Flushing-Clearview, and Long Island City-Astoria with an excess of 20 programs per 100,000 population.

⁷⁹ Ibid.

Domain 2 System Transformation Metrics

A. Create Integrated Delivery System

Table 5 - Potentially Avoidable ER Visits, Admissions, and Re-Admissions, 2012

Measure Name	NYS	NYC	Queens	QSA
Potentially Avoidable Emergency Room Visits per 100 Medicaid beneficiaries	36	34	27	28
PQI Suite – Composite of All Measures: Adult, per 100,000 Medicaid Beneficiaries	1,784	1,822	1,482	1,579
Acute Conditions Composite (PQI 91), per 100,000 Medicaid Beneficiaries	530	525	474	503
Chronic Conditions Composite (PQI 92), per 100,000 Medicaid Beneficiaries	1,254	1,295	1,008	1,078
PDI Suite – Composite of All Measures: Pediatric, per 100,000 Recipients	323	383	235	245
Acute Conditions Composite (PDI 91), per 100,000 Medicaid Beneficiaries	75	87	79	77
Chronic Conditions Composite (PDI 92), per 100,000 Medicaid Beneficiaries	248	296	154	166

Data Source: Medicaid 2012 data, from Office of Quality and Patient Safety, 2014. Created by Office of Health Systems Management, NYSDOH. Rates are risk-adjusted expected (controlling for race/ethnicity, gender, age and case mix)

Data is not yet available from the New York State Department of Health for the Domain 2 metrics relating to Provider Reimbursement, System Integration, Primary Care, and Medicaid Spending for Projects Defined Population on a PMPM Basis.

B. Implementation of Care Coordination and Transitional Care Programs

Performing Provider Systems will be required to meet all of the above metrics with the addition of a set of Care Transitions metrics, including those defined below and CAHPS metrics, forthcoming.

Among adults with a discharge in NYC who responded to a recent H-CAHPS survey, 34% strongly agreed of the following: hospital staff took a patient-centered approach to their health care needs post-discharge; that they had a good understanding to managing their health; and they had a clear understanding of the purpose of their medications. This percentage was slightly lower than NYS, though this data does not adjust for any patient, hospital or market factors. Data at the aggregate Manhattan level is not currently available.

C. Connecting Settings (Performing Provider Systems will be required to meet all of the above metrics for A and B)

SECTION B. DESCRIPTION OF THE COMMUNITY TO BE SERVED

Section i: Demographics of the Medicaid and Uninsured Populations in Queens

Population by Neighborhood and Insurance Status

Queens' 2.2 million residents comprise approximately 27% of NYC's total population of 8.2 million. Over 41% of Queens county residents have Medicaid insurance, while 18% of the Queens population is uninsured, with higher rates in neighborhoods within the Queens Service Area -- West Queens (51% Medicaid, 27% Uninsured); Flushing/Clearview (45% Medicaid, 19% uninsured); Jamaica (47% Medicaid; 15% uninsured) and East New York (63% Medicaid; 14% uninsured).⁸⁰

It is important to note that the uninsured rate cited in this CNA may be overestimated due to recent events. Largely due to the establishment of the New York State Health Exchange in January 2014, more than 660,000 New York City residents enrolled in Medicaid, and an additional 157,000 enrolled in a Qualified Health Plan (QHPs) with the assistance of premium subsidies.⁸¹ Given that 93% of Medicaid enrollees and 63% of QHP enrollees were uninsured at the time of enrollment, it has been estimated that the total number of uninsured citywide declined by approximately 60%.^{82, 83} The greatest increase in recent Medicaid enrollees occurred in neighborhoods that had the highest uninsured rates.

The geographic distribution of the number and percent of Medicaid beneficiaries and persons without insurance by zip code are on Maps 1 and 2.

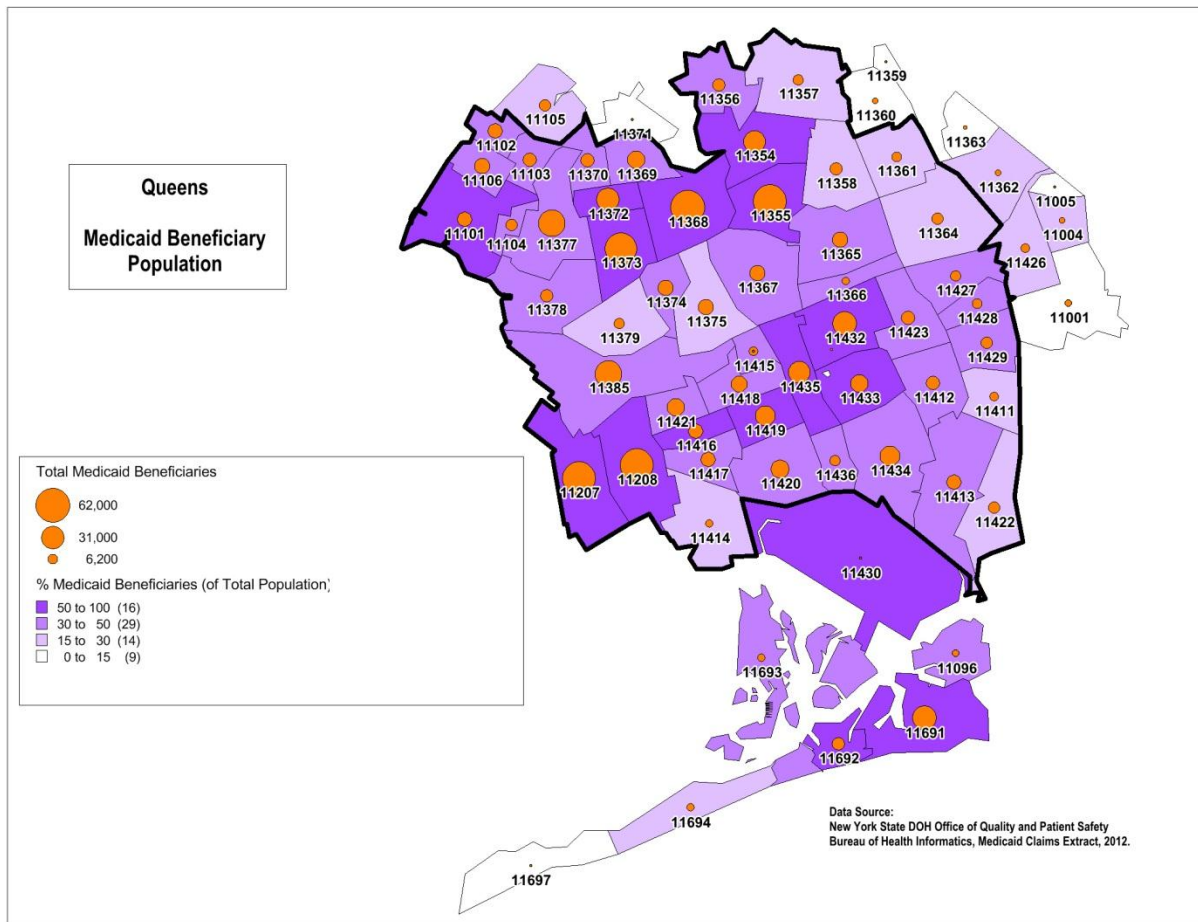
⁸⁰ US Census American Community Survey, 2008-2012.

⁸¹ Goldberg, Dan. "Mapping Obamacare by New York City ZIP code," *Capital New York*, October 20, 2014, accessed October 30, 2014.

⁸² New York State Department of Health: The Official Health Plan Marketplace 2014 Open Enrollment Report, June 2014.

⁸³ Goldberg, Dan. Mapping Obamacare by New York City ZIP code," *Capital New York*, October 20, 2014, accessed October 30, 2014.

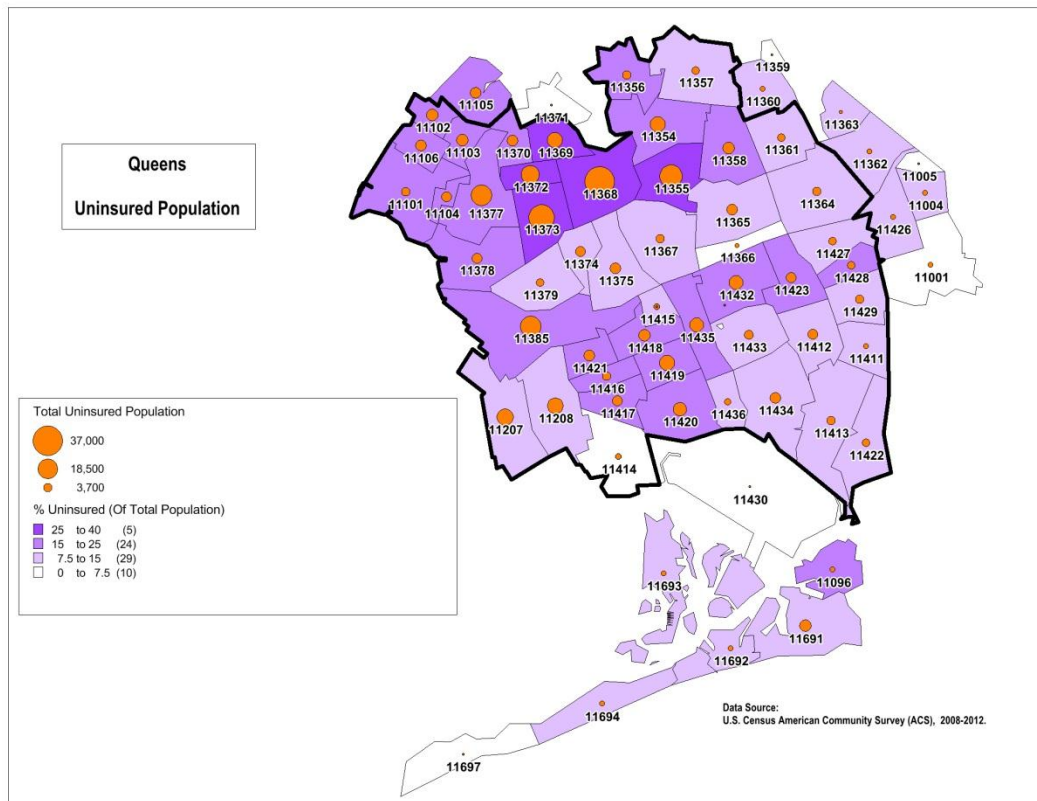
Map 1: Distribution of Medicaid Population and Percent, Queens



Map 1 illustrates two types of information. The circles show, by size, the number of Medicaid beneficiaries by Zip Code. The color shading, from light to dark, indicates the proportion of Medicaid beneficiaries relative to the total population of that ZIP code. Zip codes with the largest number and percent of Medicaid beneficiaries are prime target areas.

Map 2 describes the geographic distribution of uninsured populations. The circles show how the number of uninsured by ZIP Code, and the shading shows the proportion of uninsured to the total population of that ZIP code.

Map 2: Distribution of Uninsured Population and Percent, Queens



Gender Distribution by Insurance Status

A higher proportion of men are uninsured, and a larger proportion of women enrolled in Medicaid (table 6).

Table 6: Total Population by Gender and Insurance Status

	Total Population	Uninsured			Medicaid			Other Insurance		
		%	% Male	%Female	%	% Male	%Female	%	% Male	%Female
New York City	8,198,393	14.4%	57.2%	42.8%	29.3%	44.0%	56.0%	56.3%	46.9%	53.1%
Queens	2,233,483	17.6%	56.8%	43.2%	25.4%	44.9%	55.1%	57.0%	47.4%	52.6%

Source: US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012.

Race/Ethnicity

Queens' population is 28% white, 18% black or African American, 23% Asian, 28% Hispanic or Latino of any race, with the balance falling within other categories⁸⁴. The Queens population with Medicaid insurance is more likely to be Hispanic (36%) or Asian (27%), while less likely to be White (15%)⁸⁵. The Queens population with no health insurance is more likely to be Hispanic (41%) or Asian (27%), while less likely to be White (16%) or Black (12%)⁸⁶.

Age

Queens residents by age and insurance status is on tables 7 through 9.

⁸⁴ US Census American Community Survey, 2008-2012.

⁸⁵ US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012.

⁸⁶ *Ibid.*

Table 7: Age Distribution for Uninsured Population

	Total	Under 5	5 - 9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85 and over
NYC	100%	1.5%	1.5%	2.0%	4.9%	14.6%	16.5%	13.3%	10.7%	9.3%	8.1%	6.7%	5.4%	3.9%	0.8%	0.3%	0.2%	0.1%	0.1%
NYC	100%	9.9%				55.1%				33.5%				1.5%					
Queens	100%	1.3%	1.3%	1.8%	4.5%	13.4%	15.5%	13.3%	11.0%	10.4%	8.6%	7.4%	5.7%	4.1%	0.9%	0.2%	0.2%	0.2%	0.1%
Queens	100%	8.9%				53.2%				36.3%				1.6%					

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Table 8: Age Distribution for Medicaid Beneficiaries

	Total	Under 5	5 - 9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85 and over
NYC	100%	11.4%	10.1%	9.7%	9.3%	7.1%	5.4%	4.9%	4.7%	5.2%	5.6%	5.1%	4.5%	4.0%	3.2%	3.0%	2.5%	2.2%	2.3%
NYC	100%	40.4%				22.1%				24.4%				13.1%					
Queens	100%	16.6%	14.9%	14.2%	13.1%	9.5%	7.0%	6.7%	7.1%	7.8%	8.2%	7.5%	6.6%	5.6%	4.7%	4.2%	3.4%	3.0%	3.6%
Queens	100%	58.9%				30.2%				35.8%				18.9%					

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Table 9: Age Distribution for Population with Other Insurance

	Total	Under 5	5 - 9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85 and over
NYC	100%	5.1%	4.5%	4.7%	5.2%	6.4%	8.9%	8.5%	7.5%	7.5%	7.3%	7.3%	6.7%	5.9%	4.7%	3.4%	2.6%	1.9%	1.8%
NYC	100%	19.5%				31.4%				34.6%				14.5%					
Queens	100%	5.0%	4.6%	4.8%	5.1%	5.6%	7.6%	7.8%	7.2%	7.4%	7.7%	7.8%	7.2%	6.1%	5.0%	3.8%	3.0%	2.3%	2.2%
Queens	100%	19.5%				28.1%				36.1%				16.3%					

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Income and Poverty

Median household income in Queens is approximately \$56,780, somewhat higher than in NYC (\$51,865). Among neighborhoods the range extends from the eastern part of the borough which tend to be more affluent, to the neighborhoods of Corona, Elmhurst and Jackson Heights on the low end.⁸⁷

The percentage of households living below the Federal Poverty Level (FPL) in Queens is 14.4% versus the NYC rate of 19%; however, poverty rates are highest in Elmhurst/Corona, Astoria, Sunnyside/Woodside, Jackson Heights and Flushing, which range from 30% to 43%.⁸⁸

Although the health related implications of poverty may vary by population, common themes were evident in our surveys and interviews: poverty was described as directly affecting health; affecting the prioritization (or de-prioritization) of health behaviors; and as affecting access to health related resources, including nutritious food, stable and well-maintained housing, health care coverage, and medical services. Community members and providers interviewed referred to the impact that poverty and lack of community resources have on health and well-being:

We also have identified that there's food insecurity because of lack of available funds to maybe buy the groceries that they need. So people are making those decisions every day about, "Well, what can I buy, what can I afford with my limited amount of income for this month?" And oftentimes nutrition suffers in that mix, because they'll get their medication instead of buying the food. And sometimes we found they won't get their medication either. (key informant, CBO)

Low-income Queens residents describe very stressful lives, with concerns that include, but are not limited to, employment, access to healthy food and appropriate resources for children and teens.⁸⁹

Most of us parents are constantly working, and many times we don't have the time to commit to cooking a healthy meal every night – and so, we resort to fast food. (focus group participant)

"People [are] literally working, you know, 18 to 20 hours a day. Some of our people are working two to three jobs. So either by the priorities they set, or just what they have time for – you know, accessing health services is one of the last things that is on the list of priorities. And there's also the issue of the work situations they're in, and how stressful they can be, and how they're not safe workplaces, healthy workplaces (Key informant).⁹⁰

⁸⁷ U.S. Census, DP03: SELECTED ECONOMIC CHARACTERISTICS, New York City Community Districts 2010-2012 American Community Survey 3-Year Estimates

⁸⁸ Neighborhood Poverty Status by Sub-borough, NYC DOHMH, <http://nyc.gov/health/tracking>. 12/19/2011

⁸⁹ NYAM Primary Data

⁹⁰ NYAM Primary Data

A common complaint is that providers fail to recognize and address the connection between social issues and health, looking instead to the quick but often ineffective medical "fix." A focus group respondent stated:

I feel like when it comes to health and the services that are being provided, providers need to start looking at underlying issues as to why people are doing certain behaviors. Like, dig deeper. Don't just prescribe a medication to subside the pain or whatever. Dig deeper. See why the person is choosing to have an unhealthy diet. Maybe it's mental issues. And address those things. Don't just see a patient and give him medication.

Disabilities and Mobility Difficulties

According to the New York City Department of Planning, persons 65 or older comprised 12.9% of Queens' population in 2010 but will be 14% – one out of seven persons– of the borough's population by 2030.⁹¹ Of the population aged 65 years or older in the Queens Service Area, 7.7% have vision difficulty, 10.3% have hearing difficulty, 10% have cognitive difficulty and 25% have ambulatory difficulty⁹². There appears to be a relationship between high rates of ambulatory or cognitive difficulty, uninsured, and Medicaid enrollees.

There are 30,000 Queens and East New York residents over the age of 65 with a cognitive disability. The Rockaways (14.4%), East New York (12.6%), Jamaica (11%), Southwest Queens (11%), West Queens (10.2%) and Ridgewood/Forest Hills (10%) experience the highest prevalence of cognitive disability for this age group. There are an additional 39,000 Queens and East New York residents, between the ages of 18 to 64, with cognitive disabilities. A similar mix of neighborhoods has the highest rates of cognitive disabilities among this age group. The Rockaways (4.5%), East New York (3%), Jamaica (2.9%), Southwest Queens (2.8%), and Southeast Queens (2.8%) are the neighborhoods with the highest prevalence.

Education

Educational levels are higher among the uninsured relative to the Medicaid population. Forty-two percent of the uninsured in Queens have completed some college, compared to 35% for those with Medicaid insurance, but are lower than individuals with other types of insurance, at 61% (tables 9 through 11).

Table 10 - Educational Attainment for Population with No Health Insurance

	% Less than HS diploma	% HS diploma or equivalent	% Some college/ Associate's	% Bachelor's degree or higher
New York	30%	29%	20%	21%

⁹¹ New York City Department of City Planning, New York City Population Projections by Age/Sex and Borough, 2010-2040 (Updated from the original PlaNYC Projections, 2000-2030), Accessed November 6, 2014.

⁹² US Census American Community Survey, 2008-2012.

Queens	28%	30%	21%	21%
--------	-----	-----	-----	-----

Table 11: Educational Attainment for Population with Medicaid/Low Income Medical Assistance

	% Less than HS diploma	% HS diploma or equivalent	% Some college/ Associate's	% Bachelor's degree or higher
New York	40%	29%	19%	12%
Queens	35%	30%	20%	15%

Table 12: Educational Attainment for Populations with Other Insurance

	% Less than HS diploma	% HS diploma or equivalent	% Some college/ Associate's	% Bachelor's degree or higher
New York	11%	22%	22%	45%
Queens	13%	26%	24%	37%

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Housing: Types and Environment

More than one in five (22.8%) households in Queens is a single parent householder, and accounting for 11% of all such households in NYS.⁹³ East New York (44.7%), Jamaica (32.5%), Southeast Queens (30.6%) and Rockaway (28.7%) have the highest rates among the Queens neighborhoods. Sufficient financial, employment and family resources are necessary to ensure that these residents avoid unnecessary hospital-based health care utilization.

More than one-quarter (26.2%) of all households in Queens are comprised of a single person living alone, accounting for approximately 10% of such households in NYS.⁹⁴ Long Island City/Astoria (35.7%), Ridgewood/Forest Hills (32.1%) and Rockaway have the highest rates among Queens neighborhoods.

Housing: Overcrowding

Citywide, 4.04% of renter households and in Queens 4.42% of renter households are overcrowded, defined as having 1.5 occupants or more per room.⁹⁵ Neighborhoods with high rates of severe crowding rate are also the neighborhoods with high rates of foreign born, uninsured and Medicaid populations. Elmhurst/Corona (10.74%), Jackson Heights (9.7%), Sunnyside/Woodside (6.1%) and East New York (4.7%) neighborhoods have the highest rates of overcrowding in Queens (table 13). Note that crowding cited here may be understated due to people's reluctance to disclose this sort of information. Primary

⁹³ US Census American Community Survey, 5 year data table, 2008-2012

⁹⁴ Ibid.

⁹⁵ The Furman Center New York City Neighborhood Information, 2005-2009

data collection revealed that household composition was described as problematic as there might be adults living in close quarters with unrelated children.⁹⁶

Table 13 - Percentage of Renter Households with 1.5 Occupants per room or more

	Percent of Renter Households with 1.5 Occupants or More per Room				
Region	2005	2006	2007	2008	2009
New York City	3.01	3.41	3.17	4.67	4.04
Queens	3.70	4.10	3.83	5.69	4.42
Astoria	3.68	2.85	3.53	3.10	2.96
Bayside/Little Neck	2.17	2.76	0.89	2.06	0.42
Elmhurst/Corona	7.09	8.13	7.45	13.19	10.74
Flushing/Whitestone	3.98	3.98	4.11	4.78	4.25
Hillcrest/Fresh Meadows	2.24	3.46	6.50	3.77	2.21
Jackson Heights	8.57	7.20	9.33	12.52	9.68
Jamaica	5.15	4.13	3.70	5.15	3.81
Middle Village/Ridgewood	1.30	1.10	1.04	1.97	3.76
Ozone Park/Woodhaven	3.26	2.39	2.66	2.93	3.29
Queens Village	0.36	1.38	1.25	0.99	1.85
Rego Park/Forest Hills	2.45	2.74	0.98	2.25	3.77
Rockaways	2.55	6.04	1.04	9.80	2.17
South Ozone Park/Howard Beach	0.94	1.59	2.31	3.46	0.56
Sunnyside/Woodside	2.15	6.66	4.35	8.28	6.13
East New York/Starrett City	0.86	2.30	0.81	6.26	4.64

The Furman Center New York City Neighborhood Information, 2005-2009

A key informant from the Asian community reinforced the notions of crowding:

We're taught to take a pretty thorough social history ... I thought that some of [the patients] were a little taken aback and didn't want to be so open about those things in the beginning. And then I realized why. Because, here there's a lot of housing issues and things that they don't really want people to know about, you know. And, we room together in like a two, three bedroom, you know, three or four families living together, these kinds of things.

A key informant (school-based provider) added that when families stay with friends and relatives, they move a lot, which makes reaching parents or guardians difficult when a child is ill. It also presents challenges to maintaining a relationship with a primary care provider, who may not be accessible after a move.

Housing: Condition and Violations

⁹⁶ NYAM Primary Data

High rates of serious housing violations per 1,000 units are found in East New York, Jamaica/Hollis, Kew Gardens/Woodhaven and South Ozone Park (table 14).⁹⁷

Poor housing conditions appear to be related to asthma prevalence as described by a focus group participant, *"people have breathing issues because principally these buildings are old and dirty. The building where I live is very dirty, having all kinds of insects"*.

Table 14 - Serious Housing Violations by Community District, 2008

Community District	Serious Housing Violations per 1,000 Rental Units
New York City	53.79
QN01: Astoria	11.10
QN02: Woodside/Sunnyside	21.25
QN03: Jackson Heights	33.60
QN04: Elmhurst/Corona	16.09
QN05: Ridgewood/Maspeth	22.78
QN06: Rego Park/Forest Hills	7.68
QN07: Flushing/Whitestone	11.79
QN08: Hillcrest/Fresh Meadows	11.57
QN09: Kew Gardens/Woodhaven	26.45
QN10: South Ozone Park/Howard	33.61
QN11: Bayside/Little Neck	5.95
QN12: Jamaica/Hollis	51.34
BK05: East New York/Starrett City	101.10

Source: The Furman Center New York City Neighborhood Information, 2008.

Employment/Unemployment

As of September 2014, the unemployment rate in New York City was 6.1%; 5.4% in Queens, 8.5% in Bronx, 6.6% in Brooklyn and 5.1% in Manhattan (not seasonally adjusted).^{98,99} For young adults, the employment situation is higher. In 2012, the unemployment rate for young adults ages 16 to 24 was 18.6 percent—more than double the citywide average, and twice as high as for any other age cohort.¹⁰⁰

It is important to note that the unemployment rate for the target population is understated by these general city and borough wide rates. Currently and historically, unemployment rates are higher for persons with less than a college degree¹⁰¹ and persons of color.¹⁰²

⁹⁷ The Furman Center New York City Neighborhood Information, 2008.

⁹⁸ New York State Department of Labor. <http://labor.ny.gov/stats/laus.asp>. Accessed November 7, 2014.

⁹⁹ http://www.labor.ny.gov/stats/PressReleases/county_rates.pdf

¹⁰⁰ Gonzalez-Rivera, C., (September 2014) *Bridging the Disconnect*.

<https://nycfuture.org/research/publications/bridging-the-disconnect>. Accessed November 7, 2014.

¹⁰¹ http://www.bls.gov/emp/ep_chart_001.htm

Access to Regular Source of Care

Medical services: Approximately one quarter of respondents reported that there was a time in the last year when they needed healthcare but didn't get it.¹⁰³ The most commonly noted reasons for that were "not insured" (41% of the subsample), "could not get an appointment soon or at the right time" (17%), and "cost of copays" (13%). They did, however, report relatively good access to most types of medical care. Approximately 80% of survey respondents reported that primary care was available or very available, 77% reported that they had a primary care provider or personal doctor, and 76% reported that had a routine check-up in the last 12 months.

Seventy-three percent of survey respondents reported that pediatric and adolescent services were available/very available. Seventy-two percent reported that medical specialists are available/very available, although there was significant variability in responses according to neighborhood (e.g., 57% in northwest Queens, compared to 85% in north Queens). Several key informants and focus groups participants reported on relatively poor access to specialist services.

There's still a ton of people in the community that we've served that have chronic illnesses that are the result of a whole bunch of different factors that primary and preventative care are just not going to be able to address. And so there's a gap in primary care providers' ability to find specialists who are accepting Medicaid or different kinds of insurance. (key informant, health advocacy)

Table 15: Service Availability as Reported by Survey Respondents

Table 4: Service Availability	
	(N=605)
Accessible transportation	86.9%
Affordable housing	34.1%
Dental services	71.2%
Healthy food	76.2%
Home health care	66.4%
Job training	38.4%
Medical specialists	72.4%
Mental health services	54.6%
Pediatric and adolescent services	73.4%
Places to exercise, walk, and play	79.1%
Primary care medicine	79.8%
Social services	67.3%
Substance abuse services	39.1%
Vision services	69.4%
*Percentage reflects participants who responded very available or available	

Source: CNA Survey. 2014.

¹⁰² http://www.bls.gov/web/empst/cpsee_e16.htm

¹⁰³ NYAM Primary Data Collection.

Behavioral Health Services: Survey respondents reported that behavioral health services are less available than other types of care: 55% reported that mental health services were available/very available (range: 30% in northwest Queens, 79% in central Queens) and 39% reported that substance abuse services were available/very available.¹⁰⁴ Mental health services for children and adolescents were described as particularly limited, as well as culturally and linguistically competent services.

Dental Care: Seventy-one percent of survey respondents felt that dental services are available or very available in their community; 58% reported having been to the dentist in the prior 12 months. Although focus group participants with good coverage reported using dental services consistently, a number of participants described dissatisfaction with services, commonly due to the high cost.¹⁰⁵

Immigration and Citizen Status

Nearly 48% of people residing in Queens are foreign born, with the highest rates in Elmhurst, Corona, Jackson Heights and Flushing.¹⁰⁶ Of those with no health insurance, 72% are foreign born, compared to 45% for population with Medicaid/Low Income Medical Assistance and 41% for those with other health insurance coverage (table 16).

Table 16: Nativity by Insurance Status

	Uninsured		Medicaid		Other Insurance	
	% Foreign Born	% Native	% Foreign Born	% Native	% Foreign Born	% Native
New York City	62%	38%	35%	65%	32%	68%
Queens	72%	28%	45%	55%	41%	59%
Astoria & Long Island City	60%	40%	42%	58%	37%	63%
Jackson Heights & North Corona	87%	13%	48%	52%	57%	43%
Flushing, Murray Hill & Whitestone	81%	19%	60%	40%	44%	56%
Bayside, Douglaston & Little Neck	67%	33%	50%	50%	37%	63%
Queens Village, Cambria Heights & Rosedale	58%	42%	35%	65%	40%	60%
Briarwood, Fresh Meadows & Hillcrest	71%	29%	47%	53%	42%	58%
Elmhurst & South Corona	86%	14%	53%	47%	62%	38%
Forest Hills & Rego Park	68%	32%	58%	42%	46%	54%
Sunnyside & Woodside	77%	23%	56%	44%	50%	50%
Ridgewood, Glendale & Middle Village	60%	40%	34%	66%	31%	69%
Richmond Hill & Woodhaven	73%	27%	47%	53%	45%	55%
Jamaica, Hollis & St. Albans	63%	37%	35%	65%	39%	61%
Howard Beach & Ozone Park	68%	32%	49%	51%	39%	61%

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

¹⁰⁶ U.S. Census ACS 2007-2011

Far Rockaway, Breezy Point & Broad Channel	52%	48%	23%	77%	23%	77%
East New York & Starrett City	58%	42%	27%	73%	32%	68%

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Citizenship

Some 23% of Queens residents are not U.S. citizens, compared to 18% in NYC and 11% in NYS.¹⁰⁷

Limited English Proficiency

Nearly 600,000 Queens residents, 50% of the population, report that they speak English, "less than very well". Half of Spanish speakers, 42% of Indo-European speakers and 61% of Asians report that they have limited English proficiency (LEP).¹⁰⁸ Populations with no health insurance are more likely to report LEP, at 47% in Queens, compared to 31% for Medicaid/Low Income Medical Assistance and 18% for Other Insurance (table 17).

