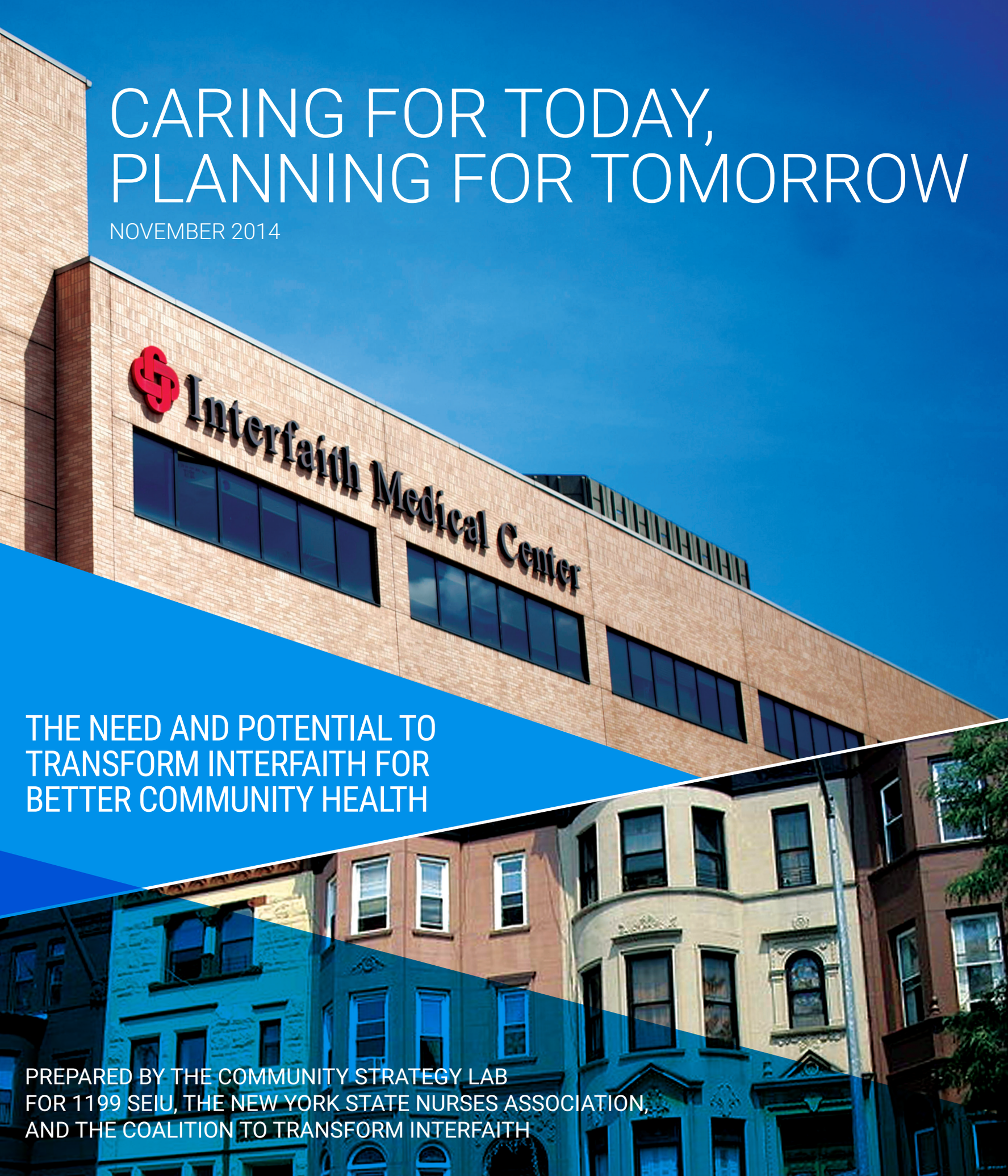
CARING FOR TODAY, PLANNING FOR TOMORROW

NOVEMBER 2014



THE NEED AND POTENTIAL TO TRANSFORM INTERFAITH FOR BETTER COMMUNITY HEALTH

PREPARED BY THE COMMUNITY STRATEGY LAB
FOR 1199 SEIU, THE NEW YORK STATE NURSES ASSOCIATION,
AND THE COALITION TO TRANSFORM INTERFAITH

This project was made possible by generous support from 1199 SEIU and the New York State Nurses Association.

This report was prepared for 1199 SEIU, the New York State Nurses Association, and the Coalition to Transform Interfaith by a team at the Community Strategy Lab, a research and planning organization that works with low-income communities to develop and implement strategies that promote solutions on a range of issues from health to economic development to housing. It was founded b y current and former MIT faculty and students. The team that worked on this project are:

J. Phillip Thompson, co-principal investigator; Associate Professor of Urban Planning, MIT
Mariana Arcaya, co-principal investigator; Yerby Postdoctoral Research Fellow, Harvard University
Barbara Caress, co-principal investigator
Stacey Sutton, co-investigator; Assistant Professor of Urban Planning, Columbia University
Saleema Moore, co-investigator
Dara Yaskil, project manager

Graphic design by Sean Coté at Co.Open.

Acknowledgments:
We are grateful for research and mapping support from Matthew Do, Angela Morris, Alina Schnake-Mahl, Halley Brunsteter-Reeves, and Karuna Mehta. In addition, we thank Cheryl Powell for her enormous assistance in distributing our survey to doctors in and around Interfaith Medical Center. We are especially thankful to the Planning Committee of the Coalition to Transform Interfaith, under the leadership of Bruce Richard, Eliza Carboni, and Roger Green, for their helpful feedback on earlier drafts, as well as their tremendous support in organizing events that helped us reach the ears of Central Brooklyn's elected officials, clergy and community organizations. For organizing the elected officials of Central Brooklyn around our project, we are indebted to the indomitable Assemblywoman Annette Robinson. Lastly, our thanks goes to George Gresham and Jill Furillo for their leadership and vision.

A COMMUNITY HEALTH MANIFESTO

By Bruce Richard

Hundreds of People walking, running, biking together
Not just standing and living in the same space
But people connecting weekly, perhaps daily
Women, men, and children
Conveying their intent to take better care of themselves
Hundreds of hearts attaching themselves
Learning to value, to trust, to know and have confidence.

Bodies vibrating the ground together
Crossing into different cultures
Revealing the precious diversity
Holding and elevating each other
Encouraging the success of the other
Becoming a viable alternative
To the violence, ignorance and fear
The young, the seniors, the ill, the brave, the courageous, the locked out
The visibility of our social experience evolving together
Resuscitating the vegetables, the fruit, the nourishment
And the moisture we need.

Overcoming the many forms of pollution
People working in concert
Creating a new rhythm
Having a healing impact
No longer drowning
In the misery of poor health and social injustice
No longer waiting for someone else to fix us
But rather doing something ourselves
Something within our realm of influence
Standing up even though we can't physically stand
Demonstrating to the world how to stand
Achieving together what is more difficult to achieve alone
Making commitments and promises to each other
Giving community the incentive to operate as it should.

Table of Contents

SUMMARY OF REPORT

Introduction

The communities that surround Interfaith Medical Center in Central Brooklyn[1] are in serious need of better health care. The current healthcare delivery system within these communities has failed to meet residents' health needs and improve their overall health outcomes. More significantly, as research has shown that health outcomes are powerfully determined by the social and economic conditions of places, decades of discriminatory policies towards racial and ethnic minorities have resulted in a lack of investment in the development and preservation of quality housing, the creation of living wage jobs, and the conservation of clean air in the area surrounding Interfaith.

Large-scale efforts are currently underway to transform the healthcare delivery system across the borough. However, it remains uncertain as to how residents in this community will benefit from these changes under the current plans. Therefore, to better understand the drivers of residents' health outcomes, the costs and benefits to providing better health services, and how efforts in and around Interfaith Medical Center can dovetail and build off borough-wide efforts to transform Brooklyn's healthcare delivery system, 1199 SEIU and the New York State Nurses Association, in partnership with the Planning Committee of the Coalition to Transform Interfaith Medical Center, commissioned the Community Strategy Lab in June 2014 to carry out the following:

1. A community health needs assessment of the communities that surround Interfaith Medical Center
2. An economic impact analysis of Interfaith on the surrounding area
3. An assessment of Interfaith's post-bankruptcy position
4. An assessment of the community's assets in creating a robust and networked system of care.

This study seeks to inform a planning process that will create a plan for how the hospital can be reconstituted into a health care institution that is able to anchor broader health-promotion efforts and transform the existing health care delivery system in the community.

Recommendations

With the belief that adequate health is fundamental to creating and sustaining thriving communities, the following is recommended to create not only a more responsive health care delivery system, but also a healthier living environment:

IMMEDIATE

- *Allow up to three years for a transformation process while keeping services funded*

  The State of New York should commit to adequate funding of health care services at Interfaith long enough to allow an intensive planning and community engagement process to transform the facility from an inpatient focused, limited care facility to a hub for the promotion of community health and wellness. This objective is fully consistent with the State's Delivery System Reform Incentive Payment program (DSRIP)[2]:

  > To transform the system, DSRIP will focus on the provision of high quality, integrated primary, specialty and behavioral health care in the community setting with hospitals used primarily for emergent and tertiary level of services (DSRIP Project Toolkit)

- *Appoint additional members to the Interfaith Board of Trustees*

  The Board will become the legally controlling entity once the term of the Temporary Operator expires, which will happen either at the end of November, 2014, or, if extended with cause, in May 2015. There is a pressing need to augment the 3-person Board appointed by the NYS Department of Health with people who have both the requisite local knowledge and community

interest to make the very difficult decisions that lay ahead. The By-laws allow for a Board of 9 members. The additional six members should represent the community of patients and potential users as well as committed staff of the institutions.

WHAT THE COMMUNITY NEEDS

Health Care

- *Robust primary and preventative care services located throughout the community.*

  Bedford-Stuyvesant/Crown Heights houses a surprising number of office-based practitioners, two Federally qualified health centers, a nearby City District Health Office and a small network of clinics sponsored by Interfaith. While, at first glance, it may look like a community with an adequate primary care complement, data suggest that residents' health is suffering due to a lack of preventative and primary care. The community experiences high rates of preventable disease, and uses emergency department services to treat health conditions that would be better managed in outpatient and primary care settings. In particular, better connections to community-based preventative and primary care services could help Bedford-Stuyvesant/Crown Heights bring down its high rates of premature death, hospital utilization for uncontrolled diabetes and related complications, unexpectedly high hospital admission rate for heart failure, and excessively high ED utilization for asthma-related emergencies. The disconnect can be attributed to the absence of 24/7 access to the kind of community connected patient centered primary care that can help cure acute illness and prevent disability and death due to chronic disease. The appropriate response to these dismal health statistics is preventative care and services embedded within the community, as well as primary care that is coordinated and available when it is needed.

- *Prenatal care and maternity services.*

  The most tractable element of premature death is infant mortality – death before an infant reaches his or her first birthday. Bedford-Stuyvesant/Crown

Heights had among the highest infant mortality rates recorded in the city, and twice the rate registered in Ridgewood, Queens, a neighborhood just 20 minutes away. High rates of infant deaths are closely associated with inadequate prenatal care and inaccessible maternity services. There were 14,000 babies born to residents of the Interfaith community between 2010-2012. Few were born at Interfaith. Interfaith Medical Center closed its maternity services in 2004. Nearby St. Mary's, an alternative source of obstetric care, closed in 2005. Respondents to both the Need for Caring Survey of community residents, as well as a survey of office based physicians conducted for this study, named obstetrics as a key missing health service. Whether the maternity service can be reconstituted on the Interfaith campus needs further evaluation. However, the need for prenatal care that is integrated with delivery services is undeniable.

- *Vastly expanded chronic disease prevention programs and community-based care management to help prevent chronic disease and to assist those who are afflicted to live long and healthy lives.*

  Most diabetes is preventable. Yet the disease afflicts one in seven of the neighborhood's residents. With good care and careful self-management many of the consequences of diabetes are avoidable. The evidence in the Interfaith community points to the absence of both preventative and effective treatment. There are many more observed than expected cases, and, among those diagnosed, the incidence of uncontrolled diabetes is much greater than it should be. One of the most devastating consequences is a disproportionately high rate of uncontrolled diabetes and lower-limb amputations. Similarly, there is a disproportionately high rate of people with heart disease and hypertension. According to the CDC, the key to chronic disease control begins with prevention: "Lack of exercise or physical activity, poor nutrition, tobacco use, and drinking too much alcohol—cause much of the illness, suffering, and early death related to chronic diseases and conditions."[3] Once someone becomes ill, the key to successful treatment is self-management – almost impossible to do alone. The development of community care and peer-to-peer programs supported by a corps of committed medical care and public health providers that are sensitive to patients' culture, life and family obligations is critical.

- *Expanded outpatient medical home services for people with psychiatric and substance abuse problems.*

  By far the most frequent reasons for admission to Interfaith Medical Center in 2013 were mental health and substance abuse disorders. Of the 287 beds at Interfaith, 160 of them are designated for people with psychiatric and substance abuse issues. By the time they were admitted, many needed 24/7 care.

  There is a growing body of evidence that community-based programs can divert many admissions and prevent re-admissions. A 2007 study of NYS Medicaid patients[4] with mental illness and substance abuse problems found that such people were more likely to be admitted to a hospital than people with other diagnoses and 3.5 times more likely to be re-admitted. The admissions were not a consequence of more intense disease and disability, but rather a result of a wide diversity of care needs and a fragmentation of services. The best developed programs for people with behavioral health problems are individually tailored and managed -- integrating community and institutional behavioral health services with medical care and social services, housing and legal assistance. Health Homes are described by the NYS Department of Health as "a care management service model whereby all of an individual's caregivers communicate with one another so that all of a patient's needs are addressed in a comprehensive manner. . . When all the services are considered collectively they become a virtual Health Home."[5] Only 655 residents of the Interfaith community are receiving services from the Maimonides health home. This is only 15 percent of the unique individuals treated as in or outpatient at the hospital during the year 7/13-6/14.

- *A community health system premised on the understanding that health care is only one component of health.*[6]

  While much is known about the health status and health needs of the residents of Bedford-Stuyvesant/Crown Heights, much remains unexposed and unexplored. A successful community health action plan requires engaging all the stakeholders – Interfaith nurses, doctors and health workers, community health and mental health providers, the New York City's Department of Health and Mental Hygiene (DoHMH), local elected officials, lead-

ers of religious, educational, business and community organizations, and, most importantly, community residents themselves. A first step might be to develop a community health agenda through a series of meetings and forums to develop a specific Bedford-Stuyvesant/Crown Heights agenda. The starting point could be the NYC DoHMH Take Care New York's Ten Priority Areas and Measures for Success.[7] It has several particular goals that could be tailored to the Interfaith community's needs, including lowering adult obesity rates, reducing premature deaths from cardiovascular disease, and reducing asthma triggers such as mites, mold and air pollution.

Economic Development

- *An anchor institution that buys from and hires local people, as well as helps develop local supply businesses.*

  Currently, many households, particularly those of color, in Central Brooklyn experience economic instability. The median income in the communities that surround Interfaith is lower than the borough and city overall, and, when broken down by race, significant racial inequality is revealed. In 2010, Black and Latino households earned 45 percent of the median income White and Asian households earned in the study area. In addition, the area has a high rate of unemployment, particularly among people of color. Central Brooklyn has significant financial, organizational, and social assets that, if leveraged, could provide a strong foundation for healthy and sustainable community development, and, ultimately, a reduction in racial health and economic disparities. Interfaith, which is one of the largest employers in Central Brooklyn and an important economic engine for the local economy, can anchor broader health promotion efforts and increase local economic activity through the purchasing of supplies from local businesses, the hiring and training of local residents to work in sectors related to health, and the development of local businesses that not only provide supplies for the hospital, but address the health needs of residents. Interfaith can partner with other anchor institutions in the area, such as Medgar Evers College, to realize

these economic development goals.

- *An institution that promotes energy retrofits and healthy homes in its surrounding communities.*

  Energy is a major and constant cost in all communities. Central Brooklyn has a large number of old buildings and large public and private buildings that are highly energy inefficient. Energy retrofits in such buildings typically save 40 percent or more on monthly energy bills. Interfaith, in partnership with Medgar Evers College and area high schools, can create a training program where local residents in Central Brooklyn can become green "experts" in energy retrofits. Overall, New York City has 900,000 buildings in need of retrofits. Workers and local businesses (plumbers, electricians, HVAC, carpenters, engineers, architects) trained in energy retrofitting in Central Brooklyn will have a market for their services in the entire region.

  Residents' physical environments can have significant impacts on their health, and a high percentage of the buildings in the study area, particularly in South Crown Heights, are in poor physical condition and have three or more maintenance deficiencies. Therefore, when buildings are opened up for energy retrofits, it would be cost effective, in many cases, to retrofit the buildings for asthma prevention (e.g., removing mold and closing cracks and holes). While asthma rates are lower in the study area than the rest of the borough and NYC, Interfaith experienced higher rates of asthma-related ED usage in comparison to neighboring areas. This approach could reduce hospitalizations due to asthma by fixing the "sick" buildings generating asthma upstream.

- *An institution that views and encourages affordable housing as a health policy*

  Economically, high housing costs creates unhealthy stress. In many cases, high housing costs can force residents to make choices between rent and food or medication, as well as to move often, making it difficult to manage chronic illnesses and hold stable jobs. Many hard-working families and long-time residents are finding it increasingly difficult to afford housing in the area, in large part due to gentrification. While a significant portion of the housing stock is rent-regulated, over half of residents in the study area experience rent-burdens. In the past, union pension funds have financed affordable housing developments, such as Coop City in the Bronx and Rochdale

Village in Queens, which continue to be bastions of stable affordable housing today. Labor pension funds can play a similar role today and, beyond that, they can utilize different ownership structures, such as land trusts, to remove land off the speculative market and preserve the affordability of homes for the long-term.

Understanding the Community's Health Needs

There is an urgent need to restructure the health care delivery system in Central Brooklyn. Previous studies[8] aimed at informing restructuring efforts describe an inefficiently used, and nearly bankrupt, system serving the health care needs of a socially vulnerable and unhealthy population. These studies overwhelmingly agree that safety net hospitals in Central Brooklyn are not currently equipped to deal with the complex health issues facing the communities they serve. Interfaith Medical Center suffers from low occupancy rates, financial insolvency, and low patient satisfaction with care, the facility, and interactions with providers. Medicare and Medicaid, which account for over 93 percent of patients' source of payment, pay more modestly than commercial insurers, but require careful financial management to ensure hospitals remain solvent. Despite these challenges, Central Brooklyn residents rely heavily on local health care resources. It is clear that residents want more, not fewer, high-quality and better coordinated care options close to home.

KEY FINDINGS

- The neighborhoods surrounding Interfaith suffer disproportionately high rates of serious chronic diseases, including hypertension and diabetes, that have their roots in the physical environment and the economic and social conditions in the community.
- Services provided at Interfaith are poorly matched to meet the community's health needs.
- Opportunities exist to reduce hospital utilization and better control chronic conditions among study area residents.

Our study builds on the previous assessments to more deeply explore underlying population health needs in the neighborhoods surrounding Interfaith Medical Center, including upstream community risk factors and social determinants of health, in order to re-envision Interfaith's potential to improve community health. We reach three main conclusions. **First**, the neighborhoods surrounding Interfaith Medical Center ("the study area") suffer disproportionately high rates of serious chronic diseases, including hypertension and diabetes, that have their roots in

the physical environment and economic and social conditions in the community. **Second**, services provided at Interfaith Medical Center are poorly matched to meet the community's health needs. **Finally**, opportunities exist to reduce hospital utilization and better control chronic conditions among study area residents. We argue that Interfaith has the potential to serve as a community health hub in Central Brooklyn that can 1) more efficiently leverage and coordinate community and hospital resources, 2) address the community's most prevalent and serious health problems, preventing debilitating and expensive disease complications and avoidable hospital utilization, and 3) continue to provide good health care jobs for the community's workforce.

Community health risk factors and needs

Health does not begin or end at the hospital. In fact, health care explains only about 10 percent of premature mortality in the United States. Much more important drivers of health include social and economic conditions; the social and physical environment, and individual behaviors, choices and constraints, which directly impact health through stress pathways and other mechanisms. Chief among the myriad "social determinants of health" are income, employment, housing conditions, community safety, and other psychological stressors such as various forms of discrimination.

Central Brooklyn has long been fraught by concentrated poverty, high rates of under- or unemployment, low wages, and other social disadvantage, all of which exacerbate health risks. The neighborhoods surrounding Interfaith Medical Center are historically predominantly minority and poor communities, although they are rapidly gentrifying. Over 40 percent of working age adults are either unemployed or not in the labor force, over 36 percent of children live in poverty, and income is highly unequal by race. Research shows that poverty, unemployment, poor quality and unaffordable housing, violence, and discrimination put people at risk of weight gain, unhealthy eating behavior, poor cardiovascular health, diabetes, substance use, injury, exposure to allergens and toxins that exacerbate asthma and allergies, depression, anxiety, and a host of other health problems that are common among local residents. For example, roughly 14 percent of local adults report that they have

had diabetes (compared to about 10 percent citywide), and over 35 percent report that they have had high blood pressure (compared to about 28 percent citywide). Obesity affects almost one-third of adults in the study area, and another 30 percent are overweight, but not obese. Compared to the rest of New York City, the area surrounding Interfaith is among one of the worst-off neighborhoods in terms of overweight/obesity.

Development pressures and pockets of rising property values in the local area create additional pressures on existing residents, with nearly a third of residents spending at least half of their incomes on housing. In some parts of the study area, roughly 15 percent of renters live in overcrowded housing, and over a fifth live in units that are in poor physical condition. Cracks or holes in the walls, inadequate heat, rodent and cockroach infestations, peeling paint, and water leaks are more common in the neighborhoods surrounding Interfaith than in most other parts of Brooklyn or New York City, due in part to the age of housing in the area. New and Old Law tenement buildings built before 1929 account for 40 percent of the housing stock in our study area, compared to less than 30 percent in New York City overall, and is generally poorly maintained by landlords. Tied to these poor housing conditions, we see some of city's highest neighborhood rates of elevated blood lead levels among children, and higher than expected emergency department visits for asthma.

Local residents die at higher rates in the study area than do other people of the same age in the rest of the city or borough, on average. Local residents are also more likely to die young than are people in other neighborhoods. The neighborhood surrounding Interfaith ranked 38 of 42 in terms of premature death, with heart disease, cancer, HIV and HIV-related complications, and homicide costing residents more life years than any other causes, according to the most recently available data. Heart disease and cancer were the biggest killers in the study area overall, followed by flu, diabetes, hypertension, and stroke.

Vital statistics on birth paint a similarly urgent picture of disproportionately poor health in the areas surrounding Interfaith. Over 14,000 babies were born in the 5 zip-code study area between 2010 and 2012, accounting for about 12 percent of all births in the borough. These babies had worse outcomes, on average, than Brooklyn babies overall. While 11.3 percent of Brooklyn babies were born prematurely, about 15 percent of those born in the study area were premature. The percent of underweight babies born was also higher than in the borough overall; about 12 percent of study area babies were underweight compared to roughly 8 percent of all

Brooklyn babies. The study area's infant death rate was also among the city's highest. This may, in part, reflect low rates of prenatal care and high rates of teen pregnancy, which are both risk factors for infant mortality. Low birth weight and preterm birth, which are disproportionately common in the study area, also likely contribute to the high infant mortality rate.

Hospital Utilization

Local hospital utilization patterns generally reflect struggles with the types of health problems described. For example, circulatory diagnoses (e.g., heart problems) were the largest contributor to hospital admissions among Brooklyn residents in 2012, followed by childbirth and admissions for newborns. Respiratory issues, which include asthma, were the fourth most common inpatient diagnostic category. Narrowing in on health care utilization patterns among study area residents, we use 2012 zip-code level data on chronic conditions among the neighborhood's Medicaid beneficiaries to help us understand what conditions are responsible for the largest number of ED visits and hospitalizations. While many local residents are not Medicaid beneficiaries, these data allow us to compare the relative importance of various conditions to hospital utilization among a large and vulnerable group. Based on an analysis of Medicaid beneficiaries, hypertension, asthma, and diabetes were the three most common chronic conditions responsible for hospital admissions in the study area in 2012. Hypertension and asthma accounted for nearly twice the number of ED visits as the next most common causes in 2012. In the case of asthma, the number of ED visits far exceeded the number of beneficiaries with the condition, showing that, on average, beneficiaries with asthma made multiple trips to the ED each year to help control their condition.

Psychological and behavioral conditions were also important contributors to hospital usage in Brooklyn overall and in the local area. Mental disorders, while common causes for admissions in Brooklyn, accounted for only about one third the number of admissions as contributed by circulatory problems. Drug and alcohol discharge counts were less than a quarter of the number attributed to the circulatory system. Mental and behavioral health issues were also common causes of admissions and ED visits among Medicaid beneficiaries in 2012. Depression and

chronic alcohol abuse were among the top 10 contributors to Medicaid ED visits and hospitalizations in the study area, though neither matched the contributions of hypertension, asthma, or diabetes.

Health care services at Interfaith

In stark contrast to community members' hospital utilization, inpatient diagnostic categories at Interfaith are dominated by psychological and behavioral health issues. Among Interfaith's discharges, mental disorders contribute the largest number of patients, followed by drug- and alcohol-related admissions.

While circulatory disorders, which include heart disease, and respiratory disorders, which include asthma, were also among Interfaith's most common inpatient diagnostic categories, they accounted for a much smaller proportion of discharges than average in the borough's hospitals. Interfaith Medical Center currently provides no obstetrical services, resulting in an extremely low percentage of admissions for childbirth.

The mismatch between residents' needs, current hospital utilization patterns, and Interfaith's services is reflected in facility utilization data across the study area. Less than 10 percent of hospital discharges among neighborhood residents were from Interfaith Medical Center in 2011. In other words, in 90 percent of cases, hospitalizations of residents occurred at other facilities. While no single hospital met most of the community's need, Kings County Hospital Center and New York Methodist Hospital represented higher proportions of local residents' discharges than did Interfaith. Utilization rates among the privately insured are even lower, in line with Interfaith's reputation as a hospital of last resort among community members. Among two of the area's largest representatives of union workers, 1199 and 32BJ, less than 4 percent of local beneficiaries' hospital admissions were to Interfaith Medical Center last year.

In the communities that surround Interfaith, the percent of residents who were uninsured dropped steeply from 17 percent in 2012 to just 6 percent in 2014. While this rapid and significant improvement marks a success for the Affordable Care Act, additional choice in health care providers afforded by improved coverage may spell more trouble for Interfaith. Newly insured residents who otherwise may have

depended on Interfaith could now seek care at facilities offering a wider range of services and a better reputation. Regardless of the fact that residents are choosing to go elsewhere for their healthcare services, healthcare outcomes in the community remain poor and better local healthcare services are desperately needed.

Brooklyn's Health Care Policy Environment

Brooklyn is at one end of New York's health care/hospital policy conundrum. The borough is under-resourced (and probably under-bedded) while at the same time it is home to a substantial number of failing hospitals. The question of why this might be so is rarely asked. Current state policy makers (who have virtually all the regulatory authority in NY) are not particularly focused on Brooklyn, but on how to make New York's health care system more effective and less costly – a process embedded in their Delivery System Reform Incentive Payment program (DSRIP). When challenged about the ailing state of Brooklyn's hospitals today, State officials express the hope that the system-wide fix will result in enough of a transformation to save those hospitals that ought to be saved.

Three years ago, in November 2011, the Medicaid Redesign Team (MRT) Brooklyn Workgroup, appointed by the Cuomo administration, portended the transformation that would likely ensue in Brooklyn's health care system:

> Brooklyn's healthcare delivery system is at the brink of dramatic change – change that will be characterized either by a reconfiguration

KEY FINDINGS

- Brooklyn's health care system is under-resourced and home to a substantial number of failing hospitals
- The Federal government advanced $8 billion in Medicaid payments to assist the State in reconfiguring its health care delivery system.
- The Delivery Reform Incentive Payment Program (DSRIP) is intended to reduce avoidable and preventable hospitalizations and ER usage by Medicaid recipients
- Successful coalitions of hospitals and other providers will be entitled to additional Medicaid payments.
- If Interfaith still needs additional assistance after it has spent its interim assistance cash, it will need to qualify for DSRIP payments.

of services and organizations to improve health and health care, or by a major disruption in services as a result of financial crises at three hospitals.[9]

However, the MRT's most important proposals to salvage Brooklyn's voluntary hospital system were not realized. Interfaith, Wyckoff and Brooklyn Hospital were not merged into a single facility under Brooklyn Hospital's tutelage. Wyckoff's new leader pulled out of the discussion. Many in the Interfaith community objected to the proposed subordination and possible closure under Brooklyn Hospital control. In the end, no agreement between the two hospitals was reached.

In June 2014, Interfaith and other seriously ailing Brooklyn hospitals were awarded millions in short term operating assistance from the $8 billion pledged by the federal government to assist the State in promoting the redesign of its health care (particularly hospital) systems. DSRIP is the centerpiece of that plan, and has two elements. First, to reduce projected spending by about 7 percent or $17 billion over 5 years. Second, to reach the spending targets: the State's Medicaid providers, led by broadly defined 'safety net' hospitals, would be rewarded for reconfiguring their care to achieve a 25 percent reduction in avoidable and preventable hospital admissions and emergency room use.

The reconfigured system is expected to be so well-balanced that it will be right-sized and self-sustaining. Given the enormous amounts of money passing through the health system, it is expected to generate enough revenue to keep any 'needed' hospitals open.

DSRIP offers a menu of 43 or so projects that span the spectrum of evidence-based care practices that the hospitals organized together and with other providers to programs that community-based organizations might implement. An example of an initiative is sponsorship of greatly enhanced community based primary care and the development of integrated programs for people who are homeless and have substance abuse issues. Successful groups would be rewarded with supplemental Medicaid payments, which the State would make available to support the development of activities that are designed to eventually curtail Medicaid spending. How much a particular institution will derive from participation in the DSRIP process depends upon the number of Medicaid and uninsured residents that are served by that hospital, the value of the particular set of projects, and the hospital's role in meeting the group's objectives.

There were 7 competing DSRIP planning entities in Brooklyn. Interfaith was part of two, but the hospital's temporary leadership was most invested in the application made by SUNY Downstate Medical Center, which was recently withdrawn. The current application Interfaith is part of was made by Maimonides. However, it is currently slated to play a very minor role in the PPS. Whether it will now have a more substantial relationship with the Maimonides-led PPS or stay on the sidelines is yet to be determined.

History and Context

Formed by a marriage arranged by the NY State Department of Health in 1979, Interfaith Medical Center was an unlikely coupling of two venerable Brooklyn institutions: St. John's Episcopal Hospital and Brooklyn Jewish. St. John's Episcopal Hospital opened its doors under the name Charitable Hospital in 1851 – a church run home for destitute 'incurables.' Rebuilt several times, St. John's Episcopal Hospital took shape as a recognizable hospital by 1881. Brooklyn Jewish was organized shortly after the turn of the last century when the 1903 opening of the Williamsburg Bridge connected Brooklyn to the poor Jewish population living in the Lower East Side. Tens of thousands streamed across the river to live in Brooklyn.

KEY FINDINGS

- Interfaith was formed through a merger of St John's Episcopal and Brooklyn Jewish, two venerable but failing hospitals.
- Both the State and Federal governments supported the merger, with expectations that it would develop a new, viable health care model.
- Over the past 22 years, the hospital has encountered numerous financial crises that have helped to set up its current fiscal problems.

St. John's Episcopal and Brooklyn Jewish were two of the largest hospitals and most significant employers in Brooklyn, with close to 4,000 workers combined. Both developed into major teaching centers with celebrated nursing schools and large postgraduate house staff programs for interns and residents. Even the world famous Albert Einstein traveled to Brooklyn for surgery in 1949. Yet neither had the resources to sustain these institutions as post-WWII hospital care became more complex and expensive, and private charity was insufficient to keep up with rising costs. There was a brief respite in their unrelenting appeals after the 1965 passage of Medicaid and Medicare. But it was soon apparent that there were still far too many people left out of insurance coverage, particularly in the working class African American and immigrant communities that depended on these hospitals. By the late 1970s, the hospitals were gasping for air – Brooklyn Jewish was on the brink of bankruptcy and St. John's required an ever-increasing subsidy from the Diocese.

With a $14 million federal grant to encourage the development of more robust community primary care and reduced inpatient capacity, the hospitals were merged. In 1982, they became Interfaith Medical Center. It was smaller by 300 beds and staffed by 800 fewer workers. A new Board of Trustees with equal representation of the two hospitals was established. Both institutions formally disassociated from their sectarian sponsors and benefactors -- the Federation of Jewish Philanthropies and the Episcopal Church Charity Foundation. The new hospital was launched debt free, but with few assets of its own to fall back on if the combination of patient care reimbursement and grant funding were to fall short.

Several nearby primary care clinics were created but the hospital never had a significant period of fiscal health. With downsizing came a concomitant reduction in patient service revenue. Expenses exceeded income from the start. The initial grant did not cover the operating deficit for long. It was expensive and inefficient to run a hospital at two locations separated by a distance of a mile and a near century of competing hospital cultures and systems. The crisis of AIDS and a crack epidemic increased the need for services, but within 10 years Interfaith was in very serious trouble.

"A New Beginning" proclaimed banners hung in the lobbies of both buildings commemorating the start of a 4-phase project to unite Interfaith into one, state-of-the-art, hospital campus on the St. John's site at 1545 Atlantic Avenue. The project had been enabled by a legislative change in the Dormitory Authority of New York's (DASNY) borrowing capacity. In early 1997 Interfaith borrowed $148.5 million with the protection of the Secured Hospital Revenue Bond Program, enabling it to go into the private market and float the necessary bonds.

However, there was no cure in sight. By 2011, Interfaith was one of the sickest hospitals in New York, but not the only one looking for additional financial assistance from the State. It was met with uncommon opposition. The newly elected Governor, Andrew Cuomo, had taken up the State's perennial struggle to control its Medicaid expenditures. To develop an 'acceptable' plan, the Governor appointed most of the key stakeholders to the Medicaid Redesign Team.

The Medicaid Redesign Team (MRT) zeroed in on the hospitals in Brooklyn facing bankruptcy and possible closure—Brookdale, Brooklyn, Kingsbrook, LICH, Wyckoff and Interfaith. Its recommendation vis-à-vis Interfaith was explicit: *Brooklyn Hospital Center, Interfaith Medical Center, and Wyckoff Heights Hospital: The Work Group recommends the integration of these three institutions into a single*

system under an active parent, or other accountable governance structure, led by Brooklyn Hospital Center. The report's authors implied that failure to accept these recommendations might result in withdrawal of State support, which would force the institution to close.

Interfaith's community and management raised a host of objections to the recommendations. They wanted to keep Interfaith open as a fully independent hospital; not merge it under the leadership of Brooklyn Hospital. Wyckoff, too, was unwilling to join. As a result, no merger ensued and Interfaith was forced back on its own. By August 2012, they had less than a couple of weeks of operating funds on hand and needed a cash infusion of $10-$30 million to remain open. Interfaith sought relief from its bond obligations, but DASNY refused unless the hospital agreed to a merger with Brooklyn Hospital.

On December 3, 2012, the Hospital filed a petition in federal court for reorganization under Chapter 11 of the bankruptcy code.

Interfaith's Bankruptcy in a Volatile Healthcare Environment

In December 2012, faced with debts and liabilities approaching $200 million dollars, looming federal and state health system transformation initiatives linking population health and financial accountability, reductions in Medicaid reimbursements, increased costs to patient care, legacy debt and $31.5 million dollars in malpractice obligations, Interfaith Medical Center, a 287-bed, multi-site facility, filed for Chapter 11 bankruptcy protection. Chapter 11 allows debtors to remain open while proposing a plan for reorganization of the business, assets and debts to allow payment to creditors over time.

KEY FINDINGS

- Re-organized Interfaith Medical Center emerged from Chapter 11 with virtually no assets and with a management team that has no connection to the community.
- Only six of the thirty-six U.S. hospitals that entered bankruptcy proceedings between 2009 and July 2014 are still operating: four were acquired or merged; one is still struggling to pay its debts; and the last appears to be successful re-constituted.

To emerge from bankruptcy and receive additional operational funding through March 2015, the New York State Department of Health (DOH) required Interfaith to forfeit all of its assets and reorganize its management team and board of trustees. The State-appointed management team and board of trustees are not from Central Brooklyn and have little connection to the community.

The Chapter 11 plan also required the Dormitory Authority of the State of New York's (DASNY) holding company to receive all of Interfaith's assets, including all real property, real property leases or contracts, inventory, accounts receivable, grants or funding, Healthfirst equity interests, and a multitude of Interfaith funds (e.g., those set aside for payment of post-petition medical malpractice claims). As a result, Interfaith does not have the ability to leverage its assets to borrow capital and is almost entirely dependent on state and federal funding to remain in operation.

While the Chapter 11 plan allowed Interfaith to emerge from its year-long bank-

ruptcy, the requirements imposed to resuscitate it do not provide long-term solutions to the entrenched fiscal ills the hospital faces and do not begin to align the health needs of the community with the services it provides.

A Successful Emergence from Bankruptcy, But Now What?

To help understand how likely it would be for Interfaith to remain an independetly owned, viable institution, we look at the success of other health care institutions who have filed for bankruptcy protection. Descriptive case analyses were conducted on hospitals and hospital systems that filed for bankruptcy protection after the implementation of the Affordable Care Act, from January 1, 2009 to July 2014, with a specific emphasis on hospitals and hospital systems that were able to successfully emerge from bankruptcy.

The 36 hospitals that filed for bankruptcy during this time period shared the following characteristics:

- Declining reimbursements (most often cited)
- An average debt of $50 million
- A similar geographic region (mostly in the northeast)
- An average bed size that ranged from 100 to 199 beds
- Independent and privately owned (61 percent)

Interfaith is an outlier among these institutions in several ways: it has a larger bed size, a higher debt amount, and was able to emerge from bankruptcy in tact, though with no assets and resources to ensure its ongoing viability.

As the findings suggest, successful emergence from bankruptcy cannot be equated with long-term viability. Excluding Interfaith, six out of the thirty-six hospitals that filed for bankruptcy during the above-defined time period successfully emerged. Of those six, three were acquired by, or merged with, larger hospital systems within 5 years. The remaining three -- KidsPeace, Christ Hospital and CarePoint -- have had varied outcomes. KidsPeace, a comprehensive psychiatric hospital that provides the full-spectrum of inpatient, outpatient and therapeutic services for children

and adolescents, successfully emerged from bankruptcy on August 1, 2014 as an independent institution, but its future ability to remain independent is uncertain. Christ Hospital in Jersey City emerged from bankruptcy, only to be purchased by CarePoint for $45 million in 2012. LifeCare Holdings, which emerged from bankruptcy in 2013, continues to struggle to pay its creditors and is under pressure to sell more of its assets to cover its debts and liabilities.

The need for a hospital or hospital system to file for bankruptcy protection generally does not stem from a single event, but rather follows deteriorating financial performance indicators that were overlooked or ignored, including declining reimbursements, changes in volume, changes in payer reimbursement policy, and shifts in care settings. Therefore, bankruptcy and emergence from bankruptcy is not guaranteed to resolve long-standing financial distress, especially when rooted in a legacy of persistent financial troubles and mismanagement.

The findings from this report suggest that Interfaith cannot be a viable institution without a well-defined and articulated plan and strategy for shoring up its long-term financial health. Plans for Interfaith would need to include operating as either an independent safety-net provider, or through partnering and/or merging with another hospital or hospital system.

The Economic Environment

DESCRIPTION OF THE CENTRAL BROOKLYN COMMUNITY

The socioeconomic and demographic composition of Central Brooklyn has changed significantly over the last decade.

In the middle of the 20th century Black residents (mostly African-American and African-Caribbean) constituted slightly more than 50 percent of Central Brooklyn's population. Over the next few decades, the proportion of Black residents in Central Brooklyn steadily increased. By 2000, Central Brooklyn was approximately 77 percent Black, 13.8 percent Latino and just 6.4 percent White.

However, by 2010, it was evident that the racial landscape of the community was changing. The proportion of Black residents had declined by 8 percent from the previous decade; nearly twice the rate of decline observed in the borough or the city overall. Conversely, the proportion of White residents in Central Brooklyn had nearly doubled.

KEY FINDINGS

- Central Brooklyn is changing demographically and economically. However, most Black and Latino residents are not benefitting from the improvements in economic conditions brought by gentrification.
- Central Brooklyn is poorer than other Brooklyn neighborhoods and substantially poorer than the city as a whole.
- Hospitals are both purchasers and paymasters in the community in which they are located. The unionized employees at Interfaith annually contribute $8.6 million to the Central Brooklyn economy and another $14.4 million to the rest of Brooklyn.

While Central Brooklyn remains relatively low-income, economic conditions for residents seem to be improving, particularly for those under 64 years of age. In 2010, the median household income was $38,483, approximately $5,000 less than the median for the borough and $14,000 less than the median for the city, but, at the same time, growing faster than the borough and the city overall. While these trends seem promising with regard to the economic health of the community, median

household income by race reveals troubling economic inequality. Median income for Black and Latino households in Central Brooklyn is not only substantially lower and growing much more slowly than Black and Latino households in the rest of the city, but are roughly half the median incomes for White and Asian households within the community.

Important questions that cannot be fully answered with existing Census data is: How much of observed socioeconomic trends reflect quality of life improvements for existing Central Brooklynites or the higher status of newcomers? How much are existing residents benefitting from gentrification?

GENTRIFICATION DOES NOT MEAN IMPROVEMENT FOR ALL IN CENTRAL BROOKLYN

There is good reason to believe that much, though not all, of the social and economic improvements observed in Central Brooklyn are being driven by processes of gentrification that are already underway in many northern Brooklyn neighborhoods. Although gentrification is an elastic and highly contentious term, it can simply be described as the process where low-income/low-rent neighborhoods become newly desirable to higher income and higher status tenants (both residential and commercial). The entry of higher income and higher status newcomers inflates real estate values, transforms neighborhood character, and typically engenders the involuntary and exclusionary displacement of low-income tenants. Simply put, gentrification is the process by which inequality plays out in our communities and neighborhoods.

Gentrification can be animated by a confluence of factors, including, but not limited to, real estate speculation, physical redevelopment projects, private investment, and the enactment and enforcement of place-based policies. It is important to recognize, especially in the case of Central Brooklyn, that gentrification commonly trends with a changing racial landscape. In more explicit terms, in predominately Black (or Latino) inner-city neighborhoods a significant increase in the White population is a strong indication that processes of gentrification are underway. Hence, improvement in educational attainment, median household income and poverty is unequal and may be driven by gentrification or higher income newcomers, rather than existing residents.

Areas to the west and north of Interfaith -- such as Clinton Hill, Fort Greene, Prospect Heights, Bushwick and the western part of Bedford-Stuyvesant -- are experiencing significant gentrification, whereas the areas to the east and south of Inter-

faith -- including part of Bedford-Stuyvesant, Crown Heights, Brownsville and East New York -- where it draws most of its patients, social and economic conditions are either static or worsening.

In order to begin to parse the effects of gentrification, we identified the Census tracts that have gentrified[10] between 2000 and 2010. In the gentrified section of Central Brooklyn, White residents increased by more than 22 percent, while Black residents declined by approximately 15 percent. For the first time in more than a generation, the ratio of Black residents to White residents is nearly comparable. Understanding the variability across Central Brooklyn's social and economic geography is important for proposing a plan for Interfaith that is particularly sensitive to the needs of incumbent residents yet recognizes the potential for new opportunities amid a changing market.

LOCATING INTERFAITH MEDICAL CENTER'S ECONOMIC CONTRIBUTIONS

Hospitals make both direct and indirect contributions to the economy. Employment is conventionally understood as one direct effect of a hospital's economic contribution, whereas hospital spending on goods and services in various supplying industries is commonly considered an indirect effect. Calculating the indirect effects requires estimating the multiplier effects of changes in demand for the hospital -- for instance, on supplying industries in the local economy.[11]

Hospitals also have an induced effect on the local economy, which means the consumption and local spending of hospital employees and patients also impact the local economy. For example, Interfaith employs over 1,200 people and receives many visitors. Thus we can assume that employees and patrons purchase goods and services in the local economy. Depending on the goods and services of interest, the 'local economy' may include the area most proximate to the hospital, Central Brooklyn, or the borough overall. Therefore, it is not reasonable to fully attribute observed economic growth (or decline) in any of these geographies to Interfaith employees and patients. However, it is fair to assume that they make some contribution to the local economy. Chapter 5 analyzes the induced effects by focusing on neighborhood retail[12] trends proximate to Interfaith.

DIRECT EFFECTS: EMPLOYEES AND THE CHANGING LANDSCAPE

Interfaith Medical Center is one of the largest employers in Brooklyn's health care industry, an industry that contributes the highest number of jobs in the borough. In this way, Interfaith also plays an important role in Central Brooklyn's economy.

Sixty percent of Interfaith's employees live in the borough, but less than a fifth live in Central Brooklyn. Most workers at Interfaith are unionized. Of those that are unionized, 69 percent of 1199 workers and 57 percent of NYSNA nurses live in Brooklyn. Therefore, a high percent of their salaries remain in the borough. Further, based on aggregate employee salaries for union workers, Interfaith contributes over $4 million dollars per month to the regional economy, of which approximately 62 percent goes to Brooklyn residents.

When looking at the dispersion of 1199 and NYSNA employees across Brooklyn, it is clear that the majority of workers reside in non-gentrified areas. Given the relatively low incomes, high rates of poverty and tenuous relationships to the labor force in non-gentrified Central Brooklyn, 1199 and NYSNA employees play an important role in creating economic stability.

