

**New York City Health Provider Partnership
Bronx Community Needs Assessment
Report September 25, 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 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, 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

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.

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 healthcare 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.

Impact on Project Selection

Domain 2 Projects

The high number of potentially preventable inpatient admissions, emergency visits, and potentially preventable readmissions in this area suggests that systems 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

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

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

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 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 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 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

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

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

¹³ Ibid.

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.

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, 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, High Bridge-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%) 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.”*

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

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.

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

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

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.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 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

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 co-morbidity Episode Disease Categories within a Major Diagnostic Category.

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.

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 High Bridge – 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 and Kingsbridge-Riverdale areas and the highest in Highbridge, Bedford Park, Mott haven, Port Morris, Baychester, Wetchester 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 High Bridge–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.)

³¹ Ibid.

³² Ibid.

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 High Bridge-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) appears 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 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 High Bridge-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.

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

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.

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

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 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 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 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

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 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.”

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: High Bridge-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/High Bridge, 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 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 an HIV/AIDS service utilization and the location of HIV/AIDS resources, which is also consistent with the prevalence PLWHA by UHF neighborhood. The existing health care and ancillary services structure appears to provide a strong foundation for implementing the related DSRIP

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

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 High Bridge 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 2010-2012 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

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.

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.

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 Projects

Domain 4 projects are intended 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. As many as one in five adults in some neighborhoods of the Bronx 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-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, High Bridge-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 is available, an estimated 639.2 per 100,000 emergency room visits in

⁵⁸ NY State Vital Statistics, 2012

⁵⁹ Ibid.

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.

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” 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.”*

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 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.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 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%).⁶⁸ (See Appendix B, Table 34.)

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.

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

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.

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;

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.”

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

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 higher HIV/AIDS prevalence rate than the city as a whole: High Bridge-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/High Bridge, 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).

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

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

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 an HIV/AIDS service utilization and the location of HIV/AIDS resources, which is also consistent with the prevalence 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.

(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

⁸⁶ Attachment J

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

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

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, and Appendix C. Primary Data Collection Instruments. Forthcoming is an Appendix D with Primary Data

⁹² Ibid.

⁹³ NYAM primary data findings, September 2014.

Bronx CNA – For Bronx PPS Steering Committee use only – not for distribution or citation
September 25, 2014

Collection Findings. In addition to these appendices, NYAM will provide an electronic version of the tables with zip code (or UHF neighborhood, or Community District) level data, as available.

SECTION A. DESCRIPTION OF HEALTH CARE RESOURCES AND COMMUNITY RESOURCES

Sections i and ii

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, 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.⁹⁴

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%).⁹⁵

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 bed capacities ranging from 164 to 767, with an average of 379 total 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

⁹⁴ NYAM Primary data findings, September, 2014.

⁹⁵ Ibid.

the largest proportions of Medicaid and uninsured populations. The Veterans Administration also operates one hospital in the Borough, the James J. Peters VA Medical Center.⁹⁶ 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 High Bridge – 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 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.⁹⁷ (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.

⁹⁶ US Department of Veterans Affairs, 2013,

⁹⁷ 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.⁹⁸

- **Primary care providers 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.⁹⁹

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.

¹⁰⁰ While 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.¹⁰¹ 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.¹⁰² 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

⁹⁸ NYAM Primary Data Collection, preliminary findings, August, 2014.

⁹⁹ 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.

¹⁰⁰ Center for Health Workforce Studies, Analysis of Physician Re-registration Data, 2014. Received from HHC.

¹⁰¹ Starfield, Barbara et al., “Contribution of Primary Care to Health Systems and Health,” *Milbank Quarterly* 83(3): 457-502.

¹⁰² 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.

In the Bronx, there are approximately 337 nurse practitioners (24.2 per 100,000 population, compared to 47 per 100,000 in NYC¹⁰³ and 76¹⁰⁴ NYS), and 244 physician assistants (17.5 per 100,000 population compared to 36 per 100,000 in NYC and 61 in NYS).¹⁰⁵ Approximately 135 nurse practitioners and physician's assistants in the Bronx are safety net providers.¹⁰⁶ These non-physician safety net providers vary considerably by zip code, from 0 to 41 in the Bronx, with an average of 5.4 per zip code.¹⁰⁷ (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.¹⁰⁸ Of these, 42 are primary care physicians, 6 are OB/GYNs, 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, OB/GYN, or "mental health" physicians serving over 30% self-pay, including portions of the Southeast Bronx and Crotona – 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."¹⁰⁹

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.¹¹⁰ 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.¹¹¹

¹⁰³ Includes midwives

¹⁰⁴ Includes midwives

¹⁰⁵ 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)

¹⁰⁶ New York State Department of Health "Eligible Safety Net Physicians", as of August 26, 2014

¹⁰⁷ Ibid.

¹⁰⁸ Center for Health Workforce Studies, Analysis of Physician Re-registration Data. 2008-2013 Blended.

¹⁰⁹ NYAM Primary Data Collection, preliminary findings, August, 2014.

¹¹⁰ "Corinthian Fact Sheet" provided by AW Medical Offices, September 2014

¹¹¹ Ibid.