Table 17: Limited English Proficiency by Insurance Status

	No Health Insurance	Medicaid	Other Insurance
NYC	40%	29%	14%
Queens	47%	31%	18%

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Languages Spoken

There are nearly 30 languages other than English spoken in Queens.¹⁰⁹ Fifty-six percent of borough residents speak a language other than English at home. Spanish is the most prevalent, followed by Chinese (several dialects) and a number of Southeast Asian dialects. There is some variance in the languages spoken by the uninsured and Medicaid populations (table 11). Citywide, 88% of LEP uninsured populations speak one of the 12 languages, with the vast majority, 72%, speaking Spanish or Chinese.¹¹⁰ There is a wider spread of languages among the NYC Medicaid population, given that the population that speaks Spanish or Chinese is 62%, 10% lower than the uninsured proportion. However, there is a larger concentration of all languages within the top languages among the LEP Medicaid population. The top languages among the LEP Medicaid population comprise 92% of all languages spoken in this group.

¹⁰⁷ U.S. Census American Community Survey, 5-year table, 2008-2012

¹⁰⁸ Ibid.

¹⁰⁹ Source: American Community Survey Aggregate Data, 5-Year Summary File, 2006-2010

¹¹⁰ US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Table 18: Language Spoken at Home by Insurance Status

Uninsured					Medicaid Beneficiaries				
	NYC		Queens			NYC		Queens	
	Total	Percent	Total	Percent		Total	Percent	Total	Percent
Spanish	299,759	64%	104,469	57%	Spanish	355,732	52%	63,550	36%
Chinese	36,616	8%	13,958	8%	Chinese	67,666	10%	19,737	11%
Korean	17,497	4%	11,793	6%	Russian	48,401	7%	4,773	3%
Mandarin	15,807	3%	6,376	3%	Cantonese	30,822	5%		
Russian	12,272	3%	1,182	1%	Bengali	24,008	4%	10,928	6%
Polish	7,923	2%	1,978	1%	Mandarin	21,487	3%	5,843	3%
French Creole	7,811	2%	1,067	1%	Yiddish	18,246	3%		
Bengali	7,219	2%			French Creole	16,225	2%	2,139	1%
Cantonese	7,137	2%			Korean	10,998	2%	6,293	4%
Arabic	5,771	1%			Arabic	10,446	2%		
French	5,256	1%			Urdu	8,764	1%		

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

In interviews with key informants in Queens, respondents consistently noted the ethnic mix within the borough, emphasizing the unprecedented diversity of communities like Elmhurst and surrounding neighborhoods. While Hispanics/Latinos, Korean, Chinese and Indian immigrants have long settled in Queens, newer immigrant groups from Southeast Asian countries such as Nepal and Bangladesh add to the diverse mix of language and culture in the borough. This cultural divide is further emphasized by the places of birth among the foreign born and the variance in country and neighborhood lived in comparing those with no health insurance and those with Medicaid. The top countries among those with no health insurance include Mexico, Dominican Republic, China, Ecuador, Jamaica, Guyana, Korea, Trinidad & Tobago, Colombia, India, El Salvador and Bangladesh.¹¹¹ The same nations are represented among those with Medicaid/Low Income Medical Assistance, but the geographic distribution among those *with* Medicaid is more varied. For example, among those residents who are Chinese foreign born with no health insurance, the majority live in a particular central neighborhood - Flushing, Murray Hill and Whitestone (tables 19 and 20).

¹¹¹ US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Table 19 - Top Places of Birth Among Foreign Born With No Health Insurance

PUMA Name													
	Total	Mexico	Dominican Republic	China	Ecuador	Jamaica	Guyana	Korea	Trinidad & Tobago	Colombia	India	El Salvador	Bangladesh
New York City	724,452	131,000	74,765	60,385	56,982	32,639	25,737	23,941	20,659	17,511	15,482	13,230	11,487
Queens	284,315	39,103	10,360	27,947	34,350	7,831	15,958	18,254	6,788	14,331	12,911	7,242	7,450
Astoria & Long Island City	19,874	4,655	578	586	2,285	16	310	942	7	660	328	297	571
Jackson Heights & North Corona	47,885	15,763	2,662	1,213	13,357	168	132	378	164	3,668	1,660	1,162	990
Flushing, Murray Hill & Whitestone	38,540	1,103	342	16,093	988	16	193	8,727	-	1,721	1,160	1,751	370
Bayside, Douglaston & Little Neck	9,640	280	96	1,400	384	-	1	4,206	-	89	189	215	-
Queens Village, Cambria Heights & Rosedale	13,933	106	179	124	434	2,866	2,011	63	660	283	1,875	177	368
Briarwood, Fresh Meadows & Hillcrest	13,713	602	539	1,495	264	88	1,040	1,061	391	500	932	208	967
Elmhurst & South Corona	32,748	8,529	1,310	3,076	6,817	82	52	692	59	3,087	887	312	535
Forest Hills & Rego Park	8,478	102	16	770	164	14	16	444	24	595	882	13	60
Sunnyside & Woodside	22,335	3,009	374	1,508	2,833	30	108	1,595	-	1,661	971	80	1,037
Ridgewood, Glendale & Middle Village	16,911	1,579	1,116	824	3,569	-	130	41	79	650	146	279	105
Richmond Hill & Woodhaven	18,379	1,491	1,290	491	1,758	93	2,777	14	1,094	868	2,533	252	643
Jamaica, Hollis & St. Albans	20,839	684	723	267	934	3,687	3,793	7	1,542	407	344	1,082	1,469
Howard Beach & Ozone Park	14,438	1,107	869	12	473	363	4,888	84	2,559	112	977	490	324
Far Rockaway, Breezy Point & Broad Channel	6,602	93	266	88	90	408	507	-	209	30	27	924	11

Table 20: Top Places of Birth Among Foreign Born with Medicaid/Low Income Medical Assistance

PUMA Name															
	Total	Dominican Republic	China	Jamaica	Mexico	Ecuador	Guyana	Haiti	Bangladesh	Trinidad & Tobago	Colombia	India	Korea	Pakistan	Philippines
New York City	1,280,549	223,746	152,430	62,456	54,940	54,338	54,137	41,369	40,962	32,125	29,990	28,705	24,217	21,156	16,828
Queens	416,706	27,182	53,617	15,234	15,645	27,733	30,352	9,553	24,542	9,919	22,062	20,729	17,843	9,220	9,131
Astoria & Long Island City	26,032	1,851	923	137	1,711	2,257	256	19	1,702	88	1,508	907	703	779	307
Jackson Heights & North Corona	45,300	6,558	3,424	344	5,142	7,925	438	294	2,840	178	5,566	1,633	397	1,648	456
Flushing, Murray Hill & Whitestone	58,597	1,328	24,146	288	742	934	155	171	709	105	2,484	2,253	8,370	744	619
Bayside, Douglaston & Little Neck	17,147	171	4,221	-	197	116	8	40	28	192	519	493	4,440	298	34
Queens Village, Cambria Heights & Rosedale	25,775	502	348	5,312	84	479	2,328	4,376	674	1,102	407	4,126	92	629	712
Briarwood, Fresh Meadows & Hillcrest	28,020	1,000	4,053	292	401	600	943	653	3,707	506	1,063	2,152	1,376	1,391	1,327
Elmhurst & South Corona	37,869	3,724	6,791	146	3,045	5,128	303	350	2,484	259	3,287	1,431	674	494	1,529
Forest Hills & Rego Park	17,837	80	2,061	65	194	453	185	47	560	46	980	1,095	195	27	353
Sunnyside & Woodside	29,683	825	3,401	46	1,585	2,304	32	115	4,146	58	2,057	1,383	1,336	605	1,514
Ridgewood, Glendale & Middle Village	22,304	2,335	1,658	34	623	2,460	60	15	16	136	919	331	101	242	571
Richmond Hill & Woodhaven	32,992	3,652	1,524	51	867	2,551	6,713	146	2,717	1,214	2,019	2,954	71	1,344	770
Jamaica, Hollis & St. Albans	38,282	2,088	362	7,392	386	1,242	7,533	2,745	3,579	2,714	699	591	53	285	540
Howard Beach & Ozone Park	24,597	1,629	372	260	572	1,096	10,586	196	1,241	2,884	461	1,222	2	734	215
Far Rockaway, Breezy Point & Broad Channel	12,271	1,439	333	867	96	188	812	386	139	437	93	158	33	-	184

US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

Challenges to quality healthcare

Common themes from key informants and focus groups representing diverse population groups included some combination of:

- Significance of language access across the spectrum of services;
- Difficulties meeting basic needs, leading to extended work hours and emotional stresses;
- Prioritization of work, children and education over health;
- Lack of sufficient information on health and health services;
- Minimal knowledge, interest, and engagement in prevention services;
- Low utilization of health care services, relative to other populations;
- Cultural issues, including greater stigmatization of particular health conditions;
- Relatively high rates of non-insurance, due to multiple factors including ineligibility; and
- Fear of medical bills, medical debt, and deportation.

The challenge of language and culture

In the Borough of Queens, one of the biggest barriers to healthcare is the ethnic diversity that exists here. So it's not even just about language. Language, of course, is a barrier, but more easily addressed than cultural barriers. And in some cultures, seeking out healthcare is just not something that they do. They're not comfortable with it, especially if a person has a questionable immigration status. They're extremely hesitant... So a lot of times what happens is that the emergency room becomes a primary care provider, because they don't have preventive care. They're not keeping up with regular routine visits, they're not monitoring their [health] status. (key informant, CBO)

The main issue here is language...Our family member shouldn't have to explain medical conditions to us unless they are also medical practitioners, because even an educated and good English speaker may not understand medical terms, and so they aren't able to interpret what's going on...Better language services at hospitals and pharmacies (Nepali focus group).

Key informants and focus group participants noted a lack of clinical staff who can speak their native language. Respondents to community surveys also note the lack of culturally competent behavioral health care services.¹¹² Gaps are even more pronounced for smaller and/or more recent immigrant groups from places such as Nepal, and for particular services including mental health and specialty services.¹¹³

¹¹² Ibid.

¹¹³ Ibid.

Independent of work and language access issues, key informants and focus group participants described cultural, attitudinal, perceptual and knowledge-based barriers to care among the foreign born, including greater stigmatization of particular health conditions, difficulties navigating the health insurance and care system, low prioritization of preventive care services, and fear of medical bills and deportation if they engage with any part of “the system.”

[Arab] women if they have breast cancer, they try to hide it as much as they can, because they don't want the community to know that their girls might get it. They might inherit it from the mother. Nobody will marry their daughters, so all these problems, they feel like they don't let anyone in the community – even though confidentiality is a very big issue for us and very important for us, but they feel very protective of themselves. They don't want anybody to know about health issues and health problems. (key informant, CBO)

Homelessness

The NYC Department of Homeless Services houses approximately 55,000 people per night through its shelter system; there are an estimated 3,000 people living on the street in NYC. The homeless population includes single adults and families with and without children. Although many are people that have come into the system due to particular interpersonal or economic difficulties, others have behavioral health issues that make it difficult to remain housed, and which may be, in turn, further exacerbated by homelessness.

A lot of clients have very significant mental illness; very significant substance use – largely, alcohol, but ... a lot of opioids. ... Our clients are not different than the highest poverty clients. (key informant, homeless services expert)

Homeless individuals are reported to be frequent users of emergency services, not only because of health conditions but because of the instability in their lives.

Our clients use EMS all the time for things that – if one were confident that they had a medical home – they would be calling. A child has a 102 degree fever – this is not a newborn. We would call our pediatrician and ask what to do. But, they are not calling pediatricians.... I think, often feel disconnected. Maybe they've been placed in a borough that is not their home borough, and they're not connected to the doctor who was across the street. (key informant, homeless services expert).

Group Quarters - Institutionalized Populations

In Queens, there are approximately 28,000 residents living in Group Quarters with 15,400 residing in institutional settings. In total, 700 live in Adult Correctional Facilities, 300 live in Juvenile Facilities, 13,400 live in nursing facilities (including skilled nursing facilities) and 1,000 live in other institutional facilities (comprises hospital, inpatient hospice, psychiatric hospital, military treatment facilities and residential schools for people with disabilities). There are another 9,300 residents living in other non-institutionalized facilities (comprises shelters, adult group homes, adult residential treatment facilities,

and religious or work group quarters) in the county. The PUMA neighborhoods with the largest institutional populations include – Breezy Point-Belle Harbor-Rockaway Park-Broad Channel (800), Hammels-Arverne-Edgemere (1,200), Far Rockaway-Bayswater (2,000), Flushing (1,100), College Point (600), Corona (600), East Elmhurst (500), Briarwood-Jamaica Hills (800), Bellerose (500), Glen Oaks-Floral Park-New Hyde Park (1,200) and Murray Hill (700).^{114, 115}

Crime and Jail Admissions

While crime has been declining overall in NYC for the past 15 years, the issue persists in parts of the city.¹¹⁶ Data suggests that the highest rates of serious felony crime in the borough are in the Jamaica/Hollis, South Ozone Park/Howard Beach, Elmhurst/Corona and Woodside/Sunnyside Community Districts.¹¹⁷

Along with a declining crime rate and Rockefeller drug law reforms in 2009, the number of new NYC Jail and NYS Prison admissions has been steadily declining over the past 15 years.¹¹⁸

Despite the reductions in crime and incarceration, concerns around aggressive policing practices remain a concern to key informants that work with affected populations, who emphasized the diminished life chances resulting from involvement in the criminal justice system and the need to place a greater emphasis on alternative to incarceration and disincentives for inappropriate guilty pleas, particularly for crimes, like sex work, that may be motivated primarily by the need to survive rather than by criminal intention.

The jail admission rate per in the Queens Service Area is 621 per 100,000 population, 40% lower than the New York City rate (877 per 100,000) and 7% higher than the statewide rate (489 per 100,000). Areas in the service area that have high rates of jail admissions include East New York (1,911 per 100,000), Jamaica (1,124 per 100,000) and Southeast Queens (612 per 100,000).¹¹⁹

Domestic Violence

Domestic violence—with wives, older adults and children as potential victims— was a topic that resonated with several interviewees and focus group participants as a significant community concern and having received inadequate attention. Of Queens survey respondents, 28% reported that health education or programs on domestic violence are needed in their community.¹²⁰

¹¹⁴ Sources: U.S. Census Bureau, 2010 Census, Population Division.

¹¹⁵ New York City Department of City Planning (July 14, 2011).

¹¹⁶ Brennan Center “How NYC Reduced Mass Incarceration”. Accessed August , 2014 at http://www.brennancenter.org/sites/default/files/publications/How_NYC_Reduced_Mass_Incarceration.pdf

¹¹⁷ The Furman Center for Real Estate and Urban Policy – Total Felony Rate by Community District, 2007

¹¹⁸ Brennan Center for Justice at New York University School of Law “How NYC Reduced Mass Incarceration”.

¹¹⁹ New York City Department of Corrections Jail Admissions, 2007-2012, Acquired by Gothamist

¹²⁰ Ibid.

Although not necessarily more prevalent, domestic violence issues according to key informants, are particularly relevant in immigrant communities.¹²¹

They came to U.S. legally with their husband, but because of abuse, and sometimes, oftentimes abusers use their immigration status as a tool to control their partner, so they ended up being undocumented, so it's much harder for them to get a job. They ended up working under the table, a lot of labor trafficking issues there too by the employer. (key informant, CBO)

Some people are afraid to let people know they're undocumented. If they let people know about [abuse by] their husband or brother, that means they're putting themselves at risk for deportation. Sometimes I believe people are afraid to make that step because of the fear that they're going to be sent back. (focus group)

A key informant working with older adults described the significance of elder abuse across populations, which may be physical, emotional and/or financial, in nature.

People come to us in sometimes very dire situations of being physically abused, certainly emotionally abused. I would say that emotional abuse is the accompanier of any type of abuse because people feel vulnerable and at risk. One major type of abuse is financial abuse, and that could be from strangers, as well as, family members. But in our experience, unfortunately family is over 50% of our cases tends to be the abuser. ... Elder abuse is not just domestic violence grown old in our world, because it can be perpetrated by someone other than domestic partner, etc. And beyond that, it is sometimes very clearly related to the changes that happen when you're getting older, whether it's your financial need or some isolation, social isolation. (key informant that works with older adults)

Population Trends

New York City is projected to grow from 8.2 million persons in 2010 to 8.5 million in 2020, an increase of 308,000 or 3.7 percent. Between 2020 and 2030, the growth rate in New York City is projected to increase by 3.2 percent. Queens is projected to grow from 2,250,000 in 2010 to 2,330,000 in 2020, an increase of 3.6 percent. From 2020 to 2030, the growth rate will slow to 1.9%, adding another 43,000 Queens residents. High growth age groups (defined as a 20% increase) among males from 2010 to 2020 include 65-69 and 70-74 years while it is expected that there will be a population decline (of more than 5%) among 15-19, 45-49 and 50-54 year old males. Among females over the same time period, high growth age groups include 65-69 and 70-74 years, while it is expected that there will be a population decline among females aged 45-49, 50-54, 80-84, and 85+ years.

Queens is expected to have a 2.8% increase in school-age children from 2010-2020, this population growing from 332,000 in 2010 to 341,000 in 2020. From 2020-2030, the growth rate is expected to

¹²¹ NYAM primary data findings, September, 2014.

remain flat at 2.8%, adding another 9,000 school-age children in Queens. The population aged 65 years and older in Queens is expected to grow 12.9% from 2010 to 2020, expanding by 37,000 (from 288,000 to 325,000). The growth rate is expected to expand narrowly to 14% from 2020 to 2030, adding an additional 45,000 seniors to the Queens population.¹²²

¹²² New York City Department of City Planning, New York City Population Projections by Age/Sex and Borough, 2010-2040 (Updated from the original PlaNYC Projections, 2000-2030), Accessed November 6, 2014.

Section ii: Health Status

From the community's standpoint and consistent with other boroughs, the most commonly cited health concerns by Queens key informants and focus group respondents are diabetes, high blood pressure, cancer, depression, obesity and asthma.¹²³ Respondents from the community of Jamaica were more likely to report that HIV was a health concern and more likely to report having asthma. There was some variability in health concerns as well as health behaviors based on neighborhood and/or population groups. For example, African American and Caribbean populations in Jamaica considered obesity and asthma very problematic, and access to healthy foods difficult. Asians, on the other hand, did not cite obesity as an issue, reported easy access to healthy foods, and for them physical activity was apparently more common.¹²⁴

Mental health issues were seen to be problematic across all populations, particularly for immigrant groups. Depression and isolation may result from the pressures of migration and assimilation, long work hours and social isolation. Typical comments from interviews and focus groups include:

There's really such a lack of mental health services, and combined with the fact that people just have really, really difficult lives. Sometimes they've left behind even more difficult lives in their countries. I think there's just kind of a lot of trauma about what they've left, and then the process of trying to integrate here. And to some extent, a good amount of isolation. When you're working so much, you don't really have as much time to seek out other things that are not hard work. So we've seen that as kind of crisis moments where people come in and they're like, "I can't take this anymore," and we help them connect to something. And often it's not great. It's like they have to go to the emergency room. (Key informant, Latino CBO)

From day one in the United States there is mental pressure. There is depression and frustration because my experiences, qualification and education from back home are not compatible with the demands here. There is no job satisfaction. We aspire to do well in this country but the realization of not being able to is frustrating. (Focus Group, Bangladeshi CBO)

Approximately one quarter of respondents reported that there was a time in the last year when they needed healthcare but didn't get it. The most commonly noted reasons were "not insured" (41% of the subsample), "could not get an appointment soon or at the right time" (17%), and "cost of copays" (13%). They did, however, report relatively good access to most types of medical care. Approximately 80% of survey respondents reported that primary care was available or very available, 77% reported that they had a primary care provider or personal doctor, and 76% reported that had a routine check-up in the last 12 months. Seventy-three percent of survey respondents reported that pediatric and adolescent services were available or very available. Seventy-two percent reported that medical specialists are available or very available, but there was significant variability in responses according to neighborhood,

¹²³ Ibid.

¹²⁴ Ibid.

with the percentage dropping to 57% in northwest Queens. An exception is behavioral health services, an issue addressed in below. One key informant said “there’s a gap in primary care providers’ ability to find specialists who are accepted Medicaid or different kinds of insurance.”

Leading Causes of Death and Premature Death and Racial/Ethnic Disparities

Data indicate that heart disease is the leading cause of death among White, Black and Hispanic populations in the borough, while cancer is the leading cause of death among Asian populations.¹²⁵ After heart disease and cancer, Queens residents succumb to influenza and pneumonia, complications from diabetes, chronic lower respiratory disease (COPD), cerebrovascular disease (stroke), accidents except drug poisoning, essential hypertension and renal diseases, mental and behavioral disorders due to accidental poisoning and other psychoactive substance use. The leading causes of death in the borough are closely aligned to those in the city and state. (See Appendix B. Tables)

The top five causes of premature death in Queens are cancer, heart disease, unintentional injury, diabetes and stroke.¹²⁶ This aligns with the top five causes of premature death in the city, and matches the top three causes of death across the state, for the same time period.¹²⁷ (See Appendix B, Tables)

Hospitalizations by Age Payer Group, and Diagnoses

Of the 1.08 million inpatient discharges by hospitals in New York City in 2013, 16% were made by patients ages 0 to 17; 27%, ages 18 to 44; 26%, ages 45 to 64, and 30%, age 65 and older. Fifty-five percent of visits were by female patients, with 45% by males. Medicaid was the primary payer for 39% of visits, Medicare 32% Commercial 24%, Uninsured 3.4%, and Other payers 2%. Over the four-year time period from 2010 to 2013, inpatient discharges decreased 7.4% city wide and the average length of stay declined 1.1% from 5.69 to 5.63 days. The greatest decrease in the number of discharges occurred in Queens with a decline of 9.6%, while the Bronx had the smallest decline, at 6.6%.

Causes for Hospital Admissions – Diagnoses and Trends

The main causes for hospital admissions were stable between 2010 and 2013, and across boroughs. Newborn and newborn related was the main reason for admission in all four boroughs and both time periods. Heart disease, digestive disease, and respiratory disease all had similar rates in all boroughs, with the exception of The Bronx, where respiratory disease was more common. Table 19 lists primary diagnoses for discharges citywide and by borough in 2010 and 2013.

Table 21 - Inpatient Discharges by top 20 primary diagnoses, 2010 and 2013

¹²⁵ New York City Vital Statistics, “Top Ten Leading Causes of Mortality 2012,” Queens, accessed via the EpiQuery interactive tool, August, 2014.

¹²⁶ Premature deaths (< age 75) for the three years 2010-2012. Vital Statistics Data as of March, 2014, New York State Department of Health - Bureau of Biometrics and Health Statistics.

¹²⁷ The number 4 cause of premature death in NYS for the same time period is Lower Respiratory Disease, and the 5th cause is Diabetes.

	NYC		Manhattan		Bronx		Brooklyn		Queens	
	2010	2013	2010	2013	2010	2013	2010	2013	2010	2013
Complications Pregnancy	11%	11%	11%	10%	11%	11%	13%	13%	12%	13%
Newborns	10%	10%	10%	10%	9%	9%	11%	12%	11%	12%
Heart Disease	9%	8%	8%	8%	7%	7%	9%	8%	9%	8%
Digestive Disease	8%	8%	7%	8%	8%	8%	8%	8%	9%	8%
Respiratory Disease	7%	7%	7%	7%	9%	10%	7%	7%	7%	7%
Psychoses	5%	5%	7%	7%	5%	6%	5%	5%	5%	5%
Symptoms And Signs	6%	5%	6%	5%	7%	6%	6%	5%	7%	5%
Infectious/Parasitic Dis	4%	5%	3%	4%	5%	5%	4%	4%	4%	4%
Musculoskeletal Dis	4%	5%	4%	4%	3%	3%	3%	3%	3%	3%
Malignant Neoplasms	4%	4%	4%	4%	3%	3%	3%	3%	4%	3%
Endo/Nutr/Metab Dis	4%	4%	4%	4%	5%	5%	4%	4%	3%	4%
Other Injury	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Urinary Disease	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Other Circulatory Dis	2%	2%	3%	3%	3%	3%	2%	2%	2%	2%
Nervous System Dis	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Other Supplementary	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%
Alcohol/Drug	3%	2%	4%	3%	3%	2%	2%	2%	1%	2%
Fractures	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Skin Disease	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Cerebrovascular Disease	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
All Other Diagnoses	7%	7%	6%	6%	7%	7%	7%	7%	6%	7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: New York Statewide Planning and Research Cooperative System (SPARCS), 2010 and 2013.

Among leading potentially avoidable admissions, circulatory conditions followed a similar pattern, having higher rates than respiratory conditions and diabetes in all boroughs except the Bronx, where respiratory conditions was more common. Observed (actual) rates of admission for all three disease categories declined from 2009 to 2012 in all boroughs.

Table 22 - Potentially Avoidable Inpatient Discharges (Composite PQI), 2009 and 2012

		Bronx		Brooklyn		Manhattan		Queens	
		2009	2012	2009	2012	2009	2012	2009	2012
Overall (PQI 90)	Observed Rate Per 100,000	2,982	2,482	1,991	1,731	1,547	1,360	1,453	1,318
	Expected Rate Per 100,000	2,048	1,796	2,002	1,633	1,615	1,398	1,874	1,641
	Observed/Expected	1.46	1.38	0.99	1.06	0.96	0.97	0.78	0.80
Diabetes (PQI S01)	Observed Rate Per 100,000	553	495	387	347	246	230	243	225
	Expected Rate Per 100,000	369	336	337	289	250	227	296	272

	Observed/Expected	1.50	1.47	1.15	1.20	0.99	1.01	0.82	0.83
Respiratory Conditions (PQI S03)	Observed Rate Per 100,000	831	701	442	393	357	304	289	269
	Expected Rate Per 100,000	493	437	458	378	365	319	426	374
	Observed/Expected	1.69	1.60	0.96	1.04	0.98	0.95	0.68	0.72
Circulatory Conditions (PQI S02)	Observed Rate Per 100,000	825	653	611	503	425	350	427	386
	Expected Rate Per 100,000	590	499	590	464	456	380	543	462
	Observed/Expected	1.40	1.31	1.04	1.08	0.93	0.92	0.79	0.83

Source: New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics Medicaid Claims Extract, 2012

Emergency Department Visits

Of the 2.9 million ED visits by city residents in 2013 (excluding Staten Island), 24% were by patients ages 0 to 17; 44%, ages 18 to 44; 23%, ages 45 to 64, and 9%, age 65 and older. Fifty-four percent of visits were by female patients, with 46% by males. Medicaid was the primary payer for 46% of visits; Commercial insurers paid for 19% of visits; Medicare, 10%, Uninsured, 19%, and Other payers 4%. The table immediately below lists primary diagnoses for ED visits in 2010 and 2013.

Table 23: ED visits by top 20 primary diagnoses, 2010 and 2013

	NYC		Manhattan		Bronx		Brooklyn		Queens	
	2010	2013	2010	2013	2010	2013	2010	2013	2010	2013
Symptoms And Signs	21%	20%	20%	23%	27%	19%	18%	17%	19%	23%
Respiratory Disease	11%	11%	11%	9%	10%	13%	12%	12%	11%	10%
Other Injury	11%	11%	11%	10%	10%	10%	12%	12%	13%	12%
Musculoskeletal Dis.	8%	9%	9%	9%	9%	9%	8%	9%	7%	8%
Digestive Disease	6%	6%	5%	5%	5%	5%	6%	6%	7%	6%
Infectious/Parasitic Dis	5%	5%	5%	4%	4%	6%	4%	4%	6%	4%
Compl. Pregnancy	4%	4%	4%	3%	4%	5%	6%	6%	4%	4%
Other Supplementary	4%	4%	4%	4%	5%	5%	4%	3%	4%	3%
Open Wounds	4%	4%	4%	4%	3%	3%	4%	4%	4%	4%
Skin Disease	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%
Alcohol/Drug	3%	3%	3%	4%	2%	2%	3%	3%	2%	2%
Urinary Disease	2%	3%	3%	3%	2%	2%	3%	3%	3%	3%
Ear Disease	3%	2%	2%	2%	3%	3%	2%	2%	3%	2%
Fractures	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%
Female Reproductive	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Other Mental Dis.	2%	2%	2%	2%	2%	2%	1%	2%	1%	2%

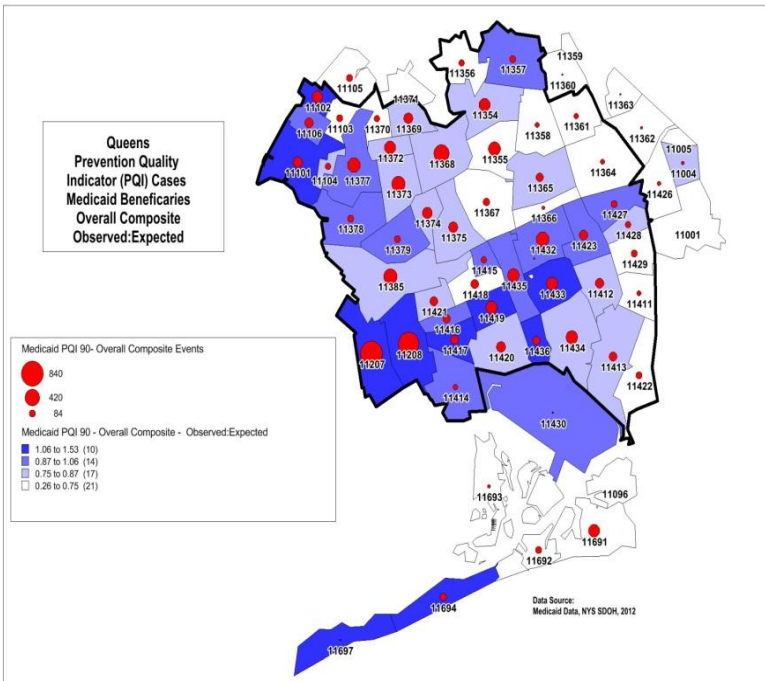
Psychoses	1%	2%	2%	2%	1%	2%	1%	2%	1%	2%
Eye Disease	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Other Circulatory Dis.	1%	1%	1%	1%	1%	1%	1%	2%	1%	1%
Nervous System Dis.	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
All Other diagnoses	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: New York Statewide Planning and Research Cooperative System (SPARCS), 2010 and 2013.