Endnotes

[1] By Central Brooklyn we mean sections of the neighborhoods of Bedford-Stuyvesant, Crown Heights, Clinton Hill, Prospect Heights and Brownsville. This United Hospital fund defined community includes the five zip codes (11238, 11216, 11213, 11212, and 11233) that constitute Interfaith Medical Center's primary service area.

[2] The DSRIP Project Toolkit can be found here: http://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrip_project_toolkit.pdf

[3]Centers for Disease Control and Prevention, "Chronic Disease and Health Promotion." Available from: http://www.cdc.gov/chronicdisease/overview/

[4] New York State Department of Health, "A Comparison of Potentially Preventable Hospital Readmissions where Preceding Admission was a Behavioral Health, Medical or Surgical Admission: New York State Medicaid Program, 2007." Available from: https://www.health.ny.gov/health_care/managed_care/reports/statistics_data/4hospital_readmission_behavioral.pdf

[5] NYS Department of Health, "Medicaid Health Homes." Available from: https://www.health.ny.gov/health_care/medicaid/program/medicaid_health_homes/

[6] CDC has long recognized the critical importance of community engagement through its Healthy Communities and REACH US (Racial and Ethnic Approaches to Community Health Across the U.S.) technical assistance and funding programs.

[7]NYC DoHMH Take Care New York's Ten Priority Areas and Measures for Success can be found here: http://www.nyc.gov/html/doh/downloads/pdf/tcny/listening-session-flyer.pdf

[8] Previous health needs assessments conducted in Brooklyn: 'The Need for Caring in North and Central Brooklyn' by the Commission on the Public's Health System (CPSH); 'The Brooklyn Health Care Improvement Project (B-HIP)' by SUNY Downstate; and 'At the Brink of Transformation: Restructuring the Healthcare Delivery System in Brooklyn' by the Brooklyn Work Group of the Medicaid Redesign Team.

[9] 'At the Brink of Transformation: Restructuring the Healthcare Delivery System in Brooklyn': http://www.health.ny.gov/health_care/medicaid/redesign/docs/brooklyn_mrt_final_report.pdf

[10] Census tracts identified as having gentrified (2000-2010) had a significant percentage point change in median household income, residents with college education, the number of rental units, and growth in average rent.

[11] Accurately assessing this effect requires using the proprietary IMPLAN software package and database.

[12] We use this term broadly to include all commercial establishments that typically occupy ground-level storefronts thus affect consumer access, corridor aesthetic and economic vitality of an area. For the purposes of this study, neighborhood retail encapsulate 8 retail and service sectors based on 3-digit North American Industry Classification System (NAICS) codes: Building Supply (NAICS: 444), Food+ Beverage (NAICS: 445), Health+ Personal care (NAICS: 446), Clothing + Clothing accessories (NAICS: 448), Books + Hobby (NAICS: 451), General merchandise (NAICS: 452), Food +Drinking (NAICS: 722), and Personal services (NAICS: 812).

CHAPTER 1: COMMUNITY HEALTH

Brooklyn's health care institutions currently operate in a challenging environment, characterized by serious - and often unmet - population health needs, immense political and financial pressure to control costs, stiff competition for patients with large medical centers in Manhattan, and huge disparities in health status patterned by geography, socioeconomic status, and race/ethnicity. Barriers to accessing community-based resources that help patients prevent or manage chronic conditions has led to inefficient hospital utilization, particularly in Central Brooklyn.

Over the past several years, pressures facing Brooklyn's health care system have mounted, leading to financial instability in several of the borough's hospitals. Interfaith Medical Center is one of several financially troubled institutions that has been subject to intense scrutiny. Debates over Interfaith's future have taken place both in the community and among health care experts seeking to inform borough-wide health system transformation.

The goal of this report is to engage these ongoing debates with an interdisciplinary and comprehensive perspective on community health. To do this, we describe previous community engagement efforts to involve residents and workers in deciding Interfaith's fate. We also summarize existing research efforts that characterize health care system challenges in Central Brooklyn. We do not duplicate these existing reports; rather, we use them as a starting point for understanding health needs and assets in Central Brooklyn. Our own work builds on previous investigations of health needs in the area to describe health status in the community, and to connect health outcomes to upstream drivers of health at play in Central Brooklyn.

Context and history of hospital and community health planning activities in central Brooklyn

Community Engagement Activities

The community engagement activities to date have primarily revolved around saving Interfaith Medical Center from bankruptcy, rather than on public health campaigns or transforming the existing health care delivery system within the community. During the hospital's bankruptcy proceedings, hospital workers and nurses, along with labor and community representatives, public health advocates and elected officials, formed the Coalition to Save Interfaith Medical Center. The Coalition was led by representatives from 1199 SEIU and the New York State Nurses Association. Every week, they met to discuss strategies to ensure the hospital emerged from bankruptcy.

After the hospital emerged from bankruptcy on June 2, 2014, the Coalition remained intact, albeit with fewer community representatives. While Interfaith was saved in the short-term, its long-term viability remained in question. Utilization rates among people living in the community are low, with negative community perceptions, confusion over the hospital's bankruptcy and closure status, and a mismatch of services provided and services needed all contributing to the problem. More recently, during the summer of 2014, the hospital census reached a record low of 160 patient beds filled. A number of meetings with community stakeholders and public events, including a health care forum, helped increase the visibility of the hospital and the health issues a reconstituted hospital could address.

However, even as the census has steadily increased, the future of the hospital remains uncertain. With the acknowledgement that the hospital, as it currently stands, needs to dramatically change if it hopes to adequately address the needs of the community, the Coalition decided to change its orientation. The Coalition recently changed its name to the Coalition to Transform Interfaith, signaling its intent to not only save the hospital from further financial ruin, but to transform the hospital into an institution that focuses on broader health-promotion efforts that address the health needs of the community. The newly renamed Coalition, led now by a community resident, is working on strategies to publicize its efforts and gain greater traction and partnerships within the area. These efforts focus on the creation of a new health care delivery system, with an emphasis on addressing the social determinants of health. As a result, the Coalition has once-again broadened its membership, and now includes more community and elected official representatives.

Previous Studies

As a result of pressures facing local health care institutions, four main community health assessments have been conducted in recent years to inform the restructuring of the health care delivery system in Central Brooklyn and other parts of the borough.

1. **At the Brink of Transformation: Restructuring the Healthcare Delivery System in Brooklyn** was published in 2011 and is an analysis of hospitals in Brooklyn and the communities they serve conducted by the Brooklyn Work Group of the Medicaid Redesign Team (MRT). The Work Group focused on six hospitals either deemed to be financially unsustainable in the long run, or currently troubled. Three of the six are experiencing financial crises, including Interfaith Medical Center, Wyckoff Heights Medical Center and Brookdale Hospital Medical Center.

2. **The Brooklyn Health Care Improvement Project's (B-HIP) report " Making the Connection to Care in Northern and Central Brooklyn"** is a community health needs assessment conducted between 2009 and 2012 of most of the same 15 zip codes studied in the Need for Caring report. B-HIP primarily analyzed healthcare utilization in the study area using emergency department (ED) surveys, longitudinal analysis of health insurance usage and hospital discharge data provided by the New York State Department of Health Statewide Planning and Research Cooperative System (SPARCS).
3. **The Need for Caring in North and Central Brooklyn** was undertaken in 2012 to determine residents' perceptions of barriers to, and gaps in, access to health services in 15 federally-designated medically underserved zip codes in North and Central Brooklyn. The study surveyed 644 community residents and conducted focus groups to understand needs among various subpopulations. Although data were collected from a convenience sample, the survey population reflected the general demographic profile of the community.
4. **Brooklyn Community Needs Assessment by The New York Academy of Medicine** was prepared in 2014, under the aegis of DSRIP, to address questions and suggest solutions related to restructuring the Brooklyn health care system. The report examines communities across Brooklyn, their resources, and the health and health service challenges these communities face. It uses primary data, including 28 key informant interviews, 24 focus groups, and approximately 681 surveys, secondary analysis of 70 datasets, and a review of the literature on health needs assessments and community reports.

Each report was motivated by different aims, and brings unique perspectives on Central Brooklyn's heath care systems and needs. The 'Need for Caring' study focused on resident perceptions of health care in Northern and Central Brooklyn, and provided detailed information on satisfaction among subgroups with unique health care needs, such as individuals living with disabilities and pregnant women, among others. B-HIP integrated analysis of health care utilization with patient surveys to highlight opportunities for system changes that better engage local residents and improve linkages between hospital care and community-based resources. In writing 'At the Brink of Transformation,' the MRT was tasked to assess the long-term viability of Brooklyn's hospitals. As such, the report provides insight into both community health needs, and financial concerns that will help shape the future of Brooklyn's health care system. The New York Academy of Medicine's Community Needs Assessment was intended to inform strategy selection under the Delivery System Reform Incentive Payment program (DSRIP), aimed at reducing avoidable inpatient admissions among the Medicaid and uninsured population of New York.

Synthesis of Previous Community Health Needs Assessments

Existing Community Health Needs Assessments Major Common Findings

Although they differ in their aims and focus, there is general agreement among previous studies that Central Brooklyn is grappling with serious health challenges, including high rates of chronic disease, premature mortality, and avoidable hospital utilization compared to New York City as a whole. High blood pressure and diabetes were identified as being among the area's most prevalent chromic conditions, while preterm birth and infant mortality are key reproductive health challenges. Further, the area faces a range of social vulnerabilities, including high poverty rates, and residents are heavily reliant on local resources for care. However, safety net hospitals in Central Brooklyn are currently struggling to accomplish the dual goals of remaining financially viable and providing services that appropriately tackle the complex health challenges facing the communities they serve.

The reports consistently found evidence of inappropriate Emergency Department (ED) usage, especially for high blood pressure and asthma. For example, MRT's "At the Brink of Transformation" reports that 46 percent of ED visits in Brooklyn that did not result in a hospital admission could have been treated in primary care or were not emergent. In Central Brooklyn, these ED encounters without admissions accounted for 52 visits per 100 residents, indicating substantial room for reducing ED utilization. The New York Academy's report found that Northern/Central Brooklyn Medicaid beneficiaries accounted for the highest number of Medicaid potentially preventable emergency room visits in the borough. In terms of inpatient utilization, Brooklyn had a 20 percent higher rate of admissions that would have been potentially avoidable with appropriate primary care and community-based disease management compared to the statewide average. Interfaith's rate of such admissions was 20 percent, compared to 13 percent statewide, corresponding roughly to a 50 percent difference in rates. According to the B-HIP study, about half of the ED staff in the North and Central Brooklyn safety-net hospitals reported that only 25 percent of the daily cases would be deemed an "emergency" and the Need for Caring report found that residents reported using the ED for non-emergency situations. There was consensus that many residents sought care in the ED for problems that could be more appropriately addressed in a primary care or other outpatient setting. The top ten preventable ED visits by number of visits in the B-HIP study area were related to congestive heart failure, asthma, pneumonia, diabetes, COPD, epilepsy, and cellulitis. These potentially preventable events totaled about $58 million in costs annually.

A shortage of PCPs and variation in PCP availability by neighborhood appear to contribute to inappropriate hospital utilization. Both the B-HIP and Need for Caring studies identified the following health care challenges in the community:

- lack of dental and specialty care;
- long waits for appointments and in waiting rooms;
- prohibitively high costs for care or insurance;
- difficulty navigating the health care system,
- inadequate communication around care;

- poor relationships with providers; and
- lack of after-hours appointment availability of primary care providers, which was seen as a major driver of ED use.

Despite these challenges, residents tended to and prefer to utilize care close to home. Of the Need for Caring study's 644 survey responses, 89.4 percent said that they preferred to receive care near their home. A major reason why people utilized health care was that they perceived the facilities to be close to home and had a good relationship with their care provider.

Finally, studies agree that local hospitals are financially troubled. 'At the Brink of Transformation' identified Brookdale Hospital Medical Center, Interfaith Medical Center, and Wyckoff Heights Medical Center as the three most troubled hospitals in Brooklyn. Interfaith's total assets in 2010 were -$126,000,000 with $517,000 in long-term debt per each of their 287 beds.

Unique Contributions and Differences

In addition to these common findings, each of the previous studies contribute unique insights. MRT's 'At the Brink of Transformation' highlights challenges facing Interfaith and other Brooklyn safety net hospitals around quality of care and vacancy. For example, all of Brooklyn's hospitals have high rates of preventable hospitalizations and longer average lengths of stay. Despite high rates of utilization, bed vacancy rates are high at the Brooklyn hospitals: the three hospitals in financial crisis, namely Brookdale Hospital, Interfaith Medical Center, and Wyckoff Heights Medical Center, have an occupancy rate of less than 66 percent. This is in part due to privately insured residents seeking care in Manhattan. The MRT working group also found that over 40 percent of inpatient stays at Interfaith were attributable to patients with a principal diagnosis of a behavioral health condition, indicating a need for better community-based and outpatient management of mental illness and substance use disorders locally.

B-HIP's report and the 'Need for Caring' study provided important insights into patient and resident perspectives on health care utilization decision. B-HIP found that many patients use the ED because of convenience and lack of PCP access. The majority of respondents in the 'Need for Caring' study found it was most convenient to receive care in their community, and 75 percent received some or all health care in their community. A lack of mental health, dental, and linguistically and culturally competent care within the community were also among resident complaints.

Barriers to primary care identified among 48 percent of the 'Need for Caring' survey respondents were related to the quality of care they receive, the hours of the service, and limited cultural sensitivity. 14 percent of the respondents described long waiting times as a major barrier to care. In exploring why PCPs lacked after-hours accessibility, B-HIP found that cost, security, provider availability limited after-hours care, despite the fact that many PCPs operated under capacity during the day.

Variation in Need within Central Brooklyn

An important contribution of the B-HIP study was to disaggregate data to examine smaller neighborhoods within Central and Northern Brooklyn. The report showed that within Brooklyn, there is significant variation in health outcomes, care usage, and primary care availability, both geographically and among different demographic populations. The report identified several high-risk areas where residents experience higher rates of poverty and general social challenges, and have greater

health needs. These areas were termed, "Hot spots," and are described as densely populated census tracts with high annual rates of ED visits and Ambulatory Care Sensitive Conditions (ACSC) discharges as well as chronic disease. ACSCs are conditions where quality outpatient care and intervention can reduce the need for hospitalization.

GIS mapping of SPARCS data identified the following Hot Spots:

1. Brownsville/East New York;
2. Crown Heights North/Bedford Stuyvesant, which roughly corresponds to the "study area" examined for this report; and
3. Bushwick/Stuyvesant Heights.

With only 4 percent of the borough's population, these Hot Spots account for 9 percent of all preventable ED visits and 8 percent of ACSC discharges, indicating opportunities for quality improvement in care. Hot Spots are also particularly unhealthy with regard to chronic disease rates, premature mortality, and preterm births.

Gaps in understanding community health needs

While existing studies provide valuable insights into how Brooklyn's health care system functions, they spend relatively little time examining broader social issues that drive health care needs in the community. The need to look to social factors as drivers of health was reflected in the Need for Caring study, which reported that participants felt their community's biggest challenges included violence, poverty, lack of jobs, low/poor education and obesity, in addition to health care.

Employment

While both the B-HIP and 'At the Brink of Transformation' reports examined some upstream health risk factors, including unemployment, they examined the data differently and as a result, found some moderate differences. Both reports found unemployment rates near 10 percent across their study areas overall. Using the ACS 5-year estimates within its study area, B-HIP reported a 10 percent unemployment rate compared to the 9 percent unemployment rate throughout Brooklyn. The 'At the Brink of Transformation' report included the 2010 ACS estimates and found 10.5 percent were unemployed within their study area compared to 9.3 percent statewide. However, the B-HIP report went further to examine unemployment at smaller scales, finding that these aggregated numbers masked important disparities. When examining the three Hot Spots with particularly poor health outcomes, as described above, local unemployment rates were as high as 20 percent.

Housing

B-HIP's study notes a correlation between area-level socioeconomic conditions, including high vacant housing rates, and ED utilization for non-emergencies. The 'Brink of Transformation' report highlights a lack of resources to support housing in the communities assessed. Finally, the 'Need for Caring' study reports community member suggestions that healthcare providers ought to consider housing in their assessments of patients.

Violence
In the 'Need for Caring' study, teens described violence as a major concern for their communities. Neither the B-HIP study nor the "At the Brink of Transformation" mention violence as a concern for the study area's communities.

Poverty
Previous reports acknowledged poverty as a community problem, with the New York Academy of Medicine needs assessment consistently referring to poverty as a health risk factor. This report also introduced gentrification as a related phenomena with both positive (e.g., increased access to health foods) and negative (e.g., reduced access to affordable housing) consequences.

Gaps This Report Aims to Address

Although previous studies make note of upstream determinants of health and health care utilization, a more thorough discussion of underlying community needs is warranted. This report seeks to provide a uniquely broad perspective on community health needs in the neighborhoods surrounding Interfaith Medical Center. Rather than duplicate standard data analysis reported previously, we strategically identify and fill gaps in our current understanding of the community's underlying health needs. We also highlight the role of the social, built, and economic environment in shaping resident health. To do this, we include in this report:

- Neighborhood-level prevalence estimates for health outcomes and risk factors;
- Neighborhood-level health care utilization and quality data;
- Information on services provided at Interfaith;
- Discussion of the upstream social determinants of health affecting residents;
- Descriptions of successful community-based approaches to improving health; and
- Recommendations for Interfaith Medical Center's potential future role in promoting community health.

Because this report relies on several data sources, available at different geographies, we have included a map of the study area showing geographic coverage for various data sources at the end of this document as Appendix 1.

Upstream determinants of poor health and health care demand

This report focuses on Interfaith Medical Center's role in promoting health among study area residents. However, it is important to acknowledge that health does not begin or end at the hospital. Instead, the social determinants of health, or the "circumstances in which people are born, grow up, live, work and age"[1] are highly determinative of individual and population health. In fact, as shown in Figure 1, health care explains only about 10 percent of the premature mortality in the United States. Rather than medical care, more impactful drivers of health include: behaviors, including social circumstances and living conditions that influence behavioral choices; and economic, built, and social environment factors that impact health directly through stress pathways and other mechanisms. In short, while health care is essential for helping those who are sick, providing better living conditions is what keeps people healthy. We introduce select health risks associated with challenging economic and social conditions below in order to contextualize the neighborhood conditions surrounding Interfaith.

POVERTY

A large and burgeoning body of literature acknowledges what is often called a "social gradient in health." The social gradient refers to the fact that health improves with increasing income, education and occupation, and declines with poverty.[2-4] Residents of areas of concentrated poverty tend to experience worse health than do those living in more affluent areas as measured by outcomes such as heart disease, mental illness, respiratory problems, BMI, and mortality.[5] The negative health outcomes associated with living in poor areas cannot be fully attributed to personal socioeconomic status, but rather are also determined by the level of disadvantage in the surrounding neighborhood.[6,7] In other words, it is not just that neighborhoods are home to poor individuals who themselves are at higher risk of being ill, but that living in concentrated poverty is a health risk itself regardless of personal income. Economically deprived neighborhoods may put residents health at risk by exposing them to high rates of crime, limited or low quality health-promoting assets (e.g., sidewalks, bike paths, parks), and a dearth of sources for affordable healthy food.[8] Stress associated with living in concentrated disadvantage is itself a health risk factor. Residence in high poverty areas can affect health by influencing behaviors, attitudes and utilization of services, or through stress mediated pathways that translate the constant and additive effect of exposure to resource deprivation and social stressors to increase susceptibility and vulnerability to disease.

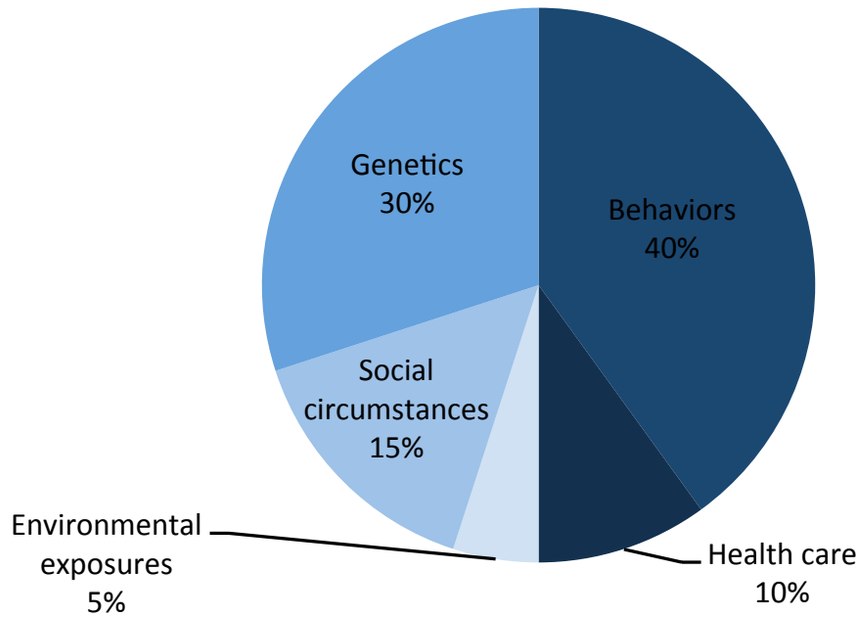


Figure 1-1. Proportional contributors to premature mortality in the United States. ***Source:*** McGinnis JM, Williams-Russo P, Knickman JR. The case for more active policy attention to health promotion. Health Aff Proj Hope. 2002 Apr;21(2):78–93.; McGinnis JM, Foege WH. Actual causes of death in the United States. JAMA. 1993 Nov 10;270(18):2207–12.

EMPLOYMENT

Employment and working conditions powerfully influence the life and health of individuals. Good jobs can enhance healthy feelings of wellbeing, allow individuals to invest in healthy behaviors and relationships, and protect against psychosocial and interpersonal stressors. In contrast, being unemployed is associated with unhealthy outcomes and behaviors including all-cause mortality, heart disease, suicide, alcohol consumption and smoking.[10] Employment in a stressful job is also a health risk factor. Jobs that limit worker control over their own schedule and work process while placing high demands on workers can can negatively affect mental and physical health, particularly cardiovascular outcomes.[9] High neighborhood unemployment rates are also thought to elevate residents health risks regardless of their own employment status. High levels of unemployment at the neighborhood or community level are associated with increased risk of cardiovascular disease and all cause mortality, after controlling for individual characteristics.[11]

THE HOUSING ENVIRONMENT

Abandoned houses, lead paint, contaminated water supplies, overcrowded houses, and vandalism are among some housing environment factors that impact health. We review some of the the evidence linking poor housing[12] in a separate section below.

VIOLENCE

Neighborhood violence harms health not only by directly jeopardizing the physical safety of victims, but also by contributing to PTSD, depression, cognitive functioning and suicide[13] through psychological impacts. Even for those who have not personally experienced crime, living in violent areas has health implications beyond acute injuries; indirect exposure to violence is associated with low birth weight, premature birth, and reduced life expectancy, and can often contribute to the adoption of unhealthy stress coping mechanisms such as alcohol consumption or smoking cigarettes.[2,14,15]

RACE/ETHNICITY AND DISCRIMINATION

Research shows strong associations between residential segregation and adverse health outcomes,[18,19] as well as between experiences of discrimination and chronic stress and related long term health challenges.[20] Because we do not have data on experiences of discrimination in the study area and comparison neighborhoods, we cannot explore racial/ethnic and other forms of discrimination as a neighborhood health risk factor specifically. However, it is important to note segregation, interpersonal discrimination, and structural racism as serious assaults on health.

Health risk factors and disease burden in Interfaith Medical Center's service area

Critically, many of the health risk factors described above are at work in the study area. A demographic profile, land use summary, and description of socioeconomic conditions in the neighborhoods surrounding Interfaith Medical Center are provided in Chapter 5, "Economic Impact Analysis." In short, Chapter 5 describes a rapidly gentrifying, historically poor, and predominantly minority community. Over 40 percent of working age adults are either unemployed or not in the labor force, over 36 percent of children live in poverty, and huge income disparities exist by race. Concentrated poverty, under- or unemployment, low wages, and historical social disadvantage all create health risks as described briefly above. Development pressures and changes to the housing market brought by pockets of rising property values create additional pressures on existing residents. Because of housing's powerful and multidimensional effects on health, we concentrate on local housing conditions below, which reflect both historical disadvantages in the study area, as

well as new signs of gentrification. As critical social determinants of health, we link descriptions of housing conditions to data on related health outcomes.

Housing Conditions and Affordability in the Study Area

This section presents housing data for the study area surrounding Interfaith Medical Center. To understand environmental risks associated with housing in the neighborhood, data available through the New York Department of Health's Environment & Health Data Portal was used. The portal is a website with neighborhood-level information for 42 United Hospital Fund neighborhoods across New York City.

To characterize the housing environment in the Interfaith study area with respect to its potential to harm or promote health, we used two main data sources. We analyzed community-district level data collected from the 2011 New York City Housing and Vacancy Survey to understand the housing market in the study area, including the quality of the housing stock, affordability and crowding. The survey is sponsored by the New York City Department of Housing Preservation and Development and is conducted every three years by the Census Bureau.

HOME-BASED ENVIRONMENTAL EXPOSURES

Residents' physical environments can have significant impacts on their health. Housing conditions are particularly important because of the multiple environmental, economic, and social pathways through which housing creates exposures to health risk factors. For example, low quality or distressed housing can expose residents to pests, which can exacerbate asthma and allergies, and to potentially toxic pesticides used to deal with insects and rodents. Poorly maintained older housing can put children at risk of lead poisoning, and housing maintenance deficiencies can make it difficult for families to stay warm, dry, and keep pest infestations under control. Home-based environmental exposures are also known to produce a wide range of effects, including impaired neurological development from lead exposure, respiratory symptoms from mold, and lung cancer from radon. In fact, linkages between indoor residential environmental exposures and health are particularly pronounced in multifamily and low-income housing developments and represent some of the determinants of health disparities.

QUALITY OF THE HOUSING STOCK

When compared to the rest of Brooklyn, the quality of the housing stock in the Interfaith study area is in poorer condition. The percent of all occupied housing units in 'physically poor' condition is more than two times higher in South Crown Heights and 2.8 percent higher in Bedford-Stuyvesant than it is in the borough overall.

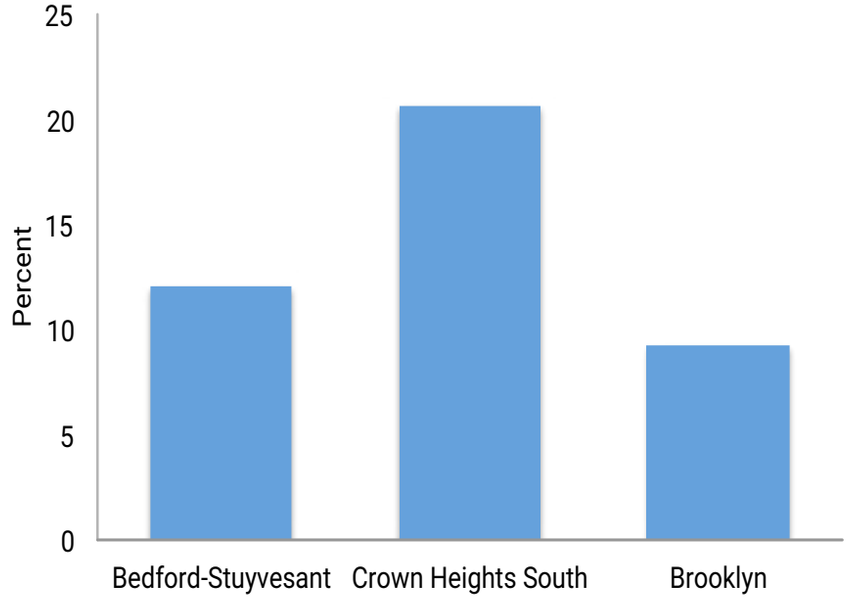


Figure 1-2. Percent of all occupied units in physically poor condition. ***Source:*** New York City Housing and Vacancy Survey, 2011

The condition of the buildings is most likely a result of a combination of the following two factors:

1. *Age and Structure of the Buildings*: A high percentage of the buildings in South Crown Heights and Bedford-Stuyvesant were built in the second half of the nineteenth century and first half of the twentieth century. In South Crown Heights, over 50 percent of households reside in New Law tenement buildings, which are buildings built between 1901 and 1929, and over 60 percent of renters live in pre-1947 rent-stabilized units. In Bedford-Stuyvesant, 26.8 percent of households live in Old Law (buildings built before 1901) and New Law tenement buildings, and 25 percent live in pre-1947 rent-stabilized units.
2. *Disinvested Neighborhoods*: The neighborhoods that surround Interfaith are characterized as high poverty. In general, the housing stock in low-income neighborhoods is not as well-maintained by landlords. This especially holds true in New York City, where homes with three or more maintenance deficiencies are disproportionately found in high poverty neighborhoods.[2]

When looking more closely at the housing stock in the Interfaith study area, the percent of households reporting 3 or more maintenance deficiencies ranks second highest in Brooklyn. Roughly 25 percent of the units have 3 or more maintenance deficiencies,[3] of which over 35 percent have children under 18 years old. These deficiencies can result in mildew, mold, poor insulation, lead exposure and pest infestation, which can lead to adverse impacts on residents' health, particularly children.

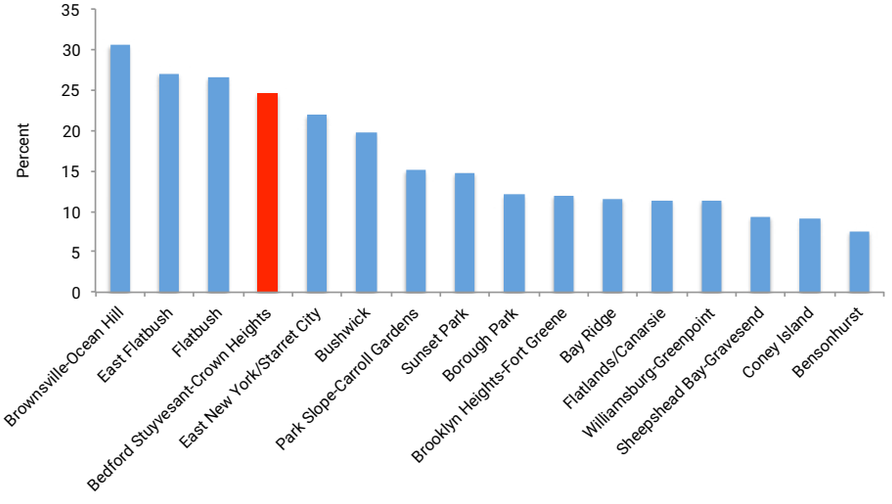
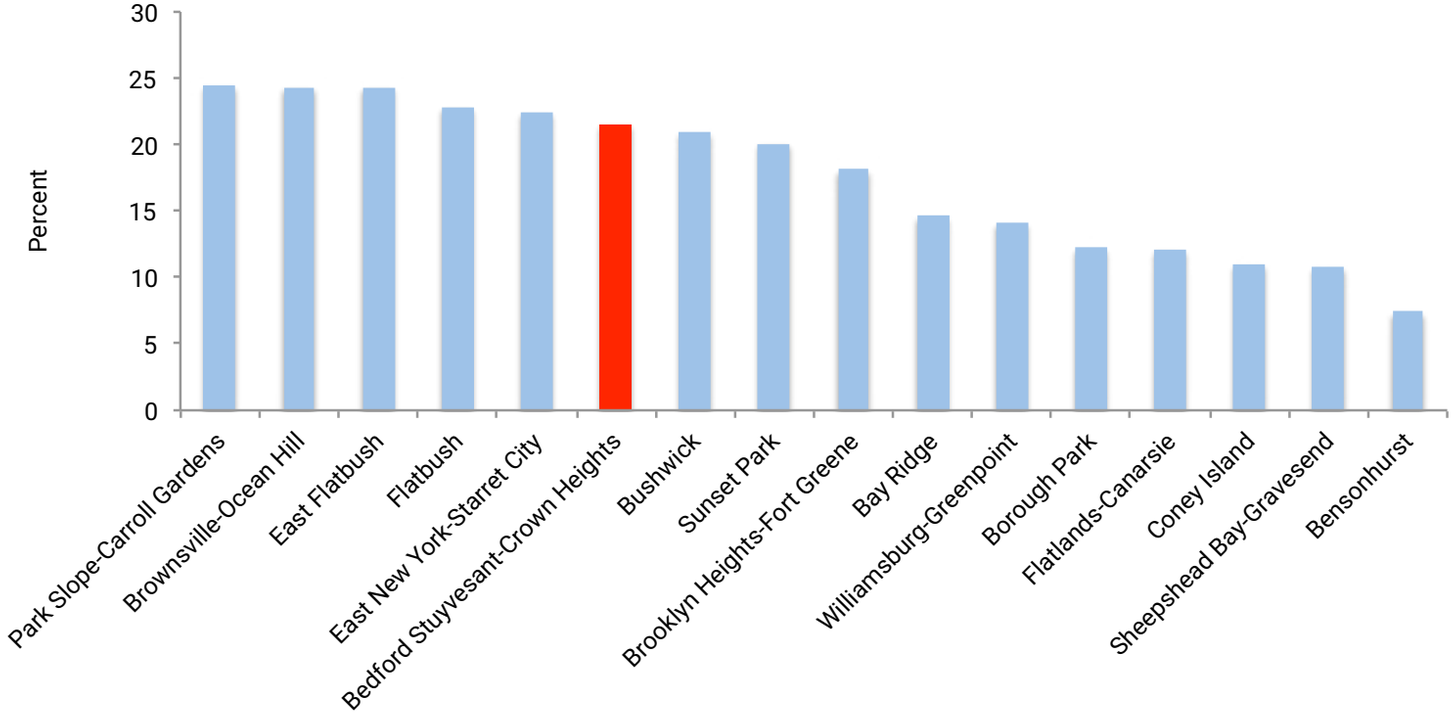


Figure 1-3. Percent of households with 3 or more maintenance deficiencies. ***Source*:** New York City Housing and Vacancy Survey, 2011.

Among the maintenance deficiencies reported, cracks or holes are particularly problematic, as they exacerbate pest infestation and make it more difficult to keep the home heated or cooled. As shown in Figure 1-4, the percent of homes with cracks or holes is relatively high when compared to the rest of the borough and the city overall.

The New York City Community Health Survey asks residents across the city's neighborhoods to report whether they've seen various types of pests or other environmental hazards inside their homes in the past 30 days. Figure 1-5 reveals that our study area ranks worse than the city overall on roach, mice, and mold sightings.

Figure 1-4. Percent of homes with cracks or holes. ***Source*:** New York City Housing and Vacancy Survey, 2011.



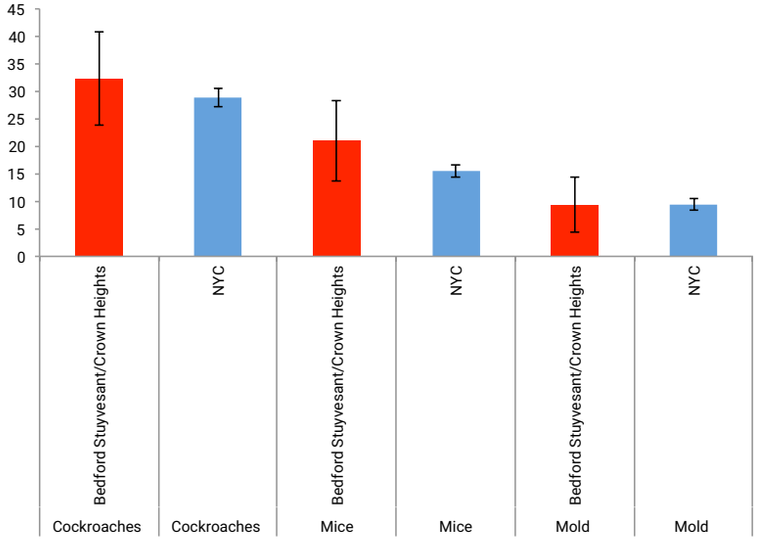


Figure 1-5. Seen inside the home within the past 30 days. ***Source*:** NYC Department of Mental Health and Hygiene Community Health Survey, 2012.

Pests are particularly problematic for health; not only because of the pests themselves, but also the pesticides used to remove them. Insecticide and pesticide commercial applications in the city can be hard to interpret because big applications often happen in places with lots of parks or other open space. However, while the area is not particularly exposed to some types of pesticides and insecticide, it ranks higher than any other neighborhood in the borough on liquid insecticide, and very high compared to the city overall.

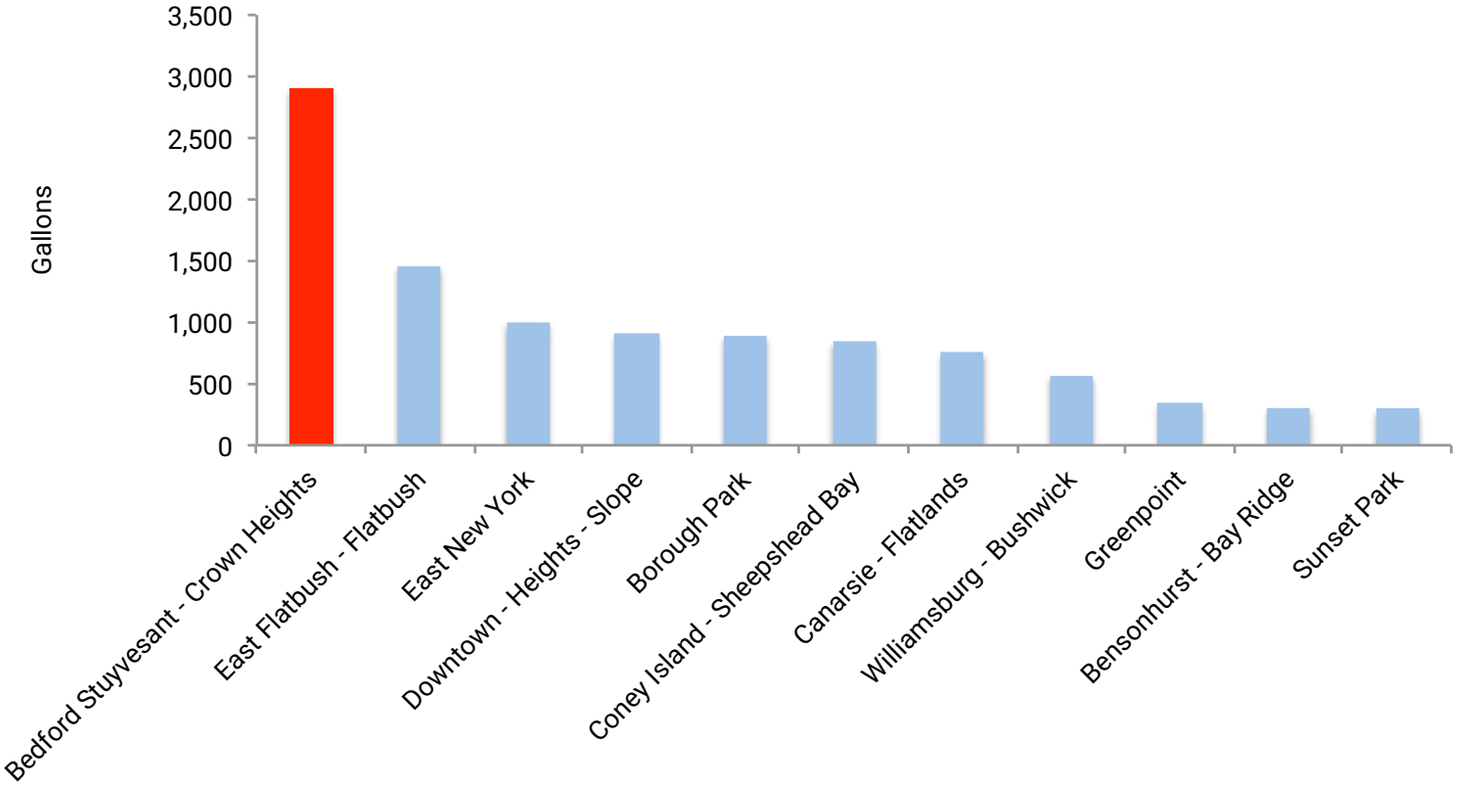
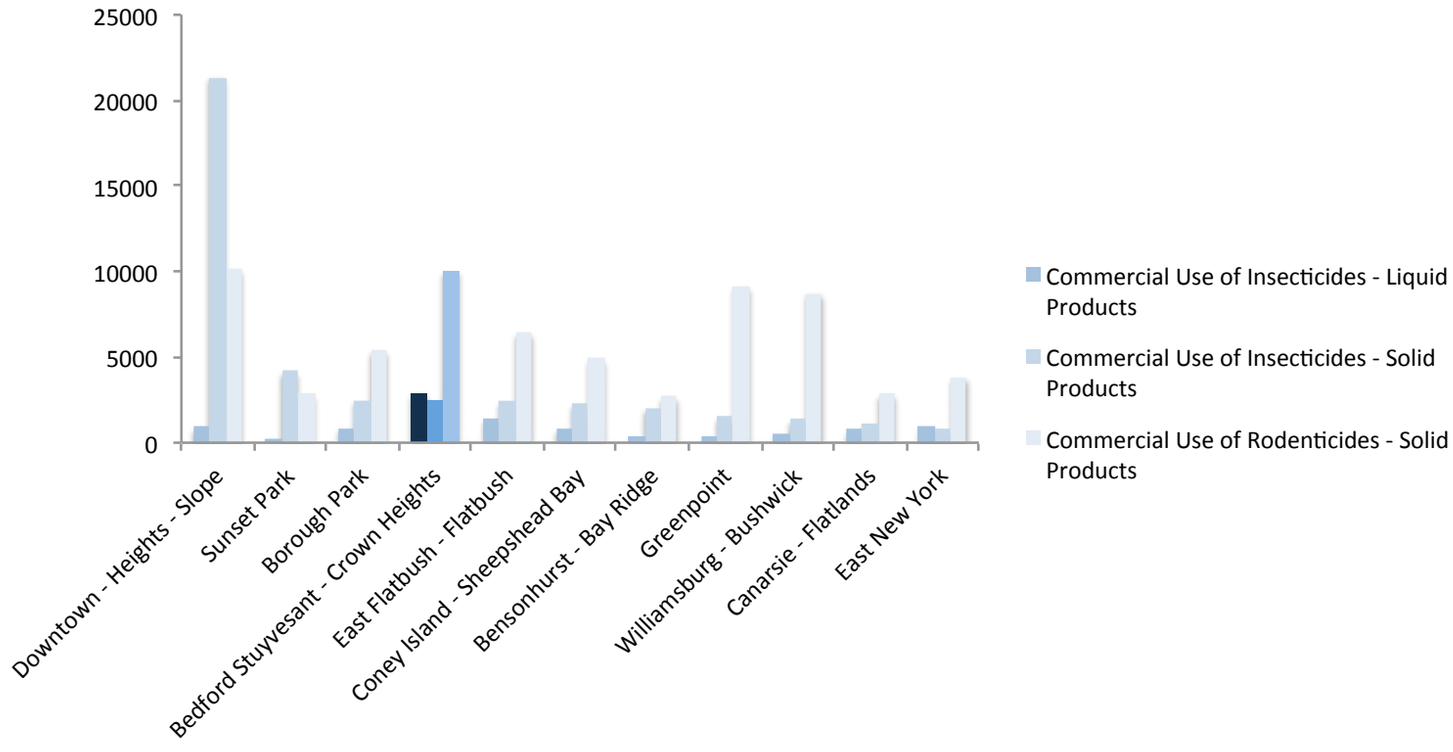


Figure 1-6. Pounds of Commercial Liquid Insecticide Applied. ***Source*:** New York State Pesticide Sales and Use Registry (PSUR), 2005.

Figure 1-7. Pounds of Commercial Product Applied. ***Source*:** New York State Pesticide Sales and Use Registry (PSUR), 2005.



Peeling paint in older homes is an important risk factor for lead poisoning in children. When looking at the study area, the percent of homes that had peeling paint and the number of children under 6 years old with elevated blood lead levels is high when compared to the city overall.

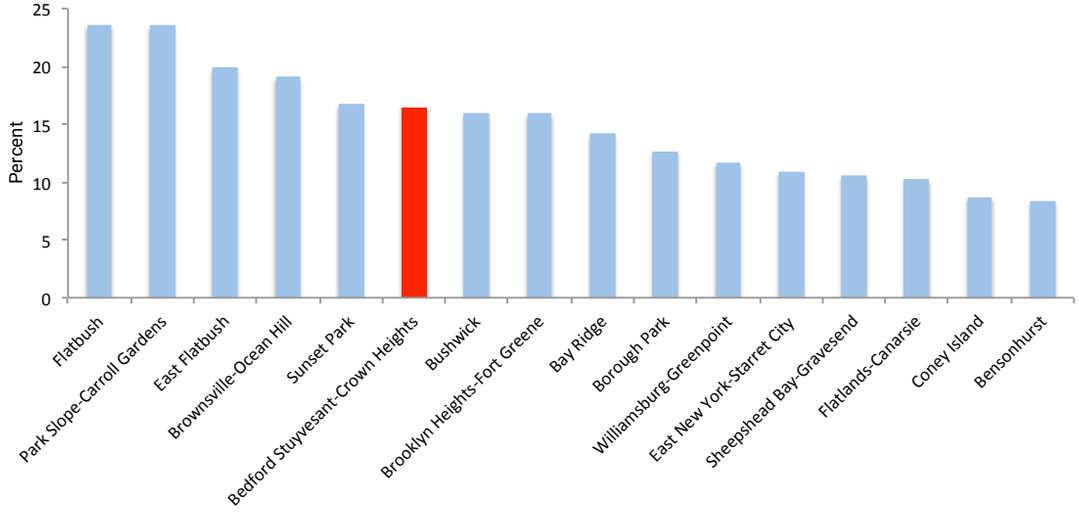
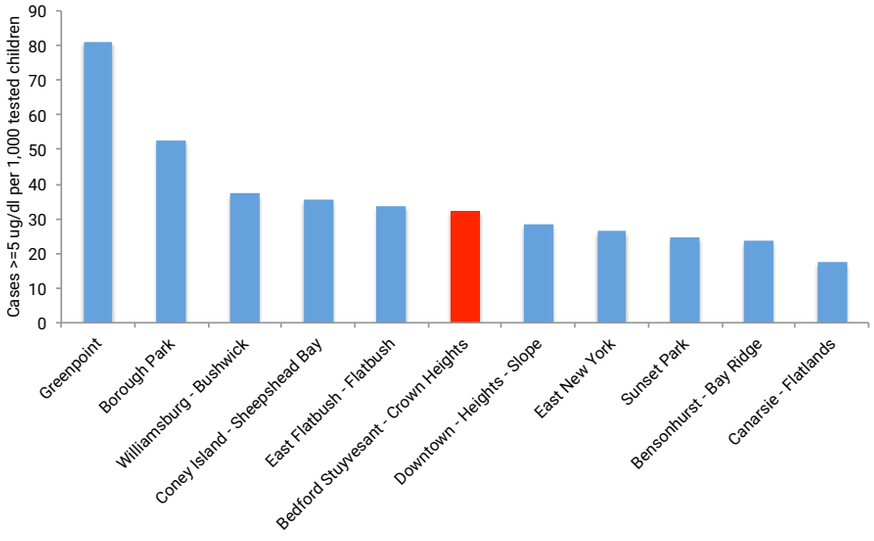


Figure 1-8. Percent of homes built before 1960 and had peeling paint. ***Source*:** New York City Housing and Vacancy Survey, 2011.