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)

- **Specialty medical providers including private, clinics, hospital based including residency programs**

In addition to primary care physicians, there are approximately 2,535 specialty physicians, or 182.2 per 100,000 population compared to 271 per 100,000 in NYC. These Bronx specialists include 579 Internal Medicine subspecialists (41.6 per 100,000 population), 92 general surgeons (6.6 per 100,000 population), 289 surgery subspecialists (20.8 per 100,000), 391 general psychiatrists (28.1 per 100,000 population) and 1,184 physicians other specialties (85.1 per 100,000 population).¹¹² About 38% of Bronx survey respondents reported that medical specialists were “not very available” or “not available at all.”¹¹³

- **Palliative Care**

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. Additionally, there are 30 facilities with hospice services (these include nursing homes, hospices and general hospitals) located in the borough.¹¹⁴ 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).¹¹⁵ One hundred and twelve dentists are designated safety net dentists by NYS DOH.¹¹⁶ 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.¹¹⁷ (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.

¹¹² 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.

¹¹³ NYAM Primary Data Collection, preliminary findings, August, 2014.

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

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

¹¹⁵ Ibid.

¹¹⁶ New York State Department of Health “Eligible Safety Net Physicians”, as of August 26, 2014

¹¹⁷ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014.

- **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.¹¹⁸ 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.

- **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 100,000.¹¹⁹ There are 1,883 social workers in the Bronx, or 135.3 per 100,000 compared to 231 per 100,000 in NYC.¹²⁰

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, High Bridge – 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

¹¹⁸ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August 2014.

¹¹⁹ Martiniano R, Siwach G, Krohl D, and Smith L. *New York State Health Workforce Planning Data Guide 2013*. Center for Health Workforce Studies.

¹²⁰ Ibid.

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.¹²¹

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.¹²² 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.¹²³ 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 2003.¹²⁴ 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

¹²¹ NYAM Primary Data Collection, preliminary findings, August, 2014.

¹²² New York State Office of Mental Health “County Capacity and Utilization Data Book, Calendar Years 2012-2013,” prepared April, 2014.

¹²³ New York State Office of Mental Health, “Local Mental Health Programs in New York State” Directory, as of August, 2014.

¹²⁴ New York State Office of Mental Health web site and the Center for Urban Community Services at <http://www.cucs.org>.

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).¹²⁵ (See Appendix A, Map 88.)

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.¹²⁶ (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.¹²⁷ 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.”¹²⁸

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

¹²⁵ New York State Office of Mental Health, “Targeted Case Management Programs Location with Program Capacity,” August 2011.

¹²⁶ 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.

¹²⁷ 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.

¹²⁸ NYAM Primary Data Collection, preliminary findings, August, 2014.

total capacity of 136 beds, and one additional community residence program with an unreported bed capacity.¹²⁹ (See Appendix A, Map 62.)

Outpatient

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.¹³⁰ (See Appendix A, Map 62.)

Additionally, there are approximately 107 doctors certified to prescribe buprenorphine in the Bronx.¹³¹

- **Skilled nursing homes, assisted living facilities**

There are 46 nursing homes with a total bed capacity of 11,732 scattered throughout the borough.¹³² 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 (ALP), with a total capacity of 578 beds. In addition, one program has Assisted Living Residence (ALR) bed capacity of 195, enhanced ALR bed capacity of 35 and special needs ALR bed capacity of 20. 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 hospice, are located in the Bronx.¹³³ Approximately 36% of survey respondents reported that home care was “not very available” or “not available at all.”¹³⁴

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

¹²⁹ 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.

¹³⁰ 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.

¹³¹ Substance Abuse and Mental Health Services Administration “Physicians Certified for Buprenorphine Treatment,” accessed July, 2014.

¹³² New York State Department of Health “New York State Nursing Home Profile,” as of July, 2014.

¹³³ New York State Department of Health “Home Health and Hospice Profile,” as of July, 2014.

¹³⁴ 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.¹³⁵ In addition, there are approximately 14 health centers with radiology services that provide care to those with Medicaid and the uninsured.¹³⁶

- **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.¹³⁷ 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)¹³⁸ and approximately five health centers serving Medicaid beneficiaries and the uninsured population provide eye care services.¹³⁹ Among survey respondents, about 34% reported that vision services were “not very available” or “not available at all.”¹⁴⁰

- **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.)

- **Local Health Departments**

¹³⁵ New York State Department of Health “HCRA Provider List,” as of July, 2014.

¹³⁶ 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.

¹³⁷ New York City Department of City Planning “Selected Facilities and Program Sites,” as of June, 2014.

¹³⁸ Center for Health Workforce Studies.

¹³⁹ 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.

¹⁴⁰ NYAM Primary Data Collection, preliminary findings, August, 2014.

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 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 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.¹⁴¹ 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 2012.¹⁴² (See Appendix B, Table 4.)

- **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.

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)

¹⁴¹ New York State Department of Health Division of Managed Care and Program Evaluation "County Directory of Managed Care Plans," as of July, 2014.

¹⁴² United Hospital Fund, "Medicaid Managed Care Enrollment by Region," 2012.

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

- **Food pantries, community gardens, farmer’s markets**¹⁴³

There are 154 food banks in the Bronx, including 120 food pantries and 30 soup kitchens.¹⁴⁴ In addition, there are 32 community gardens and 45 farmers markets.¹⁴⁵ Although CNA respondents noted an 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.¹⁴⁶

- **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, families at risk of eviction and older adults. Four Financial Empowerment Centers that offer free individual, professional financial counseling, are located in the Bronx: two in High Bridge-Morissania, one in Central Bronx and another in Southeast Bronx. There are also 23 WIC programs throughout the Bronx.¹⁴⁷

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.¹⁴⁸

- **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.¹⁴⁹ However, a

¹⁴³ If an organization provides multiple services, they are included under each header for which they provide services.

