

**New York City Health Provider Partnership
Bronx Community Needs Assessment
Final Draft November 14, 2014**



NYAM

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OVERVIEW

The goal of the Delivery System Reform Incentive Payment (DSRIP) program is to promote community-level collaborations and focus on system reform in order to reduce avoidable inpatient admissions and emergency room visits by 25% over 5 years for the Medicaid and uninsured populations in New York State. To inform the health system transformation that is required under the DSRIP program, several emerging Performing Provider Systems (PPSs) contracted with The New York Academy of Medicine (NYAM) to complete a Bronx-wide Community Needs Assessment (CNA). The CNA was governed and monitored by a Steering Committee consisting of representatives from each of the following emerging PPSs: **A W Medical; The New York City Health and Hospitals Corporation (HHC) including representatives from their central office, Jacobi Medical Center (HHC), and Lincoln Medical Center (HHC); and St. Barnabas Hospital (dba SBH Health System).**

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.

Methods

NYAM utilized both primary and secondary data collection and analyses to inform this CNA. To ensure the perspective of community members and stakeholders was 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 24 key informant interviews (involving 30 individuals), 21 focus groups with community members and other stakeholders, and approximately 600 community surveys.

NYAM developed the primary data protocol in collaboration with the PPSs using standard research methods consistent with DSRIP CNA guidance. Key Informant interview, focus group, 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. NYAM collected this data, after IRB approval, in partnership with numerous community organizations, which were identified in collaboration with PPS representatives and represented a range of populations, e.g., older adults, immigrant populations, and people with disabilities, and neighborhoods. 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. Socio-demographic

characteristics of survey respondents included: 48% Black/African American, 38% Latino, 10% Asian, 43% foreign born, 12% limited English proficient, 78% living below the poverty line, 52% on Medicaid and 12% uninsured. The mean age of respondents was 46, with a range of 18 to 95.

The NYAM team analyzed the data using standard qualitative and quantitative methods; we have reported common themes, as appropriate, throughout the report. NYAM also 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. (See Section F. of this report and the attached Bibliography for a detailed list.)

Summary of Findings

The population in the Bronx is burdened by a myriad of health challenges and socioeconomic circumstances that foster poor health outcomes. It is the least healthy county in New York State, and has high rates of chronic disease such as diabetes, cardiovascular disease, and respiratory disease including asthma/COPD, cancer and high rates of obesity.¹ The Bronx leads New York State in the percentage of premature deaths in people aged less than 65 years;² the leading causes of these deaths in the county are cancer, heart disease, unintentional injury, AIDS and diabetes.³ The Bronx also outpaces NYC overall in household poverty and low educational attainment, and is approximately on par with city rates of unemployment and health insurance.⁴ More than half of the Bronx population speaks a language other than English in the home, and many are immigrants, presenting possible additional cultural and regulatory challenges to health care access.⁵ Among the Medicaid population, the Bronx ranks highest among all boroughs in NYC in the rate of potentially preventable inpatient hospitalizations, including for chronic conditions overall and for certain chronic conditions such as circulatory conditions, respiratory conditions and diabetes.⁶ It also ranks second among the NYC boroughs in the rate of preventable emergency room visits (PPV).⁷

From the perspective of the community, the main health issues include diabetes, obesity, cancer, cardiovascular disease, asthma, violence and behavioral health issues, including anxiety, depression and substance use.⁸ Community members clearly connect these common health conditions to conditions of poverty, including—but not limited to—insecurity with respect to housing and other basic needs, unsafe environments, and poor access to healthy foods. The community members associate health problems with depression, and likewise depression with poverty. People reported concerns about jobs, housing,

1 RWJ County Health Rankings 2014, available at

http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2014_NY_v2.pdf, accessed September 8, 2014.

2 The Bronx figure is 33.9% compared to the NYS figure of 23.9%. Source: “Percentage of premature deaths (before age 65 years), 2012” New York State Prevention Agenda Dashboard, using Vital Statistics Data.

3 NYC DOHMH Epiquery System, Vital Statistics data, accessed August 2014.

4 US Census American Community Survey 5-year, 2008-2012.

5 According to US Census data, approximately one in five Bronx residents are not US Citizens (US Census American Community Survey, 5 year table, 2008-2012). It is possible that this number may be underreported due to undocumented individuals

6 2011-2012 Medicaid Prevention Quality Indicators, New York State Department of Health, Office of Quality and Patient Safety, 2014, as reported by the Office of Health Systems Management.

7 Ibid.

8 NYAM primary data findings, September 2014.

access to government benefits programs, and the safety of their streets. A dramatic indicator of poverty, with obvious health implications, is food insecurity (hunger), which was described as a challenge by multiple respondents.

The costs incurred—in both time and money—for medical care remain problematic and act as a barrier to effective use of prevention and disease management services from the perspective of community members. The income criteria for Medicaid are described as unrealistic, given the cost of living in New York City, and the working poor who do not qualify for Medicaid have trouble affording even the subsidized premiums of insurance (or are not eligible for subsidies) offered through the Health Exchange. Community members (and providers) consistently describe long wait times for visits and at the time of a visit. Furthermore, the possible need for multiple visits (e.g., for tests or specialist services), discourages timely use of services and for many makes the emergency department a rational choice for “one stop shopping”.

Furthermore, the policy environment reportedly presents a number of challenges to residents and providers. For example, funding and regulatory agencies have differing requirements that 1) limit continuity of care for patients with multiple health care needs and 2) put high demands on provider organizations that work with multiple systems. Funding for high-demand services, such as care coordination, is limited and consequently salaries for the positions are relatively low. Low salaries make hiring difficult and may necessitate selection of candidates that are under-qualified, particularly considering the expectations of the job. Lack of trust or engagement (or possibly time) in care coordination on the part of medical providers is also considered to limit the potential effectiveness of care coordination models. Finally, a consistent electronic health record was described as a challenge for agencies offering care coordination services, as they had to utilize multiple systems.

Key informants participating in the CNA, representing a cross-section of professions and fields, described distinct populations with particular health care – and health – challenges. For example, individuals with severe alcohol or substance abuse disorders, who often have high rates of mental and physical illness and homelessness, are frequent users of emergency department services. However, emergency departments mostly lack the resources to address the psychosocial needs that might increase stability within this population, and decrease their use of health care services. Undocumented residents are described as hesitant to use health care services due to cost considerations and fear of deportation. When they do access medical services, it is late and sporadic.

Implications for Project Selection

Domain 2 System Transformation Projects

The high number of potentially preventable inpatient admissions, emergency visits, and potentially preventable readmissions in this area suggests that system transformation is needed. Thus, for the county as a whole, the needs assessment suggests that any of the DSRIP domain 2 projects could be appropriate. For an individual Performing Provider System, a specific project may be more appropriate dependent on ongoing initiatives, current infrastructure, payor mix, partners, and service area.

In addition to the DSRIP Domain 2 projects focused on creating integrated delivery systems (Domain 2A), implementation of care coordination and transitional care programs (Domain 2B), and connecting settings (Domain 2C), the New York State Department of Health has announced it is adding a new project (Domain 2D) focused specifically on the uninsured.⁹ In the Bronx, approximately 217,000 people are uninsured, accounting for approximately 10% of all the uninsured individuals in New York State.¹⁰ Adults between the age of 18 and 65 account for the largest proportion of uninsured in the Bronx, with a rate of 20% versus approximately 2% among those aged 65 and older, and approximately 5% among children aged 0-17. (See Appendix B, Table 22.) Within the borough, the highest number of uninsured are clustered in parts of Fordham-Bronx Park south through to Hunts Point-Mott Haven. (See Appendix A, Map 3.)

A significant portion of the uninsured in the Bronx may be undocumented.¹¹ The 2008-2012 5-year American Community Survey estimated that 131,665 (or 60.7%) of the total number of 217,009 uninsured Bronx residents were foreign born.¹² Of these 131,665 foreign-born uninsured residents, the largest number were born in Latin American countries (86,572, 65.8%), followed by those born in non-Hispanic Caribbean countries (16,070, 12.2%), African countries (13,699, 10.4%), Balkan and Eastern European countries (3,349, 2.5%), and South Asian countries (2,766, 2.1%).¹³ Within the borough, uninsured foreign born Latinos live primarily in the south Bronx and west of the Grand Concourse, with approximately 11,000-13,000 people living in each of the following Community Districts (CD): CD 1&2, Hunts Point, Longwood, and Melrose; CD 9, Castle Hill, Clason Point, and Parkchester; CD 4, Concourse, Highbridge, and Mount Eden; CD 5, Morris Heights, Fordham South, and Mount Hope; and CD 7, Bedford Park, Fordham North, and Norwood. Those who are uninsured and were born in non-Hispanic Caribbean countries reside primarily in CD 12, Wakefield, Williamsbridge, and Woodlawn. African-born uninsured residents reside primarily on either side of the Grand Concourse, in CDs 3 and 6, Belmont, Crotona Park East, and East Tremont; CD 4, Concourse, Highbridge, and Mount Eden; and CD 5, Morris Heights, Fordham South, and Norwood. Uninsured residents born in Balkan and eastern European

⁹ This project will also focus on low- and non-utilizing Medicaid beneficiaries.

¹⁰ US Census, American Community Survey, 5 year data, 2008-2012.

¹¹ NYAM Primary Data Collection, preliminary findings, August, 2014

¹² US Census, American Community Survey, 5 year data, 2008-2012.

¹³ Ibid.

countries live primarily in CD 11, Pelham Parkway, Morris Park, and Laconia; and uninsured residents born in South Asian countries live primarily in CD 9, Castle Hill, Clason Point, and Parkchester.¹⁴

Despite health reform, data suggest that insurance coverage remains problematic (or is increasingly problematic) even for those eligible.¹⁵ Community members and key informants describe income restrictions for Medicaid as unrealistically low, and self-purchased coverage, even when subsidized, as too expensive for low-income populations (or some are not eligible for subsidies), given the difficulties of paying for basic necessities like food and housing. Lack of health insurance is reported to result in reduced use of preventive and community based care and increased emergency department use.¹⁶

Domain 3 Clinical Improvement Projects

As noted above, Bronx ranks highest among all New York City boroughs in the rate of potentially avoidable inpatient hospitalizations, and ranks second among the NYC boroughs in the rate of preventable emergency room visits (PPV).¹⁷ The greatest proportion of potentially preventable admissions (PQI) in the Bronx are for chronic conditions including respiratory conditions such as asthma/COPD, cardiovascular conditions such as heart failure and hypertension, and diabetes.¹⁸ Thus, these also represent the areas of opportunity for reducing preventable inpatient stays. The Medicaid beneficiaries who account for the largest proportion of these preventable admissions are concentrated in the areas of the Bronx in a wide corridor from Fordham-Bronx Park in the north, south alongside the Grand Concourse to the South Bronx.¹⁹ These areas also account for the highest proportion of potentially preventable emergency room visits.²⁰

Behavioral Health

Among the Bronx population as a whole, the age-adjusted percentage of adults with poor mental health for 14 or more days of 9.1%, as well as the age-adjusted suicide rate of 5.4%, are lower than the state rates and roughly on par with citywide rates.²¹ However, in the Bronx, 7.1% of all people report experiencing serious psychological distress, compared to 5.5% in NYC overall.²² The Pelham-Throgs Neck area and the South Bronx, in particular, appear to be disproportionately impacted by psychological distress with approximately 8%-9% of residents reporting it. (See Appendix B, Table 31.) Those in Hunts

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ 2011-2012 Medicaid Prevention Quality Indicators, New York State Department of Health, Office of Quality and Patient Safety, 2014, as reported by the Office of Health Systems Management.

¹⁹ NYS DOH 2012.

²⁰ NYS DOH 2012.

²¹ The “poor mental health” measure is from 2008-2009 BRFSS and Expanded BRFSS data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard. The suicide rate is for the years 2010-2012 from Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

²² Serious psychological distress is a composite measure of 6 questions in the Community Health Survey regarding symptoms of anxiety, depression and other emotional problems. New York City Department of Health and Mental Hygiene, Community Health Survey 2012 data, as reported on Epiquery <http://nyc.gov/health/epiquery>, accessed August 2014.

Point-Mott Haven, Highbridge-Morrisania and Crotona-Tremont also report high rates of psychological distress, with approximately 5%-8% of those surveyed reporting it. The myriad of stresses on lower income residents were considered overwhelming to some and contributed to high levels of depression.²³ Low-income immigrant populations may have additional stressors of assimilation, as well as poorer access to care, due to insurance and language issues.²⁴

Community members also marked that substance use and alcohol abuse are pressing issues. Indeed, in 2012, the last year for which data is available, an estimated 639.2 per 100,000 emergency room visits in NYC were due to non-alcohol, illicit drugs.²⁵ In the Bronx, the age-adjusted percentage of adult binge drinking among the total population “during the past month” for the borough was nearly one-in-five (18.5%) in 2012, similar to the overall NYC rate (19.6%) for the same time period. (See Appendix B, Table 33.) Also, key informants described behavioral health issues as one factor in delaying or precluding appropriate preventive and primary health care. According to the director of a Bronx CBO serving a number of residents with mental health and substance abuse issues, *“Survival is the most important thing, so not health, not seeing a doctor... but that’s just – literally hustling to survive each day is the number one goal.”*

There are no PQI measures of preventable hospitalizations related specifically to behavioral health. However, New York State Office of Mental Health (OMH) data suggest that over half (54.4% or 9,215/16,942) of Bronx clients served by OMH-licensed and OMH-funded programs have one or more physical chronic health conditions, indicating a need for coordinated behavioral and physical health care. (See Appendix B, Table 32.)

The geographic distribution of behavioral health resources (see Appendix A, Map 88) appears to match the widespread distribution of behavioral health-related service utilization in the Bronx;²⁶ however, questions as to the adequacy of these resources in terms of capacity were raised in focus groups and key informant interviews. In addition, there were concerns about concentration of particular services, such as methadone programs in particular neighborhoods, resulting in perceived declines in safety and quality of life for community members. Per DSRIP behavioral health clinical improvement projects, the integration of behavioral health specialists into primary care clinics could help address this issue if it entails a net increase of behavioral health resources, as well as a smoother and quicker referral process between primary care and behavioral health. Further, it may also address low behavioral health services utilization among some beneficiaries resulting from the inconvenience and the stigma associated with seeking treatment at a behavioral health provider location. Conversely, the integration of primary care services into existing behavioral health services settings could help address the high rates of co-

²³ NYAM Primary Data findings, September, 2014.

²⁴ Ibid.

²⁵ Drug Abuse Warning Network, 2011: New York City – 5 Boros: Drug-Related Emergency Department Visits, 2004-2011 - Illicits (excluding alcohol) Rockville, MD: Center for Behavioral Health Statistics and Quality, SAMHSA, 2013

²⁶ These numbers and rates reflect possible duplicated counts of beneficiaries if a beneficiary's calendar year utilization was found by NYS DOH to occur across multiple Episode Disease Categories within a single Major Diagnostic Category. Therefore, the numbers reflect the Weighted Number of Beneficiaries with Condition-Related Utilization, and the rates reflect the Weighted Condition Prevalence Among Beneficiaries, by multiple counting beneficiaries for utilization across multiple comorbidity Episode Disease Categories within a Major Diagnostic Category.

morbidity between behavioral health and chronic physical health conditions for those currently utilizing behavioral health services.

According to providers, the system is fragmented, with possibly poorer integration within behavioral health services 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.²⁷

Cardiovascular Disease

Heart disease is the top cause of mortality among the white, black, and Hispanic populations of the Bronx²⁸ and is recognized by community members as a major health problem. It is also the second leading cause of premature death in the borough.²⁹ The age adjusted cardiovascular disease hospitalization rate in the Bronx is 210.8 per 10,000, higher than either NYC (173.6) or NYS (159.9).³⁰ Similarly the age adjusted mortality rate for diseases of the heart was 225.8 in the Bronx, 212.2 in NYC, and 198.6 in NYS.³¹ Within the broad category of heart health, the Bronx fares worse than NYC and NYS on all age-adjusted indicators.³²

In 2012, the number of potentially preventable hospitalizations among Medicaid beneficiaries for circulatory conditions (PQI S02 Circulatory Composite) in the Bronx was 3,173, accounting for about one in five (20.1 %) of all such admissions in the State. (See Appendix B, Table 44.) The ratio of observed/expected (O/E) admissions in the Bronx (1.34) was higher than the ratio for NYC (1.06) for the same time period. (See Appendix B, Table 44.) At the ZIP Code level within the borough, the highest number of preventable hospitalizations and the highest observed / expected PQI ratios for the Circulatory Composite measure are found along the Grand Concourse from Highbridge – Morrisania to Fordham – Bronx Park. (See Appendix A, Map 40.)

Approximately 185.02 out of 100,000 Medicaid beneficiaries in the Bronx were hospitalized for conditions related to hypertension, compared to 124.02 in NYC and 105.5 in NYS. In 2012, there were 969 potentially preventable hospitalizations among Medicaid beneficiaries for hypertension (PQI 07) in the borough. (See Appendix B, Table 44.) The variation in hospitalization rates for conditions related to hypertension between neighborhoods in the Bronx is wide. For example, the rate in Kingsbridge-

²⁷ Ibid.

²⁸ New York City Vital Statistics, "Top Ten Leading Causes of Mortality 2012," accessed via the EpiQuery interactive tool, August, 2014

²⁹ 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

³⁰ 2009-2011 data reported on the NYS Dept of Health Website County Health Assessment Indicators, https://www.health.ny.gov/statistics/chac/chai/docs/chr_58.htm, accessed September 2014.

³¹ Ibid.

³² Ibid.

Riverdale is 115.66 per 100,000, compared to a rate of 261.85 in the Northeast Bronx. (See Appendix A, Map 45.)

There were 2,013 potentially preventable hospitalizations among Medicaid beneficiaries for heart failure (PQI 08) in the Bronx. (See Appendix B, Table 44.) The range for observed/expected admissions for heart failure was 0.7 to 2.87. The lowest rates were in Kingsbridge-Riverdale and the highest in the Pelham Bay-Throgs Neck area. (See Appendix A, Map 46.)

In 2012, adult angina without procedure (PQI 13) accounted for 191 potentially preventable hospitalizations in the Bronx. (See Appendix B, Table 44.) The range for observed/expected admissions for adult angina without procedure is 0.0 to 2.1, with the lowest rates in the Throgs Neck- Pelham Bay and Kingsbridge-Riverdale areas and the highest in Highbridge, Bedford Park, Mott Haven, Port Morris, Baychester, Westchester Heights, and Parkchester. (See Appendix A, Map 50.)

The highest rates of cardiovascular-related service utilization (including pharmacy) among Medicaid beneficiaries were found in Kingsbridge – Riverside and Northeast Bronx; however, the highest numbers were found along either side of the Grand Concourse from Highbridge–Morrisania to Fordham–Bronx Park.³³ (See Appendix A, Map 26.) In regard to disease information and support services, these areas of the Bronx with high rates of condition-related utilization and high numbers of circulatory composite PQI hospitalizations appear to have those services available, with the exception of the Fordham–Bronx Park area. Specialty cardiology services similarly appear to be located in or near the areas of greatest need, with the exception of the Fordham–Bronx Park area (See Appendix A, Map 71.)

³³ These numbers and rates reflect possible duplicated counts of beneficiaries if a beneficiary's calendar year utilization was found by NYS DOH to occur across multiple Episode Disease Categories (e.g., hypertension and congestive heart failure) within a single Major Diagnostic Category (e.g., Diseases and Disorders of the Cardiovascular System). Therefore, the numbers reflect the Weighted Number of Beneficiaries with Condition-Related Utilization, and the rates reflect the Weighted Condition Prevalence Among Beneficiaries, by multiple counting beneficiaries for utilization across multiple co-morbidity Episode Disease Categories within a Major Diagnostic Category.

Diabetes

The diabetes composite PQI (S01) for the Bronx (1.24) is higher than for New York City (1.01) and New York State (1.00).³⁴ (See Appendix B, Table 44.) Many community members see diabetes as their greatest health concern.³⁵ Within the Bronx, the range for PQI S01 observed/expected ratios is 0.8 to 2.26. (See Appendix A, Map 39.) Across New York State, only 51% of Medicaid Managed Care beneficiaries with diabetes received all recommended tests in the last year, and 33% of Medicaid Managed Care beneficiaries in NYS with diabetes have poorly controlled HbA1c (>9%).³⁶

In 2012, there were 792 potentially avoidable hospitalizations for short-term diabetes complications (PQI 01) among Bronx Medicaid beneficiaries, with a borough-wide Observed/Expected (O/E) ratio of 1.13.³⁷ (See Appendix B, Table 44.) Within the borough, twelve ZIP Code areas with an O/E ratio greater than 1.00 account for 493 or 62% of these hospitalizations.³⁸ (See Appendix A, Map 42.) These 493 hospitalizations are found in three clusters: from Highbridge-Morrisania to Crotona-Tremont east of the Grand Concourse; in northeast Bronx from north of Bronx Park to Pelham Bay Park; and in southeast Bronx from Soundview to Throgs Neck (See Appendix A, Map 42.) Potentially avoidable long-term complications from diabetes hospitalization (PQI 03) rates among Medicaid beneficiaries in the Bronx vary by neighborhood. Rates of such hospitalizations are highest in Kingsbridge, Mott Haven, and Pelham Bay Park neighborhoods. (See Appendix A, Map 43.) Potentially preventable Medicaid hospitalizations for uncontrolled diabetes (PQI 14) appear highest in East Tremont. (See Appendix A, Map 51.) Potentially avoidable hospitalizations for lower extremity amputation (PQI 16) for Medicaid Beneficiaries with diabetes appear to be largely concentrated in the northeast Bronx. The highest rates are found in Eastchester, Baychester, Co-op City, Pelham Gardens, and Mott Haven. (See Appendix A, Map 53.)

The geographic concentration of Diabetes PQI hospitalizations makes the potential return on investment in practice reforms high in terms of reduced PQI admissions. The Diabetes Resources map (See Appendix A, Map 72) appears to show current geographic alignment of diabetes care management resources and need (shown in terms of Diabetes Composite PQI S01 hospitalizations) in or near the Highbridge-Morrisania, Crotona-Tremont, and Bronx Park areas; but apparently less alignment of resources with need in the northeast and southeast clusters where resources are lacking, although the areas between these two clusters do have specialty diabetes clinical resources.

³⁴ NYS Dept of Health 2012 data, accessed August, 2014.

³⁵ NYAM Primary data findings, September 2014.

³⁶ QARR, 2011

³⁷ NYS Dept of Health 2012 data, accessed August, 2014.

³⁸ Ibid.

Asthma

CNA participants reported that asthma was among the most significant health concerns, with causation commonly attributed to indoor (e.g., mold, cockroaches, rodents) and outdoor (e.g., exhaust) environmental conditions.³⁹ While the observed rate of PQI respiratory admissions has declined in the Bronx since 2009, it remains far above the expected rate, with an Observed/Expected ratio of 1.42 for the Respiratory Composite PQI. (See Appendix B, Table 44 and Chart 50.) There were 4,116 Respiratory Composite (PQI S03) PQI hospitalizations in the Bronx in 2012. (See Appendix B, Table 44.) This includes 3,383 COPD or Asthma in Older Adults (PQI 05) PQI hospitalizations and 733 Asthma in Younger Adult (PQI 15) PQI hospitalizations. (See Appendix B, Table 44.) The areas of the Bronx with the highest PQI respiratory composite hospitalizations are located in a corridor that runs from parts of Fordham-Bronx Park south along both sides of the Grand Concourse to Hunts Point – Mott Haven. (See Appendix A. Map 41.)

When looking at the location of asthma health care resources in relation to Respiratory Composite PQI hospitalizations (See Appendix A Map 73), there appears to be fairly good alignment of health care resources to need; however, the relationship of these resources to the prevention of PQI hospitalizations is uncertain, especially when considering additional socio-demographic variables that may be influencing the PQI hospitalization outcomes, such as language barriers, constraints on time, and lack of insurance. Whatever the current efficacy of these resources in preventing asthma-related hospitalizations, a strong foundation is needed to implement the DSRIP clinical improvement projects around medication adherence and home-based self-management, which includes a focus on reducing home environmental triggers. Regarding home environmental triggers, limited data is available. However, data on the rate of serious housing violations by Community District, i.e., housing code violations that are considered “immediately hazardous or serious,” show prevalence in many of the same neighborhoods with high numbers of preventable respiratory PQI hospitalizations (See Appendix A, Map 15.)

The highest total Medicaid PQI asthma hospitalizations among young adults correlate well with the PQI respiratory composite. (See Appendix A, Map 52.) Among children in the Bronx who are Medicaid beneficiaries, the asthma rate of 701.47 per 100,000 is startlingly higher than the NYC overall rate of 426.91 per 100,000 and the NYS overall rate of 210.39 per 100,000.⁴⁰ Childhood asthma rates in the borough range from 418.8 per 100,000 in Kingsbridge-Riverdale to 987.9 per 100,000 in Hunts Point. Additionally, DOH data suggests that the majority, 981 or 52.6%, of the 1,865 pediatric asthma preventable PDI hospitalizations in 2012 were among very young children, aged 2-5.⁴¹ Among older

³⁹ NYAM Primary Data Collection, preliminary findings, August 2014.

⁴⁰ Medicaid Prevention Quality Indicators, 2012.

⁴¹ The asthma PDI is reported for children aged 2-17, but the PDI chronic composite (which includes asthma and diabetes) is reported only for those aged 6-17. Thus the difference (decrease) in numbers between those two measures is a result of the loss of the asthma admissions for children aged 2-5 in the chronic composite. Thus, it is the young children aged 2-5 that represent the bulk of the asthma PDI numbers. As explained in an email transmission from the NYS DOH dated August 25, 2014: “Each PDI has a different age criteria, asthma is 2-17 years, diabetes is 6-17 years, gastroenteritis and uti are both 3 months to 17 years. These 4 PDI make up the overall composite PDI, however, that age criteria is 6-17 years. This results in the

adults in the Bronx, the COPD/Asthma PQI O/E ratio is 1.38, significantly higher than the city ratio of 1.01. (See Appendix B, Table 44.) Consistent with other asthma indicators, the highest number of Medicaid PQI hospitalizations for COPD and asthma in older adults are clustered in the corridor from Fordham-Bronx Park south to the South Bronx. (See Appendix A, Map 44.)

HIV

The fourth leading cause of premature deaths in the Bronx is AIDS, accounting for approximately 30% of all such deaths in NYC.⁴² The HIV/AIDS prevalence rate for the Bronx (approximately 1,660 per 100,000 population) is higher than the NYC rate (1,370 per 100,000), and variation exists within the borough.⁴³ Four UHF neighborhoods in the borough have a higher HIV/AIDS prevalence rate than the city as a whole: Highbridge-Morrisania (2,353/100,000), Hunts Point-Mott Haven (2,290/100,000), Crotona-Tremont (2,207/100,000), and Fordham-Bronx Park (1,696/100,000).⁴⁴ In terms of numbers of People Living with HIV/AIDS (PLWHA), these neighborhoods account for a total of 16,996 PLWHA or 73.7% of all PLWHA in the Bronx.⁴⁵ (See Appendix B, Table 35.) The age adjusted mortality rate for AIDS in the Bronx (20 per 100,000) is more than twice the rate of NYC (9.4 per 100,000) and four times the rate for NYS (4.7 per 100,000).⁴⁶ Neighborhoods with the highest incidence of HIV also have higher rates of concurrent HIV/AIDS diagnoses, and are the same neighborhoods with the highest prevalence: Morrisania/Highbridge, and Mott Haven/ Hunts Point.⁴⁷ (See Appendix B, Chart 38.)