Figure 1-9. Elevated blood lead level rate among children under 6. ***Source*:** New York City Lead Poisoning Prevention Program.

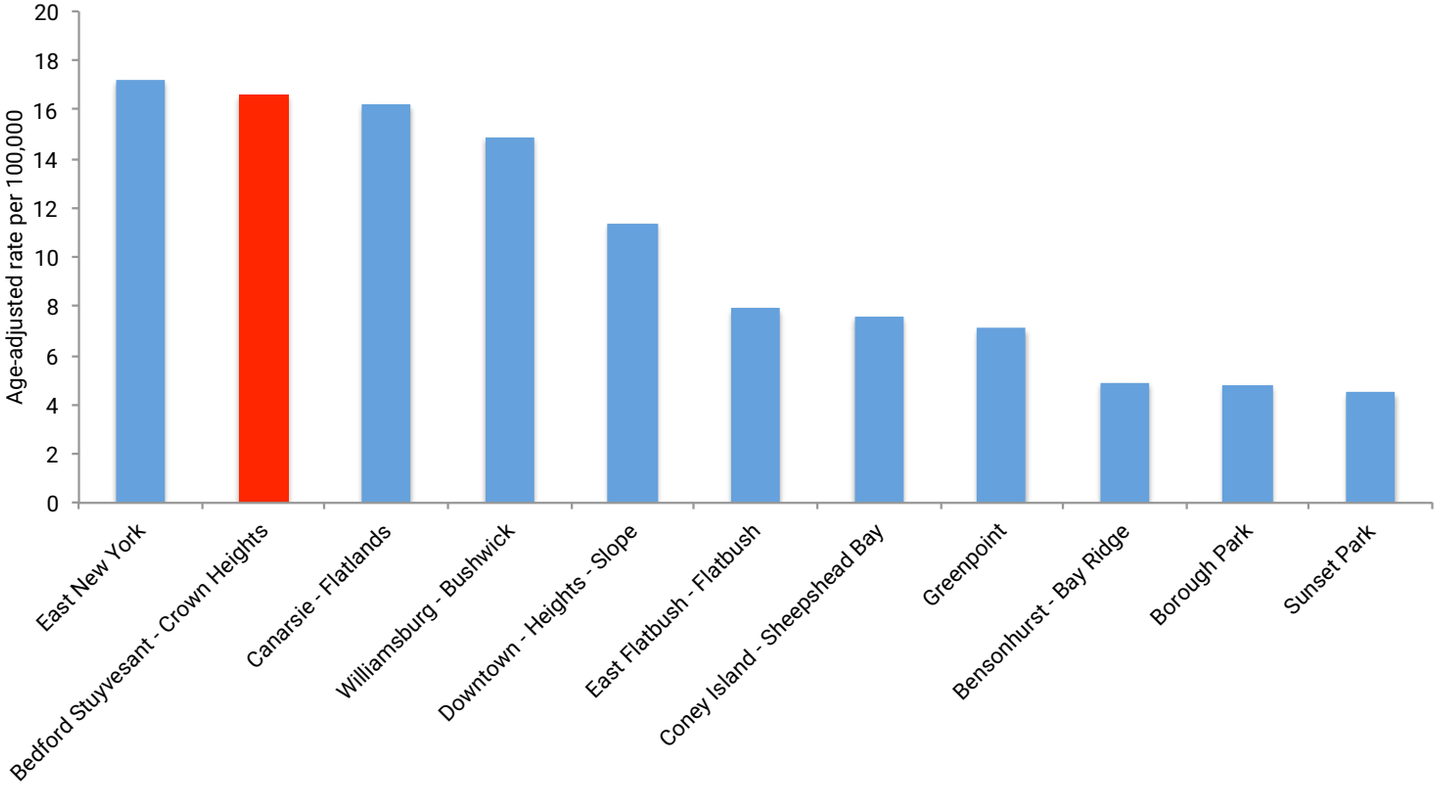


Heat stress can be a medical emergency and can occur when individuals, particularly the old and very young, cannot find cool places on hot summer days. The study area ranks high in the percent of emergency department visits as a result of heat stress. Given the high electricity costs associated with running an A/C unit, the lack of subsidies available to subsidize cooling costs, and the high percent of maintenance deficiencies present in many of the units, controlling the temperatures of the units can be difficult and are risk factors for these preventable hospital visits.

ECONOMIC CONDITIONS AND CROWDING

Economically, high housing costs can create unhealthy stress. It forces residents to make choices between rent and food or medication.[4]

Figure 1-10. Age-adjusted rate of heat stress emergency department visits. ***Source*:** New York State Statewide Planning and Research Cooperative System (SPARCS) De-identified Hospital Discharge data.



In addition, rising housing costs can force residents to move often, making it difficult to manage chronic illnesses and hold stable jobs. In particular, residential instability takes a powerful toll on children, and is known to lower emotional and behavioral functioning.

A mismatch between supply and demand

Out of all of the neighborhoods in our study area, the residents of Bedford-Stuyvesant have the greatest affordable housing needs and the least amount of affordable housing options available to them. A study conducted by the Vera Institute of Justice in 2005 revealed that the highest number of homeless families in the shelter system between 1999 and 2003 came from Bedford-Stuyvesant.

When compared to the other neighborhoods in the study area and the rest of Brooklyn, Bedford-Stuyvesant has the lowest median household income among renter households ($28,000) and the highest percent of households living in poverty (28.1 percent) and receiving public assistance (30.1 percent). While close to sixty percent of the housing stock is rent-regulated, over half of the households experience rent burdens in relation to their income.

South Crown Heights, on the other hand, has the highest concentration of rent-regulated housing units (78.4 percent) of all the neighborhoods in the study area. Despite this, a high percent of households continue to experience rent-burdens in relation to their incomes.

A closer look at the rent-regulated stock in South Crown Heights reveals that almost all of it is rent-stabilized. However, rent-stabilization is not always an indicator of affordability. In New York City, rent-stabilized apartments are allowed to rent up to $2,500 per month, which can make it too costly for many low-income households to afford. While none of the households in South Crown Heights have reached the rent ceiling that stabilization imposes, 60 percent of households living in rent-stabilized units pay over $1,000 per month, of which 40 percent are rent-burdened.

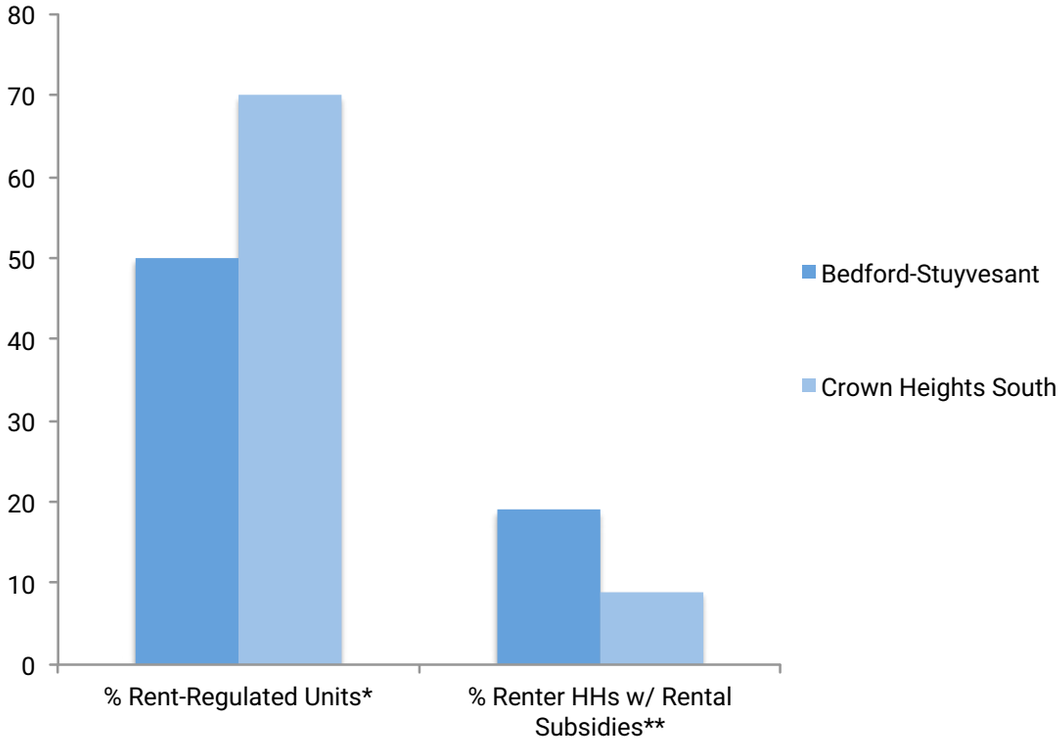
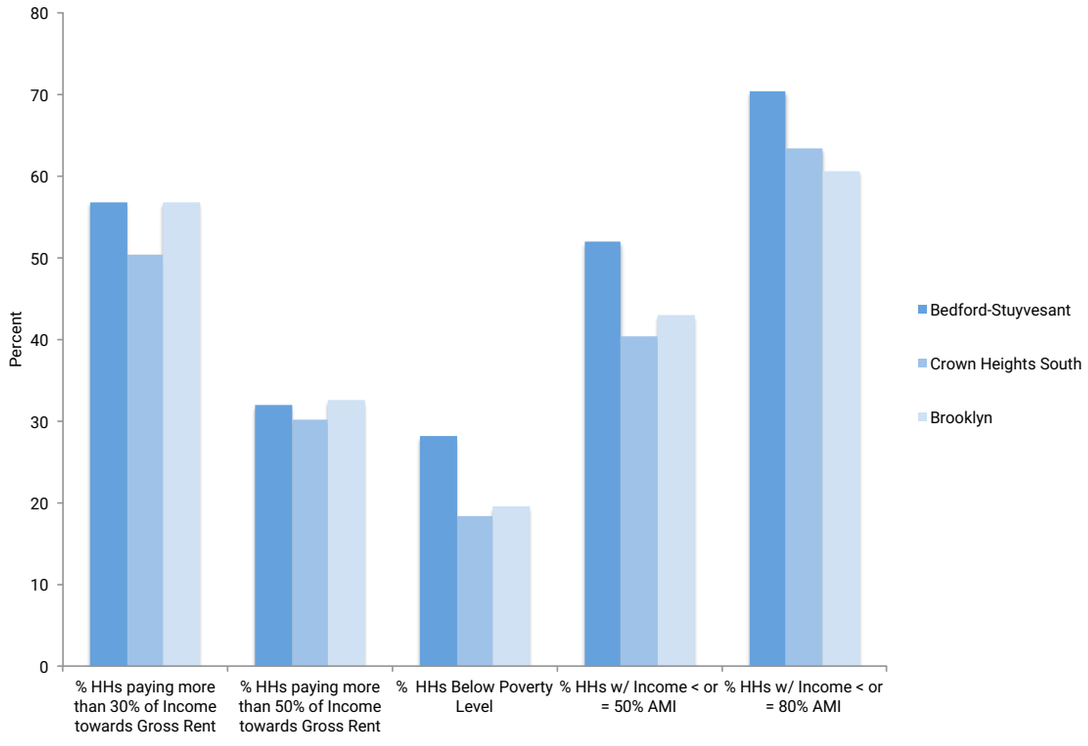


Figure 1-11. Subsidized housing. ***Source*:** New York City Housing and Vacancy Survey, 2011.

**Rent-regulated units include rent-stabilized, rent-controlled, public housing, Article 4 or 5 buildings, Mitchell Lama rentals, and in-rem. ** Rental subsidies include Housing Choice Vouchers, Public Assistance-Shelter Allowance, Family Eviction Prevention Subsidy and Senior Citizens Rent Increase Exemption.*

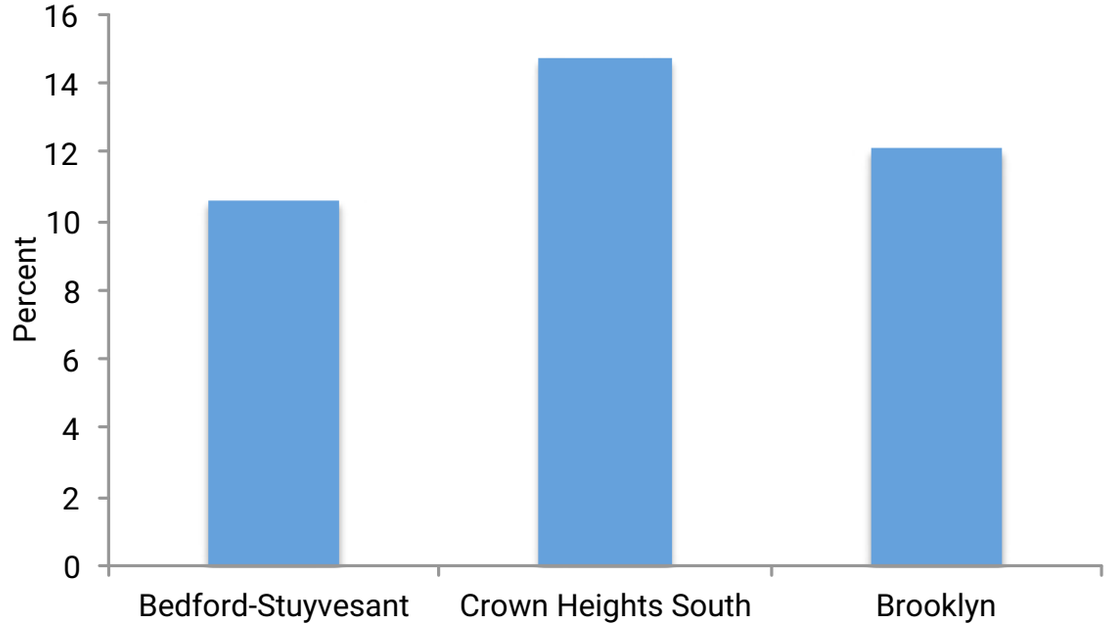
Figure 1-12. The need for affordable housing. ***Source:*** New York City Housing and Vacancy Survey, 2011.



Crowding

Overcrowding is similarly stressful, and has been linked to psychological distress and reduced parental responsiveness to children.[5] Crowding, defined as more than one person per room, is high in the study area, particularly in South Crown Heights.

Figure 1-13. Percent crowded. ***Source:*** New York City Housing and Vacancy Survey, 2011.



Prevalent Health Problems in the Study Area

This section presents population health data for the study area surrounding Interfaith Medical Center. Mortality data come from the Bureau of Vital Records, which includes data on all vital events, including births and deaths, that occurred in New York City from 1994-2007. Disease prevalence estimates come from the 2012 New York City Community Health Survey, which is designed to provide small area estimates for the City's United Hospital Fund neighborhood boundaries. This is an annual telephone survey collected by the DOHMH that provides robust data on the health and behavioral risk factors of city residents. Health varies naturally with age, so where relevant, age-adjusted rates are reported to allow for standardized comparison.

OVERALL HEALTH

Mortality rates in New York City, and each of the boroughs, fell steadily over the past decade. The death rate in Brooklyn, which was once similar to the city as a whole, has fallen slightly below the city average in terms of age-adjusted mortality. Despite these encouraging trends for the health of the city and borough, the overall trend obscures significant variation in the health of Brooklyn's residents.

Within Brooklyn, significant health disparities exist by geography. While Brooklyn enjoys overall lower than average mortality when compared to New York City, Central Brooklyn suffers from higher than average mortality rates. Figure 1-15 compares Bedford-Stuyvesant/Crown Heights' age-adjusted mortality to all of New York City and shows that in 2010, 2011 and 2012, the area's age-adjusted mortality rate remained higher than the New York City average. Disease-specific mortality rates show similar trends.

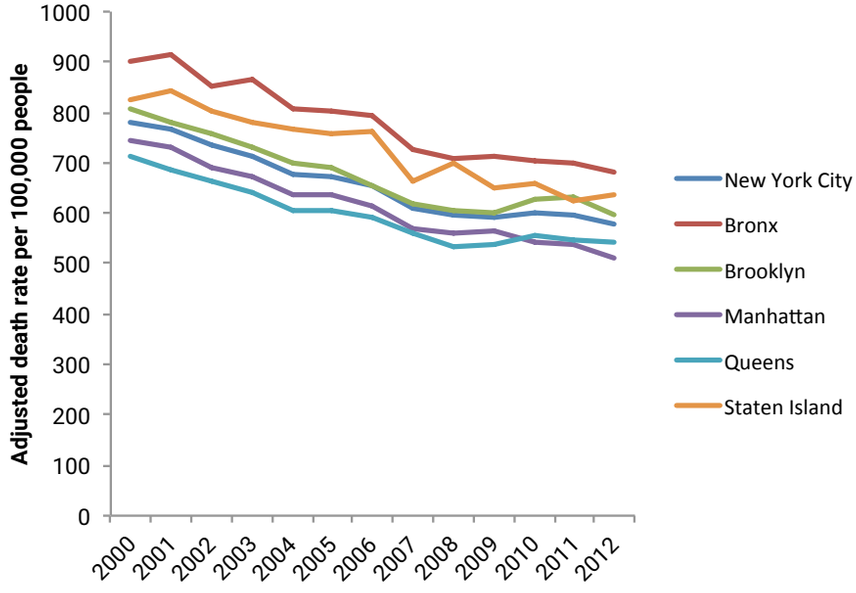


Figure 1-14. Age-sex adjusted death rate, 2000-2012. ***Source*:** New York State Department of Health.

Although death rates have been falling in Central Brooklyn, disparities between the study area and the rest of the city persist.

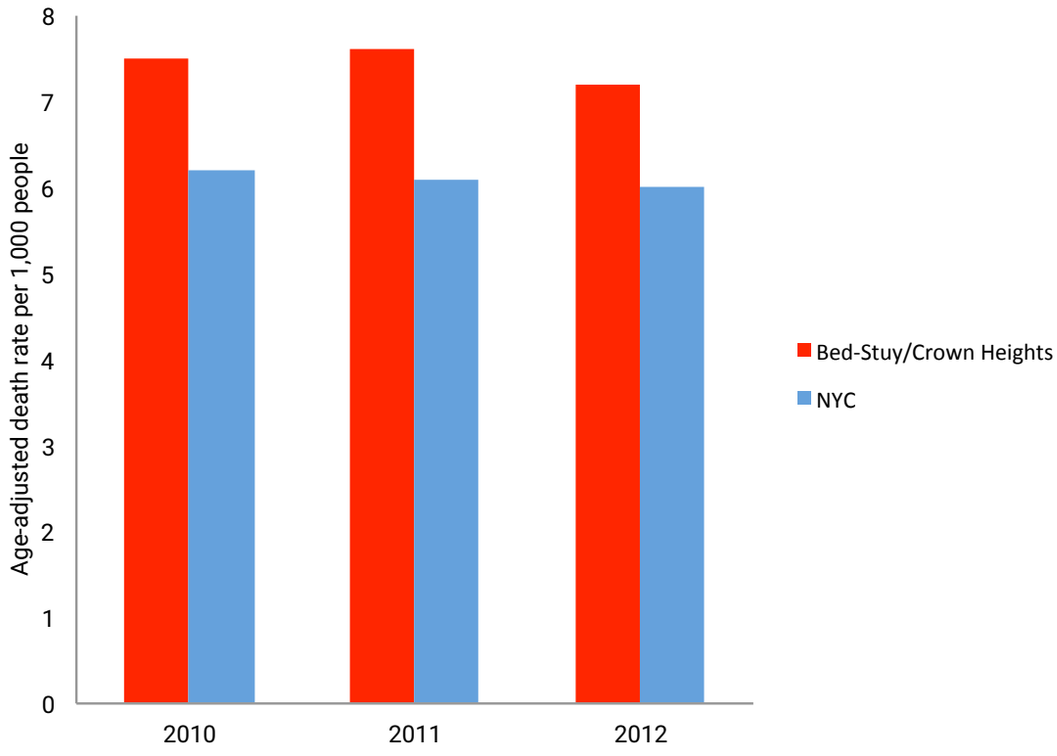


Figure 1-15. Age-adjusted mortality rate, New York City and Bedford-Stuyvesant/Crown Heights, 2010-2012. ***Source*:** NYC Bureau of Vital Statistics

Heart disease, cancer, flu, and diabetes are among the neighborhoods leading causes of death, and kill residents at higher than city-and borough-wide rates. In addition, despite contributing relatively little to the overall mortality rate, disparities between the study area and entire city are particularly stark for assault and homicide deaths.

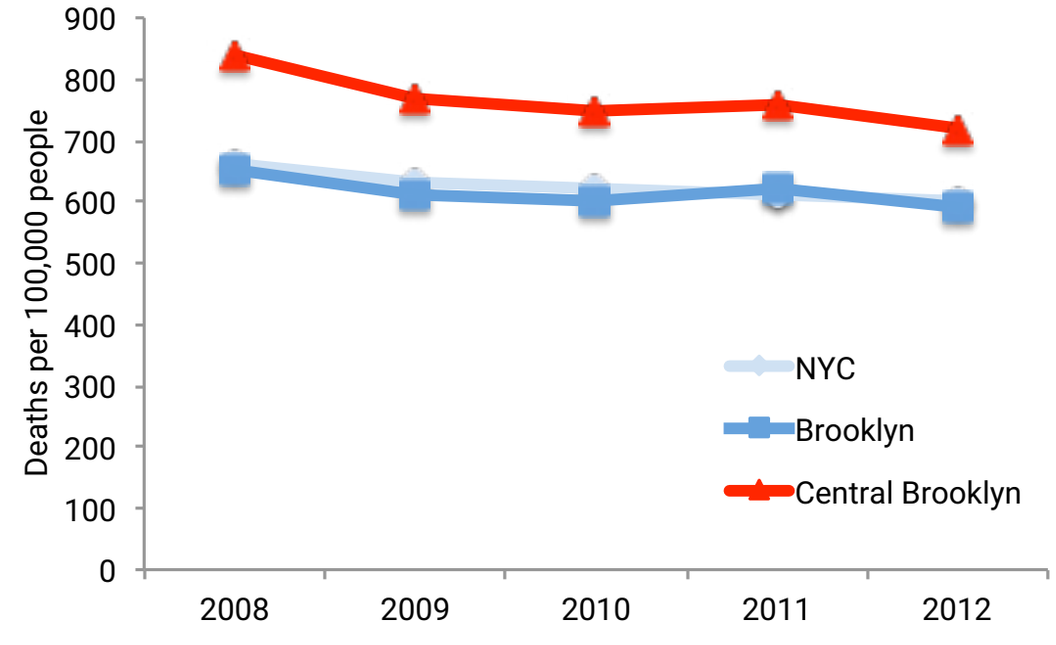


Figure 1-16. Death rates. ***Source*:** New York City Bureau of Vital Statistics

Homicide is a particularly important contributor to premature mortality in the study area. By examining premature mortality, we can understand what health outcomes cost the largest number of life years in the study area. Premature mortality rates reflect death rates for those under 75 years of age, effectively counting the rate at which people die too young in certain areas. The latest data available show that the study area ranked 38th of New York City's 42 neighborhoods in terms of premature mortality, losing more residents at young ages than almost any other place in the city.[6] Homicide rises to the top five sources of premature mortality in the area, accounting for roughly 8 percent of life years lost among residents who died too young. Heart disease, cancer, HIV and HIV-related complications were the only conditions to surpass homicide in terms of contributions to premature mortality in the area.

Diseases of the heart and malignant neoplasms, or cancer, were also the biggest killers in the study area overall. Figure 1-17 shows that, in comparison to the city as a whole, the study area experienced higher age-adjusted mortality rates for 9 of its 10 leading causes of death.

Upstream contributors common to many of the area's top 10 killers include obesity, poor diet, a lack of physical activity, substance use, including smoking and alcohol consumption, stress, and violence, among others social determinants of health.

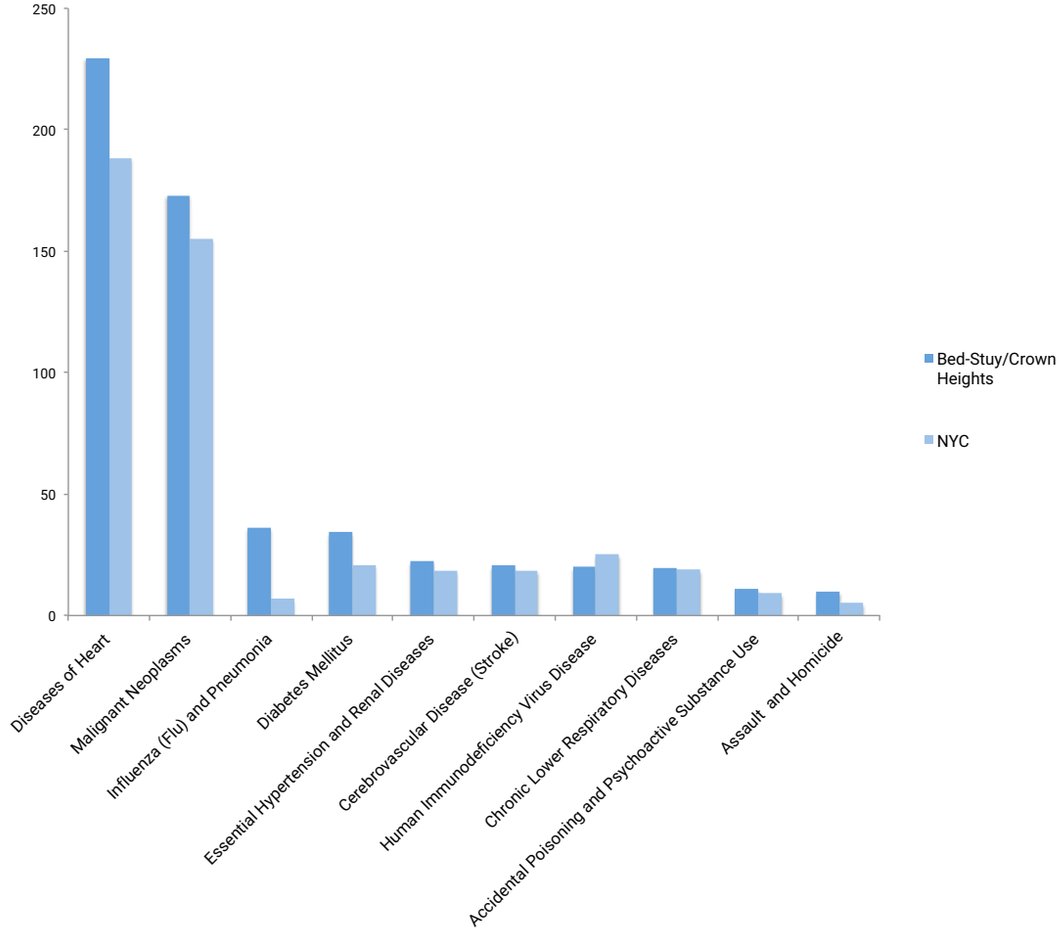


Figure 1-17. Leading causes of mortality in Bedford-Stuyvesant/ Crown Heights, 2012. ***Source*:** NYC Bureau of Vital Statistics.

Much of the area's disease burden can also be traced, in part to these and other upstream factors. Illness, disease, and injury, even when not lethal, can be disruptive, unpleasant, expensive, and debilitating. Below we present data on prevalent health conditions affecting the study area. While not all of these conditions are among the area's leading causes of death, they interfere with residents' quality of life and contribute to potentially avoidable hospital utilization.

DIABETES

Diabetes is among one of the most common health concerns for area residents. The percent of adults in the study area reporting a diabetes diagnoses surpasses the city and borough averages (as shown in Figure 1-18).

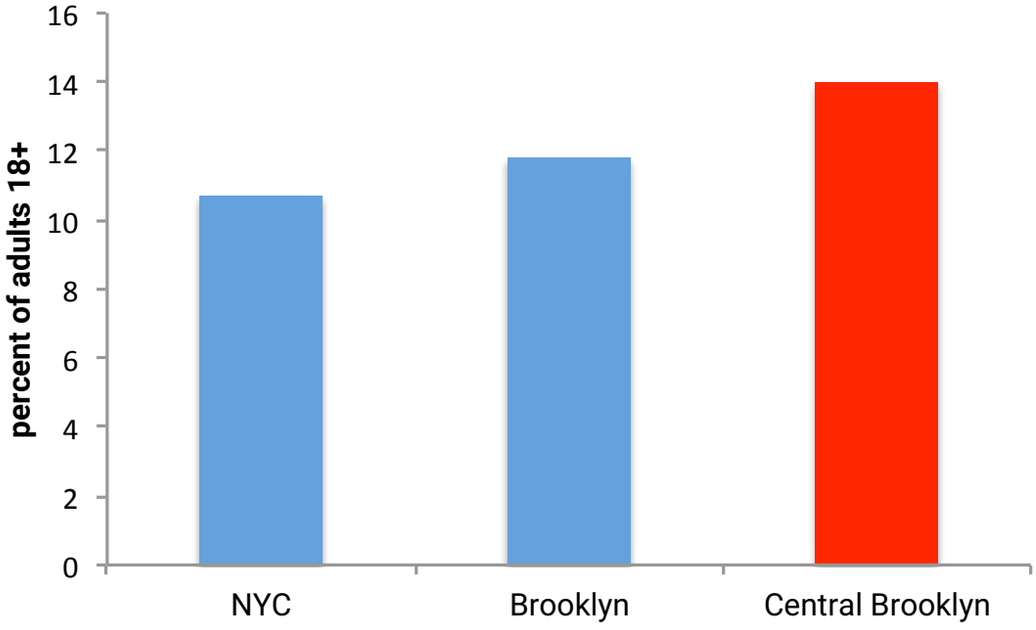
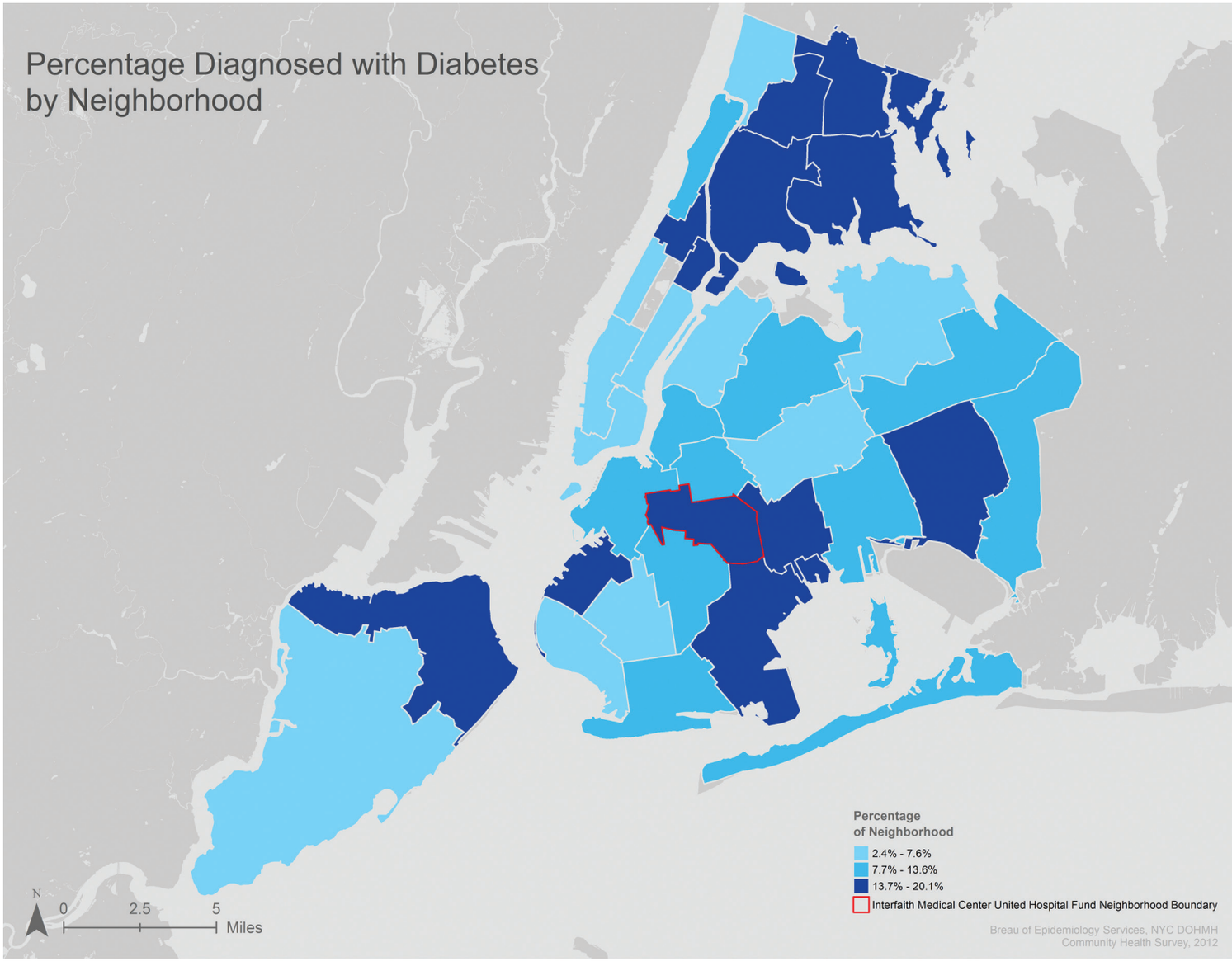


Figure 1-18. Diabetes. ***Source*:** NYC DoHMH Community Health Survey, 2012.

Brooklyn experiences large geographic disparities in diabetes prevalence, with Central Brooklyn suffering twice the rate of diabetes compared to low prevalence neighborhoods.

Figure 1-19. Percentage diagnosed with diabetes by neighborhood. ***Source:*** NYC DoHMH Community Health Survey, 2012.



CARDIOVASCULAR HEALTH

Heart disease deaths are more common in Central Brooklyn than in Brooklyn or New York City overall. This trend persisted between 2008 and 2012.

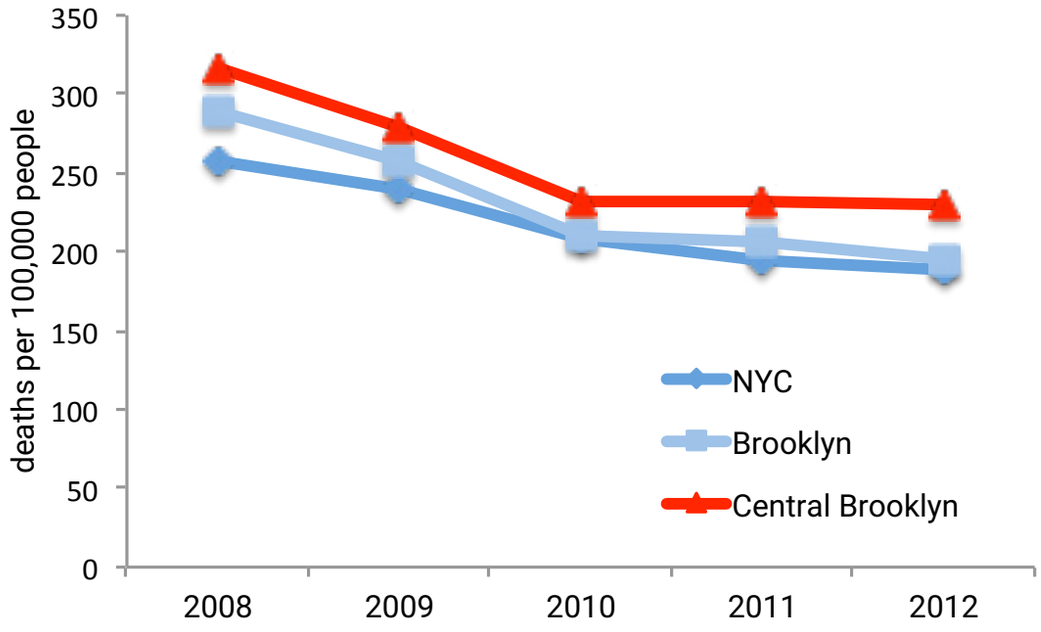


Figure 1-20. Deaths due to heart disease. ***Source:*** NYC Bureau of Vital Statistics.

A serious risk factor for devastating cardiovascular health outcomes such as stroke and heart attack, the study area's hypertension prevalence is also higher than average.

Figure 1-21. Percentage which have ever been told high blood pressure by neighborhood.
***Source*:** NYC DoHMH Community Health Survey, 2012.

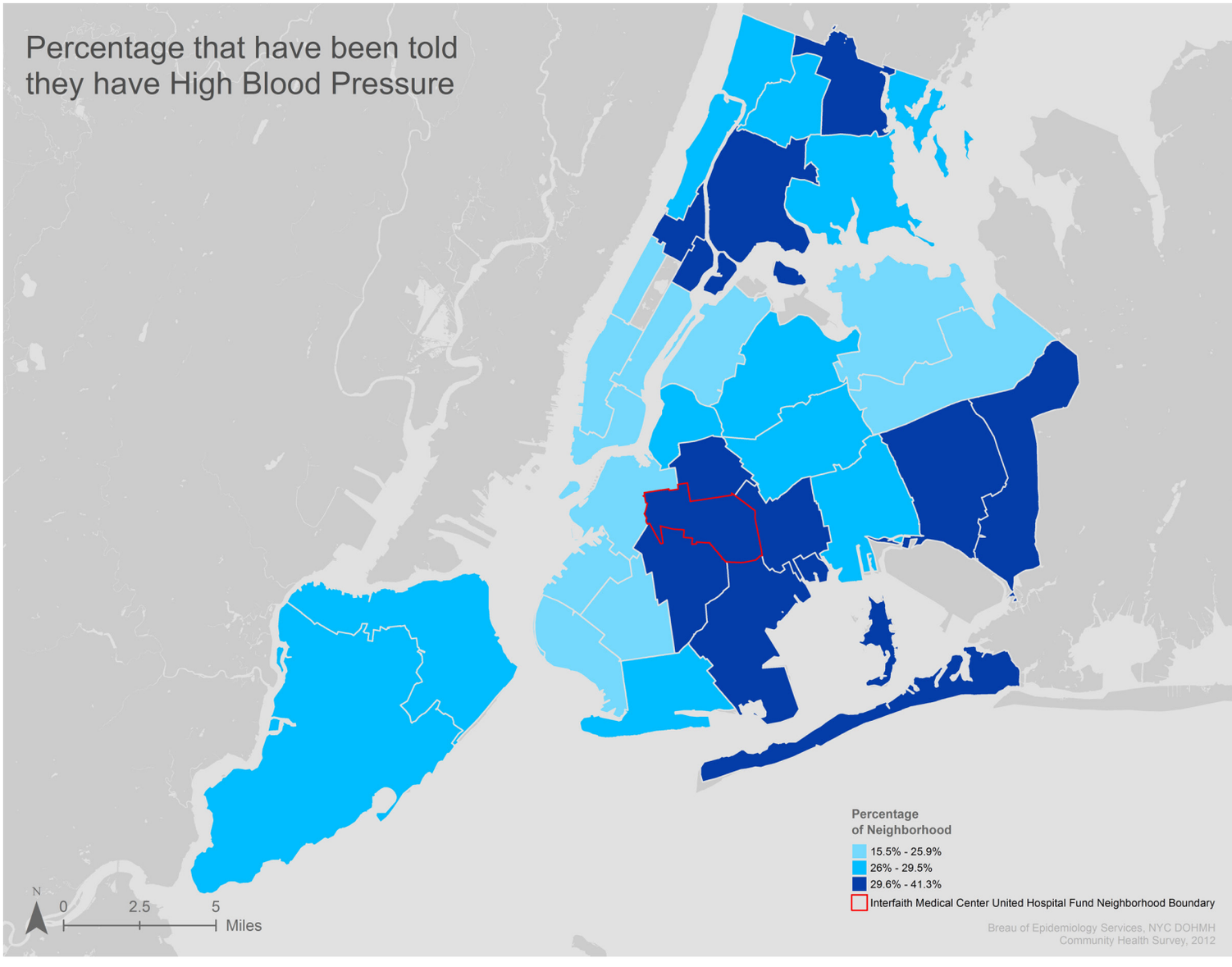
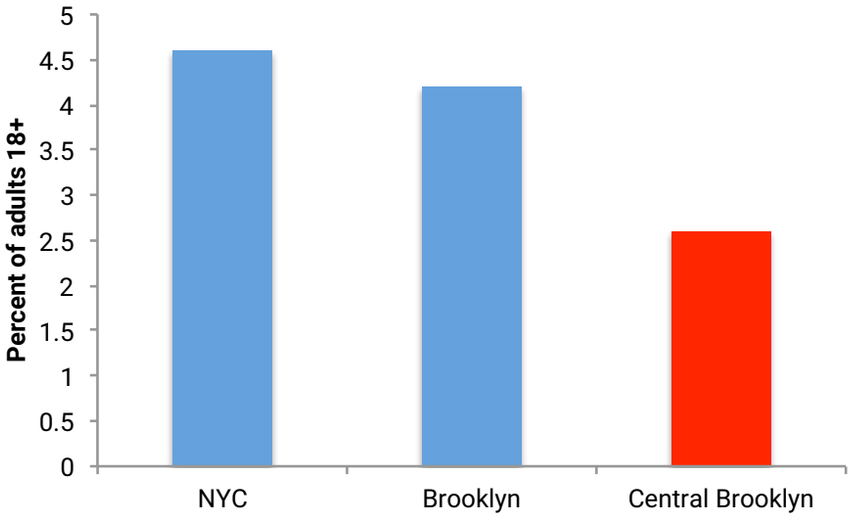


Figure 1-22. Currently have asthma. ***Source*:** NYC DoHMH Community Health Survey, 2012.



ASTHMA

A smaller share of study area adults report asthma than do adults in the rest of Brooklyn and New York City as a whole.

Given the lower prevalence of asthma, we would expect similarly low ED usage for asthma. However, in comparison to neighboring areas, Interfaith experienced higher rates of ED use for asthma, suggesting the potential for improvements in asthma control.

Figure 1-23. Brooklyn asthma emergency department visits by zip code. ***Source*:** New York State Statewide Planning and Research Cooperative System (SPARCS) Hospital Discharge data.

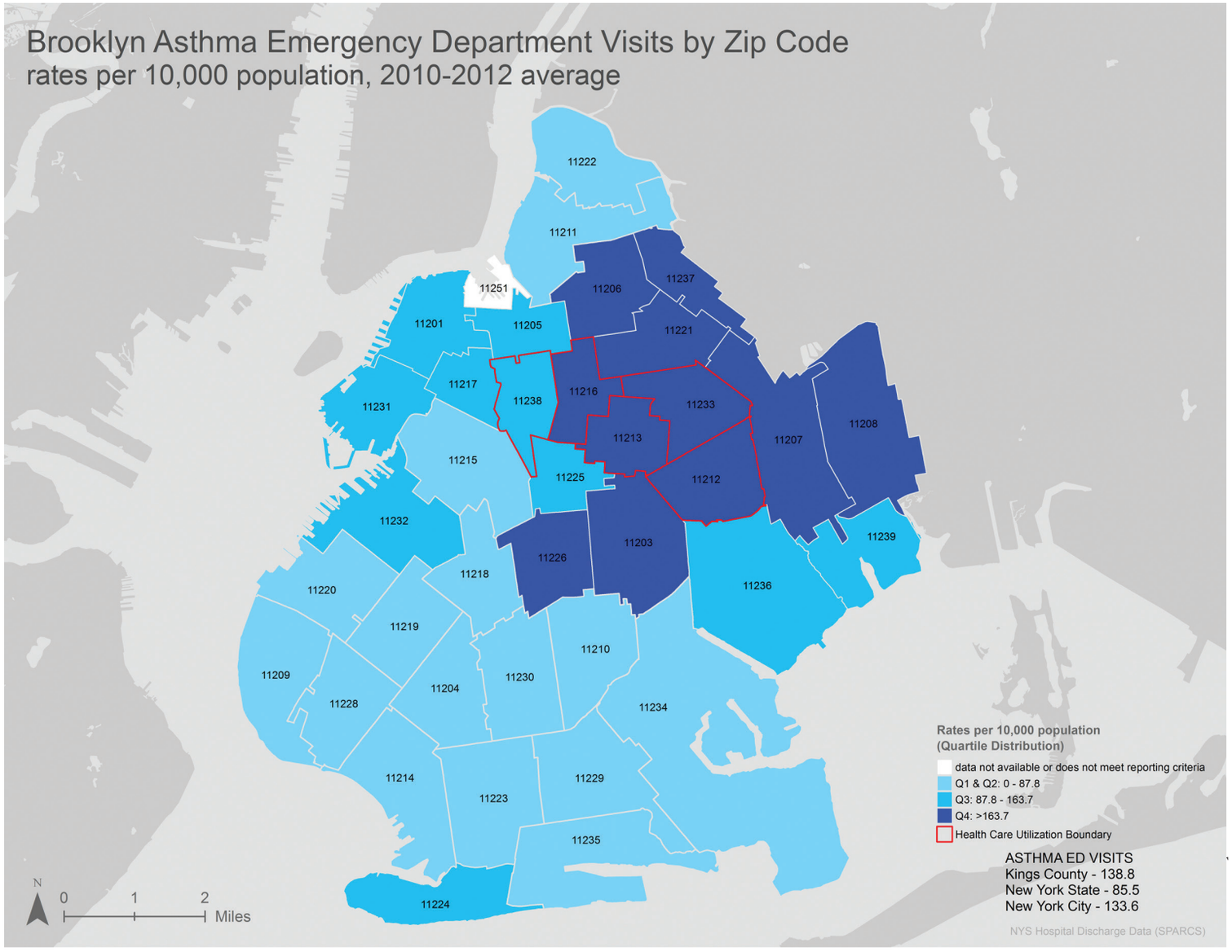


Figure 1-24 shows inpatient discharges for asthma. The areas in blue represent the upper quartile of asthma discharges, or rates above 35 per 10,000 people. Areas shaded darkest blue have the highest rates of admissions for asthma.

