

2018



PEOPLE FOCUSED RESEARCH: CREATING HEALTH IN BROOKLYN

Participatory Action Research
in Bedford Stuyvesant, Crown Heights, and East Flatbush

THE NEW YORK
COMMUNITY TRUST



COMMUNITY CARE
OF
BROOKLYN



Interfaith
Medical Center



KINGSBROOK
JEWISH MEDICAL CENTER



MEDGAR
EVERS
COLLEGE
THE CITY UNIVERSITY
OF NEW YORK

NEXT
SHIFT

FOREWORD

"Becoming an active community researcher gave me the ability to see beyond the common definition of health relating to only the body. In my perspective, health is the overall balance of one's life in areas such as financial health, physical health, environmental health, social health, and mental health; once there is a balance and satisfaction in all these areas then one is considered healthy."

- Member of the PAR1 and PAR2 research team

"This needs to be a civic *engagement responsibility*. We are looking for an infrastructure that affordable housing is a part of. If there is no infrastructure, then we will always need to start over." **(emphasis added)**

- Central Brooklyn stakeholder

"Gentrification in general is an opportunity for conversation -- *to question what the soul of the neighborhood is*...Time to lift up and center long term residents and low-moderate income people. Opportunity to *build institutions that really see themselves as resiliency mechanisms*. Economic resilience mechanisms."

(emphasis added)

- Central Brooklyn community organization leader

"Our role is to be the best provider we can be and to be *an anchor to the community*. to be *engaged in economic issues*... as we purchase supplies and services, prioritizing, when possible, our community of Central Brooklyn. [We want to be] a venue or forum for *issues of social justice* to be articulated, to support those types of democratic processes." **(emphasis added)**

- Central Brooklyn health care leader

"For my grandma and mother, all information was disseminated at church. Information is now disseminated in the hospital setting. The hospital is the biggest community outreach center there is, if structured effectively. The community can come here for studies like this [PAR focus group]. Or open up hospital spaces for the community to use."

- Central Brooklyn resident

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ABOUT US

Project Sponsors:
New York Community Trust (NYCT)

Community Care of Brooklyn (CCB)

David I. Cohen, MD, MSc - Chair, Executive Committee
Karen Nelson, MD, MPH, Chief Medical Officer
Shari Suchoff, Vice President, Policy & Strategy
Okenfe Lebarty, Senior Community Engagement Specialist
Veronica Simpson, Program Associate

Research Team:

Kingsbrook Jewish Medical Center (Kingsbrook)

Enid Dillard, Director of Marketing & Public Affairs
Joyce Leiz, Director of Development & DSRIP Coordinator

Interfaith Medical Center (IMC)

LaRay Brown, President & Chief Executive Officer
Gina Thompson, LCSW, AVP, Planning & Program Development
Benjamín González, Associate Director, Grants Management
Tajria Afrin, Intern, Ladders for Leaders
Dorcas Eng, MPH, Data Specialist, Grants Management
Alida Ortiz, MS.Ed, Associate, Grants Management

CCB Community Action and Advocacy Workgroup (CAAW)

Maurice Reid, Chair - Community Action and Advocacy Workgroup
Humberto Brown, Arthur Ashe Institute
LaRay Brown, Interfaith Medical Center
Gina Thompson, Interfaith Medical Center
Benjamin Gonzalez, Interfaith Medical Center
Alida Ortiz, Interfaith Medical Center
David I. Cohen, MD, MSc, Chair - Executive Committee
Karen Nelson, Maimonides CSO
Enid Dillard, Kingsbrook Jewish Medical Center

Joyce Leiz, Kingsbrook Jewish Medical Center
LaZetta Duncan-Moore, Brooklyn Plaza Medical Center
Cynthia Piard, Brooklyn Plaza Medical Center
Torian Easterling, Department of Health and Mental Hygiene - Center for Health Equity
Ewell Napier, Department of Health and Mental Hygiene - Center for Health Equity
Barbara Felker, Northwell Health
Patricia Fernandez, Bedford Stuyvesant Family Health Center
Craig Pogue, Bedford Stuyvesant Family Health Center
John Flateau, DuBois-Bunche Center at Medgar Evers College
Yvonne Graham, DuBois-Bunche Center at Medgar Evers College
Roger Green, DuBois-Bunche Center at Medgar Evers College
J. Phillip Thompson, NextShift Collaborative
Harvey Lawrence, BMS Family Health Center
Toni Lewis, Immediate Past Chair, SEIU Healthcare
Selena Pitts, 1199 Funds
Bruce Richard, 1199
Eric Smith, NYSNA
Denise West, Brooklyn Perinatal Network.

NextShift Collaborative, LLC (NextShift)

Prof. Phil Thompson, Ph.D, Principal Investigator
Alexis Harrison, MCP, Project Manager
Alina Schnake-Mahl, MPH, Project Manager
Wilnelia Rivera, MUP, Project Manager

DuBois Bunche Center for Public Policy, Medgar Evers College, RF CUNY

Prof. John Flateau, Ph.D., MPA, Principal Investigator
Prof. Yvonne Graham, MPH, RN, Project Manager
Prof. Roger Green, DBC Senior Fellow, Principal Investigator

Wellness Empowerment for Brooklyn (WEB) Research Team:

Graduate Researchers

Tatianna Echevarria, Massachusetts Institute of Technology

Cynthia Odu, Massachusetts Institute of Technology

Mark Freker, Pratt Institute

Abigail Ellman, Pratt Institute, PAR 1 & 2

Anna Cash, University of California, Berkeley

Julieth Ortiz, University of California, Berkeley

Undergraduate Researchers:

Cameron Bryan, Medgar Evers College & DBC-CUNY Service Corps

Greshawna Clement, Medgar Evers College, PAR 1 & 2

Jessica Collins, Medgar Evers College & DBC-CUNY Service Corps

Saradia Eugene, Medgar Evers College (alumn)

Bert Griffith, Medgar Evers College (alumn), PAR 1 & 2

Khaalida Jones, Medgar Evers College, PAR 1 & 2

Reann Oyola, Medgar Evers College
Natasha Rowley, Medgar Evers College (alumn)

Leozard Simon, Medgar Evers College, PAR 1 & 2

Anthony Taylor, Medgar Evers College

Catherine Vautor-Laplaceliere, Medgar Evers College (alumn), PAR 1 & 2

Kelvin Tejada, John Jay College & DBC-CUNY Service Corps

Miles Morris, New York University

Sydney Thompson, College of Staten Island, IMC Volunteer

Community Representative

Rakim Covington, Center for Nu Leadership

High School Researchers

Boys and Girls High School

Danessa Archer
Danita Archer
Keson Edwards
Woodlyne Macon

Academy for Health Careers

Shania Muschette
Abigail Robinson
Fatoumata Niane
Jaden Smith
Sarahi Barthelemy
O’Havyah Boynton
Monica Gaspard

Medgar Evers College Preparatory School

Toni-Ann Anderson
Jhanai Campbell
Breanna Labastide
Zasia Simmons

Pathways in Technology Early College High School (PTech)

Shanaes Akhtar
Sharon Bailey
Kearra Binker
Amaya Locke
Kiana Moore

Bedford Academy

Faisal Alam
Ockacia Bigby
Makeja Cabey
Nicole Grant
Leila Mohamed

World Academy for Total Community Health (WATCH) alumn

Medjilou Cerime, PAR 1 & 2
Shemiza Sears, PAR 1 & 2

EXECUTIVE SUMMARY

Medicaid Reform

In New York State, the Delivery System Reform Incentive Payment program (DSRIP), a federally-funded \$8 billion overhaul of the State's Medicaid program, is systematically restructuring and reorganizing the State and the City's healthcare system. With Medicaid spending at \$63 billion in 2016 and nearly a quarter of the state's population covered, New York has one of the largest Medicaid programs in the country. The critical health challenge faced by the State and City is scaling down preventable hospital use and excess healthcare costs while reducing persistent health inequities across race, gender, and income (Health 2011, Analysis 2015).

DSRIP is demanding far higher levels of coordination among providers and a sharper focus on population health. The program allows the state to reinvest billions of federal dollars into community-level collaborations, aimed at reducing preventable hospitalizations and emergency department use. It achieves these objectives by improving population health via nontraditional interventions addressing factors beyond the hospital walls (Health 2011, Analysis 2015). To help ambulatory care providers implement and fund recommendations from DSRIP projects and improve the healthcare system for Medicaid and uninsured patients, New York State allocated \$6.4 billion to safety-net providers to work collaboratively with hospitals, healthcare providers, and community-based organizations in Performing Provider Systems (PPS) within specific geographic areas.

When Interfaith Medical Center (IMC), a crucial safety-net¹ hospital in Central Brooklyn, faced the threat of closure, The Coalition to Save Interfaith ("the Coalition") formed to fight the potential loss of access to healthcare and jobs. At the request of the Coalition, NextShift Collaborative, LLC (NextShift), organized a team to conduct a health needs and assets assessment. The assessment helped community members and the Coalition determine local health needs and assets and recommend a plan to move forward.

¹ Safety-net providers - providers that deliver care to medically and socially vulnerable populations regardless of ability to pay

The plan that the Coalition adopted and advocated for reached beyond the hospital closing, proposing a comprehensive set of wellness-based development initiatives that could improve population health while also creating new community jobs -- including community health jobs into which workers in over-bedded hospitals could transition (Lab 2014).

Participatory Action Research and Health Care Policy Interventions in Central Brooklyn

Since 2016, Community Care of Brooklyn (CCB), a Brooklyn PPS charged with improving the health care system for Medicaid and uninsured patients via DSRIP funding, has supported a collaboration between the DuBois-Bunche Center for Public Policy at Medgar Evers College and NextShift to build a deeper understanding of the social determinants of health in Central Brooklyn. In the summer of 2016, CCB hired NextShift to assemble a team of 28 young adults to engage in a Participatory Action Research (PAR)² project to understand the East New York and Brownsville communities' priorities for health creation. PAR is centered on popular education pedagogy that includes the view that neighborhood residents and local stakeholders are experts with critical insight into how best to identify community assets and address community challenges. PAR is a collaborative and dynamic approach to research that equitably involves community members, organizational representatives, and researchers in all aspects of the research project -- from generating the questions asked, to analyzing and publishing the data (see Appendix A.2 for all PAR shared values and goals).

The summer 2016 PAR project (PAR I) aimed to gather residents' perceptions of their community's health and to assess resident priorities for health transformation in their neighborhoods. A core question guided the project: *"How do we mobilize the Brownsville and East New York communities to address the social, physical and environmental inequalities that affect health?"*

² See Appendix A.1. for information on the Background of Participatory Action Research

The team used a survey of 525 residents, 23 interviews with key neighborhood stakeholders,³ and one focus group to explore five dimensions of health and develop a set of recommendations and action steps to create a healthier Central Brooklyn. Key findings⁴ of the PAR I research included:

- Less than half of respondents rated their own health as “Very Good” or “Excellent.” This figure was even lower among women than men.
- Residents reported facing significant barriers to physical activity, including inaccessible and unaffordable facilities, a lack of connection and support, and social challenges including sexual harassment and violence.
- Over half of respondents reported lack of access to affordable healthy food as a key obstacle to health.
- Respondents identified numerous social, cultural, and human assets in Brownsville and East New York, assets that are ready to be leveraged in the service of a healthier community. Stakeholders and residents strongly emphasized that culture is the key to building a healthier future.

Together, the findings prompted CCB to prioritize food justice for intervention and helped inform local and state policy advocacy efforts.

In March 2017, in support of DSRIP goals and largely consistent with the priority areas identified by PAR I, the governor announced Vital Brooklyn, a \$1.4 billion state investment in community health in Central Brooklyn. Vital Brooklyn proposes \$700 million for community-based health care, mandating the creation of 36 new ambulatory care centers, \$563 million for affordable housing and other community initiatives. In addition to affordable housing, the initiative targets seven critical sectors connected to the social determinants of health that were identified as integral to improving community health in the PAR I research. The sectors include food access,

³ Stakeholders include: healthcare institutions, labor leaders, and civic organizations operating in Brownsville and East New York.

⁴ Additional key findings from the PAR I research can be found in *Healthier Brooklyn: Community Centered Study, Proposed Health and Wellness Interventions in Brownsville and East New York* (CCB, 2016)

economic development and job creation driven by local institution or “anchor⁵” procurement, and health-supporting civic infrastructure. Vital Brooklyn also proposed a comprehensive set of wellness-based development initiatives that promote collaboration across these sectors to improve community health. In January 2018, Governor Cuomo announced \$664 million for One Brooklyn Health system improvements, including a plan for IMC to renovate and expand the emergency department and develop a comprehensive psychiatric emergency program and a plan for Kingsbrook Jewish Medical Center (Kingsbrook) to be transformed into a Medical Village, repurposing its campus to better address social determinants of health. In addition to meaningfully undertaking direct improvements in population health, all of these activities create opportunities for locally-owned, community-centered businesses, and local wealth creation— thereby directly addressing systemic economic poverty – one of the key drivers of poor health.