Bronx residents who are HIV positive, or have been diagnosed with AIDS, have rates of viral load suppression (60.19%) slightly lower than New York City (61.2%) and New York State (62.2%).⁴⁸ Among Medicaid Managed Care Beneficiaries in the Bronx who are HIV positive, or who have been diagnosed with AIDS, 91% are engaged in care, 69% received appropriate viral load monitoring, and 70% of those 19 or older received syphilis screening.⁴⁹ Viral load suppression is a key factor in reducing transmission of HIV and maintaining good health.

Within the borough, there are wide racial disparities in HIV incidence. In 2011, the latest year for which data is available, the rate of new HIV diagnoses among African Americans living in the Bronx was nearly

loss of patients age 3 months up to 6 years, hence the decrease in numbers. The same situation occurs in the acute and chronic composites. The composite age group is 6-17, however, that doesn't reflect the actual age groups in the individual measures."

⁴² "County Number of 3-Years Premature [< age 75] Deaths" Vital Statistics Data as of March, 2014, New York State Department of Health - Bureau of Biometrics and Health Statistics.

⁴³ NYC DOHMH 2011

⁴⁴ Ibid.

⁴⁵ 2011 data, the latest year for which information is available, from the New York City Department of Health and Mental Hygiene.

⁴⁶ NYS Dept of Health County Health Assessment Indicators, 2009-2011, https://www.health.ny.gov/statistics/chac/chai/docs/sti_58.htm, accessed September 2014.

⁴⁷ Source: New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - [HIV/AIDS Surveillance Data, 2009]. [1 August 2014]. <http://nyc.gov/health/epiquery>

⁴⁸ HIV Ambulatory Care Performance, 2011

⁴⁹ QARR, 2012

4 times higher than the new HIV diagnosis rate among Whites living in the Bronx (76.7 compared to 19.1 cases per 100,000 people). The rate of new HIV diagnoses among Latinos living in the Bronx was more than 2 times higher than the new HIV diagnosis rate among Whites living in the Bronx (41.8 compared to 19.1 cases per 100,000 people). (See Appendix B, Chart 37).

According to key informants in the field, transmission among injecting drug users (IDUs) in the Bronx has dropped dramatically, likely due to access to clean syringes from syringe exchange programs—although hepatitis C remains a concern, since it is more easily transmitted.

The HIV/AIDS Resources map (See Appendix A, Map 75.) suggests a geographic alignment between Medicaid Beneficiaries with a HIV/AIDS service utilization and the location of HIV/AIDS resources, which is also consistent with the prevalence of PLWHA by UHF neighborhood. The existing health care and ancillary services structure appears to provide a strong foundation for implementing the related DSRIP projects. However, key informants providing services to HIV-infected individuals describe significant changes in funding priorities, with increasing resources going toward medical management, and less funding available for supportive services, including housing for people with HIV. Given the aging of the HIV-infected population, and the potential medical complications of HIV medication, a large number of people with HIV/AIDS also have more common chronic conditions, including diabetes and heart disease. Integration of medical services is therefore essential.

Perinatal Care

Over the period 2010-2012, there were 21,867 live births per year on average in the Bronx, representing nearly one in five (18.5%) births in New York City and nearly one in ten (9.1%) in the State over the same time period.⁵⁰ The percentage of all births in the Bronx that were Medicaid or self-pay was 75.4%, compared to 59.7% in NYC and 50.1% in the State; the percentage of Medicaid or self-pay births across Bronx ZIP Codes ranged from 23.6% to 87.5%. (See Appendix A, Map 8.) Fertility rates are also higher in the Bronx (59 births in the past year per 1,000 women age 15-50) than in NYC (52 per 1,000) and NYS (50 per 1,000).⁵¹ For young women, the difference is even greater, with a rate of 34 births in the past year per 1,000 women age 15-19, compared to 21 per 1,000 in NYC and 17 per 1,000 in NYS.⁵² The highest fertility rates are found along the western side of the Grand Concourse from Highbridge to Fordham – Bronx Park, and in the south in Mott Haven, Hunts Point, and Soundview. (See Appendix A, Maps 6-8). The teen pregnancy rate is also higher in the Bronx than NYC and NYS, at 60.8 per 1,000 compared to 44.2 per 1,000 in NYC and 35.7 per 1,000 in NYS.⁵³ (See Appendix A, Map 7.)

In 2012, the latest year for which data is available, the percentage of preterm births in the Bronx (12.2%) was higher than in NYC (10.8%) or NYS (10.8%).⁵⁴ Preterm birth is associated with low birth weight and poor health outcomes. The overall low birth weight (LBW) rate for the Bronx over the time period 2010-

⁵⁰ NYS Vital Statistics, 2010-2012, <http://www.health.ny.gov/statistics/chac/perinatal/>, accessed September 2014.

⁵¹ Ibid.

⁵² Ibid.

⁵³ NYS Vital Statistics, 2012

⁵⁴ NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

2012 was 9.5%, compared to 8.5% for NYC and 8.1% for the state.⁵⁵ Within the Bronx, the LBW rates ranged from 1.9% to 12.8%, with the highest rates found in two clusters of ZIP Codes – one in the south central part of the borough from Mott Haven, Morrisania, to Claremont Village; and the other in the northeast part of the borough in Wakefield, Eastchester, and Co-Op City. These neighborhoods also experience the highest rates of infant mortality. (See Appendix A. Map 6.)

Racial disparities also persist in the borough in the number of preterm births, with 1.4 times the number of preterm births among the black population than among the non-Hispanic white population for the time period 2010-2012 and 1.2 times the number of Hispanic preterm births than non-Hispanic white preterm births in the same time period.⁵⁶ (See Appendix B, Table 68). Though, these racial and ethnic disparities were narrower in the Bronx than in NYC and NYS in the same time period.⁵⁷

In the Bronx, the percentage of mothers receiving prenatal care starting in the first trimester was lower than the NYS and NYC rates (71.8% and 70.4%, respectively) by over 10%, and more than one-third (37.0%) of mothers in the Bronx received prenatal care beginning in the third trimester (months 7-9), compared to 23.9% for NYS and 28.7% in NYC.⁵⁸ (See Appendix B, Table 61). Additionally, the Bronx neonatal death rate was slightly higher than NYC and NYS at 3.5 per 1,000, compared to 2.9 per 1,000 in NYC and 3.3 per 1,000 in NYS.⁵⁹

Domain 4 Population-Wide Projects

Domain 4 projects are intended to promote population health and reduce health risks. Specifically, these projects are to: (1) promote mental health and prevent substance abuse, (2) prevent chronic disease, including promoting tobacco use cessation and improving preventive care and disease management for chronic diseases not covered in Domain 3b, (3) prevent HIV and STDs, and (4) promote healthy women, infants and children. As noted above, the Bronx-wide population is burdened by chronic disease, including cancer. They also have high rates of teenage pregnancy, and high incidence and prevalence of HIV and other STDs. In some neighborhoods in the Bronx as many as one in five adults report being a current smoker.

(1) Promote Mental Health and Prevent Substance Abuse

As noted in the section on Domain 3 projects above, among the Bronx population as a whole, the age-adjusted percentage of adults with poor mental health for 14 or more days of 9.1%, as well as the age-

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ The ratio of black to white preterm births in NYC was 1.8 and in NYS was 1.62 for the period 2010-2012. The ratio of Hispanic to white preterm births in NYC was 1.39 and in NYS was 1.25 for this time period. Source: NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard, accessed August 2014.

⁵⁸ NY State Vital Statistics, 2012

⁵⁹ Ibid.

adjusted suicide rate of 5.4%, are lower than the state rates and roughly on par with citywide rates.⁶⁰ However, in the Bronx, 7.1% of all people report experiencing serious psychological distress, compared to 5.5% in NYC overall.⁶¹ The Pelham-Throgs Neck area, in particular, appears to be disproportionately impacted by psychological distress with approximately 8% of residents reporting it. (See Appendix B, Table 31.) Those in Hunts Point-Mott Haven, Highbridge-Morrisania and Crotona-Tremont also report high rates of psychological distress, with approximately 5%-8% of those surveyed reporting it. The myriad of stresses on lower income residents were considered overwhelming to some and contributed to high levels of depression.⁶² Low-income immigrant populations may have additional stressors of assimilation, as well as poorer access to care, due to insurance and language issues.⁶³

Community members also marked that substance use and alcohol abuse are pressing issues. Indeed, in 2012, the last year for which data are available, an estimated 639.2 per 100,000 emergency room visits in NYC were due to non-alcohol, illicit drugs.⁶⁴ In the Bronx, the age-adjusted percentage of adult binge drinking among the total population “during the past month” was nearly one-in-five (18%) in 2012, similar to the overall NYC rate (19.6%) for the same time period. (See Appendix B, Table 33.) Also, key informants described behavioral health issues as one factor in delaying or precluding appropriate preventive and primary health care. According to the director of a Bronx CBO serving a number of residents with mental health and substance abuse issues, *“Survival is the most important thing, so not health, not seeing a doctor... but that’s just – literally hustling to survive each day is the number one goal.”*

Access to mental health services is reported to be limited, some mental health providers report that community organizations and residents are not aware of available services or how to access them.⁶⁵ In addition, behavioral health issues generally carry greater stigma than other health concerns, which tends to limit use of services. There were also concerns about concentration of particular services, such as methadone programs in particular neighborhoods, resulting in perceived declines in safety and quality of life for community members. Key informants and focus group participants both reported that many affected individuals and families try to address problems internally.

According to providers, the system is fragmented, with possibly poorer integration within behavioral health services 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

⁶⁰ The “poor mental health” measure is from 2008-2009 BRFSS and Expanded BRFSS data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard. The suicide rate is for the years 2010-2012 from Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

⁶¹ Serious psychological distress is a composite measure of 6 questions in the Community Health Survey regarding symptoms of anxiety, depression and other emotional problems. New York City Department of Health and Mental Hygiene, Community Health Survey 2012 data, as reported on Epiquery <http://nyc.gov/health/epiquery>, accessed August 2014.

⁶² NYAM Primary Data findings, September, 2014.

⁶³ Ibid.

⁶⁴ Drug Abuse Warning Network, 2011: New York City – 5 Boros: Drug-Related Emergency Department Visits, 2004-2011 - Illicits (excluding alcohol) Rockville, MD: Center for Behavioral Health Statistics and Quality, SAMHSA, 2013

⁶⁵ NYAM primary data findings, September 2014.

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.⁶⁶

(2) Prevent Chronic Disease

a. Promoting tobacco use cessation

The domain 4 project on this topic is intended to “promote tobacco use cessation, especially among low SES populations and those with poor mental health.”⁶⁷ The percentage of cigarette smoking among adults in the Bronx is roughly on par with NYC and NYS rates (15.8% in the Bronx versus 15.5% in NYC and 16.2% in NYS in 2012), but rates vary by neighborhood. Approximately one in five adults in Pelham-Throgs Neck (21.2%) and the South Bronx (18.2%) report being a current smoker compared to less than one in ten in Kingsbridge-Riverdale (7.3%) and Fordham-Bronx Park (7.5%).⁶⁸ (See Appendix B, Table 34.)

b. Preventive care and disease management for chronic diseases not covered in Domain 3b

The leading cause of premature death in the borough is cancer.⁶⁹ (See Appendix B, Table 27.) Rates for some preventive screening measures in the Bronx are on par with NYC and NYS, e.g., approximately half (53%) of adults Medicaid beneficiaries aged 50-75 years received appropriate colorectal cancer screening in the borough, compared to 52% in NYC and 49% in NYS in 2012, the latest year for which data is available.⁷⁰ (See Appendix B, Table 66.) However, the borough lags in other related risk factors, such as obesity.

⁶⁶ Ibid.

⁶⁷ New York’s MRT Waiver Amendment Delivery System Reform Incentive Payment (DSRIP) Plan, Attachment J.”NY DSRIP Strategies Menu and Metrics,” 2014.

⁶⁸ These neighborhood estimates should be interpreted with caution. The estimate's Relative Standard Error (a measure of estimate precision) is greater than 30% or the sample size is less than 50, or the 95% Confidence Interval half width is greater than ten, making the estimate potentially unreliable. Source: NYC DOHMH Community Health Survey, 2012

⁶⁹ Vital Statistics Data as of March, 2014, New York State Department of Health - Bureau of Biometrics and Health Statistics.

⁷⁰ State data obtained from the 2012 BRFSS and reports the “Percentage of adults who received colorectal cancer screening according to most recent guidelines.” Those complying with recent guidelines included individuals who used a blood stool test at home in the past year; and/or, sigmoidoscopy in the past 5 years and blood stool test in the past 3 years; and/or, had a colonoscopy in the past 10 years. However, the 2012 NYC Community Health Survey only reports the percentage of respondents who received a “colon cancer screening in last 10 years.”

The prevalence of obesity in the Bronx is higher than in NYC or NYS, with nearly one in three (32%) of all adults in the Bronx obese, versus 24.2% in NYC and 23.6% in the state.⁷¹ (See Appendix B, Table 31.) The obesity rate varies widely within the borough with the highest rates in a corridor from parts of Fordham-Bronx Park down to the South Bronx. There are also very high rates in parts of Pelham-Throgs Neck.⁷² (See Appendix A, Maps 17-18.) Among women and children participating in the United States Department of Agriculture Food and Nutrition Service Women Infant and Children (WIC) program, approximately 29% of pregnant women were overweight, and 27% of pregnant women were obese in the Bronx in the time period 2010-2012. These Bronx rates are higher than the corresponding rates in NYS (approximately 27% overweight, 24% obese) and NYC (approximately 27% overweight, 22% obese).⁷³

Focus group participants attributed obesity to a number of causes, including the limited access and relatively high cost of healthy food.⁷⁴ In the Bronx, a mere 6% of adults report eating five or more fruits or vegetables per day, compared to approximately 9% in NYC and 27% in NYS.⁷⁵ Focus group participants also described the challenges of changing dietary behavior in general—and of losing weight, in particular—despite obvious negative health consequences. Cultural preferences for fried and certain high caloric foods were acknowledged. Although obesity was in part attributed to individual motivation and community conditions, more comprehensive and consistent educational messaging from providers, as well as improved access to affordable healthy food, were also recommended by community members.⁷⁶ Promising programs described by key informants including cooking demonstrations; linkages between providers and food stores, so that the former can provide support regarding promotion of healthy choices; and farmers market participation in food subsidy programs like SNAP and Health Bucks.⁷⁷

(3) Prevent HIV and Sexually Transmitted Diseases (STDs)

As noted above in the section on Domain 3 projects, the fourth leading cause of premature deaths in the Bronx is AIDS, accounting for approximately 30% of all such deaths in NYC.⁷⁸ The HIV/AIDS prevalence rate for the Bronx (approximately 1,660 per 100,000 population) is higher than the NYC rate (1,370 per 100,000), and variation exists within the borough.⁷⁹ Four UHF neighborhoods in the borough have a

⁷¹ This is 2012 data for Bronx and NYC from the Community Health Survey, 2012. It is 2008-2009 data for New York State from the NYS Department of Health, County Health Assessment Indicators, 2010 –2012.

⁷² It should be noted these rates are by UHF neighborhood, as rates are not available at the ZIP Code level, so there could be variation within these UHF neighborhoods that is not captured here.

⁷³ Source: Bronx County: County Health Assessment Indicators, 2010 – 2012 data
http://www.health.ny.gov/statistics/chac/chai/chai_58.htm#bronx, accessed August 2014.

⁷⁴ NYAM Primary data findings, September 2014.

⁷⁵ 2008-2009 data found at Bronx County: County Health Assessment Indicators, 2010 – 2012 data
http://www.health.ny.gov/statistics/chac/chai/chai_58.htm#bronx, accessed August 2014.

⁷⁶ NYAM Primary data findings, September 2014

⁷⁷ Health Bucks, worth \$2 each, are developed and distributed by the NYC Health Department and can be used to purchase fresh fruits and vegetables at all farmers' markets in NYC.

⁷⁸ "County Number of 3-Years Premature [< age 75] Deaths" Vital Statistics Data as of March, 2014, New York State Department of Health - Bureau of Biometrics and Health Statistics.

⁷⁹ NYC DOHMH 2011

higher HIV/AIDS prevalence rate than the city as a whole: Highbridge-Morrisania (2,353/100,000), Hunts Point-Mott Haven (2,290/100,000), Crotona-Tremont (2,207/100,000), and Fordham-Bronx Park (1,696/100,000).⁸⁰ In terms of numbers of People Living with HIV/AIDS (PLWHA), these neighborhoods account for a total of 16,996 PLWHA or 73.7% of all PLWHA in the Bronx.⁸¹ (See Appendix B, Table 35.) The age adjusted mortality rate for AIDS in the Bronx (20 per 100,000) is more than twice the rate of NYC (9.4 per 100,000) and four times the rate for NYS (4.7 per 100,000).⁸² Neighborhoods with the highest incidence of HIV also have higher rates of concurrent HIV/AIDS diagnoses, and are the same neighborhoods with the highest prevalence: Morrisania/Highbridge, and Mott Haven/ Hunts Point.⁸³ (See Appendix B, Chart 38.)

Bronx residents who are HIV positive, or have been diagnosed with AIDS, have rates of viral load suppression (60.19%) slightly lower than New York City (61.2%) and New York State (62.2%).⁸⁴ Among Medicaid Managed Care Beneficiaries in the Bronx who are HIV positive, or who have been diagnosed with AIDS, 91% are engaged in care, 69% received appropriate viral load monitoring, and 70% of those 19 or older received syphilis screening.⁸⁵ Viral load suppression is a key factor in reducing transmission of HIV and maintaining good health.

Within the borough, there are wide racial disparities in HIV incidence. In 2011, the latest year for which data is available, the rate of new HIV diagnoses among African Americans living in the Bronx was nearly 4 times higher than the new HIV diagnosis rate among Whites living in the Bronx (76.7 compared to 19.1 cases per 100,000 people). The rate of new HIV diagnoses among Latinos living in the Bronx was more than 2 times higher than the new HIV diagnosis rate among Whites living in the Bronx (41.8 compared to 19.1 cases per 100,000 people). (See Appendix B, Chart 37).

According to key informants in the field, transmission among injecting drug users (IDUs) in the Bronx has dropped dramatically, likely due to access to clean syringes from syringe exchange programs—although hepatitis C remains a concern, since it is more easily transmitted.

The HIV/AIDS Resources map (See Appendix A, Map 75.) suggests a geographic alignment between Medicaid Beneficiaries with a HIV/AIDS service utilization and the location of HIV/AIDS resources, which is also consistent with the prevalence of PLWHA by UHF neighborhood. The existing health care and ancillary services structure appears to provide a strong foundation for implementing the related DSRIP projects. However, key informants providing services to HIV-infected individuals describe significant changes in funding priorities, with increasing resources going toward medical management, and less funding available for supportive services, including housing for people with HIV. Given the aging of the

⁸⁰ Ibid.

⁸¹ 2011 data, the latest year for which information is available, from the New York City Department of Health and Mental Hygiene.

⁸² NYS Dept of Health County Health Assessment Indicators, 2009-2011, https://www.health.ny.gov/statistics/chac/chai/docs/sti_58.htm, accessed September 2014.

⁸³ Source: New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - [HIV/AIDS Surveillance Data, 2009]. [1 August 2014]. <http://nyc.gov/health/epiquery>

⁸⁴ HIV Ambulatory Care Performance, 2011

⁸⁵ QARR, 2012

HIV-infected population, and the potential medical complications of HIV medication, a large number of people with HIV/AIDS also have more common chronic conditions, including diabetes and heart disease. Integration of medical services is therefore essential.

(4) Promote Healthy Women, Infants and Children

The domain 4 project on this topic is specifically focused on reducing premature, or preterm, births.⁸⁶ As noted above, in 2012, the latest year for which data is available, the percentage of preterm births in the Bronx (12.2%) was higher than in NYC (10.8%) or NYS (10.8%).⁸⁷ Also, as noted above, preterm birth is associated with low birth weight and poor health outcomes. The overall low birth weight (LBW) rate for the Bronx over the time period 2010-2012 was 9.5%, compared to 8.5% for NYC and 8.1% for the state.⁸⁸ Within the Bronx, the LBW rates ranged from 1.9% to 12.8%, with the highest rates found in two clusters of ZIP Codes – one in the south central part of the borough from Mott Haven, Morrisania, to Claremont Village; and the other in the northeast part of the borough in Wakefield, Eastchester, and Co-Op City. (See Appendix A. Map 6.) These neighborhoods also experience the highest rates of infant mortality.⁸⁹ Racial disparities also persist in the borough in the number of preterm births, with 1.4 times the number of preterm births among the black population than among the non-Hispanic white population for the time period 2010-2012 and 1.2 times the number of Hispanic preterm births than non-Hispanic white preterm births in the same time period. (See Appendix B, Table 68.) Though, these racial and ethnic disparities were narrower in the Bronx than in NYC and NYS in the same time period.⁹⁰

In the Bronx, the percentage of mothers receiving prenatal care starting in the first trimester was lower than the NYS and NYC rates (71.8% and 70.4%, respectively) by over 10%, and more than one-third (37.0%) of mothers in the Bronx received prenatal care beginning in the third trimester (months 7-9), compared to 23.9% for NYS and 28.7% in NYC.⁹¹ (See Appendix B, Table 61). Additionally, the Bronx neonatal death rate was slightly higher than NYC and NYS at 3.5 per 1,000, compared to 2.9 per 1,000 in NYC and 3.3 per 1,000 in NYS.⁹²

An important component of promotion of healthy women, infants and children is the reduction in teenage pregnancy. Key informants working in the field described a number of evidence based and promising practices related to teen pregnancy, including better linkages to health centers that provide family planning services, improved access to long-acting and emergency contraception, and adolescent medical visits with the parent out of the exam room—for at least part of the time.⁹³

⁸⁶ New York's MRT Waiver Amendment Delivery System Reform Incentive Payment (DSRIP) Plan, Attachment J."NY DSRIP Strategies Menu and Metrics," 2014

⁸⁷ NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ The ratio of black to white preterm births in NYC was 1.8 and in NYS was 1.62 for the period 2010-2012. The ratio of Hispanic to white preterm births in NYC was 1.39 and in NYS was 1.25 for this time period. Source: NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard, accessed August 2014.

⁹¹ NY State Vital Statistics, 2012

⁹² Ibid.

⁹³ NYAM primary data findings, September 2014.

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 NYS 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 the DSRIP program 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 hospital use.

To inform the DSRIP project planning process, PPSs are required to complete a Community Needs Assessment (CNA). The New York Academy of Medicine (NYAM) was contracted to complete a borough-wide CNA in the Bronx. The CNA was governed and monitored by a Steering Committee consisting of representatives from each of the following emerging PPSs: **A W Medical, Jacobi Medical Center (HHC), Lincoln Medical Center (HHC), St. Barnabas Hospital (dba SBH Health System)**, as well as representatives from the New York City Health and Hospitals Corporation (HHC) central office.

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 (DOH) CNA Guidance dated June 6, 2014, and the section headers A-F, therein. Also attached here are a glossary of key terms, a bibliography, and appendices including Appendix A. Maps of The Bronx, Appendix B. Tables, Charts and Graphs, Appendix C. Primary Data Collection Instruments and Appendix D. Primary Data Collection Findings.

SECTION A. DESCRIPTION OF HEALTH CARE RESOURCES AND COMMUNITY RESOURCES

Sections i and ii

Community Based Resources

The Bronx has a large number of community based resources. However, CNA participants expressed concerns about capacity (small staff and budgets), quality, and health care linkages to those services that might benefit their patients.

I think it's less about [health care] access and more about all of the other things that are hindering access: poverty, chaotic drug use, unstable housing, hunger. So that's why we spent so much time attacking those issues so they can get stabilized so then they can think about medical care. So I think what's lacking is more commitment of resources to really addressing homelessness and hunger and those things that once they're stabilized, access becomes much, much easier. (key informant, community based organization)

Because physicians like us, we have absolutely zero knowledge of community resources, and there are plenty of community resources (key informant, health provider)

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

There are approximately 78 non-profit or public agencies and community based organizations that provide housing services of varying types located in the Bronx. 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; immigrants; adolescents aging out of foster care.⁹⁴ There are approximately 97 New York City Housing Authority (NYCHA) Developments and 124 NYCHA Community Facilities located in the Bronx.⁹⁵ Housing and homeless resources, including Homebase⁹⁶ locations, housing and rent assistance programs, NYCHA community facilities and shelters, appear to be located predominantly in the southern Bronx neighborhoods of Crotona – Tremont, Highbridge – Morrisania and Hunts Point – Mott Haven (though the eastern portion of Hunts Point – Mott Haven appears to have very few of these resources). The concentration of poverty

⁹⁴ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

⁹⁵ This compares to 103 NYCHA developments and 146 community facilities in another large NYC borough, Brooklyn, and 352 NYCHA developments and 536 community facilities in NYC overall. 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.

⁹⁶ NYC Department of Homeless Services "Homebase" homeless prevention locations offer individualized services to low-income families at risk of becoming homeless through a community-based network of providers. These services include: emergency rental assistance, landlord mediation, job training, among others.

in neighborhoods with a large number of NYCHA developments presents distinct challenges to health and service providers.

Concentrated poverty, you've got a neighborhood [that] has a poverty rate of about 46%. The Bronx in general is about 26% which is still ridiculous, but that area has that concentrated poverty because of all the NYCHA housing projects. And so when you get that kind of concentrated poverty and then the violence, sexual violence, domestic violence, street violence, gang violence, drug violence, it's a perfect storm for breeding ground for spreading illness, disease, lots of psychiatric issues and lots of drugs. (key informant, community based organization)

Comparatively, Northeast Bronx, Kingsbridge – Morrisania and Pelham – Throgs Neck seem to have few housing resources. (See Appendix A, Maps 90-91.)

Similar to other parts of NYC, CNA participants described a lack of affordable housing, inadequate housing resources, and poor conditions for low-income populations, including rodents, cockroaches, and poor maintenance. Additionally, among survey participants, close to half identified affordable housing as “not very available” or “not available at all.”⁹⁷

The Bronx—particularly the South Bronx—has a well-known history of housing degradation and loss to arson. According to some key informants, in the rebuilding of the Bronx, the needs of long-time residents have been ignored, in favor of higher income populations. However, the legacy of housing activism can be described as a community strength:

And the South Bronx has a pretty vibrant history of having pushed back against the bad mortgage practices and done a lot of community organizing around unfair practices and pushing for affordable housing. And I don't think the affordable housing situation is solved, but it's a lot better than it was, and there's a lot more attention put into affordable housing. So that's like a rich recent history that I think a lot of community-based organizations were forged during that time period, and then they came to take on health because that's sort of, you know, housing, health education, as far as kind of primitive needs that we all want... So the strength of the earlier community struggles around housing, I think, has helped us in terms of the, the pertinent things around health.

- **Food pantries, community gardens, farmer's markets**⁹⁸

There are 154 food banks in the Bronx, including 120 food pantries and 30 soup kitchens.⁹⁹ In addition, there are 32 community gardens and 45 farmers markets.¹⁰⁰ Although CNA respondents noted an

⁹⁷ NYAM primary data findings, September, 2014.