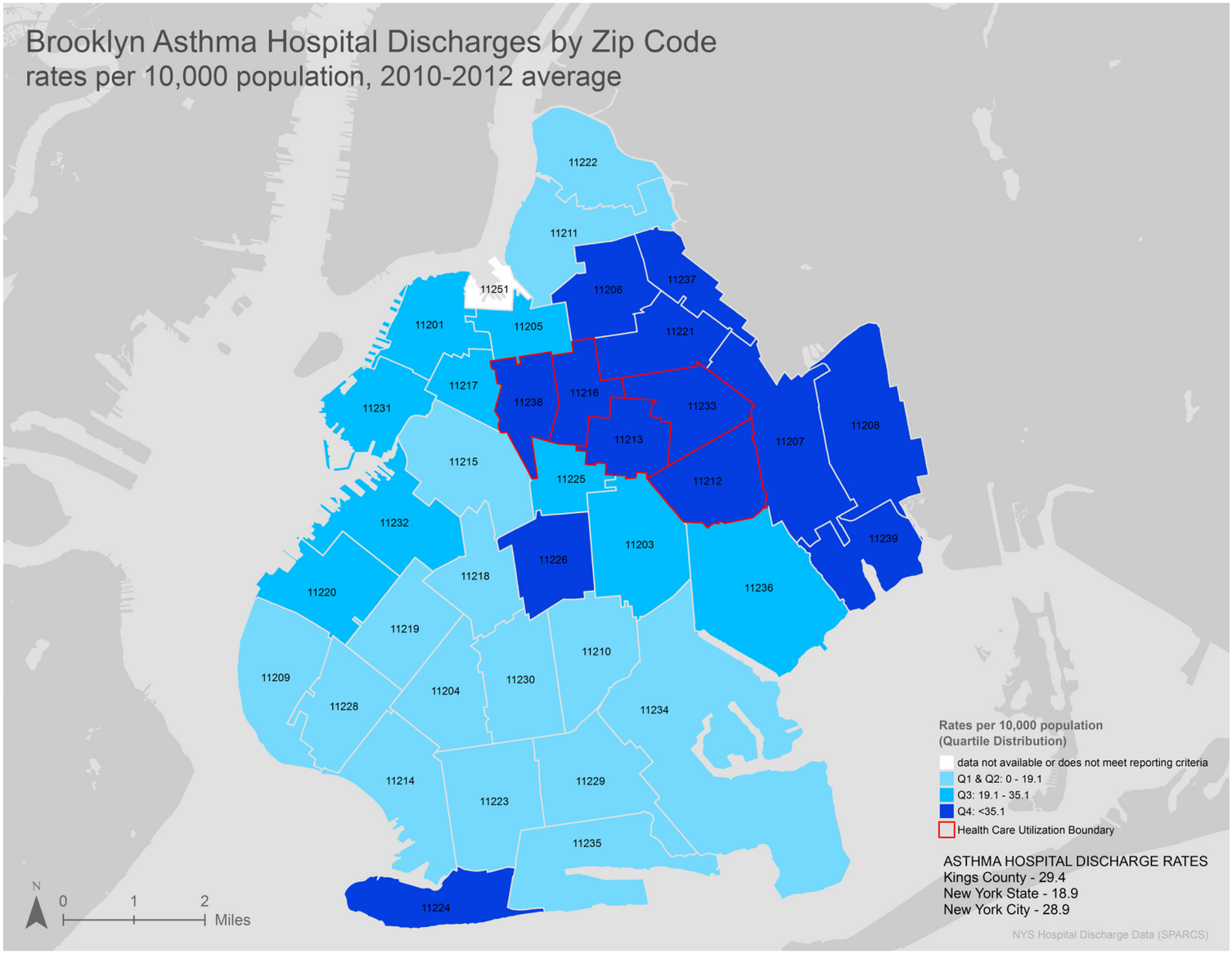


Figure 1-24. Brooklyn asthma hospital discharges by zip code. ***Source*:** New York State Statewide Planning and Research Cooperative System (SPARCS) Hospital Discharge data.

While only 10 percent of Brooklyn's population lives in the study area, in 2010 and 2012 the study area zip codes accounted for 24.8 percent of ED asthma visits or over 26,000. Over the same time period, the five zip codes contributed roughly 4,800 (21.8 percent) asthma hospitalizations, accounting for 21.8 percent of the borough's asthma hospitalizations. In zip code 11233, asthma ED visit rates were more than twice the borough average.

While there is natural variation in individuals' risk of asthma, exposure to allergens in the home, exposure to tobacco smoke, obesity, a lack of consistent medical care and other modifiable factors contribute to asthma-related hospital utilization. Air pollution, in the form of fine particu-

late matter (PM 2.5) is a contributor to ED visits for asthma among both children and adults in the study area.

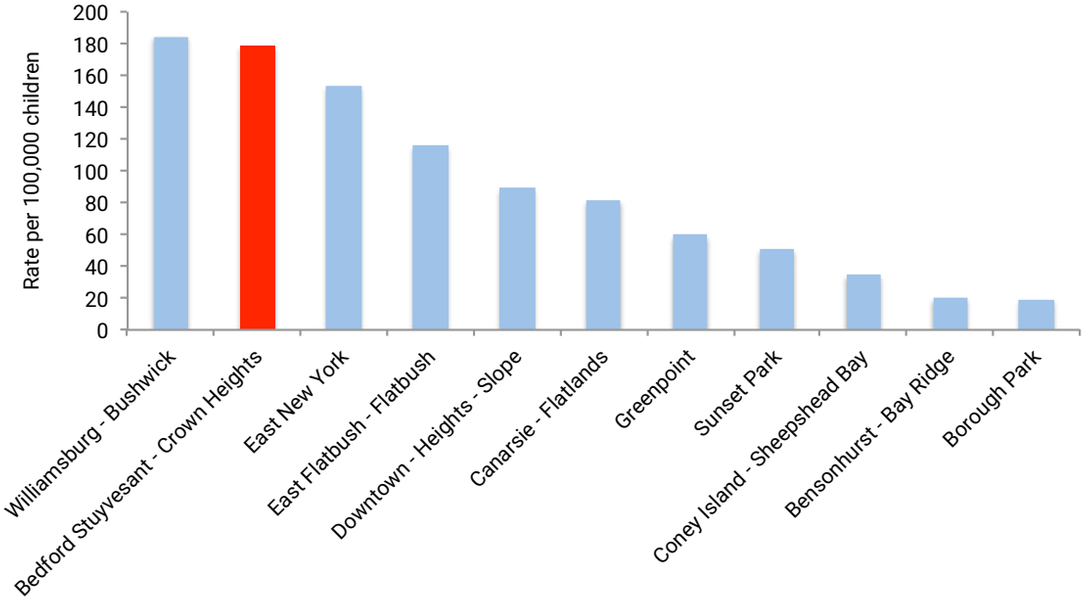


Figure 1-25. PM 2.5-Attributable asthma emergency department visits among children, 2009-2011. ***Sources:*** USEPA Air Quality System; Ito K et al. (2007) J Expo Sci Environ Epidemiol 17:S45-S60, New York Statewide Planning and Research Cooperative System (SPARCS); US Census.

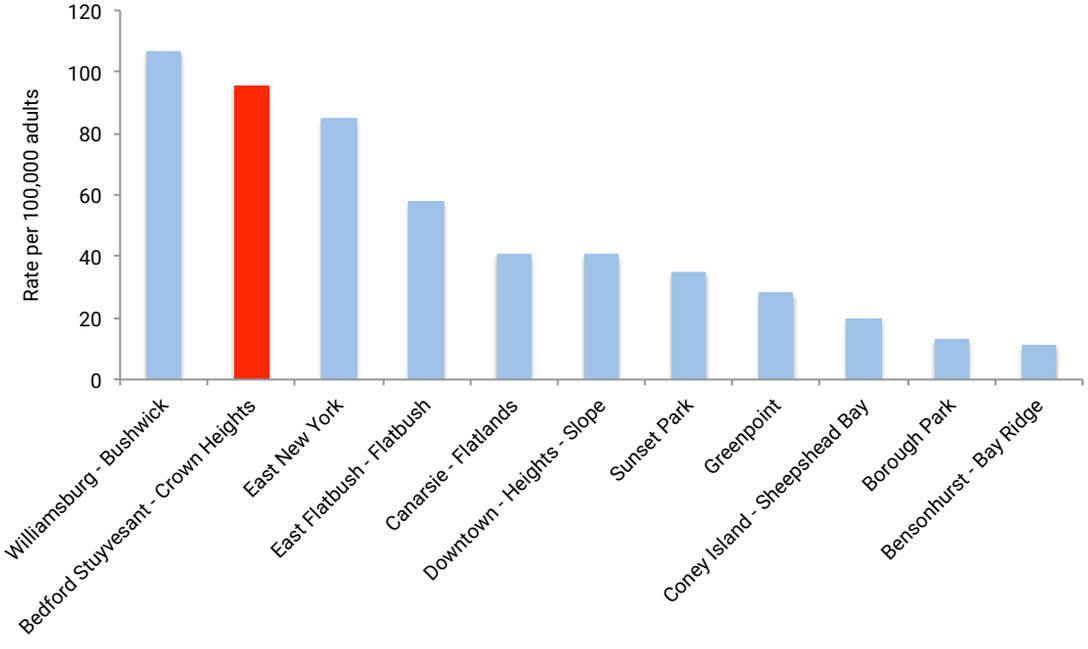


Figure 1-26. PM 2.5-Attributable asthma emergency department visits among adults, 2009-2011. ***Sources:*** USEPA Air Quality System; Ito K et al. (2007) J Expo Sci Environ Epidemiol 17:S45-S60, New York Statewide Planning and Research Cooperative System (SPARCS); US Census.

OBESITY

The chronic conditions discussed above, including diabetes, cardiovascular disease, high blood pressure, and asthma, are worsened by obesity, which is extremely common in the study area. Obesity is also a risk factor for other poor health outcomes, including liver and gallbladder disease, mental illness, sleep apnea and respiratory problems, osteoarthritis and reproductive health complications.[7]

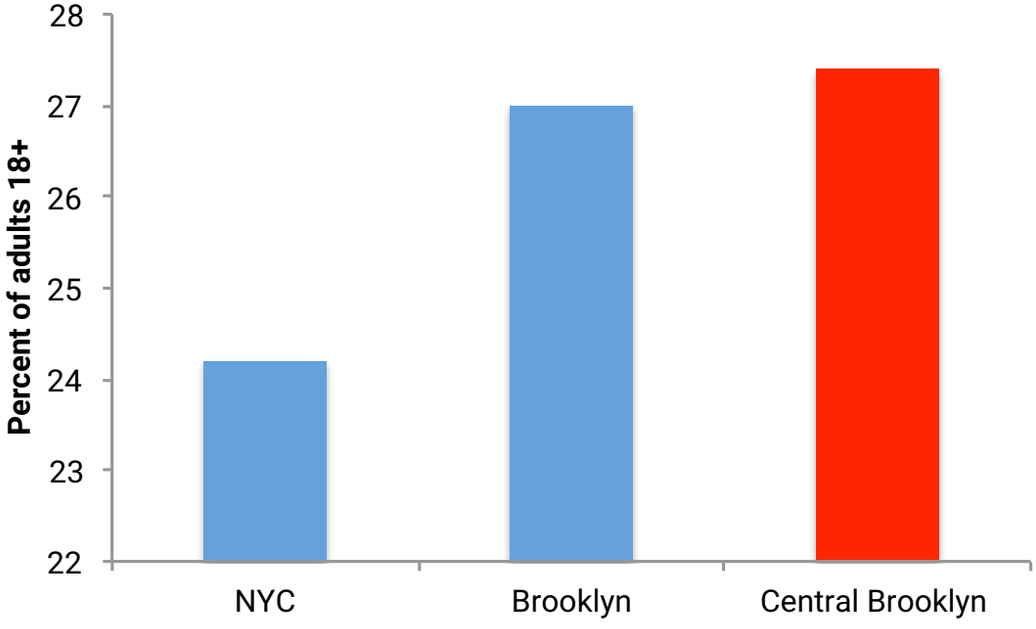
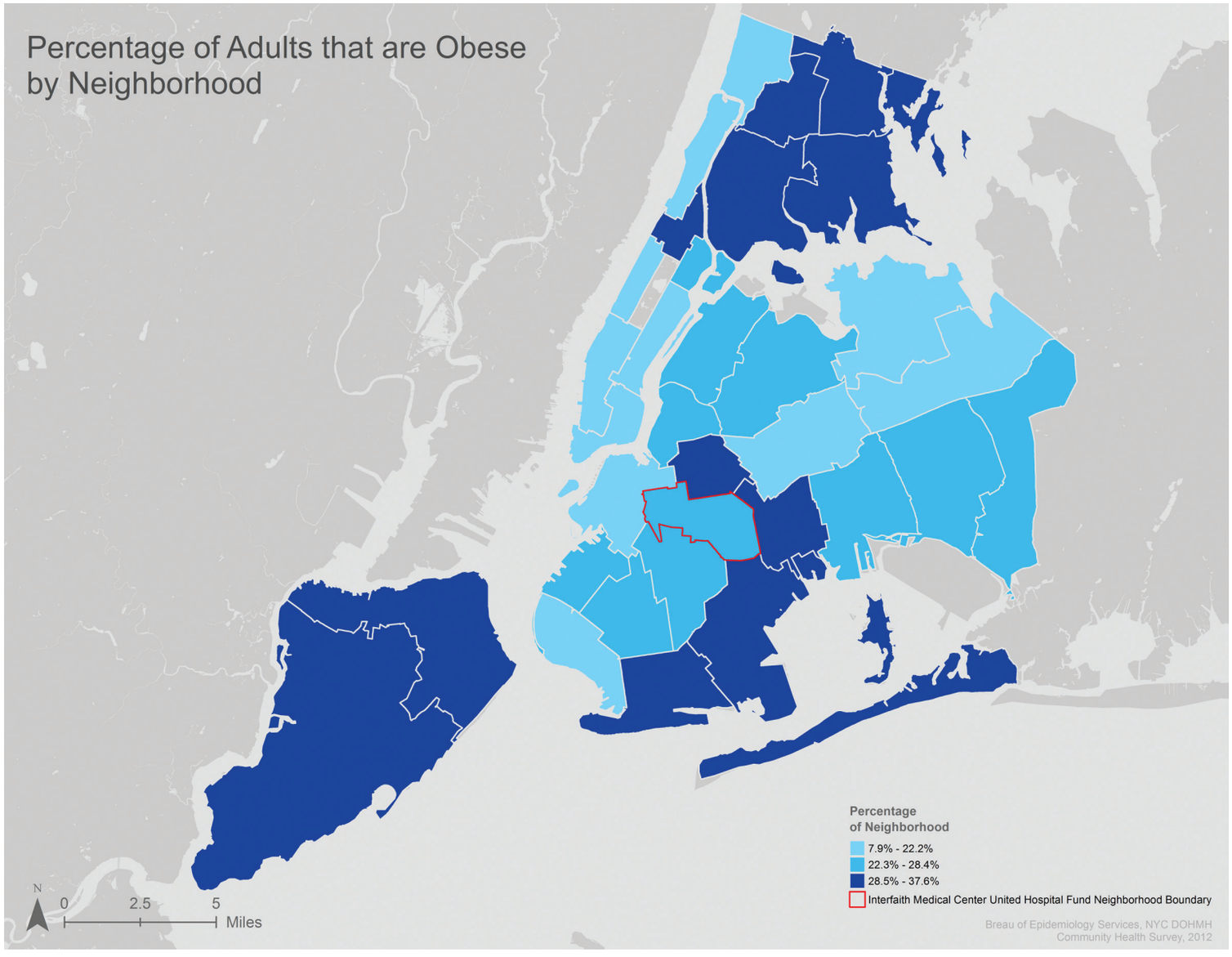


Figure 1-27. Obesity.
***Source*:** NYC DoHMH Community Health Survey, 2012.

Obesity affects almost one-third of adults in the study area, and another 30 percent are overweight but not obese.

Figure 1-28. Percentage of adults that are obese by neighborhood. ***Source*:** NYC DoHMH Community Health Survey, 2012.



Health risk factors

NUTRITION

In low-income areas, limited access to healthy food options, and an overabundance of unhealthy options, makes it hard for residents to eat a healthy diet. Central Brooklyn residents lack sufficient access to grocery stores and supermarkets that sell affordable healthy food; several studies have identified Central Brooklyn as a food desert.[8] Instead, many low-income residents must depend on bodegas, corner stores, fast food restaurants as their primary sources of food, or travel long distances to markets that sell affordable groceries. This food environment is saturated with processed, rather than fresh, foods, especially those rich in calories, sugar, salt, and fat. In fact, nearly 20 percent of surveyed residents in our study area reported eating no fruits or vegetables when asked about the previous day's diet. Conversely, over 30 percent of residents report drinking one or more sugar-sweetened beverage each day. Such diets are associated with the development of obesity, asthma, heart disease, and diabetes - all conditions that are prevalent in the study area.

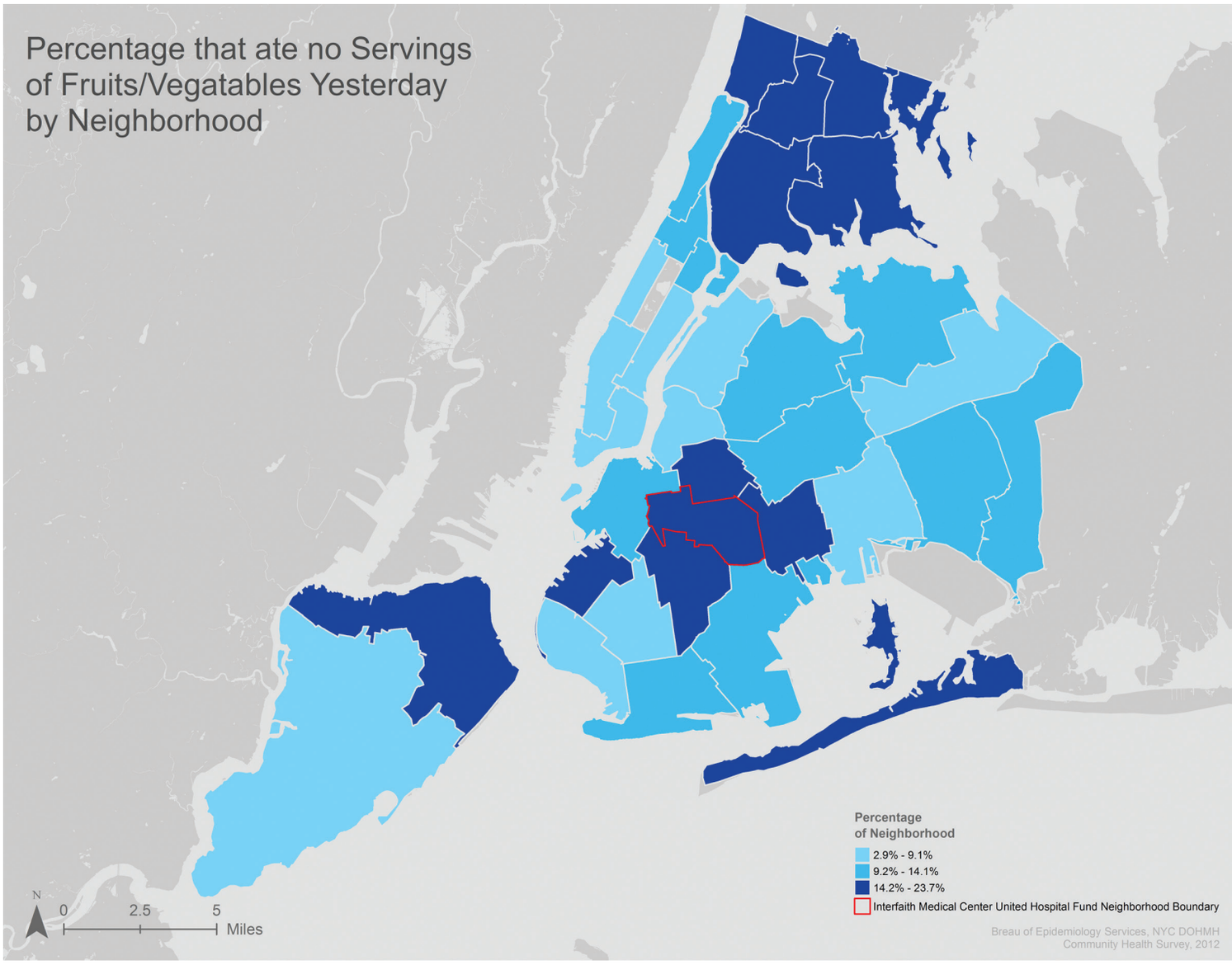
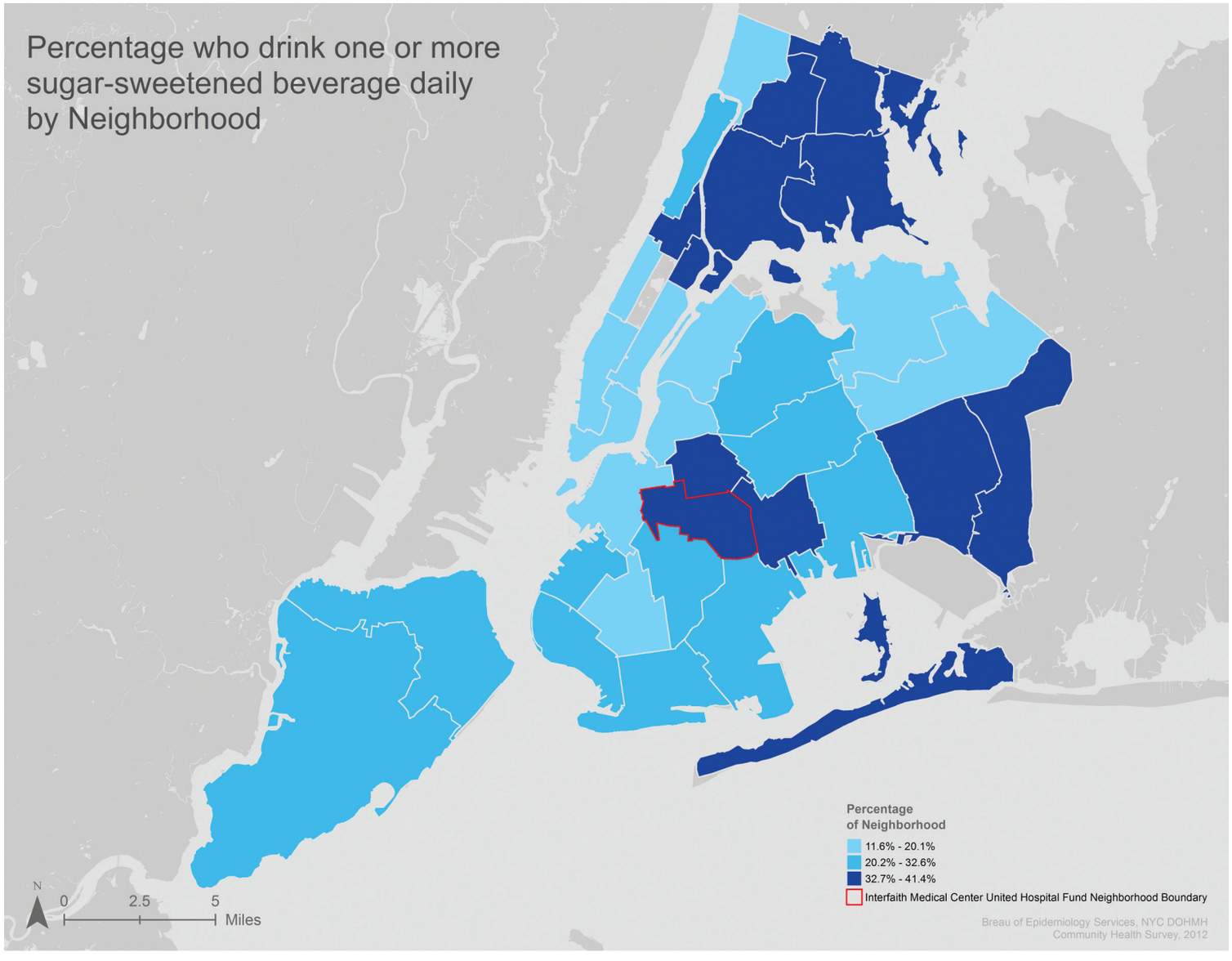


Figure 1-29. Percentage that ate no servings of fruits/vegetables yesterday by neighborhood. ***Source*:** NYC DoHMH Community Health Survey, 2012.

Figure 1-30. Percentage who drink one or more sugar-sweetened beverage daily by neighborhood. ***Source*:** NYC DoHMH Community Health Survey.



PHYSICAL ACTIVITY

While nutritional challenges are common in the study area, physical inactivity is relatively less problematic. Residents in the area are less physically inactive, on average, than other residents of Brooklyn or New York City overall. However, about 1/5th of the area's adult population reports being physically inactive, and an additional 1/5th do not get sufficient activity. Strategies are needed to engage the almost 40 percent of neighborhood adults who are less active than recommended.

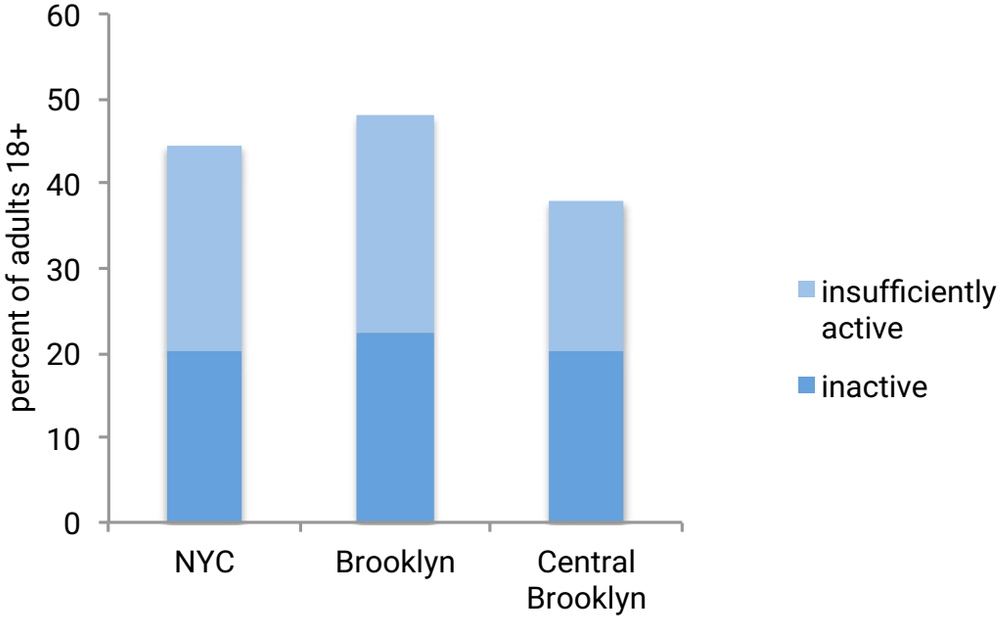


Figure 1-31. Meets 2008 physical activity guidelines. ***Source*:** NYC DoHMH Community Health Survey, 2012.

It is possible that some residents are not achieving the recommended level of physical activity due to concerns about safety and violence in the neighborhood. Fear of criminal victimization may also limit some residents from being physically active. In the first eight months of 2014, Bedford-Stuyvesant (precinct 79) experienced over 12 crimes[9] per 1,000 residents, compared to just under 9 crimes per 1,000 in Brooklyn, on average, and to 8.5 crimes per 1,000 in New York City. Neighboring Crown Heights (precinct 71) also had higher than average crime rates at 10.1 crimes per 1,000 people in the first eight months of 2014.[10]

Safety is also an issue. As shown in Figure 1-32, pedestrian injuries that sent residents to the emergency room are particularly common, per 100,000 people, in the study area compared to other neighborhoods. Hospital admission rates for pedestrian injuries were also higher in Central Brooklyn than in most other areas. Safe streets initiatives may help curb some avoidable injuries.

Figure 1-32. Age-adjusted rate of pedestrian injury emergency department visits, 2010. ***Source*:** New York State Planning and Research Cooperative System (SPARCS) updated March 2013.

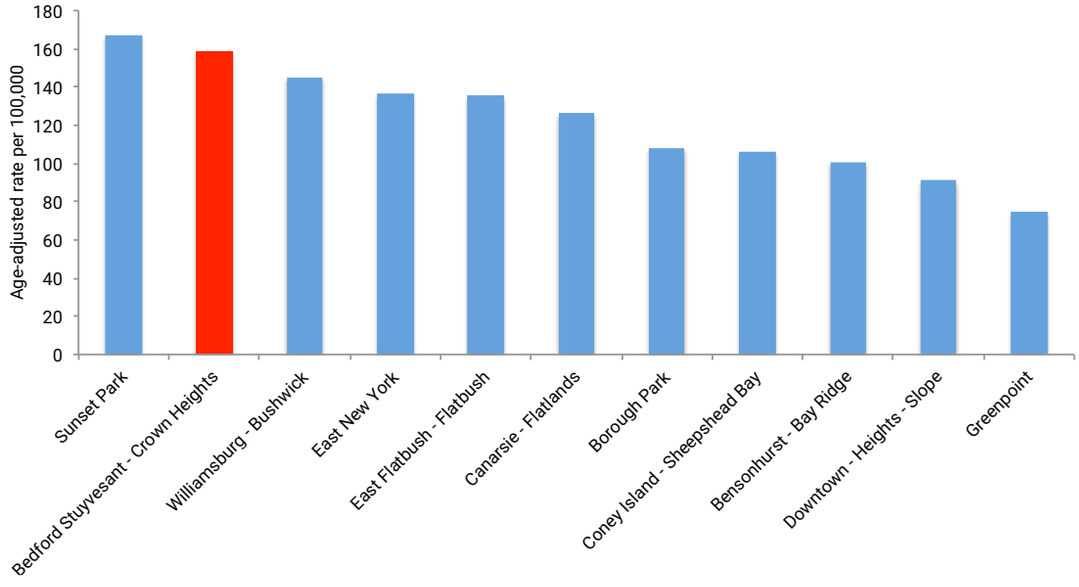
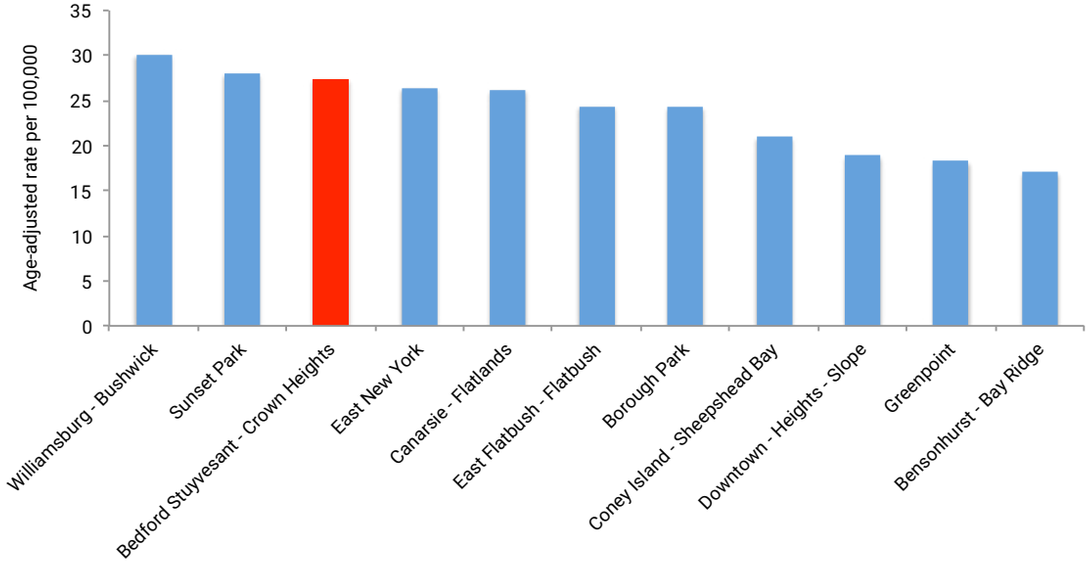


Figure 1-33. Age-adjusted rate of pedestrian injury hospitalizations, 2010. ***Source*:** New York State Planning and Research Cooperative System (SPARCS) updated March 2013.



SUBSTANCE USE

Substance use, including heavy drinking, illicit drug use, and smoking are risk factors for nearly all the leading causes of death in the study area. In 2012, about 6 percent of adults in the area reported heavy drinking, and about 16 percent identified as smokers. Promisingly, over 70 percent of smokers tried to quit in the previous year. These data suggest that a large number of adults in the study area would be receptive to, and could benefit from, effective cessation programs.

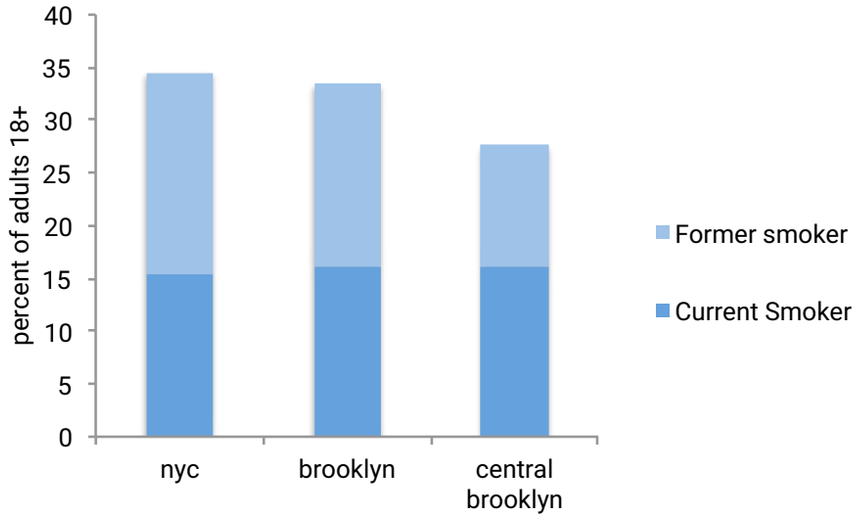


Figure 1-34. Smoking status, Central Brooklyn. ***Source*:** NYC DoHMH Community Health Survey, 2012.

SEXUAL HEALTH

HIV/AIDS is among the 10 leading causes of death in the study area. While certain types of substance use increase the risk of contracting and spreading sexually transmitted diseases, sexual health is also an important risk factor.

In the study area, less than half of surveyed residents reported using a condom during their most recent sexual encounter, and 13 percent reported three or more sexual partners in the past year. These, and other factors, may contribute to higher burden of sexually transmitted diseases in the neighborhood, including gonorrhea and chlamydia.

Figure 1-35. Gonorrhea, 2009. ***Source*:** NYC DoHMH Community Health Survey.

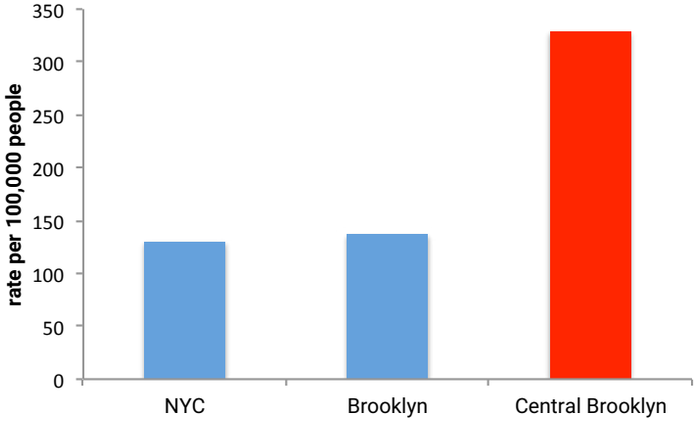
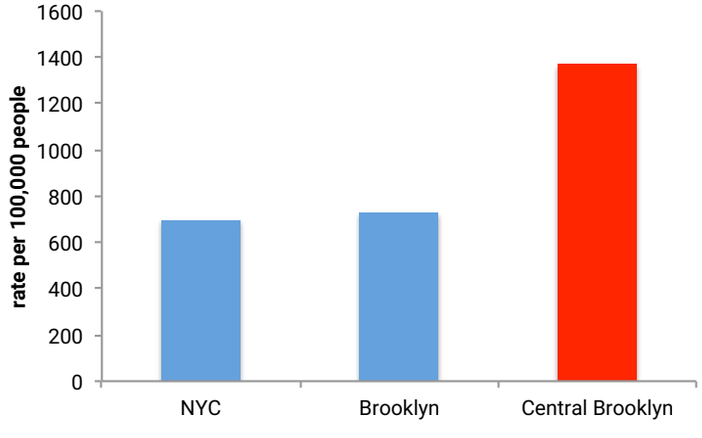


Figure 1-36. Chlamydia, 2009. ***Source*:** NYC DoHMH Community Health Survey.



Residents in the area are more likely than those in neighboring areas to undergo HIV testing, which demonstrates a positive connection to important health care resources. High rates of other sexually transmitted diseases, such as gonorrhea and chlamydia, may also reflect higher than average rates of testing for sexually transmitted diseases in the study area.

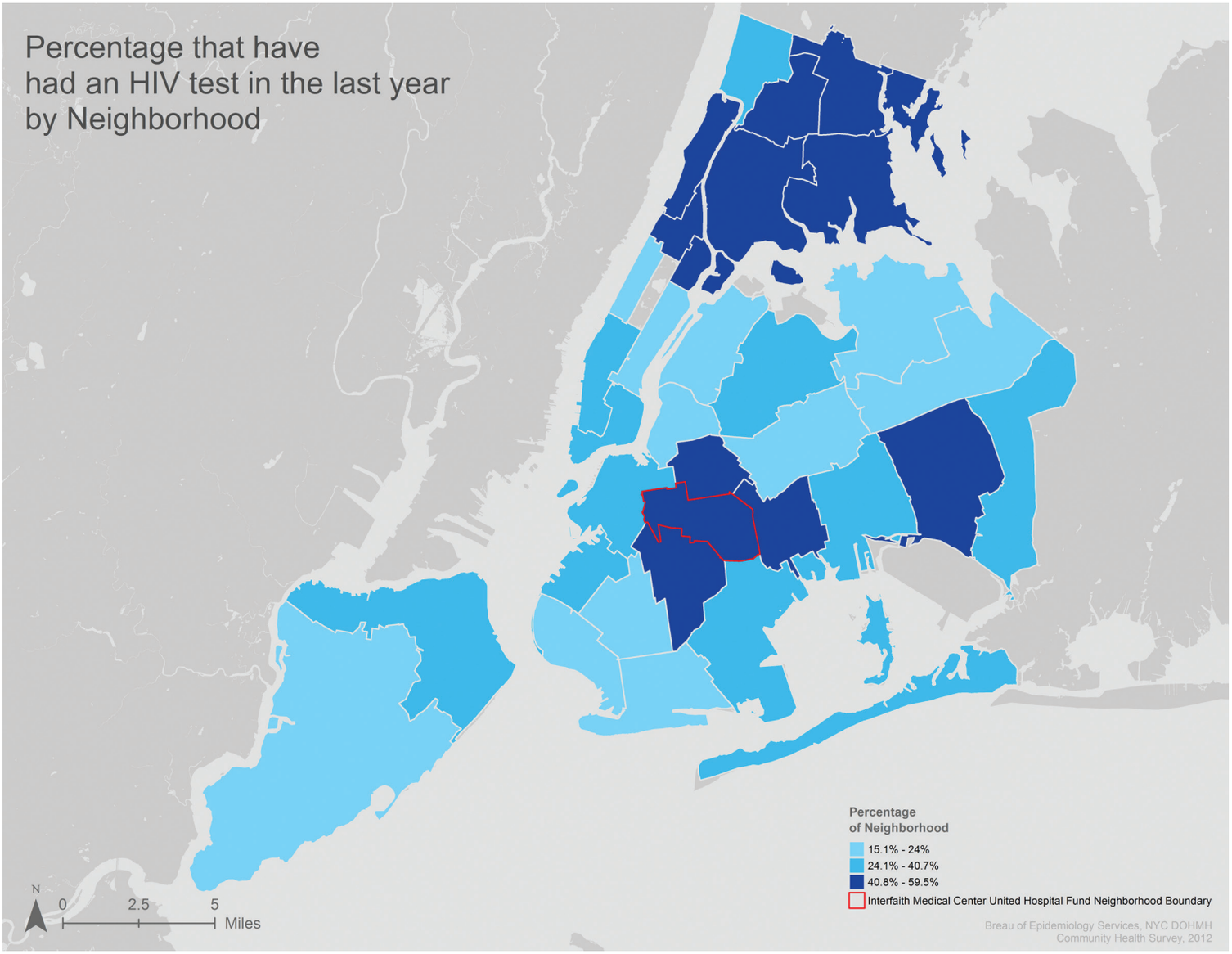


Figure 1-37. Percentage that have had an HIV test in the last year by neighborhood. ***Source*:** NYC DoHMH Community Health Survey, 2012.

MATERNAL HEALTH

Over 14,000 babies were born in the 5-zipcode study area between 2010 and 2012, or about 12 percent of all births in the borough. However, these babies had worse outcomes, on average, than Brooklyn babies overall. While 11.3 percent of Brooklyn babies were born prematurely, about 15 percent of those born in the study area were premature. The percent of underweight babies born was also higher than in the borough overall; about 12 percent of study area babies were underweight compared to roughly 8 percent of all Brooklyn babies.

Teen birth and pregnancy rates were higher in 4 of the 5 area zip codes than in the borough overall. Zip code 11238 was the only one to fall below Brooklyn averages on teen pregnancy and birth. The same geographic pattern emerged when looking at the percent of babies born to mothers who had received no or late prenatal care.

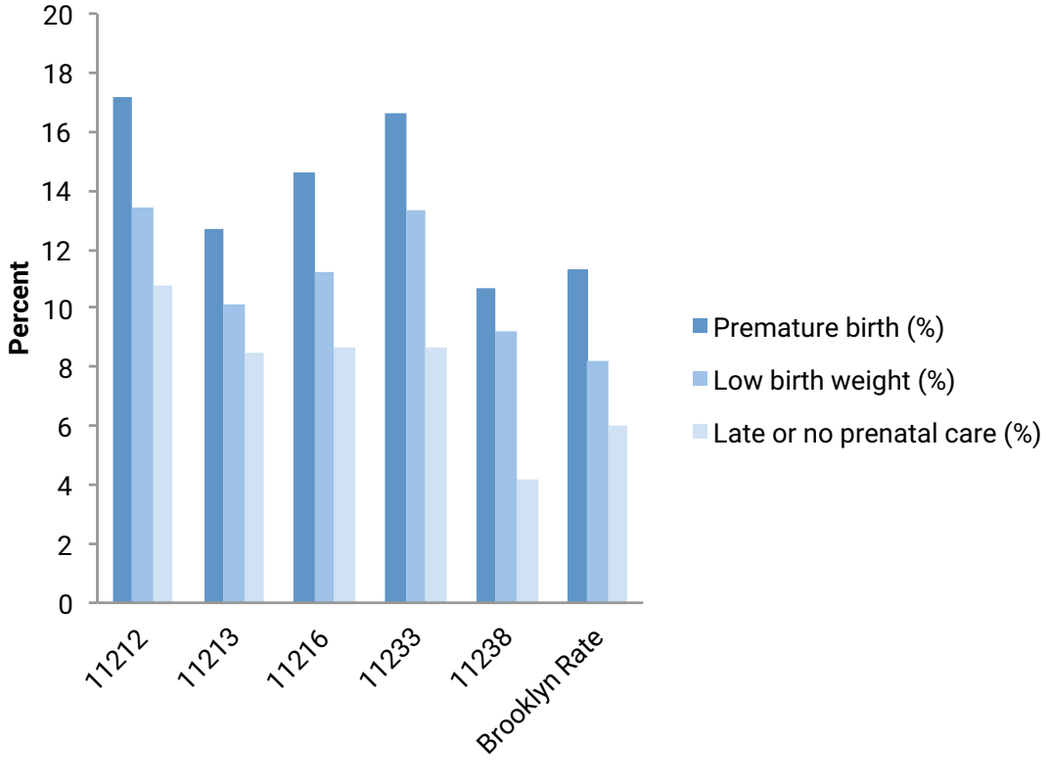


Figure 1-38. Birth outcomes by zip code, 2010-2012. ***Source*:** Vital Statistics of New York State Department of Health.