Potentially Preventable Readmissions (PPR), Potentially Preventable ED Visits (PPV), and Prevention Quality Improvement (PQI) Events

Three categories of preventable hospital inpatient admissions data were examined for this section. These categories are:

- Potentially preventable readmissions (PPR), which measure readmissions to a hospital following a prior discharge from a hospital and that is clinically related to the prior hospital admission.
- Potentially preventable ED visits (PPV), measures that identify emergency room visits that could have been avoided with adequate ambulatory care.
- Prevention Quality Improvement (PQI) indicators. The AHRQ defines these as “a set of measures that can be used with hospital inpatient discharge data to identify quality of care for “ambulatory care sensitive conditions.” These are 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. The PQIs are population based and adjusted for covariates.” (at <http://www.qualityindicators.ahrq.gov/>)
- **Potentially Preventable Admissions (PQI), ER Visits (PPV), and Readmissions (PPR)**



The map above shows two types of information: The size of the red circles indicates the number of actual preventable hospitalizations for ambulatory care sensitive conditions (ACSC), that is, responsive to intervention and management in less costly community-based ambulatory care/outpatient settings. The blue shading indicates how the ratio between actual events and the expected, or predicted, number of events, based on predictive algorithms that consider community demographics and other factors. The darker shading indicates more actual hospitalizations than predicted.

Overall, the rate of PQI Admissions in Queens has been declining since 2009, but is above the expected rate. The majority of PQI admissions in Queens are for chronic conditions that are considered ambulatory care sensitive. ACSC conditions in the borough have also declined since 2009, but remain above the expected rate. Examining the ZIP Code level data, the highest Actual/Risk-Adjusted Expected PQI ratios are consistently found in specific Queens neighborhoods, ranging from a cluster of ZIP Codes in Southeast Queens (13% higher post-adjustment) to Jamaica (4% higher), East New York (8% higher) on the western border of Queens, and throughout the Rockaway peninsula (27% higher). Turning to absolute numbers of PQI admissions, the geographic areas of concern extend through Southwest Queens and further north into West Queens. (See Appendix A). These geographic patterns persist for each of the major adult chronic conditions represented in the table below.

Among the pediatric Medicaid beneficiary population, West Queens, Jamaica, East New York, Rockaway and Southeast Queens, have higher than expected potentially avoidable admission rates.

Note that in the data illustrated below, the Risk-adjusted/Expected rate ratio is a measure of how well each geographic region is doing, taking into account basic demographic differences (age, gender,

race/ethnicity) and case mix (statewide rate for specific PQI) factors. A ratio less than 1.00 denotes performance that is better than expected; a ratio greater than 1.00 denotes performance that is worse than expected.

Table 24 - Risk Adjusted Expected Rates by Major Composite Measure Groupings

	PQI Overall composite		PQI Acute Composite		PQI Chronic Composite	
	PQI admissions	Risk-Adjusted Expected Rate	PQI admissions	Risk-Adjusted Expected Rate	PQI admissions	Risk-Adjusted Expected Rate
QSA	9,204	1,579	2,852	503	6,352	1,078
Queens	8,316	1,482	2,641	474	5,675	1,008
NYC	44,913	1,822	12,328	525	32,619	1,295
NYS	69,084	1,784	20,521	530	48,568	1,254
<u>UHF Neighborhoods:</u>						
LIC /Astoria	793	1,714	237	502	556	1,212
West Queens	1,744	1,423	650	527	1,094	895
Flushing/Clearview	773	1,320	296	450	477	860
Bayside/Little Neck	121	1,027	46	333	75	687
Ridgewood / Forest Hills	814	1,521	294	498	520	1,015
Fresh Meadows	257	1,280	78	359	179	923
Southwest Queens	1,155	1,678	331	492	824	1,186
Jamaica	1,573	1,699	417	509	1,156	1,191
Southeast Queens	573	1,296	141	371	432	923
Rockaway	472	1,079	143	350	329	732
East New York	1,578	1,957	422	629	1,156	1,339

Source: New York State Department of Health, 2012

Table 25 - Risk Adjusted Expected Rates by ACS Chronic Conditions Composite Measures

	PQI S01 Diabetes composite		PQI S02 Circulatory Composite		PQI S03 Respiratory Composite	
	PQI admissions	Risk-Adjusted Expected Rate	PQI admissions	Risk-Adjusted Expected Rate	PQI admissions	Risk-Adjusted Expected Rate
QSA	1,856	317	2,341	388	2,155	431
Queens	1,612	292	2,171	372	1,892	425
NYC	9,289	370	11,116	432	12,216	493
NYS	14,121	365	15,795	408	18,654	482
<u>UHF Neighborhoods:</u>						

LIC /Astoria	145	321	174	382	237	509
West Queens	326	272	378	310	390	313
Flushing/Clearview	104	208	201	316	172	326
Bayside/Little Neck	21	222	31	243	23	220
Ridgewood/Forest Hills	142	297	188	368	190	352
Fresh Meadows	64	351	50	243	65	337
Southwest Queens	224	321	370	537	230	330
Jamaica	356	357	445	436	355	391
Southeast Queens	105	220	208	416	119	274
Rockaway	118	269	107	226	104	238
East New York	381	414	346	411	429	512

Source: New York State Department of Health, 2012

Table 26 - PQI Indicators and Actual/Expected Ratios

PQI Indicator	# of Medicaid PQI Hospitalizations, Queens	QSA	Actual/Risk-Adjusted Expected Rate ratio		
			QSA:NYC	Queens: NYC	NYC:NYC
Adult Overall Conditions Composite (PQI 90)	8,316	9,204	0.87	0.81	1.02
Adult Chronic Conditions Composite (PQI 92)	5,675	6,352	0.83	0.78	1.03
Adult All Diabetes Composite (PQI S01)	1,612	1,836	0.86	0.79	1.01
Adult Diabetes Short-term Complications (PQI 01)	420	507	0.88	0.79	0.91
Adult Diabetes Long Term Complications (PQI 03)	947	1,072	0.85	0.79	1.07
Adult Uncontrolled Diabetes (PQI 14)	203	229	0.83	0.78	1.04
Lower Extremity Amputation among Adults with Diabetes (PQI 16)	75	85	0.85	0.78	0.97
Adult All Circulatory Conditions Composite (PQI S02)	2,171	2,341	0.90	0.86	1.06
Adult Hypertension (PQI 07)	594	557	0.84	0.83	1.10
Adult Heart Failure (PQI 08)	1,455	1,574	0.91	0.86	1.04
Adult Angina Without Procedure (PQI 13)	159	173	1.00	0.96	1.09
All Adult Respiratory Conditions Composite (PQI S03)	1,892	2,155	0.75	0.69	1.02
COPD and Asthma in Older Adults (PQI 05)	1,899	1,685	0.77	0.71	1.01
Asthma in Younger Adults (PQI 15)	207	256	0.63	0.57	1.11
Adult Acute Conditions Composite (PQI 91)	2,641	2,852	0.96	0.90	0.99
Pediatric Overall Conditions Composite (PDI 90): ages 6-17 years	393	414	0.64	0.61	1.19
Pediatric Chronic Conditions Composite (PDI 92): ages 6-17 years	252	277	0.56	0.52	1.19
Pediatric Asthma (PDI 14): ages 2-17 years	562	743	0.67	0.58	1.22
Pediatric Acute Conditions Composite (PDI 91): 6 - 17 years	141	137	0.89	0.91	1.16

Source: NYS Department of Health, 2012

Table 27 - Potentially Preventable ER Visits (PPV)

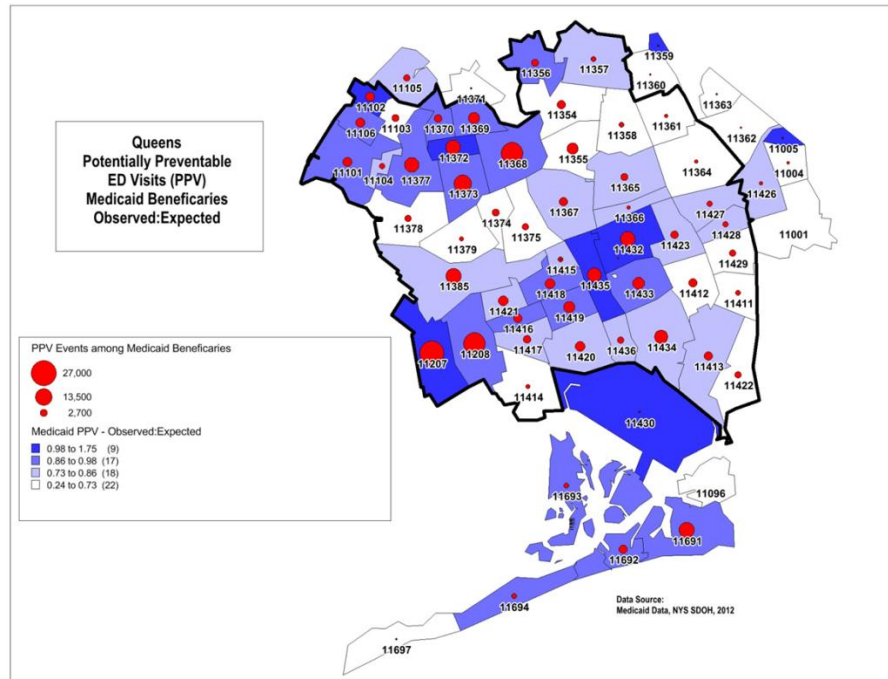
PPV	NYS	NYC	Queens	QSA	# PPV, Queens
Emergency Dept. Visits for Ambulatory Sensitive Conditions (PPV), per 100 Beneficiaries	36	33	27	28	247,384
Actual/Risk-Adjusted Expected Rate ratio: NYS	1.00	0.94	0.85	0.87	n/a

Source: NYS Department of Health, 2012

PPVs

In 2012, Queens had fewer potentially avoidable emergency room visits (PPV) per 100 beneficiaries than the city or state as a whole, a rate 15% lower than the state rate after adjusting for age, gender, race/ethnicity and case mix. However, the proportion of Emergency Visits that are considered potentially preventable

varies widely between Queens UHF neighborhoods, ranging from 11%-40%. The PPV Actual/Risk-Adjusted Expected rates for Southeast Queens, Rockaway and East New York are 4%, 8% and 13% higher than NYS rates (table 26). The areas with the highest rates of potentially preventable emergency department visits, post demographic and case mix adjustment, include East New York (35.5 per 100 residents), Jamaica (33.8 per 100 residents), West Queens (33.7 per 100 residents), Rockaway (35.5 per 100 residents) and Long Island City/Astoria (32 per 100 residents).

**Table 28 - Potentially PPVs Among Medicaid Beneficiaries by UHF Neighborhood**

UHF Neighborhood	Medicaid PPV Events	Actual Rate per 100 Beneficiaries	Risk-Adjusted Expected Rate per 100 Beneficiaries	Actual/ Risk Adjusted Expected Rate Ratio
Long Island City/Astoria	21,041	29.28	32.01	0.91
West Queens	68,268	29.69	33.74	0.88
Flushing/Clearview	17,334	14.83	25.46	0.58
Bayside/Little Neck	2,236	11.22	18.77	0.60
Ridgewood/Forest Hills	17,730	23.12	25.31	0.91
Fresh Meadows	7,591	21.77	29.29	0.74
Southwest Queens	32,531	26.85	30.95	0.87
Jamaica	45,601	33.92	33.77	1.00
Southeast Queens	15,473	27.38	26.26	1.04
Rockaway	18,535	35.27	32.69	1.08
East New York	47,135	39.96	35.48	1.13

Source: NYS Department of Health, 2012

According to focus group participants and key informants, overuse of ED services result from decisions made by both patients and by providers. From the patient perspective, given the long wait time for appointments, the long wait on the day of an appointment, and the potential for multiple visits for test, the ER is a rationale choice, providing relatively efficient one stop care¹²⁸.

People say it's not rational to go to the emergency room for care, but when we talk to people, they would say things like, "Well, I tried to make an appointment with my doctor, and it's like four months in advance." What rational person is going to wait four months rather than go [to the ER]

According to ER physicians, primary care providers also use the ER for their difficult cases, since their allotted time per visit is so brief. They feel that the police also use the ER to avoid liability.

Lastly, key informants report that inappropriate ER use may result from inadequate services and supports in the ER itself. Frequent users, including those with severe alcohol issues, may benefit from intensive case management, which would connect them to treatment and other supportive services.

*Once we admit patient with intoxication, we treat and release, they go back and drink... We can give names of places, but many patients do not follow... They go out, drink and come back.*¹²⁹

¹²⁸ NYAM Primary Data

¹²⁹ Ibid.

Potentially Preventable Readmissions (PPR)

Table 29 – Potentially Preventable Readmissions in Queens

Area	Actual Potentially Preventable Readmissions	Actual Rate per 100 Admissions	Risk-Adjusted Expected Rate per 100 Admissions	Risk-Adjusted Expected Rate Ratios	
				to NYC	to NYS
Queens	2,904	5.42	6.89	0.96	1.02
NYC	23,981	6.95	7.19	1.00	1.07
NYS	40,687	6.73	6.73	-	1.00

* Risk-Adjusted Expected Rate accounts for demographic (age,gender, race/ethnicity) and case mix (statewide PPV rate) factors. Rate ratio less than 1 signifies outperformance by area, relative to NYC/NYS after controlling for these factors. PPR data source: New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics Medicaid Claims Extract, 2012

Potentially preventable readmissions (PPRs) are readmissions within 30 days that could have been prevented with less-expensive ambulatory care. The table above indicates Queens overall has a PPR rate that is lower than that of the city and the state, and that overall Queens has fewer readmissions than predicted by an algorithm.

The table below shows PPR data from Queens hospitals. The Actual/Risk-Adjusted Expected ratios range from 0.64 (Forest Hills and New York Queens) to 1.50 (St. John's Episcopal), with an overall ratio of 0.79. Elmhurst and Queens Hospitals, participants in the Queens hub of the HHC PPS, have ratios of .84 and .99, respectively.

TABLE 30 - Potentially Preventable Readmissions, Queens Hospitals

Facility Name	At Risk Admissions	Actual PPR Events	Actual / Risk Adjusted Expected Ratio	Actual PPR Rate	Risk-Adjusted Expected PPR Rate	Risk Adjusted Expected PPR Events
Elmhurst Hospital	12,830	733	0.84	5.71	6.80	873
Flushing Hospital	7,532	422	0.75	5.6	7.49	564
Jamaica Hospital	9,797	571	0.82	5.83	7.10	695
NY Queens Hospital	11,157	443	0.64	3.97	6.16	687
Forest Hills Hospital	5,233	235	0.64	4.49	7.01	367
Queens Hospital	6,690	469	0.99	7.01	7.09	475
St. John's Episcopal	341	31	1.50	9.09	6.07	21
Queens Hospitals Total	53,580	2,904	0.79	5.42	6.89	3,694

Facility Name	At Risk Admissions	Actual PPR Events	Actual / Risk Adjusted Expected Ratio	Actual PPR Rate	Risk-Adjusted Expected PPR Rate	Risk Adjusted Expected PPR Events
New York City Total	345,073	23,981	0.97	6.95	7.19	24,823
New York State Total	604,308	40,687	N/A	6.73	N/A	N/A

Source: New York State Department of Health, 2012

Overall Medicaid Spending

According to analyses of calendar year 2009 data performed by the New York State Department of Health, which included risk stratification of Medicaid Fee for Service members (MC FFS) and matrix analysis of co-morbidities of those adults eligible for the State's Medicaid Health Home program, there is substantial variance in total expenditures and per member/per month (PMPM) costs by CRG and number of chronic conditions, with a disproportionate amount of Medicaid dollars spent on a relatively small yet medically complex set of patients.

For example, 10.4% of Medicaid FFS member months for beneficiaries with two chronic conditions account for 36.6% of total Medicaid FFS spending, or \$3,841 PMPM, compared with a low of \$252 PMPM (Healthy/Acute) and the overall average Medicaid PMPM of cost of \$1,511. The trend continues: the cost associated with malignancies (only 0.56% of member months) account for 2.8% of total Medicaid spending, and patient with HIV/AIDS, comprising 2.7% member months, account for 11.8% of total spending. Most notably, catastrophic events, 0.98% of member months in this population, account for 9.2% of total spending, a multiplier so large that much of the care is clearly occurring in an acute care setting. This statistic underscores the need for palliative care services outside of hospital settings, which would reduce the cost of care associated with treatment of late stage chronic diseases.

The skewing of Medicaid costs based on ascending levels of clinical acuity underscores the need for improved service integration and clinical interventions for people with complex medical needs, to mitigate the financial impact of a fragmented service delivery system.

TABLE 31 - Medicaid Fee for Service Spending by Clinical Risk Grouping Stratification

Clinical Risk Grouping for FFS-Only Non-Dual Eligible Recipients***	Recipients	Pct. Total Member Months	Sum Total Claim Expenditures CY2009	Pct. Total Claim Expenditures	Total Claim PMPM
Healthy/Acute	685,922	67.02	\$ 1,145,627,952	9.49	\$ 251.84
Minor Chronic	37,866	3.70	\$ 292,866,238	2.43	\$ 772.35
Single Chronic	135,991	13.29	\$ 2,299,827,552	19.05	\$ 1,788.58
Pairs Chronic	106,050	10.36	\$ 4,422,143,460	36.64	\$ 3,840.82

Triples Chronic	14,166	1.38	\$ 1,039,970,105	8.62	\$ 6,528.78
Malignancies	5,720	0.56	\$ 337,435,792	2.80	\$ 6,894.61
Catastrophic	10,035	0.98	\$ 1,112,572,535	9.22	\$10,044.17
HIV / AIDS	27,673	2.70	\$ 1,420,175,935	11.77	\$ 4,666.04
Total	1,023,423	100.00	\$	100.00	\$ 1,510.96

Health Homes: Improving Health Outcomes for Women of Reproductive Age, Public Health Committee of the Public Health and Health Planning Council, as provided by SDOH, 2014

Chronic Comorbidities and Relationships to High-Cost Acute Care Utilization

Among a sample of the New York State Health Home eligible population ages 21 and older, behavioral health conditions including severe mental illness (43.5%), mental illness (46.2%) and substance abuse (54.4%) are the most frequent predictive risk factor for high-cost Medicaid acute care utilization. The physical health conditions that are most predictive of Health Home eligibility include cardiovascular disease (41.9%), hypertension (37.6%), Diabetes (27.8%) and Asthma (28.3%). People suffering from these above referenced behavioral health conditions evidence substantial physical chronic condition co-morbidity due to a variety of factors, including side effects of medications, poor lifestyle conditions (homelessness, poor access to nutritious food, smoking) and intermittent access to regular preventive health care.

TABLE 32 – Correlation Matrix of Clinical Risk Group Conditions among the Health Home Population

Chronic Episode Diagnostic Categories Health Home Eligibles Adults 21+ Years With a Predictive Risk Score 75% or Higher (n=27,752)																	
Percent of Adult Recipients with Co-Occurring Condition																	
Condition	Total	Severe Mental Illness	Mental Illness	Substance Abuse	Hypertension	Hyperlipidemia	Diabetes	Asthma	Congestive Heart Failure	Angina & Ischemic Heart Disease	HIV	Obesity	Osteoarthritis	COPD & Bronchiectasis	Epilepsy	CVD	Kidney Disease
Severe Mental Illness	43.5	100.0	74.7	77.2	33.8	28.1	23.2	34.1	6.8	8.5	9.6	14.8	23.2	13.9	20.1	31.9	10.9
Mental Illness	46.2	70.4	100.0	70.9	42.0	33.7	28.0	35.8	11.0	12.6	8.7	16.9	29.9	17.8	19.4	41.0	16.4
Substance Abuse	54.4	61.9	60.3	100.0	35.4	25.9	21.4	32.8	7.5	9.4	11.2	10.7	23.1	14.5	16.4	34.4	11.2
Hypertension	37.6	39.1	51.6	51.1	100.0	47.4	41.4	30.7	28.2	22.1	5.6	17.8	29.3	22.6	13.9	62.2	30.8
Hyperlipidemia	29.8	41.0	52.2	47.1	59.8	100.0	54.9	37.7	27.8	33.4	5.6	23.6	30.9	25.1	15.0	70.4	31.5
Diabetes	27.8	36.3	46.5	41.8	56.0	58.8	100.0	35.4	25.7	25.3	5.4	24.3	28.1	22.8	13.2	64.9	34.3
Asthma	28.3	52.4	58.5	62.9	40.8	39.7	34.8	100.0	15.3	17.4	12.3	22.0	34.3	33.0	16.7	47.7	18.4
Congestive Heart Failure	13.4	22.1	37.9	30.6	79.5	61.9	53.5	32.3	100.0	41.2	4.1	21.1	26.1	33.9	8.9	100.0	50.3
Angina & Ischemic HD	12.2	30.5	47.8	41.8	68.2	81.5	57.6	40.3	45.1	100.0	4.6	24.1	33.8	31.5	11.7	100.0	41.9
HIV	8.3	50.2	48.4	73.5	25.2	20.0	18.1	41.9	6.7	6.8	100.0	4.9	26.6	16.4	13.2	31.1	17.9
Obesity	12.7	50.5	61.4	45.8	52.6	55.4	53.1	49.0	22.2	23.1	3.2	100.0	39.3	25.7	16.5	60.1	27.2
Osteoarthritis	22.1	45.7	62.7	56.8	49.9	41.8	35.5	44.0	15.8	18.7	10.0	22.7	100.0	25.5	15.1	52.0	24.9
COPD & Bronchiectasis	15.5	38.8	53.0	50.6	54.7	48.1	40.7	60.1	29.2	24.8	8.7	21.0	36.1	100.0	14.0	67.2	27.0
Epilepsy	13.5	65.1	66.6	66.3	38.8	33.2	27.2	35.1	8.9	10.6	8.1	15.6	24.8	16.2	100.0	41.1	16.3
CVD	41.9	33.2	45.3	44.6	55.9	50.2	43.1	32.3	32.0	29.2	6.2	18.3	27.4	25.0	13.2	100.0	35.4
Kidney Disease	18.8	25.2	40.4	32.4	61.5	49.9	50.6	27.6	35.8	27.2	7.9	18.3	29.1	22.3	11.7	78.6	100.0
Total	100.0	43.5	46.2	54.4	37.6	29.8	27.8	28.3	13.4	12.2	8.3	12.7	22.1	15.5	13.5	41.9	18.8

Note: Diagnosis History During Period of July 1, 2010 through June 30, 2011.

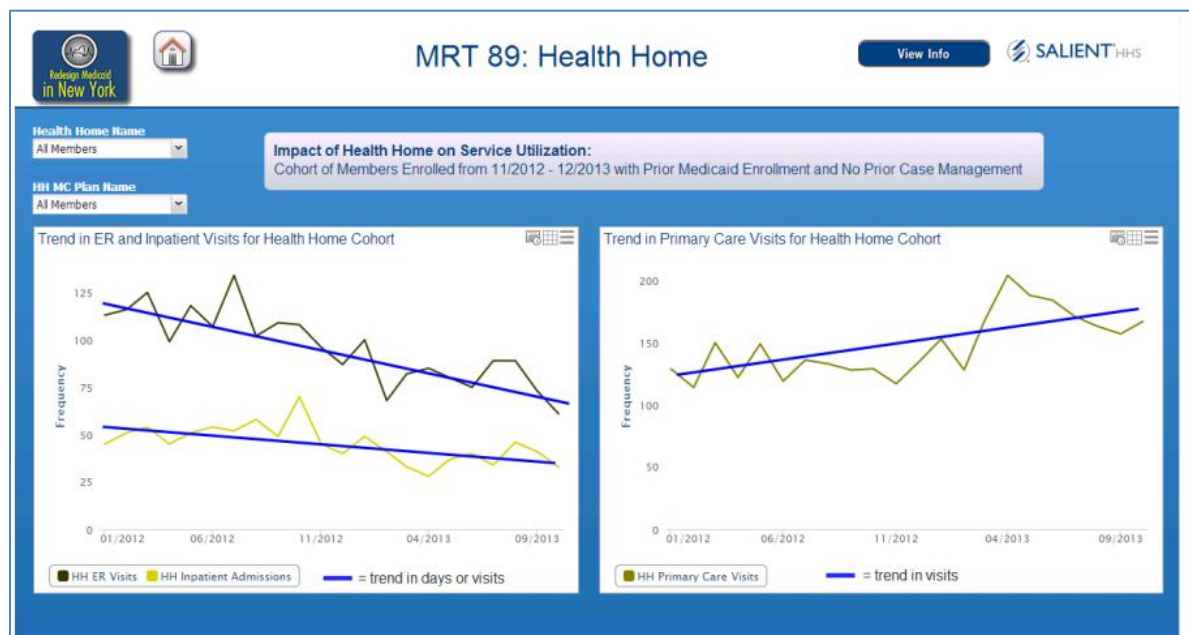
Source: Health Homes: Improving Health Outcomes for Women of Reproductive Age, Public Health Committee of the Public Health and Health Planning Council, as provided by SDOH, 2014

Queens: Utilization by Medicaid insurance

Among the Health Home cohort, ED utilization trended down from approximately 115 visits per 100 patients to less than 75 visits per 100 patients from January 2012 to September 2013. Meanwhile, primary care utilization increased from approximately 130 visits per 100 patients to approximately 150 visits per 100 patients over the same time period (see chart below).¹³⁰ Over the same time period, the rate of ED utilization among the Queens' managed care population has also trended down from 41.64 visits per 100 to 36.81 visits per 100, while primary care visits among this group increased from 366 to 400 per 100 patients.¹³¹ These trends suggest that patient centered paradigms such as Health Homes and managed care are having a positive effect on decreasing unnecessary use of ED services and increasing appropriate use of preventive primary care services.

Finally, among Queens Medicaid Fee for Service members over this time period, the ED visit rate decreased from 37.1 to 31.3 visits per 100 patients, with volume of primary care also decreasing from 268.9 to 238 visits per 100 patients.¹³²

Figure 1



SDOH, Delivery System Reform Incentive Payment (DSRIP) Program and Health Homes, 2014

¹³⁰ SDOH, Delivery System Reform Incentive Payment (DSRIP) Program and Health Homes, 2014

¹³¹ SDOH NYS Medicaid DSRIP Dashboards, 2014

¹³² Ibid.

Table 33 - Emergency Department and Primary Care Utilization by Medicaid Plan Type

Date	Queens ED Visit Rate			Queens Primary Care Visit Rate		
	Medicaid FFS	Medicaid	Medicaid	Medicaid	Medicaid	Medicaid
01/2012	37.07	41.64	20.73	268.87	366.05	318.25
02/2012	31.16	39.46	19.74	246.22	359.00	323.36
03/2012	35.07	42.71	21.60	271.78	389.81	356.14
04/2012	33.73	39.47	20.74	257.90	358.87	334.50
05/2012	33.98	40.97	21.35	264.48	366.15	325.79
06/2012	34.52	39.57	19.33	278.65	349.18	312.86
07/2012	34.50	39.17	20.49	264.78	329.34	293.71
08/2012	37.27	35.94	20.39	322.78	340.87	300.45
09/2012	33.30	35.77	19.35	275.84	350.96	318.00
10/2012	26.76	36.99	18.90	254.46	367.13	336.77
11/2012	25.24	34.45	17.44	210.25	336.67	311.39
12/2012	26.00	44.30	20.45	209.90	361.04	316.80
01/2013	34.16	45.76	22.78	261.01	418.40	377.81
02/2013	28.91	36.12	19.15	209.16	343.49	304.95
03/2013	33.05	41.68	20.14	234.73	380.70	350.61
04/2013	35.22	39.22	19.31	292.72	390.42	360.72
05/2013	35.43	42.00	22.08	275.36	395.62	360.66
06/2013	34.05	39.41	20.46	246.97	365.83	335.38
07/2013	35.65	40.32	20.97	249.96	368.94	328.57
08/2013	37.20	36.12	20.97	270.13	365.96	326.40
09/2013	31.31	36.81	19.19	238.02	400.24	342.31
10/2013	32.56	39.28	19.96	255.04	435.47	374.28
11/2013	29.72	39.66	16.75	208.24	387.18	284.61
12/2013	32.96	43.62	17.40	222.84	379.68	271.30
01/2014	32.82	38.32	23.73	201.78	360.87	371.97
Total	33.58	39.18	19.67	262.94	366.60	322.18

Source: SDOH NYS Medicaid DSRIP Dashboards, 2014

ASTHMA/RESPIRATORY CONDITIONS

Medicaid Avoidable Hospitalizations (PQI)

Asthma in younger adults and children

Among 18-39 year-old Medicaid beneficiaries in Queens, there are 77.2 PQI discharges per 100,000 (207 cases), which is lower than the city and state rate of 160.82 per 100,000 and 134.52, respectively. However, there is great variability among neighborhoods with rates that range from 30.3 per 100,000 in

Flushing/Clearview to 155.9 per 100,000 in East New York.¹³³ Key neighborhoods with higher than expected rates for this PQI include: East New York (34% higher), Rockaway (29% higher), Southeast Queens (20% higher) and Jamaica (12% higher). East New York (209 cases), West Queens (143 cases), Southwest Queens (101 cases) and Jamaica (106 cases) have the highest actual number of cases in the region.

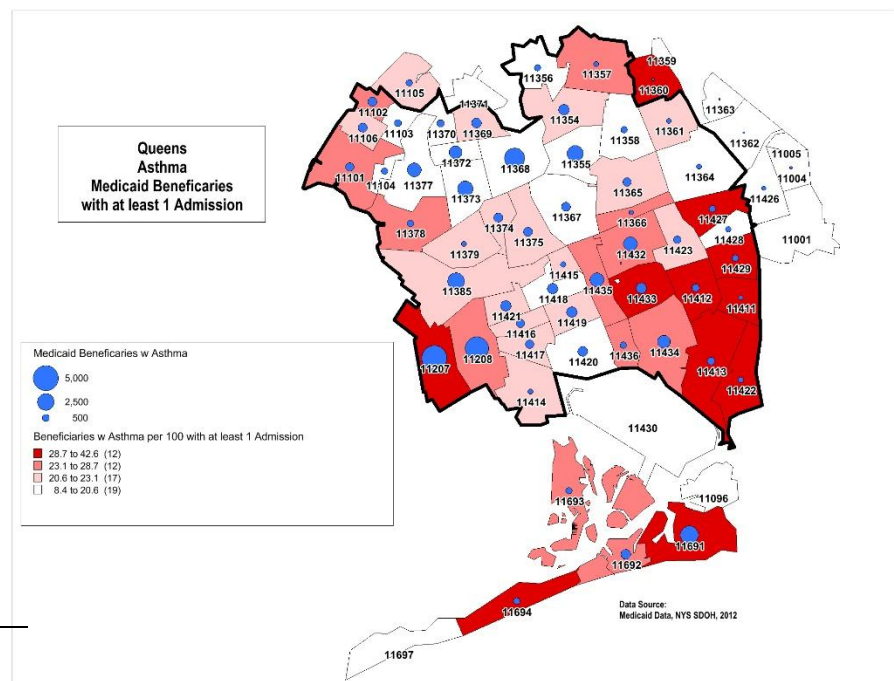
Among children in Queens who are Medicaid beneficiaries, the asthma rate of 230 per 100,000 is substantially lower than the NYC overall rate of 426.9 per 100,000 and the NYS overall rate of 320.6 per 100,000.¹³⁴ However, childhood asthma PQI rates and other chronic conditions in the borough have similar neighborhood-based disparities, with 557 per 100,000 in East New York, 317 per 100,000 in Southeast Queens, 299 per 100,000 in Southwest Queens and 286 per 100,000 in Ridgewood/Forest Hills.