Regarding the Vital Brooklyn initiative, Governor Cuomo noted:

“For too long investment in underserved communities has lacked the strategy necessary to end systemic social and economic disparity, but in Central Brooklyn those failed approaches stop today. We are going to employ a new holistic plan that will bring health and wellness to one of the most disadvantaged parts of the state.⁶”

Vital Brooklyn is currently the largest state-based healthcare reform demonstration plan in the U.S. Its explicit focus on combating the social determinants of health by using participatory planning processes and long-term multi-stakeholder coordination to build a community-owned entrepreneurial ecosystem is an innovative and necessary departure from approaches that seek solely to improve healthcare access and cut costs.

The success of the initial phase of PAR work, and the adoption of the priority interventions by Vital Brooklyn led to an additional PAR project (PAR II) initiated IMC and Kingsbrook, with support from the New York Community Trust (NYCT) and Community Care of Brooklyn (CCB).

5 Institutions such as universities and hospitals rooted in their local communities by institutional mission, invested capital, or relationship to community.

6 “Governor Cuomo Announces \$1.4 Billion “Vital Brooklyn” Initiative to Transform Central Brooklyn” (Governor’s Press Office Website, 2017) <https://www.governor.ny.gov/news/governor-cuomo-announces-14-billion-vital-brooklyn-initiative-transform-central-brooklyn>

7 These are the neighborhoods defined by the Vital Brooklyn Initiative as being within Central Brooklyn. (<https://www.ny.gov/programs/transforming-central-brooklyn>)

In the summer of 2017, NextShift, the Dubois-Bunche Center, and IMC recruited, trained, and supervised a 48-person community-based PAR research team, which included local high school and college students, as well as urban planning graduate students from across the country.

The PAR II project sought to understand and investigate community perceptions of health and well-being in Central Brooklyn (Bedford Stuyvesant, Brownsville, Bushwick, Canarsie, Crown Heights, Cypress Hills/Ocean Hill, East Flatbush, East New York, Prospect Heights, and Prospect Lefferts Gardens)⁷, while focusing on and identifying priority social determinants of health in three neighborhoods: Bedford Stuyvesant, Crown Heights, and East Flatbush. The research was guided by a core question *“How can residents build power to pool existing assets and demand increased investment in a healthier, more supportive and more affordable Central Brooklyn now, and in the future?”* Using a survey of 1,026 residents (collected over a two-and-a-half week period), four focus groups, and fifteen neighborhood stakeholder interviews,⁸ the team explored five health determinants and developed a set of recommendations and action steps to improve health in Central Brooklyn. The determinants of health include economic justice, youth and families, community and belonging, environmental justice, as well as housing and neighborhood services.

By working with youth from Central Brooklyn, PAR II aims to build a generation of community leaders invested in the future of their communities. The research diverges from typical research in that youth residents drove the research agenda, participating as full members of the collaborative research team. Community input also largely informed the research recommendations. In addition, institutional leaders and local organizations involved in the research were invested in the popular education principle concept that the community is already equipped with the knowledge and power to create a healthier Central Brooklyn. However, they also recognize that substantial economic investment, trust, and dynamic collaborations are required to move this work.

⁷ These are the neighborhoods defined by the Vital Brooklyn Initiative as being within Central Brooklyn. (<https://www.ny.gov/programs/transforming-central-brooklyn>)

⁸ “Stakeholder interviews” refer to a *sample* of leaders and employees of health system institutions, labor leaders, and civic organizations working in Central Brooklyn, who were interviewed during the asset mapping process. The term “stakeholder” generally refers to the full population of health care institutions, labor leaders, and civic organizations operating in Central Brooklyn.

The PAR II Report, and its underlying community-based PAR research focuses on three neighborhoods in Central Brooklyn: Bedford Stuyvesant, Crown Heights, and East Flatbush. Though these neighborhoods experience adverse indicators, they also have active community-based organizations, a health system invested in improving community health, and residents dedicated to their communities' well-being. The Report builds on current healthcare innovations in several key ways: 1) it employs a population health perspective; 2) community members drive the research agenda in an attempt to elevate community participation and ownership; 3) it seeks to address systemic factors contributing to poor population health; and, 4) it incorporates a leadership development component to ensure that today's youth are tomorrow's community leaders.

The Report's principal effort is to explore how critical stakeholders in the Central Brooklyn healthcare system-- CCB and its partner hospitals, IMC, and Kingsbrook-- can build on existing community assets to improve wellness and reduce health disparities among residents in each neighborhood, among neighborhoods, and between the three target Central Brooklyn neighborhoods and the rest of New York City.

SUMMARY FINDINGS AND RECOMMENDATIONS

In this report, community is defined as local youth participants of the research teams, residents of Bedford Stuyvesant, Crown Heights, and East Flatbush, labor leaders with close ties to Interfaith, Kingsbrook, or Central Brooklyn medical institutions, Central Brooklyn-based community organizations and their employees, and health care workers and administrators in the three target neighborhoods. The survey, stakeholder interview, and focus group findings were aligned with policy interventions to build recommendations proposed by the community. Though the research team aligned the research findings with key ongoing policy interventions, the local community's active input strongly influenced the recommended actions. Recognizing the fundamental importance of community input, the team included community participation in every step of the research process: scheduling a series of stakeholder discussions to consider and respond to the findings;

deriving explicit recommendations from the data collected by the community; presenting preliminary recommendations for deliberation and feedback at a community forum; and eliciting feedback from the community. Together, the research team and the community arrived at four central findings:

- (1) Gentrification, housing affordability, and neighborhood change are seen as top challenges affecting health in Central Brooklyn
- (2) There is a need to increase and support economic development and mobility
- (3) A redesigned health system can increase community health by building relationships between the community and health care leaders
- (4) Building a sustainable civic infrastructure is key to achieving any community-based health initiative goals

FINDINGS

GENTRIFICATION, HOUSING AFFORDABILITY, AND NEIGHBORHOOD

CHANGE: Residents identified gentrification, housing affordability, and neighborhood change as the top challenges impacting neighborhood health:

- 60% of stakeholders interviewed during the asset mapping process identified gentrification, neighborhood change, and the housing crisis as a top challenge for neighborhood health.
- Cost of living was cited as the most common neighborhood challenge, by more than half of survey respondents; gentrification and displacement were the second most commonly-cited neighborhood challenge, by 29% of survey respondents; housing was separately cited, by 24% of survey respondents, as the sixth most common challenge.
- Almost a quarter of survey respondents reported moving in the past five years and over 40% thought they would likely leave the neighborhood in the next five years. Among those survey respondents who said they would leave, over half said it would be for affordability reasons.

ECONOMIC DEVELOPMENT AND MOBILITY: Residents identified income insecurity and the lack of local economic development, quality jobs, or opportunity for economic mobility as key health challenges:

- 64% of survey respondents reported being employed (the “not employed” category included students, those caring for family, or who are retired or homemakers), and 64.51% of employed respondents worked more than 35 hours per week (Bedford Stuyvesant - 68.7%; Crown Heights - 63.86 %; East Flatbush - 61.11%).
- Over 60% of survey respondents found it hard or very hard to cover their costs and expenses each month and more than half of respondents were unsure about their income next month.
- Less than half of survey respondents received health insurance from work; 50% reported having sick leave; 27% received paid time off; 24% received retirement benefits; and only 17% had a savings plan.

SUSTAINABLE CIVIC INFRASTRUCTURE: The survey, stakeholder interviews, and focus group results indicated a lack of neighborhood leadership, as well as limited social cohesion within neighborhoods, between neighborhood residents, and between residents and the institutions and leaders that serve the neighborhoods.

- Stakeholder interview and focus group participants indicated that a strong social infrastructure is important to the future of their community. They indicated that in order to be healthy, a community requires accountability and collaboration from leaders. They also cited the impact of social isolation and the lack of community spaces for both recreation and communal gathering as drivers of poor health.
- 40.4% of survey respondents reported either that there were no leaders, or they did not know whether there were leaders, in their community.
- In Bedford Stuyvesant and Crown Heights, nearly 50%, and in East Flatbush nearly 60%, of survey respondents do not believe that people in their neighborhood work together to address challenges.
- More than 50% of survey respondents do not believe they can positively address challenges in their community.

HEALTHCARE SYSTEM REDESIGN: Residents found healthcare leaders' and workers' lack of visibility or participation in the community to be a barrier to community health and wealth.

- Focus group participants and stakeholders interviewed believe that the leadership and staff of local hospitals do not reflect the communities they serve.
- Stakeholders interviewed expressed a desire for healthcare workers to more deeply and visibly engage with the community.
- Across all three neighborhoods, only 6% of survey respondents felt that health professionals were community leaders.

RECOMMENDATIONS

The recommendations below were developed based on key findings from the survey, focus groups, and stakeholder interviews conducted over the summer of 2017. Follow-up cross-sector stakeholder briefing meetings on the findings with CCB, New York State Nurses Association (NYSNA), 1199 Service Employees International Union (1199 SEIU), the Center for Health Equity, and local healthcare leaders, also contributed. The recommendations call for action steps and systems-level changes, attempting to address both contextual determinants of health and individual-level factors that challenge people's ability to invest in their health. Strategies proposed to enact the recommendations require shifts in organizational culture as well as buy-in from healthcare executives. The strategies also suggest that local healthcare institutions leverage their multiple roles as community partners, stakeholders in neighborhood-specific policy interventions, and decision-makers charged with implementing or funding interventions.

TABLE 1: COMMUNITY RESEARCH RECOMMENDATION SUMMARIES

GENTRIFICATION, NEIGHBORHOOD CHANGE, AND HOUSING AFFORDABILITY
Make investments in equitable development strategies and promote local housing affordability to help maintain racially/culturally and economically diverse neighborhoods, particularly for low-income and impacted residents.
ECONOMIC DEVELOPMENT AND MOBILITY
Partner with local institutions, entrepreneurs, and small businesses to generate opportunities that increase employment, entrepreneurship, and local business capacity so as to increase individual income and community wealth for long-term neighborhood residents.
SUSTAINABLE CIVIC INFRASTRUCTURE
Create cross-sector collaborations between the healthcare system, philanthropic organizations, policy makers, and community-based organizations to address community-identified challenges. Build local organizing capacity and campaigns to support systems-level changes in Central Brooklyn. Invest in, and partner with, community based organizations already doing the work on the ground.
CENTRAL BROOKLYN HEALTH REDESIGN
Restructure the Central Brooklyn healthcare system so that hospitals can act as economic and community anchors. Deepen hospital-community relationships; build community wealth and health. Restructuring the healthcare system will include: 1) recognizing the dual identity healthcare workers have as employees/healthcare providers and community residents/healthcare consumers; 2) investing and becoming champions of cross-sector partnerships focused on social determinants of health; 3) strengthening hospital executives' and healthcare workers' roles as leaders in building stronger community-hospital relationships and shaping policy decisions about the health of their communities.

INTRODUCTION

Health Systems Reform

In New York State, the Delivery System Reform Incentive Payment program (DSRIP), an \$8 billion overhaul of the State's Medicaid program, is forcing reorganization of the City's healthcare system. With Medicaid spending at \$63 billion in 2016 and nearly a quarter of the state's population covered, New York has one of the largest Medicaid programs in the country. DSRIP is demanding higher levels of coordination among providers and a sharper focus on population health, creating a sense of urgency and purpose for healthcare executives and the overall healthcare ecosystem. It reflects the national shift among health insurers away from a fee-for-service model towards value-based and bundled care reimbursement models. The critical challenge is scaling down preventable hospital use and excess healthcare costs while reducing persistent health inequities across race, gender, and income (Health 2011, Analysis 2015). However, addressing healthcare accessibility and cost containment without addressing the social determinants of health will only further burden an already-struggling system.

DSRIP provides the state with significant funding for innovation by providers. It allows the state to reinvest billions of federal dollars into community-level collaborations aimed at reducing preventable hospitalizations and emergency department use, and shrinking persistent health inequities across gender, income, and race (Health 2011, Analysis 2015). Performing Provider Systems (PPS) were created within specific geographic areas to help ambulatory care providers implement and fund DSRIP projects, and to improve the health care system for Medicaid and uninsured patients. DSRIP created flexible funding streams that can be leveraged to improve population health via nontraditional interventions addressing factors beyond the hospital walls while meaningfully engaging with the community in understanding and taking ownership of its health.