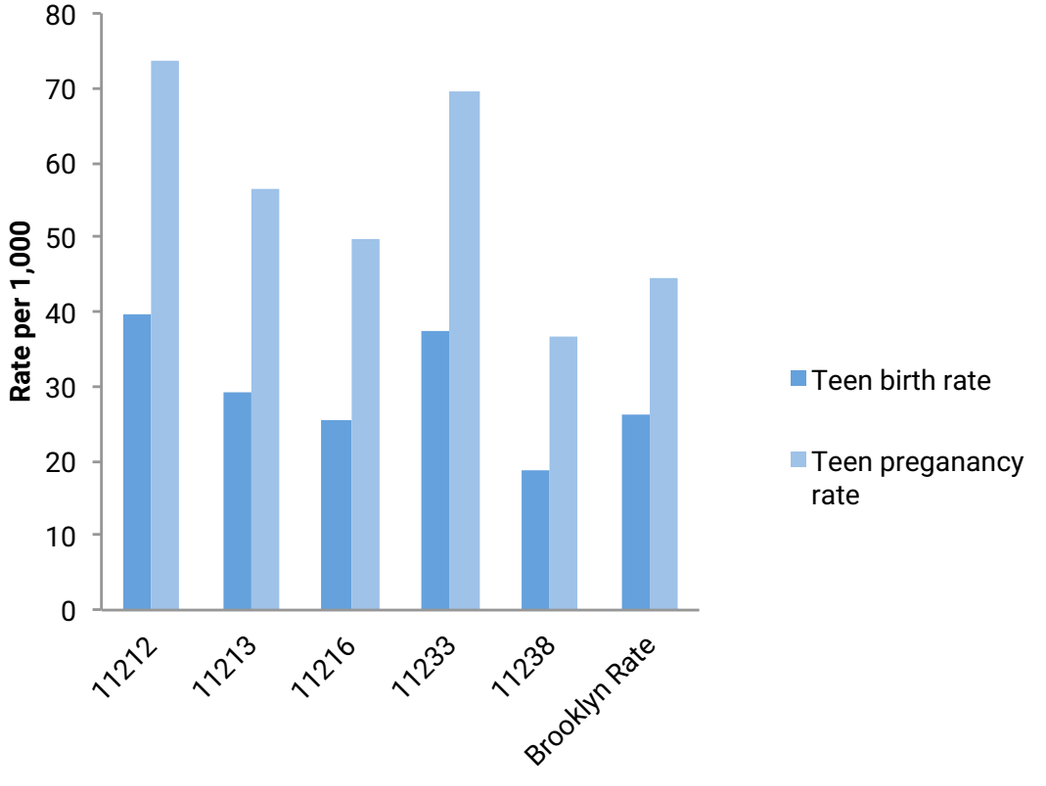
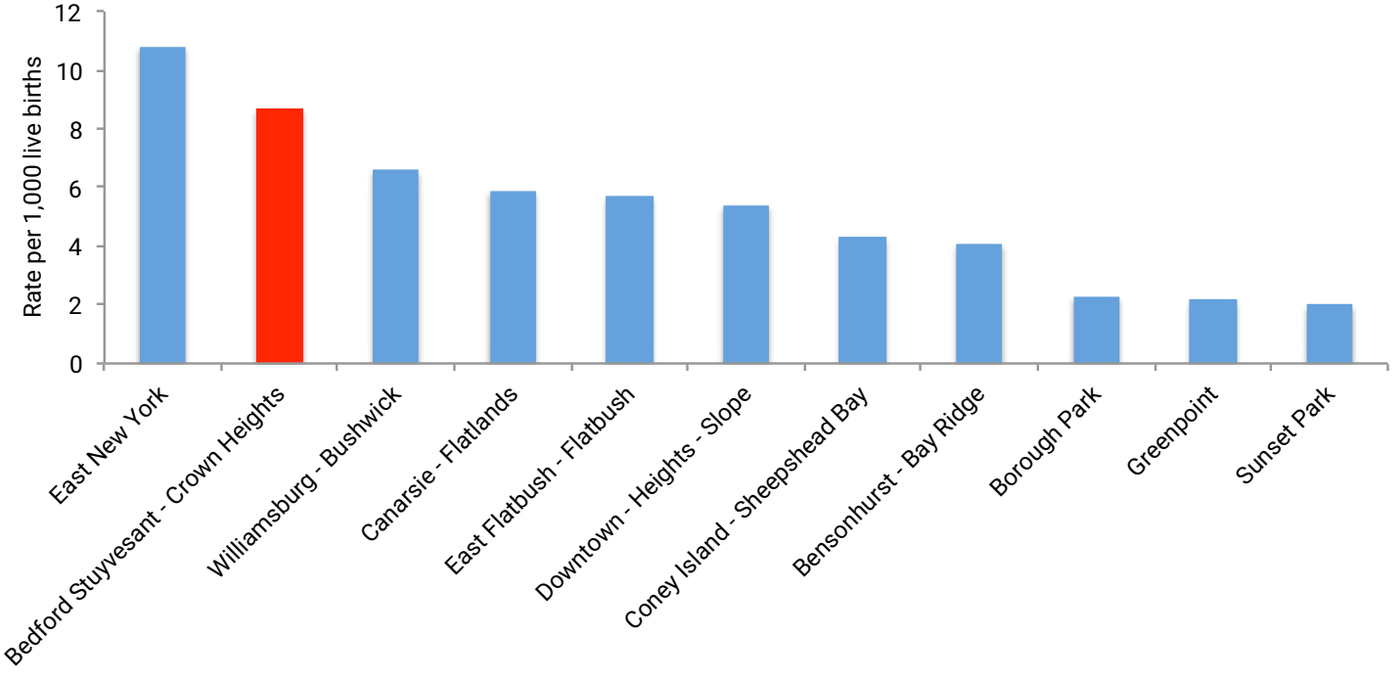


Figure 1-39. Teen birth and pregnancy rates by zip code, 2010-2012. ***Source*:** Vital Statistics of New York State Department of Health.

Figure 1-40. Infant death rate, 2008. ***Source*:** New York City Bureau of Vital Statistics.

The study area's infant death rate was also among the city's highest in recent years. This may, in part, reflect low rates of prenatal care and high rates of teen pregnancy, which are both risk factors for infant mortality. Low birth weight and preterm birth, which are disproportionately common in the study area, also likely contribute to the high infant mortality rate.



Health needs and health care utilization patterns

HEALTH CARE UTILIZATION PATTERNS

The previous section largely focused on underlying community health needs regardless of whether residents sought treatment for their condition. We now move to describing health care utilization patterns in the study area to understand what health problems are responsible for hospital utilization among residents who live near Interfaith Medical Center.

This section relies on New York's Statewide Planning and Research Cooperative System (SPARCS) data, which contains patient-level detail on patient characteristics, diagnoses and treatments, services, and charges for every hospital discharge, ambulatory surgery patient, and emergency department admission in New York State. Here we present hospital discharges by inpatient category for Brooklyn. We also use 2012 zip-code level data on chronic conditions among the neighborhood's Medicaid beneficiaries to help us understand what conditions are responsible for the largest number of ED visits and hospitalizations in the study area specifically. While many local residents are not Medicaid beneficiaries, these data allow us to compare the relative importance of various conditions to hospital utilization among a large and vulnerable group.

HEALTH CARE UTILIZATION IN BROOKLYN AND CENTRAL BROOKLYN

Overall, circulatory diagnoses (e.g., heart problems) were the largest contributor to hospital admissions among Brooklyn residents in 2012, followed by childbirth and admissions for newborns. Respiratory issues, which include asthma, were the fourth most common inpatient diagnostic category. Mental disorders, while common, accounted for just more than a third of the number of admissions contributed by circulatory problems. Drug and alcohol discharge counts were less than a quarter of the number attributed to the circulatory system.

Based on an analysis of Medicaid beneficiaries, hypertension, asthma, and diabetes were the three most common chronic conditions responsible for hospital admissions in the study area in 2012. Hypertension and asthma accounted for nearly twice the number of ED visits as the next most common chronic causes in 2012. In the case of asthma, the number of ED visits exceeded the number of beneficiaries with the condition, showing that, on average, beneficiaries with asthma made multiple trips to the ED each year to help control their condition. Mental and behavioral health issues were also common causes of admissions and ED visits in 2012. Depression and chronic alcohol abuse were among the top 10 contributors to ED visits and hospitalizations in the study area, though neither matched the contributions of hypertension, asthma, or diabetes.

Figure 1-41. Major Diagnostic Inpatient Categories, Brooklyn 2012. ***Source*:** New York State Planning and Research Cooperative System (SPARCS) updated March 2013.

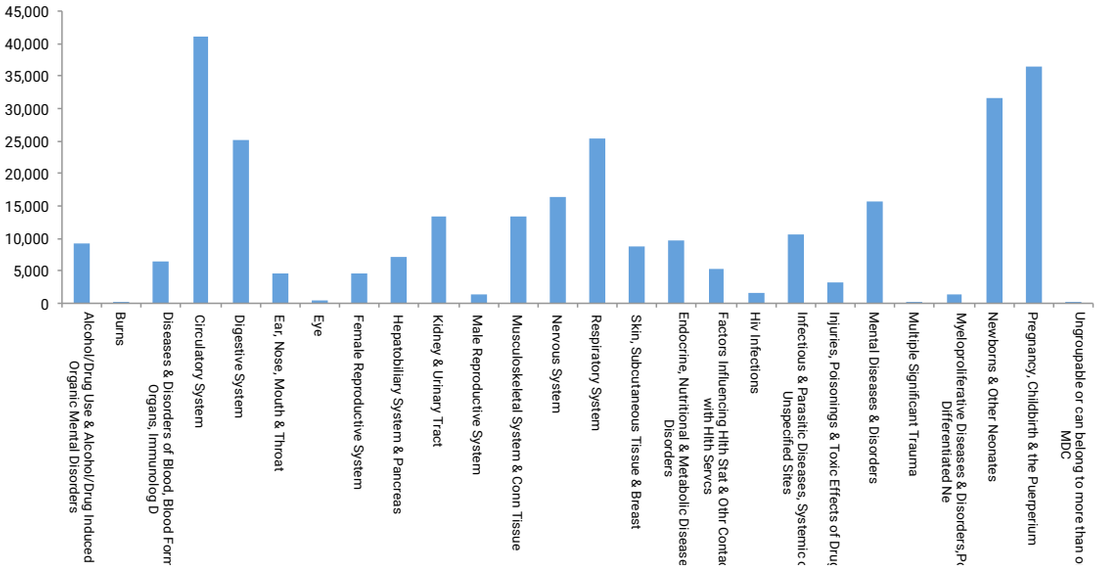
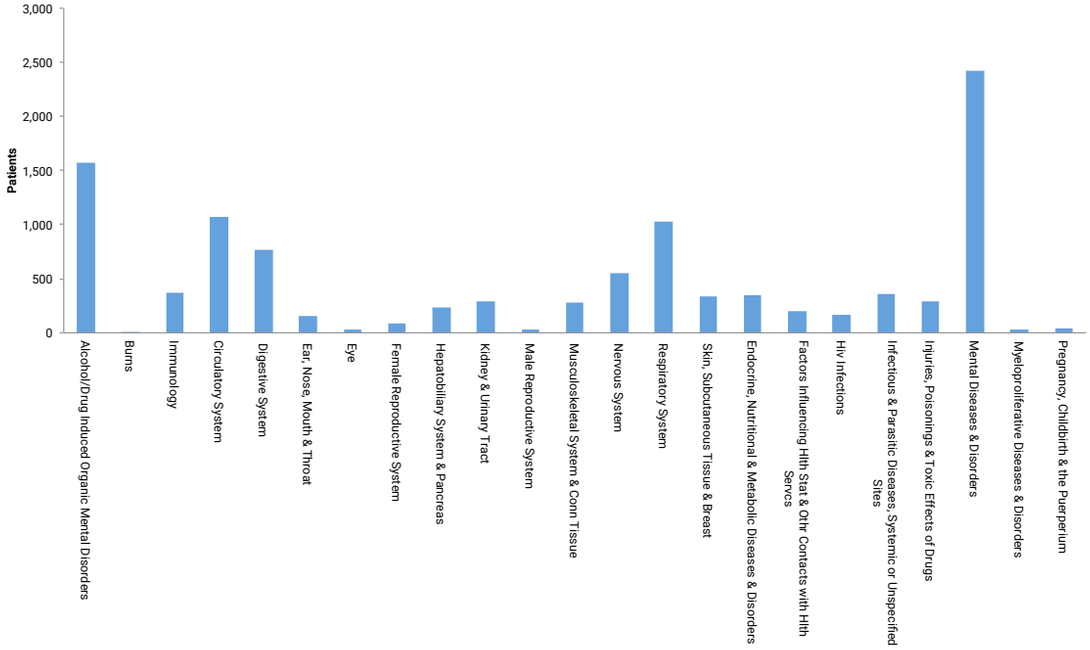


Figure 1-42. IMC Inpatient Diagnostic Category, 2012. ***Source*:** New York State Planning and Research Cooperative System (SPARCS) updated March 2013.



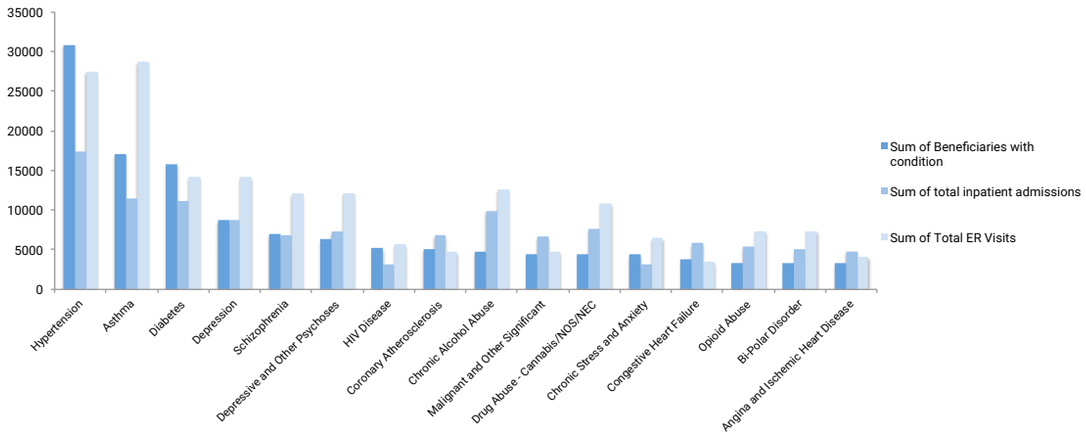


Figure 1-43. Top 15 most common Medicaid chronic conditions for Central Brooklyn. ***Source:*** New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics.

HEALTH CARE UTILIZATION AT INTERFAITH MEDICAL CENTER

Comparing the causes of community members' hospital utilization to the diagnostic categories cared for at Interfaith, we see important differences. Among Interfaith's discharges, mental disorders contribute the largest number of patients, followed by drug- and alcohol-related admissions. We note that the NYCDoHMH Community Health Survey suggests that residents in the hospital's immediate area show lower than average rates of psychological distress.

The mismatch between underlying community needs, as described by community-based surveys and Brooklyn/Central Brooklyn hospital utilization patterns, and Interfaith's services is reflected in low facility utilization by local residents. In fact, an analysis of zip code-level SPARCS data showed that less than 10 percent of hospital discharges among neighborhood residents were from Interfaith Medical Center in 2011.[11] In other words, in 90 percent of cases, hospitalizations among resi-

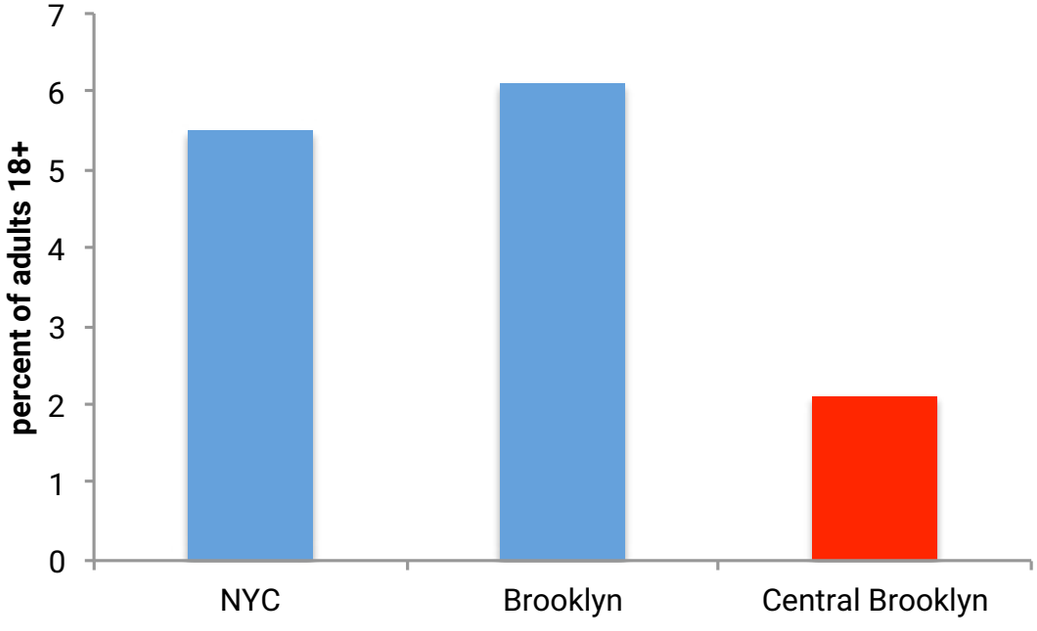


Figure 1-44. Serious psychological distress. ***Source:*** NYC DoHMH Community Health Survey, 2012.

dents occurred at other facilities. While no single hospital met most of the community need, Kings County Hospital Center and New York Methodist Hospital represented higher proportions of local residents' discharges than did Interfaith. Utilization rates among the privately insured are even lower, in line with Interfaith's reputation as a hospital of last resort among community members. Among two of the area's largest representatives of union workers, 1199 and 32BJ, less than 4 percent of local beneficiaries' hospital admissions were to Interfaith Medical Center last year.

Another key disconnect between community health needs and Interfaith's services involves obstetrical care. On average, in Brooklyn, pregnancy/childbirth is the second most common cause of hospital admission, closely trailing behind circulatory problems. Despite the demonstrated demand for this category of health care, as well as the area's high birth rate, need for better prenatal care, relatively poor birth outcomes, Interfaith Medical Center provides limited obstetrical care.

INTERFAITH PATIENT CHARACTERISTICS

While Interfaith does not provide the majority of care for local residents, most of Interfaith's patients are local. The overwhelming majority of Interfaith's discharged patients lived in Brooklyn in 2012. These patients were largely covered by public insurance, as were Brooklyn patients overall.

Opportunities for improved outcomes and reduced hospital utilization

Together, this report and previous studies of Brooklyn and Central Brooklyn's health care landscape have made three main points: 1) the study area is characterized by higher than average rates of chronic conditions that are sensitive to outpatient care and are strongly related to upstream social determinants of health, 2) non-emergent and potentially preventable hospital utilization is common in Central Brooklyn, and 3) services provided at Interfaith are poorly matched to underlying community health needs and to other local hospital utilization patterns. The following section focuses on specific opportunities to reduce hospital utilization, based on an examination of data from the Hospital Inpatient Prevention Quality Indicators (PQI) dataset within the Statewide Planning and Research Cooperative System (SPARCS). SPARCS is a comprehensive all payer data reporting system that collects patient level detail on patient characteristics, diagnoses and treatments, services and hospital charges. The PQI data presents population based measures using hospital inpatient discharges that identify ambulatory care sensitive conditions: conditions where the need for care is potentially preventable with appropriate outpatient care, or the condition would be less severe if treated earlier and appropriately.

HOSPITAL DISCHARGES

Inpatient hospital treatment is much more expensive than outpatient care. Therefore, higher than expected hospital utilization in the categories below present potential cost savings and opportunities for quality improvement. Expected PQI admission rates account for age, sex, and racial composition of each zip code's population, and are normalized by population size. When observed PQI admission rates exceed expected rates, there is an opportunity for improved quality of care and a reduction in hospital utilization.

Diabetes

The rate of uncontrolled diabetes in a population is a telling indicator of population health and adequate primary care. We see in the Figure 1-45 that, with the exception of zip code 11238, rates of hospitalization for uncontrolled diabetes in the study area exceed expectations.

Diabetes poses health threats alone, but is also associated with a host of other debilitating and expensive complications. Across all zip codes, diabetes complication rates are higher than expected. Breaking down the overall complications, we see that certain complications are much higher than would be expected.

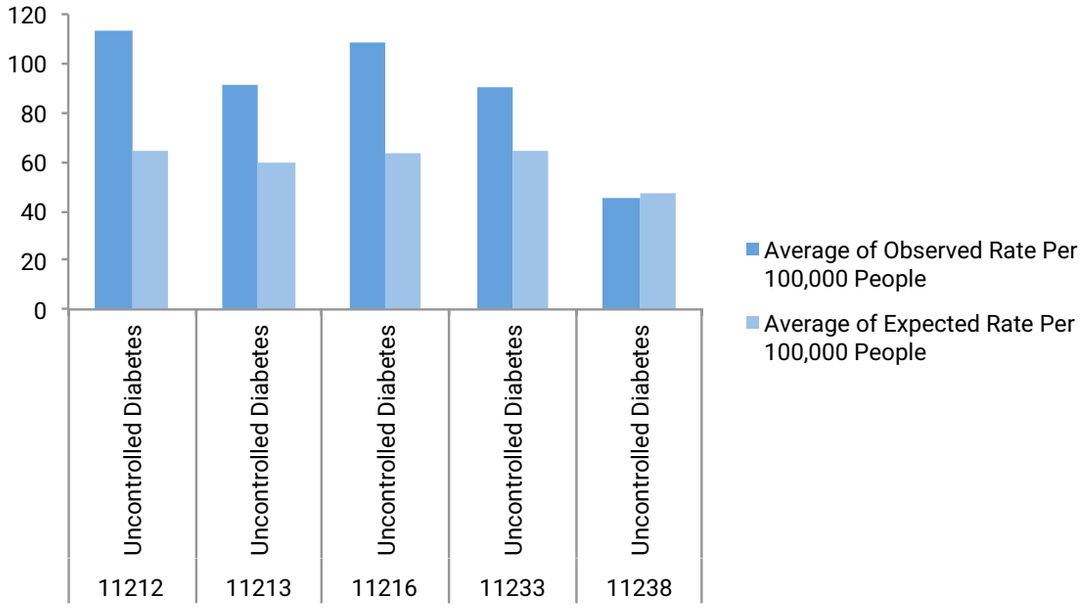


Figure 1-45. Uncontrolled diabetes, study area, 2012. ***Source*:** New York State Planning and Research Cooperative System (SPARCS), Agency for Healthcare Research and Quality (AHRQ), Claritas.

In zip code 11213 in particular, residents are hospitalized for lower extremity diabetes-related amputation at nearly twice the expected rate.

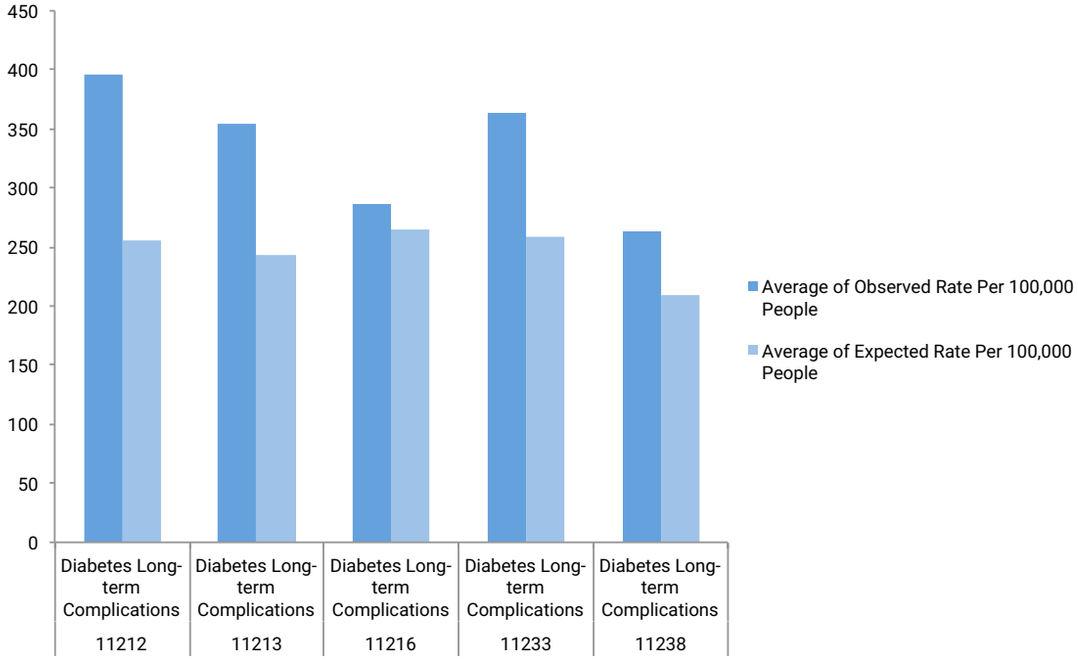


Figure 1-46. Diabetes Long-term complications. ***Source*:** New York State Planning and Research Cooperative System (SPARCS), Agency for Healthcare Research and Quality (AHRQ), Claritas.

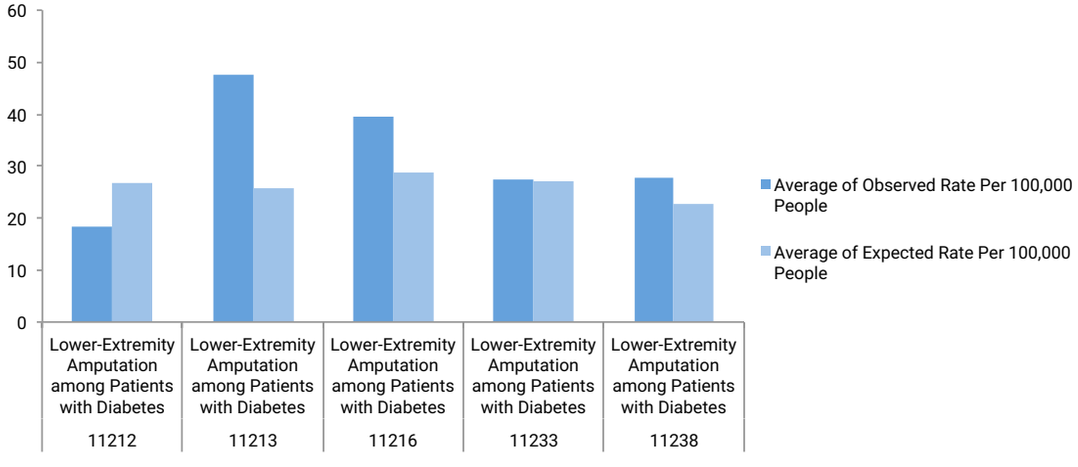


Figure 1-47. Lower extremity amputation among diabetic patients, study area, 2012. ***Source*:** New York State Planning and Research Cooperative System (SPARCS), Agency for Healthcare Research and Quality (AHRQ), Claritas.

Asthma

Within the study area, observed hospitalization rates for asthma in young adults varies significantly. An aggregated rate for the full study area can obscure important variations by neighborhood. Younger adults in zip codes 11212 and 11233 are hospitalized for asthma at the highest rates, and therefore present the greatest opportunity for improvement.

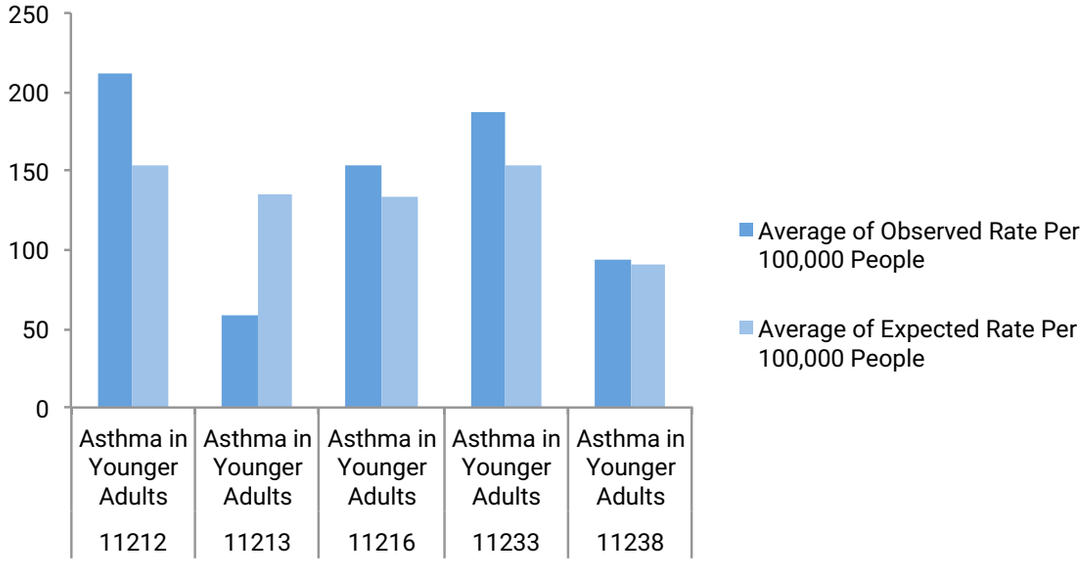


Figure 1-48. Asthma in younger adults, study area, 2012. ***Source*:** New York State Planning and Research Cooperative System (SPARCS), Agency for Healthcare Research and Quality (AHRQ), Claritas.

Heart Failure

Hospital admissions for heart failure is higher than expected in certain areas of Central Brooklyn. With the exception of zip codes 11216 and 11238, the study area exhibits excess heart failure hospitalizations; zip code 11233 contributes the largest share of cases.

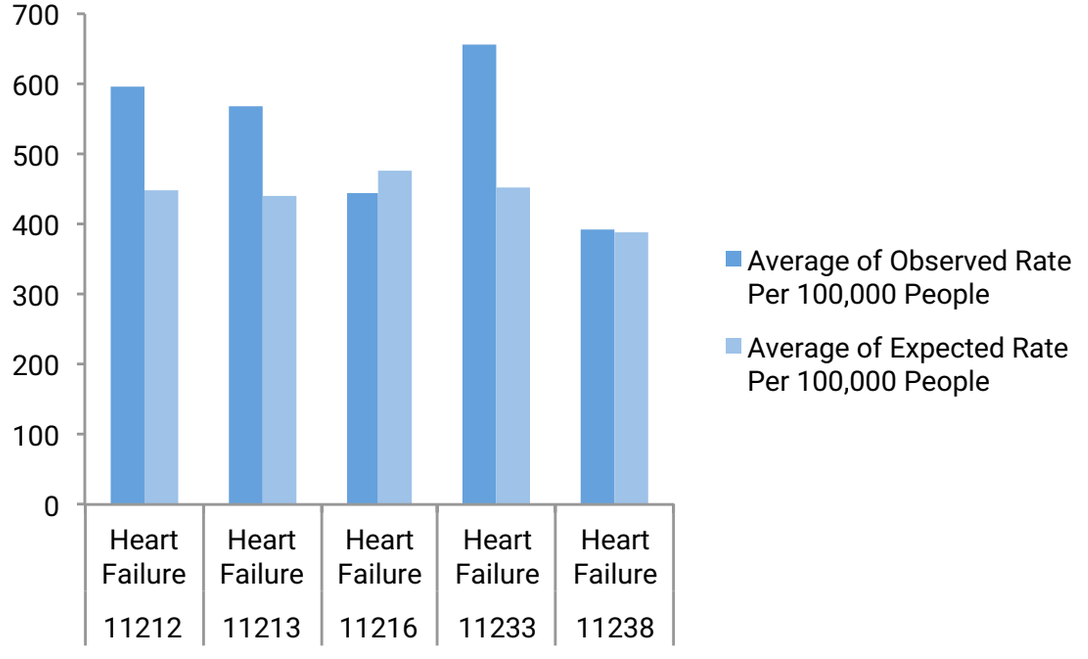


Figure 1-49. Heart failure, study area, 2012. ***Source*:** New York State Planning and Research Cooperative System (SPARCS), Agency for Healthcare Research and Quality (AHRQ), Claritas.

Angina without procedure, or chest pain that did not require admission for a heart procedure, is an accepted indicator of potential coronary artery disease. Some hospital visits for this cause could be avoided with proper outpatient treatment for the effects of coronary artery disease. As with heart disease, observed rates of angina without procedure also surpass expected rates in several of the study area's zip codes. Zip codes 11212 and 11233 show excess cases on both indicators.

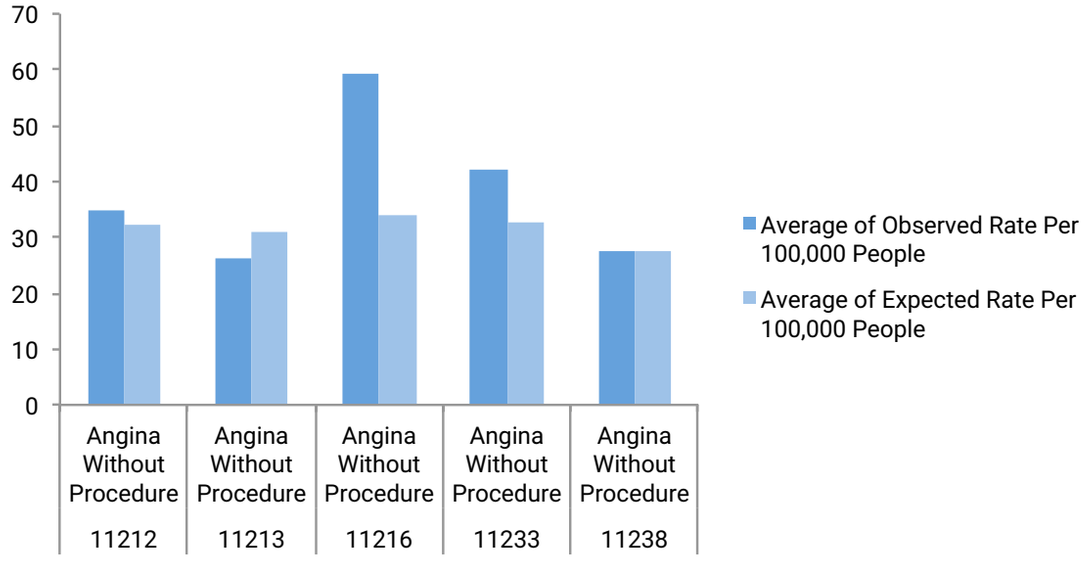


Figure 1-50. Angina without procedure, study area, 2012. ***Source*:** New York State Planning and Research Cooperative System (SPARCS), Agency for Healthcare Research and Quality (AHRQ), Claritas.

MEDICAID EMERGENCY DEPARTMENT UTILIZATION

Data on Emergency Department utilization can also provide insight into quality of care and opportunities to reduce health care utilization locally. We use data on Medicaid beneficiaries' ED usage to help illustrate the study area's potential to cut inefficient health care utilization among this important segment of the population. Additional potential exists to reduce ED usage among the privately insured and those with other public plans.

Figure 1-51 shows data on the difference between the number of expected and observed Potentially Preventable Visits (PPV). PPVs are emergency visits that may result from a lack of adequate access to care or ambulatory care coordination. These ambulatory sensitive conditions could be reduced or eliminated with adequate patient monitoring and follow up. The observed rate reflects the number of PPV visits divided by the number of beneficiaries per zip code, while the expected rate is the number of PPV events adjusted for age, sex and race/ethnicity.

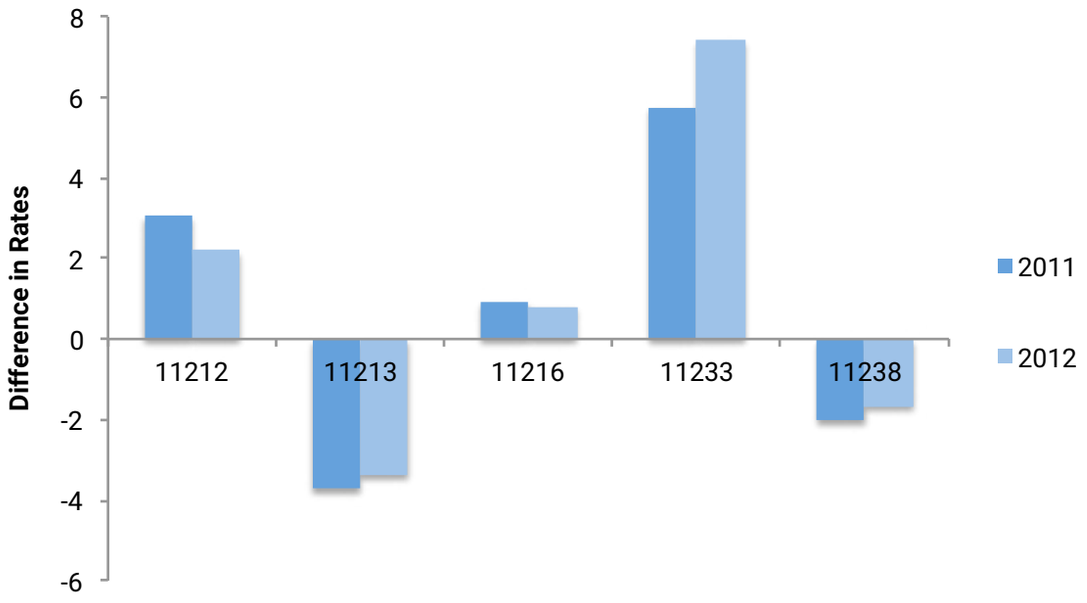


Figure 1-51. Difference between observed and expected Medicaid PPV ER visits. ***Source:*** New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics.

Figure 1-51 shows that zip codes 11212, 11216, and 11233 contribute a higher than expected number of potentially preventable ED visits by Medicaid beneficiaries. While PPV rates in zip codes 11213 and 11238 are lower than would be expected, these areas also contribute to the total number of PPVs in the study area. For example, in Figure 1-52 below, in four of the study area's five zip codes there were over 10,000 potentially preventable instances of ED usage. These data show significant opportunity to prevent thousands of avoidable and expensive emergency room visits each year.

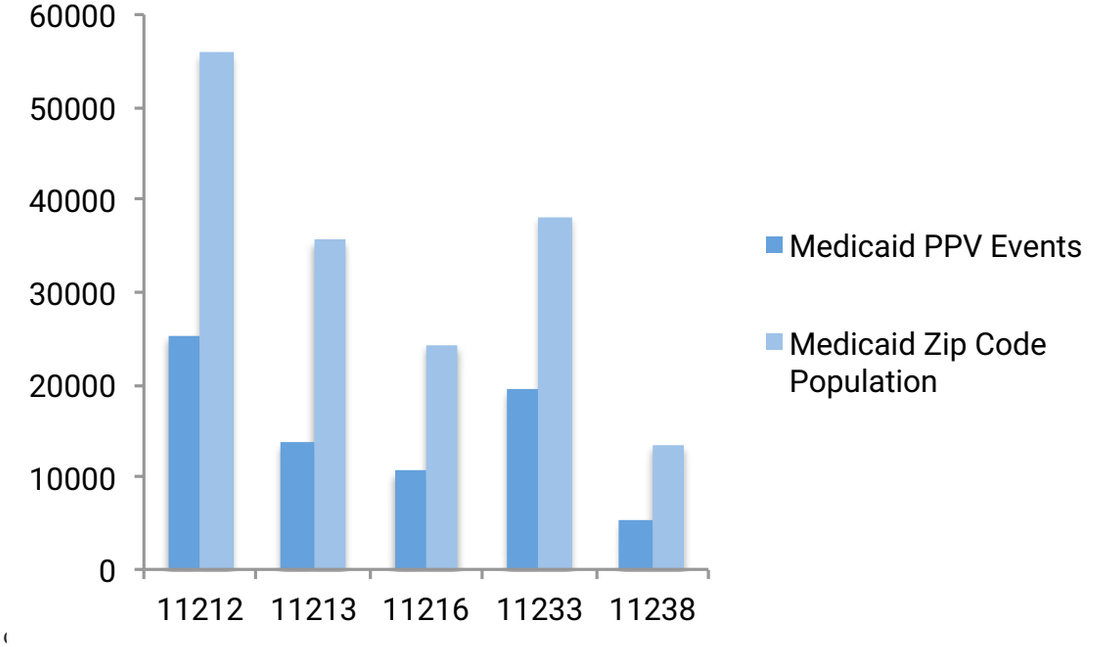


Figure 1-52. Number of Medicaid PPV events and zip code population. ***Source:*** New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics.

To better understand what types of interventions and improvements may help reduce inefficient hospital utilization, we look to condition-specific data on ED visits among Medicaid beneficiaries. Graphs below show the number of Medicaid beneficiaries with diabetes mellitus, the number of these beneficiaries with at least one ED visit, and the total number of ED across all beneficiaries. Over a third of all beneficiaries with diabetes visited the ED, and in zip code 11233 the total number of ED visits exceeded the number of beneficiaries with the condition.

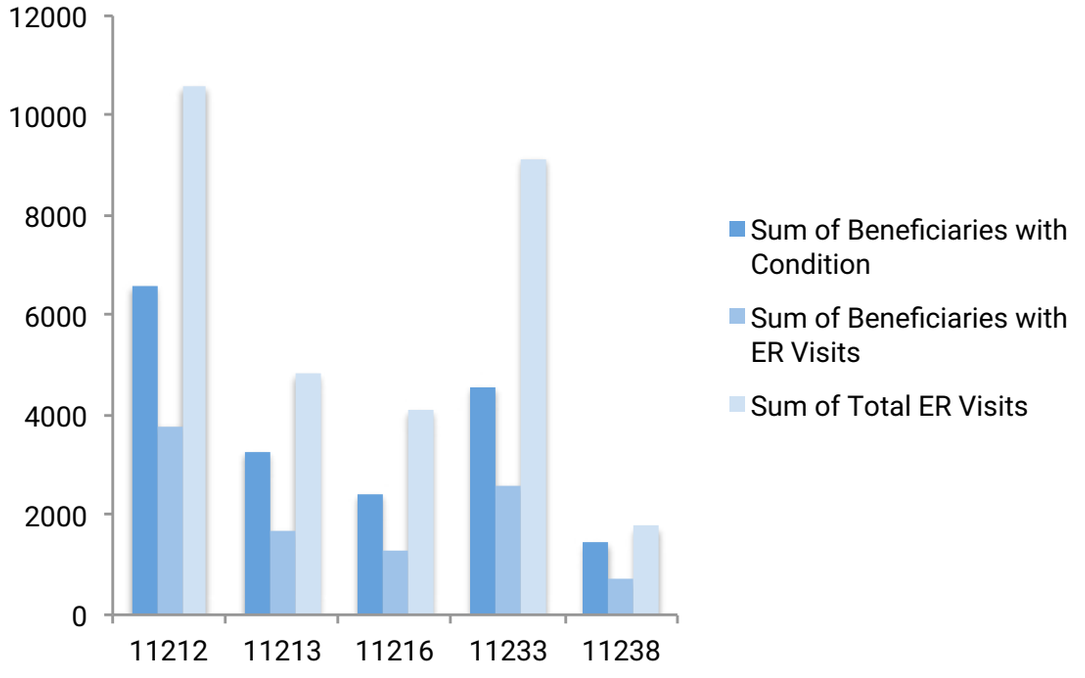


Figure 1-53. Beneficiaries with diabetes mellitus. ***Source*:** New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics.

Similar graphs describing counts and utilization patterns among beneficiaries with cardiovascular problems and respiratory diseases/disorder are shown in Figures 1-554 and 1-55. For both types of conditions, a large proportion of beneficiaries are utilizing the ED for care. Better connections to community-based resources and outpatient care, as well as interventions that tackle the social determinants of health, may help reduce inefficient emergency care utilization for these and other conditions.

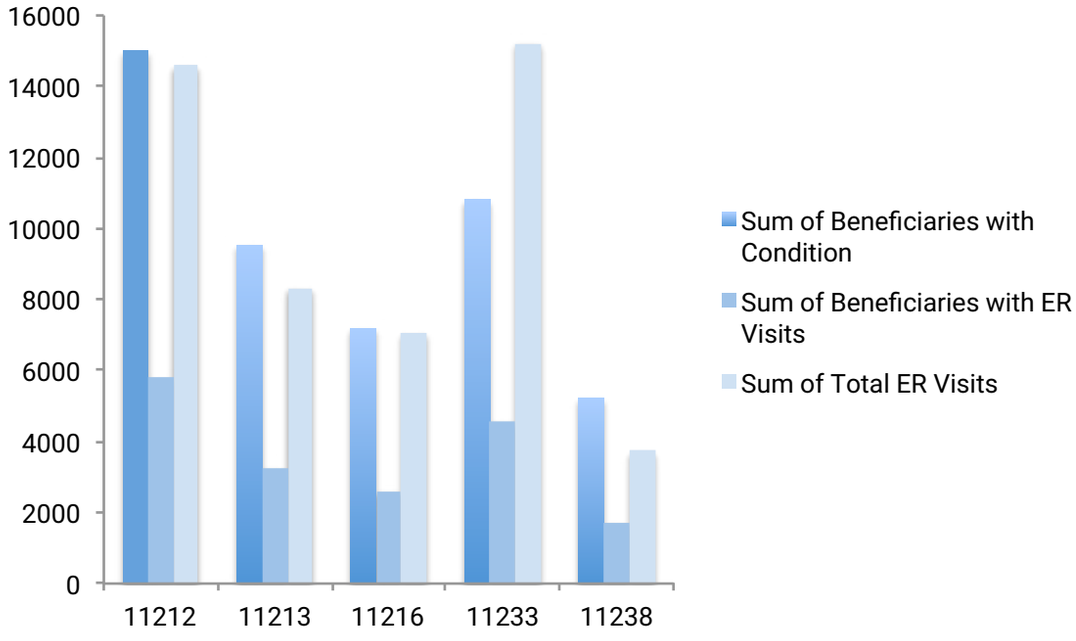


Figure 1-54. Beneficiaries with diseases and disorders of the cardiovascular system. ***Source*:** New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics.