⁹⁸ If an organization provides multiple services, they are included under each header for which they provide services.

increase in farmers markets and more nutritious food available through food pantries, as well as nutrition and exercise programs, these assets are noticeably absent from Pelham-Throgs Neck and Northeast Bronx, where the obesity rate is the highest in the borough (See Appendix A. Map 70.) In addition, 42.4% of survey respondents reported that healthy food was “not very available” or “not available at all” in their neighborhood.¹⁰¹

- **Financial assistance and support including clothing and furniture banks**

Approximately 89 organizations throughout the Bronx provide some type of financial assistance to their participants. Some of these organizations serve special populations including but not limited to: people with developmental disabilities, low-income homeowners, people with mental illness, older adults, pregnant women, mothers and children, immigrants, and families at risk of eviction. Four Financial Empowerment Centers that offer free individual, professional financial counseling are located in the Bronx: two in Highbridge-Morissania, one in Central Bronx and another in Southeast Bronx. There are also 23 WIC programs throughout the Bronx.¹⁰²

Additionally, based on GNYHA data, at least 13 community-based organizations in the Bronx provide “material goods” services, free clothing and/or furniture and about four community-based organizations provide utility assistance. There are also 3 clothing banks located in the Bronx.¹⁰³

- **Specialty Educational Programs for Special Needs Children**

The NYC 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. Our schools and programs are located at more than 310 sites in the Bronx, Brooklyn, Manhattan, Queens and Staten Island.¹⁰⁴

- **Community Outreach/Social Service Agencies**

⁹⁹ Food Bank for New York City “Food Bank Locator,” Accessed July 2014.

¹⁰⁰ New York State Department of Agriculture & Markets “New York State Farmers’ Markets,” accessed July 2014. New York City Department of Health and Mental Hygiene “New York City Farmers Markets,” accessed July 2014.

¹⁰¹ NYAM primary data findings, September, 2014.

¹⁰² Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹⁰³ Seedco, Earn Benefits Online “Clothing Resources Spreadsheet,” accessed August, 2014.

¹⁰⁴ The New York City Department of Education,
<http://schools.nyc.gov/Academics/SpecialEducation/D75/AboutD75/default.htm>, accessed October 22, 2014.

A review of the HITE site website yielded over 234 organizations that provide a variety of services and volunteer opportunities to Bronx residents, including faith-based fellowship, assistance to individuals recently released from prison, park conservation efforts, assistance to at-risk youth, employment referrals and career development help, and health-related support (i.e., fitness classes). Some 21 organizations in the Bronx including community service organizations, care management agencies and treatment and prevention programs, including syringe exchange/harm reduction programs, among others, that conduct outreach activities ranging from mobile outreach and syringe exchange to outreach and crisis intervention. They attempt to meet the needs of many different populations that are considered to be among the most vulnerable and difficult to engage, including but not limited to: homeless populations, veterans, victims of domestic violence, PLWHA, and people who inject drugs (PWID)/active drug users.¹⁰⁵

We define ourselves by the problems and the issues that we're facing and confronting in the Bronx through, you know, driven by poverty, lack of access to medical care, and some of the other issues like food and nutrition and HIV and Hepatitis and drug overdoses that are really disproportionate in the Bronx. ... what separates us from a Lincoln Hospital or a Montefiore Medical Center, a lot of things, but primarily is that our primary target population community that we're trying to reach are those who are most marginalized, most stigmatized. That's very intentional in our work. And I would say that hospitals, healthcare organizations, managed care plans, federally qualified health centers, for the most part, have – their primary intent is to open up access to medical care for everybody. And while they may see people who are very marginalized and stigmatized, it's not their primary purpose and their vision and mission. (key informant, community based organization)

- **Transportation Services**

Based on analysis of GNYHA HITE data, there are approximately 21 organizations in the Bronx that provide varying types of transportation services. Four of these provide transportation for seniors and one provides transportation services for the disabled.¹⁰⁶ While there may be other organizations that provide transportation services to their participants, no directory or inventory of these services seems to exist. Access-a-Ride is the Metropolitan Transit Authority's (MTA) para-transit service, available to those certified as eligible due to mobility restrictions. However, CNA participants reported that the services are structured in such a way, with long and unpredictable wait times, that makes it difficult for those targeted to use it to access scheduled appointments. Access-a-Ride also seems to have limitations within the Bronx and regarding drop-off at accessible bus stops that are impractical for those with mobility issues.

¹⁰⁵ Ibid.

¹⁰⁶ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

I have Access-a-Ride. Access-a-ride doesn't take me anywhere in the Bronx. It goes to Queens, Brooklyn and Staten Island. But I cannot use it here in the Bronx. Now, the last time I called them for them to take me to [Manhattan], I went over to 5th Avenue to the hospital. She told me "you can take this bus, and it will take you to Manhattan, and that bus will drop you off." And then I said, "so what do I do now? I have difficulty walking." And where they were gonna drop me off would have been at least two blocks and that hospital I was going to I know for a fact, two blocks is like four. I'm gonna have to walk. And I couldn't walk so I said "I have to walk there. What do you suggest I do?" "Uh well uh ma'am." I said "You can't help me. Thank you very much." (focus group participant)

Transit services are particularly important in the Bronx as large portions of the borough are not accessible by subway and there are no trains that travel east-west, meaning that many trips outside a particular neighborhood require both bus and subway travel and may require payment of two fares:

When you go [to the health center], you always got to get a referral for this, for that, and the third. So you are going to end up in a two fare zone. To get to that referral, because they never conduct it on site. They could say, 'Okay you have a problem with your left eye. Here is a referral to go 40 blocks away, and that's where you have to go, and you come back here for your results. But then I might give you a referral to go to the GYN that is 50 blocks away,' and so forth and so on. So either way you look at it, you are getting on the train, while they are right around the corner. (focus group participant)

Still, about 90% of survey respondents identified transportation as "available" or "very available."¹⁰⁷

- **Religious service organizations**

New York City contains tremendous diversity in the numbers of faith-based organizations, many of which provide charity care. There is no single database that lists all locales of worship and connected service organizations. According to the Bureau of Labor Statistics, 33 percent of all adults who volunteer do so for a religious service organization. The New York State Department of Health catalogued the various programs and services provided by faith-based organizations in a 2012 resource directory.¹⁰⁸ However, this is not a comprehensive listing of faith-based services or ministries in New York City as the organizations have to request voluntarily to be listed. In the Bronx, there are 31 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

¹⁰⁷ NYAM primary data findings, September 2014.

¹⁰⁸ Faith-based Ministries and Services Resource Directory,

https://www.health.ny.gov/diseases/aids/consumers/faith_communities/directory_instruction.htm, accessed October 28, 2014

over 20 Jewish community-based organizations throughout New York City that provide relief services and support.¹⁰⁹

Faith organizations provide a number of valuable services, including health education, health fairs, food pantries, visiting the homebound, and social support, as well as specific programing that promotes weight loss, physical activity, and proper nutrition.¹¹⁰ However, it is important to note that many people travel to faith institutions, and they may serve a broader—rather than their local—community.

- **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 American Heart Association. There are approximately 441 non-profit social service agency sites scattered throughout the Bronx.¹¹¹ Over one third of survey respondents reported that social services were “not very available” or “not available at all.”¹¹²

- **Specialty community-based and clinical services for individuals with cognitive or developmental disabilities**

Both the community based and clinical resources for individuals with intellectual and developmental disabilities are included in the health care resources section above. 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 accommodations may be required (e.g., to visit length) due to issues around comprehension.¹¹³

- **Peer, Family Support, Training and Self- Advocacy Organizations**

Based on a review of GNYHA HITE data, there appear to be approximately 26 organizations in the Bronx that offer peer, family support and self-advocacy programs and services to populations with

¹⁰⁹ UJA-Federation of New York, <http://www.ujafedny.org/who-we-are/our-network-of-agencies/network-agencies-directory/>, accessed October 28, 2014

¹¹⁰ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹¹¹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹¹² NYAM primary data findings, September 2014.

¹¹³ Ibid.

psychosocial issues including individuals with mental illness, disabilities, alcohol/drug use, involvement in the criminal justice system and their families, among others.¹¹⁴ There may be additional organizations providing these services as part of their broader menu of services, but a complete directory with that information does not appear to exist.

- **Youth Development Programs**

There are 336 Department of Youth and Community Development (DYCD)-funded programs located in the Bronx of the following types: 239 after-school programs; 25 family support programs including housing programs and fatherhood initiatives; 30 employment and/or internship programs; 60 summer programs and 3 runaway and homeless youth programs, among others. There are also 53 Mayor's Office Programs offering education, employment, health and justice programming.¹¹⁵ Both DYCD-funded and Mayor's Office programs seem to be clustered in Southern Bronx in the Hunts Point – Mott Haven, Highbridge – Morrisania and Crotona – Tremont, and less densely spread throughout Pelham – Throgs Neck, Northeast Bronx and Kingsbridge – Riverdale. (See Appendix A, Maps 92-93.) In addition, there are approximately 65 organizations including public libraries, shelters, housing facilities, community centers, recreation centers, and other types of community-based organizations, that offer after-school and/or youth group services in the Bronx. 38 organizations in the Bronx have summer youth programs and 30 organizations offer tutoring.¹¹⁶

- **LGBT Resources**

New York City has a large number of Lesbian, Gay, Bisexual and Transgender persons, as well as individuals in other categories such as gender queer or questioning. Healthcare resources include the Callen-Lorde Community Health Center and facilities that have earned the Human Rights Campaign's designation of "leader in LGBT healthcare equality," a list of which can be accessed at http://www.hrc.org/hei/leaders-in-lgbt-healthcare-equality#.VE_IMDTF98E. Nineteen facilities in the city are listed as "leaders" for 2014, including 10 from the New York City Health and Hospitals Corporation.

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.

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>.

- **Libraries with Open Access Computers**

¹¹⁴ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹¹⁵ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹¹⁶ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

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 the 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.

In the Bronx, there are approximately 33 public libraries operated by the New York Public Library; all have open access computers.¹¹⁷

Community Service Organizations

- **Education: Schools, Community-Based Education Programs Including Programs For Health Professions/Students, Libraries**

There are approximately 541 schools in the Bronx, including 158 public elementary schools, 69 public middle schools, 20 public junior/senior high schools, 109 public high schools, 44 public charter schools, and 101 private/parochial schools. Particularly in the South Bronx, school quality is reported to be poor and dropout rates are high, impacting future opportunities for individuals as well as the strength of the community.

The poverty is there and the low education levels, which I think are worth noting. There are areas of the South Bronx where seven percent of the adults have a college degree. That means 93 percent of adults do not have a college degree. That is like a staggering educational segregation. You know, I don't remember off the top of my head what Manhattan is like, but it's like 40 or 50 percent of adults have a college degree. So, the young people who are growing up in these areas, the odds that they meet a grown-up from their neighborhood who has a college degree is exceedingly low. And that reverberates through the health impact as well. So people often think about the poverty piece, which is huge, but one of the ways that gets reflected is in the education level, so also that area, also has low rates of four-year high school graduation. I don't know exactly what it is, but for the city it's only 63 percent or something, so if you're talking about young men in the South Bronx, I don't have the data exactly current—but it's gotta be less than 50 percent. So that means the high schools are mostly creating dropouts and not successful high school graduates, and that has a huge health impact and the long-term employment impact and all of those things...You know, the school system can try as hard as it can, but it's very ill-equipped to deal with and under-resourced to deal with all the myriad of issues that, that young people present in high school. (Key informant, government)

There are four public colleges located in the Bronx: Hostos Community College (CUNY) in Highbridge-Morrisania, Herbert H Lehman College (CUNY) in Bronx Park-Fordham, Bronx Community College (CUNY) in Central Bronx and Maritime College at Fort Schuyler (SUNY) in Southeast Bronx.¹¹⁸

¹¹⁷ New York Public Library, www.nypl.org, accessed October 24, 2014

¹¹⁸ New York City Department of City Planning "Selected Facilities and Program Sites," as of June, 2014.

There are also 135 community-based organizations in the Bronx providing education services such as GED/High School Equivalency (HSE) preparation, ESL, citizenship classes, SAT prep classes, job readiness training, financial literacy and vocational skills programs. Some of these organizations offer education services to special populations including out-of-school youth and adults, children with developmental disabilities, formerly incarcerated and immigrants.¹¹⁹ There are approximately three Associates' Degree Nursing programs and two Health Worker programs located in the Bronx.¹²⁰ There are 40 public library branches in the Bronx scattered somewhat evenly throughout the borough, though some ZIP Codes such as 10474 in Hunts Point – Mott Haven and 10465 in Pelham – Throgs Neck, have no libraries. (See Appendix A, Maps 94-95.)

- **Local Governmental Social Service Programs**

There are 43 local governmental agencies located in the Bronx such as food stamp programs, a Medicaid office, job centers, a home care program and a drop-in center. They are predominantly located in central and southwest Bronx. (See Appendix A. Maps 81-82.)¹²¹

- **NAMI, a Self-Advocacy and Family Support Organization**

The National Alliance on Mental Illness (NAMI) Bronx Families & Advocates, is located in Southeast Bronx and serves all of Bronx County. NAMI offers family, peer, teacher and provider education, training and support through support and recovery groups and other programs.¹²²

- **Individual Employment Support Services**

About 66 organizations in the Bronx provide employment/vocational support services to varying populations including but not limited to: people with developmental disabilities, people who are homeless or formerly homeless, people who are homebound, minorities, immigrants, high-risk adolescents, unemployed women, people with mental illness and Native Americans.¹²³ However, a majority of survey respondents, 64.3%, reported that job training was “not very available” or “not available at all” in their community.¹²⁴

- **Peer supports (Recovery Coaches)**

¹¹⁹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹²⁰ New York State Education Department Office of the Professions “New York State Nursing Programs” and New York State Department of Health “Community Health Worker Programs,” Accessed July, 2014.

¹²¹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹²² National Alliance on Mental Illness (NAMI) Website.

¹²³ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹²⁴ NYAM primary data findings, September, 2014.

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.

From a review of the GNYHA HITE database, we have identified institutions, which vary from healthcare facilities to community-based organizations, that facilitated or offered peer support services. Although these organizations operate from a particular borough, many of the organizations serve clients regardless of where they are domiciled. In the Bronx, there are approximately 31 organizations that connect clients with recovery coaches, peer groups and mentoring to assist the clients in managing their health condition.

- **Reentry Organizations and Alternatives to Incarceration**

There are approximately ten organizations that offer criminal justice offender services located in the Bronx. 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.¹²⁵ Given the high need within this population, services seemingly are inadequate:

People are also chronically - in the same way that folks are chronically homeless, they're chronically involved in our jail system. And those folks are the same folks that you would expect to see in the shelters or that are the folks that came out of prison and come back [to Rikers]. Folks come out of prison, they don't really necessarily have the tools that they need to be successful on the outside, and that includes folks that come out with, you know, very serious health conditions. (Key informant, government)

¹²⁵ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

- **HIV Programs, including Ryan White Programs, Prevention/Outreach and Social Service Programs**

There are numerous HIV/AIDS related services located in the Bronx. A comprehensive search of the GNYHA HITE site using the keywords, HIV/AIDS, identified 14 non-profit organizations in the Bronx which provide housing support, substance abuse and mental health counseling, legal assistance, health education, benefits assistance and case management services.¹²⁶ Many of the organizations had a focus on specific population, based on racial or ethnic identity or sexual orientation. A search of the Ryan White or CDC Prevention funded HIV programs in the borough was also conducted. In the Bronx, there are also 21 Ryan White or CDC Prevention funded HIV programs in the borough.¹²⁷ A small number of the sites identified via the GNYHA HITE database (approximately 1-3 sites) are also funded via the Ryan White program. These programs 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. Additionally there are programs to support HIV positive patients such as supportive counseling, home care, housing services, food and nutrition support, and care coordination. These Ryan White and CDC Prevention programs are provided at 259 service sites in the borough by 37 individual agencies.¹²⁸

Section iii Domain 2 Metrics

See Appendix B, Tables 8 and 9.

¹²⁶ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of October, 2014

¹²⁷ Public Health Solutions Service Site Locator. <http://www.healthsolutions.org/hivcare/?event=page.locations> Services as of August 2014.

¹²⁸ 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

SECTION B. DESCRIPTION OF THE COMMUNITY TO BE SERVED

Section i: Demographics of the Bronx Population

The Bronx's large population of 1.4 million is approximately 17% of the total NYC population, and approximately 7% of the statewide population. Almost two thirds of the Bronx's population is working age adults (aged 18-64); over one quarter is children (aged 0-17) and about ten percent is older adults (aged 65+). The age of the Bronx's population is slightly younger than the NYS and NYC populations, with about 5% more children and slightly lower proportions of older and working age adults. A little over half of the Bronx population is female, roughly analogous to the populations of NYC and NYS. (See Appendix B, Table 11.)

Uninsured

In the Bronx, approximately 217,000 people are uninsured, accounting for approximately 10% of all the uninsured individuals in New York State.¹²⁹ Adults between the age of 18 and 65 account for the largest proportion of uninsured in the Bronx, with a rate of 20% versus approximately 2% among those aged 65 and older, and approximately 5% among children aged 0-17. (See Appendix B, Table 22.) Within the borough, the highest number of uninsured are clustered in parts of Fordham-Bronx Park south through to Hunts Point-Mott Haven. (See Appendix A, Map 3.)

A significant portion of the uninsured in the Bronx may be undocumented.¹³⁰ Despite health reform, data suggest insurance coverage remains problematic (or is increasingly problematic) even for those eligible.¹³¹ Income restrictions for Medicaid are considered unrealistically low, and self-purchased coverage is repeatedly described as too expensive, given the difficulties of paying for basic necessities including food and housing.

I would say that poverty is the main concern because people are finding it - number one, they're unemployed or they're underemployed or they're working places where they cannot get health insurance and now with the new law, they must have health insurance. So they - like I said, if - when people have to decide between having health insurance and having food in their stomach, they'd rather eat (Key informant, community based organization)

Lack of health insurance was reported to result in reduced use of preventive and community based care and increased emergency department use.¹³²

Effects of New York State Health Exchange

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

¹²⁹ US Census, American Community Survey, 5 year data, 2008-2012.

¹³⁰ NYAM primary data findings, September 2014.

¹³¹ Ibid.

¹³² Ibid.

Health Plan (QHP).¹³³ Given that 93% of Medicaid enrollees and 63% of QHP enrollees were uninsured at the time of enrollment, it has been estimated that a more current number of citywide uninsured is 450,000.^{134,135}

The greatest increase in recent Medicaid enrollees occurred in neighborhoods that had the highest uninsured rates.¹³⁶ As an example, Sunset Park West in Brooklyn previously had approximately 25 percent of its 54,000 population uninsured. Over the past year, the 11220 ZIP Code which overlaps with Sunset Park West saw 16,303 people enroll in Medicaid and 1,667 enroll in a QHP. Flushing, Queens also previously had an uninsured rate above 25 percent of its 72,000 population. Over the past year, the 11355 ZIP Code enrolled 13,434 in Medicaid and 2,203 in a QHP, and ZIP Code 11368 enrolled 12,480 people in Medicaid and 1,625 people in a QHP.¹³⁷

Age

Medicaid covers a high concentration of children and adolescents, with approximately 44% of the Bronx Medicaid population between the ages 0 to 19 years. This statistic suggests that efforts to enroll eligible children and adolescents in Medicaid are mostly successful. There are low numbers of uninsured pediatric patients, which is also due to the Child Health Plus program. Child Health Plus provides coverage for children and adolescents who do not qualify for Medicaid. These data suggest that there is a need for more pediatric capacity within safety net health care provider systems to ensure that there is adequate access for patients with chronic health conditions.

The uninsured population is heavily weighted toward the 20-39 age group in the Bronx (56%), suggesting that resources should be leveraged towards preventing chronic diseases for this relatively young population, promoting child and maternal health (as a large percentage of uninsured are of reproductive age) and promoting sexual health to avert HIV/STD infections. A relatively small percentage of the uninsured population consists of older adults aged 65 and over, while nearly 11% of the Medicaid population in the Bronx falls into this age group, suggesting a relatively greater need for senior health and community resources among the Medicaid population.

¹³³ Dan Goldberg, "Dan Mapping Obamacare by New York City ZIP Code," *Capital New York*, October 20, 2014, accessed October 30, 2014

¹³⁴ New York State Department of Health: The Official Health Plan Marketplace 2014 Open Enrollment Report, June 2014

¹³⁵ Goldberg.

¹³⁶ Ibid.

¹³⁷ Ibid.

Table 3: Total Population by Age Group with No Health Insurance Coverage

No Health Insurance Coverage																			
Region	Total	< 5	5 to 9	10 to 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
		9.9				55.1				33.5				1.5					
Bronx (%)	100	2.0	2.0	2.6	5.7	15.6	16.2	12.8	11.0	8.9	8.3	6.2	4.7	2.8	0.5	0.2	0.1	0.1	0.1
		12.3				55.7				30.9				1.1					

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

Table 4: Total Population by Age Group with Medicaid/Low Income Medical Assistance

Population with Medicaid/Low Income Medical Assistance																			
Region	Total	< 5	5 to 9	10 to 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
		40.4				22.1				24.4				13.1					
Bronx (%)	100	12.1	11.1	10.6	10.4	7.2	5.2	4.9	4.6	5.5	5.5	5.0	4.1	3.5	2.9	2.4	2.0	1.6	1.4
		44.2				21.9				23.6				10.3					

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

TABLE 5: Total Population by Age Group with Other Insurance

Other Insurance																			
Region	Total	< 5	5 to 9	10 to 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
		19.5				31.4				34.6				14.5					
Bronx (%)	100	5.1	5.0	5.6	6.7	6.4	6.7	6.9	6.8	7.7	8.1	7.7	6.9	5.7	4.7	3.6	2.6	1.8	1.9
		22.5				26.9				36				14.6					

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

Race/Ethnicity, Immigration

The Bronx's population is racially and ethnically diverse. Approximately one in three (34.7%) people in the Bronx identify as Black or African American, a much larger proportion than NYC as a whole (25.1%) or NYS (15.9%).¹³⁸ In fact, the Black/African American population in the Bronx accounts for approximately 16% of the total Black/African American population in New York State.¹³⁹ The Black/African American population includes US born and immigrant populations, including significant numbers from Caribbean nations, and increasing numbers from Africa.¹⁴⁰ Over half (54%) of the Bronx population identifies as Hispanic/Latino of any race, accounting for approximately 22% of this population statewide.¹⁴¹ Historically, Latinos in the Bronx were from Puerto Rico. There are now reportedly more immigrants from the Dominican Republic and Central America. About 4% of people in the Bronx identify as Asian. According to key informants, the population of the Bronx is increasingly diverse with increasing numbers of South Asian (primarily Bangladeshi and Pakistani) and Southeast Asian immigrants. (See Appendix B, Table 12.)

Of those with no health insurance, 58% are foreign born, compared to 28% for population with Medicaid/Low Income Medical Assistance and 30% for those with other health insurance coverage.

TABLE 6: Nativity by Insurance Status

Region	No Health Insurance Coverage		Population with Medicaid/Low Income		Other Insurance	
	% Foreign Born	% Native	% Foreign Born	% Native	% Foreign Born	% Native
New York City	62%	38%	35%	65%	32%	68%
Bronx	58%	42%	28%	72%	30%	70%

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

The Bronx's cultural diversity is underlined by the places of birth among the foreign born when comparing those with no health insurance and those with Medicaid (tables below). The top 10 countries among those with no health insurance include Mexico, Dominican Republic, China, Ecuador, Jamaica, Guyana, Korea, Trinidad & Tobago, Colombia, and India.¹⁴² In contrast, the top 10 nations among those with Medicaid/Low Income Medical Assistance Insurance include Dominican Republic, Jamaica, Mexico, Ecuador, *Ghana, Bangladesh, Honduras, Guyana, Albania and Nigeria*. China, Korea, Trinidad & Tobago, Colombia and India, representing half of the top 10 nations among the uninsured, ranked lower among

¹³⁸ US Census American Community Survey, 5 year table, 2008-2012.

¹³⁹ Ibid.

¹⁴⁰ NYAM primary data findings, September 2014.

¹⁴¹ US Census American Community Survey, 5 year, 2008-2012.

¹⁴² US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

populations with Medicaid. Within each nationality, there was limited variation by residing neighborhood and insurance status. Each of the nationalities is, however, concentrated in several neighborhoods, allowing for targeted efforts by country of birth.

Foreign Born and Uninsured

The 2008-2012 5-year American Community Survey estimated that 131,665 (or 60.7%) of the total number of 217,009 uninsured Bronx residents were foreign born.¹⁴³ Of these 131,665 foreign-born uninsured residents, the largest number were born in Latin American countries (86,572, 65.8%), followed by those born in non-Hispanic Caribbean countries (16,070, 12.2%), African countries (13,699, 10.4%), Balkan and Eastern European countries (3,349, 2.5%), and South Asian countries (2,766, 2.1%).¹⁴⁴ (See Appendix B, Table 22b.)