¹⁴⁴ Food Bank for New York City “Food Bank Locator,” Accessed July 2014.

¹⁴⁵ 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.

¹⁴⁶ NYAM primary data findings, September, 2014.

¹⁴⁷ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹⁴⁸ Seedco, Earn Benefits Online “Clothing Resources Spreadsheet,” accessed August, 2014.

¹⁴⁹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

majority of survey respondents, 64.3%, reported that job training was “not very available” or “not available at all” in their community.¹⁵⁰

- **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.¹⁵¹ There are approximately 97 New York City Housing Authority (NYCHA) Developments and 124 NYCHA Community Facilities located in the Bronx.¹⁵² Housing and homeless resources, including Homebase¹⁵³ locations, housing and rent assistance programs, 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). The concentration of poverty 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.)

¹⁵⁰ NYAM primary data findings, September, 2014.

¹⁵¹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹⁵² 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.

¹⁵³ 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.

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.”¹⁵⁴

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 strength of community:

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.

- **Not for profit health and welfare agencies**

There are approximately 441 non-profit social service agency sites scattered throughout the Bronx.¹⁵⁵ Over one third of survey respondents reported that social services were “not very available” or “not available at all.”¹⁵⁶

- **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.)¹⁵⁷

- **Community Outreach Agencies**

There are approximately 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

¹⁵⁴ NYAM primary data findings, September, 2014.

¹⁵⁵ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹⁵⁶ NYAM primary data findings, September, 2014.

¹⁵⁷ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

not limited to: homeless populations, veterans, victims of domestic violence, PLWHA, and people who inject drugs (PWID)/active drug users.¹⁵⁸

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.¹⁵⁹ 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.

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:

¹⁵⁸ Ibid.

¹⁵⁹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

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.”¹⁶⁰

- **Religious service organizations**

There are many faith based institutions and religious service organizations offering a range of services in the Bronx. We have included these institutions and organizations throughout our inventory of community based resources listed and accounted for here. 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.¹⁶¹ However, it is important to note that many people travel to faith institutions, and they may serve a broader—rather than their local—community.

- **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.¹⁶²

- **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 psychosocial issues including individuals with mental illness, disabilities, alcohol/drug use, involvement in the criminal justice system and their families, among others.¹⁶³ 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.

¹⁶⁰ NYAM primary data findings, September, 2014.

¹⁶¹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹⁶² Ibid.

¹⁶³ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

- **NAMI**

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.¹⁶⁴

- **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.¹⁶⁵ Both DYCD-funded and Mayor's Office programs seem to be clustered in Southern Bronx in the Hunts Point – Mott Haven, High Bridge – 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.¹⁶⁶

- **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 High Bridge-Morrisania.¹⁶⁷

- **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

¹⁶⁴ National Alliance on Mental Illness (NAMI) Website.

¹⁶⁵ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of Augusts, 2014.

¹⁶⁶ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹⁶⁷ Administration for Children's Services (ACS) "ACS Community Partners"

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 High Bridge-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.¹⁶⁸

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.¹⁶⁹ There are approximately three Associates' Degree Nursing programs and two Health Worker programs located in the Bronx.¹⁷⁰ 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.)

- **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.¹⁷¹ 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

¹⁶⁸ New York City Department of City Planning "Selected Facilities and Program Sites," as of June, 2014.

¹⁶⁹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

¹⁷⁰ 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.

¹⁷¹ Greater New York Hospital Association (GNYHA) Health Information Tool for Empowerment (HITE) data, as of August, 2014.

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)

Section iii Domain 2 Metrics

See Appendix B, Tables 8 and 9.

SECTION B. DESCRIPTION OF THE COMMUNITY TO BE SERVED

Section i: Demographics of the Bronx Population

Population Size, Age, Sex, and Race/Ethnicity

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 are working age adults (aged 18-64); over one quarter are children (aged 0-17) and about ten percent are 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.)

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%).¹⁷² 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.¹⁷³ The Black/African American population includes US born and immigrant populations, including significant numbers from Caribbean nations, and increasing numbers from Africa.¹⁷⁴ Over half (54%) of the Bronx population identifies as Hispanic/Latino of any race, accounting for approximately 22% of this population statewide.¹⁷⁵ 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.)

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%).¹⁷⁶ Approximately 468,927 people, or approximately one-third of the Bronx population, were born outside of the United States.¹⁷⁷ 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

¹⁷² US Census American Community Survey, 5 year table, 2008-2012.

¹⁷³ Ibid.

¹⁷⁴ NYAM primary data findings, September, 2014.

¹⁷⁵ US Census American Community Survey, 5 year, 2008-2012.

¹⁷⁶ Ibid.

¹⁷⁷ Ibid.

well.”¹⁷⁸ (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 information about themselves, and avoid “the system” to the greatest extent possible.¹⁷⁹ 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 housing¹⁸⁰, 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.¹⁸¹ 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.)

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.¹⁸² 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%).¹⁸³ (See Appendix B, Table 22b.)

¹⁷⁸ 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.

¹⁷⁹ NYAM primary data findings, September, 2014.

¹⁸⁰ 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.)

¹⁸¹ US Census, American Community Survey, 5 year data, 2008-2012

¹⁸² Ibid.