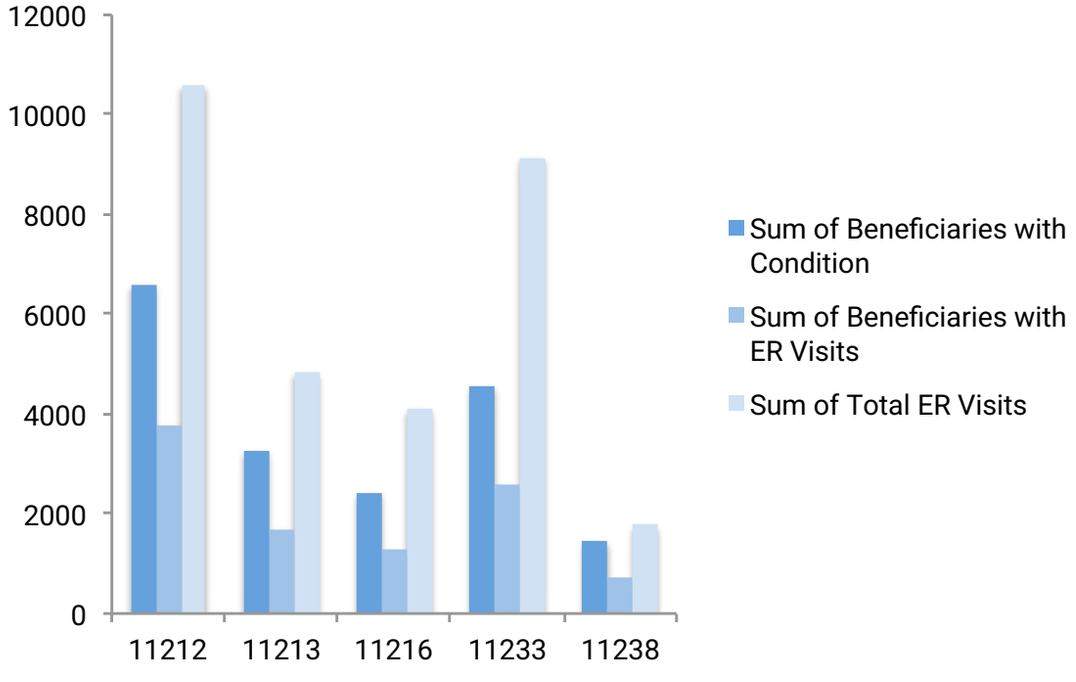


Figure 1-55. Beneficiaries with diseases and disorders of the respiratory system. ***Source*:** New York State Department of Health Office of Quality and Patient Safety Bureau of Health Informatics.

Community-based resources and opportunities

Relying on community and outpatient resources to reduce hospital utilization requires that local assets exist for residents to use. The neighborhoods surrounding Interfaith Medical Center are home to outpatient settings for medical care, as well as to a range of non-clinical health-promoting resources. Better connecting Interfaith Medical Center to the resources shown in Figure 1-56 has the potential to improve outcomes and improve efficiency in health care utilization locally.

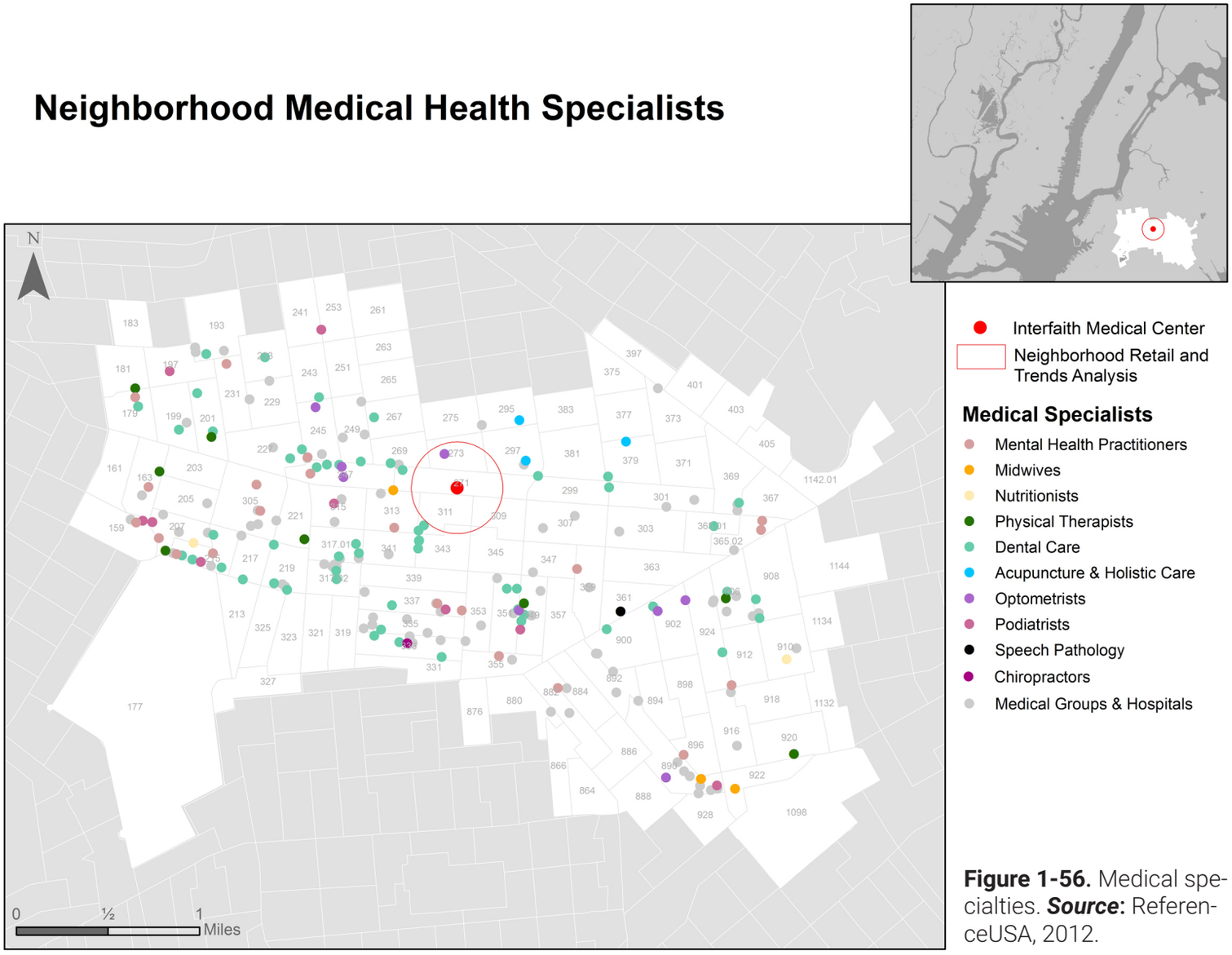


Figure 1-56. Medical specialties. ***Source*:** ReferenceUSA, 2012.

Typically, barriers to accessing primary and preventive care include lacking health insurance and not being connected to PCPs. However, most of Central Brooklyn Community Health Survey respondents had some form of insurance and nearly two thirds reported being able to see a clinician within a day or two if they needed.

While the area's residents suffer from an excessive number of conditions amenable to good primary care, 86 percent of people reported having a personal doctor in the study area. The poor outcomes can be the result of a fragmented care system or, more likely, inadequate access exacerbated by the impact of living in a generally unhealthy environment.

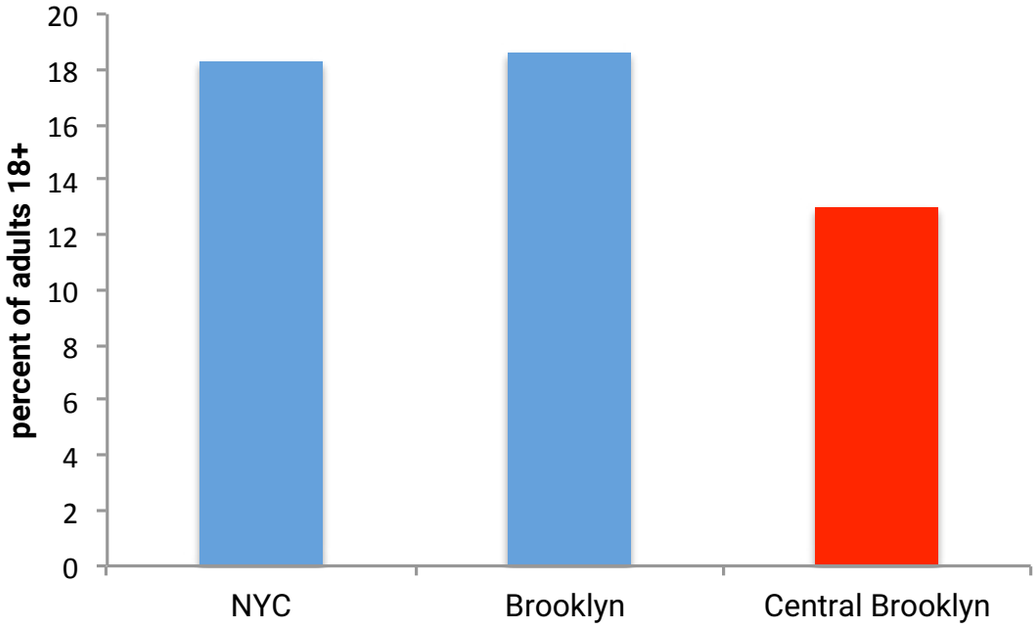
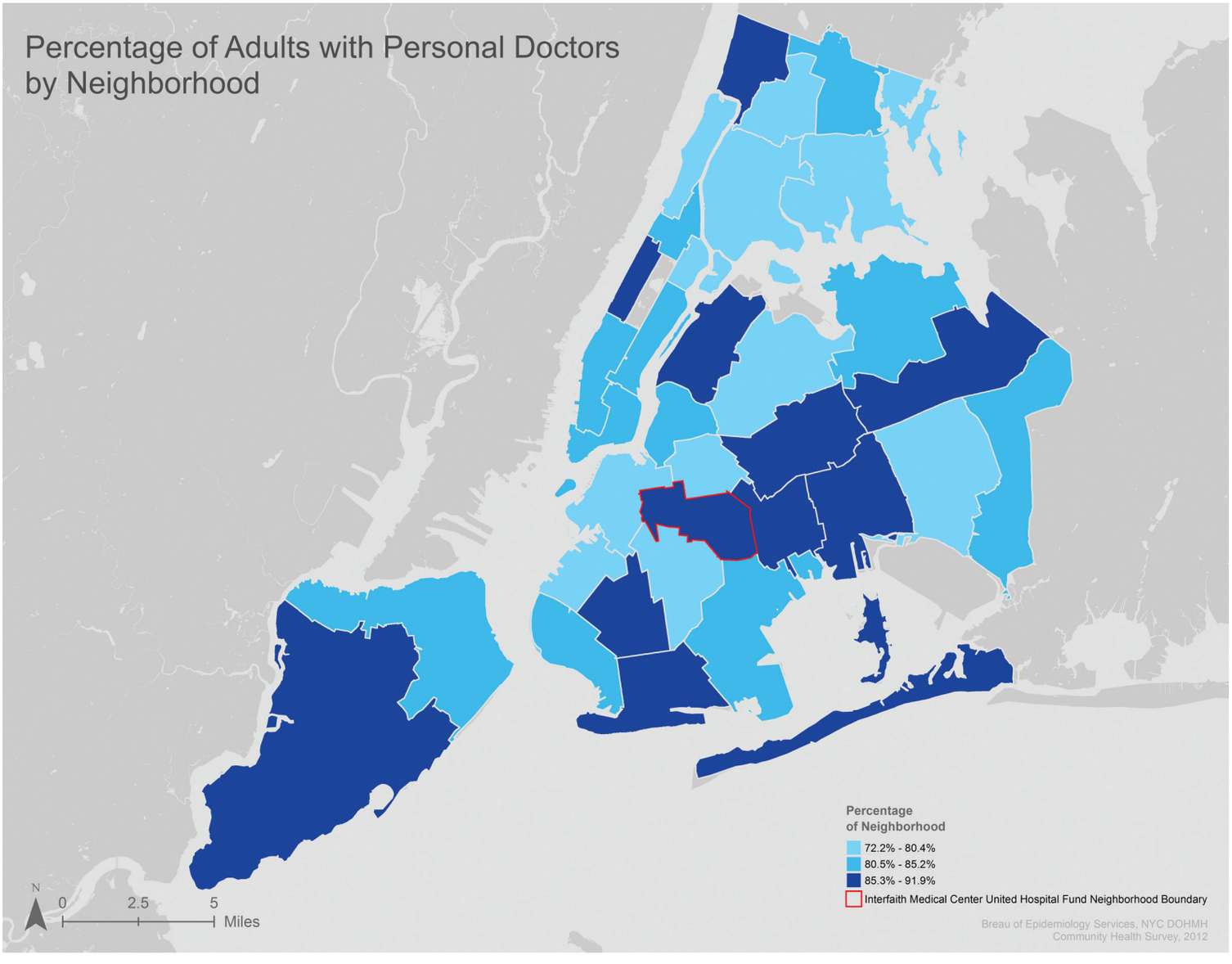


Figure 1-57. No personal doctor. ***Source*:** NYC DoHMH Community Health Survey, 2012.

Figure 1-58. Percentage of adults with personal doctors by neighborhood. ***Source*: NYC** DoHMH Community Health Survey, 2012.



Given the presence of local resources and a largely insured population, better connections between clinical and community resources may present a feasible and important pathway to more efficient health care utilization. We detail some examples of successful intersectoral efforts to address upstream determinants of health below, with a particular focus on initiatives that work to integrate community-based and clinical resources.

Community-Clinical Partnership Interventions

NURSE FAMILY PARTNERSHIP

The Nurse-Family Partnership is an evidence-based community health program that addresses both health-related and social challenges facing vulnerable, first time mothers. The program employs registered nurses to work closely with women and families during pregnancy and early childhood. Nurses make regular home visits during pregnancy and for the first two critical years of the child's life to help mothers and families adopt healthy prenatal practices, manage existing medical problems, improve eating habits, and cut back on cigarette and alcohol consumption. Nurses also help mothers and families plan for the future by setting economic, educational, and family planning goals meant to establish a path towards economic self-sufficiency. Randomized controlled trials - the gold standard of scientific research - have consistently shown that the Nurse Family Partnership model improves prenatal health, school readiness, maternal employment, healthier birth spacing, and reduces child abuse and neglect, as well as injuries among children. Cost benefit analysis shows a $17,000 return to society for each family served by the program (Williams, Costa, Odunlami, & Mohammed, 2008). Many proven local programs offer trainings or partnerships to teach other communities how to implement their successful practices.

HOME VISITING PROGRAM FOR MANAGEMENT OF CHILDHOOD ASTHMA

Home visiting programs are effective not just for new parents, but also for patients with chronic conditions. For example, home visitation programs for asthmatic children have been shown to help parents understand, identify and eliminate the triggers of asthma in their home, leading to improved asthma management among children (Williams et al., 2008).

MEDICAL LEGAL PARTNERSHIP

Across the country, 135 hospitals and 127 health centers offer patients access to integrated medical-legal support through a medical legal partnership with pro-bono lawyers, law schools, and legal aid agencies. Especially for low income patients, veterans, the elderly, and otherwise vulnerable patients, legal aid is critical to accessing nutrional, housing, and transportation benefits. Medical-legal partnerships also help patients who are wrongfully denied health care benefits, or are subject to illegal or substandard housing and working conditions that contribute to their health problems.

At the institutinal level, embedding a medical-legal partnership can help train clinicians to more easily identify upstream causes of health problems, and to connect patients to appropriate resources. Medical-legal partnerships have been the subject of nearly 50 academic papers, with evidence showing that these programs increase the likelihood that health care providers will ask patients about social conditions that may be contributing to health problems, reduce emergency department utilization, and improve treatment adherance.

HEALTH LEADS

Health Leads is a program that supports health care providers' ability to help address the underlying social and economic needs that contribute to their patients' health problems. Under this model, providers seek to understand if food shortages, a lack of heat, or a range of other unmet needs are causing or exacerbating health problems. If so, providers prescription for the services or resources that would help improve patient health. Working with a social worker or experienced case manager, a team of college students helps patients fill these prescriptions by creating connections to community resources and public benefits. Students are linguistically and culturally competent, ideally coming from or matched specifically to the communities they serve. Evaluations of the Health Leads model shows its effectiveness in reducing unmet social needs among families within six months(Garg, Marino, Vikani, & Solomon, 2012), with employment, health insurance, and food among the most commonly met needs.

Endnotes

[1] A 'physically poor' unit is defined as "a housing unit that is either in a dilapidated building, lacks complete kitchen and/or plumbing facilities for exclusive use, has four or more maintenance deficiencies, or is in a building with three or more types of building defects" (Lee, 2013)

[2] NYC DoHMH Environment & Health Data Portal. Available from: http://a816-dohbesp.nyc.gov/IndicatorPublic/VisualizationData.aspx

[3] A deficiency is defined as "heating equipment breakdown, additional heating required, rodent infestation, cracks/holes in the walls, ceilings or floors, broken plaster/peeling paint larger than 8½ x 11 inches, toilet breakdowns, or water leaks from outside the unit"

[4] Craig Evan Pollack, Beth Ann Griffin, and Julia Lynch, "Housing Affordability and Health Among Homeowners and Renters," American Journal of Preventive Medicine 39, no. 6 (December 2010): 515–21, doi:10.1016/j.amepre.2010.08.002.

[5] Gary W. Evans, Nancy M. Wells, and Annie Moch, "Housing and Mental Health: A Review of the Evidence and a Methodological and Conceptual Critique," Journal of Social Issues 59, no. 3 (July 1, 2003): 475–500, doi:10.1111/1540-4560.00074.

[6] NYC DoHMH, "Take Care Central Brooklyn." Available from: http://www.nyc.gov/html/doh/downloads/pdf/data/2006chp-203.pdf

[7] Centers for Disease Control and Prevention, "Obesity: Halting the Epidemic by Making Health Easier. Available from: http://www.cdc.gov/chronicdisease/resources/publications/aag/obesity.htm

[8] Gordon et al. Measuring food deserts in New York City's low-income neighborhoods. Health Place, 2011: 17(2)696-700

[9] Includes murder, rape, robbery, felony assault, burglary, grand larceny, and grand larceny of a motor vehicle

[10] NYC NYPD Citywide Crime Statistics. Available from: http://www.nyc.gov/html/nypd/html/crime_prevention/crime_statistics.shtml

[11]Analysis of identifiable SPARCS data by SUNY Downstate

Glossary

Ambulatory Care Sensitive Conditions (ACSC): Conditions for which hospitalization could be avoided with high quality and timely outpatient care, also termed preventable admissions.

Chronic Condition: A condition or disease that is persistent or long lasting in its effects. These conditions can be controlled but often are not curable.

Dual Eligible: Individuals who are eligible for Medicare part A and for some form of Medicaid benefit.

Length of Stay (LOS): The duration of a single hospital stay. Measured by subtracting day of admission from day of discharge. Often used as a quality metric, but is highly dependent on patient characteristics at admission.

Occupancy Rate: The number of hospital bed days divided by the number of available hospital beds multiplied by the number of days in a year. It shows utilization of an inpatient health facility.

Premature mortality: Deaths that occur before a person reaches age 75. Many of these are considered preventable.

Primary Care Physician (PCP): A physician who provides both the first contact for a person with an undiagnosed health concern as well as continuing care of varied medical conditions. Also used to abbreviate Primary Care Provider. A Primary Care Provider may be a nurse practitioner, physician assistant, or other physician extender, rather than a physician.

Public Insurance: Includes Medicare, Medicaid, and Child Health Plus in New York State. Such plans often reimburse providers at lower rates than private insurance.

Quality of Care: A measure of the ability of a doctor, hospital or health plan to provide services for individuals and populations that increase the likelihood of desired health outcomes and are consistent with current professional knowledge

Social determinants of health: A health-relevant social and environmental conditions in which people live and work.

References

Alter, H. J. (2014). Social determinants of health: from bench to bedside. JAMA Intern Med, 174(4), 543-545. doi: 10.1001/jamainternmed.2013.13302

Clark, C. R., Baril, N., Kunicki, M., Johnson, N., Soukup, J., Ferguson, K., . . . Cervical Cancer, Coalition. (2009). Addressing social determinants of health to improve access to early breast cancer detection: results of the Boston REACH 2010 Breast and Cervical Cancer Coalition Women's Health Demonstration Project. J Womens Health (Larchmt), 18(5), 677-690. doi: 10.1089/jwh.2008.0972

Clark R, Anderson NB, Clark VR, Williams DR. Racism as a stressor for African Americans. A biopsychosocial model. Am Psychol. Oct 1999;54(10):805-816

Coley RL, Leventhal T, Lynch AC, Kull M. Poor Quality Housing Is Tied to Children's Emotional and Behavioral Problems. [cited Sept 2013]. Available from: macfound.org/housingmatters.

Ellen IG, T. M, K. D. Neighborhood Effects on Health: Exploring Links and Assessing the Evidence. J Urb Aff 2001;71(3-4):391–408.

Garg, A., Marino, M., Vikani, A. R., & Solomon, B. S. (2012). Addressing families' unmet social needs within pediatric primary care: the health leads model. Clin Pediatr (Phila), 51(12), 1191-1193. doi: 10.1177/0009922812437930

Haan M, Kaplan GA, Camacho T. Poverty and health. Prospective evidence from the Alameda County Study. Am J Epidemiol. Jun 1987;125(6):989-998.

Hughes, D., Docto, L., Peters, J., Lamb, A. K., & Brindis, C. (2013). Swimming upstream: the challenges and rewards of evaluating efforts to address inequities and reduce health disparities. Eval Program Plann, 38, 1-12. doi: 10.1016/j.evalprogplan.2013.01.004

Jennings J & Papachristos A. The Effects of Neighborhood Violent Crime on Health Disparities. Available from: http://www.papachristos.org/Publications-Revised_files/Jennings% percent20and% percent20Papachristos% percent20Seed% percent20Grant_Submitted.pdf.

Kasl SV & Jones BA, Chapter 6. The impact of job loss and retirement on health. In: Berkman LF and Kawachi I (eds). Social Epidemiology. New York: Oxford University Press (2000) pp. 118-136.

Kawach I, Daniels N, Robinson DE. Health Disparities by Race and Class: Why Both Matter. Health Affairs, 2005:24(3):343-352.

Klein, M. D., Beck, A. F., Henize, A. W., Parrish, D. S., Fink, E. E., & Kahn, R. S. (2013). Doctors and lawyers collaborating to HeLP children--outcomes from a successful partnership between professions. J Health Care Poor Underserved, 24(3), 1063-1073. doi: 10.1353/hpu.2013.0147

Koh, H. K., Oppenheimer, S. C., Massin-Short, S. B., Emmons, K. M., Geller, A. C., & Viswanath, K. (2010). Translating research evidence into practice to reduce health disparities: a social determinants approach. Am J Public Health, 100 Suppl 1, S72-80. doi: 10.2105/AJPH.2009.167353

Kramer MR, Hogue CR. Is segregation bad for your health? Epidemiol Rev.2009;31:178-194

Lucksted, A., McNulty, K., Brayboy, L., & Forbes, C. (2009). Initial evaluation of the Peer-to-Peer program. Psychiatr Serv, 60(2), 250-253. doi: 10.1176/appi.ps.60.2.250

Marmot MG, Smith GD, Stansfeld S, et al. Health inequalities among British civil servants: the Whitehall II study. Lancet. Jun 8 1991;337(8754):1387-1393.

M.B L, Whyte KW, Ho D, Meza C, Karteron A. Residential Segregation and Housing Discrimination in the United States: U.S. Housing Scholars and Research and Advocacy Organizations;2008.

Morenoff, Jeffrey. 2003. "Neighborhood Mechanisms and the Spatial Dynamics of Birth Weight," American Journal of Sociolgy, v108 n5: 976-1017

Pettit, Kingsley K, Thomas G, C.J C. Neighborhoods and Health: Building Evidence for Local Policy: Urban Institute, Department of Health and Human Services; 2003.

Ross, Catherine E. and John Mirowsky. 2001. "Neighborhood Disadvantage, Disorder, and Health." Journal of Health and Social Behavior 42(3):258-76.

Theorell T. Chapter 5, Working conditions and health. In: Berkman LF and Kawachi I (eds). Social Epidemiology. New York: Oxford University Press, (2000) pp. 95-117.

Thomson H, Thomas S, Sellstrom E, Petticrew M. Housing improvements for health and associated socio-economic outcomes. Cochrane Database of Systematic Reviews, 2013 , Issue 2

V. Carstairs, R. Morris Deprivation and health. BMJ. Dec 1989: 299 (6713):1462.

van Lenthe FJ, Borrell LN, Costa C, et al Neighborhood violent crime and unemployment increase the risk of coronary heart disease: a multilevel study in an urban setting.

van Lenthe FJ, Mackenbach JP. Neighborhood deprivation and overweight: The GLOBE study. Intern J Obesity. 2002;26(2): 234–240

Viswanathan, M., Kraschnewski, J. L., Nishikawa, B., Morgan, L. C., Honeycutt, A. A., Thieda, P., . . . Jonas, D. E. (2010). Outcomes and costs of community health worker interventions: a systematic review. Med Care, 48(9), 792-808. doi: 10.1097/MLR.0b013e3181e35b51

Wen M, Browning CR, Cagney KA. Poverty, affluence, and income inequality: neighborhood economic structure and its implications for health. Soc Sci Med. Sep 2003;57(5):843-860.\

Williams DR, Collins C. Racial residential segregation: a fundamental cause of racialdisparities in health. Pub Health Rep. Sep-Oct 2001;116(5):404-416;

Williams, D. R., Costa, M. V., Odunlami, A. O., & Mohammed, S. A. (2008). Moving upstream: how interventions that address the social determinants of health can improve health and reduce disparities. J Public Health Manag Pract, 14 Suppl, S8-17. doi: 10.1097/01.PHH.0000338382.36695.42

World Health Organization. Social determinants of health: key concepts. [cited 2014 Aug 25]. Available from: URL:http://www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/index.html.

Young, C. R., Aquilante, J. L., Solomon, S., Colby, L., Kawinzi, M. A., Uy, N., & Mallya, G. (2013). Improving fruit and vegetable consumption among low-income customers at farmers markets: Philly Food Bucks, Philadelphia, Pennsylvania, 2011. Prev Chronic Dis, 10, E166. doi: 10.5888/pcd10.120356

Zhang, D., & Unschuld, P. U. (2008). China's barefoot doctor: past, present, and future. Lancet, 372(9653), 1865-1867. doi: 10.1016/S0140-6736(08)61355-0

CHAPTER 2: BROOKLYN'S HEALTH CARE POLICY ENVIRONMENT

2014 AND BEYOND

Interfaith Medical Center emerged from bankruptcy proceedings into a rapidly changing health care environment. Spurred by changes in public financing as well as innovations in treatment and care management, Interfaith's world of 2014 and beyond is likely quite different than the one it inhabited just prior to entry into the court adjudicated process.

FIRST, CUT MEDICAID

Hospitals have been at the center of New York's health care payment and planning systems for more than 75 years. With the support of their workers, their boards of major corporate and real estate players and some smart lobbying and public relations, New York's hospitals have in many ways dictated the terms of New York State's Medicaid program for more than 50 years beginning with its inception in 1965. While physician reimbursement lingered in the lowest quintile in the country (roughly 40 percent of what Medicare paid), reimbursement for hospital inpatient and emergency services for Medicaid recipients was roughly comparable to what was offered by other payors. In fact the NYS Department of Health estimated that as a consequence of flaws in the inpatient reimbursement methodology the state's Medicaid program spent $575 million more than it cost hospitals to care for Medicaid inpatients in 2008. The next year's State budget began to shift dollars within the hospitals. The 2009-10 budget set new targets for statewide Medicaid spending: reduce inpatient reimbursement by $154.5 million and more than compensate by increasing spending on hospital outpatient services by $178 million

Hospitals successfully resisted most reductions in State Medicaid spending but they could not completely withstand other significant changes. Recognizing that the most effective way to limit spending was by reducing capacity, making NY's inpatient bed complement smaller has long been on the state's agenda. In the early 1980s just before the temporary surge caused by the combined

epidemics of AIDs and crack, Dr. David Axelrod, the state's health commissioner, proposed a 10-15 percent cut in hospital beds. Twenty-five years later, the state convened The Commission on Health Care Facilities in the 21st Century, which opined on the need for downsizing:

> A fundamental driver of the crisis in our health care delivery system is excess capacity. New York State is over-bedded and many hospital beds lie empty on any given day… Occupancy rate has been in decline since 1994 despite a gradually aging population. Declining occupancy rates are driven in part by shifts in the venues in which health care is provided. Health care services are migrating rapidly out of large institutional settings into ambulatory, home and community-based settings. *(Final Report November 2006)*

Both before and after the Commission's report, financial pressures were driving shut-downs of NY hospitals. Since 2000, twenty NYC hospitals have closed. Most were community safety-net institutions (e.g. North General, Mary Immaculate, Caledonian, Cabrini, Westchester Square, Parkway Hospital, Peninsula, Union, St. John's Episcopal Hospital-South Shore, St. Mary's, St Johns-Queens, Victory Memorial, and LICH). With the closure of so many small low-cost community hospitals, the process was neither orderly nor an effective brake on state Medicaid spending.

Medicaid consumed an ever growing share of state resources. By 2011 it was anticipated to account for 1/3rd of state spending. Newly elected Governor Andrew Cuomo proposed an across the board $2.7B cut in Medicaid, principally in payments to providers. Instead of the usual howls, the stakeholders made a counter proposal – help us convene a task force and let us decide when and where to cut. Jointly chaired by Dennis Rivera, 1199's former president, and Michael Dowling, CEO of North Shore LIJ, the Medicaid Redesign Team (MRT) recommended 78 actions to reduce anticipated spending by $2.2 billion. Most of the recommendations involved shifting dollars within the system to make it more efficient, including increased spending on sub-acute services, care coordination, moving more people into cost-controlled managed care plus caps on cost-of-living increases ('trend"), a 2 percent across the board reimbursement cut and the usual pass-the-buck cuts in non-hospital spending and malpractice reform. Most important to the Governor was the industry's promise to find ways to cap Medicaid expenditures at no more than inflation or face a budget axe. A by-product of the MRT's work was its special report 6 months later At the Brink of Transformation: Restructuring Healthcare Delivery System in Brooklyn (see Interfaith history section).

Perhaps the most long-lasting of all the recommendations was a proposal that NY State seek a federal Medicaid waiver together with $10 billion in up-front funding to re-configure its entire health care delivery system.

MEDICARE, THE ACA AND SHIFTING PRIORITIES

The Federal Center for Medicare & Medicaid Services' (CMS) willingness and ability to grant the waiver request was predicated in part on its interest in supporting widespread system change. Exactly one year before the MRT's proposals were presented for consideration by the State legislature the US Congress was passing the Affordable Care Act. Embedded in the ACA were programs, demonstrations and initiatives designed to transform the way health care is delivered and received. Much of the action was built into changes in Medicare – the health care financing system directly controlled by the federal government.

The ACA mandated modest reductions in the rate of increase allowed for Medicare payments to hospitals, doctors and home care providers. Harvard economist, David Cutler, estimated that these alone accounted for about 5 percent of post-2010 reduction in health care spending. Equally important in the short run - and more important for the future - the ACA enabled a significant change in the way Medicare evaluates and pays for services. Rather than paying for volume, Medicare is re-orienting into a pay for performance/reward good outcomes system.

Some of the initiatives predate the ACA. For example, in 2007, Medicare stopped paying hospitals for 'never events' – i.e., operations on the wrong body part; wrong side or wrong patient; or medication errors such as the wrong drug, dose, patient, time, rate, preparation or route of administration. As a result of Medicare's payment policy, many hospitals have implemented much more stringent safety measures. Medicare has expanded its list of non-billable hospital stays to 29. It now includes, for example, extended inpatient stays caused by hospital-acquired infections and preventable ulcers.

In a similar fashion, the ACA authorized Medicare to refuse payment for unanticipated re-admissions within 30 days of discharge. By the end of 2013, re-admissions were down 10 percent saving the program about $300 million. One of the more successful programs to reduce re-admissions is Project BOOST (Better Outcomes by Optimizing Safe Transitions). As described in a Health Affairs brief "Project BOOST has developed a toolkit that includes medication reconciliation forms, a checklist for discharge patient education, and a checklist for post discharge continuity checks. A semi controlled pre-post study in 11 hospitals showed a 2 percent drop in 30-day readmission rates after one year for units that participated in BOOST compared to a slight increase in rates for units that did not participate."

Establishment of Accountable Care Organizations (ACOs) by various coalitions of providers is the most widespread incarnation of the bundled Medicare payment experiments created under the ACA's rubric. Providers organized in ACOs are paid a fixed amount per attributed Medicare recipient. If they can reach and maintain quality standards while reducing cost they are entitled to a gain share in the savings. In some formulations, the ACO is penalized if it fails either the cost or quality tests. Accomplishing the objectives requires very different approaches: 1) embrace community based preventive and primary services as an effective way of keeping participants healthy and costs down, and 2) incentivize programs that incorporate improvement in some of the non-health care determinants of health including food, housing, education and transportation.

NY'S MEDICAID WAIVER

New York State's waiver application and suggested system initiatives incorporated both the cost containment solutions described by the MRT as well as activities designed to strengthen and broaden the system transformation already underway. Specifically, as described in the Governor's press release announcing agreement with the CMS:

> The Medicaid 1115 waiver amendment will enable New York to fully implement the MRT action plan, facilitate innovation, lower health care costs over the long term, and save scores of essential safety net providers from financial ruin. The waiver allows the state to reinvest over a five-year period $8 billion of the $17.1 billion in federal savings generated by MRT reforms.
>
> The waiver amendment dollars will address critical issues throughout the state and

> allow for comprehensive reform through a Delivery System Reform Incentive Payment (DSRIP) program. The DSRIP program will promote community-level collaborations and focus on system reform, specifically a goal to achieve a 25 percent reduction in avoidable hospital use over five years. Safety net providers will be required to collaborate to implement innovative projects focusing on system transformation, clinical improvement and population health improvement. Single providers will be ineligible to apply. All DSRIP funds will be based on performance linked to achievement of project milestones.

The expected $8 billion was divided into three pots - $0.5 billion for 10 months of assistance to seriously threatened public and private hospitals (Interfaith received $38 million); $1 billion to support the re-training of workers for long-term care and various community and behavioral health programs. The remaining $6.4 billion is slated to be spent over 5 years in support of system transformation. It will be led primarily by hospitals under the banner of DSRIP. Agreeing that about $1 billion will be used for assessment, planning and organizing activities, CMS reserved the remaining billions for dispersion when the State as a whole reaches mutually agreed upon milestones.

DELIVERY SYSTEM REFORM INCENTIVE PAYMENT (DSRIP)

DSRIP is a complex program described by 4 domains:

1. Project progress milestones – measured on completion of project plan
2. System transformation milestones – measured of system transformation
3. Clinical improvement milestones – measured on disease focused clinical improvements
4. Population-wide strategy implementation milestones – Prevention Agenda improvements

To be entitled to payments from the DSRIP allocation safety-net providers (virtually all of NY's hospitals qualified under one of three criteria) are required to form coalitions with each other and related organizations as Performing Provider Systems (PPS). These systems will pick among state-created strategies associated within each domain. For example, in Domain 2 PPSs must select one project from sub list A - Create Integrated Delivery Systems and one from sub list B - Implementation of Care Coordination and Transitional Care Programs or C - Connecting Settings. There are 17 Domain 2 projects to choose from. Among the projects listed under A includes a project to increase certification of primary care practitioners with PCMH certification. B includes a project to develop plans for ED triage of at-risk populations. An example of one of the C projects is development of community-based health navigation services. There are a total of 43 projects associated with the 3 performance domains. An additional domain 'the 11th Project' designed for "Patient and Community Activation for Uninsured, Non-Utilizing and Low-Utilizing Populations" was added in late August 2014. Most likely payments on behalf of these populations and projects will be made to public hospitals. Because there is no additional CMS funding associated with the 11th project, the total pot available for non-public institutions will be about 10 percent less.

Every Medicaid recipient and estimated uninsured resident of the community served by the PPS will be attributed to one PPS. The attribution algorithm describes "recipient loyalty." It is based on total visit counts to the overall PPS network in each designated service category. The hierarchy is complicated but it begins with visits to primary care providers.

DSRIP money will be awarded based on satisfying project metrics. Each domain and project

associated with that domain will be assigned a value. How much a particular institution will derive from participation in the DSRIP process depends upon: (1) the number of Medicaid and uninsured residents are attributed to that PPS; (2) the value of the particular set of projects its PPS(s) have selected; and (3) the particular hospital's role in meeting the project objectives.

The Department of Health published the figure below prior to amending the amount due to the existence of the 11th project.

Table 2-1: HPI Project Plan. ***Source*:** NY State Department of Health.

HPI Project Plan (Containing6 Projects)	Project PMPM	Project Plan Application Score	# of Attributed Medicaid Members	# of DSRIP Months	Maximum Project Valuation
Project 1:2.a.i. Create integrated Delivery Systems that are focused on EBM/PHM to reduce avoidable hospitalizations	$6.70	0.85	10,000	60	$3,417,000
Project 2:2.a.ii Increase certification of primary care practitioners with PCMH certifications to reduce avoidable hospitalizations	$4.46	0.85	10,000	60	$2,274,600
Project 4:3.a.i Integration or primary care and behavioral health (Behavioral Health)	$4.90	0.85	10,000	60	$2,499,000
Project 5:3.c.i Evidence based strategies for disease management (Cardiovascular Health)	$3.46	0.85	10,000	60	$1,764,600
Project 6: Domain 4. Focus Area B. Reduce illness, disability and death related to tobacco use and secondhand smoke exposure	$2.74	0.85	10,000	60	$1,397,400

Assuming that one or another of the PPS projects Interfaith has affiliated with has 250,000 attributed patients and that the PPS achieves the maximum possible score, the total available to the PPS and all its partners will be $68.5 million a year. This amount is not enough to fill all of the gaps in a place like Interfaith Medical Center because it is very unlikely to be allocated to a single provider. On the other hand, the possibility of a piece of an additional $342 million over 5 years should

serve as a tasty enough carrot to spur action, particularly because there is an implicit stick – future reimbursement formulas will incorporate cuts and penalties for continuing to do business as usual. The New York State Medicaid system is re-positioning itself as a pay-for-performance scheme with rewards based not on volume but on the efficient and effective production of health care services whether in or out of the hospital.

For Interfaith to thrive in this new environment it needs to be less focused on finding and admitting more patients with high value DRG diagnoses and more motivated by the need to help its community/patients to become and remain healthy.

CHAPTER 3: HISTORY AND CONTEXT OF INTERFAITH

Formed by a marriage arranged by the New York Department of Health in 1979, Interfaith Medical Center was an unlikely coupling of two venerable Brooklyn institutions. St. John's Episcopal Hospital opened its doors as Charitable Hospital in 1851 – a church run home for destitute 'incurables.' Rebuilt several times, St. John's Episcopal Hospital took shape as a recognizable hospital in 1881. By 1927 the demand for care far exceeded capacity. To build a modern facility on its Herkimer Street site, the Episcopal Church Charity Foundation embarked on a campaign to raise $1 million to add to the $400,000 it had on hand. Like its predecessors the new hospital would continue the mission implicit in its founding name. At the dinner to kick off the fund raising campaign Bishop Stires of the Episcopal Diocese of LI (which included Brooklyn) declared that 85 of the new facility's 202 beds would be reserved for free care, 97 would be subsidized, and only 20 beds were to be set aside for full-pay patients. The Bishop explained that the Foundation's $2.5 million endowment would be enough to cover its annual $130,000 operating expense. Over the following half century, the hospital tripled in size.

Brooklyn Jewish was organized shortly after the turn of the last century when the 1903 opening of the Williamsburg Bridge connected Brooklyn to the poor Jewish population living in the lower east side. Tens of thousands streamed across the river. Within 3 years, according to Abraham Abraham, founding president of the hospital's board, the number of Brooklyn Jews grew tenfold - from 25,000 to 250,000. Like St. John's, Brooklyn Jewish was founded with a mission. "The many dependent and helpless sick," declared Abraham at the hospital's dedication in 1906, "will find here help and, we profoundly pray, the health which is the foundation of happiness and prosperity." It was designed to care for an inpatient population of 500 people. While Brooklyn Jewish was still about $60,000 short on opening day, Mr. Abraham was confident that the community would come up with the needed money to offer aid and comfort to anyone "without regard to creed or nationality."

LARGE BUT INCREASINGLY FINANCIALLY TROUBLED

St. John's Episcopal and Brooklyn Jewish became two of the largest hospitals and most significant employers in Brooklyn with close to 4,000 workers combined. Both developed into major teaching centers with celebrated nursing schools and large postgraduate house staff programs for interns and residents. Even the world famous Albert Einstein traveled to Brooklyn for surgery in 1949. However, post WWII hospital care became more complex and expensive, and private charity was insufficient to keep up with the rising costs. This left both institutions ill-equipped to sustain themselves financially. There was a brief respite in their unrelenting appeals after the 1965 passage of Medicaid and Medicare, but it was soon apparent that there were still far too many people left out of insurance coverage, particularly in the working class African American and immigrant communities that depended on these hospitals. By the late 1970s the hospitals were gasping for breath – Brooklyn Jewish on the brink of bankruptcy and St. John's requiring an ever-increasing subsidy from the Diocese.

All through the late 19th and 20th centuries NYC hospitals had received payments from the city and state as partial compensation for charity care patients. It was never enough to cover the full cost. Both Governors Rockefeller and Carey devised programs to fill the gaps. For additional relief Mayor Lindsay sponsored a plan to connect voluntary hospitals like St. John's and Brooklyn Jewish with city facilities. In 1968, for example, St. John's signed a $300,000 annual contract to back-up care at the nearby District Health Center. At one point in the late 1970s Governor Carey's senior health advisor proposed closing down SUNY's hospital at its Downstate Medical School and moving the medical school's training programs together with its State subsidy to Brooklyn Jewish.

THE MERGER

By merging and downsizing Brooklyn Jewish and St. John's, reducing their combined bed complement by 300 beds, and laying off 800 workers, the plan sought to "replace expensive inpatient hospital services with neighborhood primary care centers for communities that have virtually no private physicians left in private practice." (NYTimes 10/25/79). $14 million was promised to the newly joined Interfaith Medical Center to offset its inherited deficit and to fund the expected transformation. In addition, each of the laid off workers was offered a comparable union job elsewhere in the City's large health care system.

For the time being, the hospitals continued to operate in their separate locations although there was much discussion about replacing the 1906 Brooklyn Jewish plant with a new facility adjacent to the somewhat newer St. John's. A new Board of Trustees with equal representation of the two hospitals was established. Both institutions formally disassociated from their sectarian sponsors and benefactors -- the Federation of Jewish Philanthropies and the Episcopal Church Charity Foundation. While the new hospital was launched debt free, it possessed few assets of its own to fall back on if the combination of patient care reimbursement and grant funding fell short.

CRISIS AND NEW BUILDING PLAN

Several nearby primary care clinics were created but the hospital never had a significant period of fiscal health. With downsizing came a concomitant reduction in patient service revenue. Expenses exceeded income from the start. The initial grant did not cover the operating deficit for long. It was expensive and inefficient to run a hospital at 2 locations separated by a distance of a mile and a near century of competing hospital cultures and systems. The crisis of AIDS and a crack epidemic increased the need for medical services, but within 10 years Interfaith was in very serious

trouble. Compounding its $16 million deficit was the threat of being cut off from Medicaid and Medicare revenue. A State Department of Health audit in September 1988 had documented life threatening deficiencies caused by both a decrepit physical plant and overwhelmed care teams who, for example, several times removed healthy organs because of diagnostic mistakes. Some hospital leaders blamed the state audit for their inability to raise or borrow enough money to put a corrective plan in place. ''When I was an intern here, this was a glorious place," said Dr. Khodadadi an attending physician who trained at Brooklyn Jewish. ''The potential is there for this hospital to regain its glamour; if only the money was there. This community could certainly use it." (NYTimes 3/20/1989).

With tireless dedication, the Hospital staff managed to put itself in good enough order to keep its status with Federal and State health authorities, even securing a $200 million capital funding guarantee promise from the State legislature for a new building. The state money, however, was contingent on Interfaith finding private investors willing to purchase its bonds. There did not seem to be many takers.

While the crack and AIDS epidemic epidemics eased in the 1990s, the Hospital's problems did not. When its Medicaid payments were held up for several days due to a dispute between Gov. Pataki and the Legislature, Interfaith bounced its payroll checks. In 1992 the nurses staged a one-day walk-out to pressure the Hospital to meet its pension and health fund obligations. Four years later, the 1199 National Benefit Fund sued Interfaith because it was $14 million in arrears. The Hospital responded, in part, by laying off 330 workers. And so it went through the difficult decade.