Asthma in Older Adults

Among older adults in Queens with Chronic Obstructive Pulmonary Disorders (COPD) and asthma, the PQI rate is lower than the state and city - 468 per 100,000 recipients - versus 779 per 100,000 and 785 per 100,000, respectively. Consistent with other asthma indicators, areas with higher than expected rates include: East New York (17% higher), the Rockaways (20% higher), Southeast Queens (9% higher) and Jamaica (2% higher). Other neighborhoods with at least 200 actual cases in 2012 that perform relatively better than the state include Long Island City (218 cases; 10% lower risk-adjusted expected rate) and West Queens (361 cases; 19% lower risk-adjusted expected rate).

Medicaid Hospital Utilization among Asthma CRG beneficiaries

Approximately 6.5% of Medicaid beneficiaries in Queens have a diagnosis within the Asthma 3M clinical risk grouping (CRG) diagnosis group, which is lower than the NYC rate of 6.7% but higher than the New York State rate of 6.4%. Percentages range from 3.3% to 8.6%, with the highest rates clustered in East New York (7.9%) and Rockaway (8.6%). (See



¹³³ Medicaid Prevention Quality Indicators, 2012

¹³⁴ Medicaid Prevention Quality Indicators, 2012

Appendix A.) These neighborhoods also have the highest rates of hospital utilization measured by any metric. Rockaway has the highest proportion of the Medicaid population hospitalized with an asthma diagnosis (29.8%), 33% and 11% higher than the Queens and NYS rates respectively, and slightly over twice the highest average number of admissions per enrollee (10% higher than the state rate). Fifty-one percent (51%) of these beneficiaries have at least one ED visit, 18% higher than the Queens rate, while on average making 13% more ED visits per beneficiary than the overall Queens rate.

East New York utilization rates follow a similar pattern. The area has the second highest proportion of the Medicaid population with an asthma diagnosis with any inpatient admission (28.9%), which is 29% higher than Queens overall and 8% higher than the state rate. East New York has the second highest average number of admissions, at 1.9 per enrollee (2% higher than the state rate). Nearly 60% of these beneficiaries have at least one ED visit, 30% more likely than the average Queens beneficiary in this Clinical Risk Group (CRG). Other neighborhoods that have slightly higher than average rates of utilization include: Fresh Meadows, Jamaica and Southeast Queens.

Table 34 - Hospital Utilization among Medicaid Beneficiaries with Asthma by UHF Neighborhood

	Beneficiaries with Condition	Diagnosed Prevalence (Per 100)	% with at least 1 Admission	Average # of Admissions	% with at least 1 ED Visit	Average # of ED Visits
NYS	375,170	6.43	26.8	1.86	50.3	2.79
NYC	240,241	6.70	27.6	1.90	48.3	2.63
Queens	47,526	5.19	22.4	1.77	43.0	2.40
QSA	51,118	5.36	23.0	1.77	44.8	2.42
<u>UHF Neighborhoods:</u>						
Long Island City/Astoria	4,215	5.33	23.29	1.82	42.64	2.42
West Queens	15,193	4.63	18.20	1.60	42.73	2.33
Flushing/Clearview	8,003	4.03	19.44	1.78	31.13	2.37
Bayside/Little Neck	952	3.32	19.21	1.61	27.53	1.91
Ridgewood/Forest Hills	7,060	5.73	22.36	1.64	37.20	2.10
Fresh Meadows	2,713	5.18	20.81	1.90	36.91	2.35
Southwest Queens	8,733	5.34	20.75	1.64	43.70	2.15
Jamaica	10,759	5.78	25.64	1.84	50.68	2.52
Southeast Queens	3,511	4.76	27.47	1.82	46.08	2.64
Rockaway	8,148	8.63	29.76	2.04	50.78	2.71
East New York	12,412	7.88	28.89	1.90	55.88	2.65

Source: NYS Department of Health, 2012

Factors associated with “ever receiving” an asthma diagnosis

In the general New York City population, 12.6% of adults report a lifetime asthma diagnosis (weighted population, 792,000).¹³⁵ Those with an asthma diagnosis are 2.6 times more likely to report being native

¹³⁵ New York City Department of Health and Mental Hygiene Community Health Survey, 2012

born (prevalence, 17.2%), 42% more likely to have Medicaid insurance (versus private insurance) and 15% less likely to be uninsured (prevalence, 10.1%), relative to private insurance.

It is common for people with asthma to report having one or more diagnoses for other chronic conditions in their lifetime. They are 58% more likely to ever have had a diabetes diagnosis (prevalence, 18.6%), 24% more likely to have had a hypertension diagnosis (prevalence, 14.6%) and 97% more likely to be obese (prevalence, 18.7%). They are also more likely to report engaging in health behaviors that create additional risk for a chronic disease diagnosis or could lead to a potential worsening of a chronic condition. For example, they are 39% more likely to be a current smoker (prevalence, 16.2%), 23% more likely to have had a recent binge drinking episode (prevalence, 14.9%) and 51% more likely to not be physically active “at all” (prevalence, 19.5%). Long Island City/Astoria (17.6%; weighted population, 28,000), East New York (15.2%; weighted population, 20,000), Rockaway (12.8%; weighted population, 10,000) and Ridgewood/Forest Hills (12.2%; weighted population, 23,000) that have the highest prevalence among the adult population of a lifetime asthma diagnosis. West Queens (weighted population, 36,000), Long Island City/Astoria (weighted population, 28,000), and Jamaica (weighted population, 25,000) represent additional areas that, while having a lower prevalence, have a larger population size with a lifetime asthma diagnosis.

The overall ED visit rate is lower in Queens (81.1/10,000) than the state rate (88.6/10,000) and the city rate (139.6/10,000). (See table, Appendix B.)

MENTAL HEALTH

Survey respondents reported that behavioral health services are less available than other types of care: 55% reported that mental health services were available/very available (range: 30% in northwest Queens, 79% in central Queens) and 39% reported that substance abuse services were available/very available. Mental health services for children and adolescents were described as particularly limited, as well as culturally and linguistically competent services. As described by a key informant working with the Latino community:

People going through really crappy situations on a day-to-day basis that wears them down over time. And then, people come to us and they're just like, "Where can I go? Who can I see?" And really what they need is not to be admitted to a long-term thing. They need to have someone to be able to talk to. And, you know, the folks that don't have insurance – there's just nothing for them, right? I guess one thing is the language issue. There aren't a ton of good psychologists or psychiatrists or social workers – maybe some more social workers -- but psychologists or psychiatrists that speak Spanish and can do talk therapy in Spanish. And then the cost thing, you know. Most good providers do not take insurance at all, let alone Medicaid, so that's been huge. It's been a big challenge for us to figure out, as an organization. (key informant, CBO)

In the words of one primary care provider, *“We often throw our hands up because it is so difficult to find [adolescent mental health] providers.”* According to some providers, services that are available might also be unknown to community organizations and residents—or they might be unaware of processes for accessing them. In addition, behavioral health issues generally carry greater stigma than other health concerns, which tends to limit use of services. Key informants and focus group participants both reported that many affected individuals and families try to address problems internally—or not at all. A key informant emphasized the disparities in perceptions of behavioral health across NYC.

In New York, if you’re white having a therapist is a badge of honor, if you’re black it’s stigmatized. (key informant, CBO)

According to key informants that are themselves providers, regulatory issues promote fragmentation of services.

Depending upon the level of what people talk about, behavioral health can be done within the Article 28. We have psychiatrists who work within the [article] 28 and psychiatry can be in health clinics. They’re really there to really confirm and confer. It’s called a consultation liaison model and you know, you’re really, the rule of thumb and it’s hard to get answers out of Medicaid about how many times we can be seen. It’s like a maximum of three times. So if someone needs more than just a simple SSRI, you know, you see that the psychiatrist. The psychiatrist may say you know what, “I really think you should go into [article] 31” ... It’s not that it’s a bad thing, you know but it’s just another step ... We do offer short term therapy in our 28 ... We have very limited slots and because of licensure, it has to be secondary to a medical issue because again, the Medicaid rules are very clear. (key informant, CBO)

A number of providers suggested that there is even poorer integration within behavioral health services themselves than between physical and behavioral health. Behavioral health services are reported to be highly regulated by multiple agencies: Office for People with Developmental Disabilities (OPWDD), Office for Alcoholism and Substance Abuse Services (OASAS), and Office of Mental Health (OMH) with patient care being restricted according to the funding and regulatory agency—despite the frequency of co-occurring disorders. Thus, a mental health provider might be limited in the severity of illness that can be treated, the age of the patient, and other factors.

Historically, your systems like OMH and OASAS, up until very recently, they really worked in silos. So, if you came into a mental health clinic and in your intake appointment, you said, “You know, I smoke pot a couple times a week,” a red flag would go up. You talk to your supervisor and they say, “They have to go to substance abuse.” So until those doors really become integrated, I mean really become integrated in treatment and acceptance and a model of care, we’re going to continue to run into these types of challenges because it’s very fragmented. (key informant, multiservice organization)

Many patients with behavioral health conditions also have chronic physical health conditions. According to 2013 data from the NYS Office of Mental Health (OMH), approximately 51.8% (9,513/18,364) of Queens' clients served have at least one chronic medical condition. (See table and chart, Appendix B.)

The 2013 OMH Patient Characteristics Survey, which surveys clients with one or mental illnesses, found that 51.7% of Queens Adults surveyed have cardiac or metabolic illnesses; and 7.3% of Queens Children surveyed have a pulmonary condition. Although the data is not available at the city or county levels, state Health Home data corroborates this point (see section "Chronic Co-Morbidities" above). For example, in a 2010-2011 sample of those with a non-severe mental illness (46% of the health home sample), 70.9% also experience substance use issues, 36% have asthma, 35% have diabetes, 42% have hypertension and 28% have had a congestive heart failure episode.

Access to mental health services is reported to be limited, particularly culturally competent care and services for children and adolescents.¹³⁶ According to some providers, services that are available might also be unknown to community-based organizations and residents, or they may be unaware of processes for accessing them.¹³⁷

Behavioral health issues generally carry greater stigma than other health conditions or concerns, which tends to limit use of services in many low-income and/or immigrant populations. Key informants and focus group participants both reported that many affected individuals and families try to address problems internally—or not at all.

Medicaid Fee for Service Performance

The 30-day readmission rate among Queens Medicaid Fee for Service (MC FFS) adult beneficiaries for *mental health discharges* is 27.5%, 23% greater (24.3%) than the New York State rate (22.4%) (See table below for 30-day readmissions rate by hospital.). In context, the Statewide MC FFS mental health 30-day readmission rate is 5 times greater than the 30-day potentially preventable readmission rate for beneficiaries with physical chronic conditions, underscoring the challenge of managing this population. Over a 90-day time frame, the readmission rate increases to 40% in Queens, yet the gap to the State rate narrows

TABLE 35 - Mental Health Readmissions within 30 Days among Medicaid Fee for Service Beneficiaries

Region	All Ages				
	# of Discharges	# of Readmissions in <= 30 Days to Any Region	Rate of Readmission in <= 30 Days to Any Region	# of Readmissions in <= 30 Days to the Same Region	Rate of Readmission in <= 30 days to the Same Region
Queens	4,008	1,004	25.0%	904	22.6%

¹³⁶ NYAM Primary Data

¹³⁷ Ibid.

New York City	21,653	5,047	23.3%	4,672	21.6%
Statewide	41,814	8,754	20.9%	7,953	19.0%
Hospitals					
Elmhurst Hospital	969	215	22.2%	201	20.7%
Flushing Hospital	168	67	39.9%	62	36.9%
Holliswood Hospital (closed 2013)	491	93	18.9%	69	14.1%
Jamaica Hospital	300	53	17.7%	51	17.0%
Long Island Jewish Med. Center	974	220	22.6%	190	19.5%
Queens Childrens PC	82	10	12.2%	8	9.8%
Queens Hospital	626	154	24.6%	141	22.5%
St John's Episcopal Hospital	397	191	48.1%	182	45.8%

Source: NYS Department of Health, 2012

There is scant data measuring efforts to prevent the initial admission for this population - robust data only exists in describing the community-based health care experiences of MC FFS individuals with an admission post-discharge. New York City, which accounts for 56% of the nearly 30,000 Medicaid FFS mental health discharges in 2012, generally underperforms other New York State regions in the various measurable interventions post-discharge that represent strategies for reducing the likelihood of a readmission event. These include the following interventions: continuity of care via a follow-up outpatient visit; engagement in care - defined as multiple outpatient visits over a longer time horizon; and medication fill rates at the 30- and 100-day time frames.

The 30-day readmission rate in Queens is 27.5%, ranging from 18% (Jamaica) to 48% (St. John's Episcopal). In terms of quantifying performance gaps in this analysis, Queens metrics were compared to metrics in the top performing region, Western New York, which has a 30 day readmission rate of 17% (38% lower than the Queens and 24% lower than New York State). Outperformance of other New York State regions in the post-discharge metrics may contribute to Western New York's relatively outstanding readmission rate.

In Queens, almost 35% of MC FFS mental health patients have a follow up appointment within seven (7) days of discharge (ranging from 30.1%, Queens, to 46.3%, St. John's Episcopal, which is on par with New York State but approximately 30% lower than the Western New York region). This rate increases to nearly 50% at the 30-day marker for these patients (ranging from Elmhurst's 43%, to Jamaica Hospital's 52.5%), again with underperformance relative to Western New York. The gap in outperformance for engagement in care narrows over the 60-day time frame (4 outpatient visits). One third of these patients remain engaged at the 60-day point (ranging from 25%, Flushing, to 51%, St. John's Episcopal), a rate only 8% lower than the benchmark region. Improved performance in engagement in care over a

longer time horizon may explain why the 90-day readmission rate in Queens is substantially better than the 30-day readmission rate.

TABLE 36 - Mental Health Outpatient Services within 30 days

Outpatient Service within 30 Days	Discharges	Outpatient
Queens	4,915	46.4%
New York City	16,629	42.6%
Statewide	29,661	46.9%
Hospital		
Elmhurst Hospital Center	755	43.0%
Flushing Hospital Medical Center	158	44.9%
Holliswood Hospital	1	100.0%
Jamaica Hospital Medical Center	265	52.5%
Long Island Jewish Medical Center	778	47.7%
Queens Hospital	512	44.3%
St John's Episcopal Hospital	298	50.7%

Source: OMH, 2012

With respect to medication fill rates, there is limited variance between regions at the 90-day marker, suggesting that Queens and New York City can reach state benchmark levels, but barriers persist that prevent medication fills in a timely fashion. These barriers may be associated with gaps in local health systems, specifically with housing transitions or pharmacy accessibility, or may be at the patient or provider level. At the 30-day marker, in comparison, Queens MC FFS patients with a mental health discharge are 17-27% less likely than those in the Western New York region to have a fill for psychotropic, antipsychotic and mood stabilizer prescriptions, possibly explaining some of the variation in 30-day readmission rates. For each of these metrics, each Queens hospital performed below the 50% mark relative to state levels.

According to key informant providers, the system is fragmented, with possibly poorer integration within behavioral health services themselves than between physical and behavioral health. Behavioral health services are reported to be highly regulated by multiple agencies: Office for People with Developmental Disabilities (OPWDD), Office for Alcoholism and Substance Abuse Services (OASAS), and Office of Mental Health (OMH) with patient care being restricted according to the funding and regulatory agency—despite the frequency of co-occurring disorders. Thus, a mental health provider might be limited in the severity of illness that can be treated, the age of the patient, or other factors, which increases the likelihood of readmission for behavioral health reasons for this population.¹³⁸

TABLE 37 - Mental Health Outpatient Service Follow-up and Continuity of Care post Mental Health Inpatient Episode Among Adult Medicaid Fee for Service Beneficiaries

Event	Queens	New York City	New York State
-------	--------	---------------	----------------

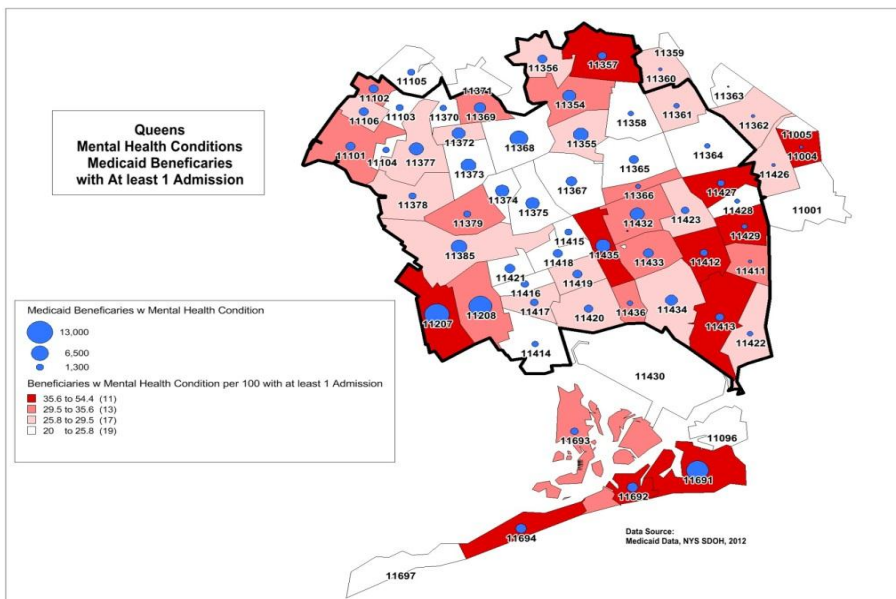
¹³⁸ NYAM Primary Data

7 day MH Follow-Up (MH Only)	34.6%	31.1%	34.8%
7 day MH Follow-Up (MH and SUD)	37.1%	35.9%	39.1%
30 Day MH Follow-Up (MH Only)	46.4%	42.6%	46.9%
30 Day MH Follow-Up (MH and SUD)	49.2%	48.0%	52.1%
30 Day MH Engagement (2 or More OP)	38.7%	32.6%	36.1%
60 Day MH Engagement (4 or More OP)	33%	26.5%	29.5%

Source: OMH, 2012

TABLE 38 - Medication Fill Rates post Mental Health Discharge Among Medicaid Fee for Service Beneficiaries

Event	Queens	New York City	New York State
30 Day MH Rx Fill (1st Psychotropic Rx)	62.6%	57.6%	63.9%
100 Day MH Rx Fill (Refill Psychotropic Rx)	89.7%	86.5%	88.2%
30 Day MH Rx Fill, w/ Psychosis (1st Antipsychotic Rx)	56.7%	54.3%	59.6%
100 Day MH Rx Fill, w/ Psychosis (Refill Antipsychotic Rx)	85.7%	83.0%	84.4%
30 Day MH Rx Fill, w/ Mood Disorder (1st Mood Stabilizer Rx)	51.3%	47.0%	55.8%
100 Day MH Rx Fill, w/ Mood Disorder (Refill Mood Stabilizer Rx)	85.5%	83.1%	84.8%



Source: OMH, 2012

Medicaid Hospital Utilization among Mental Health CRG beneficiaries

As of 2012, approximately 20% (703,000) of all city Medicaid beneficiaries have a diagnosis in the mental health 3M CRG, 15% higher than the NYS rate. In Queens, the prevalence is approximately 15% lower than the rate and 25% lower than the city rate. Queens beneficiaries with a diagnosis in the mental health CRG are 27% less likely to have an admission (30.2%) for any reason and 38% less likely to have an ED visit (37.6%) for any reason relative to New York State Medicaid beneficiaries in this grouping. However, mental health CRG diagnosis rates in East New York (19.5%), Ridgewood/Forest Hills (20.2%) and Rockaway (33.2%) are substantially higher.

Among Medicaid beneficiaries in Queens, 8.4% (77,000) have a depression CRG diagnosis (includes “Depression”; “Depressive and Other Psychoses”; and “Depressive Psychosis-Severe”), a rate nearly thirty percent lower than the city rate (11.3%). Rates of depression among enrollees vary greatly through the county and are highest in these UHF neighborhoods: Fresh Meadows (9.6%), Jamaica (8.5%), Long Island City/Astoria (8.2%) and Ridgewood/Forest Hills (11.9%).¹³⁹ Prevalence of serious psychological distress (SPD), a composite measure of 6 questions regarding symptoms of anxiety, depression and other emotional problems, correlates with the rate of severe mental illness in a population. Citywide, the rate of SPD in the general population is 5.1%, while the Queens Rate is 4.6%. Neighborhoods with the highest rates of SPD in Queens include West Queens (7.7%), Jamaica (5.1%) and Southwest Queens (4.9%).¹⁴⁰

There is also significant correlation between the neighborhood prevalence of beneficiaries with a mental health CRG condition and hospital-based utilization for beneficiaries with this CRG (see table below). For example, while Southeast Queens, at 11.7%, and Jamaica, at 14.7%, have moderate to high prevalence of a mental health CRG diagnosis, each area is a “hot spot” with respect to utilization according to each metric considered in this analysis. Thirty-seven (37%) of Southeast Queens UHF beneficiaries with a mental health CRG have an admission (second highest ratio in Queens), averaging 2.89 admissions. The overall Queens rate however is in line with the state rate of 2.17 per beneficiary.

Southeast Queens also has the second highest ratio of beneficiaries in this CRG with an emergency department visit (46.3%), and the highest average number of ED visits per beneficiary (3.64). The Queens rate is slightly lower than the State, at 2.74 per beneficiary. The Jamaica UHF neighborhood follows a similar trend to Southeast Queens - 32.7% of Jamaica UHF beneficiaries with a mental health CRG have an admission, averaging 2.4 admissions per beneficiary. This area also has the third highest ratio of beneficiaries with a mental health CRG diagnosis with an emergency department visit, at 40.2% and the third highest average number of ED visits, at 3.02.

Nearly 20% of East New York beneficiaries have a mental health CRG diagnosis, the third highest ratio of beneficiaries with any admission (33.6%), and second highest average number of admissions per

¹³⁹ New York State Dept. of Health, 2012. <https://health.data.ny.gov/Health/Medicaid-Chronic-Conditions-Inpatient-Admissions-a/wybg-m39t>.

¹⁴⁰ Community Health Survey 2012 data, as reported on Epiquery <http://nyc.gov/health/epiquery>, accessed August 2014.

beneficiary (2.72). This neighborhood also has the highest ratio of beneficiaries within this CRG with an emergency department visit 47.6%), and the highest average number of ED visits per person (3.33).

The Rockaways, with the highest prevalence of a mental health CRG diagnosis among Queens Medicaid beneficiaries (33.2%), also has the highest ratio of beneficiaries with an admission (43.4%), but the average number of admissions is in line with state averages, at 2.26. Rockaway, does, however, have the fourth highest proportion of beneficiaries with an ED visit (40.2%), and the fourth highest average rate of ED visits per beneficiary at 3.02. Ridgewood/Forest Hills UHF, at 20.2%, the second highest prevalence in the region, has relatively low ratios of each of the key metrics, signifying successful management of the mental health and physical health of beneficiaries in those neighborhoods.

TABLE 39 - Hospital Utilization among Medicaid Beneficiaries with Mental Health Condition by UHF Neighborhood

	Beneficiaries with Condition	Diagnosed Prevalence (Per 100)	% with at least 1 Admission	Average # of Admissions	% with at least 1 ED Visit	Average # of ED Visits
NYS	997,306	17.09	41.21	2.24	60.98	3.19
NYC	702,585	19.58	32.34	2.43	42.33	2.98
Queens	133,250	14.55	30.20	2.17	37.60	2.74
QSA	135,746	14.23	29.14	2.26	39.03	2.83
UHF Neighborhoods:						
Long Island City/Astoria	10,432	14.52	27.91	1.99	39.48	2.51
West Queens	26,313	11.45	26.32	1.96	36.24	2.27
Flushing/Clearview	14,390	12.33	29.94	2.05	32.74	2.95
Bayside/Little Neck	2,400	12.05	24.88	2.05	27.17	2.22
Ridgewood/Forest Hills	15,446	20.15	25.09	1.87	29.96	2.36
Fresh Meadows	5,652	16.21	24.63	2.34	34.16	2.94
Southwest Queens	14,752	12.18	25.31	2.06	38.63	2.53
Jamaica	19,784	14.74	32.71	2.40	44.21	3.02
Southeast Queens	6,509	11.69	37.18	2.89	46.31	3.64
The Rockaways	17,488	33.21	43.37	2.26	40.19	3.02
East New York	22,969	19.54	33.58	2.72	47.60	3.33

Source: NYS Department of Health, 2012

Additional behavioral health measures for provider systems implementing the Behavioral Interventions Paradigm in Nursing Homes (BIPNH) project:

Among all long-stay residents in nursing homes in New York State, 12.2% exhibit depressive symptoms (Nursing Home Quality Initiative 2013). Overall mental health services utilization data is available from

NYS OMH by county of provider and, through the OMH Patient Characteristics Survey, county of client residence.

SUBSTANCE USE

Substance abuse often co-occurs with behavioral health issues, or may be triggered by mental health issues. As mentioned in earlier sections, mental health issues were reported to be prevalent among across all populations participating in stakeholder interviews and focus groups, with depression and isolation high among immigrant populations who face pressures from long work hours and social isolation. Drinking alcohol is particularly problematic as it is easily available and legal.

A key informant working across Asian communities stated:

I think substance abuse is something that is definitely not talked about. But in the work that I've done, alcoholism in certain communities is definitely something that people just don't want to acknowledge. In the Filipino community, for example, it's called shabu, but it's equivalent to crystal meth.

This stigma dissuades people from acknowledging their problems and seeking treatment.

The LGBT population in Queens faces significant isolation and stigma which leads to mental health concerns and substance abuse. A key informant noted:

I wouldn't say that the prevalence of psychiatric diagnosis is greater but there is a substantial amount of affective issues of mood anxiety and depression, and with those [conditions] in particular, substances play a very key role in modulating mood.¹⁴¹

Another LGBT focus group noted that there are LGBT-specific issues relating to substance abuse, but also described other themes affecting low-income and/or or immigrants who have substance abuse problems:

I do think there's a fair amount of substance abuse in the LGBT community. In this neighborhood there are two twelve step programs, one of which is specifically LGBT but you still see a lot of people drunk on the street who are obviously not getting assistance. Part of that might have to do with the large number of new immigrants who don't know what's available or two, LGBT AA groups I know of are largely white, so I don't know if immigrants or people with language barriers feel like they can join in....A lot of immigrants suffer because they don't know who to talk to. And they don't have mentors to help navigate the system. So people really suffer if they're not made aware of what is really available.... I'm from the south and I grew up in New York in my 20s and we drank hard and we partied but I feel like the new immigrants are not acclimated to the amount of alcohol that's available and the way we drink. I don't know the answer to this. But

¹⁴¹ NYAM Primary Data

I see on Roosevelt avenue people crazy drunk like I've never seen before, so those people are not being reached. Maybe different languages in this neighborhood are not being reached and represented.

Medical providers also expressed frustration at the challenges in effectively treating this population without a more coordinated, seamless service delivery system across clinical and supportive programs. One ED provider stated:

We have is we have a fairly high substance abuse population. So we see a number of patients with specifically alcohol, but other substances also. We see a pretty large group of patients with alcohol related issues. And so those patients are very regular here and very difficult despite trying to get interventions for them whether it be psychiatric interventions or substance abuse interventions. It's extremely difficult to get them connected and to get them to stay in any kind of program. So we can see them more than once a day, and it wouldn't be surprising....And I'll also say there are some private hospitals in the area that the expectation is the patients are going to come here. We're an HHC hospital. This is an intoxicated patient. You bring them to the city hospital.

Medicaid Fee for Service Performance

There are approximately 35,000 total Substance Use Disorder (SUD) Detox and SUD Rehabilitation (Rehab) discharges among MC FFS beneficiaries across the state. Some 19,000 discharges are from New York City hospitals, accounting for 56% of total admissions. The trends prevalent in mental health care outcomes and apparent gaps in post-discharge services - specifically lack of continuity of care and low prescription fill rates - are evident in post-discharge substance abuse treatment as well.

There are nearly 7,800 30-day readmissions for SUD among MC FFS beneficiaries in NYC, a ratio of 40.3% to total admissions, or a rate 7.4 times higher than for Medicaid PPRs and 1.5 times the readmission rate for Medicaid FFS enrollees for a mental health discharge. (Please note that data in this Medicaid FFS substance use analysis is not currently available at the county or hospital level.) The SUD readmission rate is 7.8 times greater than the benchmark county, Western New York (readmission rate, 5.2%), and 38% greater than the New York State readmission rate of 29.2%, correlating with the lack of continuity of care and medication fill rates post-discharge. Rates of a follow up appointment in a lower level of care SUD service among MC FFS beneficiaries for any SUD Discharges at the 14-day marker is 17.7% lower in NYC, at 30.2%, relative to NYS, at 36.7%. The 14-day follow up rate in Western New York, by comparison, is 42% higher, however, at 51.9%. Rates of follow up at the 30-day period increase over the 14-day point only 8% in NYC to 32.6%, however, increase nearly twice as much in Western New York, to approximately 60%.

With respect to medication fill rates, NYC underperforms in fill rates for both anti-addiction medicine and anti-depressant/mood stabilization medicine at the 30-day marker, yet manages to reach or surpass benchmark levels at the 100-day point for medication refills. This may suggest difficulty in successful outreach to complex patients post-discharge or a more pronounced "healthy adherer" effect among

those patients with an initial medication fill, each possibility creating selection bias in individuals that remain in care or medication. For all medications, the fill rate at the 30-day point in NYC is 19.9%, 38% lower than the rate in Western New York of 31.9% and 21% lower than the rate in New York State of 25%. At the 100 day-point for all medication refills, the NYC, Western New York and NYS all converge to 80%. Within New York City, patients who are prescribed anti-addiction medicines are 40% less likely (at 17.7%) to have it filled, when compared to those who are prescribed anti-depressant/mood stabilization medicine (at 29.5%). This finding suggests that additional research must investigate and evaluate potential gaps between the mental health and substance abuse health care systems.