Health Equity and the Social Determinants Approach to Health Systems Reform

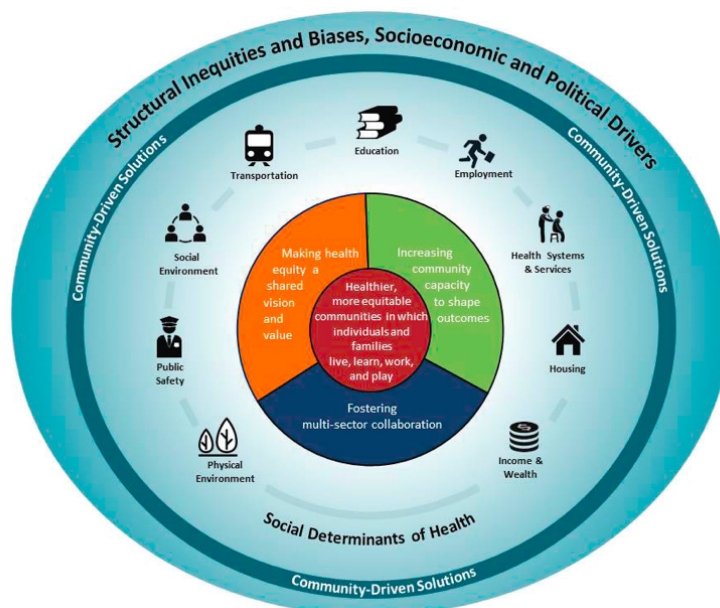
Health equity means, “everyone has a just and fair opportunity to be healthier” (Braveman 2006). Opportunities for health and wellness are largely determined by the social, environmental, and economic conditions of the places in which we live, work, play and learn – the social determinants of health (SDOH) (Foundation 2011). Research demonstrates that such factors as physical environment, food insecurity, housing instability, unemployment, poverty, and lack of wealth, are associated with increased risk of poor health, more healthcare utilization, and higher healthcare costs. In New York City, this reality contributes to neighborhood level differences in life expectancy of as much as 10 years. (Li et al. 2017). Addressing non-medical needs can significantly improve individual and population health, often more decisively than improvements in medical care (Weinstein et al. 2017).

Biases, and structural and political inequities also significantly drive health disparities. The socioeconomic and demographic profile of place also impacts the distribution of health and wellness. One’s zip code affects access to quality education, housing options, and rent levels, exposure to violence, crime, and environmental toxins, as well as levels of social capital – all of which are essential determinants of health. Risks for smoking, low levels of physical activity, and obesity also have been shown to be associated with place, even after taking into account the individual characteristics of those who live there (Diez Roux 2001). Healthcare innovation rooted in a systems-level SDOH approach can improve care and population health outcomes while lowering costs – the triple bottom aim in New York State. Most important, using an SDOH approach can also advance health equity - a shared goal across the Central Brooklyn ecosystem.

In practice, taking an SDOH approach helps to visualize and identify the relationship between the underlying causes of poor health, community-based interventions, and population health equity (See figure 1). Such relationships are also dependent on community and stakeholder participation, particularly when seeking to drive community collaborations to address health equity.

The circular format of the figure below, calls attention both to the complex and dynamic relationship between all of these factors, and the need to consider multi-level (e.g. individual, community and broader city/state policy) and multi-sector interventions that can improve social and contextual factors to produce wide-ranging health benefits.

Figure 1. Structural Inequities and Biases, Socioeconomic, and Political Drivers of Health.



Conceptual model that grounds the report of the Committee on Community-Based Solutions to Promote Health Equity. Source: Weinstein et al. 2017

Traditional healthcare payment models have not typically reimbursed providers for addressing the social determinants of health. However, payment models are gradually allowing greater flexibility in reimbursing for population-level interventions and incorporating incentives for improving population health.

Many healthcare providers are beginning to understand the importance of their patients' social context and are investing in interventions that address the social and economic factors shaping their patients' health status. For example, Massachusetts, New York, and other states now refer patients directly to social services and are using Medicaid funds to deliver patient support services (Witgert 2017). Currently, in Central Brooklyn, new state policies, shifts towards performance-based payment models, changes to community benefits requirements, and increases in recognition of social determinants of health, are reshaping the healthcare system.

IMC and the Coalition to Save Interfaith

Safety-net hospitals' play a vital role in the American healthcare system, providing needed care to Medicaid, uninsured, and vulnerable patients. Though in cities such as New York, Boston, and Los Angeles, some safety-net hospitals are in more affluent communities, most provide care in struggling urban neighborhoods or rural communities. Once small local entities, today, many urban safety-net hospitals have become critical economic anchors in their region.⁹ Some hospitals¹⁰, such as University Hospital (Cleveland, Ohio), the Mayo Clinic (Rochester, Minnesota), and Gundersen Lutheran Medical Center (La Crosse, Wisconsin), have begun to understand their role as economic anchors and are leading the way in healthcare innovation with an eye towards meaningfully addressing one principal underlying cause of poor population health – poverty.¹¹ Further, as local anchor institutions, safety-net hospitals offer the possibility of significantly enhancing surrounding communities' opportunities to shape their own development trajectory.

In Central Brooklyn, a majority-minority community of a half-million people, residents endure significant racialized health disparities in comparison to residents of other NYC neighborhoods. When Interfaith Medical Center (IMC), a crucial safety-net hospital in Central Brooklyn, faced the threat of closure, a labor/community coalition called the Coalition to Save Interfaith ("the Coalition") formed to fight the loss of access to healthcare and jobs. At the request of the Coalition, NextShift organized a team to conduct a review of health needs and assets. NextShift research helped community members and the Coalition to determine local health needs and assets and recommend a plan to move forward.

9 Wright, Walter, Hexter, W. Kathryn, and Nick Downer. (May 2016). Cleveland's Greater University Circle: An Anchor Based Strategy. Democracy Collaborative.

10 Howard, Ted and Tyler Norris. (December 2015). Can Hospitals Heal America's Communities? "All in for Mission" is the Emerging Model for Impact. The Democracy Collaborative.

The plan the Coalition adopted and advocated to save IMC reached beyond the hospital closing itself, proposing a comprehensive set of wellness-based development initiatives that could improve population health while also creating new community jobs -- including community health worker jobs into which workers in over-bedded hospitals could transition.

The Coalition's approach was different from many other population health and development initiatives. It resulted from a three-year, highly participatory effort amongst an organized group of African-American community leaders, labor leaders, elected officials, businesses and academic institutions. From the beginning, the Coalition was guided by a specific objective, set by the community itself, to improve community wellness by: 1) strengthening coordination across multiple systems and 2) tapping under-utilized local assets in order to 3) create good family-supporting jobs, including building a robust community-owned entrepreneurial ecosystem within which existing and emerging local businesses can thrive as a way to 4) address multi-generational poverty through improving livelihoods and 5) improve social determinants of health. By proposing this plan as a response to, and with the goal of leveraging, state and local healthcare reform that opens new possibilities for wealth creation, the effort sought to reverse a familiar pattern of gentrification that often results in socially marginalized and racial/ethnic minority groups losing ground.

An early victory of the Coalition's advocacy was the replacement of IMC's out-of-state bankruptcy administrator with a community-oriented CEO Ms. LaRay Brown, the first African American woman CEO of a hospital in the State's history, is now working deeply with the Coalition and bringing the full panoply of IMC's resources -- from service delivery improvements, to employment, procurement spending, capital deployment and physical planning, real estate, infrastructure, energy demand, social capital investments -- to support the rebuilding of community health and wealth. In 2016, IMC with Brookdale University Hospital Medical Center and Kingsbrook Jewish Medical Center (Kingsbrook) applied for and received from the NYS Public Health and Planning Council approval to establish the One Brooklyn Health System (OBHS). One Brooklyn is a tax-exempt NY not-for-profit corporation that will preserve and enhance health care services in Central and Northeast Brooklyn. The merger of the three hospitals has created the potential for a robust anchor institution ecosystem in Central Brooklyn.

Participatory Action Research in Central Brooklyn

Since 2016, Community Care of Brooklyn (CCB) has supported a collaboration between the DuBois-Bunche Center for Public Policy at Medgar Evers College and NextShift to build a deeper understanding of the social determinants of health in Central Brooklyn. In the summer of 2016, CCB hired NextShift to assemble a team of 28 young adults to engage in a Participatory Action Research (PAR) project to understand the community's priorities for health creation. A core question guided the research: "How do we mobilize the Brownsville and East New York communities to address the social, physical and environmental inequalities that affect health?" Using a survey of 525 residents, and focus groups and interviews with key neighborhood stakeholders ¹², the team explored five social determinants of health and developed a set of recommendations and action steps to create a healthier Central Brooklyn.

Vital Brooklyn

In March 2017, in support of DSRIP goals, and largely building off the priority areas identified by PAR I, Governor Andrew Cuomo announced Vital Brooklyn, a comprehensive state-funded multi-sector initiative. Vital Brooklyn has committed \$1.4 billion towards improvements in the following eight critical areas of wellness, areas the PAR I research identified as integral to improving community health: open space and recreation, healthy food, community-based health care, comprehensive education and youth development, economic empowerment and job creation, community-based violence prevention, affordable housing, and resiliency.

Vital Brooklyn proposes \$700 million for community-based health care, which will include the creation of 36 new ambulatory care centers and \$563 million for affordable housing and other community initiatives. In addition to meaningfully undertaking direct improvements in population health, all of these activities create opportunities for locally-owned, community-centered businesses and local wealth to grow – thereby directly confronting community poverty, one of the key drivers of poor health.

¹¹ Dubb, Steve, McKinley, Sarah and Ted Howard. *The Anchor Dashboard: Aligning Institutional Practice to Meet Low-Income Community Needs* (August 2013). The Democracy Collaborative at the University of Maryland.

¹² "Stakeholder interviews" refer to a sample of leaders and employees of health system institutions, labor leaders, and civic organizations working in Central Brooklyn, who were interviewed during the asset mapping process. The term "stakeholder"

Vital Brooklyn's explicit focus on addressing the social determinants of health by using participatory planning processes -- and long-term multi-stakeholder coordination -- to build a community-owned entrepreneurial ecosystem, is an innovative and necessary departure from approaches that seek solely to improve healthcare access and reduce costs. Half of Brooklyn's 2.5 million residents currently receive Medicaid, implicating every hospital in the borough in the State's Medicaid reform process. With the support of State officials in Central Brooklyn, the Coalition's IMC plan could set the stage for changes in the entire Brooklyn health care system.

The success of the PAR I work including the adoption of the PAR I priority intervention areas by Vital Brooklyn led to an additional PAR project (PAR II) initiated by CCB, IMC, and Kingsbrook with support from the New York Community Trust (NYCT). Led by the same principal investigators as PAR I, in the summer of 2017, NextShift, Medgar Evers College, and IMC recruited, trained, and supervised a 48-person community-based PAR research team, which included local high school and college students, as well as urban planning graduate students from across the country. Many of the PAR I student researchers returned for the second project as curriculum facilitators and supervisors, creating a continuity of local knowledge and experience across projects, while directly supporting the students' academic and professional development.

The PAR II project sought to understand and investigate community perceptions of health and wellbeing in Bedford Stuyvesant, Crown Heights, and East Flatbush. This research sought explicitly to use PAR methods and seed long-term multi-stakeholder coordination to build a community-owned entrepreneurial ecosystem. To this end, the research was guided by a core question: "How can residents build power to pool existing assets and demand increased investment in a healthier, more supportive and more affordable Central Brooklyn now, and in the future?" Using a survey of 1,026 residents, 4 focus groups, and 15 neighborhood stakeholder interviews, the team explored five social determinants of health, and developed a set of recommendations and action steps to improve health in Central Brooklyn. The five determinants of health explored include economic justice, youth and families, housing and neighborhood resources, community and belonging, as well as environmental justice.

generally refers to the full population of healthcare institutions, labor leaders, and civic organizations operating in Central Brooklyn.

RESEARCH GOAL: A HEALTHIER CENTRAL BROOKLYN

Healthcare systems and providers increasingly recognize the importance of social risk factors to ensuring healthy communities and improving clinical outcomes. While promising models that connect providers to community-based organizing and addressing social needs in clinical settings are emerging, these models often are both individually- and biomedically- focused (e.g. connecting social services to individual patients based on screening tools) or outcome specific (e.g. reducing readmissions and emergency department usage among homeless populations using a “housing first” model). Many of these interventions have been shown to reduce costs and improve outcomes effectively, but they are often small in scale, difficult to replicate, and do not address fundamental drivers of health disparities.