"A NEW BEGINNING"

"A New Beginning," proclaimed banners hung in the lobbies of both buildings. They commemorated the start of a 4-phase project to unite Interfaith into one, state-of-the-art, hospital campus on the St. John's site at 1545 Atlantic Avenue. The project had been enabled by a legislative change in the Dormitory Authority of New York's (DASNY) borrowing capacity. As part of the Health Care Reform Act of 1996 which unregulated hospital rates and associated revenues, a short one-year window was opened up to guarantee the loans for a few of the State's safety net hospitals. In early 1997 Interfaith borrowed $148.5 million with the protection of the Secured Hospital Revenue Bond Program, enabling it to go into the private market and float the necessary bonds.

The new buildings solved some, but not most, of Interfaith's problems. By the time construction was completed, the 700 bed institution created by the 1979 merger had been whittled down to 287 beds. With about half the number of employees and an operating budget three times higher than what it had previously been, the hostpial's woes continued.

ANOTHER CRISIS, ANOTHER MERGER PROPOSAL

By 2011, Interfaith was one of the sickest hospitals in New York, but not the only one looking for additional financial assistance from the State. It was met with uncommon opposition. Newly elected Governor Andrew Cuomo had taken up the State's perennial struggle to control its Medicaid expenditures. Anticipating a $10 billion budget deficit in the following year, Cuomo proposed cutting the State's share of Medicaid by $2.7 billion. After successfully resisting Gov. Pataki's proposed cuts the previous year, the hospitals acknowledged the need for some change. Given the extraordinary difficulty of making and keeping changes on this scale, the hospital associations and the Unions accepted a 2 percent across the board cut, a cap on future spending, and proposed a Medicaid re-design process for the following years.

The Medicaid Redesign Team (MRT) zeroed in on the hospitals in Brooklyn facing bankruptcy and possible closure– Brookdale, Brooklyn, Kingsbrook, LICH, Wycoff and Interfaith. In its final report At the Brink of Transformation: Restructuring Healthcare Delivery in Brooklyn, the MRT acknowledged that the people of Brooklyn face "daunting population health challenges." To keep alive some part of the six at-risk hospitals intact, the MRT proposed a program of additional financial support and debt restructuring. The program was contingent on the hospitals accepting major changes in the way they provided care combined with downsizing of inpatient capacity and mergers. Its recommendation vis-à-vis Interfaith was explicit: Brooklyn Hospital Center, Interfaith Medical Center, and Wyckoff Heights Hospital: *The Work Group recommends the integration of these three institutions into a single system under an active parent, or other accountable governance structure, led by Brooklyn Hospital Center.* Failure to accept these recommendations, the report's authors implied, might result in withdrawal of State support and ultimately closure.

In the end, the Legislature readily accepted the MRT's proposal. The proposal, which included small cuts in current year spending and limits on future spending to no more than a rolling ten year average of medical inflation -- a proposal that sounds more rigorous that it actually is in this era of slowed medical cost growth. In addition they proposed a special allocation of state controlled funds to assist the Brooklyn hospital merger process. That program was not acceptable to the Legislature which instead insisted that the small pot be made available equally to all hospitals in the state. The MRT proposed a number of significant changes in the ways Medicaid patient patients received their care and urged the state to embark upon a health/hospital system transformation that would re-direct spending towards evidence based care that emphasized chronic care management, coordination and primary/preventive interventions. In other words, they strongly urged the state to move the system away from its historic dependence on hospitals as the locus of care for Medicaid recipients.

NO MERGER: BANKRUPTCY INSTEAD

Despite the fact that some opposed the proposed merger because it would have put Interfaith under Brooklyn Hospital's control, the proximate cause of the failure to realize the merger according to Nathan Barotz, Chair of Interfaith's Board in 2012, was the fact that that Wycoff balked. No merger ensued. Interfaith was forced back on its own. By August 2012 they had less than a couple of weeks of operating funds on hand and needed a cash infusion of $10-$30 million to hold on. "Because it took so long to figure out where Wyckoff stood in this formula," Mr. Barotz said, "we lost an incredible amount of time, and we as an institution don't want to be penalized for that." (NYTimes 8/2/2012). He wasn't optimistic that the State would be forthcoming and he was correct. Jim Intone, the Governor's Secretary for Health, is quoted in the Times asserting that the situation wasn't urgent and he suggested Interfaith continue to work out its merger plans. Interfaith sought relief from its bond obligations. DASNY refused unless the hospital agreed to merger with Brooklyn Hospital.

On December 3, 2012 the Hospital filed a petition in federal court for reorganization under Chapter 11of the bankruptcy code.

CHAPTER 4: INTERFAITH'S BANKRUPTCY

Interfaith Medical Center's Chapter 11 Bankruptcy Proceedings

In December 2012, faced with debts and liabilities approaching $200 million dollars, looming federal and state health system transformation initiatives linking population health and financial accountability, reductions in Medicaid reimbursement, increased costs to provide patient care, inherited legacy debt and $31.5 million dollars in malpractice obligations, Interfaith Medical Center, a 287-bed, multi-site facility, filed for Chapter 11 bankruptcy protection. Chapter 11 allows debtors to remain open while proposing a plan for reorganization of the business, assets and debts to allow payment to creditors over time.

To emerge from bankruptcy and receive needed funding to continue operations through March 2015, the New York State Department of Health (DOH) required Interfaith to forfeit all of its assets and replace its management team and board of trustees. The Chapter 11 plan also required that the Dormitory Authority of the State of New York's (DASNY) holding company receive all of Interfaith's assets, including real property, real property leases or contracts, all inventory, all accounts receivable, all grants or funding owed to Interfaith, Healthfirst equity interests, and a multitude of funds (e.g., those set aside for payment of post-petition medical malpractice claims). As a result of these pre-conditions, Interfaith now finds itself: 1) with a State-appointed management team and Board of Trustees made up of people who are not from Central Brooklyn and who have little connection to the community 2) with limited ability to leverage its assets to borrow capital 3) almost entirely dependent on state and federal funding to remain in operation and 4) faced with uncertainty once DOH's operational funding expires in March 2015.

While the Chapter 11 plan allowed Interfaith to successfully emerge from bankruptcy, the requirements imposed by the State and DASNY to keep Interfaith operational do not provide long-term solutions to the entrenched fiscal ills the hospital faces and do not begin to align the health needs of the community with the services it provides.

THE AFFORDABLE CARE ACT AND A CHANGING HOSPITAL ENVIRONMENT

The Affordable Care Act (ACA) outlines a strategy to improve the performance of the nation's health system. Many state-level health system transformation initiatives, including New York, also parallel the national strategy. Health system redesign and efficiency aimed at improving population health, quality and value are incentivized through expanded coverage and reimbursement rewards and penalties that explicitly link provider payment to quality and health outcomes.

Hospitals in particular face new challenges but also incredible opportunities. On the one hand, they are challenged to improve quality or face financial penalties through initiatives that explicitly target indicators of poor system performance: avoidable readmissions, post-operative surgical infections, system fragmentation and poor coordination, and patient experience. In addition, beginning in 2014 and extending through 2020, the ACA reduces Disproportionate Share Hospital (DSH) payments. DSH payments are partial payments provided to qualifying hospitals—primary large, urban and teaching hospitals for uncompensated care. Under the ACA, effective for discharges occurring after fiscal year 2014, hospital DSH payments will be reduced each year until 2020. Presently, DSH payments are a meaningful source of revenue for hospitals that serve a large proportion of low-income and uninsured populations – 'safety net hospitals.' These payments will be reduced under the expectation that millions will gain health insurance coverage because of the ACA, reducing the need for payment for uncompensated care. For hospitals, this is not necessarily bad news. ACA's expansion of health insurance through Medicaid creates an opportunity for hospitals to not only expand their population base but also to capture revenues for services that were previously not reimbursed due to insurance status or payment delinquency. The combined effects of the ACA require organizations to adopt organizational strategies that shift focus away from acute, episodic models of care, towards community-based systems of care that promote the health and wellness of all community members.

The health of the communities that surround Interfaith is linked closely to the future of Interfaith and its ability to adapt in a rapidly changing national and state healthcare environment. Considering Interfaith's past and uncertain future, identifying the characteristics, causes, and outcomes of hospitals that have filed for bankruptcy, and among those, the characteristics of those that have successfully emerged from bankruptcy, has important implications for understanding where and how Interfaith's future intersects more broadly with opportunities to improve the health and lives of Central Brooklyn community members.

The specific questions addressed are:

1. What are the characteristics and circumstances of hospitals that have filed for bankruptcy, and how do they compare to Interfaith Medical Center?
2. Among those who have successfully emerged from bankruptcy, what factors contribute to their survival, and what are the outcomes of restructuring and reorganizing?
3. What are the implications for Interfaith Medical Center's continued survival and presence in the community in light of a rapidly changing healthcare environment?

APPROACH

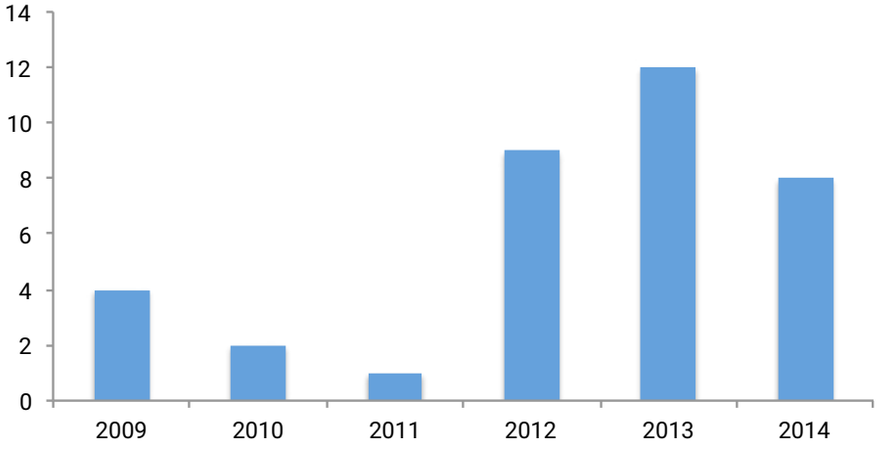
A descriptive case review of hospitals and hospital systems that sought and obtained bankruptcy protection from January 1, 2009 through July 18, 2014 are examined. This period of time includes the year prior to enactment of the ACA, taking into account the implementation of key ACA provisions. A total of thirty-six hospitals and hospital systems are identified and examined. It should be noted that at the time of this study, seven of the hospitals and hospital systems included in this study are in the process of actively restructuring, an activity that takes, on average, about two years to complete. Hospitals and hospital systems were identified by conducting a systematic review of the journals Modern Healthcare and Becker's Hospital Review, as well as a database search of Lex-

isNexis Academic with a keyword search for "hospital bankruptcies" from January 1, 2009 through July 18, 2014. In addition to identifying the universe of hospitals that filed for bankruptcy protection, we also identified factors associated with recent bankruptcy filings, organizational differences between hospitals able to reorganize and restructure successfully, the circumstances leading up to filing a bankruptcy petition, post-bankruptcy performance and the extent to which Interfaith's circumstance is unique. This methodology is consistent with previous studies that have investigated the causes, consequences and factors associated with hospital bankruptcies as precipitated by major shifts in the economic and healthcare environments. Key findings and implications for Interfaith Medical Center are described below.

HOSPITALS BANKRUPTCY FILINGS, 2009-2014

Though still a relatively rare phenomenon, the number and frequency of hospitals filing for bankruptcy protection follow major economic shifts such as the recession of 2008 and/or major shifts in the health policy environment such as passage of the Affordable Care Act. Accordingly, the number of hospitals seeking bankruptcy protection increased since the recession of 2008 and the passage of the ACA in 2010. The number of bankruptcy filings in 2014 is on pace to meet or exceed the number of hospitals that filed for bankruptcy in 2013.

Figure 4-1: Bankruptcy Filings by Year, as of July 2014



Shifts in the Health Policy Environment

The increasing number of hospitals filing for bankruptcy can be partially explained by a consolidation in the health care industry in response to incentives created by the ACA. As payer reimbursement models shift toward rewarding performance, many independent hospitals and hospital systems are choosing to merge or be acquired by larger systems. Merging hospitals and hospital systems can create a more efficient health care system, as it involves sharing administrative costs, integrating information systems, and lowering operational costs through sharing services. Additionally, this approach can enable hospitals to expand its service offerings, as it would have access to a larger and potentially more diverse patient population base.

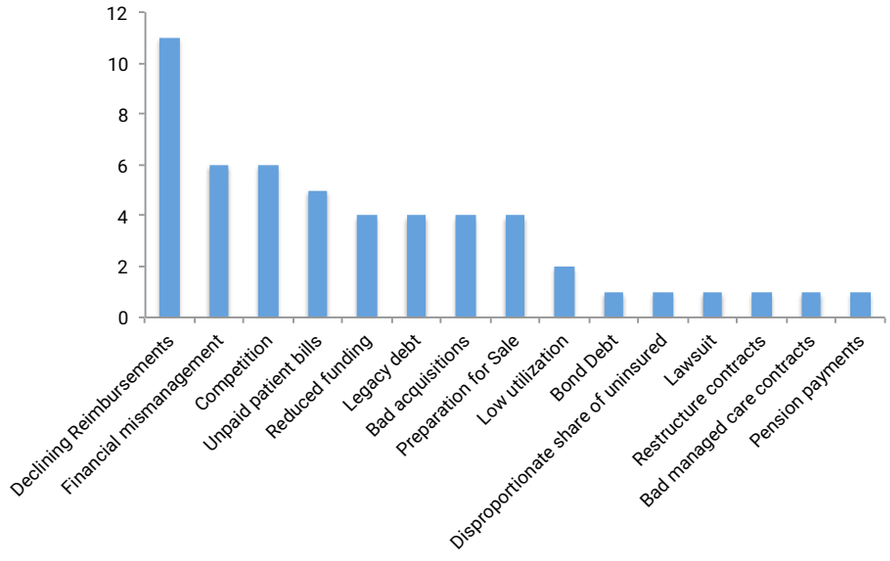
CHARACTERISTICS OF HOSPITALS FILING FOR BANKRUPTCY PROTECTION, 2009-2014

Hospitals that filed for bankruptcy tended to be smaller and located in more rural areas, with an average bed size of 178. However, despite these commonalities, hospitals that filed for bankruptcy from January 2009 through July 2014 varied in size and operations. Below is a list of the most commonly shared characteristics of hospitals filing for bankruptcy:

- Declining reimbursements (most cited)
- Average debt of $50 million
- Concentrated primarily in the Northeast

- Average bed size range from 100 to 199 beds
- Independent and privately owned (61 percent)
- The majority qualified as either a safety-net institution or a critical access or rural institution, providing needed access to care and services for low-income and geographically isolated communities

Figure 4-2: Characteristics of hospitals filing for bankruptcy protection, 2009-2014.



Interfaith shares many of these characteristics as a private safety-net provider located in the Northeast. However, it is an outlier in two important ways: 1) its $200 million debt is larger than most hospitals that have filed, and 2) its bed size is larger with 287 beds.

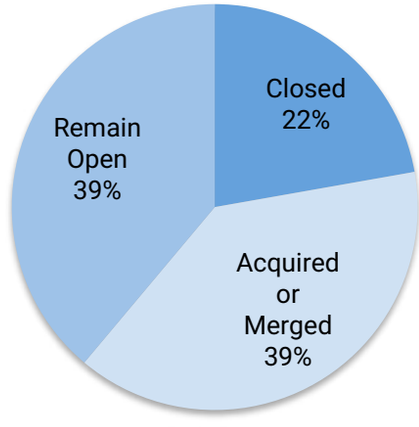
Interfaith's outlier status in these two areas highlights the challenge it must contend with looking ahead to March of 2015, after NY DoH operational funding is set to expire. It is a large, urban safety-net hospital that primarily serves a low-income community with high rates of preventable and avoidable conditions, many of which would be better treated and managed in outpatient and community-based care settings and a population for whom needed services are presently not provided by the healthcare system in Central Brooklyn. Further, nationally, over the past decade, hospital bed size and length of stay have consistently declined, while the number of outpatient visits has consistently increased. Inpatient stays for hospitals with 200-299 beds have decreased from 6.2 days in 1995 to 5.1 days in 2011. Outpatient visits, on the other hand, have increased nearly 32 percent from 84,080 in 1995 to 110,681 in 2010. Interfaith's current approach to care delivery and services is out of sync with national trends in utilization, does not meet the needs of the Central Brooklyn community and are misaligned with national and NY state efforts to transform healthcare delivery.

CHARACTERISTICS OF FILING HOSPITALS THAT REMAINED OPEN

Most of the hospitals in this analysis chose to remain open or be acquired, with only 22% closing (Figure 4-3):

Different bankruptcy outcomes create different paths for the community and the stakeholders involved. A merger or acquisition is often the easiest financial path for ensuring that the minimum requirements for stakeholders with a financial interest are met. Creditors typically receive some payment for debts incurred, the bankrupt hospital continues to exist in some form, the purchasing entity is able to expand its market share and the patients in the com-

Figure 4-3: Outcomes, post-bankruptcy filing, as of July 2014.



munity avoid decreased access to care, and, in some cases, gain access to services that previously were not provided. However, with hospital closures, access and services lost to closure were often not replaced. Only three of the hospitals that filed for bankruptcy were replaced by emergency care units or other health care services. The rest of the communities that experienced a closure were left to travel further to access services.

CHARACTERISTICS OF HOSPITALS THAT SUCCESSFULLY EMERGED FROM BANKRUPTCY

Excluding Interfaith, six out of the thirty-six hospitals that filed for bankruptcy during the above-defined time period successfully emerged. Of those six, three were acquired by or merged with larger hospital systems within 5 years. The remaining three have had varied outcomes. KidsPeace, a comprehensive Psychiatric Hospital providing the full-spectrum of inpatient, outpatient and therapeutic services for children and adolescents, emerged from bankruptcy on August 1, 2014. It continues to operate as an independent institution. Christ Hospital in Jersey City emerged from bankruptcy, only to be purchased by CarePoint for $45 million in 2012. LifeCare Holdings, which emerged from bankruptcy in 2013, continues to struggle to pay its creditors and is under pressure to sell more of its assets to cover its debts and liabilities.

As the findings suggest, successful emergence from bankruptcy cannot be equated with long-term organizational health and financial viability. The need for a hospital or hospital system to file for bankruptcy protection generally does not stem from a single event, but rather follows deteriorating financial performance indicators that were overlooked or ignored, including declining reimbursements, changes in volume, changes in payer reimbursement policy, and shifts in care settings. Therefore, bankruptcy and emergence from bankruptcy is not guaranteed to resolve long-standing financial distress, particularly when rooted in a legacy of persistent financial troubles and mismanagement.

IMPLICATIONS FOR INTERFAITH MEDICAL CENTER

The findings from this section of the report suggest that Interfaith Medical Center cannot be a viable institution without a well-defined and articulated plan and strategy for shoring up its long-term organizational and financial health. Both the scenario of Interfaith operating as an independent safety net provider and the scenario of merging or being acquired by another hospital or system have to reasonably be considered as part of any strategy or plan. Further, any strategy or plan will necessarily have to consider Interfaith's current state, including:

- Its current approach to care delivery and offering of services
- The current composition of the management team and Board of Trustees
- Time-limited operational funding through March 2015

and alongside:

- Unmet community needs for health and healthcare
- New opportunities facilitated by national and state health system transformation
- Business and financial modeling that is more closely aligned with the promotion of health and wellness and payor policies

Interfaith Medical Center has reached a strategic inflection point; it either has to change and adapt to the new environment or risk future bouts of financial distress and closure. Though the hospital has current financial challenges, it is also in a prime position to realize and leverage health system reform opportunities that would allow it to be sustainable and viable over the long-term.

References

Bazzoli, G.J. and W.O. Cleverley, *Hospital bankruptcies: An exploration of potential causes and consequences*. Health Care Management Review, 1994. 19(3): p. 41-51.

Centers for Medicare and Medicaid Services. *Disproportionate Share Hospital (DSH)*. 2014 [cited 2014 September 24, 2014]; Available from: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/dsh.html.

Eberhart, A., E. Altman, and R. Aggarwal, *The Equity Performance of Firms Emerging from Bankruptcy*. Journal of Finance, 1999. 54(5): p. 1855-1868.

Plan of Reorganization for Interfaith Medical Center, Inc. 2014, United States Bankruptcy Court: Eastern District of New York.

National Center for Health Statistics. *Hospitals, beds, and occupancy rates, by type of ownership and size of hospital: United States, selected years 1975–2011*. 2013; Available from: http://www.cdc.gov/nchs/data/hus/2013/107.pdf.

National Center for Health Statistics. *Hospital admissions, average length of stay, outpatient visits, and outpatient surgery, by type of ownership and size of hospital: United States, selected years 1975–2010*. 2012; Available from: http://www.cdc.gov/nchs/data/hus/2012/099.pdf.

Yarbrough Landry, A., *Factors Associated with Hospital Bankruptcies: A Political and Economic Framework*. Journal of Healthcare Management 2009. 54(4): p. 252-272.

CHAPTER 5:
THE ECONOMIC ENVIRONMENT

Interfaith Hospital and the Economic Environment of Central Brooklyn

Interfaith Medical Center plays an important role in the economic health of Central Brooklyn and the borough of Brooklyn more broadly. This chapter describes the socioeconomic and demographic environment of the Central Brooklyn community that Interfaith serves and analyzes the economic impact, both realized and potential, of Interfaith Medical Center on the community and the city overall. We analyze the economic impact of Interfaith by primarily examining direct effects on hospital employees and potential indirect effects observed in the surrounding retail environment.

This chapter is divided into four sections.
First, we briefly review the socioeconomic and demographic composition of Central Brooklyn, the borough of Brooklyn, and New York City between 1990 and 2010. Patterns of growth in Central Brooklyn have been unequal throughout the community. There is good reason to believe that social and economic improvements observed in some parts of Central Brooklyn are being driven by processes of gentrification. For instance, areas to the west and north of Interfaith -- such as Clinton Hill, Fort Greene, Prospect Heights, Bushwick and the western part of Bedford-Stuyvesant -- are experiencing significant gentrification, but the areas to the east and south of Interfaith -- including part of Bedford-Stuyvesant, Crown Heights, Brownsville and East New York -- where Interfaith draws most of its patients, social and economic conditions are either static or worsening. After discussing overall trends in Central Brooklyn relative to comparison areas, we disaggregate data for Central Brooklyn into gentrifying and non-gentrifying sections to analyze trends separately.

Second, we analyze the commercial environment in Central Brooklyn, focusing on commercial trends between 2004 and 2012. We look to the performance of neighborhood retail[1] establishments proximate to the hospital to assess the indirect effect of the hospital. According to previous studies, it is clear that, on average, community hospitals generate employment multiplier effects observable in industries such as retail. It should also be noted that discerning a reliable measure of the indirect effects is difficult because the performance of nearby retailers, for instance, cannot be fully attrib-

uted to patronage by Interfaith employees and patients. Nevertheless, we analyze neighborhood retail performance within a conventional urban shopping district (approximately ¼ mile around the hospital) to understand how consumption by hospital employees, patients, and contractors may impact the local economy. We compare establishment and employment trends within the Interfaith shopping district to observed trends in Central Brooklyn and the borough overall.[2] Our analysis was seriously impeded by very limited access to key data. Although repeatedly promised, the hospital never released vendor or comprehensive employment information.

To bolster this analysis, we also examine the performance of neighborhood retailers in shopping districts in community hospital environments that are arguably comparable to Interfaith Medical Center. Specifically, we focus on the shopping districts for St. Mary's Hospital in Brooklyn and Mary Immaculate Hospital in Jamaica, Queens. These hospitals closed in 2005 and 2009 respectively. We analyze the retail data (2004 -2012) as a quasi-before and after test of the potential indirect effects of community hospital closure. Given data constraints, we are unable to control for confounding factors or construct a longer lag prior the closure of St. Mary's Hospital.

Third, we analyze the healthcare sector (for the purposes of this study, "healthcare" consists of three sectors based on North American Industry Classification System (NAICS): ambulatory health services (NAICS: 621), hospitals (NAICS: 622), and nursing homes and residential care (NAICS: 623). We use location quotients to identify economic base industries in Central Brooklyn relative to the borough.[3] In 2012, the economic base of the community included: healthcare, arts and entertainment, food and accommodations, educational services, and other non-public administrative services.

Finally, the last section suggests how a sustainable and just economic development plan might be drawn. This section draws on existing land-use data for Central Brooklyn and proposes ways that Interfaith Medical Center might help catalyze comprehensive community health in the area.

I. Socioeconomic and Demographic Environment

To better understand Central Brooklyn's contemporary socioeconomic and demographic landscape, this section maps the rapid, yet unequal, change in the area between 2000 and 2010.

CENTRAL BROOKLYN FROM 1950 TO 2000

By the middle of the twentieth century, the population of Central Brooklyn had reached upwards of 700,000 residents. Black residents (African-American and African-Caribbean) constituted slightly more than 50 percent of the population. Over the next few decades, until the turn of the 21st century, the density of Central Brooklyn declined, but the proportion of Black residents steadily increased, hovering between 75 and 85 percent of the population. Latinos, representing the next largest group, accounted for approximately 15 percent of the population. The White population, for the most part, remained less than 2 percent of the population in the study area.

"White flight" or the out-migration of White residents during the 1960s and 1970s, contributed to the growing share of Black residents in Central Brooklyn over this time period. As a result, deindustrialization and public sector malaise transformed the social and economic fabric of Central Brooklyn. The disproportionate number of very low to moderate income Black families weathered numerous challenges and created a strong community. However, by the turn of the twenty-first century, it was clear that the social and economic fabric of the community was changing and would continue to change.

Some have applauded recent changes in Central Brooklyn's demographic composition as the impetus to improvements in the aesthetics of the commercial corridor, greater access to amenities, and an increase in real estate values. However, these changes have also led to changes in the community's character, and many community residents fear physical and social displacement.

CENTRAL BROOKLYN FROM 2000 TO 2010: POPULATION, RACE AND POVERTY

While Central Brooklyn experienced decades of decline and out-migration during the second half of the twentieth century, the percent of Brooklynites residing in the area increased by 2 percent from 2000 to 2010. It is of little surprise to most Brooklynites that Central Brooklyn is growing faster than the borough and city overall; rapidly increasing rents in Manhattan and northern parts of Brooklyn have sent many apartment hunters to Central Brooklyn in search of more affordable rents.

While Central Brooklyn remains a predominately Black community, comprising 70 percent of the population, the proportion of Black residents declined by 8 percent from the previous decade, nearly twice the rate of decline observed in the borough or the city overall. Concurrently, the proportion of White residents in Central Brooklyn has nearly doubled. At this rate, White residents will soon outnumber Latino residents, which have historically been the second largest ethno-racial group in the community.

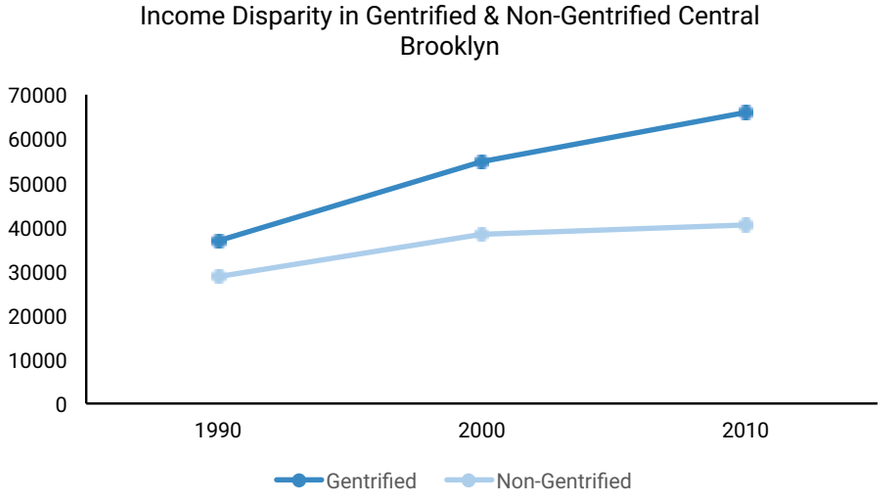
Table 5-1: Socioeconomic and Demographic Trends (2000-2010). ***Source:*** ACS 2006-2010 (5-year estimates)

	Central Brooklyn			Brooklyn			New York City		
	2010	**%**	**Rate of growth (2000-2010)**	**2010**	**%**	**Rate of growth (2000-2010)**	**2010**	**%**	**Rate of growth (2000-2010)**
Educational Attainment for Population 25 Years and Over									
Population 25 Years and over:	**268,745**		**9.09%**	**1,613,215**		**3.89%**	**5,458,986**		**3.4%**
Less Than High School	54,589	20.3%	-30.80%	358,352	22.2%	-26.01%	1,144,231	21.0%	-21.8%
High School Graduate (includes equivalency)	82,618	30.7%	17.86%	465,379	28.9%	12.18%	1,399,195	25.6%	8.5%
Some college	61,665	23.0%	12.01%	325,576	20.2%	3.54%	1,099,327	20.1%	2.0%
Bachelor's degree	43,951	16.4%	73.08%	289,646	18.0%	43.32%	1,078,439	19.8%	29.2%
Master's degree	20,176	7.5%	68.75%	126,044	7.8%	35.55%	504,230	9.2%	27.0%
Professional school degree	4,257	1.6%	20.63%	34,864	2.2%	6.16%	164,094	3.0%	4.8%
Doctorate degree	1,489	0.6%	3.04%	13,354	0.8%	17.98%	69,470	1.3%	18.8%
Employment Status for Total Population 16 Years and Over									
Population 16 Years and over:	**328,636**		**8.26%**	**1,941,421**		**3.39%**	**6,510,606**		**3.7%**
Employed	183,705	55.9%	26.11%	1,086,160	56.0%	17.17%	3,745,106	57.5%	14.3%
Unemployed	21,353	6.5%	-18.53%	99,804	5.1%	-10.51%	359,222	5.5%	3.6%
Not in labor force	123,458	37.6%	-6.19%	754,144	38.8%	-10.03%	2,402,199	36.9%	-9.4%
Occupation for Employed Civilian Population 16 Years and Over									
Employed civilian Population 16 Years and over:	**183,705**		**26.11%**	**1,086,160**		**17.17%**	**3,745,106**		**14.26%**
Management, business, and financial operations occupations	19,848	10.8%	38.99%	124,158	11.4%	25.91%	532,145	14.2%	20.45%
Professional and related occupations	44,528	24.2%	51.47%	259,035	23.9%	27.63%	876,534	23.4%	14.69%
Healthcare support occupations	13,568	7.4%	13.59%	63,758	5.9%	21.63%	163,999	4.4%	25.06%
Protective service occupations	9,382	5.1%	31.55%	36,911	3.4%	22.30%	113,347	3.0%	17.98%
Food preparation and serving related occupations	6,576	3.6%	44.40%	55,495	5.1%	51.46%	201,355	5.4%	37.89%
Building and grounds cleaning and maintenance occupations	8,720	4.8%	27.34%	48,763	4.5%	32.41%	172,021	4.6%	38.59%
Personal care and service occupations	10,662	5.8%	57.98%	48,139	4.4%	53.34%	171,041	4.6%	54.06%
Sales and related occupations	16,415	8.9%	35.56%	103,191	9.5%	17.22%	397,006	10.6%	16.72%
Office and administrative support occupations	27,961	15.2%	-4.86%	160,491	14.8%	-4.96%	523,660	14.0%	-5.88%
Construction, extraction, and maintenance occupations	10,865	5.9%	14.57%	77,904	7.2%	16.23%	245,161	6.6%	16.93%
Production occupations	4,068	2.2%	-23.48%	40,400	3.7%	-29.64%	125,344	3.4%	-29.06%
Transportation and material moving occupations	11,076	6.0%	30.98%	67,200	6.2%	19.65%	220,438	5.9%	23.09%

Median household income for Central Brooklyn in 2010 was just $ 38,483, which was approximately $5,000 less than the median for the borough, but growing nearly twice as fast. When looking at the median income by race, the rise in median income can largely be attributed to the increase in White residents living in Central Brooklyn. Median income for Black and Latino households in Central Brooklyn is lower than the rest of the city and is just 45 percent of the median for White and Asian households in the area. While New York City is known to have one of the highest rates of income inequality in the country,[4] racial income inequality in Central Brooklyn is higher than the borough and the city overall.

Economic disparity across Central Brooklyn is equally striking. In 2010, the average family income in gentrified Central Brooklyn was $65,754, compared to just $40,437 in the non-gentrified sections of the area. Figure 5-1 shows the area's widening income inequality over the past three decades. Median household income and poverty status are directly affected by the rate of full-time employment. In 2010, nearly 44 percent of working age Central Brooklyn residents were either unemployed or not in the labor force, a rate comparable to the borough and the city overall.

Figure 5-1: Income Disparity in Central Brooklyn. **Source:** U.S. Census



Although unemployment is relatively high across the various occupation categories in Central Brooklyn, the number of people employed increased between 2000 and 2010. On the whole, sectoral employment for Central Brooklynites seems to be keeping pace with the borough and city overall. In three sectors -- professional and related occupations, protective services, and sales and related occupations – growth is markedly higher in Central Brooklyn. However, both the borough and the city outperform Central Brooklyn in employment related to healthcare support occupations.

Table 5-2: Education Attainment and Employment. ***Source:*** ACS 2006-2010 (5-year estimates).

	Central Brooklyn			Brooklyn			New York City		
	2010	%	Rate of growth (2000-2010)	2010	%	Rate of growth (2000-2010)	2010	%	Rate of growth (2000-2010)
Total Population									
Total Population	418,944		1.64%	2,466,782		0.06%	8,078,471		0.88%
Race & Hispanic origin									
White Alone	50,731	12.1%	93.57%	878,857	35.6%	2.85%	2,723,853	33.7%	-2.8%
Black or African American Alone	292,243	69.8%	-8.05%	808,265	32.8%	-4.75%	1,874,089	23.2%	-4.5%
Asian Alone	9,779	2.3%	110.94%	250,007	10.1%	35.66%	1,012,014	12.5%	29.7%
Two or More races	5,193	1.2%	-48.85%	26,880	1.1%	-60.87%	101,694	1.3%	-54.8%
Hispanic or Latino	57,823	13.8%	14.59%	487,197	19.8%	-0.14%	2,281,115	28.2%	5.6%
Median Household Income by Race (In 2010 Inflation Adjusted Dollars)									
Median household income:	**$38,483**		**6.40%**	**$43,567**		**3.58%**	**$50,293**		**0.1%**
White Alone	$74,825		9.89%	$53,022		4.68%	$68,487		2.8%
Black or African American Alone	$36,184		2.43%	$39,892		0.96%	$40,568		-0.5%
Asian Alone	$63,786		46.69%	$45,779		-0.85%	$53,419		-1.3%
Hispanic or Latino	$26,810		0.17%	$33,906		1.08%	$35,581		-2.5%
Two or More Races	$33,766		2.63%	$44,973		19.13%	$45,407		9.8%
Poverty Status In 2010									
Population Under 18 Years of Age Living in Poverty	36,569	36.7%	-21.89%	186,937	31.7%	-15.51%	493,217	28.1%	-13.7%
Population Age 18 to 64 Living in Poverty	60,038	22.1%	-8.07%	286,954	18.2%	-13.08%	853,830	16.3%	-8.9%
Population Age 65 and Over Living in Poverty	10,706	25.6%	3.11%	64,544	23.1%	9.27%	171,589	18.3%	7.1%
Educational Attainment for Population 25 Years and Over									
Population 25 Years and over:	**268,745**		**9.09%**	**1,613,215**		**3.89%**	**5,458,986**		**3.4%**
Less Than High School	54,589	20.3%	-30.80%	358,352	22.2%	-26.01%	1,144,231	21.0%	-21.8%
High School Graduate (includes equivalency)	82,618	30.7%	17.86%	465,379	28.9%	12.18%	1,399,195	25.6%	8.5%
Some college	61,665	23.0%	12.01%	325,576	20.2%	3.54%	1,099,327	20.1%	2.0%
Bachelor's degree	43,951	16.4%	73.08%	289,646	18.0%	43.32%	1,078,439	19.8%	29.2%
Master's degree	20,176	7.5%	68.75%	126,044	7.8%	35.55%	504,230	9.2%	27.0%
Professional school degree	4,257	1.6%	20.63%	34,864	2.2%	6.16%	164,094	3.0%	4.8%
Doctorate degree	1,489	0.6%	3.04%	13,354	0.8%	17.98%	69,470	1.3%	18.8%

GENTRIFIED AND NON-GENTRIFIED SECTIONS OF CENTRAL BROOKLYN

Gentrification is an elastic and highly contentious term. The voluminous literature on the topic describes gentrification as a social and economic process where a low rent neighborhood is transformed into a high rent neighborhood through a confluence of factors that typically include: real estate speculation; physical improvements and redevelopment; private investment; the enactment and enforcement of place-based policies and planning decisions; and changing demographics. Gentrification is commonly marked by changes in physical design, greater access to commercial amenities and improved public safety within a locality. But, at the same time, it also inflates property values and rents, increases the proportion of affluent residents, and engenders direct and indirect displacement[5] of current low-income tenants (residential and commercial). Given the history of race and urban space in the United States, gentrification has typically correlated with a changing racial landscape. In predominately Black (or Latino) inner-city neighborhoods, such as Central Brooklyn, a significant increase in the White population is a strong indicator that other processes of gentrification are at work.

As previously mentioned, parts of Central Brooklyn are rapidly gentrifying, yet other sections of the community have remained fairly static. Understanding the distinct dynamics at play across Central Brooklyn is important for proposing a plan for Interfaith Medical Center that is particularly sensitive to the needs of current and long-time residents, but also recognizes the potential for new opportunities amid a changing market.

For the purpose of this analysis, we use the rate of change in median household income, median rent, and racial composition to identify census tracts that have gentrified between 2000 and 2010. As shown in Figure 5-2, gentrification is largely concentrated in the western and northern sections of Central Brooklyn, and in large areas of northern Brooklyn. In gentrified Central Brooklyn, the White population increased by more than 22 percent, while the Black population declined by approximately 15 percent. For the first time in more than a generation, the proportion of Black residents to White residents is nearly comparable. Figure 5-3 shows population trends by gentrification.

Figure 5-2: Gentrification in Brooklyn between 2000 and 2010. ***Source:*** U.S. Census Bureau.

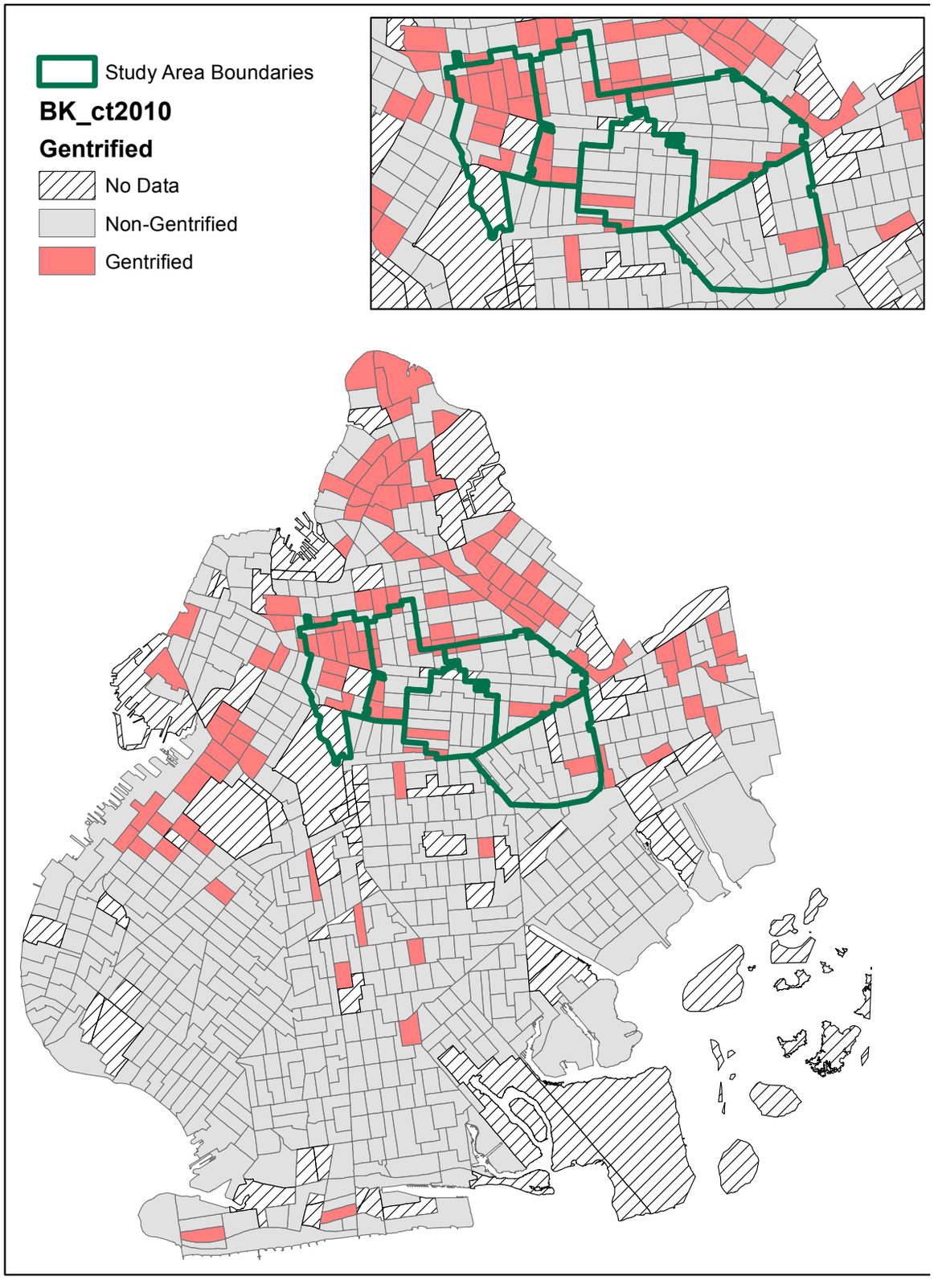
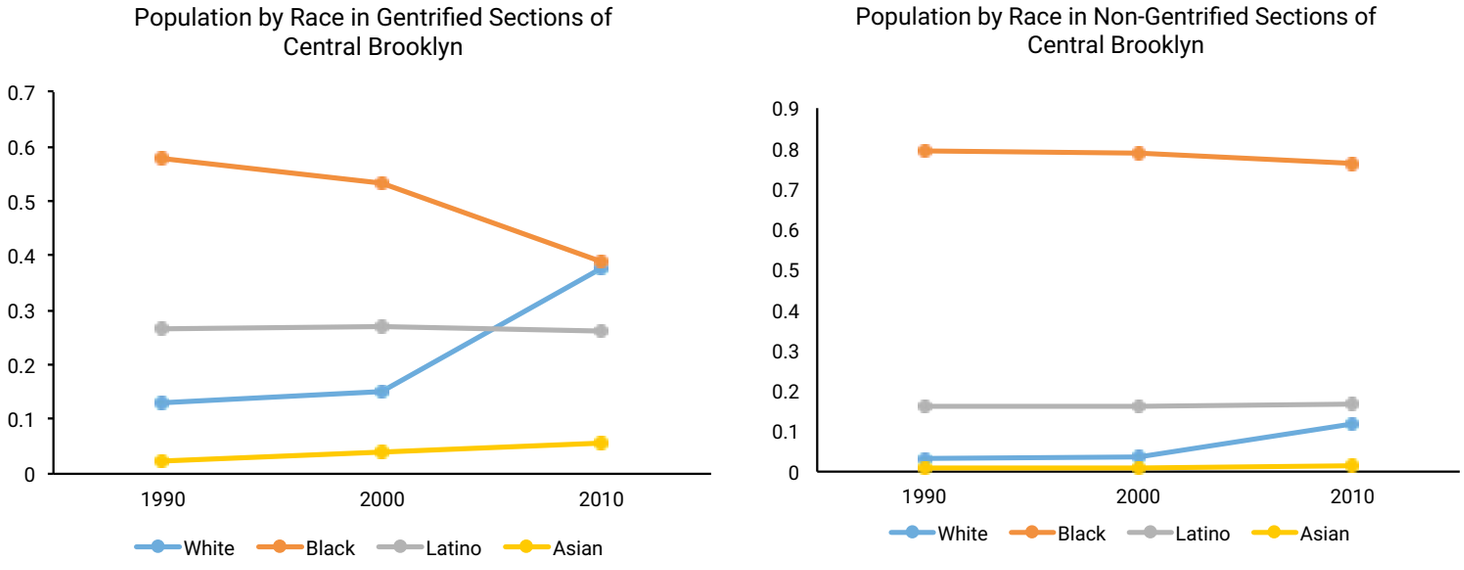


Figure 5-3: Population Trends by Gentrification. ***Source:*** U.S. Census Bureau.



II. The Commercial Environment

Hospitals are typically economic engines of communities – directly, as employers and purchasers of goods and services, and, indirectly, through the commerce generated by the hospital's activity. Interfaith provides the single largest source of jobs in the community. Its role is particularly important because 40 to 50 percent of hospital jobs are held by working class people.

DIRECT EFFECTS: INTERFAITH MEDICAL CENTER WORKFORCE

As Table 5-4 shows, in 2014, approximately 19 percent of Interfaith union and non-union employees reside in Central Brooklyn and another 41 percent reside in Brooklyn.[6] The overwhelming majority of Interfaith's unionized workers live in Brooklyn, whereas more than half of the non-unionized workers live outside of Brooklyn, most of them outside of New York City.

Table 5-4: The Geography of Interfaith Medical Center Employees, 2014. ***Source:*** 1199 SEIU and NYSNA.