Table 40 - Substance Use Disorder: Readmissions and Other Metrics Among Medicaid Fee For Service Beneficiaries

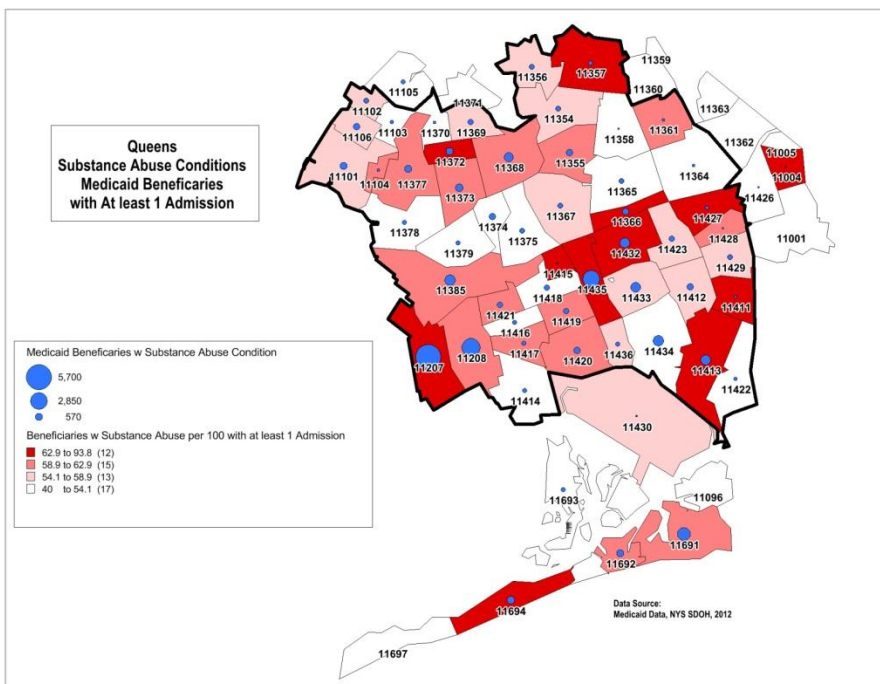
	New York City			New York State		
	Discharges	Events	%	Discharges	Events	%
SUD Readmissions (immediate next service) within 30 Days to Any Region	29,304	12,519	42.9%	49,010	16,116	32.9%
SUD Readmissions (immediate next service) within 45 Days to Any Region	29,304	14,134	48.2%	49,010	18,340	37.4%
Percentage of SUD Detox/Rehab Discharges Followed by a Lower Level SUD Service or MH Outpatient Treatment within 14 Days	23,264	7,023	30.2%	41,490	15,210	36.7%
Percentage of SUD Detox/Rehab Discharges Followed by a Lower Level SUD Service or MH Outpatient Treatment within 30 Days	23,264	7,576	32.6%	41,490	16,798	40.5%
Percentage of SUD Detox or Rehabilitation Discharges Followed by Two or More Lower Level SUD Services within 14 Days of Discharge	20,170	3,557	17.6%	8,198	36,197	22.6%
Percentage of SUD Detox or Rehabilitation Discharges Followed by Two or More Lower Level SUD Services within 30 Days of Discharge	20,170	4,085	20.3%	9,553	36,197	26.4%
Percentage of SUD Detox or Rehabilitation Discharges where a Prescription for an Anti-Addiction/Mood Stabilizer/Antidepressant Medication was Filled within 30 Days	23,435	4,657	19.9%	43,601	10,902	25.0%
Percentage of SUD Detox or Rehabilitation Discharges where a Prescription for an Anti-Addiction/ Mood Stabilizer/Antidepressant Medication was Filled within 100 Days	4,675	3,743	80.1%	10,758	8,583	79.8%

Source: NYS Department of Health, 2012

Medicaid Hospital Utilization among Substance Use CRG beneficiaries

In 2012, approximately 6% (222,000) of all NYC Medicaid Beneficiaries have a diagnosis in the substance use CRG. In Queens, the prevalence is approximately 55% lower than New York City and New York State rate, at 2.9%, respectively. Queens' beneficiaries with a diagnosis in the substance use CRG are as likely to have an admission (60.2%) for any reason, and are 10% less likely to have an ED visit (54%) for any reason when compared to NYS as a whole (60% of NYS beneficiaries in this CRG have least 1 admission or ED visit, or both). East New York at 7.6%, Jamaica at 5.6%, and Rockaway at 6.4% are specific UHF

neighborhoods with a substantially higher prevalence of a substance use CRG diagnoses among Medicaid Beneficiaries in the region.



There is an anomaly between rates of inpatient admission or an ED visit for any reason, and the prevalence of Medicaid Beneficiaries classified with a substance use CRG diagnosis in certain neighborhoods. For example, East Rockaway and Jamaica residents have the second and third highest prevalence of a substance use CRG diagnosis in the region - 6.4% and 5.6% respectively, both nearly twice the prevalence of Queens as a whole. but neither area has hospital-based utilization that exceeds the state rate.

Jamaica has similar metrics with the equivalent likelihood of an admission as the average NYS beneficiary in this CRG, similar inpatient utilization, and slightly lower likelihood of an ED visit, but still 5% greater than Queens overall.

East New York has the highest prevalence in the Queens SA, at 7.58% (2.64 times the Queens rate), and has substantially high utilization measured by any metric. The likelihood for a beneficiary in this CRG to have an admission for any reason is 64%, 7% higher than the Queens rate, with a 16% increased average number of admissions, at 3.76 per beneficiary. Enrollees in this grouping are also 10% more likely to have at least 1 ED visit for any reason (59.4%), and have 25% more ED visits, on average, at 4.89 per beneficiary. Other neighborhoods in the Queens SA, despite low to moderate prevalence, have high rates of inpatient admission and/or ED utilization. Fresh Meadows' beneficiaries within this CRG have an 18% higher likelihood to have an admission, at 71% (highest in region), and have a 76% increased average number of admissions, at 5.71% per beneficiary, when compared to Queens. Southeast Queens also has pronounced utilization metrics, ranging from 12-24% higher than Queens.

TABLE 41 - Hospital Utilization among Medicaid Beneficiaries with Substance Use Condition by UHF Neighborhood

	Beneficiaries with Condition	Diagnosed Prevalence (Per 100)	% with at least 1 Admission	Average # of Admissions	% with at least 1 ED Visit	Average # of ED Visits
NYS	370,898	6.36	59.56	3.13	59.86	4.18
NYC	222,198	6.19	65.03	3.58	58.37	4.34
Queens	26,264	2.87	60.23	3.24	54.04	3.92
QSA	31,425	3.29	61.21	3.37	55.02	4.19
<u>UHF Neighborhoods:</u>						
Long Island City/Astoria	1,909	2.66	56.10	3.25	56.63	3.61
West Queens	3,664	1.59	60.02	2.85	47.71	3.47
Flushing/Clearview	1,617	1.39	59.43	2.86	47.62	4.57
Bayside/Little Neck	250	1.25	54.40	2.90	47.60	2.74
Ridgewood/Forest Hills	2,294	2.99	53.36	2.70	46.21	3.49
Fresh Meadows	1,115	3.20	71.12	5.71	53.27	4.09
Southwest Queens	2,488	2.05	57.60	2.67	53.82	3.61
Jamaica	7,468	5.56	59.75	3.19	56.55	3.85
Southeast Queens	2,045	3.67	68.36	3.61	62.00	4.86
Rockaway	3,386	6.43	62.76	3.44	58.33	4.25
East New York	8,911	7.58	64.31	3.76	59.35	4.89

Source: NYS Department of Health, 2012

DIABETES

Diabetes is the fourth leading cause of early mortality in Queens, with 607 premature deaths between 2010 and 2012, a rate of 29 per 100,000 persons.

Medicaid Avoidable Hospitalizations (PQI)

The various avoidable hospitalizations in the Diabetes PQI composite include short-term complications, long-term complications, uncontrolled diabetes and a lower extremity amputation caused by Diabetes. There are 1,385 Diabetes PQI cases, with an actual rate of 257 per 100,000 population in the borough in 2012. The actual PQI rate is 33% lower than the city rate and 30% lower than the State rate of 385 and 365 per 100,000, respectively. However, there is great variability among neighborhoods with rates that

range from 115 per 100,000 in Flushing/Clearview to 510 per 100,000 in East New York.¹⁴² Key neighborhoods that have the highest actual/risk adjusted expected rate of this PQI include: East New York (23%), Rockaway (28%), Southeast Queens (23%) and Jamaica (12%). East New York (381 cases), Jamaica (356 cases), West Queens (326 cases), and Southwest Queens (224 cases).

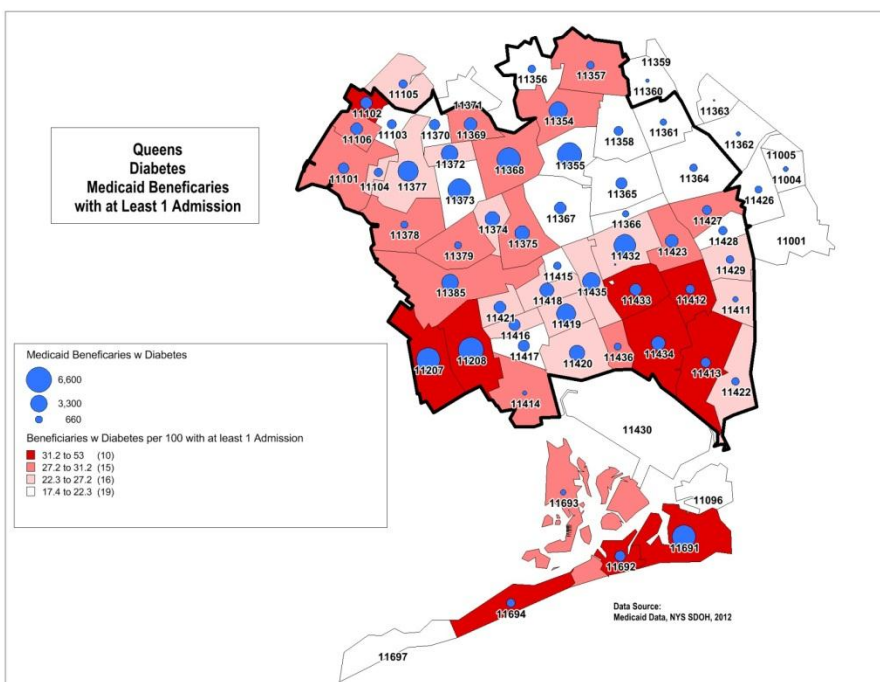
The Queens health system performs well at averting Diabetes-related hospitalizations due to long term complications (actual rate of 151/100,000). This rate is 21% lower than the city rate and 16% lower than the state rate, after controlling for age, race/ethnicity, gender and case mix. The same neighborhoods remain hot spots for this PQI. These include: East New York (20% higher), Rockaway (32% higher), Southeast Queens (23% higher) and Jamaica (12% higher).

The rate of hospitalizations for Queens children aged 6-17 years is 2.3 per 10,000 population, 32% lower than the city rate and 23% lower than the state rate of 3.4/10,000 and 3/10,000, respectively. Among adults in Queens, the hospitalization rate of 5.1/10,000 is 27% lower than the city rate and 16% lower than the state rate of 7/10,000 and 6.1/10,000, respectively.

Medicaid Hospital Utilization among Diabetes Clinical Risk Group (CRG) beneficiaries

Approximately 11.5% of Medicaid beneficiaries in Queens have a diagnosis within the Diabetes CRG, as of 2012, 1% higher than the NYC rate of 11.4% and 18% higher than the New York State rate of 9.6%. Percentages range from 9% to 16% and the highest rates are clustered in Southwest Queens (12.8%), Jamaica (12.3%) and Rockaway (16%).

¹⁴² Medicaid Prevention Quality Indicators, 2012



The diabetes prevalence rate in East New York (10.7%), while lower compared to Queens overall, is still 11% greater than the state rate. East New York also has relatively high utilization rates compared to Queens and New York State. The area has the second highest proportion of the Medicaid population with a Diabetes diagnosis and an inpatient admission (35.4%), 34% higher than the Queens rate and 9% higher than the state rate, and the highest average number of admissions (2.1) per enrollee, 17% higher than the Queens rate and 11% higher than the state rate. These beneficiaries are also 54% more likely to have any ED visit (35.7%), and a 21% higher average number of ED visits per beneficiary (2.39) compared to Queens overall. Other neighborhoods with substantially higher than average rates of utilization include: Southwest Queens, Jamaica and Southeast Queens.

Table 42 - Hospital Utilization among Medicaid Beneficiaries with Diabetes Conditions by UHF Neighborhood

	Beneficiaries with Condition	Diagnosed Prevalence (Per 100)	% with at least 1 Admission	Average # of Admissions	% with at least 1 ED Visit	Average # of ED Visits
NYS	562,637	9.64	32.52	1.89	31.23	2.43
NYC	409,227	11.41	32.27	1.93	28.55	2.25
Queens	105,074	11.47	26.52	1.80	23.17	1.97
QSA	106,517	11.17	26.46	1.83	24.23	2.00
<u>UHF Neighborhoods:</u>						
Long Island City/Astoria	7,959	11.08	27.18	1.86	25.88	1.98
West Queens	22,717	9.88	24.90	1.67	20.58	1.72
Flushing/Clearview	12,964	11.11	21.37	1.67	15.78	1.85

	Beneficiaries with Condition	Diagnosed Prevalence (Per 100)	% with at least 1 Admission	Average # of Admissions	% with at least 1 ED Visit	Average # of ED Visits
Bayside/Little Neck	1,795	9.01	20.95	1.55	13.76	1.51
Ridgewood/Forest Hills	9,134	11.92	27.74	1.64	19.74	1.78
Fresh Meadows	3,902	11.19	21.19	1.80	18.55	2.13
Southwest Queens	15,534	12.83	23.59	1.70	23.92	1.86
Jamaica	16,526	12.31	28.87	1.92	29.64	2.03
Southeast Queens	6,003	10.79	25.54	2.06	27.14	2.33
Rockaway	8,424	16.00	41.99	2.01	29.76	2.48
East New York	12,580	10.70	35.41	2.10	35.66	2.39

Source: NYS Department of Health, 2012

Factors associated with ever receiving a Diabetes diagnosis

In the general NYC population, 10.6% of adults report having a lifetime Diabetes diagnosis (weighted population, 667,000¹⁴³). Among those adults that have a Diabetes diagnosis, there is a 15% higher likelihood of being foreign born (prevalence, 1.4%), 159% increased likelihood to have at least a PCP (prevalence, 12%), 19% higher likelihood to have Medicaid insurance, relative to private insurance (prevalence, 13.4%) and 46% lower likelihood to have no insurance (prevalence, 6.1%), relative to private insurance.

It is also very common for those that have ever received a Diabetes diagnosis to report a diagnosis for another chronic condition in their lifetime. These are 5.96 times more likely to have had a hypertension diagnosis (prevalence, 26.8%), 3.6 times more likely to have had a cholesterol diagnosis (prevalence, 21.8%), 60% more likely to ever have had an asthma diagnosis (prevalence, 15.7%) and 4.37 times more likely to be obese (prevalence, 21.1%), relative to normal weight. They also more commonly report performing health behaviors that may add additional risk for a chronic disease diagnosis or lead to a potential worsening of a chronic condition. They are 2.43 times more likely to have had a recent binge drinking episode (prevalence, 11.6%) and 133% more likely to be not physically active at all (prevalence, 22.7%) compared to those who were somewhat active. There are some risk behaviors, such as smoking and consuming sugar sweetened beverages, that are reported at lower rates among the population with Diabetes. They are 11% less likely to be a current smoker (prevalence, 8.8%) than never having smoked and are 2.7 times more likely to have no sugar sweetened beverage, on average, per day (prevalence, 16.8%), which may be a positive sign that they are trying to self-manage their condition by changing lifestyle habits.

West Queens (12.8%; weighted population, 42,000), Southwest Queens (13.1%; weighted population, 25,000), Jamaica (14.1%; weighted population, 31,000), East New York (20.1%; weighted population,

¹⁴³ New York City Department of Health and Mental Hygiene Community Health Survey, 2012

24,000) and Rockaway (13.6%; weighted population, 15,000) are the neighborhoods in the region that have the highest prevalence of the adult population ever having had a Diabetes diagnosis.

CARDIOVASCULAR DISEASE/HEART HEALTH/STROKE

Heart Disease is the second leading cause of premature death in Queens with 4,101 deaths in 2010-2012 (age-adjusted rate of 165 per 100,000). Heart disease is also the leading cause of death in Queens, with 4,699 deaths in 2012, at a rate of 183 per 100,000. The mortality rate is highest among White Non-Hispanics, at 392 per 100,000, nearly twice the rate among Black Non-Hispanic populations (208 per 100,000)

Medicaid Avoidable Hospitalizations (PQI)

The various avoidable hospitalizations within the circulatory composite PQI indicator include: hypertension, congestive heart failure and angina without a corresponding procedure. There are 2,171 Circulatory PQI cases, with an actual rate of 346 per 100,000 population, in Queens, as of 2012. The actual PQI rate is 25% and 15% lower than the City and State rate of 461 per 100,000 and 408 per 100,000, respectively. However, there is great variability among neighborhoods with rates that range from 199 per 100,000 in Fresh Meadows to 533 per 100,000 in Southeast Queens.¹⁴⁴ Specific neighborhoods with higher than expected rates (actual/risk adjusted expected rate) of this PQI than in the region include: East New York (445 cases, 13% higher), Southeast Queens (370 cases, 28% higher) and Jamaica (445 cases, 15% higher).

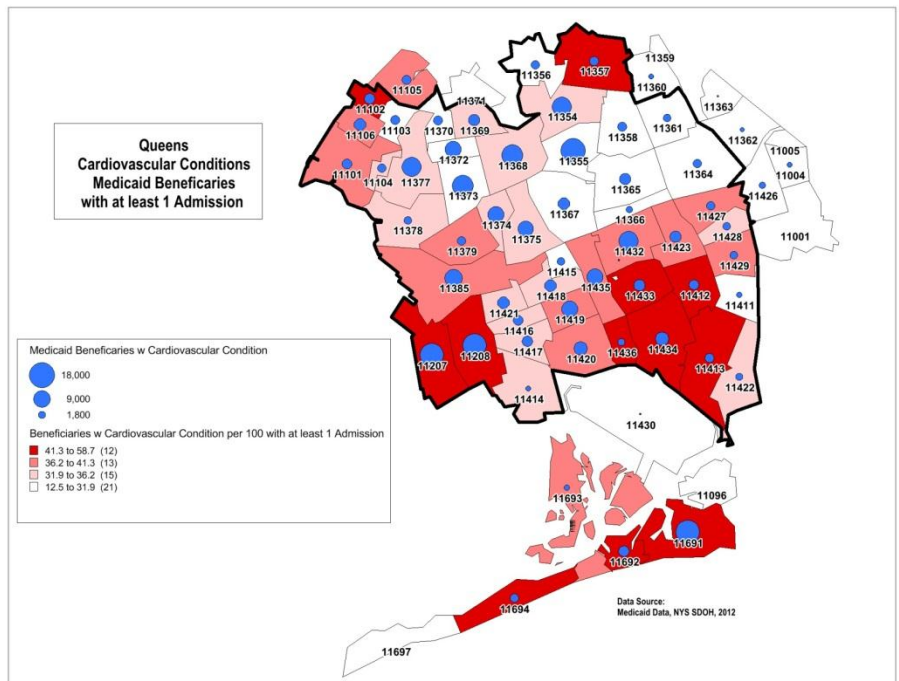
The borough's performance in averting hospitalizations due to hypertension (actual rate of 89/100,000) is also excellent at 17% lower than the city rate and 9% lower than the state rate, after controlling for age, race/ethnicity, gender and case mix. The same mix of neighborhoods remain hot spots when considering hypertension admissions. These neighborhoods include: East New York (26% higher), Rockaway (38% higher), Southeast Queens (38% higher) and Jamaica (23% higher). Queens, with an actual rate of 232/100,000 population of Congestive Heart Failure cases, is 14% and 10% lower than the City rate and State rate, after controlling for age, race/ethnicity, gender and case mix. Neighborhood performance patterns persist. East New York (8% higher), Rockaway (39% higher), Southeast Queens (25% higher) and Jamaica (12% higher) neighborhood UHFs all have higher than expected rates.

The rate of age-adjusted heart attacks is also lower in Queens (13.3 per 10,000) than in the city (13.5 per 10,000) or the state (15.1 per 10,000), as of 2012.

Medicaid Hospital Utilization among Cardiovascular Clinical Risk Group (CRG) Beneficiaries

¹⁴⁴ Medicaid Prevention Quality Indicators, 2012

Approximately 29.6% of Medicaid beneficiaries in Queens have a diagnosis within the Cardiovascular CRG diagnosis grouping, as of 2012, a figure 2% lower and 14% higher than the City and State rate of 30.2% and 26.4%, respectively. Percentages range from 23.8% to 45.4%, with the highest rates clustered in Ridgewood/Forest Hills (36.2%). While the health system in Ridgewood/Forest Hills has, to date, successfully averted hospital-based utilization for these beneficiaries, Jamaica, Southeast Queens and East New York all have relatively high hospital utilization by any metric.



East New York has a cardiovascular CRG diagnosis prevalence rate (26.4%) that is in line with the NYS rate, but rates are disproportionately higher across each metric. The area has the second highest proportion of the Medicaid population with a cardiovascular diagnosis with any inpatient admission (44.8%), or 26% and 12% higher than the Queens and NYS rate. This neighborhood also has the highest average number of admissions per enrollee (2.19), 16% higher than the Queens rate and 11% higher than the state rate. Thirty-six percent (36%) of beneficiaries with this diagnosis have had an ED visit, 52% higher than the Queens rate, and have an average number of ED visits per beneficiary, at 26% higher than Queens rate (in line with the State rate).

Jamaica and Southeast Queens also follow this pattern. Jamaica beneficiaries in this CRG are 16% and 29% more likely to have any admission or ED visit relative to the Queens rate (41.2% and 30.7%, respectively). Southeast Queens' beneficiaries in this CRG are 5% and 20% more likely to have any admission or ED visit relative to the Queens rate, at 37.4% and 28.7%, respectively. These geographic distributions are consistent when drilling down into the hypertension diagnosis in the Cardiovascular CRG and analyzing inpatient and emergency department utilization rates.

Table 43 - Hospital Utilization among Medicaid Beneficiaries with Cardiovascular Conditions by UHF Neighborhood

	Beneficiaries with Condition	Diagnosed Prevalence (Per 100)	% with at least 1 Admission	Average # of Admissions	% with at least 1 ED Visit	Average # of ED Visits
NYS	1,543,129	26.44	40.00	1.97	31.28	2.57

	Beneficiaries with Condition	Diagnosed Prevalence (Per 100)	% with at least 1 Admission	Average # of Admissions	% with at least 1 ED Visit	Average # of ED Visits
NYC	1,085,013	30.24	40.44	2.03	28.09	2.37
Queens	271,388	29.63	35.55	1.89	23.89	2.10
QSA	270,776	28.38	35.68	1.92	24.88	2.16
<u>UHF Neighborhoods:</u>						
Long Island City/Astoria	20,511	28.55	37.52	1.94	26.68	2.29
West Queens	54,707	23.80	32.08	1.79	21.34	1.82
Flushing/Clearview	37,374	32.02	29.01	1.78	16.65	2.00
Bayside/Little Neck	5,924	29.74	24.71	1.57	13.23	1.53
Ridgewood/Forest Hills	27,747	36.20	35.47	1.70	20.16	1.86
Fresh Meadows	10,718	30.74	28.73	1.74	19.91	2.02
Southwest Queens	35,914	29.66	35.50	1.85	25.90	1.94
Jamaica	38,841	28.94	41.21	2.03	30.73	2.20
Southeast Queens	15,411	27.69	37.41	2.13	28.71	2.63
Rockaway	23,924	45.43	47.75	2.10	30.06	2.50
East New York	31,027	26.40	44.83	2.19	36.36	2.65

Source: NYS Department of Health, 2012

Factors associated with ever receiving a Hypertension diagnosis

In the general NYC population, 27% of adults report having a lifetime Hypertension diagnosis (weighted population, 1,726,000¹⁴⁵). Among those that have a Hypertension diagnosis, there is a 15% increased likelihood to report be native born (prevalence, 28.5%). They also report 2.37 times more likely to have a PCP (prevalence, 30.8%) and 52% less likely to be uninsured (prevalence, 14.6%), relative to private insurance. It was also very common for those that have a Hypertension diagnosis to report a diagnosis for another chronic condition in their lifetime. They are 3.1 times more likely to report having had a diabetes diagnosis (prevalence, 69.2%), 2.7 times more likely to have had a cholesterol diagnosis (prevalence, 49.9%), 19% more likely to ever have had an asthma diagnosis (prevalence, 31.8%) and 2.75 times more likely to be obese (prevalence, 44.9%) relative to normal weight. They are more commonly reporting performing health behaviors that could create additional risk for a chronic disease diagnosis or lead to a potential worsening of a current chronic condition. They are 15% more likely to report being a current smoker (prevalence, 28.1%) and 1.77 times more likely to be not active at all (prevalence, 46.1%), when compared to those who are somewhat active. There are some risk behaviors, such as binge drinking and consuming sugar sweetened beverages, that are reported at lower rates among the population with Hypertension. They are 31% less likely to have had a recent binge drinking episode

¹⁴⁵ New York City Department of Health and Mental Hygiene Community Health Survey, 2012

(prevalence, 19.9%) than those who did and are 19% more likely to have no sugar sweetened beverage, on average, per day (prevalence, 32.9%), than those who had one sugar sweetened beverage.

Southeast Queens (35.3%; weighted population, 56,000), East New York (34.8%; weighted population, 42,000) are the neighborhoods in the Queens region that have the highest prevalence of the adult population with a lifetime Hypertension diagnosis. Additional areas that have large populations with hypertension include: West Queens (88,000), Flushing/Clearview (51,000), Ridgewood/Forest Hills (55,000), Southwest Queens (56,000) and Jamaica (70,000).

HIV/AIDS and STDs

Queens has a substantially lower diagnosis and incidence rate of HIV, Chlamydia and Gonorrhea compared to New York City as a whole, however stark disparities exist for certain UHF neighborhoods and rates of HIV and STDs. The neighborhoods of Jamaica, Long Island City/Astoria, West Queens and East New York present the greatest need for intervention to reduce the spread of these conditions and level their impact across communities.

HIV/AIDS Diagnosed Prevalence (Proxy for Prevalence)

Although the prevalence rate for Queens is lower than the NYC overall diagnosed prevalence rate, as of 2011, four of the eleven UHF neighborhood districts in the region range between 27 and 102% higher than the diagnosed prevalence in Queens, with East New York as the highest at two times the Queens-wide rate.

HIV/AIDS Case Rate (Proxy for Incidence)

The HIV/AIDS case rate in Queens is 46% lower than the New York City rate overall, but wide disparities exist within the borough. Neighborhoods with the highest diagnosed prevalence (a proxy for actual prevalence) - Jamaica, Long Island City/Astoria, West Queens, and East New York - also have the highest case rates (proxy for incidence) in 2011. Neighborhoods with the highest case rates of HIV in this region perform well at avoiding concurrent HIV/AIDS diagnoses, that is, HIV diagnoses occurring so late that they also come with an AIDS diagnosis (as a benchmark, 20% of citywide cases are concurrent, though this rate had decreased precipitously over time with enhanced testing and surveillance efforts). The exception among these four key neighborhoods is East New York--28% of cases are concurrent with AIDS.

Tracking neighborhoods with a high percentage of concurrent HIV/AIDS diagnoses can be an effective strategy in decreasing HIV/AIDS mortality and reducing transmission risk among those unaware of their HIV serostatus. These areas include Flushing/Clearview (39% concurrent) and Southeast Queens (32% concurrent). Risk factors to having a concurrent diagnosis in NYC include living in areas with medium to high poverty levels, being 40-49 years of age, being Black or Hispanic, and being an MSM (Men who

have Sex with Men).¹⁴⁶ Being foreign born is also considered a factor to concurrent diagnosis in New York City,¹⁴⁷ which may indicate a need for more culturally and/or linguistically outreach and testing strategies in targeted communities.

Queens' residents, who are HIV positive or have a diagnosed with AIDS, have higher rates of viral load suppression (69.1%) as compared to New York City (61.2%) and New York State (62.2%).¹⁴⁸ Among Medicaid Managed Care Beneficiaries in Queens who are HIV positive or who have been diagnosed with AIDS, 88% are engaged in care, with 68% received appropriate viral load monitoring, and 66% of those 19 or older received Syphilis screening.¹⁴⁹ Viral load suppression is a key factor in reducing transmission of HIV.

According to key informants, a portion of the HIV-infected population continues to struggle with stability and access to resources to meet basic needs. Yet as treatments became more effective, HIV funding has shifted to medical management, with diminished resources available for supportive services. Two key informants explained:

We still have the state ADAP program that covers immigrants, the undocumented and uninsured. So the system of care for HIV is well built. What's peeling away are some of the supportive services that keep people in care or bring them to care in the first place. I mean, I think substance use treatment services and mental health services have blossomed finally. ... Community-based programs that used to provide supportive services for HIV ... have been pared down, and there's more of a funder focus on medical [unclear] HIV care, putting more funding in the hospital setting for case management, HIV case management. ... I think that 70 AIDS service organizations in New York City have closed or merged with another organization since 2009 (key informant, HIV focused CBO).

The focus being on medication management more than anything and making sure that people are taking their meds. I don't know that we've necessarily seen an incredible change in terms of people's ability to become stable and go back to work and no longer be dealing with the key determinants of poverty, let's say, they're still struggling with major issues that impact their lives and that impact their stability. That's still pretty constant. Access to housing and ... access to appropriate care. Things like access to appropriate entitlements. (Key informant, multiservice organization).

In addition, individuals taking HIV medications have increasing risk of medical complications from the drugs themselves.