In this research, we look beyond individual behavioral or lifestyle decisions that impact health, to identify structural, social, and economic health risks that may hinder or facilitate the adoption of healthy behaviors and make it more difficult for residents to navigate healthy decisions and opportunities. We examine the contextual and social antecedents of health and disease in the Brooklyn neighborhoods where people live, work, play, and learn.

This Report and its underlying community-based PAR research focus on three neighborhoods in Central Brooklyn – Bedford Stuyvesant, Crown Heights, and East Flatbush. Though these neighborhoods experience adverse indicators, including excess mortality, high rates of chronic disease, and economic challenges, the neighborhoods have strong community-based organizations, a health system invested in improving community health and wellbeing, and residents engaged in, and dedicated to, their communities’ well-being. Recognizing these challenges and opportunities, the young adults, and other stakeholders in these three Central Brooklyn neighborhoods are embarking on an ambitious project to spur community transformation that can improve community health and wellbeing. Their strategy seeks to involve and invest in the people and organizations already doing the challenging work of building community, holding up the economically disenfranchised, and making their communities places where everyone can thrive.

REPORT OVERVIEW

This Report's principal effort is to explore how critical stakeholders in the Central Brooklyn healthcare system, CCB and its member hospitals, IMC, and Kingsbrook, can build on existing community assets to improve wellness and reduce health disparities among residents in each neighborhood, among neighborhoods, and between the Central Brooklyn neighborhoods and the rest of NYC.

This Report builds on current healthcare innovations in several key ways: 1) it employs a population health perspective; 2) community members drive the research agenda in an attempt to elevate community voice; 3) it seeks to address systemic factors contributing to poor population health; and 4) it incorporates a leadership development component to ensure that today's youth are tomorrow's community leaders.

We first provide community profiles that examine the socioeconomic and demographic context of the three study neighborhoods, identifying potential characteristics that may affect health and that are amenable to intervention. In the Background section, we provide an overview of data characteristics in each neighborhood and connect the various indicators to health in order, to suggest how changing these underlying risk factors may impact health. We follow this background section with a Methods section that describes the research project design. In the Findings section, we present the quantitative outcomes of the collected survey data, and the qualitative narratives revealed through the stakeholder interviews and focus groups. These results were used to inform the development of our Asset Map (Figure 5, asset descriptions are in Appendix F).

We conclude with a summary of the iterative process adopted for generating a final set of recommendations and action steps for place-based and community-identified initiatives. To help inform the discussion ahead, in the conclusion, we outline key principles to consider as joint planning and community engagement continues over the months ahead. Lastly, we include an appendix section with additional detail on PAR theory, methods and research themes, internal evaluations, a list of stakeholder interview organizations, additional findings, case studies, and the survey and interview instruments.

Data and sources referenced in this Report can be found in Appendix B.4.

COMMUNITY PROFILES

Bedford Stuyvesant, Crown Heights, and East Flatbush

Figure 2. Map of study area



Table 2. Population NYC, Brooklyn, and the three study neighborhoods

GEOGRAPHY	TOTAL POPULATION
New York City	8,426,743
Brooklyn	2,595,259
Bedford Stuyvesant	139,904
Crown Heights	237,098
East Flatbush	136,530

Source: ACS 2011-2015, 5 Year, B01003

This section provides a profile of the demographic, health, and community characteristics of Bedford Stuyvesant, Crown Heights, and East Flatbush, three neighborhoods in Central Brooklyn. To highlight the health equity implications of potential investments and programs, we provide neighborhood-level data alongside the Brooklyn and New York City data. The study neighborhoods and zip code boundaries were chosen to incorporate the primary service areas of IMC and Kingsbrook, where most of the hospitals' patients live.

In neighborhoods across NYC, communities with higher levels of economic distress and social hardship experience diminished health outcomes across a range of indicia (Diez Roux and Mair 2010). For example, neighborhoods with high levels of poverty, housing burden, and unemployment suffer from higher levels of infant mortality, premature mortality, and preventable disease (Krieger et al. 2005, Brooks-Gunn and Duncan 1997). These patterns suggest that eliminating disparities in health requires addressing contextual and neighborhood inequities that drive many of the observed health disparities between neighborhoods. Individual lifestyle factors, such as food consumption, physical exercise, or smoking, and health care can only partly explain the distribution of good and ill health across neighborhoods. Social, economic, and built environment characteristics of neighborhood remain critical determinants of population health.

Neighborhood Demographics

Of Brooklyn's 2,595,259 residents, one in three identifies as Black or African American (compared to 25% for NYC as a whole), one in five identifies as Hispanic or Latino, and one in ten identifies as Asian. Both Crown Heights and East Flatbush have Black populations more substantial than the borough- and city-wide averages. Nearly two-thirds of Crown Heights residents are Black, and over 88% of East Flatbush residents identify as Black or African-American. These neighborhoods reflect the diverse racial makeup of Brooklyn. Though Central Brooklyn, specifically Bedford Stuyvesant, was historically the cultural center of Brooklyn's black community, the Black population has been shrinking while the percentage of all other racial and ethnic groups has increased (Small 2017). Three-quarters of Bedford Stuyvesant residents identified as Black in 2000, but in the following fifteen years, the Black population decreased 17%, while the White population grew from 3,087 to 41,203 residents, a 1235% increase. Crown Heights has also experienced a significant shift in the racial diversity of its population: Community District 8's¹³ white population increased by 203% between 2000 and 2015, while the Black and Hispanic or Latino population decreased by 23% and 83%, respectively; in the same time period Community District 9 saw an increase in White (by 160%), Asian (by 341%), and Hispanic or Latino (by 3%) population, while the Black population decreased by 18%.

Given Brooklyn's relatively large number of foreign-born residents (including U.S. citizens and noncitizens), a substantial amount report that they speak a language other than English at home. In East Flatbush, home to a large West Indian and Caribbean population, only 79% of residents speak English alone, and 12% of residents speak French or French Creole.

In the sections that follow, we detail key factors affecting health in each neighborhood. We discuss socioeconomic status, or social position in relation to others, as one of the most influential and consistent predictors of morbidity and mortality. Whether measured by education, income, social class, or occupation, lower socioeconomic position is consistently associated with worse health for individuals and groups (Glymour, Avedano, and Kawachi 2014, Marmot and Wilkinson 2005).

Income and Poverty

The more income a person has, the lower their risk of disease and premature death (Statistics 2012). For individuals, low income and limited wealth make it difficult to access resources such as health care, quality housing, healthy diet, and neighborhoods with quality schools, low crime, and health-promoting assets (i.e. parks, sidewalks, gyms). Living below the poverty line puts people at higher risk for physical and mental health challenges such as adverse birth outcomes, diabetes, stroke, and asthma (Schiller, Lucas, and Peregoy 2012, Case, Lubotsky, and Paxson 2002).

Median household incomes in Central Brooklyn fall dramatically below income levels of either Brooklyn (\$48,201) or New York City as a whole (\$53,373). The neighborhood median household income in Bedford Stuyvesant is \$11,342 less than the Brooklyn median household income, and 32% of Bedford Stuyvesant residents live below poverty level (about \$24,424 in pre-tax income for a family of four). The median household income in Crown Heights is slightly higher than in Bedford Stuyvesant, at \$42,390, but 24% of Crown Heights residents live below the poverty line. The median household income for East Flatbush residents is higher than both Crown Heights and Bedford Stuyvesant, at \$46,725, and fewer East Flatbush residents (17%) live under the poverty line than Brooklyn (23%) or NYC residents (21%). As Central Brooklyn neighborhoods have increasingly gentrified¹⁴, impoverished residents remain, though their numbers have fallen slightly between 2000 and 2015 (in Bedford Stuyvesant by 2.20%; North Crown Heights, by 4.40%; South Crown Heights, by 3.80%, and East Flatbush, by 2.50%). Though individual income and wealth is a primary determinant of health, community poverty levels can independently put residents at risk of poor health by limiting exposure to health-promoting or beneficial factors and increasing health-diminishing factors such as high stress and resource deprivation.

Employment, Economic Opportunity, and Incarceration

Though Central Brooklyn has high levels of concentrated poverty, the neighborhoods are undergoing substantial economic transformation and business growth. The number and size of businesses have increased since 2000 in low-income neighborhoods across NYC, including the three study neighborhoods, with particular growth in the arts, hospitality, and food services industries.

In Brooklyn, between 2007 and 2012, the number of women/minority-owned business enterprises (WMBE) grew by 4,127, but the share of Black-owned businesses in the borough fell. According to the NYU Furman Center, nine out of the ten neighborhoods with the fastest business growth are gentrifying, and Bedford Stuyvesant had the 5th most rapid business growth; between 2000 and 2015 the number of businesses in the neighborhood increased by 67%. Business growth, particularly of small businesses, may confer protective health effects, particularly in low-resource areas, by creating employment opportunities, generating strong economic ties to the community, and spurring further economic growth, all factors associated with better community health (Keppard and Schnake-Mahl 2016). However, the gentrification associated with this economic growth may negatively impact long-term residents' health, particularly the health of Black residents, by breaking down social networks and cohesion, displacing local residents and businesses, exacerbating stress associated with potential displacement, and forcing residents to spend more money on rent in order to stay in their homes as housing costs increase (Gibbons and Barton 2016).

Despite business growth in lower-income and gentrifying neighborhoods, employment opportunities often leave out young adults of color, and racial disparities in educational attainment persist. About 30% of Black and Hispanic or Latino youth were out of school and out of work in 2015 compared to 9% of Whites in lower-income neighborhoods. Among the target population, low educational attainment levels, substantial involvement with the criminal justice system, and high chronic disease burden additionally impact the health status and put residents at risk for avoidable use of costly hospital services.

Table 3: 2014 Incarceration rates in NYC, Brooklyn, and the three study neighborhoods

GEOGRAPHY	INCARCERATION RATES*
NYC	93
Brooklyn	96
Bedford Stuyvesant	244
Crown Heights and Prospect Heights (District 8)	105
South Crown Heights and Lefferts Gardens (District 9)	105
East Flatbush	112

*Rate of persons incarcerated in local jails (not including prisons) per 100,000 adults (ages 16+), by address of residence. Source: NYC DOHMH 2015 Community Health Profiles Public Use Data; 2014 NYC Department of Corrections

Incarceration inextricably links to lack of economic opportunity: incarceration rates are concentrated in disadvantaged communities with high unemployment rates (Petteruti et al. 2015). Most incarcerated people in the U.S. are low income and had limited access to employment or quality education before incarceration (Rabuy and Kopf 2015). However, the distribution of incarceration rates is not even. The lifetime risk of imprisonment for Black men is one in four, compared to almost one in nineteen for White men (Pettit, Sykes, and Western 2009). Rates of incarceration in the study neighborhoods are among the highest in the city, and in Bedford Stuyvesant, the rate is more than double the rate in Brooklyn overall.

Incarceration presents substantial health challenges for individuals, families, and communities: the prison population has four to ten times the rate of infectious disease, and higher prevalence and more advanced chronic conditions than the rest of the US population (Dumont et al. 2012). After their release, those formerly imprisoned face a slew of social and economic challenges that can exacerbate underlying health conditions, catalyze the development of new illnesses (Freudenberg 2002), and amplify the spread of communicable disease in their home communities. Communities that shoulder a disproportionate number of formerly incarcerated people are most at risk for these challenges (Raphael and Winter-Ebmer 2001).

Bedford Stuyvesant has had one of the highest crime rates of any neighborhood in the city. Although the serious crime rate in Bedford Stuyvesant has fallen 44% since 2000, the crime rate in all three study neighborhoods remains above the borough average. The violent crime rate has also dropped in Bedford Stuyvesant since 2006 but stayed steady in the other two neighborhoods. This report's limited emphasis on crime and safety is not intended to minimize the implications of neighborhood security for resident health, and the authors recognize violence as a health issue (Dahlberg and Mercy 2009). However, the community-based PAR team did not emphasize these factors, and crime and safety did not emerge as dominant features of community discourse throughout the research process.

¹³ Crown Heights is split between Community District 8 and 9; North Crown Heights is combined with Prospect Heights and Weeksville in Community District 8 and South Crown Heights is combined with Lefferts Garden and Wingate in Community District 9.

¹⁴ The furman center defines gentrifying neighborhoods as those as areas that were low-income in 1990 (among the bottom 40% in the city), and then experienced higher than median neighborhood rent growth in the following 20 years

The Built Environment and Resource Access

The built environment or “the human-made space in which people live, work, and recreate on a day-to-day basis” can either support or undermine access to critical health-promoting resources (Roof and Oleru, 2008). Access to green space, nutritious and affordable food options and transportation are crucial factors. Parks provide places for physical activity, relaxation, and connection to nature -- all essential factors for mental and physical well-being. Studies have found that living close to a park is associated with higher levels of park use and physical activity (Cohen et al. 2007). While 90% of housing in Bedford Stuyvesant, 73.8% of Crown Heights - Prospect Heights housing, and 70% of South Crown Heights and Lefferts Garden housing is within a quarter mile of a public park, only 39.6% of East Flatbush housing is close to a park.