Uninsured foreign born Latinos live primarily in the South Bronx and west of the Grand Concourse, with approximately 11,000-13,000 living in each of the following Community Districts (CD): CD 1&2, Hunts Point, Longwood, and Melrose; CD 9, Castle Hill, Clason Point, and Parkchester; CD 4, Concourse, Highbridge, and Mount Eden; CD 5, Morris Heights, Fordham South, and Mount Hope; and CD 7, Bedford Park, Fordham North, and Norwood. Those uninsured born in non-Hispanic Caribbean countries reside primarily in CD 12, Wakefield, Williamsbridge, and Woodlawn. African-born uninsured residents reside mostly on either side of the Grand Concourse, in CD 3&6, Belmont, Crotona Park East, and East Tremont; CD 4, Concourse, Highbridge, and Mount Eden; and CD 5, Morris Heights, Fordham South, and Norwood. Uninsured residents born in Balkan and eastern European countries live primarily in CD 11, Pelham Parkway, Morris Park, and Laconia; and uninsured residents born in South Asian countries live primarily in CD 9, Castle Hill, Clason Point, and Parkchester.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

Table 7: Top Places of Birth among Foreign Born With No Health Insurance

PUMA Name	No Health Insurance Coverage										
	Total	Mexico	Dominican Republic	China	Ecuador	Jamaica	Guyana	Korea	Trinidad & Tobago	Colombia	India
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
Bronx	131,665	35,802	32,721	10,767	5,985	4,850	4,309	2,593	2,319	2,297	2,137
Riverdale, Fieldston & Kingsbridge	7,743	989	2,735	180	142	290	131	38	124	98	-
Wakefield, Williamsbridge & Woodlawn	12,287	845	840	6,500	88	458	11	313	-	341	181
Co-op City, Pelham Bay & Schuylerville	3,681	253	686	570	306	261	55	-	-	158	-
Pelham Parkway, Morris Park & Laconia	12,205	3,707	1,006	1,137	364	239	393	63	249	237	182
Belmont, Crotona Park East & East Tremont	13,353	3,850	3,304	446	398	773	620	450	612	177	411
Bedford Park, Fordham North & Norwood	15,787	5,434	4,530	340	964	412	745	54	387	228	-
Morris Heights, Fordham South & Mount Hope	17,700	4,473	7,085	469	723	831	655	648	248	98	368
Concourse, Highbridge & Mount Eden	15,790	3,967	6,099	321	346	1,078	267	515	267	91	652
Castle Hill, Clason Point & Parkchester	16,912	5,465	3,145	646	2,058	367	155	245	175	781	198
Hunts Point, Longwood & Melrose	16,207	6,819	3,291	158	596	141	1,277	267	257	88	145

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

Table 8: Top Places of Birth among Foreign Born with Medicaid/Low Income Medical Assistance

PUMA Name	Population with Medicaid/Low Income Medical Assistance										
	Total	Dominican Republic	Jamaica	Mexico	Ecuador	Ghana	Bangladesh	Honduras	Guyana	Albania	Nigeria
New York City	1,280,549	223,746	62,456	54,940	54,338	9,474	40,962	13,617	54,137	6,605	7,721
Bronx	222,960	96,328	18,517	12,646	9,611	7,756	6,603	6,167	6,126	2,807	2,547
Riverdale, Fieldston & Kingsbridge	14,336	7,028	311	544	326	398	17	49	243	155	204
Wakefield, Williamsbridge & Woodlawn	20,984	2,354	8,718	626	253	752	187	135	1,460	32	914
Co-op City, Pelham Bay & Schuylerville	8,107	1,090	1,365	181	285	155	86	196	290	169	215
Pelham Parkway, Morris Park & Laconia	18,662	3,441	2,965	1,290	372	399	999	310	561	1,512	71
Belmont, Crotona Park East & East Tremont	25,053	13,125	679	1,299	1,036	694	11	1,255	352	230	326
Bedford Park, Fordham North & Norwood	26,328	13,163	1,107	1,274	1,198	477	1,585	180	639	322	103
Morris Heights, Fordham South &	30,304	19,276	880	1,523	1,217	1,412	104	720	465	152	66
Concourse, Highbridge & Mount Eden	30,233	17,932	694	1,734	917	1,569	520	560	343	-	261
Castle Hill, Clason Point & Parkchester	24,893	7,487	1,367	1,731	1,991	841	3,034	623	1,679	235	271
Hunts Point, Longwood & Melrose	24,060	11,432	431	2,444	2,016	1,059	60	2,139	94	-	116

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

Citizenship Status and Language Spoken at Home

According to available data, approximately one in five (19%) people in the Bronx are not US citizens, comparable to NYC (18%) but higher than the State rate of approximately one in ten people (11%).¹⁴⁵ Approximately 468,927 people, or approximately one-third of the Bronx population, were born outside of the United States.¹⁴⁶ High proportions of non-citizens are found throughout the Bronx and especially high rates are on the western edges of Crotona-Tremont and Fordham-Bronx Park. These areas, along with Hunts Point-Mott Haven, also have high rates of residents who speak English less than “very well.”¹⁴⁷ (See Appendix A. Maps 9-10.) These numbers likely underestimate the undocumented population, which is reported to be substantial in the Bronx. The concerns of other immigrant populations are magnified among the undocumented. Access to most services is limited, and the fear of deportation results in lower utilization of services that are available, including health services. Providers report that people who are undocumented want to avoid providing their information regarding their citizenship and identity, and avoid “the system” to the greatest extent possible.¹⁴⁸ Those who are not US citizens and who speak English less than “very well” may experience additional regulatory or cultural barriers to health care access. Although bilingual providers and interpretation may be available for the largest language groups, smaller populations feel the burden of translation and interpretation falls on them. In addition, residents complain about the quality and reliability of language services offered, whether in person or by phone.

So we have heard of folks that are living up in the Bronx, perhaps because that’s where they got placed in NYCHA housing¹⁴⁹, but all of their services are in Brooklyn. So they go to the grocery in Brooklyn. Their friends are there. Their doctors are there. So that’s a tremendous amount of time to be able to travel to get culturally-competent, language-accessible programs and services. So then that’s a real big challenge that we’re seeing across a lot of communities, in the Asian-American community (Key informant CBO)

Over half (57%) of Bronx residents report speaking a language other than English at home.¹⁵⁰ Approximately half (46.4%) speak Spanish or Spanish Creole; approximately 3% speak African languages, and approximately 1% each speak French (including Patois and Cajun), Italian, Indic or Indo-European languages. (See Appendix B, Table 18.)

¹⁴⁵ Ibid.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid. This is self-reported data in response to the American Community Survey questions: a) Does this person speak a language other than English at home? If YES, b) What is the language?, and c) How well does this person speak English? Very well; Well; Not well; Not at all.

¹⁴⁸ NYAM primary data findings, September, 2014.

¹⁴⁹ There are approximately 97 NYCHA Developments and 124 NYCHA Community Facilities located in the Bronx. , NYCHA community facilities and shelters appear to be located predominantly in the southern Bronx neighborhoods of Crotona – Tremont, High Bridge – Morrisania and Hunts Point – Mott haven (though the eastern portion of Hunts Point – Mott Haven appears to have very few of these resources). Comparatively, Northeast Bronx, Kingsbridge – Morrisania and Pelham – Throgs Neck seem to have few housing resources. (See Appendix A, Maps 88-89.)

¹⁵⁰ US Census, American Community Survey, 5 year data, 2008-2012

It is important to distinguish the category called Limited English Proficiency (LEP), which “means persons who are unable to communicate effectively in English because their primary language is not English and they have not developed fluency in the English language. A person with Limited English Proficiency may have difficulty speaking or reading English. An LEP person will benefit from an interpreter who will translate to and from the person’s primary language. An LEP person may also need documents written in English translated into his or her primary language so that person can understand important documents related to health and human services.”¹⁵¹

Populations with no health insurance are more likely to report LEP, at 41% in the Bronx, compared to 26% for Medicaid/Low Income Medical Assistance and 14% for Other Insurance reporting LEP.

Table 9: Limited English Proficiency by Insurance Status

Region	% Low English Proficiency		
	No Health Insurance Coverage	Population with Medicaid/Low Income	Other Insurance
New York City	40%	29%	14%
Bronx	41%	26%	14%

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

Citywide, 90% of LEP uninsured populations speak one of the 12 languages, with the vast majority, 72%, speaking Spanish or Chinese (see table below).¹⁵² There is a wider variance of languages spoken among the NYC Medicaid population, given that the population that speaks either Spanish or Chinese is 62% or 10% lower than the uninsured proportion. There is a slighter higher concentration of languages spoken among the NYC LEP Medicaid population, as the top 12 languages among the LEP Medicaid population comprise 92% of all languages spoken in this group. In the Bronx, over 86% of Medicaid/Low Income Assistance insured and uninsured populations that have LEP speak Spanish.

Table 10: Languages Spoken at Home Among Populations With Limited English Proficiency With No Health Insurance and Medicaid/Low Income Medical Assistance

Languages Spoken At Home Among Populations With Low English Proficiency With No Health Insurance	Languages Spoken At Home Among Populations With Low English Proficiency With Medicaid/Low Income Medical Assistance
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¹⁵¹ U.S. Department of Health and Human Services. <http://www.hhs.gov/ocr/civilrights/resources/specialtopics/lep/> Accessed October 30, 2014.

¹⁵² US Census American Community Survey-Public Use Microdata Sample (PUMS), New York City Department of City Planning, Population Division, 2008-2012

	New York City	Percent	Bronx	Percent		New York City	Percent	Bronx	Percent
LEP Language	470,669	100%	93,676	100	LEP Language	686,792	100.0%	149,535	100
Spanish	299,759	64%	80,129	86%	Spanish	355,732	52%	129,459	86.6%
Chinese	36,616	8%			Chinese	67,666	10%		
Korean	17,497	4%			Russian	48,401	7%		
Mandarin	15,807	3%			Cantonese	30,822	5%		
Russian	12,272	3%			Bengali	24,008	4%		
Polish	7,923	2%			Mandarin	21,487	3%		
French Creole	7,811	2%			Yiddish	18,246	3%		
Bengali	7,219	2%			French Creole	16,225	2%		
Cantonese	7,137	2%			Korean	10,998	2%		
Arabic	5,771	1%			Arabic	10,446	2%		
French	5,256	1%			Urdu	8,764	1%		
Panjabi	4,073	1%			French	5,641	0.8%		

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

Income

The median household income in the Bronx is approximately \$34,300 per year, significantly lower than NYC (\$51,000) and NYS (\$57,000). Over one-quarter (29%) of households in the Bronx lives below the federal poverty level, compared to just under one-fifth (19%) in NYC and approximately 14% in NYS. Furthermore, these figures are not adjusted for the higher cost of living in New York City compared to other parts of the State. There are relatively high rates of poverty throughout the Bronx, with the highest rates of poverty in Hunts Point-Mott Haven, where nearly half of households have incomes below the federal poverty level (FPL).¹⁵³ There are also high rates of poverty in Highbridge-Morrisania, Crotona-Tremont and Fordham-Bronx Park where approximately 25%-40% of households have incomes below the FPL.¹⁵⁴ These are also the areas of the county with the highest rates of unemployment. As

¹⁵³ US Census, American Community Survey, 5 year data, 2008-2012

¹⁵⁴ Ibid.

described by key informants, poverty has implications for communities and families. (See Appendix A. Maps 4-5.)

Living in poor community, you have poor quality schools. You have lack of safety in your streets. The air quality is bad. (Key informant, provider)

It's cheaper to eat rice and chicken. So finances have a lot to say also with food choices, because if you have a large family and you want, you know, the food to go longer or further with the number of people in the household, what is it you're buying? Is it more expensive to buy oranges, grapes, strawberries and watermelon than it is to have other items that may not be as nutritious? (Key informant, community based organization)

Education

Educational levels in the Bronx are substantially lower compared to citywide averages, independent of insurance status. City wide, the uninsured have higher rates of completion of some college or higher relative to the Medicaid population (41% compared to 31%). This relationship is less strong in the Bronx. Thirty-one percent of the uninsured in the Bronx have completed some college, compared to 27% for those with Medicaid insurance. Within NYC, this finding may be explained by a sizable proportion of immigrants completing higher education credentials in their native lands. This may suggest that less educated immigrant groups may be migrating to the Bronx. Still, in context, these education figures are still far lower when compared to other types of insurance, with 45% of this population completing some college in the Bronx.

Table 11: Educational Attainment for Population with No Health Insurance

Region	No Health Insurance Coverage			
	% Less than HS diploma	% HS diploma or equivalent	% Some college/ Associate's	% Bachelor's degree or higher
New York City	30%	29%	20%	21%
Bronx	39%	30%	20%	11%

Table 12 - Educational Attainment for Population with Medicaid/Low Income Medical Assistance

Region	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 City	40%	29%	19%	12%
Bronx	47%	26%	20%	7%

Table 13 - Educational Attainment for Populations with Other Insurance

Region	Other Insurance			
	% Less than HS diploma	% HS diploma or equivalent	% Some college/ Associate's	% Bachelor's degree or higher
New York City	11%	22%	22%	45%
Bronx	18%	26%	28%	27%

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

Employment Rates

The unemployment rate not seasonally adjusted for New York City was 6.1% in September 2014, according to the New York State Department of Labor.¹⁵⁵ The Queens rate was 5.4%; Bronx, 8.5%; Brooklyn, 6.6%, and Manhattan, 5.1%.¹⁵⁶ For young adults, the employment situation is dire.

*There's little doubt that New York is facing a youth employment crisis. 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. Last year, only 29 percent of 16 to 24 year olds were employed or seeking work. In 2012, among the nation's 100 largest metro areas, New York City ranked 92nd in the rate of 16-19 year olds employed, and 97th for 20-24 year olds.*¹⁵⁷

Interpretation of labor statistics is made difficult by a number of factors. Since unemployment rates count only persons still in the labor forces, a disproportionate number of persons of color who no longer seek work would lower those groups' unemployment rates. Also, there is no accurate count of employment by informal arrangement such as day labor, domestic labor and child care.

It is noteworthy that, currently and historically, unemployment rates are higher for persons with less than a college degree¹⁵⁸ and persons of color.¹⁵⁹ Low educational attainment and a high proportion of persons of color in our service areas can correlate to high unemployment in groups served by our healthcare system. As there is a focus on Medicaid beneficiaries and the uninsured, it is noted that these populations are more likely to have higher rates of unemployment or employment in low-paying positions, some of which may be “off the books.” Employment with insurance benefits is hard to come by for many low income and/or immigrant populations as jobs are hourly or seasonal.

¹⁵⁵ New York State Department of Labor. <http://labor.ny.gov/stats/laus.asp>. Accessed November 7, 2014.

¹⁵⁶ http://www.labor.ny.gov/stats/PressReleases/county_rates.pdf

¹⁵⁷ Gonzalez-Rivera, C., (September 2014) *Bridging the Disconnect*. <https://nycfuture.org/research/publications/bridging-the-disconnect>. Accessed November 7, 2014.

¹⁵⁸ http://www.bls.gov/emp/ep_chart_001.htm

¹⁵⁹ http://www.bls.gov/web/empsit/cpsee_e16.htm

Medicaid

Medicaid beneficiaries in the Bronx represent 14.1% of the Medicaid beneficiaries in New York State (821,339 of 5,835,794), while comprising 7.1% of the overall State population. The percentage of the total population who are Medicaid Beneficiaries varies across ZIP Codes from 17.5% to 84.2%, with an overall percentage for the borough of 59.2%. (See Appendix A, Map 1.) The highest proportion of the population who are Medicaid Beneficiaries are in a single large cluster that reaches from the Fordham – Bronx Park area between the Botanical Garden and the Harlem River in the north, and continues southward along both sides of the Grand Concourse through Morris Heights, Mouth Hope, Highbridge – Morrisania, to Mott Haven.

Older Adults/ Dual Eligible Beneficiaries

Older adults covered by Medicare alone are not a focus for the DSRIP program which is primarily focused on Medicaid and uninsured populations, however there are a number of low-income adults who are dually-eligible for Medicaid and Medicare the Bronx. Approximately 60% of the Bronx older adult population of 147 thousand is dually eligible for Medicaid and Medicare.¹⁶⁰ Bronx “duals” account for approximately 20% of all dually eligible individuals in NYC, and approximately 10% in NYS.¹⁶¹ Dual eligible individuals live in many parts of the borough with the highest numbers in parts of Fordham-Bronx Park, Crotona-Tremont, and Highbridge-Morrisania. (See Appendix A, Map 2 and Appendix B, Table 23.)

Ambulatory Difficulties and Disability

Among Bronx households, 29.1% have a disabled household member (someone with a hearing, vision, cognitive, ambulatory, self-care, or independent living difficulty). The comparable percentage for NYC is 21.2% and for New York State is 22.5%.

Approximately 44.2% (64,949) of Bronx residents aged 65 and older have an ambulatory difficulty, comparable to NYC (42.5%) and NYS (39.8%).¹⁶² Among Bronx residents aged 18-64, approximately 7% (60,771) have an ambulatory difficulty, higher than the rate in NYC (4.3%) overall and NYS (4.4%).¹⁶³ Within the Bronx, ambulatory difficulty among the age 65+ population is concentrated in Mott Haven and Hunts Point, extending to the northeast through Soundview, Parkchester and Pelham Parkway. For those aged 18-64, the rates are much lower but ambulatory difficulty still affects a sizable number of people, with a similar concentration in Mott Haven and Hunts Point but extending more directly north rather than northeast. (See Appendix A, Maps 11-12 and Appendix B, Table 25.)

¹⁶⁰ New York State Department of Health, 2012 data. Note, it is possible to be dually eligible for Medicare and Medicaid if you have a low-income and are long term disabled, without being over the age of 65.

¹⁶¹ Ibid.

¹⁶² Ambulatory difficulty is self-reported data in response to the American Community Survey question “Does this person have serious difficulty walking or climbing stairs?” Source: US Census American Community Survey 5-year, 2008-2012.

¹⁶³ Ibid.

Individuals with disabilities and ambulatory difficulties may have multiple barriers to access to care, including inadequate transportation services, providers that lack appropriate accommodation for individuals with disabilities or are insensitive to these individuals, and practice rules (e.g., visit lengths that are inconsistent with appropriate care).¹⁶⁴ Examples of access barriers—and their implications—were described by a key informant working in the field. Unfortunately, the barriers are considered even more significant in community provider settings as compared to hospital settings.¹⁶⁵

- *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. 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 cannot use the subways where you need to go, or the buses, and 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."*
- *We have people who avoid health practitioners because they are routinely stigmatized and humiliated. The No. 1 problem people with disabilities have cited to us in studies is that they're dealing with practitioners who do not understand their disability, and who do not treat them with respect. People will go to the health practitioner, and if there's an aide with them, the health practitioners will address themselves entirely to the aide. As if the person sitting with a disability in front of them is not the person to whom they should be directing their comment, is not in charge of themselves, is not able to communicate, is not a thinking person. People with disabilities that are physical often complain that people treat them as if they have a low IQ.*

Housing: Types and Environment

Approximately 30% of Bronx households are headed by a female with no spouse, accounting for approximately 14% of all such households in NYS.¹⁶⁶ Approximately 30% of all households in the Bronx are comprised of a single person living alone.¹⁶⁷ (See Appendix B, Table 19.) A number of focus group

¹⁶⁴ NYAM primary data findings, September 2014.

¹⁶⁵ Ibid.

¹⁶⁶ US Census American Community Survey, 5 year data table, 2008-2012.

¹⁶⁷ Ibid.

participants expressed concerns about single parent households, feeling that they are in need of supports:

Like counseling for a lot of people in this community because we have a lot of broken families, which is single mothers, and single fathers, too. And that's why a lot of our youth have the tendency to don't continue in school, and get into drugs. And also men, you know, and women are getting into drugs. So I think that we should have more services – programs, services that they could allot for counseling regarding help about how to deal with divorce, how to deal with a parent leaving, things like that. (focus group participant)

Serious Housing Violations¹⁶⁸ and Housing Environment

Many lower income populations live in apartments with poor maintenance, but given the restricted options, they have little leverage when advocating for repairs. Higher rates of serious housing violations per 1,000 units are found along either side of the Grand Concourse from Highbridge to Fordham – Bronx Park.¹⁶⁹ (See Appendix A, Map 15.) Concerns about housing, including high rents and poor conditions, are a significant source of stress for lower income residents.¹⁷⁰

Housing big, big need. You have individuals that are complaining that landlords are converting their buildings into shelter-like settings and offering tenants that have been there for several years \$5,000, \$6,000 to move out so that they can convert that building and secure city funding and reimbursement for that type of client profile or tenant profile (key informant, community based organization)

As noted above, there are approximately 97 NYCHA Developments and 124 NYCHA Community Facilities located in the Bronx.¹⁷¹ NYCHA community facilities and shelters appear to be located predominantly in the southern Bronx neighborhoods of Crotona – Tremont, Highbridge–Morrisania and Hunts Point – Mott haven (though the eastern portion of Hunts Point – Mott Haven appears to have very few of these resources). Comparatively, Northeast Bronx, Kingsbridge – Morrisania and Pelham – Throgs Neck seem to have few housing resources. (See Appendix A, Maps 90-91.)

Homeless Population

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

¹⁶⁸ “Serious housing violations” are Class C (immediately hazardous) housing code violations issued by the NYC Department of Housing Preservation and Development.

¹⁶⁹ State of New York City’s Housing and Neighborhoods in 2013: The Bronx. NY: NYU Furman Center; 2013:22.

¹⁷⁰ Ibid.

¹⁷¹ This compares to 103 NYCHA developments and 146 community facilities in another large NYC borough, Brooklyn, and 352 NYCHA developments and 536 community facilities in NYC overall. 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.

behavioral health issues that make it difficult to remain housed, and which may be, in turn, further exacerbated by homelessness. According to a key informant that works with the homeless:

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.

I think on the Families with Children side, there is a very significant proportion of our families coming in because they are domestic violence [DV] victims. And, they may not qualify for a DV shelter. That's something that's determined at our intake center. Or, they may decline going to a DV shelter – even though they qualify for it. Of course, the psychological and sometimes physical ramifications of having been a DV victim – for both the Head of Household – the responsible parent – and for the kids is very, very significant.

Homeless New Yorkers tend to be disconnected from primary care and a medical home and are reportedly frequent users of emergency departments. According to the key informant cited above:

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.

She attributes a portion of this lack of coordination to hospital and provider practice:

If I'm hospitalized at Hospital X, and I have an outpatient service – the expectation ... is that: You've had them on your inpatient service for two weeks. Have this institutional transference and pop them into your outpatient service – whether it be psych or medical. It's not happening. They're being sent to walk-in clinics. If it's a voluntary hospital, we're not seeing them take ownership. Sometimes they're sent to an HHC hospital.... The hospitals – and I say this not only about our psychiatrically ill populations but even about our Family shelters: They have no clue, for the most part, as to where these homeless people are landing, what services are in the shelters, what connection they have to medical services, what they're able and not able to do. You can't give a single adult or a street homeless person an appointment for a colonoscopy three weeks from now. You can't. If you think that somebody needs a colonoscopy – you have to do it while you have them inpatient.

Recommendations for improved coordination of care, more efficient use of services, and improved health focus on targeted outreach and care coordination involving multiple hospital staff persons, including social workers in the emergency department and on the inpatient service. In addition, key informants in multiple fields emphasized the importance of supportive housing for high need homeless populations.

Group Quarters - Institutionalized Populations

In the Bronx, there are approximately 47,000 residents living in Group Quarters with 25,000 residing in institutional settings. Nearly half of the institutionalized population lives at Riker's Island. In total, 12,100 live in Adult Correctional Facilities, 450 live in Juvenile Facilities, 11,700 live in nursing facilities (including skilled nursing facilities) and 1,200 live in other institutional facilities (comprises hospital, inpatient hospice, psychiatric hospital, military treatment facilities and residential schools for people with disabilities)¹⁷². There are another 15,000 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 – Co-op City (1,200), East Concourse-Concourse Village (700), North Riverdale-Fieldston-Riverdale (1,200), Hunts Point (900), Van Cortlandt Village (800), Spuyten Duyvil-Kingsbridge (900), Kingsbridge Heights (900), Allerton-Pelham Gardens (1,600), Van Nest-Morris Park-Westchester Square (700), Williamsbridge-Olinville (900) and Riker's Island (11,000).

Crime and Jail Admissions

While crime has been declining overall in NYC for the past 15 years, the issue persists in parts of the Bronx.¹⁷³ Data suggests that the highest rates of serious crime in the borough are in the South Bronx. (See Appendix A, Map 14.) Residents describe a proliferation of guns, particularly among young people, and fear of “who’s crazier than you out there.” Despite reported declines, violence and safety were significant concerns in certain Bronx communities, limiting engagement in physical activity for children and adults.¹⁷⁴

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.¹⁷⁵ 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.¹⁷⁶

I mean we're big supporters of not having young, black and Latino men get criminal records that early in their lives. Then what happens to them when they're at Rikers and in the prison system?

¹⁷² Source: U.S. Census Bureau, 2010 Census, Population Division - New York City Department of City Planning (July 14, 2011).

¹⁷³ 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

¹⁷⁴ NYAM primary data findings, September, 2014.

¹⁷⁵ Brennan Center for Justice at New York University School of Law “How NYC Reduced Mass Incarceration”.

¹⁷⁶ Ibid.

And then what happens when they come back and are there jobs for them, and what are they going to wind up doing, and what kind of diseases are they exposing themselves to? (Key informant, community based organization)

Domestic Violence

Domestic violence is a topic that resonated with several interviewees and focus group participants as a significant community concern that has received inadequate attention. Of Bronx survey respondents, 31% reported that health education or programs on domestic violence are needed in their community. Although not necessarily more prevalent, domestic violence issues were particularly relevant in immigrant communities, due to possibly different standards in their home country as compared to the US, stigma, lack of linguistically and culturally appropriate resources, and fear of deportation—particularly in mixed immigration status families. Immigrant groups coming from war-torn countries may also perpetuate the violence they experienced. Examples of comments from key informants and focus group participants include:

There are these young men in his community that the image that they have always seen when they were growing up was the way that their fathers would treat their mothers, right? And then they realized later on when they were kind of able to unpack it and get treatment was really, when you come from communities who have been just so devastated by war and by trauma, that what was happening to the fathers and their uncles is that a lot of times they didn't get treatment. They were totally traumatized, and they were taking it out on the mothers. So that's how – so these young men were growing up thinking, well, that's how you treat women. (key informant, immigrant focused organization)

A provider, working for many years with low-income children, described the perceived pervasiveness of domestic violence:

Our psychologist in our early childhood program I asked him what percentage of kids in our early childhood program he thought has [observed] domestic violence and he said 100 percent (key informant, provider)

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. The Bronx is projected to grow from 1,385,000 in 2010 to 1,447,000 in 2020, an increase of 4.5 percent—the highest level of growth among the city's boroughs. From 2020 to 2030, the growth rate will expand further to 5%, adding another 72,000 Bronx residents. High growth age groups (defined as a 20% increase) among males from 2010 to 2020 include 25-29, 60-64, 65-69, 70-74 and 75-79 years while it is expected that there will be a population decline (of more than 5%) among 15-19, 40-

44 and 45-49 year old males. Among females over the same time period, high growth age groups include 60-64, 65-69, 70-74 years, while it is expected that there will be a population decline among females aged 15-19, 40-44, and 45-49 years.

The Bronx is expected to have a 2.3% decrease in school-age children from 2010-2020, this population decreasing from 266,000 in 2010 to 259,000 in 2020. From 2020-2030, the growth rate is expected to rebound and grow to 7.3%, adding 19,000 school-age children in the Bronx. The population aged 65 years and older in the Bronx is expected to grow 17.8% from 2010 to 2020, expanding by 26,000 (from 146,000 to 172,000). The growth rate is expected to expand to 23.6% from 2020 to 2030, adding an additional 41,000 seniors to the Bronx population.¹⁷⁷

Section ii: Health Status

According to Bronx residents completing the CNA survey, the greatest health concerns in their community are diabetes (55%), drug and alcohol use (47%), hypertension (41%), asthma (39%), obesity (35%), and cancer (34%). The most common self-reported health problems were hypertension (26%), asthma (20%), chronic pain (20%), high cholesterol (19%), and depression or anxiety (19%). Approximately 34% of respondents were overweight and 31% were obese; 25% described their health as fair or poor. Community residents participating in focus groups echoed these concerns and also added behavioral health issues such as depression and anxiety. Violence was also commonly cited as a significant problem in the Bronx. These overall findings correlated to information provided by key informants and focus group participants, for example:

I'm looking at obesity, I'm looking at smoking, I'm looking at and hearing as well as diabetes, hypertension. You know, we have a senior population that's also in poverty mode (key informant, community based organization)

Leading Causes of Death and Premature Death

'Diseases of the heart' is the leading cause of death among White, Black and Hispanic populations in the Bronx.¹⁷⁸ The top ten causes in order are: diseases of the heart, cancer, influenza and pneumonia, diabetes, chronic lower respiratory disease, 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, and Alzheimer's disease. The leading causes of death in the borough are closely aligned to those in NYC and NYS. (See Appendix B, Table 26.)

¹⁷⁷ 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.

¹⁷⁸ New York City Vital Statistics, "Top Ten Leading Causes of Mortality 2012," accessed via the EpiQuery interactive tool, August, 2014.

The top five causes of premature death in the Bronx are cancer, heart disease, unintentional injury, AIDS, and diabetes.¹⁷⁹ This closely aligns with the top five causes of premature death in NYC, and matches the top three causes of death in NYS, for the same time period.¹⁸⁰ (See Appendix B, Table 27.)