STD Incidence

¹⁴⁶ New York City HIV/AIDS Annual Surveillance Statistics 2012

¹⁴⁷ HIV diagnosis and care initiation among foreign-born persons in New York City, 2001–2007

¹⁴⁸ HIV Ambulatory Care Performance, 2011

¹⁴⁹ QARR, 2012

Rates of Chlamydia and Gonorrhea are 33% and 40% lower than the citywide rate in 2009, at 466 cases and 78 cases per 100,000 persons, respectively. High rates of STDs are concentrated in East New York, Jamaica, West Queens (Chlamydia only), and Southeast Queens.

East New York has the highest incidence rate of Chlamydia, at 1,317 cases per 100,000, 89% greater than the City rate. Jamaica's incidence rate is 28% higher than the City rate at 890 cases per 100,000. Southeast Queens and Rockaway have incidence rates in line with the citywide rate, at 689 and 685 cases per 100,000, respectively. West Queens has an incidence rate 26% below the city rate, but 11% above the Queens-wide rate. Among Medicaid Managed Care Beneficiaries in Queens, 69% of sexually active women between 16 and 24 years of age receive a Chlamydia screening.¹⁵⁰

East New York has the highest incidence rate of Gonorrhea, at 270 cases per 100,000, 107% greater than the City rate. Jamaica's incidence rate is 55% higher than the City rate at 202 cases per 100,000. Southeast Queens has an incidence rate in line with the citywide rate, at 130 and 127 cases per 100,000, respectively.

Racial/ Ethnic HIV/AIDS and STD Disparities

The rate of new HIV diagnoses among black/African American people living in Queens is more than four times the rate among whites in the borough (43.8 compared to 10 cases per 100,000 people).¹⁵¹ The rate of new HIV diagnoses among Latinos living in Queens is over 3.5 times that of whites (35.6 compared to 10 cases per 100,000 people).¹⁵²

The rate of new Chlamydia incidence among Black/African American people living in Queens is more than 21 times the rate among Whites in the borough (685 compared to 32 cases per 100,000 people). The rate of new Chlamydia incidence among Latinos living in Queens is over 6.5 times that of Whites (206 compared to 32 cases per 100,000 people). The rate of new Gonorrhea incidence among black/African American people living in Queens is more than 23 times the rate among Whites in the county (176 compared to 8 cases per 100,000 people). The rate of new Gonorrhea incidence among Latinos living in Queens is over four times the rate of the White population (31 compared to 8 cases per 100,000 people).¹⁵³

Gender Disparities

¹⁵⁰ QARR, 2012

¹⁵¹ New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - [HIV/AIDS Surveillance Data 2011]. [1 August 2014]. <http://nyc.gov/health/epiquery>.

¹⁵² New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - [HIV/AIDS Surveillance Data 2011]. [1 August 2014]. <http://nyc.gov/health/epiquery>.

¹⁵³ New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - [STD Surveillance Data 2009][1 August 2014]. <http://nyc.gov/health/epiquery>.

The rate of new HIV diagnoses among Males living in Queens is more than four times the rate among females in the borough (37 compared to 8.6 cases per 100,000 people).¹⁵⁴ Rates of other STDs such as Gonorrhea, Chlamydia and Syphilis in Queens outpace corresponding rates in NYS. In 2009, the rate of Chlamydia among Females aged 15-44 years in Queens, at 611 per 100,000, is 1.9 times the rate for Males. In 2011, the Queens Chlamydia rates by gender are in line with the state rate. In 2011, the rate of Gonorrhea among men aged 15-44 years in Queens, at 94 per 100,000, is 1.5 times the rate for women. In 2011, the Queens Gonorrhea rates by gender are in line with the state rate.

The neighborhoods of Jamaica, Long Island City/Astoria, West Queens, and East New York, on the border of Queens and Brooklyn, experience the greatest burden from disparities in HIV and STDs. (See Tables, Appendix B.) Neighborhoods with high rates of concurrent HIV/AIDS diagnoses - Rockaway, Flushing/Clearview, and Southeast Queens - should be targeted for prevention strategies that emphasize early detection of HIV to avert transmission and reduce mortality rates.

CANCER

The incidence rate of colorectal, breast, lung or bronchus and prostate cancer is lower in Queens compared to New York State incidence. Incidence data, as of 2007-2011, is available at the ZIP Code level and has been mapped and analyzed. The New York State Cancer Registry provides actual and expected rate, with the latter rate controlling for the local age distributions, relative to the state age distribution.

Colorectal

There are 5,715 colorectal cancer cases in Queens, 4% lower than the state rate, when comparing actual to expected (age-adjusted) Statewide rates. Rockaway (333 cases; 14% higher), East New York (339 cases; 9% higher), Flushing/Clearview (853 cases; 7% higher), Bayside/Little Neck (310 cases; 3% higher) are neighborhoods with higher than expected rates of colorectal cancer over this time period.

Breast

There are 7,489 breast cancer cases in Queens, 15% lower than the state rate, when comparing actual to expected (age-adjusted) Statewide rates. Rockaway (430 cases; 2% higher) and Fresh Meadows (398 cases; 4% higher) are the neighborhoods with higher than expected rates of breast cancer over this time period.

Lung or Bronchus

¹⁵⁴ New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - [HIV/AIDS Surveillance Data 2011]. [1 August 2014]. <http://nyc.gov/health/epiquery>.

There are 6,061 lung or bronchus cancer cases in Queens, 24% lower than the state rate, when comparing actual to expected (age-adjusted) State wide rates. Rockaway (389 cases; 4% higher), was the only neighborhood with higher than expected rates of lung or bronchus cancer over this time period.

Prostate

There are 7,458 prostate cancer cases in Queens, 11% lower than the state rate, when comparing actual to expected (age-adjusted) Statewide rates. Rockaway (484 cases; 16% higher), East New York (621 cases; 28% higher), Jamaica (925 cases; 32% higher) and Southeast Queens (612 cases; 47% higher) are neighborhoods with higher than expected rates of prostate cancer over this time period.

PAIN MANAGEMENT AND PALLIATIVE CARE

The need for palliative care services will increase significantly as the population of New York City ages, and the prevalence of conditions suitable for palliative care increases. In Queens in 2020, 11.7% of the residents will be age 65 or older. In 2030, the percentage will be 114.5%, or almost one person in seven.¹⁵⁵ At least 80% of the elderly have at least one chronic condition.¹⁵⁶

Clinicians are warning that, as the population ages, it will be accompanied by, “a marked increase in patients requiring care for disorders with a high prevalence in the elderly. As cancer incidence increases exponentially with advancing age, it is expected that there will be a corresponding surge in older cancer patients that will challenge both healthcare institutions and healthcare professionals (p. 147)”.¹⁵⁷ Moreover, healthcare professionals will face an increase in patients with multiple age-related conditions.

Within the HHC PPS service areas, there are a high number of hospitalizations related to chronic conditions, particularly among older age groups. For example, there were 47,464 Manhattan residents hospitalized with at least one of nine chronic conditions (arthritis, CHF, COPD, ESRD, HIV, hypertension, mental health, obesity and diabetes). Although the majority of these individuals are age 65 and older, a significant percentage is between ages 45 and 64.¹⁵⁸ The lower Manhattan service area had 7,176 residents hospitalized who had at least three chronic conditions and the upper Manhattan service area had 21,768 residents.

¹⁵⁵ City of New York Department of City Planning (2006). *New York City Population Projections by Age/Sex & Borough 2000-2030*.

¹⁵⁶ Centers for Disease Control and Prevention (2011). Healthy Aging: Helping People to Live Long and Productive Lives and Enjoy a Good Quality of Life. At: www.cdc.gov/chronicdisease/resources/publications/aag/aging.htm.

¹⁵⁷ Berger et. al (2006). Cancer in the elderly. *Transactions of the American Clinical and Climatological Association*, 117, 147-156.

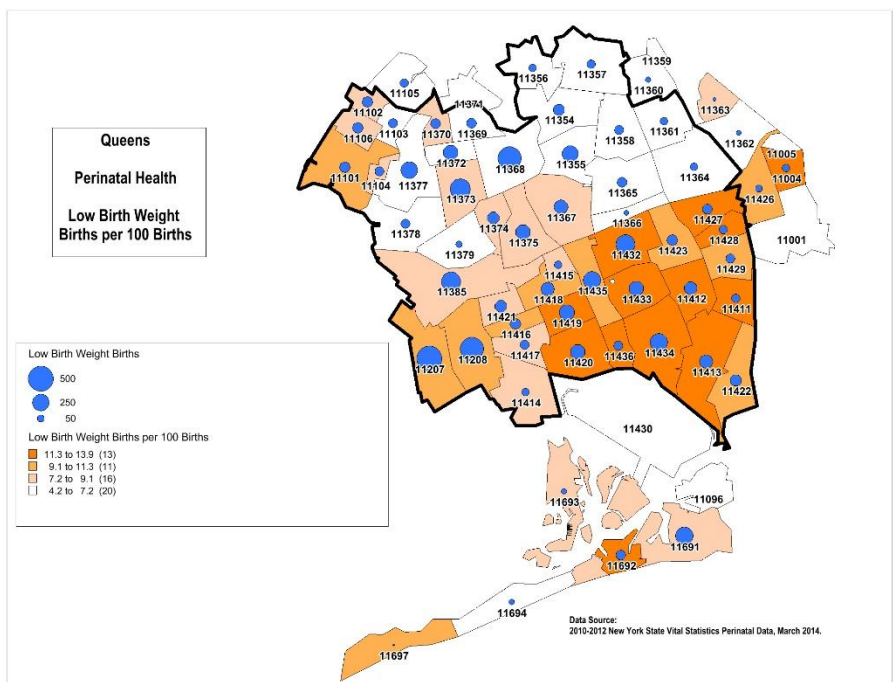
¹⁵⁸ Unpublished analysis by the Healthcare Association of New York State, 2013.

Pain management is particularly needed among residents of nursing home residents. The percentage of nursing home short-stay residents who self-report moderate-to-severe pain is 19% and 14%, nationally and statewide, respectively. Among long-stay patients, the percentage self-reporting moderate-to-severe pain is 8% and 3%, nationally and statewide, respectively.¹⁵⁹

Federal data from eight city skilled nursing facilities finds the percentage of short-stay residents who self-report moderate to severe pain is 0-19%. Self-report of moderate to severe pain among long-stay residents in these facilities ranges from 0-4%. In five SNFs in Lower Manhattan, the percentage of short-stay residents who self-report moderate to severe pain is 0-11%, while the percent of long-stay residents who self-report moderate to severe pain is 0-24%. These are subject to self-report bias and are percentages are likely conservative as patients with dementia who experience pain may be unable to self-report their conditions. A secondary literature review indicates that 50% of persons with dementia experience regular pain, which can be the underlying cause of behavioral symptoms.

MATERNAL/CHILD HEALTH

Over the period 2010-2012, Queens averaged 30,333 live births per year, representing 25.6% of the births in New York City and 12.6% of the births in the state. The percentage of all births in Queens that are Medicaid or self-pay is 56.6%, compared to 59.7% in NYC and 50.1% in the State; the percentage of Medicaid or self-pay births across Queens neighborhoods range from 27.5% (Bayside/Little Neck) to 78.1% (West Queens). The highest fertility rates in the Queens SA are found in West Queens, Fresh Meadows and East New York.



Teen pregnancy and childbearing bring substantial social and economic costs through immediate and long-term impacts on teen parents and their children – teen pregnancy is associated with higher rates of

¹⁵⁹ Nursing Home Compare website, accessed September 2014. A sample based dataset of individuals receiving community-based long-term care services.

poverty and incarceration and lower rates of educational attainment. The teen birth rate is 24 per 1,000 population in the Queens Service Area, 20 percent higher than the city rate (20.2 per 1,000). Areas that have high teen birth rates include West Queens (33 per 1,000), Southwest Queens (21 per 1,000), Jamaica (27 per 1,000) and East New York (41 per 1,000).

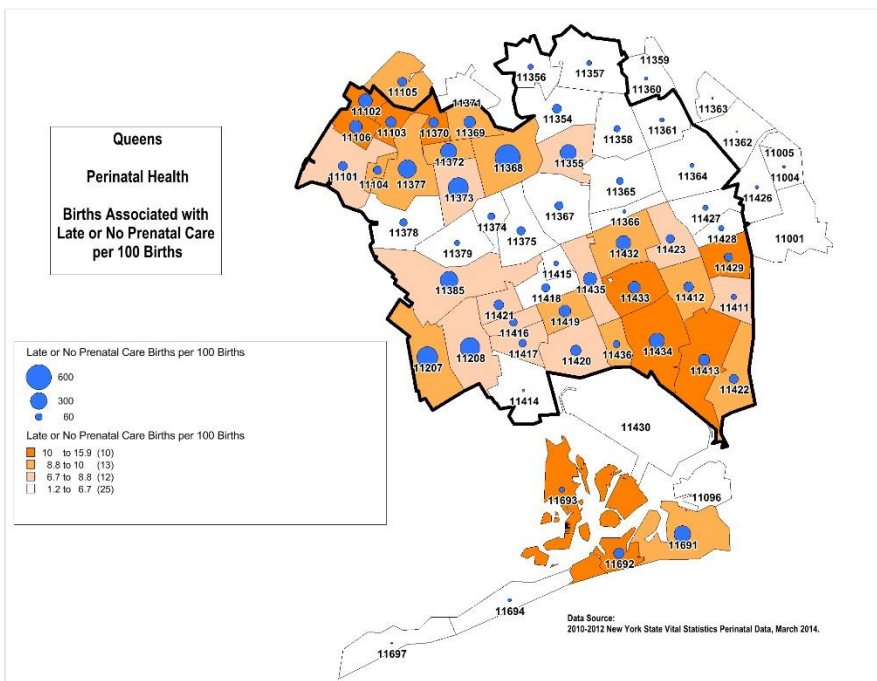
Low birth-weight babies are at high risk for respiratory infection, blindness, learning disabilities, cerebral palsy and heart infection, and have higher rates of sudden infant death syndrome and infant mortality¹⁶⁰. The overall Low Birth Weight (LBW) rate for the Queens SA over the same time period is 8.1%, compared to 8.5% for NYC and 8.1% for the State. Across neighborhoods, the LBW rates range from 6.2% (Flushing/Clearview) to 11.3% (Jamaica), with the highest rates found in a large cluster of ZIP Codes extending through the Jamaica and Southeast Queens, as well as the ZIP Codes in East New York. These neighborhoods also experience the highest rates of infant mortality.

Preterm birth, defined as a birth of an infant before 37 weeks of pregnancy, accounts for a large proportion of infant deaths, and is a leading cause of long-term neurological disorders in children. 11.3% of births in the Queens SA are preterm, a rate that slightly higher than the city rate (10.9%). Neighborhoods with high rates of preterm birth include Southwest Queens (12%), Jamaica (14%), Southeast Queens (14%) and East New York (15%). Finally, the infant mortality rate per 1,000 persons is 4.6 in the Queens SA, 5% higher than the city rate (4.4 per 1,000). Neighborhoods with high rates of infant mortality include Jamaica (7.5 per 1,000), Southeast Queens (6.4 per 1,000) and East New York (7%).

Regular and early prenatal care provides an opportunity for pregnant women to discuss their pregnancy and their behaviors (healthy diet, use of vitamin supplements) with their care provider, as well as identify maternal risk factors (genetic, hypertension, diabetes, etc.) and health promotion opportunities. It is essential to have these visits early in pregnancy to have an optimal effect on pregnancy outcomes

¹⁶⁰ AHRQ, 2014

and to reduce the risk of serious complications¹⁶¹.



The areas that had poor birth outcomes (low birth weight, preterm birth and infant mortality) also have high rates of late (defined as later than first trimester) or no prenatal care. This rate for Queens over the same time period is 7.5%, compared to 7.0% for NYC and 5.5% for the state. Across neighborhoods, rates of late or no prenatal care rates range from 2.6% (Bayside/Little Neck) to 10.9% (Long Island City/Astoria), the latter neighborhood with a rate two times the state rate. Other neighborhoods that have less than optimal utilization of prenatal care include West Queens (8.9%), Jamaica (9.1%), Rockaway (9.4%) and East New York (9%).

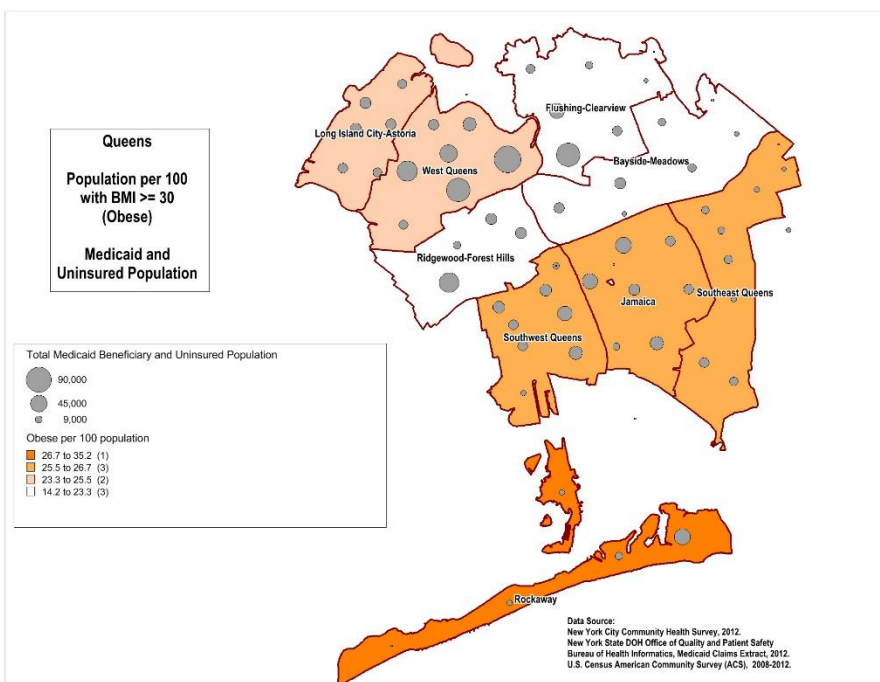
OVERWEIGHT/OBESITY/HEALTHYEATING/EXERCISE

The prevalence of obesity in Queens is slightly lower than the NYC or NYS rate, with just under one-quarter (22.2%) of all adults in Queens reporting a BMI ≥ 30 that is consistent with being considered obese, versus 24.2% in NYC and 23.6% in the state.¹⁶² (See table, Appendix B.) The obesity rate varies widely within Queens with the highest rates in East New York (37%), Jamaica (26.7%), Southeast Queens (25.8%), Southwest Queens (25.5%) and West Queens (23.3%), all areas with high prevalence of Medicaid populations. Among children and adolescents, approximately one in five is obese (21.1%), on par with NYC, but higher than NYS (17.6%, excluding NYC) for the same time period.¹⁶³

¹⁶¹ AHRQ, 2014

¹⁶² NYC Community Health Survey, New York City Department of Health, 2012

¹⁶³ Data years 2010-2011



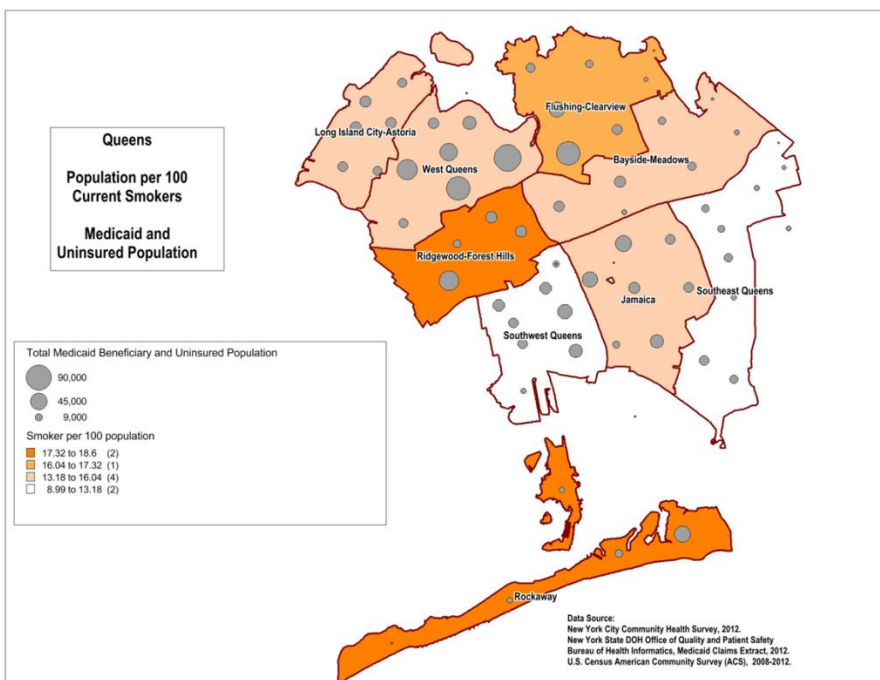
According to results from the community survey, there was some variability in health according to population. Among African American and Caribbean populations in Jamaica, obesity and asthma were considered very problematic. Among the Asian groups, ingredients (many vegetables) were considered healthy, although preparation (commonly fried) was less so. Obesity was considered less of a problem in Asian communities compared to others, and physical activity was apparently more common. Access to healthy foods was not described as particularly problematic in many neighborhoods, although limitations were described in Jamaica.¹⁶⁴ (Appendix D)

TOBACCO USE/CESSATION

In the general NYC population, 15.6% of adults report as current smokers (weighted population, 981,000¹⁶⁵). Among those that are smokers, there is a 48% higher likelihood to be native born (prevalence, 18.7%). Current smokers are also 31% less likely to have a PCP (prevalence, 14.5%), 40% more likely to have Medicaid insurance (prevalence, 19%) compared to private insurance, and 35% more likely to be uninsured (prevalence, 18.3%), relative to private insurance. Being a current smoker is not associated with any particular chronic condition, as rates of diabetes, while hypertension and high cholesterol did not vary by current smoking current smokers are 31% more likely to have a lifetime asthma diagnosis (prevalence, 20.2%), however. Current smokers are also 2.3 times more likely to have had a recent binge drinking episode (prevalence, 30.8%), compared to not having had a recent episode.

¹⁶⁴ NYAM Primary Data

¹⁶⁵ New York City Department of Health and Mental Hygiene Community Health Survey, 2012.



Long Island City/Astoria (16%; weighted population, 27,000), West Queens (15.9%; weighted population, 56,000), East New York (16.7%; weighted population, 21,000), Flushing (16.3%; weighted population, 33,000), Ridgewood (17.3%; weighted population, 33,000) and Rockaway (18.6%; weighted population, 14,000) are the neighborhoods in the Queens region that have the highest prevalence of the adult population that are current smokers.

DRUG OVERDOSES

About 9,000 city residents died of an unintentional drug poisoning (overdose) from 2000-2012, an average of 700 overdose deaths per year.¹⁶⁶ In 2012 nearly all unintentional drug poisoning deaths involved more than one substance, including alcohol, licit and illicit drugs, most commonly identified as heroin, cocaine, benzodiazepines, prescription opioid analgesics and methadone, according to DOHMH.

Access to and Quality of Health Care in New York State by Insurance Status

Compared with commercially insured populations, Medicaid Managed Care adult beneficiaries are less satisfied with their primary care providers and specialists, and generally rate the quality of their health care lower. Adult Medicaid Managed care populations are also less likely to have received care when needed. Child Medicaid beneficiaries appear to receive care at a rate on par with commercial plans.¹⁶⁷

¹⁶⁶ New York City Department of Health and Mental Hygiene. *Unintentional Drug Poisoning (overdose) Deaths in New York City, 2000-2012*. Epi Data Brief, Sept. 2013, No. 33

¹⁶⁷ "2013 Health Plan Comparison in New York State," New York State Department of Health

The following discussion notes differences in access to and quality of health care between Medicaid Managed Care and commercially insured populations in New York State.

Overall Quality of Care and Patient Satisfaction

High ratings on patient satisfaction measures are directly correlated with better patient engagement in clinical decision-making and more interaction between patients and their physicians¹⁶⁸. Engaged patients are more likely to manage their health and health care, which is correlated with lower health care costs.¹⁶⁹

Fewer Medicaid Managed Care beneficiaries reported satisfaction with healthcare services when compared to beneficiaries of commercial Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs) in New York State. Table 42 provides a comparison of several measurements of patient satisfaction by payer status. In all categories, on average, the commercial organizations performed better than the Medicaid Managed Care organizations.

Table 44 - Selected Patients' Satisfaction Ratings for Adult Services-Statewide Averages By Payer

	Commercial HMO	Commercial PPO	Medicaid Managed Care*
Satisfaction with Provider Communication	94%	95%	87%
Satisfaction with Personal Doctor	83%	84%	73%
Satisfaction with Specialist	83%	83%	69%
Received Needed Care	87%	87%	75%
Got Care Quickly	87%	86%	76%

Source: 2013 Health Plan Comparison in New York State, New York State Department of Health. * Data is for 2011.

In the table above, "Satisfaction with Communication" is the percent of members who responded "usually" or "always" when asked how often their doctors listened to them carefully, explained things in a way they could understand, showed respect for what they had to say, and spent enough time with them. "Satisfaction with Personal Doctor" and the "Satisfaction with Specialist" measures are the percentage of members who rated their doctors 8, 9 or 10 (on a scale of 0-1, where 0 is the lowest). Additionally, patients were asked a series of questions to determine if they received necessary care and if they were able to get an appointment for routine care as soon as desired. "Received Needed Care" reflects the percent of members who responded "usually" or "always" in regard to receiving urgent care, and "Got Care Quickly" represents the percentages of members who responded "usually" or "always" in regard to expediency. Commercial organizations performed better than Medicaid Managed Care organizations across all measures.

¹⁶⁸ "The CAHPS Improvement Guide," AHRQ, June 17, 2012.

¹⁶⁹ "Health Policy Brief: Patient Engagement," Health Affairs, February 14, 2013.

Access to Care for Adults

Compared to commercial organizations, adult Medicaid Managed Care populations are often less likely to have received care when needed. Table 45 presents selected quality of care measures for several illnesses by payer.

Table 45 - Selected Quality of Care Measures for Adults – Statewide Averages by payer

	Commercial HMO		Commercial PPO		Medicaid Managed Care	
Controlling High Blood Pressure	59%		57%		63%	
Poor HbA1c Control in Diabetics* (Lower is better)	27%		42%		33%	
Use of Appropriate Medications for People with Asthma	89%		90%		82%	
Behavioral Health: Follow-up after Hospitalization for Mental Illness	64%	78%	58%	71%	65%	79%

Source: 2013 Health Plan Comparison in New York State," New York State Department of Health. * Data is from 2011

“Controlling High Blood Pressure” represents the percent of Medicaid beneficiaries, ages 18 to 85 years, with hypertension whose blood pressure was adequately controlled (below 140/90). Medicaid Managed Care beneficiaries generally fared better than other payer types. “Poor HbA1c Control” is the percentage of members with diabetes whose most recent HbA1c level (a measure of long-term glucose control) indicated poor control (>9.0%). Commercial HMOs performed best in this category. “Use of Appropriate Medications for People with Asthma” is the percentage of members, ages 19 to 64 years, with persistent asthma who received at least one appropriate medication to control their condition during the measurement year. Medicaid Managed Care on average performed worst, 7% lower than the average of Commercial PPOs. “Behavioral Health: Followup after Hospitalization for Mental Illness” concerns members, ages 6 years and older, who were hospitalized for treatment of selected mental health disorders and has two time-based components. The first column is the percentage of members who were seen on an ambulatory basis or who were in intermediate treatment with a mental health provider within 7 days of discharge. The second column is the percentage of members who were seen in the same settings within 30 days.

Access to Care for Children and Adolescents

There is less variation between Medicaid Managed Care to Commercial organizations in regard to access to care for children and adolescents, as demonstrated in the table below.

Table 46 - Access and Quality Measures for Children and Adolescents, Statewide Average by Payer

	Commercial HMO	Commercial PPO	Medicaid Managed Care
Well-Child and Preventive Care Visits in the First 15 Months*	91	90	83

Well-Child and Preventive Care Visits Years 3-6*	84	79	82
Adolescent Well-Care Visits*	61	53	59
Appropriate Treatment—no antibiotic--for Upper Respiratory Infection	89	89	93

Source: 2013 Health Plan Comparison in New York State, New York State Department of Health. *Data is from 2011

The measure “Well-Child and Preventive Care Visits in the first 15 months” is the percentage of children who had five or more well child visits with a primary care provider in their first 15 months of life. Both types of commercial groups on average performed at about the same rate, seven to eight percentage points higher than the average of Medicaid Managed Care organizations. The “Well-Child and Preventive Care Visits 3-6 measure is the percentage of children in those ages who had one or more well-child visit with a primary care provider during the measurement year. There is little variation between payer types (range 79%-84%). The “Adolescent Well-Care Visit” measure is the percentage of youth ages 12-21 who had at least one comprehensive well-care visit to a PCP during the measurement year. Medicaid managed care organizations and commercial HMOs performed about equally, with commercial PPOs on average performing several points lower. “Appropriate Treatment for Upper Respiratory Infection” is the percentage of children ages 3 months to 18 years who were diagnosed with an upper respiratory infection (common cold) and were not given a prescription for an antibiotic. Medicaid Managed Care plans performed on average four points higher than the average of commercial HMO and PPO providers.

Section iii: Domain 3 and 4 Metrics

Domain 3 Metrics: Clinical Improvement

Table 47 - Domain 3 Metrics, Behavioral Health

Select Clinical Improvement Measures, 2012	NYS	NYC	Queens
PPV (for persons with BH diagnosis)	[No known public source]	[No known public source]	[No known public source]
Antidepressant Medication Management: Effective Continuation Phase Treatment Effective Acute Phase Treatment*	37% 50%	47%	49%
Diabetes Monitoring for People with Diabetes and Schizophrenia (aged 18-64 years)*	68%	70%	66%
Diabetes Screening for People with Schizophrenia or Bipolar Disorder (aged 18-64 years) Using Antipsychotic Medication*	79%	80%	80%
Cardiovascular Monitoring for People with CVD and Schizophrenia.	[No known public source]	[No known public source]	[No known public source]
Follow-up care for Children Prescribed ADHD Medications: Initiation Phase* Continuous Phase	56% 63%	64%	62%
Follow-up after hospitalization for Mental Illness: Within 7 Days Within 30 Days*	65% 55%	51%	50%
Screening for Clinical Depression and follow-up			
Adherence to Antipsychotic Medications (at least 80% of treatment time) for People with Schizophrenia (aged 19-64 yrs)*	64%	63%	71%
Initiation of Alcohol and Other Drug Dependence Treatment*	78%	78%	74%
Additional behavioral health measures for provider systems implementing the Behavioral Interventions Paradigm in Nursing Homes (BIPNH) project:			
PPR for SNF patients	[No known public source]		
Percent of Long Stay Residents who have Depressive Symptoms**	12.23%	[See source note]	[See source note]

Sources: *Healthcare Effectiveness Data & Information Set (HEDIS), Medicaid Recipients, 2012, as presented by the New York State Department of Health, Office of Health Systems Management. ** Source: Nursing Home Quality Initiative 2012 (this source does not provide data at the city or county level).