Region	Non-Union	%	1199 SEIU	%	NYSNA	%	Total Workers	% of Total
Central Brooklyn	80	22	118	19	43	15	241	19
Other parts of Brooklyn	88	25	316	50	123	42	527	41
Brooklyn	168	47	434	69	166	57	768	60
Queens	52	14	98	16	67	23	217	17
Manhattan	8	2	25	4	2	1	35	3
Staten Island	10	3	6	1	6	2	22	2
Bronx	11	3	13	2	5	2	29	2
Outside NYC	110	31	55	9	46	16	211	16
Total	**359**		**631**		**292**		**1282**	

Approximately 69 percent of all 1199 workers and 57 percent of NYSNA nurses live in Brooklyn. Therefore, a comparable proportion of 1199 and NYSNA salaries remain in Brooklyn. Based on aggregate employee salaries for union workers, Interfaith Medical Center contributes over $4 million dollars per month to the regional economy. Approximately 62 percent of that goes to Brooklyn residents (see Table 5-5).

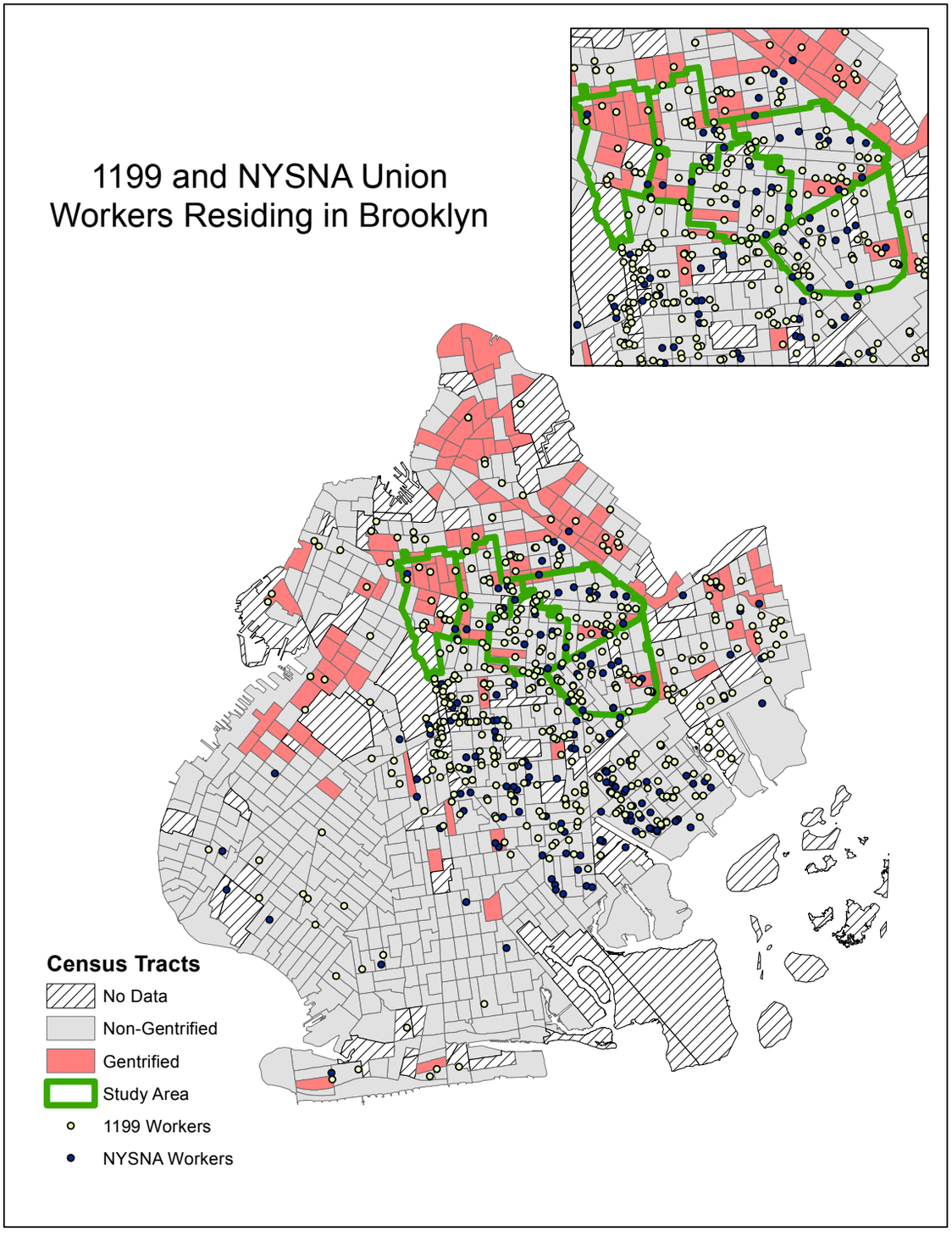
When we look at the dispersion of 1199 and NYSNA employees across the borough, it is clear that the majority of workers reside in non-gentrified areas of the borough. Given the relatively low incomes, high rates of poverty and tenuous relationships to the labor force in non-gentrified Central Brooklyn, 1199 and NYSNA employees play an important role in providing community stability (see Figure 5-4).

The importance of Interfaith to the local economy extends beyond the hospital's capacity to hire directly. Some Central Brooklynites work for companies that contract with Interfaith, or own small businesses that benefit from the patronage of Interfaith employees. According to the American Community Survey, in 2010, 32 percent of Central Brooklyn residents who were 16 years old and above were employed in the healthcare, social assistance or education sectors. Based on Reference USA data, healthcare workers account for 60 percent of the healthcare sector, followed by social assistance and then education.[7] These numbers underscore the critical importance of the healthcare industry to Central Brooklyn's economy.

Table 5-5: The Geography of Interfaith Medical Center Salaries in 2014. ***Source:*** 1199 SEIU and NYSNA.

Region	1199 Aggregate Salaries	% of Total	Average Area Salary	NYSNA Aggregate Salaries	% of Total	Average Area Salary
Central Brooklyn	$395,971	18	$3,356	$323,828	15	$6,890
Other Parts of Brooklyn	$1,086,886	50	$3,440	$848,698	40	$6,736
Brooklyn	$1,482,857	68	$6,795	$1,172,526	55	$6,813
Queens	$321,625	15	$3,282	$449,083	21	$6,237
Manhattan	$84,737	4	$3,389	$15,469	1	$5,156
Staten Island	$24,195	1	$4,032	$53,785	3	$6,723
Bronx	$54,412	3	$4,186	$29,084	1	$5,817
Outside NYC	$204,689	9	$3,722	$393,176	19	$6,446
Total	**$2,172,514**			**$2,113,123**		

Figure 5-4: Mapping Interfaith Medical Center Employees. Source: 1199 SEIU and NYSNA.



ECONOMIC IMPACT METHODS

When conducting an economic impact analysis it is customary to employ economic base theory and calculate employment and/or earning multiplier effects for local area hospitals within a regional economy. According to the American Hospital Association, in 2009, community hospitals in New York State have, on average, an employment multiplier of 1.88 and an earnings multiplier of 1.64. This means that for every job generated directly by New York State hospitals, nearly two more jobs are produced throughout the state - for example, in sectors such as building maintenance, security, food services, and medical supplies, among other suppliers and contractors. A similar logic applies to earnings multipliers. For every dollar of income brought into the state by community hospitals, another $1.64 dollars is generated in the state.

NEIGHBORHOOD RETAIL TRENDS

Figure 5-5 shows trends for the retail industry in the quarter mile shopping district around Interfaith, Central Brooklyn, and the borough, revealing the relative importance of retail for the overall local economies. In all three geographies, the number of retail establishments declined after the Great Recession of 2008, and is consistent with trends across New York City. However, between 2010 and 2012, the number of retailers in Central Brooklyn and the borough increased significantly in both absolute numbers and as a proportion of all industries. But this was not the case for the shopping district within the quarter mile around Interfaith; the number of retailers did not grow as dramatically during this period. Although it appears that local retail stagnation can be attributed to the early downsizing of Interfaith, we cannot definitively say that this was the cause.

Figure 5-5: Change in the number of retail establishments in the community and borough (2004-2012). ***Source:*** ReferenceUSA, Infogroup, Inc. US Businesses.

Despite the lack of growth in the retail industry around Interfaith, the retail sector continues to be an important and growing source of employment in the area. Food services and drinking places (restaurants), as well as personal & laundry services, are the sectors that employ a disproportionate number of workers (see Figure 5-7).

Figure 5-6: Employment in the retail sector in the shopping district and Central Brooklyn. ***Source:*** ReferenceUSA, Infogroup, Inc. US Businesses.

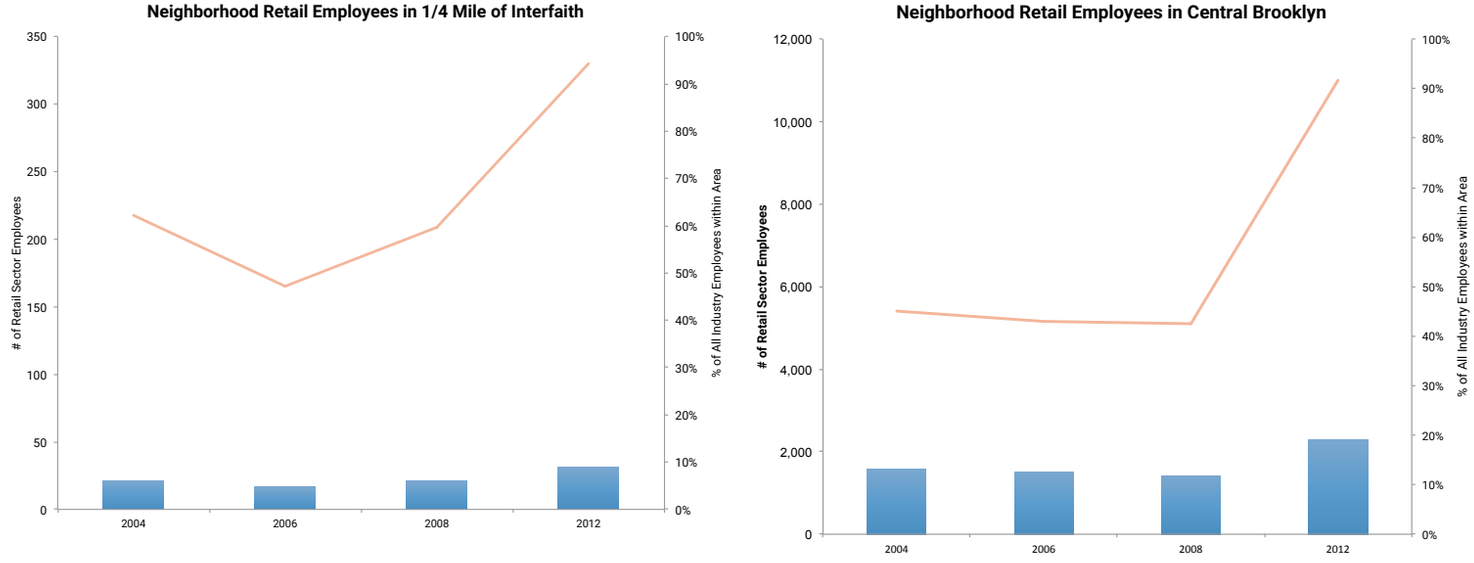
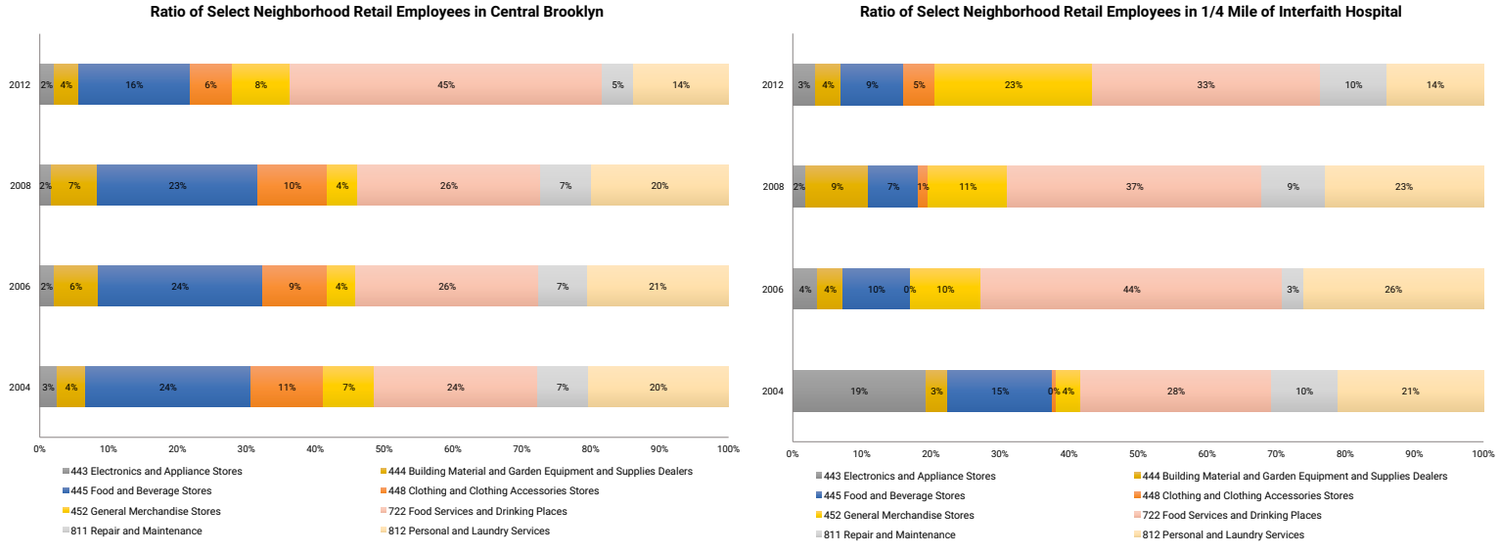


Figure 5-7: Distribution of retail employees. ***Source:*** ReferenceUSA, Infogroup, Inc. US Businesses.



III. The Health Care Sector

In Brooklyn, employment in the healthcare industry has grown in recent years. Between 2004 and 2012, the healthcare industry grew by approximately 34 percent, which is comparable to other base industries, such as educational and other services (except public administration). However, it is growing much less rapidly than the arts, entertainment, & recreation and the accommodation & food services industries. Conversely, in Central Brooklyn, employment in health care declined by 8 percent during the same eight year period, whereas the other base industries experienced growth from 40 percent to over 150 percent. The decline can be entirely attributed to the shrinkage of hospital workers in Central Brooklyn. While employment in both ambulatory health services and nursing and residential care expanded by 103 percent and 27 percent, respectively, the decline of hospital workers from 70 percent in 2004 to only 36 percent of health care workers by 2012 outweighed any increase in other health services.

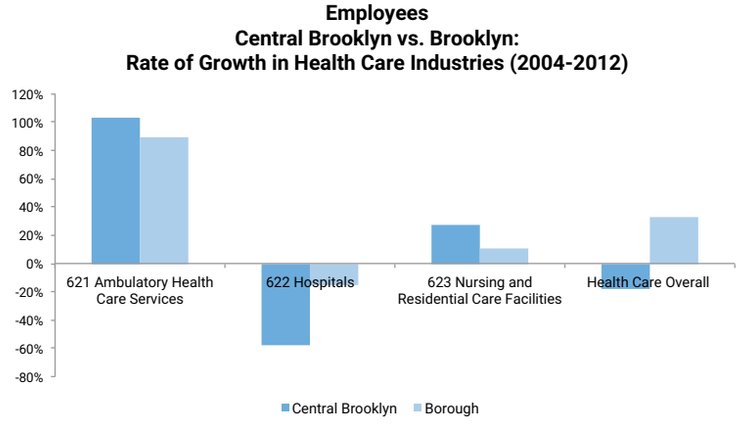
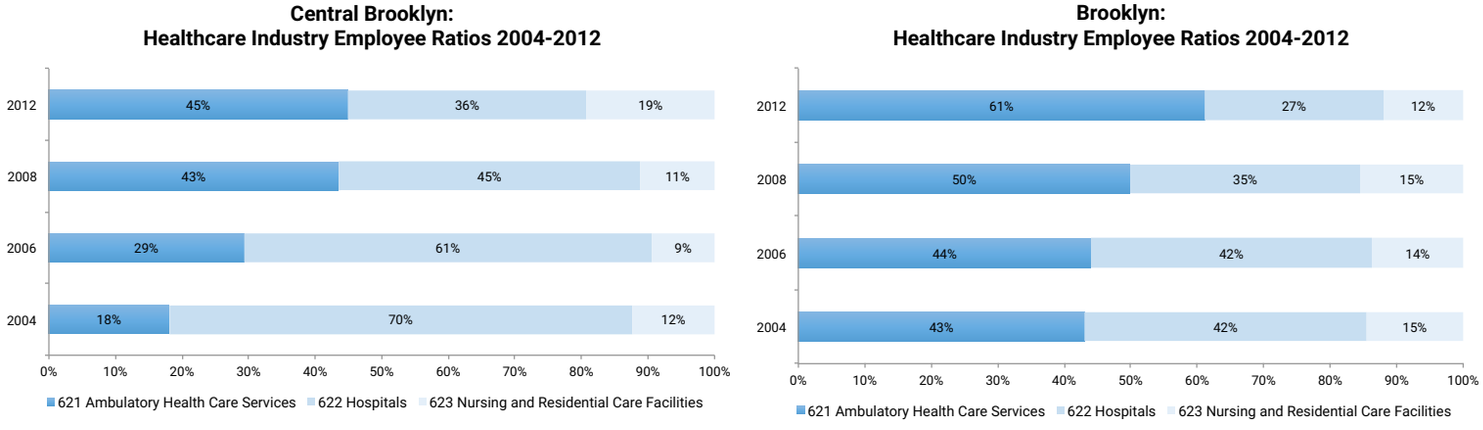


Figure 5-8: Employment growth in healthcare, Central Brooklyn vs. Brooklyn. ***Source:*** ReferenceUSA, Infogroup, Inc. US Businesses.

Figure 5-9: Proportion of workers in healthcare sectors, Central Brooklyn v. Brooklyn. ***Source:*** ReferenceUSA, Infogroup, Inc. US Businesses.



IV. Economic Development Plan

Gentrification, whether the result of large infrastructure investments or the cumulative effect of smaller investments, disrupts communities and raises serious questions about the motivations behind government investments. When residents of color are displaced, they have fewer choices in the housing market due to lower incomes, limited access to mortgage credit, and discrimination. Similar barriers to minority business ownership and development exist, including limited access to credit to start and expand businesses and a lack of intergenerational history of business ownership. It is within this context that Interfaith Medical Center has the potential to serve as an important community steward and stabilizer. Recognizing these specific challenges can help craft programs and policies that improve racial equity.

The components listed below should be included in any economic development plan that emerges for the area to ensure that local residents benefit from the economic development and neighborhood changes that Interfaith might spur in the community.

The different components of a plan should include:

- A sectoral strategy capitalizing on the area's cluster of ethnic food manufacturers, wholesalers, and retailers in the context of regional economic trends.
- A comprehensive commercial revitalization strategy aimed at strengthening the retail corridors along Atlantic Avenue.
- A human resource development strategy aimed at using the numerous educational facilities in the area to forge connections between the employment needs of the local population and emerging job opportunities.
- An advocacy agenda emphasizing participation in citywide campaigns to affect policies that would benefit low-income residents of Central Brooklyn.

Endnotes

[1] We use this term broadly to include all commercial establishments that typically occupy ground-level storefronts thus affect consumer access, corridor aesthetic and economic vitality of an area. For the purposes of this study, neighborhood retail encapsulate 8 retail and service sectors based on 3-digit North American Industry Classification System (NAICS) codes: Building Supply (NAICS: 444), Food+ Beverage (NAICS: 445), Health+ Personal care (NAICS: 446), Clothing + Clothing accessories (NAICS: 448), Books + Hobby (NAICS: 451), General merchandise (NAICS: 452), Food +Drinking (NAICS: 722), and Personal services (NAICS: 812).

[2] Establishment and employment statistics are calculated using business data from ReferenceUSA, an Infogroup company.

[3] Location quotients (LQ) are used to identify 'export' sectors which are the base of the local economy, as they draw resources from outside of the community (LQ > 1.25), 'import' sectors which require resources go outside the community (LQ < .75), and break-even sectors (LQ = .76 – 1.24)

[4] "All Cities are Not Created Unequal", Brooking Institute, 2014: http://www.brookings.edu/research/papers/2014/02/cities-unequal-berube

[5] Direct displacement refers to exorbitant rent inflation that makes it difficult for tenants to remain in place. In other words, direct displacement refers to people being priced out of their community that was previously an affordable or low-income neighborhood. Conversely, indirect displacement refers to the subtle ways that residents may be excluded from new neighborhood amenities associated with gentrification, such as upscale supermarkets, restaurants, bar, etc., because they are unaffordable. It also refers to the economic transformation of a neighborhood such that it precludes low-income people from locating in the neighborhood in the future.

[6] Employment data for union and non-union employees come from 1199 and NYSNA. Analysis by author.

[7] Economic statistics are calculated using the Reference USA database (2004-2012). This data set provides geo-specific firm-level attributes (e.g., establishment category, sales, and employment). For analysis, we aggregated firms to various geographic boundaries of interest, such as Central Brooklyn, borough, census tract, zip code, ¼ mile and ½ mile surrounding Interfaith Medical Center.

Recommendations

With the belief that adequate health is fundamental to creating and sustaining thriving communities, the following is recommended to create not only a more responsive health care delivery system, but also a healthier living environment:

IMMEDIATE

- *Allow up to three years for a transformation process while keeping services funded*

  The State of NY should commit to adequate funding of health care services at Interfaith long enough to allow an intensive planning and community engagement process to transform the facility from an inpatient focused, limited care facility to a hub for the promotion of community health and wellness. This objective is fully consistent with the State's Delivery System Reform Incentive Payment program (DSRIP):

  > To transform the system, DSRIP will focus on the provision of high quality, integrated primary, specialty and behavioral health care in the community setting with hospitals used primarily for emergent and tertiary level of services (DSRIP Project Toolkit)

- *Appoint additional members to the Interfaith Board of Trustees*

  The Board will become the legally controlling entity once the term of the Temporary Operator expires, which will happen either at the end of November, 2014, or, if extended with cause, in May 2015. There is a pressing need to augment the 3-person Board appointed by the NYS Department of Health with people who have both the requisite local knowledge and community interest to make the very difficult decisions that lay ahead. The By-laws allow for a Board of 9 members. The additional six members should represent the community of patients and potential users as well as committed staff of the institutions.

WHAT THE COMMUNITY NEEDS

Health Care

- *Robust primary and preventative care services located throughout the community.*

  Bedford-Stuyvesant/Crown Heights houses a surprising number of office-based practitioners, two Federally qualified health centers, a nearby City District Health Office and a small network of clinics sponsored by Interfaith. While, at first glance, it may look like a community with an adequate primary care complement, data suggest that residents' health is suffering due to a lack of preventative and primary care. The community experiences high rates of preventable disease, and uses emergency department services to treat health conditions that would be better managed in outpatient and primary care settings. In particular, better connections to community-based preventative and primary care services could help Bedford-Stuyvesant/Crown Heights bring down its high rates of premature death, hospital utilization for uncontrolled diabetes and related complications, unexpectedly high hospital admission rate for heart failure, and excessively high ED utilization for asthma related emergencies. The disconnect can be attributed to the absence of 24/7 access to the kind of community connected patient centered primary care that can help cure acute illness and prevent disability and death due to chronic disease. The appropriate response to these dismal health statistics is preventative care and services embedded within the community, as well as primary care that is coordinated and available when it is needed.

- *Prenatal care and maternity services.*

  The most tractable element of premature death is infant mortality – death before an infant reaches his or her first birthday. Bedford-Stuyvesant/Crown Heights had among the highest infant mortality rates recorded in the city, and twice the rate registered in Ridgewood, Queens, a neighborhood just 20 minutes away. High rates of infant deaths are closely associated with inadequate prenatal care and inaccessible maternity services. There were 14,000 babies born to residents of the Interfaith community between 2010-2012. Few were born at Interfaith. Interfaith Medical Center closed its maternity

services in 2004. Nearby St. Mary's, an alternative source of obstetric care, closed in 2005. Respondents to both the Need for Caring Survey of community residents, as well as a survey of office based physicians conducted for this study, named obstetrics as a key missing health service. Whether the maternity service can be reconstituted on the Interfaith campus needs further evaluation. However, the need for prenatal care that is integrated with delivery services is undeniable.

- *Vastly expanded chronic disease prevention programs and community based care management to help prevent chronic disease and to assist those who are afflicted to live long and healthy lives.*

  Most diabetes is preventable. Yet the disease afflicts one in seven of the neighborhood's residents. With good care and careful self-management many of the consequences of diabetes are avoidable. The evidence in the Interfaith community points to the absence of both preventatove and effective treatment. There are many more observed than expected cases, and, among those diagnosed, the incidence of uncontrolled diabetes is much greater than it should be. One of the most devastating consequences is a disproportionately high rate of uncontrolled diabetes and lower-limb amputations. Similarly, there is a disproportionately high rate of people with heart disease and hypertension. According to the CDC, the key to chronic disease control begins with prevention: "Lack of exercise or physical activity, poor nutrition, tobacco use, and drinking too much alcohol—cause much of the illness, suffering, and early death related to chronic diseases and conditions." Once someone becomes ill, the key to successful treatment is self-management – almost impossible to do alone. The development of community care and peer-to-peer programs supported by a corps of committed medical care and public health providers that are sensitive to patients' culture, life and family obligations is critical.

- *Expanded outpatient medical home services for people with psychiatric and substance abuse problems.*

  By far the most frequent reasons for admission to Interfaith Medical Center

in 2013 were mental health and substance abuse disorders. Of the 287 beds at Interfaith, 160 are designated for people with psychiatric and substance abuse issues. By the time they were admitted, many needed 24/7 care.

There is a growing body of evidence that community-based programs can divert many admissions and prevent re-admissions. A 2007 study of NYS Medicaid patients with mental illness and substance abuse problems found that such people were more likely to be admitted to a hospital than people with other diagnoses and 3.5 times more likely to be re-admitted. The admissions were not a consequence of more intense disease and disability but rather a result of a wide diversity of care needs and a fragmentation of services. The best developed programs for people with behavioral health problems are individually tailored and managed -- integrating community and institutional behavioral health services with medical care and social services, housing and legal assistance. Health Homes are described by the NYS Department of Health as "a care management service model whereby all of an individual's caregivers communicate with one another so that all of a patient's needs are addressed in a comprehensive manner. . . When all the services are considered collectively they become a virtual Health Home." Only 655 residents of the Interfaith community are receiving services from the Maimonides health home. This is only 15 percent of the unique individuals treated as in or outpatient at the hospital during the year 7/13-6/14.

- *A community health system premised on the understanding that health care is only one component of health.*[3]

  While much is known about the health status and health needs of the residents of Bedford-Stuyvesant/Crown Heights, much remains unexposed and unexplored. A successful community health action plan requires engaging all the stakeholders – Interfaith nurses, doctors and health workers, community health and mental health providers, the New York City's Department of Health and Mental Hygiene (DoHMH), local elected officials, leaders of religious, educational, business and community organizations, and, most importantly, community residents themselves. A first step might be to develop a community health agenda through a series of meetings and forums to develop a specific Bedford-Stuyvesant/Crown Heights agenda.

The starting point could be the NYC DoHMH Take Care New York's Ten Priority Areas and Measures for Success.[4] It has several particular goals that could be tailored to the Interfaith community's needs including lowering adult obesity rates, reducing premature deaths from c-v disease, reducing asthma triggers such as mites, mold and air pollution.

Economic Development

- *An anchor institution that buys from and hires local people, as well as helps develop local supply businesses.*

  Currently, many households, particularly those of color, in Central Brooklyn experience economic instability. The median income in the communities that surround Interfaith is lower than the borough and city overall, and, when broken down by race, significant racial inequality is revealed. In 2010, Black and Latino households earned 45 percent of the median income White and Asian households earned in the study area. In addition, it has a high rate of unemployment, particularly among people of color. Central Brooklyn has significant financial, organizational, and social assets that, if leveraged, could provide a strong foundation for healthy and sustainable community development, and, ultimately, a reduction in racial health and economic disparities. Interfaith, which is one of the largest employers in Central Brooklyn and an important economic engine for the local economy, can anchor broader health promotion efforts and increase local economic activity through the purchasing of supplies from local businesses, the hiring and training of local residents to work in sectors related to health, and the development of local businesses that not only provide supplies for the hospital, but address the health needs of residents. Interfaith can partner with other anchor institutions in the area, such as Medgar Evers College, to realize these economic development goals.

- *An institution that promotes energy retrofits and healthy homes in its surrounding communities.*

  Energy is a major and constant cost in all communities. Central Brooklyn has a large number of old buildings and large public and private buildings that are highly energy inefficient. Energy retrofits in such buildings typically save 40 percent or more on monthly energy bills. Interfaith, in partner-

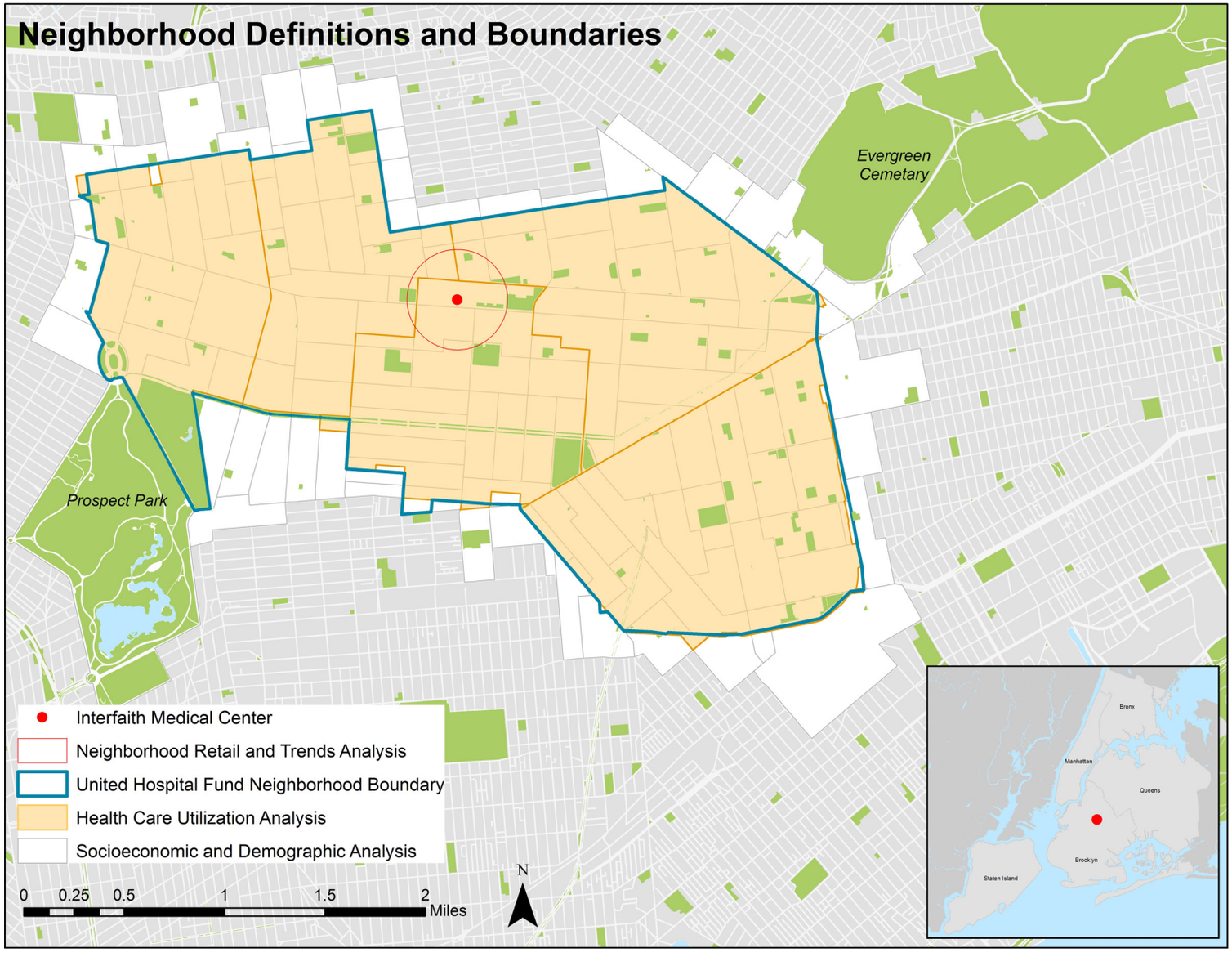
ship with Medgar Evers College and area high schools, can create a training program where local residents in Central Brooklyn can become green "experts" in energy retrofits. Overall, New York City has 900,000 buildings in need of retrofits. Workers and local businesses (plumbers, electricians, HVAC, carpenters, engineers, architects) trained in energy retrofitting in Central Brooklyn will have a market for their services in the entire region.

Residents' physical environments can have significant impacts on their health, and a high percentage of the buildings in the study area, particularly in South Crown Heights, are in poor physical condition and have 3 or more maintenance deficiencies. Therefore, when buildings are opened up for energy retrofits, it would be cost effective in many cases to retrofit the buildings for asthma prevention (e.g., removing mold and closing cracks and holes). While asthma rates are lower in the study area than the rest of the borough and NYC, Interfaith experienced higher rates of asthma-related ED usage in comparison to neighboring areas. This approach could reduce hospitalizations due to asthma by fixing the "sick" buildings generating asthma upstream.

- *An institution that views and encourages affordable housing as a health policy*

  Economically, high housing costs creates unhealthy stress. In many cases, high housing costs can force residents to make choices between rent and food or medication, as well as to move often, making it difficult to manage chronic illnesses and hold stable jobs. Many hard-working families and long-time residents are finding it increasingly difficult to afford housing in the area, in large part due to gentrification. While a significant portion of the housing stock is rent-regulated, over half of residents in the study area experience rent-burdens. In the past, union pension funds have financed affordable housing developments, such as Coop City in the Bronx and Rochdale Village in Queens, which continue to be bastions of stable affordable housing today. Labor pension funds can play a similar role today and, beyond that, they can utilize different ownership structures, such as land trusts, to remove land off the speculative market and preserve the affordability of homes for the long-term.

APPENDIX A


Neighborhood Definitions and Boundaries
Evergreen Cemetary
Prospect Park
Interfaith Medical Center
Neighborhood Retail and Trends Analysis
United Hospital Fund Neighborhood Boundary
Health Care Utilization Analysis
Socioeconomic and Demographic Analysis
0 0.25 0.5 1 1.5 2
Miles
N
Bronx
Manhattan
Queens
Brooklyn
Staten Island

APPENDIX B

Stakeholder Interviews

1. Charles Bove, COO, Interfaith Medical Center
2. Pamela Brier, President and CEO, Maimonides Medical Center
3. Eliza Carboni, Area Director, New York State Nurses Association
4. David Cohen, MD, Executive Vice President, Clinical Integration & Affiliations, Maimonides Medical Center
5. Kevin Finnegan, Political Director, 1199 SEIU
6. Jill Furillo, Executive Director, New York State Nurses Association
7. Suzanne Hepner, Partner, Levy Ratner, P.C.
8. Antonio Howell, Vice President, 1199 SEIU
9. Jim Introne, Special Advisor, New York State Department of Health (former Deputy Secretary for Health)
10. Steve Korff, CEO, Interfaith Medical Center
11. Aletha Maybank, MD, Associate Commissioner/Founding Director, Center for Health Equity, NYC Dept. of Health and Mental Hygiene
12. Hope Mason, Director of Public Affairs-Kings County, Health and Hospitals Corporation
13. Karen Nelson, MD, Senior Vice President, Integrated Delivery Systems
14. Bruce Richard, Executive Vice President, 1199 SEIU
15. Annette Robinson, Assemblymember, Assembly District 56
16. Captain James "Rocky" Robinson, Co-Founder and Executive Director, Bedford-Stuyvesant Volunteer Ambulance Corps
17. Ramon Rodriguez, President and CEO, Wyckoff Heights Medical Center
18. Avrum Rosen, Member, Law Offices of Avrum J. Rosen
19. Jeff Sachs, CEO, Sachs Consulting
20. Anthony Shih, MD, Executive Vice President, President's Office, New York Academy of Medicine
21. Linda Weiss, Director, Center for Evaluation and Applied Research, New York Academy of Medicine
22. Karen Westervelt, Senior Vice President and COO, New York-Presbyterian (former Deputy Commissioner, Office of Primary Care and Health Systems Management in the New York State Department of Health)
23. Grace Wong, Vice President, Managed Care & Clinical Business, SUNY Downstate
24. Nurses and other workers, Interfaith Medical Center

APPENDIX C

Interfaith Community Health Survey

This survey is being conducted in partnership with 1199 SEIU and the New York State Nurses Association as a way to better understand the health services provided in the community surrounding Interfaith Medical Center and the health services needed to advance the community's health. For any questions, please contact Dara Yaskil at yaskild@gmail.com.

GENERAL QUESTIONS:

1a. Field of Medicine:	1b. Medical Services Provided:

2. How long have you had this specific practice?

3. Why did you decide to open your practice in this neighborhood?

4. Do you live in the community? [zip codes: 11212, 11213, 11216, 11233, 11238]

4a. If yes, where do you usually go for care? [provide name of doctor and location]

HEALTH CARE SPECIFIC QUESTIONS:

5. What are the top 5 medical issues your patients come to you with?

6. If you cannot provide a service to your patient, where do you usually send them to receive care?

7. Would you send them to Interfaith? [Please explain]

8. What medical services are difficult for residents within the community to get access to (due to lack of doctors) or are not available within the community?

9. What percent of patients have:
Medicare?
Medicaid?
Private Insurance?
Uninsured?

10. Have you ever been a patient at Interfaith? [yes/no]

10a. If yes,
a) When?
b) What type of services did you receive?
1. ER ☐ 2. OPD ☐ 3. Inpatient ☐ 4. Other:

10b. On a scale of 1 to 5 how do you rate your experience(s)? [1 = worst, 5 = best]

10c. Please describe your experience(s):

11. Would you use Interfaith today for your care?

12. Would you recommend Interfaith today for care of a family member or friend?

13. What would the community lose if Interfaith closed?

14. What medical services should Interfaith provide?

APPENDIX D

2012 Community Health Survey Neighborhood Population Percentages							
United Hospital Fund Neighborhood	Told they have Diabetes	Obese (BMI>30)	Drinks one or more sugar-sweetened beverages daily	Eats no fruits or vegetables yesterday	Tested for HIV in the past year	Has a personal doctor	Told they have high blood pressure
East New York/New Lots	20.1%	37.6%	37.6%	22.8%	46.3%	86.5%	34.8%
The South Bronx	15.8%	30.6%	41.4%	18.0%	59.5%	80.4%	35.7%
The Northeast Bronx	15.6%	35.2%	39.8%	20.8%	45.5%	82.3%	39.7%
Fordham/Bronx Park	14.6%	36.3%	37.1%	23.0%	57.4%	74.1%	29.0%
Central Harlem	14.6%	30.3%	37.9%	14.1%	56.9%	83.0%	33.2%
Bedford Stuyvesant/Crown Heights	14.0%	27.4%	39.5%	19.2%	46.8%	87.0%	35.4%
The Rockaways	13.6%	37.5%	32.8%	15.0%	39.8%	86.8%	37.6%
East Harlem	16.2%	25.3%	38.3%	11.2%	51.0%	79.5%	41.3%
Pelham/Throgs Neck	17.4%	31.6%	37.6%	23.7%	45.1%	77.0%	29.0%
Flatbush	12.3%	28.4%	28.1%	21.9%	53.0%	76.4%	35.4%
Williamsburg/Bushwick	12.4%	29.5%	35.7%	15.7%	47.9%	73.5%	33.0%
Jamaica	14.1%	27.1%	35.2%	12.3%	41.7%	76.6%	32.3%
Canarsie and Flatlands	17.1%	30.1%	27.5%	12.8%	35.0%	81.4%	31.4%
Northern Staten Island	13.9%	34.5%	32.5%	14.6%	24.1%	84.4%	28.0%
Southeast Queens	12.0%	26.0%	33.1%	9.3%	28.1%	85.2%	35.3%
Washington Heights/Inwood	10.5%	22.2%	26.7%	12.4%	45.1%	76.8%	29.5%
Southwest Queens	13.1%	25.4%	32.6%	8.6%	24.8%	88.7%	28.0%
Sunset Park	19.0%	23.5%	29.9%	17.5%	24.5%	74.2%	25.9%
Kingsbridge and Riverdale	3.1%	19.0%	19.3%	17.3%	40.7%	87.0%	26.1%
Coney Island	11.8%	30.5%	28.5%	9.5%	19.9%	85.6%	26.4%
Southern Staten Island	7.3%	30.6%	29.4%	7.1%	15.1%	89.4%	27.0%
Ridgewood/Forest Hills	6.8%	16.6%	30.7%	12.2%	22.8%	89.9%	26.5%
West Queens	12.8%	24.2%	26.7%	10.1%	30.7%	72.2%	26.6%
Greenpoint	11.7%	26.7%	18.3%	7.5%	24.0%	83.3%	26.8%
Long Island City/Astoria	4.1%	27.3%	20.1%	8.0%	23.8%	85.7%	24.0%
Bay Ridge/Bensonhurst	5.7%	21.3%	26.6%	8.4%	22.9%	80.8%	25.8%
Downtown Brooklyn/Heights/Slope	10.3%	16.2%	17.1%	11.7%	31.0%	79.0%	21.5%
Borough Park	5.5%	24.5%	14.9%	9.1%	20.2%	86.1%	23.6%
Union Square/Lower Manhattan	7.6%	8.1%	18.9%	5.6%	31.8%	83.2%	22.3%
Flushing/Clearview	6.9%	16.3%	19.2%	12.4%	16.3%	82.9%	22.8%
Bayside/Little Neck/Fresh Meadows	10.3%	14.3%	17.8%	2.9%	16.3%	90.7%	19.6%
Chelsea/Greenwich Village	2.6%	7.9%	17.4%	6.8%	29.5%	81.6%	23.4%
Upper West Side	4.0%	16.8%	12.1%	5.3%	19.8%	91.9%	15.5%
Upper East Side/Gramercy	2.4%	8.8%	11.6%	7.4%	23.8%	82.9%	19.6%

APPENDIX E

List of Figures

CHAPTER 1: COMMUNITY HEALTH NEEDS ASSESSMENT

Figure 1-41. Major Diagnostic Inpatient Categories, Brooklyn 2012.

Figure 1-42. IMC Inpatient Diagnostic Category, 2012.

Figure 1-43. Top 15 most common Medicaid chronic conditions for Central Brooklyn.

Figure 1-44. Serious psychological distress.

Figure 1-45. Uncontrolled diabetes, study area, 2012.

Figure 1-46. Diabetes long-term complications study area, 2012.

Figure 1-47. Lower extremity amputation among diabetic patients, study area, 2012.

Figure 1-48. Asthma in younger adults, study area, 2012.

Figure 1-49. Heart failure, study area, 2012.

Figure 1-50. Angina without procedure, study area, 2012.

Figure 1-51. Difference between observed and expected Medicaid PPV ER visits.

Figure 1-52. Number of Medicaid PPV events and zip code population.

Figure 1-53. Beneficiaries with diabetes mellitus.

Figure 1-54. Beneficiaries with diseases and disorders of the cardiovascular system.

Figure 1-55. Beneficiaries with diseases and disorders of the respiratory system.

Figure 1-56. Medical specialties.

Figure 1-57. No personal doctor.

Figure 1-58. Percentage of adults with personal doctors by neighborhood.

CHAPTER 4: INTERFAITH'S BANKRUPTCY

Figure 4-1. Bankruptcy filings by year, 2009-2014.

Figure 4-2. Outcomes, post-bankruptcy filing.

CHAPTER 5: INTERFAITH HOSPITAL AND THE ECONOMIC ENVIRONMENT OF CENTRAL BROOKLYN

APPENDIX F

List of Tables

APPENDIX G

SEIU Communications Center

1199 Interfaith Medical Center Poll

10/17/2014 ~ 10/19/2014

SUMMARY	**Phone Numbers On List**	**1,516**
	Phone Numbers Dialed	**1,511**
	Completed Calls	**178**
	Contacted Households	**298**
	Dial Attempts	**4,559**

VIABLE RECORDS	**Fresh Numbers, Not Dialed**	**5**
	Call Back	**50**
	No Answer	**183**
	Busy	**0**
	Voice Mail	**700**
	TOTAL	**938**

CLOSED RECORDS	**Completed Calls**	**178**
	Refused To Engage	**119**
	Not Qualified, Terminated	**0**
	Qualified, Suspended	**1**
	Disconnect/Fax/Modem	**193**
	Wrong Number	**51**
	Unreachable This Campaign	**5**
	Language Barrier	**31**
	Deceased	**0**

Q1	Will you take 5 minutes to offer your valuable input to this survey?	YES	200	69%
		NO	89	31%
			289	
Q2	Is Interfaith Medical Center your hospital of choice?	YES	60	30%
		NO	140	70%
			200	
Q3	Do you believe that the Governor should assist in the transformation of Interfaith Medical Center into an exceptional and innovative model for community-centered health care?	YES	174	92%
		NO	16	8%
			190	
Q5	Would you like to learn more about a community-centered plan to transform Interfaith Medical Center?	YES	133	72%
		NO	53	28%
			186	
Q6	Would you like to attend a meeting on OCT. 21st, 2014 that has been organized to transform Interfaith Medical Center?	YES	62	34%
		NO	123	43%
			185	
Q7	Would you be interested in joining a community coalition to transform Interfaith Medical Center?	YES	69	37%
		NO	116	63%
			185	
Q8	Can the Coalition to Transform Interfaith Medical follow up with you about your responses to the survey?	YES	166	90%
		NO	19	10%
			185	

11/5/2014 SEIU Communications Center