Walking or biking to and from public transportation can play an important role in meeting daily suggested physical activity goals. Access to public transit can ensure better access to jobs and necessary human services such as medical care. More limited access to transportation has implications for physical activity levels and transportation use. In East Flatbush, residents have limited access to subway stations. Only 68.8% of residential units are within the half-mile distance most people are willing to walk public transportation. Over 96% of Bedford Stuyvesant and Crown Heights housing is within a half-mile. Only 70% of East Flatbush workers commute primarily by foot, bicycle, or public transportation, compared to 85% in Crown Heights and 83% in Bedford Stuyvesant.

New York City’s poorest neighborhoods have the highest rates of diet-related disease, and, often, the most limited access to healthy and affordable food. In fact, studies find that buying food for a balanced diet is usually more expensive in low-income neighborhoods (Link 2010). The City and community-based organizations have made strides to address food deserts and increase access to nutritious food in low-income areas with programs such as Shop Healthy NYC, providing incentives for grocery stores to locate in underserved communities, and supporting farmers markets and shops and food carts to sell healthy products, fresh fruits, and vegetables. Yet disparities remain.

Concerning square footage of supermarkets per 100 people, Crown Heights and Prospect Heights rank 50th of 59 community districts, and Bedford Stuyvesant ranks 32nd. This limited access to healthy food options can significantly impact residents’ ability to make healthy choices, and not surprisingly, all three study neighborhoods report daily fruit or vegetable consumption levels below Brooklyn and NYC averages (PolicyLink 2010).

Housing

Table 4: Housing Tenure, NYC, Brooklyn, and the three study neighborhoods

NEIGHBORHOOD	OWNER-OCCUPIED	RENTER-OCCUPIED
NYC	32%	68%
Brooklyn	29%	71%
Bedford Stuyvesant	21%	79%
Crown Heights	16%	84%
East Flatbush	34%	66%

Source: ACS 2011-2015, 5 Year, B25003.

Housing is a critical determinant of health. Affordability, safety, and quality of housing in a neighborhood, as well as the relative concentration of these factors, all affect residents’ and communities’ health. Lack of affordable housing inevitably increases the risk of poor housing quality and instability for low-income residents, potentially undermining mental and physical health (Burgard, Seefeldt, and Zelner 2012, Shaw 2004). Lack of affordability and instability can cause or exacerbate a multitude of adverse health outcomes by draining material resources, exposing residents to hazardous conditions, limiting opportunities for mobility, and causing substantial stress. Housing challenges can reduce individuals’ ability to adhere to recommended healthcare practices, like filling prescriptions (Pollack, Griffin, and Lynch 2010). Poor housing conditions, including overcrowding, safety hazards, and the presence of toxins have been linked to poor health outcomes, such as increased asthma rates among children (Somerville et al. 2000) and higher rates of falls or injuries among seniors (Krieger and Higgins 2002).

New York City has the lowest homeownership rate of any large city in the US (Development 2015). More than two-thirds of NYC residents rent, and more than seventy percent of Brooklyn residents rent. These rates are even more pronounced in two of the three study neighborhoods; 79% of Bedford Stuyvesant and 84% of Crown Heights residents are renters. Within the Brooklyn rental population, 9.2% live in public housing, 44.3% in subsidized or stabilized units, and 7% receive US Department of Housing and Urban Development (HUD) housing choice vouchers (usually referred to as Section 8). Across the three study neighborhoods, the prevalence of affordable housing varies widely. In East Flatbush, only 2.3% of housing units are located in New York City Housing Authority (NYCHA) public housing, while in Bedford Stuyvesant 19% of housing units are NYCHA.

Almost half of NYC residents are rent-burdened or paying at least 30% of their income in rent. Rent-burden is particularly problematic in the study neighborhoods, where an even higher percentage of residents are renters. The rate of housing-burdened families is 57% in Bedford Stuyvesant, 55% in Crown Heights and 59% in East Flatbush. Despite its greater percentage of homeowners, East Flatbush has the highest percentage of residents facing rent burden. In fact, almost 60% of renters spend over 30% of their income on rent. The percentage of residents that are severely rent burdened, or spend more than 50% of their income on rent, is close to or above 30% in all three study neighborhoods.

As housing prices increase, people are forced to spend more of their income on rent, and they have less money to spend on life necessities including health care, healthy food, leisure activities, and other assets that contribute to good physical and mental health. Housing is becoming more expensive in all of the target neighborhoods. Almost sixty percent of Bedford Stuyvesant residents already spend over 30% of their incomes on rents, and rents continue to grow. In Bedford Stuyvesant, median rents across all rental categories increased by 61.04% between 2000 and 2016: from \$770 in 2000 to \$860 in 2006, and from \$1,040 in 2010, to \$1290 in 2016. Although about half of NYC residents are rent burdened, lower and moderate income residents saw the greatest increase in rent burden since 2000.

Neighborhood Change

Central Brooklyn residents experience worse health outcomes, higher rates of preventable mortality, and lower life expectancy than majority white neighborhoods in NYC. A multitude of factors explain these racial disparities, but exposure to interpersonal and structural racism likely plays a substantial role in the expression of poor health in these communities (Krieger 2000). For example, perceived discrimination has been linked to poor self-reported health, as well as health challenges such as breast cancer, and hypertension (Williams and Mohammed 2009, Paradies 2006).

In addition to exposure to discrimination, the study neighborhoods have, until recently, been highly residentially segregated by race. Here segregation is defined as the physical separation of human beings by race, in residential contexts (Williams and Collins 2001). Residential segregation has been called a “fundamental cause” of racial disparities in health and is associated with overall increases in mortality, premature mortality and infant mortality (Williams and Collins 2001). Segregated neighborhoods tend to have limited employment opportunities, high levels of poverty, few health promoting resources, degraded built environments, and limited preventive care access. Historically segregated neighborhoods have likely experienced decades of government and market disinvestment, all of which are critical factors for individual and community health (Williams and Collins 2001). Despite decades of disinvestment, the study neighborhoods, particularly Bedford Stuyvesant and Crown Heights, are now experiencing substantial gentrification and displacement pressure due to an influx of higher-income (predominantly) White residents, with concomitant increases in property and housing prices, and also in city-driven investments. A recent Furman Center report identified both Bedford Stuyvesant and East Flatbush as undergoing significant gentrification (Center 2016). The study also found that neighborhoods with more pronounced gentrification¹⁵ had higher levels of demographic turnover than non-gentrifying neighborhoods.

Table 5: Study Neighborhood Turnover Rates between 2010 and 2015

NEIGHBORHOOD	PERCENT OF NEW RESIDENTS
Bedford Stuyvesant	31%
Crown Heights	30%
East Flatbush	24%

Source: ACS 5 Year Estimates, 2011-2015, Table B25038 (Tenure by Year Householder Moved into Unit)

Despite the tendency for increased housing values to be associated with more healthy food options and reduced crime, these benefits are not evenly distributed across residents, likely accruing mainly to those less susceptible to changes in the rental market (Dastrup and Ellen 2016). Gentrification is often unwelcomed among existing residents because of the risk of displacement of people, businesses, and culture. Though research on the connections between gentrification, health, eviction, and displacement is inconclusive, there is evidence connecting the negative impacts of eviction to health. Eviction is associated with higher rates of depression among low-income residents, particularly mothers, and black women with children are at elevated risk of eviction (Desmond and Kimbro 2015). Community members consistently highlight the fear of eviction associated with gentrification (Justa and Cause 2014). Beyond immediate health effects, eviction has long-term negative consequences for well-being and can be a primary factor limiting wealth-building (Desmond and Kimbro 2015). Though rates have decreased since the City ensured access to legal representation for all low-income New Yorkers facing eviction (2017), Central Brooklyn, including the three study neighborhoods, has among the highest eviction rates in the City.

Additionally, though foreclosure rates have dropped since their peak in 2010, foreclosure remains a significant risk in Central Brooklyn neighborhoods, particularly East Flatbush, where rates are as high as 30.1 foreclosure notices per 1000 single, multi-family, and one-condominium properties. This rate is nearly ten percentage points higher than the rate in Crown Heights or Bedford Stuyvesant, and well above the NYC average of 13.4 foreclosure notices per 1000. Like eviction, foreclosure can have dramatic impacts on health. Studies have shown that foreclosure predicts increased psychiatric morbidity symptoms (McLaughlin et al. 2012), elevated use of emergency departments, and higher rates of hypertension (Pollack et al. 2011). Living in proximity to foreclosed properties also has been associated with higher body mass index (Arcaya et al. 2013).

The City, and State, as well as local CBOs, are attempting to tackle the NYC housing crisis by making a substantial investment to create new and upgrade existing, affordable housing. The De Blasio Administration has pledged to build and preserve 300,000 affordable units

The Vital Brooklyn initiative aims to construct 3,000 affordable housing units in Central Brooklyn, and various local Community Development Corporations are actively working to develop, manage, and maintain affordable housing throughout Brooklyn. These measures could positively affect the health of Central Brooklyn residents.

Health Profile

The New York City Department of Health and Mental Hygiene (DoHMH) produces excellent publicly-available community health profiles. For this Report, we provide a smaller set of metrics selected to highlight health disparities between the study neighborhoods and the rest of Brooklyn and NYC.

Residents of the three study neighborhoods suffer from above-average rates of new HIV diagnosis, obesity, stroke, as well other health challenges. These disparities cannot be explained merely by individual choice or behaviors. Instead, the social inequities in the study neighborhoods -- poor housing conditions, lack of affordability and increasing gentrification, along with individual and concentrated poverty, incarceration, segregation, and discrimination -- help to explain why Central Brooklyn residents systematically experience worse health than residents of more affluent Brooklyn and New York City neighborhoods. Combined and in isolation, these detrimental neighborhood factors act as chronic stressors for residents; they increase vulnerability and susceptibility to poor health and disease and are associated with increased prevalence and incidence of chronic conditions, sexually transmitted infections, infant mortality, and lower life expectancy (Kawachi and Berkman 2003).

Key Statistics

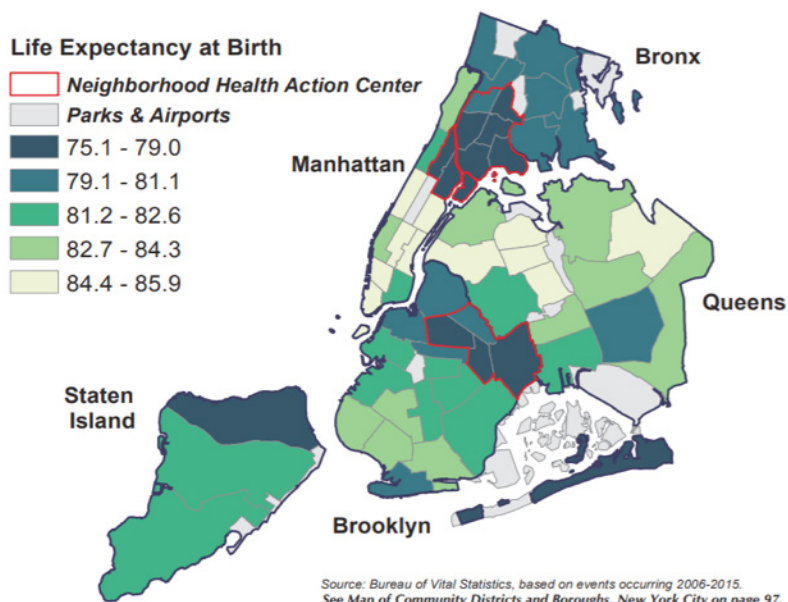
Life Expectancy

Overall life expectancy in Central Brooklyn is ten years less than the highest life expectancies in NYC (84.4-85.9 years being the highest) (see Figure 3 for NYC life expectancies by community district). However, numbers vary widely by neighborhood.