Hospitalizations by Age Payer Group, and Diagnoses

Of the 1.08 million inpatient discharges by NYC hospitals 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 4 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%.

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 X lists primary diagnoses for discharges Citywide and by Borough in 2010 and 2013.

Table 14: Inpatient Discharges by top 20 primary diagnoses, 2010 and 2013

	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	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%
Musculoskelet al 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%

¹⁷⁹ 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.

¹⁸⁰ The number 4 cause of premature death in NYS for the same time period is Lower Respiratory Disease, and the 5th cause is Diabetes.

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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 Supplementar	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%
Cerebrovascul ar 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%
Total	1,160,535	1,075,159	199,603	185,181	223,597	208,937	353,202	325,700	210,057	189,945

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 and diabetes in all boroughs except 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 15: 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	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

(PQI S03)									
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 19%, Medicare 10%, Uninsured 19%, and Other payers 4%. The table immediately below lists primary diagnoses for ED visits in 2010 and 2013.

Table 16: 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%

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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 Hospitalizations (PQI), Emergency Visits (PPV), and Readmissions (PPR)

In the Bronx in 2012, there were a total of 151,653 inpatient hospitalizations, approximately 9% (13,447) of which were considered potentially preventable.¹⁸¹ The Bronx has higher than expected rates of potentially preventable inpatient (PQI) hospitalizations, with the highest ratio for of Observed / Expected (O/E) hospitalizations for diabetes in the Bronx.¹⁸² (See Appendix B, Table 44.) Within the borough, the highest overall O/E PQI ratios are consistently found in a single narrow cluster that reaches from the Williamsbridge and Fordham–Bronx Park area in the north, and continues southward along the east side of the Grand Concourse through Belmont, East Tremont, Claremont Village, and Morrisania, to Mott Haven. (See Appendix A, Map 35.) Turning to absolute numbers of PQI admissions, the geographic areas of concern extend to the areas west of this corridor, to the communities between the Grand Concourse and the Harlem River. (See Appendix A, Map 35.)

Table 17: PQI Composite Indicator Admissions and Observed/Expected Ratios

Region	PQI S01 Diabetes composite		PQI S02 Circulatory Composite		PQI S03 Respiratory Composite	
	PQI admissions	O/E ratio	PQI admissions	O/E ratio	PQI admissions	O/E ratio
Bronx	2,775	1.24	3,173	1.34	4,116	1.42
NYC	9,289	1.01	11,116	1.06	12,216	1.02
NYS	14,121	1.00	15,795	1.00	18,654	1.00

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

This general pattern of clustering holds true when looking at the disease-specific composite measures, with the notable concentration of young adult asthma and respiratory composite PQI hospitalizations in the southern part of the borough, extending across both sides of the Grand Concourse. (See Appendix A, Maps 41, 52). The 2009-2012 trend data for the whole of the Bronx across the Chronic Composite PQI and the major diagnostic category composite PQIs are presented in Appendix B, showing a slight general downward pre-DSRIP trend. (See Appendix B, Charts 45-51.)

¹⁸¹ In the same time period, in NYC, 7.6% (45,026/593,363), and in NYS, 7.2% (68,948/954,889) of hospitalizations were considered potentially preventable. Source: NYS DOH 2012.

¹⁸² The Observed/Expected ratio is a measure of how well each geographic region is doing, taking into account basic demographic differences. 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 18: All PQI Indicators				PQI Observed / Expected ratio		
PQI Indicator	# of Medicaid PQI Hospitalizations, Bronx	# of Medicaid PQI Hospitalizations, NYC	# of Medicaid PQI Hospitalizations, NYS	Bronx	NYC	NYS
Adult Overall Conditions Composite (PQI 90)	13,447	44,943	69,084	1.31	1.02	1.00
Adult Chronic Conditions Composite (PQI 92)	10,063	32,619	48,568	1.34	1.03	1.00
Adult All Diabetes Composite (PQI S01)	2,775	9,289	14,121	1.24	1.01	1.00
Adult Diabetes Short-term Complications (PQI 01)	792	2,533	4,506	1.13	0.91	1.00
Adult Diabetes Long Term Complications (PQI 03)	1,585	5,357	7,572	1.31	1.07	1.00
Adult Uncontrolled Diabetes (PQI 14)	327	1,178	1,679	1.16	1.04	1.00
Lower Extremity Amputation among Adults with Diabetes (PQI 16)	136	432	699	1.38	0.97	1.00
Adult All Circulatory Conditions Composite (PQI S02)	3,173	11,116	15,795	1.34	1.06	1.00

Table 18: All PQI Indicators				PQI Observed / Expected ratio		
PQI Indicator	# of Medicaid PQI Hospitalizations, Bronx	# of Medicaid PQI Hospitalizations, NYC	# of Medicaid PQI Hospitalizations, NYS	Bronx	NYC	NYS
Adult Hypertension (PQI 07)	969	2,991	3,938	1.51	1.10	1.00
Adult Heart Failure (PQI 08)	2,013	7,426	10,902	1.28	1.04	1.00
Adult Angina Without Procedure (PQI 13)	191	699	955	1.26	1.09	1.00
All Adult Respiratory Conditions Composite (PQI S03)	4,116	12,216	18,653	1.42	1.02	1.00
COPD and Asthma in Older Adults (PQI 05)	3,383	10,486	16,244	1.38	1.01	1.00
Asthma in Younger Adults (PQI 15)	733	1,730	2,410	1.61	1.11	1.00
Adult Acute Conditions Composite (PQI 91)	3,384	12,328	20,521	1.24	0.99	1.00
Adult Dehydration (PQI 10)	691	2,403	3,958	1.26	0.98	1.00
Adult Bacterial Pneumonia (PQI 11)	1,424	5,353	9,347	1.20	0.96	1.00

Table 18: All PQI Indicators				PQI Observed / Expected ratio		
PQI Indicator	# of Medicaid PQI Hospitalizations, Bronx	# of Medicaid PQI Hospitalizations, NYC	# of Medicaid PQI Hospitalizations, NYS	Bronx	NYC	NYS
Adult Urinary Tract Infection (PQI 12)	1,269	4,572	7,216	1.27	1.04	1.00
Pediatric Overall Conditions Composite (PDI 90): ages 6-17 years	1,151	2,909	3,774	1.58	1.19	1.00
Pediatric Chronic Conditions Composite (PDI 92): ages 6-17 years	958	2,255	2,903	1.69	1.19	1.00
Pediatric Asthma (PDI 14): ages 2-17 years	1,865	4,282	5,384	1.80	1.73	1.00
Pediatric Diabetes Short-term Complications (PDI 15): ages 6-17 years	74	234	380	1.16	1.04	1.00
Pediatric Acute Conditions Composite (PDI 91): 6 - 17 years	193	654	871	1.17	1.16	1.00
Pediatric Gastroenteritis (PDI 16): ages 3 months - 17 years	558	1,758	2,333	1.31	1.18	1.00
Pediatric UTI (PDI 18): ages 3 months - 17 years	134	602	929	0.80	1.04	1.00

Source: New York State Department of Health, 2012

Potentially Preventable ER Visits (PPV)

There were 346,837 Potentially Preventable Emergency Visits (PPV events) in the Bronx in 2012. The overall Observed/Expected (O/E) PPV ratio for the Bronx is 1.06, but the range of PPV/100 Beneficiaries across ZIP Code areas was wide, 23.7 – 49.4 with a corresponding O/E ratio range of 0.80 – 1.27, indicating opportunities for reducing PPV. (See Appendix A, Map 54.) Primary data findings from focus groups and key informant interviews point to rational bases for beneficiaries' choice of utilizing ED for primary care and specialty care services available in one stop. Establishing co-located primary care services—and/or a more effective case management and referral system— in Emergency Departments, with services structured in a patient-centered manner informed by these findings, may divert inappropriate and costly primary care delivery from Emergency Departments in areas of the Bronx with high numbers of PPV events, which are found along either side of the Grand Concourse from Highbridge – Morrisania to the northern border of the borough (See Appendix A, Map 54.)

Factors that contribute to high emergency department visits include long wait times for medical appointments. Among survey respondents using emergency rooms in the past year, 12% reported that “*didn’t have insurance,*” was the reason for using the ER.

I know of this one person who was afraid that she had cancer of some type, and she had an appointment that was three months away. She said after a week she was going bonkers, went to the ER, says, “Let them test me here, let them run the x-rays and all that,” and that’s what she did. And she got information before the three month period. She said, “I could be dead by then.” (Key informant, community based organization).

Our neighborhood there in Mott Haven sees a lot of overdose, sees a lot of violence, is disproportionately impacted by a lot of things that would send you to the emergency room, but it’s not managed in an outpatient setting or a primary care setting like diabetes and heart disease, which we see a lot of, asthma. It’s interesting, in our pharmacy, we get aggregate data on the top medications and prescriptions that are delivered to our folks, and number one by far are psychiatric medications, which is something that can easily send you to the emergency room if it’s not managed. (Key informant, community based organization)

Table 19: Potentially Preventable ER Rates (PPV)

Potentially Preventable ER Visits (PPV)	NYS	NYC	Bronx
Medicaid PPV Events	2,111,519	1,191,549	346,837
Medicaid ZIP Code Population	5,852,350	3,593,035	822,108

Source: New York State Department of Health, 2012

Potentially Preventable Readmissions (PPR)

For the Bronx, the following table indicates rates of PPRs. There were almost 7,000 preventable readmissions, with an actual rate larger than the expected rate per 100 admissions. The Bronx performed 5% worse than the city as a whole.

Table 20: Risk Adjusted Expected Rate Ratios in the Bronx compared to NYS and NYC

Area	Observed Potentially Preventable Readmissions	Observed Rate per 100 Admissions	Risk-Adjusted Expected Rate per 100 Admissions	Risk-Adjusted Expected Rate Ratios *	
				to NYC	to NYS
Bronx	6,825	7.92	7.57	1.05	1.13
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.

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

The Observed / Expected ratios of Potentially Preventable Readmissions (PPRs) for Bronx hospitals range from 1.03 to 1.26 (excluding one small sample size outlier), with an overall ratio of 1.13.

Table 21: Risk Adjusted Expected Rate Ratios in the Bronx compared to NYS and NYC

Facility Name	At Risk Admissions	Observed PPR Chains	Observed / Expected PPR	Observed PPR Rate	Expected PPR Rate	Expected PPR Chains
Bronx Leb Hsp Ctr Concourse Div*	15,869	1,443	1.14	9.09	7.95	1,262
Calvary Hospital	61	7	2.54	11.48	4.52	3
Jacobi Medical Center	10,172	694	1.03	6.82	6.65	676
Lincoln Medical/Mental Hlth	13,130	855	1.07	6.51	6.1	801
Montefiore Medical Center	32,086	2,381	1.11	7.42	6.67	2,140

Facility Name	At Risk Admissions	Observed PPR Chains	Observed / Expected PPR	Observed PPR Rate	Expected PPR Rate	Expected PPR Chains
North Central Bronx Hospital	4,551	311	1.10	6.83	6.19	282
St Barnabas Hospital	10,287	1,134	1.26	11.02	8.76	901
Bronx Hospitals Total	86,156	6,825	1.13	n/a	n/a	6,065

Source: New York State Department of Health, 2012

*PPR is not available from DOH for Bronx Lebanon Fulton Division, which offers behavioral health related services.

Post-discharge issues focused primarily on the difficulties community members have adhering to medical recommendations in under-resourced and stressful home environments.

Patients that are going hungry and they don't even ask the question – is there enough food in the home or do you need a referral to a food pantry or Meals on Wheels program? And then, you know, if they're going through their treatment and there are all these other medications and you don't have food, it upsets everything and it contributes to another visit to the hospital (key informant, community based organization)

They will not have the ability to go back home and continue the behavior, because the support systems are not adequate. So we try to give them home care, sometimes we advise them on mid-level specialties, things like that. We are talking about really sick patients here. You know, so I see that everybody's working, everybody has issues, they have their own problems, health problems, so you can see the lack of support (key informant, provider)

BEHAVIORAL HEALTH

Mental Health

Among the Bronx population as a whole, the age-adjusted percentage of adults with poor mental health for 14 or more days of 9.1%, as well as the age-adjusted suicide rate of 5.4%, are lower than the state rates and roughly on par with citywide rates.¹⁸³ However, in the Bronx, 7.1% of all people report experiencing serious psychological distress, compared to 5.5% in NYC overall.¹⁸⁴ (See Appendix B, Table 31.) The Pelham-Throgs Neck area, in particular, appears to be disproportionately impacted by psychological distress with approximately 9% of residents reporting it. Those in Hunts Point-Mott Haven, Highbridge-Morrisania and Crotona-Tremont also report high rates of psychological distress, with approximately 5%-8% of those surveyed reporting it. The myriad of stresses on lower income

¹⁸³ The “poor mental health” measure is from 2008-2009 BRFSS and Expanded BRFSS data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard. The suicide rate is for the years 2010-2012 from Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

¹⁸⁴ Serious psychological distress is a composite measure of 6 questions in the Community Health Survey regarding symptoms of anxiety, depression and other emotional problems. New York City Department of Health and Mental Hygiene, Community Health Survey 2012 data, as reported on Epiquery <http://nyc.gov/health/epiquery>, accessed August 2014.

residents were considered overwhelming to some and contributed to high levels of depression.¹⁸⁵ Low-income immigrant populations may have additional stressors, as well as poorer access to care, due to insurance and language issues.¹⁸⁶

This qualitative finding is validated by diagnostic data. Among Medicaid beneficiaries in the Bronx, 13.4% (110,000) have a depression CRG diagnosis (includes “Depression”; “Depressive and Other Psychoses”; and “Depressive Psychosis - Severe”), a rate nearly twenty percent higher than the city rate (11.3%). While rates of depression among enrollees in the Bronx are high throughout the county, Kingsbridge/Riverdale (17.8%), Hunts Point/Mott Haven (14.7%) and Crotona/Tremont (13.5%) comprise the UHF neighborhoods with the highest rates.¹⁸⁷ 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 Bronx Rate is 7.1%. Neighborhoods with the highest rates of SPD in the Bronx include Pelham/Throgs Neck (9%) and the South Bronx (7.9%).¹⁸⁸

Alcohol/Drug Use

Community members also marked that substance use and alcohol abuse are pressing issues. Indeed, in 2012, the last year for which data is available, an estimated 639.2 per 100,000 emergency room visits in NYC were due to non-alcohol, illicit drugs.¹⁸⁹ In the Bronx, the age-adjusted percentage of adult binge drinking among the total population “during the past month” for the borough was nearly one-in-five (18%) in 2012, similar to the overall NYC rate (19.6%) for the same time period. (See Appendix B, Table 33.) Also, key informants described behavioral health issues as one factor in delaying or precluding appropriate preventive and primary health care. According to the director of Bronx CBO serving a number of residents with mental health and substance abuse issues, “*Survival is the most important thing, so not health, not seeing a doctor... but that’s just – literally hustling to survive each day is the number one goal.*”

Mental health is an issue because of the complex environment they live in, the poor support. So we see a lot of depression, a lot of anxiety and that leads to an impact on their own health: adherence to medications, adherence to follow-up. Family getting separated because of that. There’s a social impact because of their mental health and drug abuse. That’s a problem it goes across all demographics (key informant, provider)

Comorbidities with physical health

There are no PQI measures of preventable hospitalizations related specifically to behavioral health. However, from New York State Office of Mental Health (OMH) data, we know that over half of the

¹⁸⁵ NYAM primary data findings, September, 2014.

¹⁸⁶ Ibid.

¹⁸⁷ New York State Dept. of Health, 2012. <https://health.data.ny.gov/Health/Medicaid-Chronic-Conditions-Inpatient-Admissions-a/wybg-m39t>.

¹⁸⁸ Community Health Survey 2012 data, as reported on Epiquery <http://nyc.gov/health/epiquery>, accessed August 2014.

¹⁸⁹ Drug Abuse Warning Network, 2011: New York City – 5 Boros: Drug-Related Emergency Department Visits, 2004-2011 - Illicits (excluding alcohol) Rockville, MD: Center for Behavioral Health Statistics and Quality, SAMHSA, 2013

clients served by OMH-licensed and OMH-funded programs have one or more physical chronic health conditions, indicating a need for coordinated behavioral and physical health care. Approximately 54.4% (9,215/16,942) of Bronx clients served had at least one chronic medical condition. (See Appendix B, Table 32.) In 2012, 188,401 Bronx Medicaid beneficiaries had behavioral health-related service utilization (including pharmacy). Of these beneficiaries, 62,092 had an inpatient admission during the year, for any reason, i.e., the admission was not necessarily related to behavioral health. These 62,092 beneficiaries represent 7.6% of all Bronx Medicaid beneficiaries, and they accounted for a total of 151,167 inpatient admissions in 2012. They were concentrated in neighborhoods located on either side of the Grand Concourse from Fordham–Bronx Park to Highbridge–Morrisania. (See Appendix A., Map 31.)

The geographic distribution of behavioral health resources (see Appendix A, Map 88) appears to match the widespread distribution of behavioral health-related service utilization in the Bronx;¹⁹⁰ however, questions as to the adequacy of these resources in terms of capacity were raised in focus groups and key informant interviews. Per DSRIP behavioral health clinical improvement projects, the integration of behavioral health specialists into primary care clinics could help address this issue if it entails a net increase of behavioral health resources. Further, it may also address low behavioral health services utilization among some beneficiaries resulting from the stigma associated with having a behavioral health condition and seeking treatment at a behavioral health services provider location. Conversely, the integration of primary care services into existing behavioral health services settings could help address the high rates of co-morbidity between behavioral health and chronic physical health conditions for those currently utilizing behavioral health services.

Care Coordination and Disease Management

According to providers themselves, 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.¹⁹¹

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

¹⁹⁰ These numbers and rates reflect possible duplicated counts of Medicaid Beneficiaries if a beneficiary's calendar year utilization was found by the NYS Department of Health to occur across multiple Episode Disease Categories (e.g., hypertension and congestive heart failure) within a single Major Diagnostic Category (e.g., Diseases and Disorders of the Cardiovascular System). Therefore, the numbers reflect Weighted Condition-Related Utilization, and the rates reflect Weighted Condition Prevalence Among Beneficiaries, by multiple counting beneficiaries for utilization across multiple co-morbidity Episode Disease Categories within a Major Diagnostic Category.

¹⁹¹ Ibid.

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)

Disease management is also a challenge. In the Bronx, 46% of Medicaid recipients who were prescribed antidepressant medications continued to use the medication for the entirety of the 12-week acute treatment phase, which is similar to NYC (47%) and slightly lower than NYS (50%).¹⁹² In the Bronx, 64% of children enrolled in Medicaid who were prescribed medication for ADHD completed a follow-up visit with a practitioner within 30 days of starting the medication (the initiation phase), which is on par with NYC (64%) and above the percent in NYS (56%).¹⁹³ Also, approximately 56% of adults enrolled in Medicaid in the Bronx who were hospitalized for a mental illness received a follow up within 7 days of discharge, which is just above the rate for all Medicaid beneficiaries in NYC and on par with the rate for Medicaid beneficiaries in NYS.¹⁹⁴ (See Appendix B Table 53.)

ASTHMA/RESPIRATORY CONDITIONS

CNA participants reported that asthma was among the most significant health concerns, with causation commonly attributed to indoor and outdoor environmental conditions, some of which are difficult to affect.¹⁹⁵

If you start looking at the statistics, it's very mind-boggling the statistics on asthma in the Bronx. It's mainly related to the built environment. I mean there is a genetic predisposition, no doubt. ... But we call it the asthma alley because ...you have I87 Highway, you have the Cross Bronx [Expressway], then you have I95. So, there's a triangle in the South Bronx, and the number of trucks—the traffic, 24/7 is jam-packed. And the inner roads all [have] pollution, particulate matter. All those things contribute a lot. And, of course, with the environment of the housing units, you have the mold and the cockroaches, and rodents. People live in conditions which are regularly ... We give care to people who come in walking through the door, we don't even do a history of them first, we just treat them in the asthma room. And then we discharge them. So they get the treat right away, but, but, ah, you know, they go back home and they have the same triggers and they get worse. (Key informant, provider)

While the observed rate of PQI respiratory admissions has declined in the Bronx since 2009, it remains far above the expected rate, with an Observed/Expected ratio of 1.42 for the Respiratory Composite PQI. (See Appendix B, Table 44 and Chart 50.) There were 4,116 Respiratory Composite (PQI S03) PQI hospitalizations in the Bronx in 2012. (See Appendix B, Table 44.) This includes 3,383 COPD or Asthma in Older Adults (PQI 05) PQI hospitalizations and 733 Asthma in Younger Adult (PQI 15) PQI hospitalizations. (See Appendix B, Table 44.) The areas of the Bronx with the highest PQI respiratory

¹⁹² QARR 2012

¹⁹³ QARR 2012

¹⁹⁴ Ibid.

¹⁹⁵ NYAM primary data findings, September, 2014.

composite hospitalizations are located in a corridor that runs from parts of Fordham-Bronx Park south along both sides of the Grand Concourse to Hunts Point – Mott Haven. (See Appendix A. Map 41.)

When looking at the location of asthma health care resources in relation to Respiratory Composite PQI hospitalizations (See Appendix A Map 73), there appears to be fairly good alignment of health care resources to need; however, the relationship of these resources to the prevention of PQI hospitalizations is uncertain, especially when considering additional socio-demographic variables that may be influencing the PQI hospitalization outcome. Limited data is available regarding home environmental triggers. However, data on the rate of serious housing violations by Community District, i.e., housing code violations that are considered “immediately hazardous or serious,” show prevalence in many of the same neighborhoods with high numbers of preventable respiratory PQI hospitalizations (See Appendix A, Map 15).

Asthma in younger adults and children

The highest total Medicaid PQI hospitalizations for asthma among young adults occurs along the same corridor as does the PQI respiratory composite. (See Appendix A, Map 52.) Among children in the Bronx who are Medicaid beneficiaries, the asthma rate of 701.47 per 100,000 is higher than the NYC overall rate of 426.91 per 100,000 and the NYS overall rate of 210.39 per 100,000.¹⁹⁶ Childhood asthma rates in the borough range from 418.8 per 100,000 in Kingsbridge-Riverdale to 987.9 per 100,000 in Hunts Point. Additionally, DOH data suggests that the majority, 981 of the 1,865 (52.6%) of pediatric asthma preventable PDI hospitalizations in 2012 were among very young children, aged 2-5.¹⁹⁷

Asthma in Older Adults

Among older adults in the Bronx, the COPD/Asthma PQI O/E ratio is 1.38, significantly higher than the city ratio of 1.01. (See Appendix B, Table 44.) Consistent with other asthma indicators, the highest number of Medicaid PQI hospitalizations for COPD and asthma in older adults are clustered in the corridor from Fordham-Bronx Park south to the South Bronx. (See Appendix A, Map 44.)

Health Care Resources

In the Bronx, a large proportion of community members that were surveyed appear to be engaged regularly in primary and preventive care. (See Appendix B., Primary Data tables.) Approximately eighty percent of survey respondents reported having a “primary care provider or personal doctor;” 85% reported that there’s a place they “usually for health care, when it is not an emergency.” Just over half of respondents (53%) went to a primary care doctor’s office, 16% went to a hospital outpatient clinic,

¹⁹⁶ Medicaid Prevention Quality Indicators, 2012.

¹⁹⁷ The asthma PDI is reported for children aged 2-17, but the PDI chronic composite (which includes asthma and diabetes) is reported only for those aged 6-17. Thus the difference (decrease) in numbers between those two measures is a result of the loss of the asthma admissions for children aged 2-5 in the chronic composite. Thus, it is the young children aged 2-5 that represent the bulk of the asthma PDI numbers. As explained in an email transmission from the NYS DOH dated August 25, 2014: “Each PDI has a different age criteria, asthma is 2-17 years, diabetes is 6-17 years, gastroenteritis and uti are both 3 months to 17 years. These 4 PDI make up the overall composite PDI, however, that age criteria is 6-17 years. This results in the loss of patients age 3 months up to 6 years, hence the decrease in numbers. The same situation occurs in the acute and chronic composites. The composite age group is 6-17, however, that doesn’t reflect the actual age groups in the individual measures.”

13% went to a community/family health center, and 7% went to a specialist doctor's office. Eighty-four percent reported that the place they usually go is in the Bronx; 12% reported that it is Manhattan. Eighty percent of respondents reported that their last routine check-up was within the last year. Over 90% reported having a routine check-up in the last two years. Over half (58%) had seen a dentist.¹⁹⁸

However, there also seemed to be high use of the emergency room and episodes where respondents went without care. Over 40% of survey respondents had been to the ER in the last year. Over one quarter 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 (37%), cost of co-pays (26%), "couldn't get an appointment soon or at the right time" (12%) and concerns about the quality of care (9%).¹⁹⁹

Independent of the actual number of health care resources described in the sections below, a strong theme that emerged from the primary data collection (key informant interviews and focus groups) was the perception that there was an insufficient access to the high quality providers on a timely basis. A key informant working in the South Bronx explained:

Because it's the Bronx. You know how hard it is to get [organizations] to come up here to do anything? And generally they don't get providers... The services in a lot of the outer boroughs are not at the level of quality that they should be. I'm saying that as a Bronx-based provider... You're going to vote with your feet, you're going to go to where you think you're going to receive good services. And in the cases of a lot of our folks that are marginalized and do experience being stigmatized... for people to feel that they're receiving a great service, that they're being respected, they're going [out of the Bronx] to go to that service. (key informant, community based organization)

- **Hospitals**

There are 7 major hospital systems in the Bronx with 10 locations: Bronx Lebanon Hospital Center (Concourse Division and Fulton Division); Calvary Hospital; Jacobi Medical Center (HHC); Lincoln Medical and Mental Health Center (HHC); Montefiore Medical Center (Weiler Hospital, Henry and Lucy Moses Division, and Wakefield Hospital); North Central Bronx Hospital (HHC); and St. Barnabas Hospital. These hospitals have a total of 3,794 (approximately 2.74 per 1,000 population) certified hospital beds, with bed capacity ranging from 164 to 767 per hospital, for an average of 379 beds per hospital. Several hospitals are clustered in southeast Bronx, with the rest scattered in a corridor extending from northeast Bronx to Hunts Point–Mott Haven. (See Appendix A, Map 79.) Of these hospitals, the HHC system hospitals (Jacobi Medical Center, Lincoln Hospital Center and North Central Bronx Hospital) treat the largest proportions of Medicaid and uninsured populations. The Veterans Administration also

¹⁹⁸ NYAM Primary data findings, September 2014.

¹⁹⁹ Ibid.

operates one hospital in the Borough, the James J. Peters VA Medical Center.²⁰⁰ Focus group and key informant interviews expressed frustration with long wait times at local hospitals.

- **Ambulatory surgical centers**

There are approximately 14 ambulatory surgery centers and 22 office-based surgical practices in the Bronx with one cluster in the higher SES neighborhoods in the east and the others spread across the borough. These surgical centers and practices seem to be missing from several neighborhoods with high Medicaid and uninsured populations like Highbridge – Morrisania. (See Appendix A, Map 63.)