¹⁸³ Ibid.

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.

Uninsured

In the Bronx, approximately 217,000 people are uninsured, accounting for approximately 10% of all the uninsured individuals in New York State.¹⁸⁴ 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 the Bronx may be undocumented.¹⁸⁵ Despite health reform, data suggest insurance coverage remains problematic (or is increasingly problematic) even for those eligible.¹⁸⁶ 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.¹⁸⁷

Income, Education and Unemployment

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

¹⁸⁴ US Census, American Community Survey, 5 year data, 2008-2012.

¹⁸⁵ NYAM primary data findings, September, 2014.

¹⁸⁶ Ibid.

¹⁸⁷ Ibid.

highest rates of poverty in Hunts Point-Mott Haven, where nearly half of households have incomes below the federal poverty level (FPL).¹⁸⁸ There are also high rates of poverty in High Bridge-Morrisania, Crotona-Tremont and Fordham-Bronx Park where approximately 25%-40% of households have incomes below the FPL.¹⁸⁹ These are also the areas of the county with the highest rates of unemployment. As 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)

Approximately 7 out of ten (69%) Bronx residents aged 25 or higher has a high school degree or equivalent, lower than NYC (79%) and NYS (85%). Those aged 25 or higher who have earned a bachelor degree is lower at 18%, compared to 34% in NYC and 33% statewide.¹⁹⁰ (See Appendix B, Table 14.)

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, High Bridge – 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.¹⁹¹ Bronx “duals” account for approximately 20% of all dually eligible individuals in NYC, and approximately 10% in NYS.¹⁹² Dual eligible individuals live in many parts of the borough with the highest numbers in parts of Fordham-Bronx Park, Crotona-Tremont, and High Bridge-Morrisania. (See Appendix A, Map 2 and Appendix B, Table 23.)

¹⁸⁸ US Census, American Community Survey, 5 year data, 2008-2012

¹⁸⁹ Ibid.

¹⁹⁰ Ibid.

¹⁹¹ 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.

¹⁹² Ibid.

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%).¹⁹³ 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%).¹⁹⁴ 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.)

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).¹⁹⁵ 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.¹⁹⁶

- *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*

¹⁹³ 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.

¹⁹⁴ Ibid.

¹⁹⁵ NYAM primary data findings, September 2014.

¹⁹⁶ Ibid.

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.¹⁹⁷ Approximately 30% of all households in the Bronx are comprised of a single person living alone.¹⁹⁸ (See Appendix B, Table 19.) A number of focus group 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 Violations¹⁹⁹ 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 High Bridge to Fordham – Bronx Park.²⁰⁰ (See Appendix A, Map 15.) Concerns about housing, including high rents and poor conditions, are a significant source of stress for lower income residents.²⁰¹

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.²⁰² NYCHA community facilities and shelters appear to be located predominantly in the southern Bronx neighborhoods of Crotona – Tremont, High Bridge–Morrisania and

¹⁹⁷ US Census American Community Survey, 5 year data table, 2008-2012.

¹⁹⁸ Ibid.

¹⁹⁹ “Serious housing violations” are Class C (immediately hazardous) housing code violations issued by the NYC Department of Housing Preservation and Development.

²⁰⁰ *State of New York City's Housing and Neighborhoods in 2013: The Bronx*. NY: NYU Furman Center; 2013:22.

²⁰¹ Ibid.

²⁰² 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.

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 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.

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.²⁰³ 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.²⁰⁴

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.²⁰⁵ 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.²⁰⁶

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? 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:

²⁰³ 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

²⁰⁴ NYAM primary data findings, September, 2014.

²⁰⁵ Brennan Center for Justice at New York University School of Law “How NYC Reduced Mass Incarceration”.

²⁰⁶ Ibid.

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)

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.²⁰⁷ 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.)

The top five causes of premature death in the Bronx are cancer, heart disease, unintentional injury, AIDS, and diabetes.²⁰⁸ 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.²⁰⁹ (See Appendix B, Table 27.)

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.²¹⁰ 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.²¹¹ (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

²⁰⁷ New York City Vital Statistics, "Top Ten Leading Causes of Mortality 2012," accessed via the EpiQuery interactive tool, August, 2014.

²⁰⁸ 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.

²⁰⁹ The number 4 cause of premature death in NYS for the same time period is Lower Respiratory Disease, and the 5th cause is Diabetes.

²¹⁰ 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.

²¹¹ 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.

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.)

	PQI S01 Diabetes composite		PQI S02 Circulatory Composite		PQI S03 Respiratory Composite	
Region	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

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.)

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
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

				PQI Observed / Expected ratio		
PQI Indicator	# of Medicaid PQI Hospitalizations, Bronx	# of Medicaid PQI Hospitalizations, NYC	# of Medicaid PQI Hospitalizations, NYS	Bronx	NYC	NYS
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
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

				PQI Observed / Expected ratio		
PQI Indicator	# of Medicaid PQI Hospitalizations, Bronx	# of Medicaid PQI Hospitalizations, NYC	# of Medicaid PQI Hospitalizations, NYS	Bronx	NYC	NYS
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

Data Source: New York State Dept 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 High Bridge – 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)

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

Potentially Preventable Readmissions (PPR)

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.

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
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.²¹² However, in the Bronx, 7.1% of all people report experiencing serious psychological distress, compared to 5.5% in NYC overall.²¹³ (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, High Bridge-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.²¹⁴ Low-income immigrant populations may have additional stressors, as well as poorer access to care, due to insurance and language issues.²¹⁵

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.²¹⁶ 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.