¹⁵ The Furman Center measures gentrifying neighborhoods as areas that were "low-income in 1990 and experienced rent growth above the median rent growth between 1990 and 2010-2014." (NYU Furman Center, 2016, page 4)

In Bedford Stuyvesant, residents have a life expectancy of 76.8 years, nearly five years less than both the average Brooklyn age of 81.1 years and the New York City life expectancy of 81.2 years. Crown Heights residents have a life expectancy of 80.3 years, only a year below the borough and city average expectancies. East Flatbush residents, on the other hand, have a life expectancy surpassing the borough and city numbers, at 82.6 years, despite the fact that the neighborhood suffers from many of the same socioeconomic disadvantages as the other two neighborhoods. The longer life expectancy in East Flatbush is likely explained, at least in part, by the large foreign-born population. Studies have shown that compared to the US native-born population and despite their average lower socioeconomic status, foreign-born individuals tend to have lower mortality rates, and are less likely to suffer from a variety of chronic diseases (Cunningham, Ruben, and Narayan 2008).

Figure 3. Life Expectancy at Birth by Community District, New York City 2006 - 2015



Premature and Infant Mortality

Despite city-wide decreases in premature mortality over the past decade, premature mortality remains 2.2 times higher in high-poverty NYC neighborhoods than in low-poverty ones. In the study neighborhoods, the age-adjusted premature mortality rate in 2014 was 267.2 deaths per 100,000 population in Bedford Stuyvesant, 192.5 deaths in East Flatbush, and Crown Heights, and in Prospect Heights the rate was 246.9 deaths per 100,000. These figures compare to a citywide average of 186.2 deaths per 100,000 population. The infant mortality rate, a standard measure of community health status because it is highly sensitive to structural factors, shows wide disparities by neighborhood across NYC, ranging from a high of 9 infant deaths per 1,000 live births to just 1 infant death per 1,000 live births. In the three study neighborhoods, infant mortality rates were relatively high and there was limited variation among the neighborhoods -- from a low of 5.1 deaths per 1,000 live births in Bedford Stuyvesant to a high of 7.1 deaths in Crown Heights and Prospect Heights. The rate in East Flatbush was 6.1 deaths per 1,000 live births.

Asthma Rates

Asthma rates in Bedford Stuyvesant are significantly higher than the borough-wide and city-wide rates. According to the Department of Health and Mental Hygiene 2016 Community Health Survey, for every 10,000 children between the ages of 5 and 14 in 2016, there were 54 asthma-related hospitalizations (compared to 36 for NYC and 32 for Brooklyn). For every 100,000 adults, there were 531 asthma related hospitalizations in 2016 in comparison to 299 hospitalizations for the City and 263 hospitalizations in Brooklyn that year. Both adults and children suffer from avoidable admissions due to asthma complications. In Crown Heights and Prospect Heights, 76 of every 10,000 residents between ages 5 and 14 were hospitalized for asthma in 2016. By comparison, in South Crown Heights and Lefferts Garden, the rate of childhood asthma admissions was 85 per 10,000 children. For residents over 15 years old, there were 325 preventable asthma hospitalizations per 100,000 in Crown Heights and Prospect Heights, and 249 per 100,000 in South Crown Heights and Lefferts Gardens that same year.

Excessive premature death rates, infant mortality, and hospitalizations are only a few of the indicators of the inequitable health burden Central Brooklyn residents face. These indicators, in conjunction with the multitude of neighborhood stressors, described earlier, demonstrate the devastating role city-wide disparities play in determining neighborhood health outcomes. The resultant health problems put increased strain upon, and overburden the local healthcare system, comprising care and quality, and increasing cost. The current Central Brooklyn healthcare system is primarily equipped to address acute health issues and chronic conditions and is limited in its ability to counter the structural challenges driving avoidable health disparities in neighborhoods. Policy interventions and system changes are needed.

In the following section, we describe the results of our community PAR project, the goal of which was to explore, in the three study neighborhoods, resident understanding of the factors that contribute to community health. It also sought to

METHODOLOGY

Overview of Training and PAR Research

The PAR framework centers on the belief that neighborhood residents and local stakeholders have critical insight into how best to identify community assets and address community challenges. PAR aims to gather perceptions of how the community understands its own health and to assess residents' priorities for healthcare system transformation in their own neighborhoods. It can help drive action towards community improvement by facilitating articulation of communities' priorities. Also, by training local community members to become researchers, surveyors, and facilitators, PAR also helps build ongoing capacity for decision-making and informed action by residents. Further, when youth are involved, it is a direct investment in the professional and academic development of local secondary school and undergraduate students.¹⁶

To ensure student involvement in the PAR project, NextShift turned to IMC, Kingsbrook, and Medgar Evers College to recruit local secondary and undergraduate students. NextShift recruited urban planning graduate students. In early summer of 2017, the core team assembled a community-based research team composed of 48 young people and adults, which included:

- 27 students from neighborhood high schools, including Bedford Academy, Pathways in Technology Early College High School (P-TECH), Boys and Girls High School, Medgar Evers Preparatory, Academy for Health Careers, 2 World Academy for Total Community Health (WATCH) High School alums, an IMC Volunteer, and a Bedford Stuyvesant Community Representative from the Center for Nu Leadership
- 13 college students from Medgar Evers College, New York University, and John Jay College
- 6 graduate urban planning students from Massachusetts Institute of Technology (MIT), University of California, Berkeley (UCB), and Pratt Institute
- 3 Principal Investigators, from NextShift and the DuBois-Bunche Center, who also led PAR I

¹⁶ For additional information on the background of Participatory Action Research, see Appendix A. Additionally, Appendix C details the results of an internal evaluation, conducted by NextShift, of the PAR process.

Eight of the student researchers from the PAR I project -- one graduate, two high school, and five college students -- returned for PAR II. All students were supervised by NextShift and employed by IMC. Together, the collaborative research team called themselves Wellness Empowerment for Brooklyn (WEB), a name developed during the previous iteration of PAR. In June 2017, before the arrival of the high school students, the undergraduates and graduate planning students participated in NextShift's two-week Building Community Health "Train-the-Trainer" curriculum to learn about Social Determinants of Health, PAR, Collaborative Research Design, Politics and Power, and community engagement strategies.

Over the following three weeks, with support from NextShift, the team of undergraduate and graduate students led the high school researchers through the "train the trainer" curriculum, with specific adaptations for the three study neighborhoods. Student researchers from PAR 1 were invited to the training sessions as guest speakers as were speakers from CCB (IMC, 1199SEIU, and DuBois-Bunche Center). Long-standing local leaders, Bruce Richard and Maurice Reid (of CCB) were also invited as guest speakers to introduce and lead reflections on the project and local community history.

Drawing from the group's own understanding of the social determinants of health in Central Brooklyn, the group developed a foundational research question to answer through the study process:

"How can residents build power to pool existing assets and demand increased investments in a healthier, more supportive and more affordable, Central Brooklyn, now, and in the future?"

To answer the research question and sharpen the focus of the study, the WEB team broke their interests into research themes, which aligned with the Vital Brooklyn intervention categories. The goal was to align findings and recommendations with ongoing and potential investments and mobilization efforts in the research neighborhoods. WEB's research question explores five dimensions of health: economic justice, youth and families, housing and neighborhood resources, community and belonging as well as environmental justice. The high school team members worked on this research question and its related themes for the entire training and survey development period.

The intensive focus on a single question allowed students to gain a deeper understanding of their selected research themes and helped them to work towards identifying the specific constructs they sought to measure using the survey (Research theme definitions are in Appendix D Table 1 and sub-themes are in Appendix D.2).

After vetting the themes and sub-themes with CCB, and the Principal Investigators, the WEB team identified validated, or previously-used survey questions that measured these constructs of interest. Where no validated measures were available, WEB developed questions; where multiple measures were available, the team chose those that best represented the sub-theme of interest. The research team refined some sets of questions or specific questions to fit more closely the local context or sub-theme of interest. The survey¹⁷ was then approved by the IMC Institutional Review Board (IRB), and by CCB, IMC, Kingsbrook, and the Principal Investigators. The survey was also translated into Spanish. The team piloted the approved survey with family members and friends before going into the field (see Figure 4 for a recap).

After completing the survey, WEB collaboratively developed a sampling plan for collecting surveys in each neighborhood. Researchers familiar with the neighborhoods prepared a list of high foot-traffic public locations in each zip code, and subsequently, teams of 3-5 high school students, supervised by undergraduate team members, sampled in a different public location each day (Figure 6). To collect community responses, we used heterogeneous purposive intercept sampling (convenience sampling with intentional selection of diverse respondents) in public locations. This strategy provided a diverse range of characteristics in the surveyed group and created an approximately representative sample of community residents. After collecting 500 surveys representing roughly one half of the total, we compared the characteristics of the sample with the characteristics of the three neighborhoods across several key characteristics (age, gender, race, and ethnicity) and adjusted sampling strategies as necessary to more closely approximate a representative survey sample. Populations not well represented were targeted for focus groups.

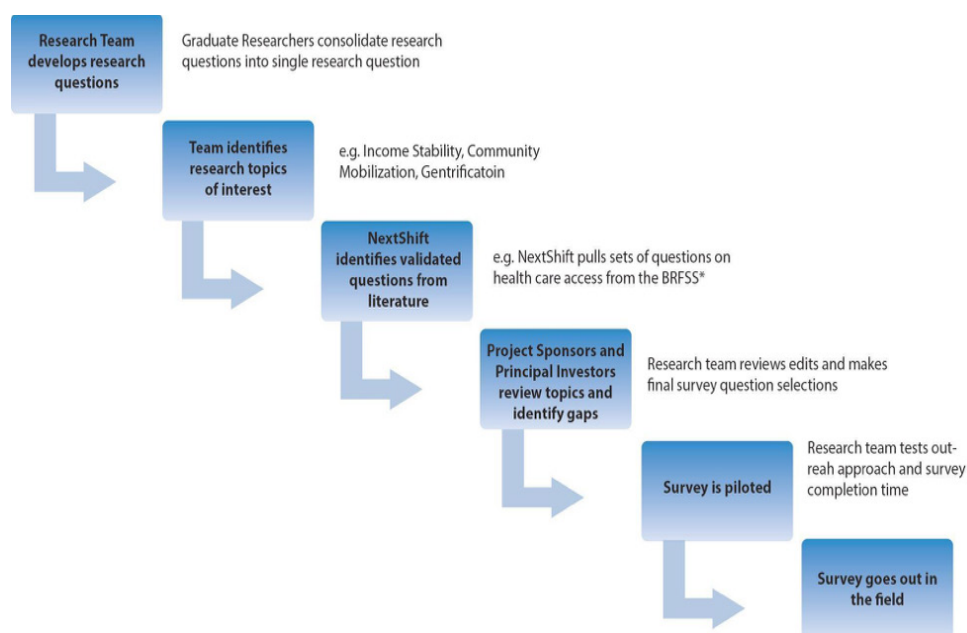
¹⁷ Final survey instrument can be found in Appendix I

The research team set a goal of collecting 1,000 surveys over two and a half weeks. Only residents of the three neighborhoods who were over age 18 were eligible to participate in the survey. The survey was available in both English and Spanish and took approximately 15-20 minutes to complete. All participants were read a consent agreement, and verbally consented to participation. Participants received five “Health Bucks” as incentives which could be used to purchase \$10 worth of fresh fruits and vegetables from NYC farmers markets. Participants also received a map of City farmers markets to help them identify where to redeem their health bucks. PAR researchers and IMC distributed more than 4,500 NYC DOHMH Farmers’ Market Health Bucks to survey and focus group participants, representing more than a \$9,000 investment to support Central Brooklyn residents’ access to fresh fruit and vegetables.

During the final week, the WEB team undertook a collaborative data analysis (See Appendix B.3.1). The team was presented with preliminary descriptive data, and based on the data, identified specific topics of importance and interest for further analysis. They additionally developed hypotheses about potential relationships in the data, based on their knowledge of the issues in the study neighborhoods.

See Appendix B.2.1 for an explanation of the survey data cleaning and analysis process, and Appendix B.3.3 - B.3.4 for methods describing the stakeholder and focus group analysis.

Figure 4. Research question design process



Asset Map, Stakeholder Interviews and Focus Groups

The graduate team, with support from the undergrad team, also conducted an asset mapping process informed by stakeholder interviews,¹⁸ and a series of focus groups¹⁹ to qualitatively examine questions of community health, mobilization and change. Asset mapping for community health is an innovative urban planning tool used both to identify and address the intersection of poverty, place and health status in low-income neighborhoods and to support urban development. The tool helps researchers familiarize themselves with neighborhoods' history and identify community assets to inform the development of policy interventions and help craft mobilization efforts. Community assets can include human, physical, cultural, social, financial, and political elements within a neighborhood.

¹⁸ List of stakeholder interview participant organizations can be found in Appendix B.1.1 and Appendix B Table 1

¹⁹ Detail on the focus groups process and population/ topic breakdown can be found in Appendix B.1.2 and Appendix E Table 1

Following a mixed-methods approach, the WEB team also collected qualitative information via structured stakeholder interviews and focus groups, which contributed personal narratives and accounts from community members and active stakeholders. During the analysis phase of the research, these qualitative results were merged with the quantitative results from the survey (1,026 observations), revealing connections between the two types of data. In this section, we begin to link the quantitative and qualitative outcomes of the surveys, focus groups, and stakeholder interviews.