- **Urgent care centers**

Because there is no standardized definition or regulation of urgent care centers in NYS, it is difficult to comprehensively catalog them (there also appears to be a more recent rapid proliferation). According to the HITE SITE, the American Academy of Urgent Care database, and a web-based search, there are 10 urgent care centers in the Bronx. Because they target insured patients, urgent care centers also tend to be concentrated in higher income communities: four in Pelham-Throgs Neck, one in Riverdale-Kingsbridge River, two in Northeast Bronx, and one each in Crotona-Tremont, Hunts Point- Mott Haven, and Fordham. (See Appendix B, Table 3 for full list.)

- **Health Homes**

There are five NYS Department of Health designated ‘health homes’ in the Bronx providing care management and service integration to Medicaid beneficiaries with complex chronic medical and behavioral health conditions. They are: Bronx Lebanon Hospital Center, Bronx Accountable Healthcare Network Health Home, Community Care Management Partners (CCMP), LLC, Community Health Care Network, and New York City Health and Hospitals Corporation.

- **Community Health Centers, including Federally Qualified Health Centers (FQHCs)**

There are approximately 255 diagnostic and treatment centers (D&TC) in the Bronx, which include outpatient care for primary care visits and specialty clinics such as for dental, Ob/Gyn. Of these, 39 are FQHCs which appear to be predominantly located in Crotona–Tremont and seem to be absent from other high need areas of central and northern Bronx like Fordham–Bronx Park, as well as sections of the Southeast Bronx. One hundred fifty-one (151), or 59% of D&TCs, serve Medicaid and uninsured populations and are also similarly clustered in Crotona–Tremont and less densely spread across other areas with high Medicaid and uninsured populations listed above.²⁰¹ (See Appendix A, Maps 55-58.) We have hours of operation information for approximately 101 out of the 151 clinics that service Medicaid and uninsured patients. Of those, approximately 41.6% list some weekend operating hours, approximately 50.5% list some evening hours.

²⁰⁰ US Department of Veterans Affairs, 2013,

²⁰¹ This includes the New York State DOH “Safety Net Clinics” list, as of August 26, 2014, and clinics listed on HITE SITE that accept Medicaid or have a sliding-fee-scale or provide services to patients free of charge.

Among survey respondents, about 13% reported that they go to a community/family health center for non-emergency healthcare services. In addition, approximately 16% of respondents said they access these services at a hospital-based clinic and about 6% at a private clinic.²⁰²

- **Federal Designation as an Underserved Area**

The Health Resources and Services Administration (HRSA) uses two types of designations to identify an area as being an underserved area or having a shortage of providers, Medically Underserved Area /Population (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.

The Bronx has 18 MUA neighborhoods, with a combined population of 815,000. Most of these neighborhoods are located south of Interstate 95 (I-95), which is where most of the primary care HPSA designations are located. An additional six Bronx neighborhoods may also qualify for MUA designation. Nearly all HHC hospitals and health centers are located in these neighborhoods.

The Bronx has 8 Primary Care HPSA designated neighborhoods (Morris Heights, Highbridge, Soundview/West Farms, Morrisania, Tremont, Parkchester/Throgs Neck, Fordham/Norwood, and Hunts Point/Mott Haven), 6 Mental Health HPSAs (West Central Bronx, Hunts Point/Mott Haven, Soundview, Parkchester/Throgs Neck, Kingsbridge/Riverdale, and Fordham/Norwood), and 3 Dental HPSAs (Central Bronx, Southwest Bronx, and Morris Heights/Fordham).

- **Physicians including private, clinics, hospital based including residency programs**

According to the Center for Health Workforce Studies Physician Re-Registration data published online by the NYS Department of Health, there were 4,325 physicians in the Bronx in 2013, or approximately 312 per 100,000 population, lower than the rate for NYC (428 per 100,000) overall.²⁰³ Of these 4,325 physicians, 457 are listed as Pediatric, 219 are Pediatric Sub-specialty, 213 are Ob/Gyn, 1,100 are “Other

²⁰² NYAM Primary Data Collection, preliminary findings, August 2014.

²⁰³ Center for Health Workforce Studies, 2013 data, published by NYS DOH online at http://www.health.ny.gov/health_care/medicaid/redesign/dsrip_workforce_information.htm, accessed September 17, 2014.

Primary Care,” 554 are “Other Sub-specialty,” 243 are Surgery, 394 are “Mental Health,” and 1,144 are “Other or Missing.”²⁰⁴

In the Bronx, the number of primary care and “mental health” physicians range considerably across ZIP Codes: Pediatricians range from 0 – 74 by ZIP Code; Ob/Gyn physicians range from 0-76 across ZIP Codes; and other primary care physicians, including family practice, general practice and non-specialty internal medicine range from 1-180 by ZIP Code. “Mental health” physicians range from 0 - 112 across ZIP Codes in the Bronx; the ZIP Code with the largest number of mental health physicians (112) is 10461, where Calvary Hospital, Jacobi Medical Center, and two Montefiore Hospital divisions are located.

²⁰⁵While data does not appear to exist regarding the appropriateness or capacity of these physician rates by Bronx neighborhood, the literature suggests that areas with a higher penetration of primary care physicians have overall higher health levels and lower costs.²⁰⁶ Also, mental health services were described by CNA participants as lacking, with a particularly serious gap in mental health services for children and adolescents.

Safety Net Physicians

The number of safety net physicians – defined as non-hospital based providers with at least 35% of all patient volume in their primary lines of business associated with Medicaid, dual-eligible or uninsured patients - ranges considerably among ZIP Codes in the Bronx from 0 to 345, with an average of 46.5 per ZIP Code.²⁰⁷ Several clusters of safety net physicians appear to be located in neighborhoods with high Medicaid and uninsured like Crotona–Tremont and Fordham– Bronx Park but are noticeably less densely located in sections of the Southeast Bronx and the southernmost portion of Crotona–Tremont. Additionally, there is a large cluster of safety net physicians in the section of the Southeast Bronx where Jacobi Medical Center, Calvary Hospital and two Montefiore divisions are located. (See Appendix A, Maps 83-84.)

Physicians Assistants and Nurse Practitioners

In the Bronx, there are approximately 337 nurse practitioners (24.2 per 100,000 population, compared to 47 per 100,000 in NYC²⁰⁸ and 76²⁰⁹ NYS), and 244 physician’s assistants (17.5 per 100,000 population compared to 36 per 100,000 in NYC and 61 in NYS).²¹⁰ Approximately 135 nurse practitioners and physician’s assistants in the Bronx are safety net providers.²¹¹ These non-physician safety net providers

²⁰⁴ Ibid.

²⁰⁵ Center for Health Workforce Studies, Analysis of Physician Re-registration Data, 2014. Received from HHC.

²⁰⁶ Starfield, Barbara et al., “Contribution of Primary Care to Health Systems and Health,” *Milbank Quarterly* 83(3): 457-502.

²⁰⁷ New York State Department of Health “Eligible Safety Net Physicians” list, as of August 26, 2014. Accessed at http://www.health.ny.gov/health_care/medicaid/redesign/dsrip_safety_net_definition.htm.

²⁰⁸ Includes midwives

²⁰⁹ Includes midwives

²¹⁰ Martiniano R, Siwach G, Krohl D, and Smith L. *New York State Health Workforce Planning Data Guide 2013*. Rensselaer, NY: Center for Health Workforce Studies, September 2013.

Report: [nys_health_workforce_planning_data_guide_2013.pdf](#) (5.9 MB)

²¹¹ New York State Department of Health “Eligible Safety Net Physicians”, as of August 26, 2014

vary considerably by ZIP Code, from 0 to 41 in the Bronx, with an average of 5.4 per ZIP Code.²¹² (See Appendix A, Maps 83-84.)

Physicians Serving Self-Pay Patients

According to Center for Health Workforce Data, there are approximately 196 physicians in the Bronx whose self-pay patients comprise more than 30% of their panels.²¹³ Of these, 42 are primary care physicians, 6 are Obstetricians/Gynecologists, 11 are pediatricians (excluding pediatrics sub-specialties), and 40 are “mental health” physicians. The number of these physicians ranges from 0-55 by ZIP Code, with an average of 8.2 per ZIP Code. These physicians are dispersed rather sparsely throughout the borough, with several neighborhoods that have little to no primary-care, obstetrics/gynecology, or “mental health” physicians serving over 30% self-pay, including portions of the Southeast Bronx and Croton –Tremont that have high numbers of uninsured. (See Appendix A, Map 89.)

Access and Adequacy of Care, Providing Culturally Appropriate Care and Creating Linkages with Hospitals, Health Plans and Community Organizations

Of those surveyed, over half of Bronx respondents said that they access non-emergency healthcare services at a primary care doctor’s office and over three quarters reported that primary care medicine was “very available” or “available.” Nearly one third of respondents reported that pediatric and adolescent services were “not very available” or “not available at all.”²¹⁴

Physicians in the Bronx, including hundreds represented by IPAs, have worked toward creating better linkages with hospitals, health plans and community providers. For example, the Corinthian Medical IPA, which has over 1,200 physician members, approximately 30% of which are based in the Bronx, has a mission to create a “network of medically accomplished and culturally sensitive physicians” and works with major health plans and government partners to ensure “complete and efficient care” for its patients.²¹⁵ They have formed an Accountable Care Organizations and have Medicaid contracts with seven major health plans in NYC. Despite these efforts, key informants and focus group participants report that gaps remain in culturally and linguistically competent providers, particularly for immigrant populations that are relatively new to the Bronx, such as Africans and South East Asians.²¹⁶

I don’t care where you come from, but it has to be people seeing people who look like them, that are like them, who speak like them and who feel like this people are – have my interests on my –their mind. ... Seriously, you need to have a program where you have people who look like me, who will be there to pass along information to the people is critical. (immigrant focus group participant)

²¹² Ibid.

²¹³ Center for Health Workforce Studies, Analysis of Physician Re-registration Data. 2008-2013 Blended.

²¹⁴ NYAM Primary Data Collection, preliminary findings, August, 2014.

²¹⁵ “Corinthian Fact Sheet” provided by AW Medical Offices, September 2014

²¹⁶ Ibid.

- **Specialty medical providers**

The number of specialty physicians by borough is as follows:

Table 1: 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, New York City has the following number of non-MD (or non-DO) specialty providers:

Table 2: 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
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>

About 38% of Bronx survey respondents reported that medical specialists were “not very available” or “not available at all.”²¹⁷

- **Pain Management and Hospice Services**

²¹⁷ NYAM Primary Data Collection, preliminary findings, August, 2014.

There are approximately seven facilities serving Medicaid and the uninsured in the Bronx providing specialty pain management services. These include nursing homes, health centers and a hospice center. Additionally, there are 30 facilities with hospice services (these include nursing homes, hospices and general hospitals) located in the borough.²¹⁸ There may be additional organizations providing pain management services in the borough, but no exhaustive directory of such services could be identified.

- **Dental providers including public and private**

There are approximately 348 dentists, or 25 per 100,000 population compared to 74 per 100,000 population in NYC. In the Bronx, there are approximately 184 dental hygienists (13.2 per 100,000 population).²¹⁹ One hundred and twelve dentists are designated safety net dentists by NYS DOH.²²⁰ The number of safety net dentists ranges from 0 to 23 across Bronx ZIP Codes, with an average of 4.5 per ZIP Code. There are also approximately 44 dental clinics in the Bronx, located primarily in south/central Bronx.²²¹ (See Appendix A, Maps 77-78.)

Approximately 70% of survey respondents report that dental services are available or very available in their community and 60% report having been to the dentist in the prior 12 months. Many focus group respondents expressed concerns regarding out-of-pocket costs for particular dental services.

- **Rehabilitative services including physical therapy, occupational therapy, and speech therapy, inpatient and community based**

Based on a review of GNYHA HITE data, there are approximately 73 programs and services specializing in physical therapy, occupational therapy and/or speech therapy.²²² There are a few clusters of these programs in Kingsbridge – Riverdale and Fordham – Bronx Park, with many dispersed throughout the borough. However, it appears that the Southern-most section of the Bronx has relatively few rehabilitative services of this kind. (See Appendix A, Map 64.) Please note that there may be more organizations providing these types of therapy, but no exhaustive directory of such services could be identified.

²¹⁸ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014. and New York State Department of Health “Home Health and Hospice Profile,” as of July, 2014.

²¹⁹ Ibid.

²²⁰ New York State Department of Health “Eligible Safety Net Physicians”, as of August 26, 2014

²²¹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014.

²²² Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014.

- **Behavioral health resources**

Mental Health

There are 391 general psychiatrists in the Bronx, which is a rate of 28.1 per 100,000, much lower than the NYC rate of 49 per 100,000.²²³ There are 1,883 social workers in the Bronx, or 135.3 per 100,000 compared to 231 per 100,000 in NYC.²²⁴

Behavioral Health resources, including outpatient, inpatient, support and emergency programs as well as youth programs, appear to be clustered in sections of Kingsbridge – Riverdale, Crotona – Tremont, Highbridge – Morrisania and Pelham – Throgs Neck. Conversely, there appear to be very few resources in the southern-most section of the Bronx in Hunts Point – Mott Haven and in the Southeast Bronx. Some ZIP Codes with relatively high percentages of beneficiaries with behavioral health-related utilization, like 10471 in Kingsbridge – Riverdale (which has the highest rates) and 10461 in Pelham - Throgs Neck, have clusters of these programs, while others seem to have a dearth of these resources even though a relatively high percentage of beneficiaries in those ZIP Codes had behavioral health-related utilization in the calendar year. These ZIP Codes include: 10463 in Kingsbridge – Riverdale, 10475 in Pelham – Throgs Neck, 10454 in Hunts Point – Mott Haven and 10473 in Southeast Bronx. (See Appendix A, Map 88, and section below.)

Key informants also note the shortage of mental and behavioral health services, as well as the barriers to increased capacity:

For mental health, substance abuse—the way reimbursement is being structured—it’s straining programs and there are many programs right now that are trying to survive within the new payment structure. So there is a concern that they could do more, but because of budget constrictions they’re limited in the number of visits and services that they’re able to provide, even on extended hours. And then when you look at who can truly benefit from mental health services, you also have a working population, and if you’re not open later in the evening or on the weekends, then that excludes another group. By the same token, I’ve been involved with another mental health clinic and the staff expressed grave concerns regarding extended hours during the winter because it gets dark so early and safety... So just crime in certain neighborhoods and high-risk areas—because of that fear and of safety—not opening as late as they could to serve the population. (Key informant, community based organization)

Additionally, about 53% of survey respondents reported that mental health services were “available” or “very available” in the Bronx, compared – for example – to 77.6% who reported primary care was available.²²⁵

²²³ Martiniano R, Siwach G, Krohl D, and Smith L. *New York State Health Workforce Planning Data Guide 2013*. Center for Health Workforce Studies.

²²⁴ Ibid.

²²⁵ NYAM Primary Data Collection, preliminary findings, August, 2014.

Per DSRIP behavioral health clinical improvement projects, the integration of behavioral health specialists into primary care clinics could help address this issue if it entails a net increase of behavioral health resources. Further, since a large number of survey respondents noted they have a primary care doctor/usual source of care, co-location could have a high-impact on the population. It may also address low behavioral health services utilization among some beneficiaries because of the inconvenience of seeking care at multiple locations and the stigma associated with seeking treatment at a behavioral health location. Conversely, the integration of primary care services into existing behavioral health services settings addresses the high rates of co-morbidity between behavioral health and chronic health conditions for those currently utilizing behavioral health services.

Inpatient and Residential

There is one State-run adult psychiatric hospital in the Bronx, The Bronx Psychiatric Center, with 181 beds.²²⁶ At Bronx general hospitals, there are 393 psychiatric inpatient beds, which is 37.9 beds per 100,000 compared to 41.0 in NYC. In addition, there are a number of residential treatment and assertive community treatment facilities. (See Appendix B, Table 6.)

There are 155 mental health residential programs in the Bronx, including apartment/treatment, children and youth community residences, congregate support, congregate treatment, single room occupancy (SRO) community residence, supported housing community service, and supported/SRO.²²⁷ There is also a New York City Department of Health and Mental Hygiene administered Single Point of Access (SPOA) and a SPOA Housing Project staffed by the Center for Urban Community Services, which has been operating in the Bronx since August 2003.²²⁸ In addition, there are 9 emergency programs: 2 CPEP crisis intervention programs, 5 crisis intervention programs, 1 crisis program with respite beds, and 1 home-based crisis intervention program (See Appendix A, Map 88).

Outpatient and Support

There are 63 outpatient programs in the Bronx, including 9 ACT programs, 41 clinic treatment programs, 4 comprehensive PROS with clinical treatment programs, 2 continuing day treatment (CDT) program, 6 day treatment programs, and 1 partial hospitalization program. Additionally, there are 51 mental health support programs in the Bronx, including but not limited to family support services, supportive case management, vocational services, adult home supportive case management (SCM), HCBS waiver services, and Psychosocial Clubs (Club Houses). There are 15 targeted case management (TCM) programs serving 1,760 patients as of August, 2011 (the most recent available date).²²⁹ (See Appendix A, Map 88.)

²²⁶ New York State Office of Mental Health “County Capacity and Utilization Data Book, Calendar Years 2012-2013,” prepared April, 2014.

²²⁷ New York State Office of Mental Health, “Local Mental Health Programs in New York State” Directory, as of August, 2014.

²²⁸ New York State Office of Mental Health web site and the Center for Urban Community Services at <http://www.cucs.org>.

²²⁹ New York State Office of Mental Health, “Targeted Case Management Programs Location with Program Capacity,” August 2011.

South Bronx residents participating in the CNA expressed a concern that there is an overabundance of supportive services programs in their community, affecting quality of life and perceptions of safety in particular neighborhoods. Similarly, a mental health advocate and focus group participant in a northern Bronx community complained that services were not available there, because of community level prejudice.

Youth

Of the 288 mental health programs in the Bronx, 71 mental health programs serve youth: 7 emergency programs, 3 inpatient programs including one residential treatment facility (RTF), 3 other residential programs, 32 outpatient programs including 6 day treatment programs and 24 support programs including one HCBS waiver program.²³⁰ (See Appendix A, Map 88.)

- **Alcohol/Drug Use Resources**

Based on GNYHA and NYC Dept. of City Planning data, there are approximately 107 alcohol/drug use programs and services in the Bronx.²³¹ Many of these programs are clustered in south/central Bronx and very few programs are located in Pelham-Throgs Neck, Northeast Bronx and Fordham-Bronx Park. (See Appendix A, Map 61.) The availability of outpatient substance use resources appear to align fairly well geographically with need, providing a foundation for the implementation of community-based detoxification and withdrawal management services as outlined in the DSRIP Project Toolkit. However, some communities report that an overabundance of such services affects quality of life and perceptions of safety. Approximately half of survey respondents identified substance abuse services as being “not very available” or “not available at all.”²³²

Inpatient

There are 33 inpatient alcohol/drug use programs in the Bronx: 4 medically managed detoxification programs with a total capacity of 110 beds, one medically supervised withdrawal program with 30 beds, 2 inpatient rehabilitation programs with a total capacity of 68 beds, 10 intensive residential programs with a total capacity of 987 beds, one residential rehabilitation service for youth with 28 beds, one methadone to abstinence residential service with 110 beds, 5 community residence programs with a total capacity of 136 beds, and one additional community residence program with an unreported bed capacity.²³³ (See Appendix A, Map 62.)

Outpatient

²³⁰ New York State Office of Mental Health, “Local Mental Health Programs in New York State” Directory, as of August, 2014, and the New York State Office of Mental Health web site.

²³¹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014 and New York City Department of City Planning “Selected Facilities and Program Sites,” as of June, 2014.

²³² NYAM Primary Data Collection, preliminary findings, August, 2014.

²³³ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014 and New York City Department of City Planning “Selected Facilities and Program Sites,” as of June, 2014.

There are 74 outpatient alcohol/drug use programs in the Bronx: three syringe exchange programs, one medically supervised withdrawal program with a capacity of 15 patients, 13 methadone maintenance/treatment programs with a total capacity of approximately 8,995 patients, one outpatient rehabilitation program, three vocational rehabilitation programs and 34 other outpatient medically supervised programs.²³⁴ (See Appendix A, Map 62.)

Additionally, there are approximately 107 doctors certified to prescribe buprenorphine in the Bronx.²³⁵

- **Skilled Nursing Homes, Assisted Living Facilities**

Forty-six nursing homes with a total bed capacity of 11,732 are scattered throughout the borough.²³⁶ There appear to be more nursing homes located in the northern neighborhoods of the Bronx including Northeast Bronx, Fordham – Bronx Park and Kingsbridge – Riverdale. (See Appendix A, Maps 65-66.)

There are also ten Adult Care Facilities in the Bronx, with a total capacity of 1,445 beds. Seven of these facilities have Assisted Living Programs (ALPs), which accept Medicaid or SSI, with a total capacity of 578 beds. In addition, one program has an Assisted Living Residence (ALR), which is private payee only, has a bed capacity of 195, enhanced ALR bed capacity of 35 and special needs ALR bed capacity of 20. Individuals, who are medically eligible for nursing home placement but do not require continual nursing care, can be served via an ALP. ALPs overwhelmingly serve residents who are also Medicaid recipients 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 Residences (ALRs) provide services similar to ALPs, but Medicaid and Medicare will not pay for an individual to reside in an ALR. These adult care facilities appear to be concentrated in the northern part of the borough in Northeast Bronx, Fordham – Bronx Park and Kingsbridge – Riverdale. There appears to be only one adult care facility in southern Bronx located in Hunts Point – Mott Haven. (See Appendix A, Map 65-66.)

- **Home Care Services**

There are 11 certified home health agencies (CHHA), 16 long term home health care agencies (LTHHC), and 6 home care hospice agencies that service Bronx residents. Of these agencies, 2 CHHAs, 9 LTHHCs, and 2 home care hospices, are located in the Bronx.²³⁷ Approximately 36% of survey respondents reported that home care was “not very available” or “not available at all.”²³⁸

- **Laboratory and radiology services including home care and community access**

²³⁴ Outpatient capacity information was only available for Methadone Maintenance/Treatment Programs. Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014 and New York City Department of City Planning “Selected Facilities and Program Sites,” as of June, 2014.

²³⁵ Substance Abuse and Mental Health Services Administration “Physicians Certified for Buprenorphine Treatment,” accessed July, 2014.

²³⁶ New York State Department of Health “New York State Nursing Home Profile,” as of July, 2014.

²³⁷ New York State Department of Health “Home Health and Hospice Profile,” as of July, 2014.

²³⁸ NYAM Primary Data Collection, preliminary findings, August, 2014.

There are 3 D&TC-based clinical laboratories and 21 hospital-based clinical laboratories in the Bronx.²³⁹ In addition, there are approximately 14 health centers with radiology services that provide care to those with Medicaid and the uninsured.²⁴⁰

- **Specialty developmental disability services**

There are approximately 316 developmental disability programs in the Bronx and the majority (82%) of them are residential, with a total bed capacity of 1,649 beds. These include supervised community residences, individualized residential alternative programs, and intermediate care facilities. There are also 58 non-residential programs including day training programs, clinic treatment programs, day habilitation programs, counseling and crisis intervention programs, supported work/employment training programs and recreation programs.²⁴¹ Developmental Disability resources are located throughout all parts of the borough, but some neighborhoods, such as portions of Pelham – Throgs Neck, Hunts Point – Mott Haven and Kingsbridge – Riverdale, have relatively fewer resources than others. (See Appendix A, Map 67.)

- **Specialty services providers such as vision care and DME**

There are 55 optometrists in the Bronx (4.0 per 100,000 population)²⁴² and approximately five health centers serving Medicaid beneficiaries and the uninsured population provide eye care services.²⁴³ Among survey respondents, about 34% reported that vision services were “not very available” or “not available at all.”²⁴⁴

- **Pharmacies**

There are 73 NYS DOH designated safety net pharmacies located in the Bronx. Of their total prescriptions, 33 pharmacies have between 35% and 49% Medicaid prescriptions, 35 have between 50% and 74% Medicaid prescriptions and 5 have 75% or more Medicaid prescriptions. The total number of Medicaid prescriptions for these pharmacies ranges from 1,647 to 204,969 with an average of 28,799 per pharmacy. Key informants noted that there appears to be no 24 hour pharmacies in the neighborhoods south of the Cross Bronx Expressway. (See Appendix B, Table 7 for a full list of safety net pharmacies in the Bronx.)

²³⁹ New York State Department of Health “HCRA Provider List,” as of July, 2014.

²⁴⁰ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014. New York City Department of City Planning “Selected Facilities and Program Sites,” as of June, 2014. New York State Department of Health, 2014. Health Resources Services Administration “Health Care Service Delivery and Look-Alike Sites,” accessed August, 2014. New York State Department of Health “Safety Net Clinics,” as of June, 2014.

²⁴¹ New York City Department of City Planning “Selected Facilities and Program Sites,” as of June, 2014.

²⁴² Center for Health Workforce Studies.

²⁴³ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014. New York City Department of City Planning “Selected Facilities and Program Sites,” as of June, 2014. New York State Department of Health, 2014. Health Resources Services Administration “Health Care Service Delivery and Look-Alike Sites,” accessed August, 2014. New York State Department of Health “Safety Net Clinics,” as of June, 2014.

²⁴⁴ NYAM Primary Data Collection, preliminary findings, August, 2014.

- **Local Health Departments**

The New York City Department of Health and Mental Hygiene is the local health department for New York City, including the Bronx. DOHMH has a District Public Health Office (DPHO) located in Tremont designed to serve high-need areas of the borough. In addition to the population health projects of DOHMH in the borough, the Bronx DPHO focuses on two major population health initiatives: teenage pregnancy and promoting physical activity and good nutrition. In addition, the DeBlasio administration has recently established a new Center for Health Equity within the DOHMH that will reportedly oversee the Bronx DPHO (as well as the DPHOs in East Harlem and Brooklyn) and implement new efforts to address health disparities. For DSRIP projects, DOHMH has offered to serve in a technical assistance role to PPS in the borough, particularly regarding population health projects.

- **Managed care organizations**

There are 9 Medicaid Managed Care (MMC) plans and 3 HIV Special Needs Plans (SNPs) serving the Bronx.²⁴⁵ Many of these plans also serve members in other counties. While plan enrollment data is not available at the county level, the 9 MMC plans serving the Bronx had a total NYC enrollment of 2,256,087 million members as of 2012.²⁴⁶ (See Appendix B, Table 4.)

- **Foster Children Agencies**

There are 49 Administration for Children's Services (ACS) Community Partners providing preventive and family treatment and rehabilitation services throughout the borough, and three ACS Child Protective Borough Offices located in Southeast Bronx, Bronx Park-Fordham and Highbridge-Morrisania.²⁴⁷

- **Area Health Education Centers (AHECs)**

The Bronx Westchester Area Health Education Center is located in Bedford Park 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; the Health Career Bridge Program, a program offered during the school year for juniors in high school interested in exploring health careers; and the Health Careers Internship Program, a program for college students aspiring towards careers in health care settings.

²⁴⁵ New York State Department of Health Division of Managed Care and Program Evaluation "County Directory of Managed Care Plans," as of July, 2014.

²⁴⁶ United Hospital Fund, "Medicaid Managed Care Enrollment by Region," 2012.

²⁴⁷ Administration for Children's Services (ACS) "ACS Community Partners" <http://www.buildingcpi.org/>. Accessed November 7, 2014.