²¹² 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.

²¹³ 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.

²¹⁴ NYAM primary data findings, September, 2014.

²¹⁵ Ibid.

²¹⁶ 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

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 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 High Bridge–Morrisania. (See Appendix A., Map 31.)

The geographic distribution of behavioral health resources (see Appendix A, Map 87) appears to match the widespread distribution of behavioral health-related service utilization in the Bronx;²¹⁷ 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.²¹⁸

²¹⁷ 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.

²¹⁸ Ibid.

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

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%).²¹⁹ 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%).²²⁰ 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.²²¹ (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.²²²

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

²¹⁹ QARR 2012

²²⁰ QARR 2012

²²¹ Ibid.

²²² 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 100,000.²²³ 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 2-5.²²⁴

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.)

CARDIOVASCULAR DISEASE

Heart disease is the top cause of mortality among the white, black, and Hispanic populations of the Bronx.²²⁵ It is also second leading cause of premature death in the borough.²²⁶ The age adjusted cardiovascular disease hospitalization rate in the Bronx is 210.8 per 10,000, higher than either NYC

²²³ Medicaid Prevention Quality Indicators, 2012.

²²⁴ 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.”

²²⁵ New York City Vital Statistics, “Top Ten Leading Causes of Mortality 2012,” accessed via the EpiQuery interactive tool, August, 2014

²²⁶ 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

(173.6) or NYS (159.9).²²⁷ 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.²²⁸ Within the broad category of heart health – cardiovascular disease – and stroke, the Bronx fares worse than NYC and NYS on all age-adjusted indicators.²²⁹

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 High Bridge – 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 and Kingsbridge-Riverdale areas and the highest in Highbridge, Bedford Park, Mott haven, Port Morris, Baychester, Wetchester 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 High Bridge – Morrisania to Fordham – Bronx Park.²³⁰ (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

²²⁷ 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.

²²⁸ Ibid.

²²⁹ Ibid.

²³⁰ 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.

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).²³¹ (See Appendix B, Table 44.) Many community members see diabetes as their greatest health concern.²³² 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%).²³³

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.²³⁴ 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).²³⁵ 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 1.13.²³⁶ (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.²³⁷ (See Appendix A, Map 42.) These 493 hospitalizations are found in three clusters: from High Bridge-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.)

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 appears 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 High Bridge-Morrisania, Crotona-Tremont, and Bronx Park areas; but apparently less alignment of resources with

²³¹ NYS Dept of Health 2012 data, accessed August, 2014.

²³² NYAM Primary data findings, September, 2014.

²³³ QARR, 2011

²³⁴ NYS Dept of Health 2012 data, accessed August, 2014.

²³⁵ Ibid.

²³⁶ NYS Dept of Health 2012 data, accessed August, 2014.

²³⁷ Ibid.

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.²³⁸ 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.²³⁹ Four UHF neighborhoods in the borough have a higher HIV/AIDS prevalence rate than the city as a whole: High Bridge-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).²⁴⁰ 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.²⁴¹ (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).²⁴² 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/High Bridge, and Mott Haven/ Hunts Point.²⁴³ (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%).²⁴⁴ 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.²⁴⁵ 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).

²³⁸ “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.

²³⁹ NYC DOHMH 2011

²⁴⁰ Ibid.

²⁴¹ 2011 data, the latest year for which information is available, from the New York City Department of Health and Mental Hygiene.

²⁴² 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.

²⁴³ 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>

²⁴⁴ HIV Ambulatory Care Performance, 2011

²⁴⁵ QARR, 2012

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 program²⁴⁶ 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)

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

²⁴⁶ The AIDS Drug Assistance Program (ADAP) provides free medications for the treatment of HIV/AIDS and opportunistic infections.

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.²⁴⁷ 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).²⁴⁸ 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.²⁴⁹ The highest fertility rates are found along the western side of the Grand Concourse from High Bridge 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.²⁵⁰ (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%).²⁵¹ 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.²⁵² 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.²⁵³ (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.²⁵⁴

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

²⁴⁷ NYS Vital Statistics, 2010-2012, <http://www.health.ny.gov/statistics/chac/perinatal/>, accessed September 2014.

²⁴⁸ Ibid.

²⁴⁹ Ibid.

²⁵⁰ NYS Vital Statistics, 2012

²⁵¹ NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

²⁵² Ibid.

²⁵³ Ibid.

²⁵⁴ 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.

(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.²⁵⁵ (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.²⁵⁶

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%).²⁵⁷ (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.²⁵⁸ (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. The Bronx rates are higher than the corresponding rates in NYS (approximately 27% overweight, 24% obese) and NYC (approximately 27% overweight, 22% obese).²⁵⁹

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.²⁶⁰ 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:

²⁵⁵ NY State Vital Statistics, 2012

²⁵⁶ Ibid.

²⁵⁷ 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.

²⁵⁸ 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.

²⁵⁹ 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.

²⁶⁰ 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.

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

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.”²⁶¹ 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%).²⁶² (See Appendix B, Table 34.)

²⁶¹ New York’s MRT Waiver Amendment Delivery System Reform Incentive Payment (DSRIP) Plan, Attachment J.”NY DSRIP Strategies Menu and Metrics,” 2014.