During the asset mapping process, graduate students and NextShift researchers focused their outreach efforts on stakeholders identified by members of the WEB team and collaborative research partners (CCB, Medgar Evers, IMC, and Kingsbrook). Stakeholders were defined as neighborhood leaders, leaders of medical institutions, local non-profits, labor unions, community based organizations, anchor institutions, as well as healthcare providers working to improve the determinants of health in Crown Heights, East Flatbush or Bedford Stuyvesant. The team conducted structured interviews with a sample of stakeholders to: 1) to gain generalizable insight into Central Brooklyn stakeholder perceptions of key neighborhood challenges; 2) understand activities stakeholders were currently undertaking to address determinants of health; and determine the areas in which stakeholders believed further policies and interventions were needed.²⁰ The initial interviewees were also asked to identify additional interview subjects for subsequent stakeholder interviews.

The team contacted forty-nine stakeholder organizations, and held fifteen interviews, for a response rate of 30.6%. Although not all of the interviewees lived in the three target neighborhoods, all were employees of organizations or institutions serving the study neighborhoods. In these stakeholder interviews, the team aimed to identify stakeholders' perceptions of key neighborhood challenges, understand activities stakeholders were currently conducting to address health and determinants of health, and where they felt further work, policies and interventions were needed. The stakeholders interviewed were employed within a broad range of issue areas related to the social determinants of health, including health service provision, prevention of police harassment and police accountability, and building awareness

²⁰ For detailed full list of stakeholders interviewed, neighborhood served, and issue area addressed, see Appendix B Table 1

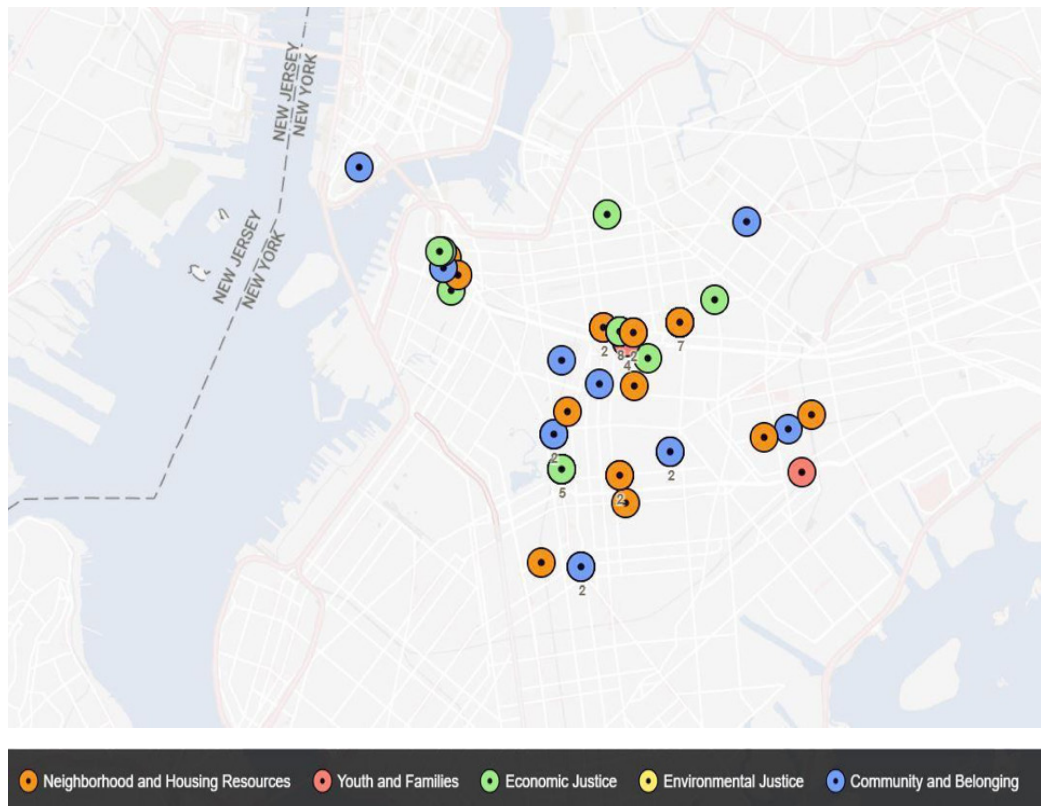
about access to public space. Despite the diverse focus areas of their organizations, 60% of stakeholder interview respondents identified gentrification, neighborhood change and the housing crisis as top challenges. The second and third most common responses were employment (40%), and food (20%) (see Table 6).

Table 6: Key Neighborhood Health Challenges Identified by Percentage of Interviewed Stakeholders

TOP NEIGHBORHOOD CHALLENGE	PERCENT OF INTERVIEWED STAKEHOLDERS
Gentrification/Neighborhood Change/Housing Crisis	60.0%
Employment	40.0%
Food	26.7%
Mental Health	20.0%
Health (Access, + access to other services)	20.0%
Environment/Open Space	20.0%
VIOLENCE/SAFETY	13.3%
Resources for Hospitals/Healthcare System	13.3%
Policing	13.3%
Health (Knowledge/education)	13.3%
Drug Use	13.3%
Chronic disease	13.3%
Political Representation	6.7%
LGBTQ Issues	6.7%
Immigration	6.7%
Family Stability	6.7%
Coordination between CBOs and institutions	6.7%
Community cohesion	6.7%
Civic engagement	6.7%

The opportunity to engage directly with local actors and learn from their knowledge strengthened the asset-based approach employed by the researchers. As an asset-mapping exercise, the stakeholder interviews provided information about existing services and programs within the three neighborhoods, highlighting the wealth of currently available resources and actors that could be strengthened with additional visibility and funding. This process also highlighted opportunities for building connectivity between existing resources, programs, and services, and for filling gaps where needs are not being met. To achieve this goal, WEB categorized stakeholder interview responses according to specific social determinants of health and the particular interventions deployed by their institutions. Participants were asked to assess community needs and identify perceived priority issues and challenges faced by the communities they serve. At the same time, respondents were asked to describe the scope of work and the services their organizations provide.

Figure 5: Map of identified assets and actions, collected during the asset mapping process²¹



²¹ See Appendix F for asset map chart of organizations and the types of services they provide.

Focus groups were leveraged as a tool to provide more in-depth perspectives on topics that were not specifically addressed in the survey, or to include the voices of under-represented groups. Through collaborative discussions with stakeholders, the WEB team identified four key topics for focus group research: seniors in East Flatbush, young adults, healthcare workers, and women. For each focus group, the topics and questions were tailored to the population targeted, though some questions, such as respondents' personal definition of health, were asked across all focus groups. The planning for each focus group required specialized outreach to identified community partners and organizations. Lastly, only residents of the three study neighborhoods were targeted for inclusion in the focus groups. The following section highlights the findings from the qualitative (focus group and stakeholder interview) data.

Identified Neighborhood Challenges from Stakeholder Interviews and Focus Groups

Housing Concerns

All three research methods identified housing affordability as a critical neighborhood challenge. The stakeholder interviews specifically identified housing cost and availability of affordable housing options; the survey, women's focus group, and young adult focus groups, identified housing more generally as a key challenge. The stakeholders overwhelmingly agreed that high housing costs place excess burdens on residents of the study communities (Table 7). One stakeholder, working primarily in multi-issue community organizing, asserted that advocating for tenants' rights and pushing for affordable housing through regulation is the "only way to fight back against rapid displacement." Local hospital employees are not immune from the challenges of housing affordability; one stakeholder reported that several co-workers lost their housing because they could not afford their apartments.

Another stakeholder, a union representative, articulated concerns about availability of affordable senior housing that were echoed by youth and senior focus group participants: "there is a whole community of elderly residents who do not have anywhere to go and are not sick enough for a hospital. Major housing initiatives need to be thought of for this population." Small efforts can still make a dent in the availability of affordable housing, and hospitals can contribute. An IMC interviewee described the hospital's commitment to develop one of its own parking lots as affordable housing for seniors.

These conversations suggest the need for prioritizing creation of new affordable housing in Central Brooklyn through use of Vital Brooklyn funding, innovative housing approaches such as co-locating health services and housing, and building supportive housing for families that incorporates child development and family services. The challenge with such housing strategies, the union representative noted, is trusting that decision-makers and developers will maintain their commitment to affordable housing that accords with communities' needs.

Gentrification

Across interviews and focus groups, and among 30% of survey respondents, the risk of gentrification in the study neighborhoods was identified as a major threat to communities' health. The women's and young adult focus groups highlighted the changing social fabric of the community and threats to community cohesion and trust engendered by gentrification and neighborhood change. The senior focus group, however, focused on lack of access to services and resources-- including scarce parking impacting their transit options -- newer services (such as drug treatment facilities) attracting unwelcome street activity, and limited promotion to seniors of programs and services available for older Brooklynites.

Respondents also noted that new development in the neighborhoods negatively contributed to community health by increasing housing prices, privatizing spaces for community interaction, and undermining existing residents' ability to influence changes affecting their neighborhoods. The participants in the women's focus group questioned, "for whom" the new housing and businesses were being created. The women participants acknowledged the impact of recent investments in cleaner streets and safer environments, but were suspicious of the timing. As long-term residents, the participants reflected on the changes they have seen in their communities since childhood, noting that the influx of wealthier and whiter people was driving increased attention to improving the community. One woman focus group participant observed:

"... [P]eople being displaced [have] been in these homes for years. Now they're not able to live in these homes. I'm ok with progressing. But when you're progressing and pushing me out I have a problem with that. [The community is] definitely not healthy in respect to that."

Significant fear of the impacts of gentrification became even more apparent when the youth focus group participants were asked to envision the future of their neighborhoods. While a few respondents expressed the “hope” that their communities would become “cleaner,” more connected, and would feature “designated dog areas” in five years, many of the youth participants expressed uncertainty that they would be able to remain a part of their rapidly changing communities. A youth focus group participant shared:

“[In five years there will be] gentrification at its fullest. It has started so it will be further by then. I guess we’ll be out. I don’t know where we’re going out. They are buying us out. It’s not even leaving, we’re being kicked out.”

The Public Realm and Community Cohesion

The stakeholders emphasized that social isolation, and the lack of community spaces for both recreation and communal gathering, presented challenges to community health. A stakeholder noted that the lack of green space keeps children from being able to “ride bikes, go running,” or have functioning sports programs in East Flatbush. A stakeholder working in health equity suggested that the rise in empty lots and construction projects produces further health risks, such as pests and increased traffic on major roads in the community. The Center for Health Equity, a member of CCB and initiative of the NYC Department of Health and Mental Hygiene, has suggested that these health-damaging forces could be countered by “activat[ing] neighborhoods in a way that is connected.”

Stakeholder interviewees and focus group participants cited the lack of open space and places for youth as a priority concern, paralleling the survey finding that access to places for youth and young adults is a significant neighborhood challenge (Table 6). Some participants indicated that development projects resulted in reduced spaces for youth, while others felt that the lack of places for youth predated development pressures.

Both stakeholder interviewees and focus group participants indicated that building a social infrastructure to support communal wealth, raise awareness, and maintain community engagement were important innovations to make positive change in their communities.

With major demographic changes impacting Bedford Stuyvesant, Crown Heights, and East Flatbush, longer-term residents feel disconnected from one another, creating new neighborhood challenges. Stakeholders worried that changes brought about by new development and gentrification were contributing to the deterioration of their community and community assets, and creating stressors that negatively impact the health of community members. One stakeholder interviewee noted the need for better immigration services to support new immigrant communities with integration, employment services, and referral to resources and programs. Stakeholders also mentioned the disjuncture between newer residents and long-time community members: “youth [that are] playing music on blocks are now being told they have to shut down.” The youth focus group participants discussed their sense of disconnectedness from their communities because of daily responsibilities, such as school and work that limit their interactions with people in their neighborhoods.

A participant in the women’s focus group expressed the need to bring the different communities together and “bridge the gap” between newcomers and long-standing residents, and between residents and community leaders (e.g. elected officials and organizers). While over 50% of survey respondents either agreed “a lot” or “somewhat” with the statement that “there is a lot of cooperation between groups in their neighborhoods,” nearly half of respondents did not agree (Figure 12). This suggests that there is room for improving community cohesion and strengthening relationships with community leaders by building community coalitions and strategic partnerships (Table 9).