CARDIOVASCULAR DISEASE

Heart disease is the top cause of mortality among the white, black, and Hispanic populations of the Bronx.²⁴⁸ It is also second leading cause of premature death in the borough.²⁴⁹ The age adjusted cardiovascular disease hospitalization rate in the Bronx is 210.8 per 10,000, higher than either NYC (173.6) or NYS (159.9).²⁵⁰ Similarly the age adjusted mortality rate for diseases of the heart was 225.8 in the Bronx, 212.2 in NYC, and 198.6 in NYS.²⁵¹ Within the broad category of heart health – cardiovascular disease – and stroke, the Bronx fares worse than NYC and NYS on all age-adjusted indicators.²⁵²

In 2012, the number of potentially preventable hospitalizations among Medicaid beneficiaries for circulatory conditions (PQI S02 Circulatory Composite) in the Bronx was 3,173, accounting for about one in five (20.1 %) of all such admissions in the State. (See Appendix B, Table 44.) The ratio of observed/expected (O/E) admissions in the Bronx (1.34) was higher than the ratio for NYC (1.06) for the same time period. (See Appendix B, Table 44.) At the ZIP Code level within the borough, the highest number of preventable hospitalizations and the highest observed / expected PQI ratios for the Circulatory Composite measure are found along the Grand Concourse from Highbridge – Morrisania to Fordham – Bronx Park. (See Appendix A, Map 40 .)

Approximately 185.02 out of 100,000 Medicaid beneficiaries in the Bronx were hospitalized for conditions related to hypertension, compared to 124.02 in NYC and 105.5 in NYS. In 2012, there were 969 potentially preventable hospitalizations among Medicaid beneficiaries for hypertension (PQI 07) in the borough. (See Appendix B, Table 44.) The variation in hospitalization rates for conditions related to hypertension between neighborhoods in the Bronx is wide. For example, the rate in Kingsbridge-Riverdale is 115.66 per 100,000, compared to a rate of 261.85 in the Northeast Bronx. (See Appendix A, Map 45.)

There were 2,013 potentially preventable hospitalizations among Medicaid beneficiaries for heart failure (PQI 08) in the Bronx. (See Appendix B, Table 44.) The range for observed/expected admissions heart failure was 0.7 to 2.87. The lowest rates in Kingsbridge-Riverdale and highest in Pelham Bay-Throgs neck area. (See Appendix A, Map 46.)

In 2012, adult angina without procedure (PQI 13) accounted for 191 potentially preventable hospitalizations in the Bronx. (See Appendix B, Table 44.) The range for observed/expected admissions for adult angina without procedure is 0.0 to 2.1, with the lowest rates in the Throgs Neck- Pelham Bay

²⁴⁸ New York City Vital Statistics, "Top Ten Leading Causes of Mortality 2012," accessed via the EpiQuery interactive tool, August, 2014

²⁴⁹ 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

²⁵⁰ 2009-2011 data reported on the NYS Dept of Health Website County Health Assessment Indicators, https://www.health.ny.gov/statistics/chac/chai/docs/chr_58.htm, accessed September, 2014.

²⁵¹ Ibid.

²⁵² Ibid.

and Kingsbridge-Riverdale areas and the highest in Highbridge, Bedford Park, Mott haven, Port Morris, Baychester, Westchester Heights, and Parkchester. (See Appendix A, Map 50.)

The highest rates of cardiovascular-related service utilization (including pharmacy) among Medicaid beneficiaries were found in Kingsbridge – Riverside and Northeast Bronx; however, the highest numbers were found along either side of the Grand Concourse from Highbridge – Morrisania to Fordham – Bronx Park.²⁵³ (See Appendix A, Map 26.) In regard to disease information and support services, these areas of the Bronx with high rates of condition-related utilization and high numbers of circulatory composite PQI hospitalizations appear to have those services available, with the exception of the Fordham – Bronx Park area. Specialty cardiology services similarly appear to be located in or near the areas of greatest need, with the exception of the Fordham – Bronx Park area (See Appendix A, Map 71.)

DIABETES

The diabetes composite PQI (S01) for the Bronx (1.24) is higher than for New York City (1.01) and New York State (1.00).²⁵⁴ (See Appendix B, Table 44.) Many community members see diabetes as their greatest health concern.²⁵⁵ Within the Bronx, the range for PQI S01 observed/expected ratios is 0.8 to 2.26. (See Appendix A, Map 39.) Across New York State, only 51% of Medicaid Managed Care beneficiaries with diabetes received all recommended tests in the last year, and 33% of Medicaid Managed Care beneficiaries in NYS with diabetes have poorly controlled HbA1c (>9%).²⁵⁶

Hospitalizations

Rates of Medicaid avoidable hospitalizations in the Bronx for short-term diabetes complications are greater than those for New York City and New York State.²⁵⁷ The rate of hospitalizations for short-term diabetes complications (PQI 01) among Medicaid beneficiaries is higher in the Bronx (151.22 per 100,000) than in the city overall (105.03 per 100,000), and higher than the state overall (110.31 per 100,000).²⁵⁸ In terms of numbers of avoidable hospitalizations due to short-term diabetes complications, the Bronx overall had 792 PQI 01 hospitalizations with a borough-wide Observed/Expected (O/E) ratio of 1.13.²⁵⁹ (See Appendix B, Table 44.) Within the borough, twelve ZIP Code areas with an O/E ratio greater than 1.00 account for 493 or 62% of these hospitalizations.²⁶⁰ (See Appendix A, Map 42.) These 493 hospitalizations are found in three clusters: from Highbridge-Morrisania to Crotona-Tremont east of the Grand Concourse; in northeast Bronx from north of Bronx

²⁵³ These numbers and rates reflect possible duplicated counts of beneficiaries if a beneficiary's calendar year utilization was found by NYS DOH to occur across multiple Episode Disease Categories (e.g., hypertension and congestive heart failure) within a single Major Diagnostic Category (e.g., Diseases and Disorders of the Cardiovascular System). Therefore, the numbers reflect the Weighted Number of Beneficiaries with Condition-Related Utilization, and the rates reflect the Weighted Condition Prevalence Among Beneficiaries, by multiple counting beneficiaries for utilization across multiple co-morbidity Episode Disease Categories within a Major Diagnostic Category.

²⁵⁴ NYS Dept of Health 2012 data, accessed August, 2014.

²⁵⁵ NYAM Primary data findings, September, 2014.

²⁵⁶ QARR, 2011

²⁵⁷ NYS Dept of Health 2012 data, accessed August, 2014.

²⁵⁸ Ibid.

²⁵⁹ NYS Dept of Health 2012 data, accessed August, 2014.

²⁶⁰ Ibid.

Park to Pelham Bay Park; and in southeast Bronx from Soundview to Throgs Neck (See Appendix A, Map 42.)

Long-term complications from diabetes hospitalization rates among Medicaid beneficiaries in the Bronx vary by neighborhood. Rates of such hospitalizations are highest in Kingsbridge, Mott Haven, and Pelham Bay Park neighborhoods. (See Appendix A Map 43.) Potentially preventable Medicaid hospitalizations for uncontrolled diabetes appear highest in East Tremont. (See Appendix A. Map 51.) Lower extremity amputation rates for Medicaid Beneficiaries with diabetes are largely concentrated in the north east Bronx. The highest rates are found in Eastchester, Baychester, Co-op City, Pelham Gardens, and Mott Haven. (See Appendix A, Map 53.)

The geographic concentration of Diabetes PQI hospitalizations makes the potential return on investment in practice reforms high in terms of reduced PQI admissions. The Diabetes Resources map (See Appendix A, Map 72) appears to show current geographic alignment of diabetes care management resources and need (shown in terms of Diabetes Composite PQI S01 hospitalizations) in or near the Highbridge-Morrisania, Crotona-Tremont, and Bronx Park areas; but apparently less alignment of resources with need in the northeast and southeast clusters where resources are lacking, although the areas between these two clusters do have specialty diabetes clinical resources.

HIV/AIDS and STDs

The fourth leading cause of premature deaths in the Bronx is AIDS, accounting for approximately 30% of all such deaths in NYC.²⁶¹ The HIV/AIDS prevalence rate for the Bronx (approximately 1,660 per 100,000 population) is higher than the NYC rate (1,370 per 100,000), and variation exists within the borough.²⁶² Four UHF neighborhoods in the borough have a higher HIV/AIDS prevalence rate than the city as a whole: Highbridge-Morrisania (2,353/100,000), Hunts Point-Mott Haven (2,290/100,000), Crotona-Tremont (2,207/100,000), and Fordham-Bronx Park (1,696/100,000).²⁶³ In terms of numbers of People Living with HIV/AIDS (PLWHA), these neighborhoods account for a total of 16,996 PLWHA or 73.7% of all PLWHA in the Bronx.²⁶⁴ (See Appendix B, Table 35.) The age adjusted mortality rate for AIDS in the Bronx (20 per 100,000) is more than twice the rate of NYC (9.4 per 100,000) and four times the rate for NYS (4.7 per 100,000).²⁶⁵ Neighborhoods with the highest incidence of HIV also have higher rates of concurrent HIV/AIDS diagnoses, and are the same neighborhoods with the highest prevalence: Morrisania/Highbridge, and Mott Haven/ Hunts Point.²⁶⁶ (See Appendix B, Chart 38.)

²⁶¹ "County Number of 3-Years Premature [< age 75] Deaths" Vital Statistics Data as of March, 2014, New York State Department of Health - Bureau of Biometrics and Health Statistics.

²⁶² NYC DOHMH 2011

²⁶³ Ibid.

²⁶⁴ 2011 data, the latest year for which information is available, from the New York City Department of Health and Mental Hygiene.

²⁶⁵ NYS Dept of Health County Health Assessment Indicators, 2009-2011, https://www.health.ny.gov/statistics/chac/chai/docs/sti_58.htm, accessed September, 2014.

²⁶⁶ Source: New York City Department of Health and Mental Hygiene. Epiquery: NYC Interactive Health Data System - [HIV/AIDS Surveillance Data, 2009]. [1 August 2014]. <http://nyc.gov/health/epiquery>

Bronx residents who are HIV positive, or have been diagnosed with AIDS, have rates of viral load suppression (60.19%) slightly lower than New York City (61.2%) and New York State (62.2%).²⁶⁷ Among Medicaid Managed Care Beneficiaries in the Bronx who are HIV positive, or who have been diagnosed with AIDS, 91% are engaged in care, 69% received appropriate viral load monitoring, and 70% of those 19 or older received syphilis screening.²⁶⁸ Viral load suppression is a key factor in reducing transmission of HIV and maintaining good health.

Within the borough, there are wide racial disparities in HIV incidence. In 2011, the latest year for which data is available, the rate of new HIV diagnoses among African Americans living in the Bronx was nearly 4 times higher than the new HIV diagnosis rate among Whites living in the Bronx (76.7 compared to 19.1 cases per 100,000 people). The rate of new HIV diagnoses among Latinos living in the Bronx was more than 2 times higher than the new HIV diagnosis rate among Whites living in the Bronx (41.8 compared to 19.1 cases per 100,000 people). (See Appendix B, Chart 37).

According to key informants in the field, transmission among injecting drug users (IDUs) in the Bronx has dropped dramatically, likely due to access to clean syringes from syringe exchange programs—although hepatitis C remains a concern, since it is more easily transmitted.

In '95 ... the new infection rate among injection drug users was 54%, so literally one out of every two people had HIV or AIDS. Now it's under 4%. We've got very few new infections. We have a lot – we see a prevalence around Hepatitis C, because it's so much more communicable, with the cotton and other stuff.

The HIV/AIDS Resources map (See Appendix A, Map 75.) suggests a geographic alignment between Medicaid Beneficiaries with an HIV/AIDS service utilization and the location of HIV/AIDS resources, which is also consistent with the prevalence PLWHS by UHF neighborhood. The existing health care and ancillary services structure appears to provide a strong foundation for implementing the related DSRIP projects. However, key informants providing services to HIV-infected individuals describe significant changes in funding priorities, with increasing resources going toward medical management, and less funding available for supportive services, including housing for people with HIV.

We still have the state ADAP program²⁶⁹ 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 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. (key informant, CBO)

²⁶⁷ HIV Ambulatory Care Performance, 2011

²⁶⁸ QARR, 2012

²⁶⁹ The AIDS Drug Assistance Program (ADAP) provides free medications for the treatment of HIV/AIDS and opportunistic infections.

Given the aging of the HIV/AIDS population, as well as the potential medical complications of HIV medications, they are also at high risk of more common chronic conditions, including diabetes and heart disease. Integration of medical and supportive services is therefore essential.

They're giving away a syringe while people's toes are falling off from diabetes and not asking about the diabetes. You're irrelevant if you start doing that.... That was the light bulb for me.... doing syringe exchange and ...[not] worrying about people's diabetes or psychiatric conditions, and that's what they were dying from. It's immoral, it's wrong to just focus on one thing because that's what you're funded to do. (key informant, community based organization)

Other STDs

The case rates for gonorrhea and chlamydia in the Bronx greatly exceed those of NYC and NYS. While some variation between neighborhoods exists, Kingsbridge/ Riverdale is the only neighborhood that has low STD rates. Crotona, Morrisania, and Mott Haven are the neighborhoods that have the highest rates of STDs. The all ages case rate for gonorrhea in the Bronx is (240.8 per 100,000) and in NYC (151.8 per 100,000) and NYS (95.8 per 100,000). All ages chlamydia case rates in the Bronx for both men and women (823.7 males and 1689.4 females per 100,000) are also dramatically higher than in NYC (508.7 males and 973.9 females per 100,000) and NYS (323 males and 674 females per 100,000). Similarly, the pelvic inflammatory disease hospitalization rate for females aged 15-44 years of age is 9.8 per 10,000 in the Bronx, but only 4.8 per 10,000 in NYC and 3.5 per 10,000 in NYS.

MATERNAL/CHILD HEALTH

Over the period 2010-2012, there were 21,867 live births per year on average in the Bronx, representing nearly one in five (18.5%) births in New York City and nearly one in ten (9.1%) in the State over the same time period.²⁷⁰ The percentage of all births in the Bronx that were Medicaid or self-pay was 75.4%, compared to 59.7% in NYC and 50.1% in the State; the percentage of Medicaid or self-pay births across Bronx ZIP Codes ranged from 23.6% to 87.5%. (See Appendix A, Map 8.) Fertility rates are also higher in the Bronx (59 births in the past year per 1,000 women age 15-50) than in NYC (52 per 1,000) and NYS (50 per 1,000).²⁷¹ For young women, the difference is even greater, with a rate of 34 births in the past year per 1,000 women age 15-19, compared to 21 per 1,000 in NYC and 17 per 1,000 in NYS.²⁷² The highest fertility rates are found along the western side of the Grand Concourse from Highbridge to Fordham – Bronx Park, and in the south in Mott Haven, Hunts Point, and Soundview. (See Appendix A,

²⁷⁰ NYS Vital Statistics, 2010-2012, <http://www.health.ny.gov/statistics/chac/perinatal/>, accessed September 2014.

²⁷¹ Ibid.

²⁷² Ibid.

Maps 6-8.) The teen pregnancy rate is also higher in the Bronx than NYC and NYS, at 60.8 per 1,000 compared to 44.2 per 1,000 in NYC and 35.7 per 1,000 in NYS.²⁷³ (See Appendix A, Map 7.)

In 2012, the latest year for which data is available, the percentage of preterm births in the Bronx (12.2%) was higher than in NYC (10.8%) or NYS (10.8%).²⁷⁴ Preterm birth is associated with low birth weight and poor health outcomes. The overall low birth weight (LBW) rate for the Bronx over the time period 2010-2012 was 9.5%, compared to 8.5% for NYC and 8.1% for the state.²⁷⁵ Within the Bronx, the LBW rates ranged from 1.9% to 12.8%, with the highest rates found in two clusters of zip codes – one in the south central part of the borough from Mott Haven, Morrisania, to Claremont Village; and the other in the northeast part of the borough in Wakefield, Eastchester, and Co-Op City. These neighborhoods also experience the highest rates of infant mortality. (See Appendix A. Map 6.)

Racial disparities also persist in the borough in the number of preterm births, with 1.4 times the number of preterm births among the black population than among the non-Hispanic white population for the time period 2010-2012 and 1.2 times the number of Hispanic preterm births than non-Hispanic white preterm births in the same time period.²⁷⁶ (See Appendix B, Table 68). Though, these racial and ethnic disparities were narrower in the Bronx than in NYC and NYS in the same time period.²⁷⁷

In the Bronx, the percentage of mothers receiving prenatal care starting in the first trimester was lower than the NYS and NYC rates (71.8% and 70.4%, respectively) by over 10%, and more than one-third (37.0%) of mothers in the Bronx received prenatal care beginning in the third trimester (months 7-9), compared to 23.9% for NYS and 28.7% in NYC.²⁷⁸ (See Appendix B, Table 61). Additionally, the Bronx neonatal death rate was slightly higher than NYC and NYS at 3.5 per 1,000, compared to 2.9 per 1,000 in NYC and 3.3 per 1,000 in NYS.²⁷⁹

OBESITY

The prevalence of obesity in the Bronx is the highest of the city boroughs, with nearly one in three (32%) of all adults obese, versus approximately one in four (24.2%) in NYC and the State (23.6%).²⁸⁰ (See Appendix B, Table 66.) The obesity rate varies widely within the borough with the highest rates in a corridor from parts of Fordham-Bronx Park down to the South Bronx. There are also very high rates in parts of Pelham-Throgs Neck.²⁸¹ (See Appendix A. Maps 17-18.) Among women and children

²⁷³ NYS Vital Statistics, 2012

²⁷⁴ NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

²⁷⁵ Ibid.

²⁷⁶ Ibid.

²⁷⁷ The ratio of black to white preterm births in NYC was 1.8 and in NYS was 1.62 for the period 2010-2012. The ratio of Hispanic to white preterm births in NYC was 1.39 and in NYS was 1.25 for this time period. Source: NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard, accessed August 2014.

²⁷⁸ NY State Vital Statistics, 2012

²⁷⁹ Ibid.

²⁸⁰ This is 2012 data for Bronx and NYC from the Community Health Survey, 2012. It is 2008-2009 data for New York State from the NYS Department of Health, County Health Assessment Indicators, 2010 –2012.

²⁸¹ It should be noted these rates are by UHF neighborhood, as rates are not available at the ZIP Code level, so there could be variation within these UHF neighborhoods that is not captured here.

participating in the United States Department of Agriculture Food and Nutrition Service Women Infant and Children (WIC) program, approximately 29% of pregnant women were overweight, and 27% of pregnant women were obese in the Bronx in the time period 2010-2012. The Bronx rates are higher than the corresponding rates in NYS (approximately 27% overweight, 24% obese) and NYC (approximately 27% overweight, 22% obese).²⁸²

In the Bronx, a mere 6% of adults report eating five or more fruits or vegetables per day, compared to approximately 9% in NYC and 27% in NYS.²⁸³ Roughly 70% of adults reported participating in a leisure time physical activity in the last 30 days, slightly lower than NYC (72%) and NYS (76%) rates. Focus group participants attributed obesity to a number of causes, including the limited access and relatively high cost of healthy food. They also described the challenges of changing dietary behavior in general—and of losing weight, in particular—despite obvious negative health consequences. Cultural preferences for fried and certain high caloric foods were acknowledged.

The South Bronx: number one, it's a healthy food desert. I think it's getting better because of concerted efforts by a lot of people, businesses and funders and City Harvest and Food Bank have done remarkable work on that. But I think for the most part, if you walked into a bodega you wouldn't find a piece of fruit or a vegetable, and if you did, it would be like a plantain. Everything is canned. We've got people who are obese who are starving because they're eating empty calories. Chips and fried chicken and fried this and fried that. And so I think that's diet and a sedentary lifestyle and lack of access to fresh foods is a huge driver of the poor health of the Bronx, and the South Bronx in particular (key informant, community based organization)

Although obesity was commonly attributed to individual motivation and community conditions, more comprehensive and consistent messaging from providers was also recommended:

Talking about obesity would also be really helpful, because ... that's not something that doctors are really talking about or feel – they may feel uncomfortable raising or ill-equipped to talk to, talk about to people. ...Community members have reported back that doctors and health care professionals, in general, talk about certain illnesses, like diabetes, hypertension, heart – a lot of these things are inevitable, right? Or kind of like, "Okay, you have hypertension, here's your medication," as opposed to actually there are things that you can do, lifestyle changes that you can make. (key informant, health advocacy)

TOBACCO USE/CESSATION

²⁸² Source: Bronx County: County Health Assessment Indicators, 2010 – 2012 data
http://www.health.ny.gov/statistics/chac/chai/chai_58.htm#bronx, accessed August 2014.

²⁸³ 2008-2009 data found at Bronx County: County Health Assessment Indicators, 2010 – 2012 data
http://www.health.ny.gov/statistics/chac/chai/chai_58.htm#bronx, accessed August 2014.

The domain 4 project on this topic is intended to “promote tobacco use cessation, especially among low SES populations and those with poor mental health.”²⁸⁴ The percentage of cigarette smoking among adults in the Bronx is roughly on par with NYC and NYS rates (15.8% in the Bronx versus 15.5% in NYC and 16.2% in NYS in 2012), but rates vary by neighborhood. Approximately one in five of adults in Pelham-Throgs Neck (21.2%) and the South Bronx (18.2%) report being a current smoker compared to less than one in ten in Kingsbridge-Riverdale (7.3%) and Fordham-Bronx Park (7.5%).²⁸⁵ (See Appendix B, Table 34.)

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.²⁸⁶ 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 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 physicians²⁸⁷. Engaged patients are more likely to manage their health and health care, which is correlated with lower health care costs.²⁸⁸

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 22 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 22: 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	83%	84%	73%

²⁸⁴ New York’s MRT Waiver Amendment Delivery System Reform Incentive Payment (DSRIP) Plan, Attachment J.”NY DSRIP Strategies Menu and Metrics,” 2014.

²⁸⁵ These neighborhood estimates should be interpreted with caution. The estimate’s Relative Standard Error (a measure of estimate precision) is greater than 30% or the sample size is less than 50, or the 95% Confidence Interval half width is greater than ten, making the estimate potentially unreliable. Source: NYC DOHMH Community Health Survey, 2012

²⁸⁶ “2013 Health Plan Comparison in New York State,” New York State Department of Health

²⁸⁷ “The CAHPS Improvement Guide,” AHRQ, June 17, 2012.

²⁸⁸ “Health Policy Brief: Patient Engagement,” Health Affairs, February 14, 2013.

	Commercial HMO	Commercial PPO	Medicaid Managed Care*
Personal Doctor			
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 Table 22, “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.

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 23 presents selected quality of care measures for several illnesses by payer.

Table 23: 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: Follow-up 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 Table 24.

Table 24: 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 that 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**

See attached Appendix B.

- **Domain 4 Metrics: Improve Health Status and Reduce Health Disparities**

See attached Appendix B.

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

The population in the Bronx is burdened by a myriad of health challenges and socioeconomic circumstances that foster poor health outcomes. It is the least healthy county in New York State, and has high rates of chronic disease such as diabetes, cardiovascular disease, and respiratory disease including asthma/COPD, cancer and high rates of obesity.²⁸⁹ The Bronx leads New York State in the percentage of premature deaths in people aged less than 65 years;²⁹⁰ the leading causes of these deaths in the county are cancer, heart disease, unintentional injury, AIDS and diabetes.²⁹¹ The Bronx also outpaces NYC overall in household poverty and low educational attainment, and is approximately on par with city rates of unemployment and health insurance.²⁹² More than half of the Bronx population speaks a language other than English in the home, and many are immigrants, presenting possible additional cultural and regulatory challenges to health care access.²⁹³ Among the Medicaid population, the Bronx ranks highest among all boroughs in NYC in the rate of potentially preventable inpatient admissions, including for chronic conditions overall, and for certain chronic conditions such as circulatory conditions, respiratory conditions and diabetes.²⁹⁴ It also ranks second among the NYC boroughs in the rate of preventable emergency room visits (PPV).²⁹⁵

Behavioral Health Risks

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.²⁹⁶ 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.²⁹⁷ 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.²⁹⁸

²⁸⁹ RWJ County Health Rankings, 2014, available at http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2014_NY_v2.pdf, accessed September 2014.

²⁹⁰ The Bronx figure is 33.9% compared to the NYS figure of 23.9%. Source: "Percentage of premature deaths (before age 65 years), 2012" New York State Prevention Agenda Dashboard, using Vital Statistics Data.

²⁹¹ NYC DOHMH Epiquery System, Vital Statistics data, accessed August 2014.

²⁹² US Census American Community Survey, 5-year table, 2008-2012.

²⁹³ According to US Census data, approximately one in five Bronx residents are not US Citizens (US Census American Community Survey, 5 year table, 2008-2012). It is possible that this number may be underreported due to undocumented individuals.

²⁹⁴ 2011-2012 Medicaid Prevention Quality Indicators, New York State Department of Health, Office of Quality and Patient Safety, 2014, as reported by the Office of Health Systems Management.

²⁹⁵ Ibid.

²⁹⁶ Murray C, Lopez A. "The Global burden of disease." Geneva: World Health Organization. 1996.

²⁹⁷ McGinnis, JM, Foege WH. "Actual Causes of Death in the United States." *Journal of the American Medical Association*: 270, pg. 2207-2212. 1993.

²⁹⁸ USDHHS (US Department of Health and Human Services), "Healthy People 2010: Understanding and Improving Health." Washington, DC. 2000.

Table 25: Risk Factors by Select Bronx Neighborhoods

	Obesity (BMI$\geq$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%
Kingsbridge and Riverdale	18.4%	16.9%	22.4%	6.4%
The Northeast Bronx	26.6%	18.3%	20.2%	16.3%
Fordham/Bronx Park	37.3%	21.5%	16.9%	8.4%
Pelham/Throgs Neck	32.8%	14.7 %	26.0%	22.3%
The South Bronx	30.1%	20.6%	27.2%	17.3%

Source: NYC Dept. of Health and Mental Hygiene, NYC Community Health Survey, 2012. Values are not adjusted for age.

Environmental Risk Factors

Environmental risk factors, which include the presence of roaches, rodents, and mold in the home, pose considerable consequences for the residents of New York City. 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 26: Environmental Risk Factors in Selected Neighborhoods in the Bronx

	NYC	Bronx	Crotona-Tremont	Fordham-Bronx Pk	Highbridge-Morrisania	Hunts Point-Mott Haven	Kingsbridge-Riverdale	Northeast Bronx	Pelham-Throgs Neck
Indoor Air Quality									
Homes with cockroaches (2011)	24%	37.7%	44.9%	38.8%	48.9%	47.9%	32.8%	23.5%	29.6%
Adults reporting second-hand smoke at home (2011)	4.9%	6.7%	9.4%	6.6%	9.4%	9.4%	1.5%	n/a	7.1%
Adults reporting mold in the home (2012)	9.5%	12.9%	11.8%	18.7%	11.8%	11.8%	9.5%	8.9%	14.4%
Adults reporting mice in the home (2012)	15.5%	23.4%	30.9%	30.2%	30.9%	30.9%	15.2%	15.8%	13.6%
Home Safety and Maintenance									
Homes with cracks or holes (2011)	15.7%	24.7%	29%	26.1%	29.3%	33%	19.5%	18.2%	20%
Homes with leaks (2011)	20.6%	28.1%	30.3%	31.6%	29.3%	30.6%	27.4%	22.3%	26%
Households rating neighborhood structures good or excellent (2011)	75.2%	58.8%	43.3%	58.6%	50.6%	48.7%	74.3%	70.8%	66.2%

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

Socioeconomic Factors

The Bronx has the highest proportion of non-white residents in the city, with very significant numbers of Black/African American residents (including US-born and immigrant populations coming from Caribbean nations and increasingly from Africa), as well as Latinos. Among the borough's Latino population, Puerto Ricans predominate, though an increasing number of immigrants are from the Dominican Republic and Central America. There is also a growing South and Southeast Asian population, though small in comparison to other immigrant groups.