²⁶² 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

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.²⁶³ The Bronx leads New York State in the percentage of premature deaths in people aged less than 65 years;²⁶⁴ the leading causes of these deaths in the county are cancer, heart disease, unintentional injury, AIDS and diabetes.²⁶⁵ 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.²⁶⁶ 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.²⁶⁷ 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.²⁶⁸ It also ranks second among the NYC boroughs in the rate of preventable emergency room visits (PPV).²⁶⁹

From the perspective of the community, main health issues include diabetes, obesity, cancer, cardiovascular disease, asthma, violence and behavioral health issues, including anxiety, depression and substance use.²⁷⁰ 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,

²⁶³ RWJ County Health Rankings, 2014, available at http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2014_NY_v2.pdf, accessed September 2014.

²⁶⁴ 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.

²⁶⁵ NYC DOHMH Epiquery System, Vital Statistics data, accessed August 2014.

²⁶⁶ US Census American Community Survey, 5-year table, 2008-2012.

²⁶⁷ 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.

²⁶⁸ 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.

²⁶⁹ Ibid.

²⁷⁰ NYAM primary data findings, September, 2014

²⁷⁰

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)

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”.²⁷¹

Furthermore, the policy environment reportedly 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).

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)

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

Impact for Project Selection

Domain 2 Projects

The high number of potentially preventable inpatient admissions, emergency visits, and potentially preventable readmissions in this area, suggests that systems transformation is needed to reduce these. 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.

While each PPS will be different, there are a number of resources in the borough that primary data analysis suggests could be galvanized or mobilized to improve care:

- Expanded access to reduce wait times and increase compatibility with work and child care schedules

But something good that some clinics are doing is that in several places, they're open until late until after six and also on Saturdays. That's good because you can go there instead of the Emergency Room where you'd be waiting until 1am and not be seen. It's a great thing. (focus group participant)

- Care coordination and linkages outside the hospital walls

The other thing that I've seen that works really well is the social work department building relationships outside the walls of the hospital. So it's not just giving a referral to the shelter. But it's actually getting to know the supportive housing provider where a lot of the clients come from. And then, when Kathy shows up, the social worker [in the hospital] can call the supportive housing provider and say, "Hey, Kathy is here again. What happened?" "Yes. She really needs to be there." "Well, I think she is going to have to be here for two to three weeks. The way it looks she's going to need surgery." "Okay, we'll hold her bed." ... So really expanding your team, your relationships. If they're going to refer to detox or treatment, you let the housing provider know. (key informant, housing)

- Comprehensive and accessible supportive housing that provides services on site for those that are high users of multiple systems, which might include health care, criminal justice system, shelter system, substance abuse services, and/or foster care.

The [supportive housing] staff is there for relapse. So, "You stop taking your meds," it's that staff that's going to know. Maybe it might be a neighbor who notices first, and it's reported to the case manager who comes up and has a relationship, and it's like, "Is everything okay? Do we need to put you in the hospital for a week?" But making sure that the main goal is housing stability, right? So doing everything they can so the person doesn't lose their apartment. Which would happen, or probably did happen in their past life, particularly with mental illness or substance abuse. You decompensate and there's nobody there to help you before you lose your apartment. So you end up in the shelter, the jail, the psych unit, before you can get back (Key informant, housing)

So what we've been advocating for... is creating a [supportive housing] system where eligibility looks at high users of multiple systems and vulnerability. Does it matter your diagnosis? You have a need. But the particular diagnosis doesn't exclude you or only include you in particular housing availability... So that domestic violence, criminal justice, people who don't meet chronic homeless because they're been in psych hospital, in jail, and bouncing around, should still be able to qualify if they're vulnerable (key informant, housing)

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.²⁷² In the Bronx, approximately 217,000 people are uninsured, accounting for approximately 10% of all the uninsured individuals in New York State.²⁷³ 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

²⁷² This project will also focus on low- and non-utilizing Medicaid beneficiaries.

²⁷³ US Census, American Community Survey, 5 year data, 2008-2012.

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 the Bronx may be undocumented.²⁷⁴ 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.²⁷⁵ 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%).²⁷⁶ 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 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.²⁷⁷

Despite health reform, data suggest that insurance coverage remains problematic (or is increasingly problematic) even for those eligible.²⁷⁸ Community members and key informants describe income restrictions for Medicaid as unrealistically low, and self-purchased coverage as too expensive for low-income populations, 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.²⁷⁹

Domain 3 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).²⁸⁰ 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.²⁸¹ 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

²⁷⁴ NYAM primary data findings, September, 2014.

²⁷⁵ US Census, American Community Survey, 5 year data, 2008-2012.

²⁷⁶ Ibid.

²⁷⁷ Ibid.

²⁷⁸ Ibid.

²⁷⁹ Ibid.

²⁸⁰ Ibid.

²⁸¹ 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.

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.²⁸² These areas also account for the highest proportion of potentially preventable emergency room visits.²⁸³

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.²⁸⁴ However, in the Bronx, 7.1% of all people report experiencing serious psychological distress, compared to 5.5% in NYC overall.²⁸⁵ 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, High Bridge-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.²⁸⁶ Low-income immigrant populations may have additional stressors of assimilation, as well as poorer access to care, due to insurance and language issues.²⁸⁷

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.²⁸⁸ 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.”*

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.)

²⁸² NYS DOH 2012.

²⁸³ NYS DOH 2012.

²⁸⁴ 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.

²⁸⁵ 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.