Table 48 - Domain 3: Behavioral Health Metrics at uhf neighborhood level

Neighborhood/Region	Adherence to Antipsychotic Medications for Individuals With Schizophrenia	Antidepressant Medication Management- Effective Acute Phase Treatment	Diabetes Monitoring for People With Diabetes and Schizophrenia	Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications	Follow-up After Hospitalization for Mental Illness within 30 Days	Follow-Up Care for Children Prescribed ADHD Medication- Initiation Phase	Initiation of Alcohol and Other Drug Dependence Treatment
Bayside/Little Neck	N/A- Small Sample Size	N/A- Small Sample Size	N/A- Small Sample Size	N/A- Small Sample Size	N/A- Small Sample Size	N/A- Small Sample Size	77.89
Flushing/Clearview	76.11	50.67	60.00	79.53	59.20	72.73	75.39
Fresh Meadows	64.29	51.32	N/A- Small Sample Size	87.06	66.07	N/A- Small Sample Size	72.12
Jamaica	59.75	42.57	76.47	80.07	46.78	58.77	76.78
Long Island City/Astoria	63.43	48.48	N/A- Small Sample Size	73.74	50.00	70.97	74.45
Ridgewood/Forest Hills	69.86	54.55	N/A- Small Sample Size	78.13	49.49	62.16	74.91
Rockaway	80.90	42.31	42.25	84.31	50.31	67.61	74.70
Southeast Queens	64.52	51.35	62.86	75.45	30.60	N/A- Small Sample Size	71.96
Southwest Queens	66.83	50.69	N/A- Small Sample Size	83.69	58.47	56.60	74.04
West Queens	73.55	47.57	76.43	80.43	59.06	63.98	71.97
NYS	63.18	48.87	68.48	78.83	55.19	56.54	78.05

Source: Medicaid 2012 data, from Office of Quality and Patient Safety, 2014. Created by Office of Health Systems Management, NYSDOH

Table 49 - Select Medicaid Managed Care Clinical Improvement Measures: Mental Health

Select Medicaid Managed Care (MMC) Clinical Improvement Measures, 2012	NYS	NYC	Queens
Antidepressant Medication Management: Effective Continuation Phase Treatment Effective Acute Phase Treatment*	37% 50%	47%	49%
Follow-up care for Children Prescribed ADHD Medications: Initiation Phase* Continuous Phase	57% 63%	[No known public source]	[No known public source]
Follow-up after hospitalization for Mental Illness: Within 7 Days Within 30 Days*	65% 79%	[No known public source]	[No known public source]

Sources: *Healthcare Effectiveness Data & Information Set (HEDIS), Medicaid Recipients, 2012, as presented by the New York State Department of Health, Office of Health Systems Management. QARR, 2012 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level)

Table 50 - Domain 3 Metrics, Diabetes Mellitus

Select Clinical Improvement Measures, 2012	NYS	NYC	Queens
Comprehensive Diabetes screening (HbA1c, lipid profile, dilated eye exam, nephropathy) ^a	51%	[See source note]	[See source note]
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Testing*	80%	82%	85%
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) ^a	33%	[See source note]	[See source note]
Comprehensive diabetes care - LDL-c control (<100mg/dL): Lipids Controlled (<100 mg/dL) Monitoring Diabetes - Lipid Profile ^a	47% 87%	[See source note]	[See source note]
Medical Assistance with Smoking Cessation ^b	[See source note]	5.8% (4.3-7.8)	4.6% (2.5-8.3)
Flu Shots for Adults Ages 50 – 64 ^b	[See source note]	43% (40.0-45.9)	43% (37.4-48.8)
Health Literacy Items (includes understanding of instructions to manage chronic condition, ability to carry out the instructions and instruction about when to return to the doctor if condition gets worse)	[No known public source]	[No known public source]	[No known public source]

Sources: * Healthcare Effectiveness Data & Information Set (HEDIS), Medicaid Recipients, 2012, as presented by the New York State Department of Health, Office of Health Systems Management

^a QARR, 2011 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level)

^b NYC DOHMH Community Health Survey, 2012 (NYC DOHMH Community Health Survey, 2012 (Note: this source provides information only that the city and county level)

Table 51 - Domain 3: Diabetes Metrics at UHF Neighborhood Level

Neighborhood/Region	Comprehensive Diabetes Care HbA1C testing
Bayside/Little Neck	87.94
Flushing/Clearview	88.01
Fresh Meadows	86.83
Jamaica	84.87
Long Island City/Astoria	84.01
Ridgewood/Forest Hills	84.55
Rockaway	72.59
Southeast Queens	82.04
Southwest Queens	85.48
West Queens	87.34
NYS	80.28

Source: Medicaid 2012 data, from Office of Quality and Patient Safety, 2014. Created by Office of Health Systems Management, NYSDOH

Table 52 - Domain 3 Metrics, Cardiovascular Disease

Select Clinical Improvement Measures, 2012	NYS	NYC	Queens
Cholesterol Management for Patients with CV Conditions ^a	[No known public source]	35.9% (33.3-38.7)	33.1% (28.9-37.5)
Controlling High Blood Pressure (Provider responsible for medical record reporting) ^{a,b}	63%*	67.0% (63.3-70.5)	[No known public source]
Aspirin Discussion and Use ^b Discussion of Aspirin Risks and Benefits(HMO/PPO) Aspirin Use(HMO/PPO)	49%/43% 39%/39%	[No known public source]	[No known public source]
Medical Assistance with Smoking Cessation ^a	[No known public source]	5.8% (4.3-7.8)	4.6% (2.5-8.3)
Flu Shots for Adults Ages 50 – 64 ^a	[No known public source]	43% (40 – 45.9)	43% (37.4-48.8)
Health Literacy Items (includes understanding of instructions to manage chronic condition, ability to carry out the instructions and instruction about when to return to the doctor if condition gets worse)	[No known public source]	[No known public source]	[No known public source]

Source:

^a NYC DOHMH Community Health Survey, 2012 (Note: this source provides information only that the city and county level).

^b QARR, 2012 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level).

^c QARR 2011 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level).

Table 53 - Select Clinical Improvement Measures, Asthma

Select Clinical Improvement Measures, 2012	NYS
Asthma Medication Ratio	
Medical Management for People with Asthma:	
50% Covered (Ages 5-11)	48%
50% Covered(Ages 12-18)	49%
50% Covered(Ages 19-50)	63%
50% Covered (Ages 51-64)	77%
50% Covered (Ages 5-64)	57%
75% Covered (Ages 5-11)	25%
75% Covered(Ages 12-18)	25%
75% Covered(Ages 19-50)	38%
75% Covered (Ages 51-64)	53%
75% Covered (Ages 5-64)	34%

Source: QARR, 2012 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level)

Table 54 - Select Clinical Improvement Measures, HIV/AIDS

Select Clinical Improvement Measures	NYS	NYC	Queens
HIV/AIDS Comprehensive Care : Engaged in Care ^a	89%	89%	88%
HIV/AIDS Comprehensive Care : Viral Load Monitoring ^a	66%	67%	66%
HIV/AIDS Comprehensive Care : Syphilis Screening ^a	68%	71%	68%
Cervical Cancer Screening ^a	67%	69%	71%
Chlamydia Screening, Women Ages 16-24 ^a	66%	70%	69%
Medical Assistance with Smoking Cessation ^b	[See source note]	5.8% (4.3-7.8)	4.6% (2.5-8.3)
Viral Load Suppression ^c	62.2%	61.2%	59%

Sources: ^a. Healthcare Effectiveness Data & Information Set (HEDIS), Medicaid Recipients, 2012, as presented by the New York State Department of Health, Office of Health Systems Management. ^b Source: HIV Ambulatory Care Performance, 2011.

^c 2011 eHIVQUAL Submissions from NYS HIV Ambulatory Care Programs. Reports updated October 21, 2013.

Table 55 - Domain 3: HIV/AIDS Metrics at UHF Neighborhood Level

Neighborhood/Region	Cervical Cancer Screening	Chlamydia Screening in Women	Comprehensive Care for People Living with HIV/AIDS		
			Engaged in Care	Syphilis screening	Viral Load Monitoring
Bayside/Little Neck	67.51	65.89	N/A- Small	N/A- Small	N/A- Small
Flushing/Clearview	75.27	68.47	94.87	62.16	48.72
Fresh Meadows	71.94	61.55	N/A- Small	N/A- Small	N/A- Small
Jamaica	69.63	66.27	87.39	71.32	69.04
Long Island City/Astoria	64.58	70.90	89.21	71.85	77.70
Ridgewood/Forest Hills	68.76	70.96	90.24	74.53	67.07
Rockaway	66.08	63.02	87.79	65.71	57.14
Southeast Queens	67.66	67.46	82.56	62.77	57.95
Southwest Queens	70.01	66.78	90.43	70.00	70.81
West Queens	72.60	73.80	89.40	66.12	67.51
NYS	66.80	65.58	89.34	69.27	66.44

Source: Medicaid 2012 data, from Office of Quality and Patient Safety, 2014. Created by Office of Health Systems Management, NYSDOH

Table 56 - Select Clinical Measures, Perinatal Care

Select Clinical Improvement Measures, 2012	NYS	NYC	Queens
PQI # 9 Low Birth Weight ^a	8.2%	8.6%	8.1%
Prenatal and Postpartum Care—Timeliness and Postpartum Visits:			
% mothers received postpartum checkup ^b	90.1%	89.2%	
% mothers received prenatal care - start 1st to 3rd month ^a	71.8%	70.4%	70.3%
% mothers received prenatal care - start 4th to 6th month ^a	20%	21.5%	21.0%
% mothers received prenatal care - start 7th to 9th month ^a	4.8%	6.2%	6.5%
% late or no prenatal ^a	3.4%	2.0%	2.2%
Frequency of Ongoing Prenatal Care:			
Frequency of Ongoing Prenatal Care 61-80% ^c	12%		
Frequency of Ongoing Prenatal Care 41-60% ^c	6%		
Frequency of Ongoing Prenatal Care 21-40% ^c	4%		
Frequency of Ongoing Prenatal Care <21% ^c	8%		
Percentage of Children Who Had Five (5) or More Well Care Visits in the first 15 months ^c	85%	83%	87%
Childhood Immunization Status: ^d			
Childhood immunization (0Im mz) ^d	1%		
Childhood immunization-3 or more IPVsd	93%		
Childhood immunization-2 or 3 rotavirus ^d	69%		
Childhood immunization-4 or more pneumococals ^d	81%		
Childhood immunization-2 or more HepA ^d	37%		

Select Clinical Improvement Measures, 2012	NYS	NYC	Queens
Childhood Immunization-2 or more influenza ^d	57%		
Childhood Immunization-Varicella ^d	91%		
Childhood Immunization-MMR ^d	93%		
Childhood Immunization-4 or more DTPs ^d	83%		
Childhood Immunization-3 or more HepB ^d	92%		
Childhood Immunization-3 or more Hibs ^d	93%		
Childhood Immunization Status (Combo 3: 4-3-1-3-3-1-4) ^d	74%		
Lead Screening in Children ^d	89%		

Sources: ^a NY State Vital Statistics, 2012. ^bPRAMS 2011 (postpartum metrics). ^c QARR, 2012 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level). ^d QARR, 2011 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level).

Table 57 - Domain 3: Perinatal Care Metrics At UHF Neighborhood Level

			Comprehensive Care for People Living with HIV/AIDS		
Neighborhood/Region	Cervical Cancer Screening	Chlamydia Screening in Women	Engaged in Care	Syphilis screening	Viral Load Monitoring
Bayside/Little Neck	67.51	65.89	N/A- Small Sample Size	N/A- Small Sample Size	N/A- Small Sample Size
Flushing/Clearview	75.27	68.47	94.87	62.16	48.72
Fresh Meadows	71.94	61.55	N/A- Small Sample Size	N/A- Small Sample Size	N/A- Small Sample Size
Jamaica	69.63	66.27	87.39	71.32	69.04
Long Island City/Astoria	64.58	70.90	89.21	71.85	77.70
Ridgewood/Forest Hills	68.76	70.96	90.24	74.53	67.07
Rockaway	66.08	63.02	87.79	65.71	57.14
Southeast Queens	67.66	67.46	82.56	62.77	57.95
Southwest Queens	70.01	66.78	90.43	70.00	70.81
West Queens	72.60	73.80	89.40	66.12	67.51
NYS	66.80	65.58	89.34	69.27	66.44

Source: Medicaid 2012 data, from Office of Quality and Patient Safety, 2014. Created by Office of Health Systems Management, NYSDOH

Table 58 - Select Clinical Improvement Measures, Renal Care

Select Clinical Improvement Measures, 2012	NYS
Comprehensive Diabetes screening (HbA1c, lipid profile, dilated eye exam, nephropathy) ^a	51%
Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Poor Control (>9.0%) ^a	33%

Comprehensive diabetes care - LDL-c control (<100mg/dL) ^a	47% 87%
Annual Monitoring for Patients on Persistent Medications – ACE/ARB ^b	92%

Sources:

^a QARR, 2011 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level).

^b QARR, 2012 (Note: this source reports data by health plan. Due to the fact that many health plans operate throughout the state, it is not possible to report metrics from this data set at the city or county level).

Table 59 - Domain 3: Other Clinical Improvement Process Metrics

Neighborhood/Region	Breast Cancer Screening	Colorectal Cancer Screening
Bayside/Little Neck	69.03	63.21
Flushing/Clearview	75.12	69.71
Fresh Meadows	70.89	59.88
Jamaica	64.14	44.73
Long Island City/Astoria	66.25	47.05
Ridgewood/Forest Hills	65.26	51.05
Rockaway	57.09	41.44
Southeast Queens	64.50	46.13
Southwest Queens	70.61	48.53
West Queens	74.31	59.14
NYS	63.40	49.31

Source: Medicaid 2012 data, from Office of Quality and Patient Safety, 2014. Created by Office of Health Systems Management, NYSDOH

SECTION C: IDENTIFICATION OF THE MAIN HEALTH AND HEALTH SERVICES CHALLENGES

Queens is a diverse borough, rich in culture, commerce and open space. However, disparities are pronounced, given its mix of high, medium and low income neighborhoods, and significant populations from diverse racial and ethnic groups including—but not limited to— Asian and Southeast Asians (from multiple countries), Latinos (originating from multiple countries), African American and Caribbean populations and Whites of European ancestry including Russian, Polish and other eastern European countries. These residents are both foreign-born citizens and recent immigrants who may or may not be documented. Each of these communities has unique health care and other needs related to culture, language, education and economics.

Behavioral Risk Factors

Tobacco use, alcohol consumption, physical activity and diet, sexual practices, and disease screenings exert strong influences on health. These behavioral risk factors contribute to numerous diseases, and have long been viewed a major contributors to deaths in the United States. For example, a World Health Organization (WHO) report shows the burden of disease and death attributed to tobacco use in developed countries was substantially higher than that attributable to any other risk factor including alcohol use, unsafe sex, hypertension, and physical inactivity.¹⁷⁰ Second to tobacco use, the combination of inactivity and poor diet has been ranked as the second leading factor contributing to mortality in the US.¹⁷¹ Overweight adults are at risk for diabetes, and increased risk for hypertension, coronary heart disease, several forms of cancer, and run the risk of developing gallbladder disease, osteoarthritis, sleep apnea, and respiratory problems.¹⁷²

Table 60 - Risk Factors by Select Queens Neighborhoods

	Obesity(BMI≥30)	Binge Drink (within past 30 days)	Lack of or low Physical Activity (within past 30 days)	Current Smoker
NYC	24.1%	19.7%	22.2%	15.6%
Long Island City-Astoria	23.8%	22.6%	17.7%	16.0%
West Queens	23.6%	23.6%	24.6%	16.0%
Flushing-Clearview	17.6%	18.2%	29.8%	16.3%
Bayside/Little Neck/Fresh	14.2%	7.5%	21.8%	13.2%
Ridgewood-Forest Hills	17.0%	13.5%	27.3%	17.3%
Southwest Queens	25.5%	21.7%	21.9%	17.3%

¹⁷⁰ Murray C, Lopez A. "The Global burden of disease." Geneva: World Health Organization. 1996.

¹⁷¹ McGinnis, JM, Foege WH. "Actual Causes of Death in the United States. " *Journal of the American Medical Association*: 270, pg. 2207-2212. 1993.

¹⁷² USDHHS (US Department of Health and Human Services), "Healthy People 2010: Understanding and Improving Health." Washington, DC. 2000.

Jamaica	26.7%	13.0%	20.7%	11.9%
Southeast Queens	25.8%	13.9%	21.8%	9.0%
East New York/New Lots	37.0%	18.4%	25.6%	10.1%

Source: NYC Dept. of Health and Mental Hygiene, NYC Community Health Survey, 2012. Values are not adjusted for age. Values in red font should be interpreted with caution. Value's relative standard error (a measure of estimate precision) is greater than 30% or the sample size less than 50 or the 95% confidence interval half width is greater than ten, make the estimate potentially unreliable.

Environmental Risk Factors

Health status varies greatly among neighborhoods across the borough. Environmental risk factors such as poorly maintained housing, pest infestation, air pollution, limited access to healthy foods, and lack of recreational space for exercise and play all adversely affect health. Vulnerable populations typically face greater environmental risks. For example, data suggest that Citywide, 40% of uninsured and 37% of Medicaid beneficiaries reported having seen cockroaches inside their home in the past month.

Table 61 – Environmental Risk Factors in Select Queens Neighborhoods

	NYC	Queens	Flushing - Clearview	Jamaica	Long Island City Astoria	Southeast Queens	Southwest Queens	West Queens
Indoor Air Quality								
Homes with cockroaches (2011)	24%	19.7%	16.7%	20.4%	22.2%	7.9%	18%	27.9%
Adults reporting second-hand smoke at home (2011)	4.9%	5%	n/a	2.6%	4.9%	5.7%	n/a	4.7%
Adults reporting mold in the home (2012)	9.5%	8.6%	5.4%	11.6%	6.9%	8.9%	8.6%	10.8%
Adults reporting mice in the home (2012)	15.5%	12.6%	10.9%	16%	12.2%	9.9%	14.8%	16.3%
Home Safety and Maintenance								
Homes with cracks or holes (2011)	15.7%	9.4%	4.6%	9.6%	15.6%	6.7%	7.3%	11.8%
Homes with leaks (2011)	20.6%	15.2%	8.6%	18.3%	16.5%	13.5%	12.3%	18.7%
Households rating neighborhood structures good or excellent (2011)	75.2%	81.9%	88.9%	67.4%	83.7%	86.4%	81.7%	78.7%

Data Sources: New York Community Health Survey (CHS), New York City Housing and Vacancy Survey (HVS), 2011, 2012.

Socioeconomic Challenges

The Medicaid beneficiaries that account for the largest number of preventable admissions are concentrated in the areas of Jamaica, Southeast Queens and East New York, though pockets of high concentration may exist at sub-zip code levels in other neighborhoods throughout the borough. Medicaid beneficiaries in these areas also account for the highest number of potentially preventable emergency room visits (PPV)¹⁷³. These areas of the borough rank consistently poorly in markers of socioeconomic determinants of health such as household poverty, unemployment, lack of health insurance, low levels of education, as well as high prevalence of disease. In addition, there are a large number of immigrants—including many undocumented—in a number of Queens neighborhoods with access barriers (e.g., linguistic, eligibility for insurance, familiarity with the US healthcare system) that go beyond those of other populations and reportedly result in delayed care.¹⁷⁴

Basic Necessity Resources

Neighborhoods with concentrated levels of poverty are described by many residents as suffering from neglect on a global scale. Housing, lifestyle, employment and education are all social determinants of good health but Queens, like all parts of all NYC boroughs, is slowly becoming more gentrified. Young and affluent people, priced out of Manhattan, are flocking to neighborhoods that are along subway lines that make the city accessible, making previously working and middle class neighborhoods like Ridgewood, Astoria, Sunnyside and Long Island City attractive to higher paying renters and first time buyers. The housing alternatives left for these displaced people are becoming slimmer every year.

The public housing stock in NYC is some of the oldest in the nation, and city government does not have the capital budget to maintain such an extensive housing stock. Mayor De Blasio has placed affordable housing on his first term agenda, but there is only so much physical space, let alone financing, to meet demand. As is, public housing in the outer boroughs such as Queens is most often located in some of the area's most far-flung neighborhoods, which can isolate residents from needed health and social services. For example after Hurricane Sandy, public housing in south Brooklyn and The Rockaways in Queens were literally cut off from all services as electrical service was lost. Residents could not even get out of their buildings without elevator service, and public transportation was lost or severely limited for months. Combined with limited services directly in the community, people went without health care services, prescription medication and social services. Without a fair distribution of affordable housing throughout the borough or enhanced public transportation services, Queens residents will always face barriers to health care access.

Barrier Free Access

Individuals with physical and/or cognitive disabilities are disproportionately low income, unemployed, and have a high number of co-morbidities, including obesity, hypertension, and cardiovascular disease.

¹⁷³ Ibid.

¹⁷⁴ NYAM Primary Data

Despite a high need for services, they reportedly delay care because of poor accommodation (e.g., absence of ramps, sign language interpreters) and providers that are insensitive to both their capabilities and their limitations. These access barriers—and their implications— were described by CNA participants. Unfortunately, barriers are considered more significant in community as compared to hospital settings so may become more pronounced as—consistent with the goals of DSRIP—services move into the community.

A requirement, for example, that you come to an appointment timely, or if you miss an appointment three times, you can be dis-enrolled from a program or a provider, [is discriminatory]. If you use Access-a-Ride, for example, it is almost impossible to know when you will arrive at a location on a consistent basis. The service is simply of such poor quality that if ... you need door-to-door transportation, you need flexibility in appointment scheduling.

In the health setting, practitioners are often listed – clinics are often listed as being wheelchair accessible in managed care program directories. But in fact, according to a survey by the Community Service Society, it was found that these practitioners have steps at their front entrance. The providers don't even know what accessibility means. And so they list themselves as accessible, but when you go to their site or you call them on the phone, they'll say, "Oh yes, we have a few [steps] at our entrance, but that's no big deal."

They don't have exam tables that will lower so that you can transfer from a wheelchair. Or they don't provide ASL interpreters, either in person or by video phone or other system. They don't give you longer times for your appointment if it's going to take you a long time to dress and undress...

Policy Environment

The NYS health care policy environment also presents challenges for consumers and providers and unintentionally causes barriers to health care access and the efficacy of care. Varying funding and regulatory agencies had differing requirements: 1) limiting continuity of care for patients with multiple healthcare needs and 2) putting excessive demands on provider organizations that worked with multiple systems. Resources for increasingly valued services, such as care coordination, were limited meaning that salaries for the positions were relatively low. Low salaries make hiring difficult and may necessitate selection of candidates that are under-qualified, particularly considering the expectations of the job. These expectations may include familiarity with multiple services (e.g., medical services, housing service, insurance information, etc.); ability to work with relatively difficult populations, including clients with behavioral health issues; and ability to use multiple electronic record systems, because of the multiple partner organizations.

Service Gaps Related to Primary Care

A key component of the DSRIP program is to reduce avoidable services by bolstering primary care providers and community based organizations (CBOs) to enhance coordination of care, prevention and disease management, particularly for those with chronic conditions.

Lack of trust or engagement (or possibly time) in care coordination on the part of medical providers also was considered to limit the potential effectiveness of care coordination models.¹⁷⁵

What's missing is...saying to individual providers that this is important, and you need to be responsive, and you need to talk to people, and you need to interact with care coordinators. One of the biggest problems and flaws in the system is that in all of our contracts... we're required to go to providers, individual PCP's and psychiatrists, and get information from them both about their care that they're providing to our client or their patient or the lab work that's been done, tests, reports, anything that they're doing with our patient. We need to get access to that information so that we can help to provide better care and to guide that person along in the care that they're getting. So if they get prescribed a specific medication, we can say, "Are you taking that medication? Where are you at with it? Have you filled the prescription?" Those kind of things. The problem is, on the provider's side, they don't get paid. No one's telling them – no one's saying to them from the funder level ... "You must communicate with these people."... so the providers ignore us. We have a requirement to do that, and so we're constantly doing it, but we're constantly getting rebuffed. And it's simply because there's no structure for them to respond. If, for example, you paid them to have a case conference, and that was part of their payment structure around a complicated expensive case, somebody who was costing Medicaid tens of thousands of dollars a year and, "Oh, let's pay the doctor \$500 to have a case conference"... They have to be incentivized, and I think this DSRIP is an opportunity to do that. (Key informant, multiservice organization)

This is perceived to be even more problematic for behavioral health services. According to key informant providers, the system is fragmented, with possibly poorer integration *within* behavioral health services themselves than between physical and behavioral health. Behavioral health services are reported to be highly regulated by multiple agencies: Office for People with Developmental Disabilities (OPWDD), Office for Alcoholism and Substance Abuse Services (OASAS), and Office of Mental Health (OMH) with patient care being restricted according to the funding and regulatory agency—despite the frequency of co-occurring disorders. Thus, a mental health provider might be limited in the severity of illness that can be treated, the age of the patient, and other factors.

Historically, your systems like OMH and OASAS, up until very recently, they really worked in silos. So if you came into a mental health clinic and in your intake appointment, you said, "You know, I smoke pot a couple times a week," a red flag would go up. You talk to your supervisor and they say, "They have to go to substance abuse." So until those doors really become integrated, I mean really become integrated in treatment and acceptance and a model of care, we're going to

¹⁷⁵ NYAM Primary Data

continue to run into these types of challenges because it's very fragmented. (Key informant, multiservice organization)

Depending upon the level of what people talk about, behavioral health can be done within the Article 28. We have psychiatrists who work within the [Article] 28 and psychiatry can be in health clinics. They're really there to really confirm and confer. It's called a consultation liaison model and you know, you're really, the rule of thumb and it's hard to get answers out of Medicaid about how many times we can be seen. It's like a maximum of three times. So if someone needs more than just a simple SSRI, you know, you see that the psychiatrist. The psychiatrist may say you know what, I really think you should go into [article] 31 ... It's not that it's a bad thing, you know but it's just another step and I don't even know that it's a wrong step but it's a very excessive, it takes at least an hour to administer it to a patient... We do offer short term therapy in our 28 which does not make you go through that. We have very limited slots and because of licensure, it has to be secondary to a medical issue because again, the Medicaid rules are very clear. (Key informant, FQHC)

Overall challenges within the health system include ambulatory care provider capacity (ability to schedule appointments within an acceptable period of time as well as waiting times at the time of the appointment) and linkages and coordination within and between broader health care delivery systems.¹⁷⁶ The data, including responses from large numbers of key informants and focus group participants, also suggest there is a lack of culturally and linguistically competent specialists.¹⁷⁷

During key informant interviews and focus groups, community members (and providers) consistently described long wait times for visits (as long as a year for a dietician) and long wait times at the time of a visit. The brief amount of time doctors spend with patients, and a perception that providers do not have the best interests of patients in mind (i.e., they will do what is expedient rather than what represents highest quality care) also present a challenge. Limitations on subspecialty services in Queens mean that patients are referred to hospitals in other boroughs, impacting on continuity of care. Such issues have an impact on acceptance of services. Furthermore, the possible need for multiple visits (e.g., for tests), discourages timely use of services and makes the emergency department a rational choice for “one stop shopping”.

Factors Related to Health Insurance

Independent of work and language access issues, key informants and focus group participants described cultural, attitudinal, perceptual and knowledge-based barriers to care among the foreign born, including greater stigmatization of particular health conditions, difficulties navigating the health insurance and care system, low prioritization of preventive care services, and fear of medical bills and deportation if they engage with any part of “the system.”

¹⁷⁶ NYAM Primary Data

¹⁷⁷ Ibid.

[Arab] women if they have breast cancer, they try to hide it as much as they can, because they don't want the community to know that their girls might get it. They might inherit it from the mother. Nobody will marry their daughters, so all these problems, they feel like they don't let anyone in the community – even though confidentiality is a very big issue for us and very important for us, but they feel very protective of themselves. They don't want anybody to know about health issues and health problems. (key informant, CBO)

Fear of medical bills and deportation was greatest among the undocumented but affected other immigrant groups, as well.

You also have insurance literacy and like, "What does a co-pay mean?" And some of the complexity of some of the plans, the way they're designed, you have co-payments and then you have co-insurance which is distinct. And then on top of that you have your premiums. And so, that's – we say this all the time, but that type of stuff is confusing to all of us, so how [immigrants] are able to navigate that moving forward and use their insurance, is huge. (key informant, health advocacy)

Oftentimes they would forego getting any care, getting screenings, or even if they were deathly ill, they will totally wait until the end, and even with people who had insurance, because they were afraid of the cost of care. (key informant, CBO)

Those are some of the most prevalent cases we get. Where people say, "I have this bill. I don't know how I could ever pay this bill." Often, even though in many cases we will help resolve the bill through the financial assistance policy, the person never wants to go back to the hospital again because that happened... Any hospital.... Often they'll have gone for like one appointment, and they get like a \$7,000 bill. It just doesn't make sense to them. So it's just scary, right? So it does feel like hospitals don't really get the impact that a scary bill can have to their patient's desire to ever come back to the hospital. (key informant, CBO)

It was reported that immigrants that regularly returned to their home country used medical services there. It was also reported that immigrants received prescription medicines from their home country, as the costs of medicine were generally much lower outside the US.