The concerns of other immigrant populations are magnified among the undocumented. Access to most services is limited, and the fear of deportation results in lower utilization of services that are available, including health services. Providers report that people who are undocumented want to avoid providing information about themselves, and avoid "the system" to the greatest extent possible.

CNA participants were consistent in their reports of very long work hours among multiple foreign born groups. Descriptions of 12 - 16 hours days, six or seven days a week were not uncommon, with people working multiple jobs (often under hazardous conditions) because pay is low. Such long work hours impact health and access to health care services:

The guy working 2 jobs, one in the morning, the other at night, he doesn't have time to take care of his health, and then it's too late. You don't have time for yourself. (focus group participant)

Concerns about language access obviously suggest concrete requirements with respect to knowledge and skills. Although many CNA participants described significant capacity among some Bronx providers for Spanish, there were complaints about use of telephonic services when a bilingual provider was not available. There was also some concern regarding training and skills of dual role interpreters (i.e., bilingual staff who are asked to interpret on an *ad hoc* basis), as well as gaps in services for groups newer to the Bronx, including Africans, South Asians, and Southeast Asians.

So we have heard of [Asian] folks that are living up in the Bronx, perhaps because that's where they got placed in NYCHA housing, but all of their services are in Brooklyn. So they go to the grocery in Brooklyn. Their friends are there. Their doctors are there. So that's a tremendous amount of time to be able to travel to get culturally-competent, language-accessible programs and services. So then that's a real big challenge that we're seeing across a lot of communities, in the Asian-American community (key informant CBO)

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 (including HIV and mental health issues), difficulties navigating the health insurance and care system, low prioritization of preventive care services, and fear of medical bills and deportation.

It's a cultural issue. Where we come from greatly impacts our behaviors, and it's clear, in Africa, health is not a priority. It's a fact. The fact that health isn't a priority and the financial

difficulties, they go together, this combination is devastating for us. I have a certain level of education, but I swear, as long as I'm not caput, I won't go to the hospital. (focus group participant)

Basic Necessity Resources

According to the resident survey, the main health issues identify by residents of the Bronx include diabetes, obesity, cancer, cardiovascular disease, asthma, violence and behavioral health issues, including anxiety, depression and substance use.²⁹⁹ Community members clearly connect these common health conditions to conditions of poverty, including—but not limited to—insecurity with respect to housing and other basic needs, unsafe environments, and poor access to healthy foods. Health problems were also connected with depression. However, the link between depression and poverty was also particularly obvious, as people worried about jobs, housing, entitlements, and the safety of their streets. The linkage to poverty makes the search for solutions more challenging.

You have to fight poverty. It doesn't necessarily always mean getting everybody a job but you can get people at least the entitlements, SNAP entitlements, the things that we fight for, get them into the shelter system or housed. I think those – that's why we spend so much time doing that work. It becomes easier to knock down the barriers to access to medical care and behavioral health... the Bronx, the Bronx Health County rankings came out again a week or two ago and that's what I brought up is we were 62 out of 62 again. So what you guys have been doing, hospitals, it ain't working. You can talk about – you can shift the conversation to population health and managing population health. It's not working, guys, and what I'm doing is not working. (key informant, community based organization)

A dramatic indicator of poverty, with obvious health implications, is food insecurity, which was described by multiple respondents.

It's just stunning to me the amount of hunger. We call our congregate food program an emergency food program, but the fact is even with food stamps, we've still got a lot of people coming to the program because food stamps aren't enough. (key informant, community based organization)

Patients that are going hungry and they don't even ask the question – is there enough food in the home or do you need a referral to a food pantry or Meals on Wheels program? And then, you know, if they're going through their treatment and there are all these other medications and you don't have food, it upsets everything and it contributes to another visit to the hospital (key informant, community based organization)

²⁹⁹ NYAM primary data findings, September, 2014
²⁹⁹

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. Despite a high need for services, they reportedly delay care because of poor accommodation (e.g., absence of ramps, absence of sign language interpreters, poor transit services) and providers that are insensitive to both their capabilities and their limitations. These access barriers—and their implications— were described by CNA participants.

I have access-a-ride. Access-a-ride doesn't take me anywhere in the Bronx. It goes to Queens, Brooklyn and Staten Island. But I cannot use it here in the Bronx. Now the last time I called them for them to take me to [Manhattan], I went over to Fifth Avenue to the hospital. She told me "You can take this bus, and it will take you to Manhattan, and that bus will drop you off." And then I said, "so what do I do now? I have difficulty walking." And where they were gonna drop me off would have been at least two blocks and that hospital I was going to I know for a fact, two blocks is like four. I'm gonna have to walk. And I couldn't walk so I said "I have to walk there. What do you suggest I do?" "Uh, well uh ma'am." I said "You can't help me. Thank you very much." (focus group participant)

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. As explained by a key informant in the field:

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.

Factors Related to Health Insurance and Health Services

The costs incurred—in both time and money—for medical care remains very problematic and acts as a barrier to effective use of prevention and disease management services from the perspective of community members. The income criteria for Medicaid are described as unrealistic, given the cost of living in New York City, and the working poor who do not qualify for Medicaid cannot afford the premiums of insurance offered through the NYS Health Insurance Exchange.

Most people are leery as to whether they're going to be charged, what they can charge for and not be charged for. It basically boils down to money. You know, you make a choice. 'Do I go to the grocer or see the doctor? Do I pay my rent?' It's a money issue. (focus group participant)

And sometimes simply can't afford them, because not everybody's eligible for Medicaid, you know. And then there is this group of individuals that fall in between Medicaid and private health insurance. Unfortunately, that group is much larger than any of us would like to see (key informant, community based organization)

Community members (and providers) consistently describe long wait times for visits and long wait times at the time of a visit. Furthermore, the possible need for multiple visits (e.g., for tests or specialist services), discourages timely use of care and makes the emergency department a rational choice for “one stop shopping”.³⁰⁰

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.

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. (key informant, multiservice organization)

Finally, a consistent electronic health record was described as a challenge for agencies offering care coordination services, as they had to utilize multiple systems.

The State's not equipped to be able to mandate [a consistent electronic health record]. So everybody is left on their own to be able to design their own or to pick and choose an on-the-shelf or off-the-shelf package. And that's been what's causing the mess. So then not only do you have that, but you also don't have the communication between Health Homes to talk about a client, where a client is... being able to get some kind of a text message or an email saying a client is in an emergency room or a hospital. ...that should be really enhanced where we have much more access to the client's status, where that client is, when the client is in crisis, so that we can intervene and help the client. (key informant, Multiservice agency)

Key informants participating in the CNA, representing a cross-section of professions and fields, described multiple distinct populations with particular health care – and health – challenges. For example, individuals with severe alcohol or substance abuse disorders, who often have high rates of mental illness, physical illness and homelessness, are frequent users of emergency department services. However, emergency departments lack the resources to address the psychosocial needs that might increase stability within this population, and decrease their use of health care services.

Drug abuse is still a big problem. Alcoholism is a huge problem. And, we see a lot of admissions, a lot of patients with some sort of drug abuse or alcohol misuse. (key informant, provider)

Undocumented residents are described as hesitant to use health care services due to cost considerations and fear of deportation. When they do access medical services, it is late and sporadic.

When you have a borough that has so many immigrants, undocumented immigrants and no matter how much you try to convince them that, "Look, if you come in for healthcare, it has nothing to do with immigration, nobody's gonna report you, you don't have to be concerned," people still stay away (key informant, community based organization)

Policy Environment

The policy environment presents a number of challenges to residents and providers. For example, funding and regulatory agencies have differing requirements, which 1) limits continuity of care for patients with multiple healthcare needs and 2) puts excessive demands on provider organizations that work with multiple systems. Funding for high-demand services, such as care coordination, are limited and consequently salaries for the positions are relatively low. Low salaries make hiring difficult and may necessitate selection of candidates that are under-qualified, particularly considering the expectations of the job.

We have to find people that are from the managed care world, that are from the hospital world. We have to find professionals that understand those worlds and they also have to be database professionals, they have to be able to navigate Navitar, they have to be able to navigate Dashboard, they have to be able to input information into these databases, and into our own database, and to be able to do it many times offsite. You're stuck between a rock and hard place, because people with enough skills and training to work with such a high acuity, in most

cases, group of clients. But then also they'll have, like the background is more like data entry... You want them to come in with some of the skills, 50% of the skills, I mean, maybe we have to teach them the other 50%. Maybe they come in with substance abuse skills but they don't know mental health and they don't diabetes and primary healthcare concerns, or maybe it's the other way around. It feels like [it's too much to ask of a person], but you have to make it work. (Key informant multiservice agency).

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. Yet, we find the distribution of primary care providers uneven in Brooklyn, with sparse numbers in certain low-income neighborhoods. In addition, while community providers have made myriad efforts over the years to improve outreach to both community members and hospital providers,³⁰¹ concerns remain within the community regarding the adequacy and accessibility of outpatient care.³⁰² According to CNA participants, ambulatory care providers' capacity, perceived quality, linkages to broader health care delivery systems, and insufficient evening and weekend service, exacerbates access issues in some high need areas, for example in northern and central Brooklyn.³⁰³ 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 specialists³⁰⁴ and multi-specialty centers that could provide a 'one-stop shopping' experience that many patients seek. For example:

When you look at specialty care, say around mental health, for example, if an individual wants to go to someone who's culturally competent, we don't have a lot of Asian-Americans who are going into fields like mental health or behavioral health issues.

From the community perspective, the costs incurred— in both time and money — in seeking medical care remains very problematic and acts as a barrier for low income populations to effectively use prevention and disease management services. The income criteria for Medicaid are described as unrealistic, given the cost of living in New York City, and the working poor who do not qualify for Medicaid — according to many focus group participants — cannot afford the premiums of insurance offered through the Exchange.³⁰⁵ Community members (and providers) consistently describe long wait times for visits and long wait times at the time of a visit. Typical of these comments:

I just walked out. I was there for like, 4 hours. I mean, I can't do that. I've been here since 10 AM. Why am I not seen yet? People get frustrated. (focus group participant)

³⁰¹ See, for example, IPA factsheets provided by AW Medical Offices and referenced in Section A(i) of this report.

³⁰² NYAM primary data findings, as of September 15, 2014

³⁰³ NYAM primary data findings, as of September 15, 2014. Brooklyn Healthcare Improvement Project (B-HIP) "Final Report: Making the Connection to Care in Northern and Central Brooklyn," August, 2012.

³⁰⁴ Ibid.

³⁰⁵ NYAM primary data findings, as of September 15, 2014

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”.³⁰⁶

I played it smart. I had an emergency and I went to the emergency room. They took care of me so quick. I was there for like 30 minutes. When you go to see a doctor, you must have an appointment with the doctor. That’s my beef. Two weeks, or two months. It depends. (focus group participant)

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?] (key informant)

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. Such concerns have an impact on acceptance of services:

First, for preventive care you have to be aware that there’s benefit to being screened for a disease that you may have no symptoms of and show no signs of. And you have to trust the provider is going to use the information you give them in a way that won’t be to your detriment andyou need to know that if you are diagnosed with something you are screened for, that there is a route to access to treatment that you can afford (Key informant, CBO)³⁰⁷

Factors Related to Health Insurance

Focus group participants, in response to a question regarding what should change in health care, overwhelming cited insurance, including its expense, complications, and the limitations it places on choice. Limitations on choice were particularly problematic for individuals with special needs, including individuals with disabilities and limited English proficient individuals. A key informant explained:

So if you signed up for a plan and that doctor that takes care of your community isn’t on that plan then there’s not a whole lot you can do. And the other issue is you might be signed up for a provider who says he accepts this plan and then halfway through the year you’re locked into the plan, [even] if the provider drops it...They do not have any commitment and so that’s been – there’s no accountability on the provider side in terms of staying in it. And this is particularly important for immigrants ... when you talk about languages of lesser infusion, where there are not that many providers that speak those languages or have the cultural competence. (key informant, health advocacy)

Lack of insurance was, not surprisingly, a more common problem in immigrant communities, due to limitations on immigrant eligibility for public insurance programs, as well as more limited access to employer-sponsored care (due to restricted job opportunities). However, community members and key informants also report that income restrictions for Medicaid are unrealistically low, and self-purchased coverage is felt to be too expensive for low-income populations, given the difficulties of paying for basic

³⁰⁶ NYAM primary data findings, as of September 15, 2014. B-HIP Report, August, 2012.

³⁰⁷ NYAM primary data findings, as of September 15, 2014.

necessities like food and housing in NYC. Many low-income, previously uninsured, community members had been receiving free or very low cost services at FQHC's or HHC facilities; insurance is perceived to be expensive in comparison.

We have lots of people who are low income families, but they're not eligible for Medicaid and they can't afford Obamacare. (key informant, CBO)

Lots of people don't get Obamacare. If we pay the violation for not having insurance, it is cheaper than paying each month's fee. (focus group participant)

Lack of insurance coverage resulted in neglect of primary care, preventive services, and dentistry; limited access to prescription medications; and use of emergency care for non-urgent issues. For example:

I go to emergency room. That's where most people have to go if they don't have a doctor. That's where everybody has to go if you don't have health insurance. (focus group participant)

As you know we have the Affordable Care implementation, but that has to do with your choices of what do you prioritize? You prioritize buying food, paying for your kids' education, or going to check this pain that you have in your chest. Do you think you can do it later? Until you have a massive heart attack, right? Certain of the type of work that people do, in those fields you don't have a lot of health insurance coverage prior to this Affordable Care. A lot of our community work in construction, a lot of community works in service area, restaurants, small business things. So they don't receive healthcare through work-related insurance. So emergency room becomes the place that they go to – and so they don't have a primary physician care, they don't have a continued care. (key informant, CBO)

I lost my job, but I was not qualified for Medicaid. I had high blood pressure but there was nothing free and accessible. It's a problem for people who are born here; working people cannot afford health care. I want to drop my insurance. I can't afford it. I pay \$150 month premium and \$50 co-pays. It's worse when you are undocumented but it's a problem for people raised here. People who have minimum wage jobs are not given health insurance or enough hours of work but make too much for Medicaid, so the guidelines need to be changed. If you make more than \$104 a week and that's with taxes, you can't live like that. I couldn't get sick. I had to fend for myself. That alone would make you sick, stress you out. (focus group participant)

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

The health and human services infrastructure in the Bronx 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, HHC's and Montefiore's Health Homes, and Health Center Controlled Networks. HHC's Bronx hospitals as well as other providers such as Bronx Lebanon, Montefiore, and Albert Einstein College of Medicine 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 Mott Haven, Highbridge and Morris Heights.

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 the Bronx to replicate these programs across the borough.

Community-based organizations (CBOs) such as BronxWorks, Inc., the Hispanic AIDS Forum, and Narco Freedom 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.

Bronx 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 Source Data

In support of the overall aims of the CNAs, primary data were collected and analyzed to ensure the perspective of community members and stakeholders was 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 are the health related programming and services available to community residents, what organizations are providing the 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?
- In what ways can health care needs and health promotion activities be better addressed overall and for distinct populations?

The protocol for primary data collection, including the instruments and outreach, was developed by the NYAM Center for Evaluation and Applied Research (CEAR) in collaboration with the PPS's 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: Approximately 600 surveys were completed by Bronx residents, 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—in targeted neighborhoods where CBO recruitment was seemingly insufficient, including East Tremont, Fordham, Highbridge, Hunts Point, Longwood, Melrose, Morrisania, Mott Haven, Parkchester and West Farms. Although the sample cannot be considered representative of the borough in a statistical sense, and gaps are unavoidable, the combination of street and organizational outreach facilitated engagement of a targeted yet diverse population, including both individuals connected and unconnected to services. Survey respondents came from all Bronx neighborhoods; socio-demographic

characteristics included: 48% Black/African American, 38% Latino, 10% Asian, 43% foreign born, 12% limited English proficient, 78% living below the poverty line, 52% on Medicaid and 12% uninsured. The mean age of respondents was 46, with a range of 18 to 95. 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-four key informant interviews were conducted, including 30 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; in fact, interviews ranged from 45 to 120+ minutes. 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: Twenty-one focus groups were conducted for the Bronx 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 Source Data

The secondary data analyses followed the recommendations and guidelines set forth in the *Guidance for Conducting Community Needs Assessment* provided by the New York State Department of Health: (http://www.health.ny.gov/health_care/medicaid/redesign/docs/community_needs_assessment_guidance.pdf). Overall, the analyses started with publicly available, de-identified data to assess health care and community resources, disease prevalence, demographic characteristics, and social determinants of health. The aim of this component of study was to assess preventable emergency room visits and hospitalizations, as well as to develop a set of descriptive analyses on the rates of chronic conditions of the population at county and ZIP Code levels, where available.

Our analyses of publicly available data was supplemented with review of the available literature, including reports prepared by the participating providers, the NYS Department of Health, NYC Departments of Health and City Planning, academic institutions, and others. NYAM aggregated, analyzed, and interpreted these data. Quantitative data was summarized first with descriptive statistics. More advanced techniques, including regression analysis, was used to explore relationships between relevant variables. Where possible, data was presented in graphical (charts, line graphs, and maps) format to facilitate ease of communication and comprehension. Below we list and provide brief descriptions of the data sets used:

- **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 observed 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 observed 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 observed 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 observed PPR chains, observed 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, Self-Reported Health Status, Binge Drinking 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 the Bronx:

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
- Bronx Westchester Area Health Education Center 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 the Bronx and various community groups. See bibliography for titles of those reports.

LIST OF APPENDICES

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GLOSSARY OF KEY TERMS

Avoidable Hospital Use: “This term is used to designate all avoidable hospital service use including avoidable emergency department use, avoidable hospital admissions and avoidable hospital readmissions within 30 days. This can be achieved through better aligned primary care and community based services, application of evidence based guidelines for primary and chronic disease care, and more efficient transitions of care through all care settings.” (New York State Department of Health, “NYS DSRIP Glossary”)

Clinical Improvement Milestones: “Noted under Domain 3, these milestones focus on a specific disease or service category, e.g., diabetes, palliative care, that is identified as a significant cause of avoidable hospital use by Medicaid beneficiaries. Milestones can either relate to process measures or outcome measures and can be valued either on reporting or progress to goal, depending on the metric. Every Performing Provider System must include one strategy from behavioral health. Payment for performance on these outcome milestones will be based on an objective demonstration of improvement over baseline, using a valid, standardized method.” (New York State Department of Health, “NYS DSRIP Glossary”)

Community District (CD): New York City has 59 community districts: 12 in Brooklyn, 12 in the Bronx, 12 in Manhattan, 14 in Queens and three in Staten Island. Each community district appoints a community

board, an advisory group that is comprised of 50 volunteers to assist neighborhood residents and to advise on local and city planning, as well as other issues.

Community Needs Assessment (CNA): As defined in the NYS DOH CNA guidance, “this process includes a description of the population to be served, an assessment of its health status and clinical care needs, and an assessment of the health care and community wide systems available to address those needs.” (New York State Department of Health, “Guidance for Conducting Community Needs Assessment Required for DSRIP Planning Grant and Final Project Plan Applications,” as of June, 2014).

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.

Delivery System Reform Incentive Payment (DSRIP): As defined by NYS DOH, “DSRIP is the main mechanism by which New York State will implement the Medicaid Redesign Team (MRT) Waiver Amendment. DSRIP’s purpose is to fundamentally restructure the health care delivery system by reinvesting in the Medicaid program, with the primary goal of reducing avoidable hospital use by 25% over 5 years. Up to \$ 6.42 billion dollars are allocated to this program with payouts based upon achieving predefined results in system transformation, clinical management and population health.” (New York State Department of Health, “DSRIP FAQs”)

District Public Health Office: Three DPHOs were established by NYC DOHMH in 2002 to reduce health disparities in the highest need neighborhoods of the city. They are located in the following neighborhoods:

- East/Central Harlem
- North/Central Brooklyn
- The South Bronx

Domain: “Overarching areas in which DSRIP strategies are categorized. Performing Provider Systems must employ strategies from the domains two through four in support of meeting project plan goals and milestones. Domain one encompasses project process measures and does not contain any strategies. The Domains are:

- Domain 1: Overall Project Progress
- Domain 2: System Transformation
- Domain 3: Clinical Improvement
- Domain 4: Population-wide Strategy Implementation”

(New York State Department of Health, “NYS DSRIP Glossary”)

DSRIP Project Toolkit: “A state developed guide that will provide additional information on the core components of each DSRIP strategy, how they are distinct from one another, and the rationale for

selecting each strategy (i.e. evidence base for the strategy and it's relation to community needs for the Medicaid and uninsured population). In addition, the strategy descriptions provided in the toolkit will be used as part of the DSRIP Plan Checklist and can serve as a supplement to assist providers in valuing projects." (New York State Department of Health, "NYS DSRIP Glossary")

MRT Waiver Amendment: "An amendment allowing New York to reinvest \$8 billion in Medicaid Redesign Team generated federal savings back into NY's health care delivery system over five years. The Waiver amendment contains three parts: Managed Care, State Plan Amendment and DSRIP. The amendment is essential to implement the MRT action plan as well as prepare for ACA implementation." (New York State Department of Health, "NYS DSRIP Glossary")

New York City Department of Health and Mental Hygiene (NYC DOHMH): New York City's local health department responsible for: disease control, mental hygiene, environmental health, epidemiology, health care access and improvement, health promotion, planning and program analysis and disease prevention and emergency preparedness and response.

Performing Provider Systems (PPS): "Entities that are responsible for performing a DSRIP project. DSRIP eligible providers, which include both major public general hospitals and safety net providers, collaborating together, with a designated lead provider for the group." (New York State Department of Health, "NYS DSRIP Glossary")

Population-wide Project Implementation Milestones: "Also known as Domain 4, DSRIP performing provider systems responsible for reporting progress on measures from the New York State Prevention Agenda. These metrics will be measured for a geographical area denominator of all New York State residents, already developed as part of the Prevention Agenda:
http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/index.htm"
(New York State Department of Health, "NYS DSRIP Glossary")

Potentially Preventable Emergency Room Visits (PPVs): "Part of the nationally recognized measures for avoidable hospital use. The measures identify emergency room visits that could have been avoided with adequate ambulatory care." (New York State Department of Health, "NYS DSRIP Glossary")

Potentially Preventable Readmissions (PPRs): "Part of the nationally recognized measures for avoidable hospital use. PPRs measure readmissions to a hospital following a prior discharge from a hospital and that is clinically-related to the prior hospital admission." (New York State Department of Health, "NYS DSRIP Glossary")

Prevention Agenda: "As Part of Domain 4, Population-wide Strategy Implementation Milestones, the Prevention Agenda refers to the "blueprint for state and local action to improve the health of New Yorkers in five priority areas and to reduce health disparities for racial, ethnic, disability, socioeconomic

and other groups who experience them”, as part of New York State’s Health Improvement Plan .
Further information: http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/index.htm”

(New York State Department of Health, “NYS DSRIP Glossary”)

Prevention Quality Indicators – Adults (PQIs): “Part of the nationally recognized measures for avoidable hospital use PQIs are 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 can be adjusted for covariates for comparison purposes. Additionally there are similar potentially preventable hospitalization measures for the pediatric population referred to as PDIs.” (New York State Department of Health, “NYS DSRIP Glossary”)

Prevention Quality Indicators – Pediatric (PDIs): “Part of the nationally recognized measures for avoidable hospital use that can be used with hospital inpatient discharge data to provide a perspective on the quality of pediatric healthcare. Specifically, PDIs screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the system or provider level. Similarly the PDIs are population based and can be also be adjusted for covariates for evaluation.” (New York State Department of Health, “NYS DSRIP Glossary”)

Project Progress Milestones: “Also known as Domain 1, measures the investments in technology, tools, and human resources that strengthen the ability of the performing provider systems (PPS) to serve target populations and pursue DSRIP project goals. The Project Progress milestones include monitoring of the project spending and post-DSRIP sustainability. In addition, submission of quarterly reports on project progress specific to the PPS DSRIP project and it’s Medicaid and low-income uninsured patient population.” (New York State Department of Health, “NYS DSRIP Glossary”)

Safety Net Provider (SNP): “Entities that provide care to underserved and vulnerable populations. The term ‘safety net’ is used because for many low-income and vulnerable populations, safety net providers are the ‘invisible net of protection’ for individuals whose lack of health coverage or other social and economic vulnerabilities limits their ability to access mainstream medical care.

Below is the DSRIP specific definition of safety-net provider:

The definition of safety net provider for hospitals will be based on the environment in which the performing provider system operates. Below is the safety net definition:

- A **hospital** must meet one of the three following criteria to participate in a performing provider system:
 1. Must be either a public hospital, Critical Access Hospital or Sole Community Hospital, or
 2. Must pass two conditions:
 - A. At least 35 percent of all patient volume in their outpatient lines of business must

- be associated with Medicaid, uninsured and Dual Eligible individuals.
- B. At least 30 percent of inpatient treatment must be associated with Medicaid, uninsured and Dual Eligible individuals; or
3. Must serve at least 30 percent of all Medicaid, uninsured and Dual Eligible members in the proposed county or multi-county community. The state will use Medicaid claims and encounter data as well as other sources to verify this claim. The state reserves the right to increase this percentage on a case by case basis so as to ensure that the needs of each community's Medicaid members are met."
- **Non-hospital based providers**, not participating as part of a state-designated health home, must have at least 35 percent of all patient volume in their primary lines of business associated with Medicaid, uninsured and Dual Eligible individuals.
 - **Vital Access Provider Exception:** The state will consider exceptions to the safety net definition on a case-by-case basis if it is deemed in the best interest of Medicaid members. Any exceptions that are considered must be approved by CMS and must be posted for public comment 30 days prior to application approval. Three allowed reasons for granting an exception are:
 - A community will not be served without granting the exception because no other eligible provider is willing or capable of serving the community.
 - Any hospital is uniquely qualified to serve based on services provided, financial viability, relationships within the community, and/or clear track record of success in reducing avoidable hospital use.
 - Any state-designated health home or group of health homes.
 - **Non-qualifying providers** can participate in Performing Providers Systems. However, non-qualifying providers are eligible to receive DSRIP payments totaling no more than 5 percent of a project's total valuation. CMS can approve payments above this amount if it is deemed in the best interest of Medicaid members attributed to the Performing Provider System. (New York State Department of Health, "NYS DSRIP Glossary")

System Transformation Milestones: "Also known as Domain 2, these are outcomes based on a community needs assessment, which reflect measures of inpatient/outpatient balance, increased primary care/community-based services utilization, rates of global capitation, partial capitation, and bundled payment of providers by Medicaid managed care plans and measures for patient engagement." (New York State Department of Health, "NYS DSRIP Glossary")

United Hospital Fund (UHF) Neighborhood: There are 42 UHF neighborhoods in NYC, 11 of which are in Brooklyn, and each is comprised of adjoining ZIP Codes to approximate community planning districts. (34 neighborhoods are sometimes used to increase the statistical power of the sample size).

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