²⁸⁶ NYAM Primary Data findings, September, 2014.

²⁸⁷ Ibid.

²⁸⁸ 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

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;²⁸⁹ 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-morbidity between behavioral health and chronic physical health conditions for those currently utilizing behavioral health services.

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.²⁹⁰

Cardiovascular Disease

Heart disease is the top cause of mortality among the white, black, and Hispanic populations of the Bronx²⁹¹ and is recognized by community members as a major health problem. It is also second leading cause of premature death in the borough.²⁹² 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).²⁹³ 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.²⁹⁴ Within the broad category of heart health, the Bronx fares worse than NYC and NYS on all age-adjusted indicators.²⁹⁵

²⁸⁹ 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 co-morbidity Episode Disease Categories within a Major Diagnostic Category.

²⁹⁰ Ibid.

²⁹¹ New York City Vital Statistics, "Top Ten Leading Causes of Mortality 2012," accessed via the EpiQuery interactive tool, August, 2014

²⁹² 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

²⁹³ 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.

²⁹⁴ Ibid.

²⁹⁵ Ibid.

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 High Bridge – 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 and Kingsbridge-Riverdale areas and the highest in Highbridge, Bedford Park, Mott haven, Port Morris, Baychester, Wetchester 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 High Bridge–Morrisania to Fordham–Bronx Park.²⁹⁶ (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

²⁹⁶ 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.

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).²⁹⁷ (See Appendix B, Table 44.) Many community members see diabetes as their greatest health concern.²⁹⁸ 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%).²⁹⁹

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 1.13.³⁰⁰ (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.³⁰¹ (See Appendix A, Map 42.) These 493 hospitalizations are found in three clusters: from High Bridge-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) appears 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 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 High Bridge-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.

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.³⁰² 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

²⁹⁷ NYS Dept of Health 2012 data, accessed August, 2014.

²⁹⁸ NYAM primary data findings, September, 2014.

²⁹⁹ QARR, 2011

³⁰⁰ NYS Dept of Health 2012 data, accessed August, 2014.

³⁰¹ Ibid.

³⁰² NYAM primary data findings, September, 2014.

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 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 startlingly higher than the NYC overall rate of 426.91 per 100,000 and the NYS overall rate of 210.39 per 100,000.³⁰³ 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 2-5.³⁰⁴ 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.)

HIV

³⁰³ Medicaid Prevention Quality Indicators, 2012.

³⁰⁴ 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.”

The fourth leading cause of premature deaths in the Bronx is AIDS, accounting for approximately 30% of all such deaths in NYC.³⁰⁵ 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.³⁰⁶ Four UHF neighborhoods in the borough have a higher HIV/AIDS prevalence rate than the city as a whole: High Bridge-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).³⁰⁷ 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.³⁰⁸ (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).³⁰⁹ 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/High Bridge, and Mott Haven/ Hunts Point.³¹⁰ (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%).³¹¹ 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.³¹² 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 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

³⁰⁵ “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.

³⁰⁶ NYC DOHMH 2011

³⁰⁷ Ibid.

³⁰⁸ 2011 data, the latest year for which information is available, from the New York City Department of Health and Mental Hygiene.

³⁰⁹ 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.

³¹⁰ 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>

³¹¹ HIV Ambulatory Care Performance, 2011

³¹² QARR, 2012

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.³¹³ 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%. 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). 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. (See Appendix B, Table 65.) The highest fertility rates are found along the western side of the Grand Concourse from High Bridge 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.³¹⁴

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%).³¹⁵ 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.³¹⁶ 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. (See Appendix B, Table 72). Though, these racial and ethnic disparities were narrower in the Bronx than in NYC and NYS in the same time period.³¹⁷

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

³¹³ NYS Vital Statistics, 2010-2012 3 year data, <http://www.health.ny.gov/statistics/chac/perinatal/>, accessed September 2014.

³¹⁴ NYS Vital Statistics, 2012

³¹⁵ NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

³¹⁶ Ibid.

³¹⁷ 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.

(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. (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.

Domain 4 Projects

Domain 4 projects are intended 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, such as cancer, (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, incidence and prevalence of HIV and other STDs. Among the population, as many as one in five adults in some neighborhoods of the Bronx report being a current smoker.

(1) Promote Mental Health and Prevent Substance Abuse

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.³¹⁸ However, in the Bronx, 7.1% of all people report experiencing serious psychological distress, compared to 5.5% in NYC overall.³¹⁹ 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, High Bridge-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.³²⁰ Low-income immigrant populations may have additional stressors of assimilation, as well as poorer access to care, due to insurance and language issues.³²¹

You've got to be somebody, somebody who [was] a doctor or military for years. You come into this country and become a cashier. If you are not mentally prepared for this, this is not really a culture shock. But this is a big shock ...But sometime people don't want to talk about it. People are keeping this to themselves, but at some point you'll see they'll start talking by themselves, and start doing some things (immigrant focus group participant)

³¹⁸ 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.

³¹⁹ 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.

³²⁰ NYAM primary data findings, September, 2014.

³²¹ Ibid.

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.³²² In addition, behavioral health issues generally carry greater stigma than other health concerns, which tends to limit use of services.

When you grew up without this and you're a certain age, it's hard to accept getting the help. So I think that's part of the problem also. So even if it's open to you, if you weren't brought up to believe that you can go to someone else for help or therapy, it was never a part of our culture (focus group participant)

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 families try to address problems internally.³²³

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.³²⁴

(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.”³²⁵ 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%).³²⁶ (See Appendix B, Table 34.)