SECTION D: SUMMARY OF THE ASSETS AND RESOURCES THAT CAN BE MOBILIZED

Queens health and human services infrastructure provides a solid base for launching collaborative programs to reduce the over utilization of acute care services and support public health interventions. The borough has an extensive array of public and private hospitals, hospital outpatient extension clinics, FQHCs, community health centers, independent community based primary care providers, and community based organizations (CBOs) that are coming together to establish targeted care coordination, health prevention, and disease management strategies through initiatives such as DSRIP, the Interboro and Healthix RHIOs, the HHC and Community Healthcare Network Health Homes and Health Center Controlled Networks. Medysis and HHC hospitals in Queens also accommodate physician residency programs which spur the growth of community-based primary and specialty care capacity in medically underserved areas. Expanded capacity, enhanced quality, technological linkages to broader health care delivery systems and operating hours adjusted to patient need are crucial in medically underserved areas such as Jamaica, East New York, Elmhurst/Corona, and Flushing.

This approach is supported by the New York State Department of Health, which is leveraging the policy objectives and financial resources from the federal Affordable Care Act and New York State's Medicaid Redesign strategy to invest in primary care service delivery funding for community health center development and capacity expansion, as well as increasing the number of insured individuals and families who will have greater access to community-based health care services. In addition, funding for establishing Patient Centered Medical Homes and EHR Meaningful Use are significant incentives to attain care coordination and quality outcome goals that are so integral to the success of DSRIP.

New York City is fortunate in that its local health department, the New York City Department of Health and Mental Hygiene (NYC DOHMH), has been led by visionary public health experts who, with Mayoral support, have established trailblazing population health programming and policy initiatives. These efforts include broad anti-smoking campaigns, a ban on trans fats in local restaurants, targeted efforts to increase physical activity (e.g. City Share bike share program, incentivizing active design in new building developments) and healthy eating initiatives such as expanding the presence of local farmers markets in low-income neighborhoods and establishing nutritional standards in schools and other public institutions. These are just a few examples of the broad impact that DOHMH has on improving the health of local communities.

DOHMH is also supporting new initiatives such as the new Center for Health Equity, which will focus on reducing health disparities citywide, and a new community health worker program that is being piloted in East Harlem. Overall, there may be greater opportunities for synergies between the NYC DOHMH and the health systems in Queens to replicate these programs across the borough.

Community-based organizations (CBOs) such as Safe Space, South Asian Council for Social Services and New Horizons provide crucial social and enabling services to neighborhoods and specific constituencies, and will continue to be vital resources for culturally and linguistically targeted health education and chronic disease management, health insurance enrollment, treatment adherence and linkages to

additional community resources. CBOs also encompass faith-based organizations and religious institutions that are often the initial, trusted source of referrals for local community services.

Queens CBOs are potent activists in advocating for social and regulatory change that will positively impact on health outcomes in areas including but not limited to:

- Supportive housing and increased affordable housing development.
- Behavioral health care reform, including integration with primary care and other behavioral service providers.
- Immigration, education, and correctional services reform.
- Legal assistance in multiple languages related to immigration and housing issues, domestic violence, and emergency financial assistance from organizations such as Asian Americans for Equality, the New York Immigration Coalition and the New York City Housing Authority
- Social services programs including SNAP, Medicaid and subsidized child care (NYC Human Resources Administration, the NYC Administration for Children's Services and Catholic Charities).

SECTION F: DOCUMENTATION OF THE PROCESS AND METHODS

Methods: Primary Data

In support of the overall aims of the CNAs, primary data were collected and analyzed to ensure the perspectives of community members and stakeholders were incorporated into the reported findings and to respond to specific questions that could not be sufficiently addressed through secondary source data alone. In addressing these questions, we were particularly interested in the perspectives of Medicaid and other low income populations, as well as the uninsured.

- To what extent are community and environmental conditions conducive to health promotion and disease prevention?
- What are the primary health concerns and health needs of residents, overall and according to neighborhood and socio-demographic characteristics?
- What health-related programming and services are available to community residents? What organizations are providing these services, and what are the service gaps?
- Are there differences in access, use and perceptions of health related programming and services according to neighborhood and according to ethnic, racial, and language groups?
- What intervention can be implemented to better address health promotion and health care needs, overall and for distinct populations?

The protocol for primary data collection, including the instruments and outreach, was developed by NYAM in collaboration with the PPS at the start of the CNA process.

Instruments and Data Collection

Data were collected through key informant interviews, focus groups, and surveys as described below.

Resident Surveys: Six hundred and five surveys were completed by residents of Queens, ages 18 and older. Survey questions focused on basic demographics, health concerns (individual and community-wide), health care utilization, barriers to care, and use of community and other services (see appendix for Resident Survey). Survey respondents were identified and recruited by local organizations, including community based organizations, senior centers, social service and health providers, and through NYAM initiated street outreach—at street fairs, subway stops, and other places where people congregate. Although the sample cannot be considered representative of the borough statistically, and some gaps are unavoidable, the combination of street and organizational outreach facilitated engagement of a targeted yet diverse population, including individuals that are connected and individuals unconnected to services. Survey respondents came from all Queens neighborhoods. Socio-demographic characteristics of survey respondents included: 11% Black/African American, 20% Latino, 54% Asian, 72% foreign born, 39% limited English proficient, 70% living below the poverty line, 41% on Medicaid and 21% uninsured. The mean age of respondents was 49. Surveys were self-administered or administered by NYAM staff or staff or volunteers at community organizations (see Partnering with Community-based Organizations section below), who were trained and supported in survey administration by NYAM staff. The surveys

were translated into 10 languages: Arabic, Bangla, Chinese (simplified and traditional), Haitian Creole, French, Hindi, Korean, Polish, Russian and Spanish. Participants received a MetroCard valued at \$10 for completing the survey.

Key Informant Interviews: Twenty-two key informant interviews were conducted, including 28 individuals. Key informants were selected with input from the PPS's. A portion had population specific expertise, including particular immigrant groups, older adults, children and adolescents. Others had expertise in specific issues, including, substance abuse, supportive housing, care coordination, corrections, and homelessness. All key informant interviews were conducted by NYAM staff using an interview guide (see attached Key Informant Interview Guide). All key informants were asked about perceptions of health issues in the community, barriers and facilitators to good health, health care and other service needs, and recommendations for services and activities that may benefit the local population. Follow-up questions, asked on ad hoc basis, probed more deeply into the specific areas of expertise of key informants. The interview guide was designed for a discussion lasting 60 minutes; interviews ranged from 45 to 120+ minutes in length. All key informant interviews were audiotaped and professionally transcribed to ensure an accurate record and to allow for verbatim quotations. (See Appendix C for the list of Key Informants by name, position, and organization)

Focus Groups: Eighteen focus groups were conducted for the Queens Community Needs Assessment. Most of the focus groups were with community members, including residents from low income neighborhoods and residents identified as having unique health and service needs, including individuals with behavioral health issues, older adults, LGBTQ, and immigrants and/or other limited English proficient (LEP) individuals. Focus group participants were recruited by local organizations, community based organizations, senior centers, social service providers, tenant associations, and health providers. Community member interest in the focus groups was high, with some groups including up to 30 individuals. In addition to the resident groups, we conducted a small number of focus groups with community leaders, as well as providers, including behavioral health providers, care coordinators, and physicians. These groups were coordinated by collaborating PPS's, so as to ensure that the perspective of key stakeholders was incorporated into the findings.

Focus groups lasted approximately 90 minutes and were conducted using a semi-structured guide (see attached Focus Group Guide), with questions that included, but were not limited to: perceptions of health issues in the community, access to resources that might promote health (e.g., fresh fruit and vegetables, gyms), use of health services, access to medical and behavioral health care, domestic violence, and recommendations for change (see Appendix C for focus group guide). Follow-up questions were asked on ad hoc basis, based on responses heard. Focus groups were conducted by CEAR staff members and consultants retained by CEAR, experienced in qualitative data collection and focus group facilitation. Many of the resident focus groups were co-facilitated by representatives of community based organizations that were trained by CEAR on focus group facilitation and the specific focus group protocol. Focus groups in

languages other than English, Spanish and French were conducted solely by trained community partners (see Partnering with Community-based Organizations section below). Participants received a \$25 honorarium, in appreciation of their time and insights. All focus groups were audio recorded, so that transcriptions and/or detailed reports could be developed for each, and to allow for verbatim quotations.

Data Management and Analysis

Surveys: Survey data were entered using Qualtrics, a web-based survey platform. They were analyzed according to standard statistical methods, using SAS. Means and proportions were generated. As appropriate, bivariate analyses was conducted to better understand the association between health indicators and geographic, demographic, and socioeconomic characteristics.

Interviews and Focus Groups: Transcripts and focus group reports were maintained and analyzed in NVivo, a software package for qualitative research. Data were coded according to pre-identified themes relevant to health, community needs, and DSRIP, as well as themes emerging from the data themselves (see Appendix C for code list). Analysts utilized standard qualitative techniques, involving repeated reviews of the data and consultation between multiple members of the research team. Analyses focused on 1) common perceptions regarding issues, populations, recommendations, etc., 2) the unique knowledge and expertise of particular individuals or groups and 3) explanatory information that facilitated interpretation of primary and secondary source data.

Partnering with Community-based Organizations

Consistent with DSRIP CNA guidance, NYAM conducted primary data collection in collaboration with numerous community organizations. Community organizations were identified in collaboration with PPS representatives, and represented a range of populations (e.g., older adults, immigrant populations) and neighborhoods.

As described above, community organizations assisted in recruitment for and administration of focus groups and surveys. All organizations assisting with survey administration or focus group facilitation were provided with written guidelines including information on data collection and the general research protocol, the voluntary nature of research, and confidentiality. Organizations also participated in an in-person or phone training on data collection conducted by NYAM staff. Community organizations partnering in the research received an agency honorarium consistent with their level of responsibility

Methods: Secondary Data

Data were collected and analyzed through these sources and surveys as described below.

- **NYS Community Health Indicator Reports**

These data are used to compare rates of chronic disease-specific morbidity, mortality, hospitalization and other indicators of poor health and associated health care utilization in particular communities to the corresponding rates of NYC and NYS.

<http://www.health.ny.gov/statistics/chac/indicators/>

- **Behavioral Risk Factor Surveillance System (BRFSS)**

These data are used to describe the population of New York State, New York City and counties/boroughs in terms of health status (e.g., percentage of the population uninsured, percentage with diabetes or obese, etc.). The BRFSS is a telephone survey and the de-identified, individual level data are publicly available for download from the Centers for Disease Control and Prevention. Individual-level metrics on regular source of care, mental health and chronic conditions will be obtained from BRFSS.

<http://www.cdc.gov/brfss/>

- **Statewide Planning and Research Cooperative (SPARCS)**

Aggregate and individual-level (de-identified) metrics on preventable hospitalizations, emergency department visit rates and hospitalization rates for chronic conditions will be obtained through the publicly available SPARCS data. <https://health.data.ny.gov/Health/Hospital-Inpatient-Discharges-SPARCS-De-Identified/u4ud-w55t>

- **Prevention Quality Indicators (PQI)**

These data include preventable hospital admission rates, with actual and expected rate per 100,000 by PQI Name, allowing identification of zip code areas with elevated rates and comparison to NYC and NYS.

<https://health.data.ny.gov/Health/Hospital-Inpatient-Prevention-Quality-Indicators-P/iqp6-vdi4>

<https://health.data.ny.gov/Health/Medicaid-Inpatient-Prevention-Quality-Indicators-P/izyt-3msa?>

- **Pediatric Quality Indicators (PDI)**

These data include preventable hospital admission rates, with actual and expected rate per 100,000 by PQI Name, by county, allowing comparison to NYC and NYS.

<https://health.data.ny.gov/Health/Medicaid-Inpatient-Prevention-Quality-Indicators-P/64yg-akce>

- **Potentially Preventable Emergency Visits (PPV)**

These data include potentially preventable hospital emergency department visits, with actual and expected rate per 100,000, allowing identification of zip code areas with elevated rates and comparison to NYC and NYS.

<https://health.data.ny.gov/Health/Medicaid-Potentially-Preventable-Emergency-Visits-/khkm-zkp2>

- **Hospital-specific profiles of quality of care for selected conditions**

<http://hospitals.nyhealth.gov/index.php?PHPSESSID=8884724aa17728cabe8a127921762546>

- **Medicaid Chronic conditions, Inpatient Admissions, and Emergency Room Visits**

These data are de-identified and publicly available by county and zip code for: Diabetes Mellitus, Diseases and Disorders of the Cardiovascular System, Diseases and Disorders of the Respiratory System, HIV Infection, Mental Diseases and Disorders, Newborn and Neonates, and Substance Abuse. Counts of Medicaid beneficiaries and number of ER visits and inpatient admissions by condition are also available by zip code.

<https://health.data.ny.gov/Health/Medicaid-Chronic-Conditions-Inpatient-Admissions-a/wybq-m39t>

- **Medicaid hospital inpatient Potentially Preventable Readmission (PPR) Rates**

Listing of the number of at risk admissions, number of actual PPR chains, actual PPR rate, and expected PPR rate to help characterize hospital performance on this metric.

<https://health.data.ny.gov/Health/Medicaid-Potentially-Preventable-Emergency-Visit-P/cr7a-34ka>

- **NYS Prevention Agenda 2013-2017 tracking indicators**

These provide data for counties for a variety of health outcomes including rates of preterm birth, unintended pregnancy, maternal mortality, new HIV cases, new STI cases, immunization rates, obesity, and smoking.

<https://health.data.ny.gov/Health/Prevention-Agenda-2013-2017-Tracking-Indicators-Co/47s5-ehya>

- **American Community Survey 2012 5-year estimates**

These data are used to estimate demographic information by Zip Code Tabulation Area and Community District.

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

- **Vital Statistics**

Aggregate metrics on premature deaths, suicide rates, and Low Birth Weight and preterm births are obtained from the NYSDOH Vital Statistics.

http://www.health.ny.gov/statistics/vital_statistics/

<https://www.health.ny.gov/statistics/chac/perinatal/index.htm>

- **NYS HIV Surveillance System and NYS STD Surveillance System**

We used the latest reports available (2012) to obtain aggregate information on the rates of HIV and STDs for the state, city and boroughs.

http://www.health.ny.gov/diseases/aids/general/statistics/annual/2010/2010-12_annual_surveillance_report.pdf

- **NYC DOHMH HIV Surveillance System**

Data on the number and rates per 100,000 population of People Living with HIV/AIDS by UHF were obtained from NYC DOHMH

<http://www.nyc.gov/html/doh/html/data/hiv-eq.shtml>

- **NYC DOHMH Community Health Survey**

Data on Obesity, Psychological Distress, and Smoking were obtained from the NYC DOHMH Community Health Survey

<http://www.nyc.gov/html/doh/html/data/survey.shtml>

- **Mental Health Services Utilization and Co-morbidities**

Aggregate data on utilization by service type and co-morbidities are obtained from the NYS Office of Mental Health

<http://bi.omh.ny.gov/cmhp/dashboard>

- **Rat sightings by location**

Geo-coded information on rat sightings called into 311 was obtained from NYC DOHMH

<https://nycopendata.socrata.com/Social-Services/Rat-Sightings/3q43-55fe>

- **Serious Crime rate per 1,000 residents and Serious Housing Violations per 1,000 rental units**

Rates by Community District and borough obtained from the NYU Furman Center

<http://furmancenter.org/research/sonychan>

- **NYC Department of Corrections Jail admissions**

New jail admissions data were obtained from the NYC Department of Corrections (DOC) at the zip code level through an article in The Gothamist, and at the NYC level from DOC

http://gothamist.com/2013/05/01/these_interactive_charts_show_you_w.php

<https://data.cityofnewyork.us/City-Government/DOC-Annual-Statistics/wkaa-8g8b>

- **NYS Prison admissions**

New NYS prison admissions data were obtained from the Justice Atlas of Sentencing and Corrections at the borough, NYC, and State level

<http://www.justiceatlas.org/>

- **Health Care Resources and Community Based Resources**

In addition to the data sets listed above, the following publicly available data-sets were inventoried and analyzed to assess the capacity, Service Area, populations served, areas of expertise and gaps in service for healthcare and community resources in Queens:

Health Care Resources

- New York State Department of Health Safety Net Lists
- New York State Department of Health Dental Providers that Accept Medicare/Medicaid
- New York State Department of Health AIDS Institute. "AIDS Drug Assistance Program Plus Dental Providers
- New York State Department of Health AIDS Institute. "Ryan White Dental Clinics for People Living with HIV/AIDS
- New York State Department of Health Profiles: Hospitals, Nursing Homes, Hospices, Adult Care Facilities and other health care facilities
- New York State Department of Health Division of Managed Care and Program Evaluation Managed Care Plan Directory
- New York State Department of Health Office Based Surgery Practices in New York State
- Health Resources and Services Administration (HRSA) Health Care Service Delivery and Look-Alike Sites
- Health Resources and Services Administration Health Care Facilities (CMS)
- New York City Department of City Planning. Selected Facilities and Program Sites
- Greater New York Hospital Association Health Information Tool for Empowerment (HITE) data
- NYC Department of Education (DOE) Office of School Health School Based Health Centers
- American Academy of Urgent Care Medicine (AAUCM) website
- City MD website
- NYS Office of Mental Health (NYS OMH) Local Mental Health Programs in New York State
- NYS OMH Residential Program Indicators (RPI) Report Tool
- NYS OMH OMH TCM Programs – Location with Program Capacity
- NYS Office of Mental Health (NYS OMH), Office of Performance Measurement and Evaluation. County Capacity and Utilization Data Book, CY 2012 or 2013. April, 2014
- Brooklyn Queens Long Island Area Health Education Center (BQLI-AHEC) website
- New York State Department of Health HCRA Provider List July 2014.
- Center for Health Workforce Studies. 2008-2010 Blended Physician Data: Analysis of Physician Re-registration Data.
- New York State of Health Navigator Agency Site Locations
- Substance Abuse & Mental Health Services Administration Services Administration (SAMHSA) Physicians Certified for Buprenorphine Treatment

Community Based Resources

- NYC Department of Information Technology and Telecommunications (DoITT) Agency Service Centers
 - Administration for Children’s Services (ACS) Community Partners
 - NYS Education Department, Office of the Professions New York State Nursing Programs
 - NYS Department of Health Community Health Worker Programs
 - NYC Department of Health & Mental Hygiene (DOHMH). “Directory of Child Care and Day Care Information Offices
 - GROWN NYC Community Gardens
 - NYC Department of Transportation (DOT) Daytime Warming Shelters
 - NYC Department for the Aging (DFTA) DFTA Contracts
 - NYC Department of Probation (DOP) Directory of DOP Office Locations
 - Department of Youth and Community Development (DYCD) After-School Programs
 - New York State Department of Health AIDS Institute Expanded Syringe Access Programs – Healthcare Facilities
 - New York City Department of Health and Mental Hygiene New York City Farmers Markets
 - New York State Department of Agriculture & Markets New York State Farmers’ Markets
 - New York City Housing Authority (NYCHA) Development Data Book
 - NYC Department of Consumer Affairs (DCA) Financial Empowerment Centers
 - NYC Department of Education (DOE) GED Plus Locations
 - HRSA Ryan White Programs
 - NYC DOHMH / Public Health Solutions HIV Care Services Sites
 - NYC Department of Homeless Services Homebase Locations
 - NYC Mayor’s Office Programs
 - National Alliance for Mental Illness (NAMI) Website
 - NYC DOE Public High School Programs
 - NYC Women’s Resource Network Directory
 - NYCHA Summer Meal Locations
 - NYC DoITT Office of Adults and Continuing Education (OACE) Sites
 - NYC Taxi and Limousine Commission (TLC) Paratransit Bases
 - Department of Health Prevention Agenda Contractors
 - NYCDOHMH Syringe Access Programs
 - Department of Small Business Services Workforce 1 Career Center Locations
 - NYC DOE Young Adult Borough Centers
-
- **Community Health Needs Assessments, Community Service Plans and Community Reports**

We also conducted a systematic review of existing Community Health Needs Assessments and Community Service Plans of the major hospitals in Queens and various community groups. See bibliography for titles of those reports.

APPENDICES

- Appendix A. Maps
- Appendix B. Tables with data by State, NYC, Queens, and zip code, UHF neighborhood or community district, where available
- Appendix C. Primary Data Collection Instruments and Information
 - List of Key Informants
 - List of Focus Groups
 - Instruments and Guides:
 - Resident Survey
 - Key Informant Interview Guide
 - Key Informant Demographic Survey
 - Focus Group Guide
 - Focus Group Demographic Survey
- Appendix D: Additional Analyses from Primary Data

BIBLIOGRAPHY

1. New York State Department of Health. "Eligible Safety Net Pharmacies." 7/21/14.
http://www.health.ny.gov/health_care/medicaid/redesign/docs/safety_net_pharmacies.pdf. Accessed 8/14.
2. New York State Department of Health. "Dental Providers that Accept Medicare/Medicaid."
https://www.health.ny.gov/diseases/aids/general/resources/dental_resource_directory/medicaid_medicaid_care.htm. Accessed 7/14.
3. New York State Department of Health AIDS Institute. "AIDS Drug Assistance Program Plus Dental Providers."
http://www.health.ny.gov/diseases/aids/general/resources/dental_resource_directory/adap_nyc_longisland.htm. Accessed 7/14.
4. New York State Department of Health AIDS Institute. "Ryan White Dental Clinics for People Living with HIV/AIDS."
http://www.health.ny.gov/diseases/aids/general/resources/dental_resource_directory/ryan_white_funded.htm#nyc. Accessed 7/14.
5. New York State Department of Health. "New York State Hospital Profile." Salient NYS Medicaid System Data Version 6.4. <http://hospitals.nyhealth.gov/>. Accessed 7/14
6. New York State Department of Health. "New York State Nursing Home Profile."
<http://nursinghomes.nyhealth.gov/>. Accessed 7/14.
7. New York State Department of Health. "Adult Care Facilities."
https://www.health.ny.gov/facilities/adult_care/. Accessed 7/14.
8. New York State Department of Health. "Adult Care Facility Annual Bed Census Data: 2011."
<https://www.healthdata.gov/data/dataset/adult-care-facility-annual-bed-census-data-2011>. Accessed 7/14.
9. New York State Department of Health. "Home Health and Hospice Profile."
<http://homecare.nyhealth.gov/>. Accessed 7/14.
10. New York State Department of Health Division of Managed Care and Program Evaluation. "Managed Care Plan Directory." https://www.health.ny.gov/health_care/managed_care/pdf/hmo_dir.pdf. Accessed 7/14.
11. New York State Department of Health. "Office Based Surgery Practices in New York State."
http://www.health.ny.gov/professionals/office-based_surgery/practices/. Accessed 7/14.
12. Health Resources and Services Administration (HRSA). "Health Care Service Delivery and Look-Alike Sites." <http://datawarehouse.hrsa.gov/data/datadownload/hccdownload.aspx>. Accessed 8/14.
13. Health Resources and Services Administration. "Health Care Facilities (CMS)"
<http://datawarehouse.hrsa.gov/tools/DataPortalResults.aspx>. Accessed 8/14.
14. New York City Department of City Planning. "Selected Facilities and Program Sites."
<http://www.nyc.gov/html/dcp/html/bytes/dwnselfac.shtml>. Released 2013. Accessed 7/14.
15. Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014.
16. NYC Department of Education (DOE) Office of School Health. "School Based Health Centers."
<http://schools.nyc.gov/Offices/Health/SBHC/SBHC.htm>. Updated 6/14. Accessed 8/14.

17. American Academy of Urgent Care Medicine (AAUCM).
<http://aaucm.org/patients/findurgentcarecenter/default.aspx> . Accessed 8/14.
18. City MD. <http://www.citymd.pth4.com/urgent-care-locations>. Accessed 8/14.
19. NYS Office of Mental Health (NYS OMH). "Local Mental Health Programs in New York State."
<http://bi.omh.ny.gov/bridges/directory>. Accessed 8/14.
20. NYS OMH. "Residential Program Indicators (RPI) Report Tool." Time Frame: July 2013-June 2014.
http://bi.omh.ny.gov/adult_housing/reports?p=rpi. Accessed 8/14.
21. NYS OMH. "OMH TCM Programs – Location with Program Capacity."
https://www.health.ny.gov/health_care/medicaid/program/medicaid_health_homes/targ_case_mgmt/docs/2011-08-11_omh_tcm_location_with_program_capacity.xls. 8/11/11. Accessed 8/14.
22. NYS Office of Mental Health (NYS OMH), Office of Performance Measurement and Evaluation. County Capacity and Utilization Data Book, CY 2012 or 2013. April, 2014.
<https://www.omh.ny.gov/omhweb/special-projects/dsrip/docs/countyutilization.pdf>. Accessed 8/13/14.
23. New York State Department of Health. "HCRA Provider List." July 2014.
<http://www.health.ny.gov/regulations/hcra/provider.htm>. Accessed 8/14.
24. Center for Health Workforce Studies. 2008-2010 Blended Physician Data: Analysis of Physician Re-registration Data.
25. New York State of Health. "Navigator Agency Site Locations." January 2014.
<http://info.nystateofhealth.ny.gov/sites/default/files/IPA-Navigator%20Site%20Locations%20%28Updated%201-24-14%29.pdf> Accessed 8/14.
26. Substance Abuse & Mental Health Services Administration Services Administration (SAMHSA)
"Physicians Certified for Buprenorphine Treatment" http://buprenorphine.samhsa.gov/bwns_locator/
Accessed 7/14.
27. NYC Department of Information Technology and Telecommunications (DoITT). "Agency Service Centers."
<http://data.cityofnewyork.us/Social-Services/Agency-Service-Center/nn5y-wmuj>. Accessed 7/14.
28. Administration for Children's Services (ACS). "ACS Community Partners."
<http://data.cityofnewyork.us/Social-Services/ACS-Community-Partners/9hyh-zkx9>. Accessed 7/14.
29. NYS Education Department, Office of the Professions. "New York State Nursing Programs."
<http://www.op.nysed.gov/prof/nurse/nurseprogs-bacc.htm>. Accessed 7/14.
30. NYS Department of Health. "Community Health Worker Programs."
https://www.health.ny.gov/community/pregnancy/health_care/prenatal/community_health_worker/program_list.htm. Accessed 7/14.
31. NYC Department of Health & Mental Hygiene (DOHMH). "Directory of Child Care and Day Care Information Offices." <http://data.cityofnewyork.us/Business/Directory-Of-Child-Care-and-Day-Care-Information-O/d6v5-2daj>. Accessed 7/14.
32. GROWN NYC. "Community Gardens." <http://www.grownyc.org>. Accessed 7/14.
33. NYC Department of Transportation (DOT). "Daytime Warming Shelters."
<http://data.cityofnewyork.us/Transportation/Daytime-Warming-Shelters/44yz-sz5t>. Accessed 7/14.
34. NYC Department for the Aging (DFTA). "DFTA Contracts." <http://data.cityofnewyork.us/Social-Services/DFTA-Contracts/6j6t-3ixh>. Accessed 7/14.

35. NYC Department of Probation (DOP). Directory of DOP Office Locations.
<https://data.cityofnewyork.us/City-Government/Directory-Of-DOP-Office-Locations/tfbb-gszk>. Accessed 7/14.
36. Department of Youth and Community Development (DYCD). "DYCD After-School Programs."
<http://data.cityofnewyork.us/Education/DYCD-after-school-programs/mbd7-jfnc>. Accessed 7/14.
37. New York State Department of Health AIDS Institute. "Expanded Syringe Access Programs – Healthcare Facilities"
38. New York City Department of Health and Mental Hygiene. "New York City Farmers Markets"
<https://data.cityofnewyork.us/Health/New-York-City-Farmers-Markets/j8gx-kc43>.
39. New York State Department of Agriculture & Markets. "New York State Farmers' Markets."
<http://www.agriculture.ny.gov/AP/CommunityFarmersMarkets.asp>.
40. New York City Housing Authority (NYCHA). "NYCHA Development Data Book," 2014.
<http://www.nyc.gov/html/nycha/downloads/pdf1/pdb2014.pdf>
41. New York City Department of Consumer Affairs (DCA) "Financial Empowerment Centers" Available at:
<http://data.cityofnewyork.us/Business/Financial-Empowerment-Centers/xpvq-b7bu>
42. New York City Department of Education (DOE) "GED Plus Locations" Available at:
<http://data.cityofnewyork.us/Social-Services/GED-Plus-Locations/pd5h-92mc>
43. Human Resource Services Administration (HRSA) "Ryan White Programs" Available at:
http://findhivcare.hrsa.gov/Search_HAB.aspx.
44. New York City Department of Health and Mental Health and Public Health Solutions. "HIV Care Service Sites" Available at: <http://www.healthsolutions.org/hivcare/?event=page.locations>.
45. New York City Department of Homeless Services. "Directory of Homebase Locations" Available at:
<http://data.cityofnewyork.us/Social-Services/Directory-Of-Homebase-Locations/ntcm-2w4k>.
46. New York City Mayor's Office "Directory of Programs List – Mayor's Office." Available at:
<https://data.cityofnewyork.us/Social-Services/Directory-of-Programs-List-Mayor-s-Office/rafb-6xry>.
47. New York City Department of Education "NYC Public High School Program Data." Available at:
<http://data.cityofnewyork.us/Education/NYC-Public-High-School-Program-Data/mreg-rk5p>.
48. New York City Commission on Women's Issues (CWI). "NYC Women's Resource Network Database"
Available at: <http://data.cityofnewyork.us/Social-Services/NYC-Women-s-Resource-Network-Database/pqg4-dm6b>.
49. New York City Housing Authority (NYCHA) "Summer Meal Locations." Available at:
<http://newyorkcity.nokidhungry.org/free-summer-meals>.
50. New York City Department of Information Technology and Telecommunications. "Office of Adults and Continuing Education (OACE) Sites" <http://data.cityofnewyork.us/Social-Services/OACE-Office-of-Adult-and-Continuing-Education-Site/4u36-44pe>.
51. New York City Taxi and Limousine Commission (TLC). "Paratransit Bases." Available at:
<http://data.cityofnewyork.us/Transportation/Paratransit-Bases/r247-45ub>.
52. New York State Department of Health. "Prevention Agenda Contractors." Available at:
http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/contractor_map.htm.
53. New York City Department of Health and Mental Health. "Syringe Access Programs," 2014. Available at:
http://www.nyc.gov/html/doh/downloads/pdf/basas/syringe_exchange.pdf.

54. New York City Department of Small Business Services. "Workforce 1 Career Center Locations." Available at: <http://data.cityofnewyork.us/Social-Services/Workforce-1-Career-Center-Locations/bnnh-zzg6>
55. New York City Department of Education (DOE). "Young Adult Borough Centers." Available at: <http://data.cityofnewyork.us/Social-Services/Young-Adult-Borough-Centers-2012-2013/pfn4-vjwr>