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

³²² NYAM primary data findings, September, 2014.

³²³ Ibid.

³²⁴ Ibid.

³²⁵ New York's MRT Waiver Amendment Delivery System Reform Incentive Payment (DSRIP) Plan, Attachment J. "NY DSRIP Strategies Menu and Metrics," 2014.

³²⁶ 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

The leading cause of premature death in the borough is cancer.³²⁷ (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.³²⁸ (See Appendix B, Table 66.) However, the borough lags in other related risk factors, such as obesity.

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.³²⁹ (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.³³⁰ (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).³³¹

Focus group participants attributed obesity to a number of causes, including the limited access and relatively high cost of healthy food.³³² Long work hours and lack of home cooked meals were also mentioned.

You're selling stuff on the street there from seven o'clock to seven o'clock at night. You can't take a two hour break because you're gonna lose a client. Right? So then all that time you don't seem to eat anything, because you don't want to miss a dollar. You've got a bill to pay. You have to work six days in a week to get maybe less than \$300.00. If you don't come to work, you don't get paid that day So then when you finish at night not only are you exhausted physically and mentally, but you need to eat. And guess what we do. We walk into the restaurant and get a whole plate of food (focus group participant)

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.³³³ Focus group participants also described the challenges of changing dietary behavior in general—and of losing weight, in particular—despite obvious negative

³²⁷ Vital Statistics Data as of March, 2014, New York State Department of Health - Bureau of Biometrics and Health Statistics.

³²⁸ 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."

³²⁹ Community Health Survey, 2012. New York State Department of Health, 2012.

³³⁰ 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.

³³¹ 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.

³³² NYAM Primary data findings, September 2014.

³³³ 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.

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 messaging from providers, as well as improved access to healthy food, was also recommended. 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.³³⁴

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

As noted above, the fourth leading cause of premature deaths in the Bronx is AIDS, accounting for approximately 30% of all such deaths in NYC.³³⁵ 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.³³⁶ Four UHF neighborhoods in the borough have a higher HIV/AIDS prevalence rate than the city as a whole: High Bridge-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).³³⁷ 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.³³⁸ (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).³³⁹ 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/High Bridge, and Mott Haven/ Hunts Point.³⁴⁰ (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%).³⁴¹ 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.³⁴² 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

³³⁴ 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.

³³⁵ "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.

³³⁶ NYC DOHMH 2011

³³⁷ Ibid.

³³⁸ 2011 data, the latest year for which information is available, from the New York City Department of Health and Mental Hygiene.

³³⁹ 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.

³⁴⁰ 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>

³⁴¹ HIV Ambulatory Care Performance, 2011

³⁴² QARR, 2012

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. ... We have to come up with better technology than we're using because they're still getting Hep C from each other (key informant, community based organization)

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 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.

(4) Promote Healthy Women, Infants and Children

The domain 4 project on this topic is specifically focused on reducing premature, or preterm, births.³⁴³ 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%).³⁴⁴ 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.³⁴⁵ 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.³⁴⁶ 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

³⁴³ NYS DOH MRT Waiver DSRIP Program “Attachment J – NY DSRIP Strategies Menu and Metrics”

³⁴⁴ NYS Vital Statistics data as reported on the NYS Prevention Agenda 2013-2017 State and County Dashboard.

³⁴⁵ Ibid.

³⁴⁶ Ibid.

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.³⁴⁷

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.³⁴⁸ (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.³⁴⁹

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.³⁵⁰

Synergies with the Local Department of Health

As noted above, a possible source for alignment of resources and efforts to address both health care access and the determinants of poor health may be the new NYC DOHMH Center for Health Equity. DOHMH will launch the Center in 2015 “to address health disparities that result in an excess burden of ill health and premature mortality in New York City’s communities of color. The Center will focus on three key areas: leveraging policy changes to better integrate primary care and public health to serve the health needs of communities, building interagency collaboration to address the root causes of health disparities, and increasing access to care by making services more accessible in neighborhoods with the worst health outcomes.”

SECTION E: SUMMARY CHART OF THE PROJECTS TO BE IMPLEMENTED (NOT APPLICABLE)

Guided by the findings of this borough-wide CNA report, and the additional analysis that is available in the detailed data tables in Appendix B., each PPS will be selecting their own projects based on their service area within the borough, their particular patient demography, and the existing infrastructure of the PPS partners. See Appendix B for a summary chart of the currently available DSRIP Measure Preliminary Baseline Findings.”

³⁴⁷ 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.

³⁴⁸ NY State Vital Statistics, 2012

³⁴⁹ Ibid.

³⁵⁰ NYAM primary data findings, September 2014.

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 promotion and health care needs 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, High Bridge, 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 were 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/wybyq-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

- Appendix A. Maps
- Appendix B. Tables with data by State, NYC, Bronx, and zip code, UHF neighborhood or community district, where available
- Appendix C. Primary Data Collection Instruments and Information
 - List of Key Informants
 - List of Collaborating Organizations (Focus Groups and Community Surveys)
 - Instruments and Guides:
 - Resident Survey
 - Key Informant Interview Guide
 - Key Informant Demographic Survey
 - Focus Group Guide
 - Focus Group Demographic Survey
 - Data Analysis Codebook
- Appendix D. Primary Data Findings (forthcoming)

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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