Systemic Challenges

The stakeholders interviewed noted that large systems and institutions in the community are not connected to pressing neighborhood challenges, or to each other. Within this category, a labor leader and Central Brooklyn stakeholder suggested that hospital administrators and leaders do not live within the communities they serve, resulting in loss of resources for the community:

“[S]top the resource extraction. Hospitals are run by folks who do not live in Brooklyn, and often such resources that leave the community. We need to create organizational bodies that have some oversight and are community run.”

While some of those interviewed felt disconnect between health care provider leadership/staff and the community, others noted the role hospitals play as strong economic anchors and providers of local jobs. At IMC for example, 60 % of employees live in Brooklyn, and 37% live in communities served by the hospital. A hospital administrator expressed a desire to do more, “to give priority to people who live in this neighborhood for any opening. [We have the] opportunity to open up the hospital to those who live in the neighborhood, so people can see opportunities to work; [to see] how they can support children around education and health careers, and to know there are different types of jobs, not just being a doctor or a nurse.”

The IMC interviewee also described a shift in the way hospitals can think about their responsibility to the communities they serve:

“[In a] small way we are contributing to resolving some of the social determinants of health. We see ourselves not just as a place to go to when people are sick, but to contributing to the health and wellness of our community.”

To counter threats of resource scarcity, participants in the healthcare workers focus group brainstormed ways to envision community-driven health care. They identified holistic and community-focused services and increased community engagement as key drivers of this change. The healthcare workers also observed the need for more significant efforts to design accessible care that reflects the languages spoken and lifestyle, economic, and time/schedule barriers that often deter residents from using medical facilities. They collectively agreed that the hospitals and ambulatory care centers need to shift to serve as holistic care facilities. Providing services in one location, a “one-stop shop” as one participant suggested, would aid in building healthier communities. But such effort will not be successful without effective outreach: the healthcare workers argued that their responsibility as care providers required them, “to think about more innovative ways to reach people,” get leadership on board and emphasize community-focused preventative measures within their institutions. According to one focus group participant, “[h]aving healthcare workers out in the community is one example of this.”

Stakeholders and participants discussed additional inter-connected and systemic issues that impact community health. For example, they noted the over-summonsing of poor people for a variety of small offenses as a contributor to economic distress that impacted the social fabric of the community and undermined social cohesion. One stakeholder shared their work in organizing resident parents to advocate for improved school systems, noting the connection between school quality and greater opportunities for youth. Such approaches could, in turn, contribute to the economic and social health of the communities.

FINDINGS

SURVEY

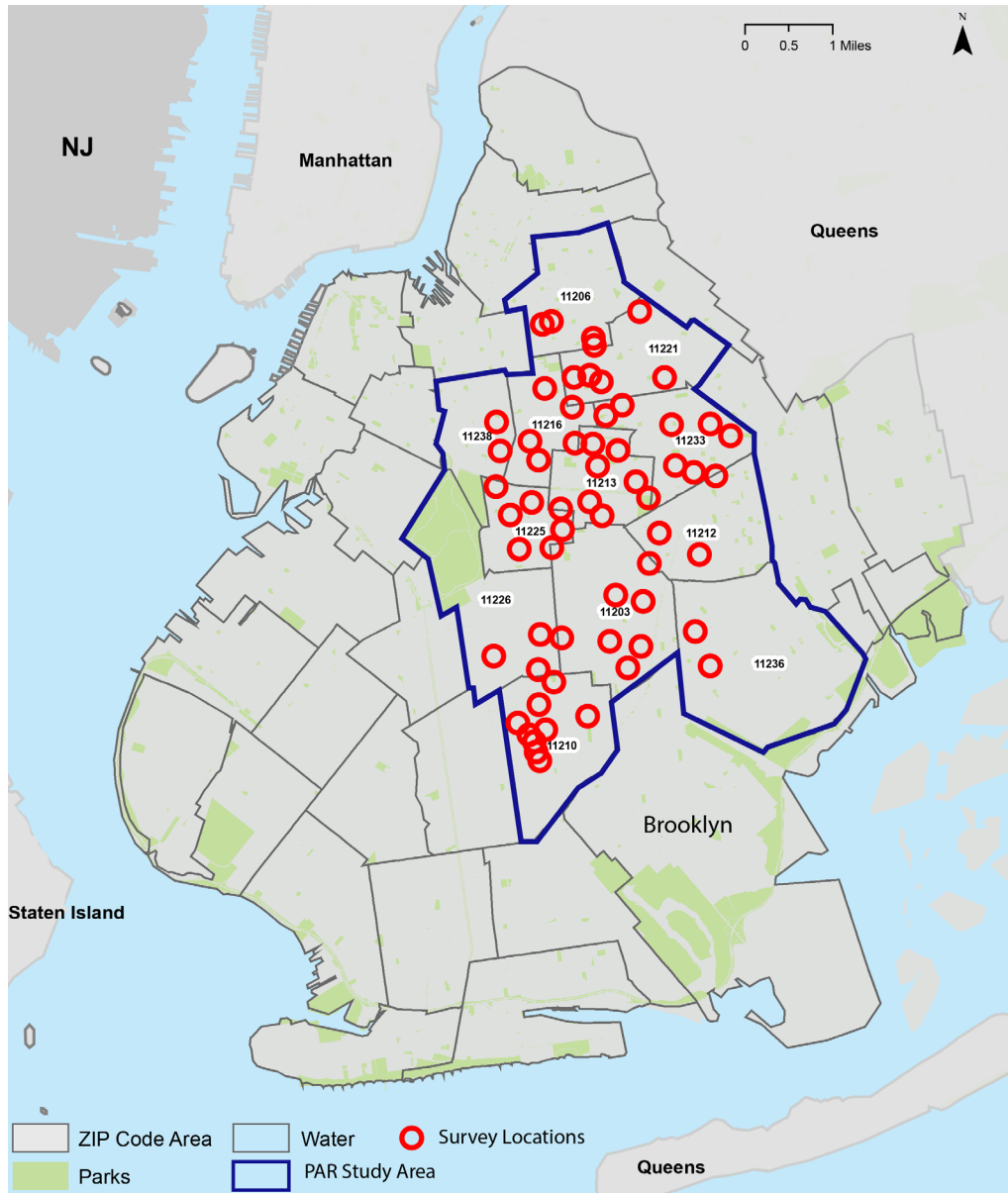
The following analysis was conducted on 1,026 completed surveys collected over two and one-half weeks of data collection.²² All survey data and analysis reflect the boundaries of the zip codes in the hospital catchment areas provided by IMC and Kingsbrook (Table 7; a summary of the final survey sampling plan statistics can be found in Appendix B Table 2). The map of study areas and surveying location can be found in Figure 2 and Figure 6, respectively.

Table 7. Identified Zip Codes of Target Study Areas for Surveying

NEIGHBORHOOD	TARGET ZIP CODES
Crown Heights	11225, 11213, 11238, 11216, 11233
Bedford Stuyvesant	11216, 11221, 11233, 11206
East Flatbush	11226, 11210, 11203, 11212, 11236

²² For detailed sampling plan, strategy, and adjustment please see Appendix B.2.

Figure 6. Map of surveying locations



In comparison to the American Community Survey (ACS) demographics for the same neighborhoods, the survey sample appears to be well representative of the neighborhoods across key demographic categories (age, race, gender, and educational attainment). Slightly more women responded to the survey in our sample, and the percentage of respondents with a college degree or more was smaller than in the ACS survey. Additionally, a larger percentage of residents identified as Non-Hispanic Black in our survey than in the most recent ACS; this difference is particularly pronounced in Bedford Stuyvesant, where 80% of our sample identified as Non-Hispanic Black compared to 55% in the 2010-2015 ACS.

In Table 8 we present the descriptive analysis of the 1,026 participants and neighborhood-specific samples. Details on the survey analysis process are in Appendix B.3.2.

Table 8: Survey Characteristics, in full sample and by neighborhood

	TOTAL SAMPLE		BEDFORD STUYVESANT	CROWN HEIGHTS	EAST FLATBUSH
	N	%	%	%	%
TOTAL	1,026		N=337	N=373	N=280
Demographics and Socioeconomic Status					
GENDER					
Male	420	41.90%	42.37%	44.69%	37.59%
Female	571	57.17	56.1	54.22	62.4
Transgender	9	0.93	1.52	1.09	0
Missing	26	2.54	2.67	1.61	2.14
AGE (YEARS)					
18-19	67	6.74%	9.18%	6.76%	3.79%
20-24	101	10.59	11.71	10.7	9.09
25-34	201	21.07	22.15	17.18	25
35-44	164	17.01	18.04	17.18	15.53
45-54	155	16.26	16.77	12.96	20.07
55-64	158	16.91	12.97	19.44	15.91
65-74	83	8.56	6.96	9.86	8.71
75+	34	3.53	2.22	5.92	1.89
MISSING	63	5.56	6.23	4.83	5.71
RACE/ETHNICITY					
Non-Hispanic White	52	5.14%	4.74%	6.17%	3.57%
Non- Hispanic Black	791	80.29	73.6	75.6	85
Asian	21	1.89	1.78	1.61	2.14
Multiracial	45	4.72	5.04	5.09	3.57
Other race	12	2.42	1.78	4.02	1.07
Hispanic/Latino	97	10.17	16.32	8.58	3.6
Missing	39	3.63	3.56	3.75	3.57
INCOME PER MONTH					
LESS THAN \$1,250	194	23.33%	20.71%	24.18%	25.33%
\$1,2501 TO \$2,100	160	18.99	16.07	20.91	20

	TOTAL SAMPLE		BEDFORD STUYVESANT	CROWN HEIGHTS	EAST FLATBUSH
	N	%	%	%	%
TOTAL	1,026		N=337	N=373	N=280
\$2,101 TO \$2,900	102	12.08	13.93	11.77	10.08
\$2,901 TO \$4,150	71	8.26	10.36	7.19	7.11
\$4,151 TO \$6,250	62	7.52	10.71	6.86	4.44
\$6,251 TO \$8,300	36	4.31	6.42	2.61	4
\$8,301 OR MORE	49	5.67	7.14	5.88	3.56
DON'T KNOW/MISSING	352	34.34%	29.08	34.85	40
EMPLOYMENT STATUS					
Employed	632	64.85%	65.85%	60.51%	67.53%
Not employed	348	35.65	34.14	39.4	32.46
Missing	46	4.48	2.67	5.63	4.29
EDUCATION LEVEL					
Less than high school	108	12.85%	14.98%	12.22%	11.26%
High school graduate or some college	535	64.13	65.92	64.89	61.39
College graduate or more	200	23.01	19.1	22.88	27.71
Missing	183	17.47	20.77	14.48	17.5
FOOD INSECURITY					
Went hungry in the last month	140	13.65%	14.94%	11.71%	16.60%
Not sure and Missing	113	10.8	8.31	11.53	12.86
HOUSEHOLD CHARACTERISTICS					
HOUSING TENURE					
Own	158	15.50%	16.88%	12.53%	17.88%
Rent	786	79.92	76.56	83.92	78.47
Market Rate	264	32.03	22.85	36.03	36.74
Rent Stabilize/ control	239	30.73	19.59	39.61	30.7
Section 8	125	14.97	15.51	12.66	17.67
NYCHA	110	13.02	23.28	5.52	5.58
Shelter	29	3.02	5	1.91	2.19
Don't have housing	15	1.56	1.56	1.63	1.46
Missing	38	2.92	5.04	1.61	2.14

	TOTAL SAMPLE		BEDFORD STUYVESANT	CROWN HEIGHTS	EAST FLATBUSH
	N	%	%	%	%
TOTAL	1,026		N=337	N=373	N=280
NUMBER OF PEOPLE IN HOUSEHOLD (1-200) MEDIAN, IQR	807	3.37	3.43	3.61	2.96
Past Moves					
Moved in last 5 years	254	26.11%	23.36%	27.04%	28.19%
Missing	50	4.84	4.75	4.83	5
EXPECTED MOVES IN THE NEXT 5 YEARS					
Expects to move in next 5 years	373	40.75%	31.88%	41.42%	50.60%
Don't Know if you will move	165	18.05	16.44	21.86	14.86
Missing	113	11.01	11.57	10.46	11.07
HEALTH					
SELF-RATED HEALTH (1-5) MEAN	956	3.42	3.59	3.37	3.29
Excellent/Very Good/ Good	762	79.72%	85.67%	78.74%	73.52%
Fair/Poor	194	20.28	14.33	21.26	26.48
Missing	60	6.82	4.75	6.7	9.64
EMOTIONAL WELL- BEING SCORE ^d (1-4) MEDIAN	823	3.33	3.33	3.33	3.33

a The not-employed category includes students, the retired, and people caring for family members in addition to those who are not currently working.

b -bold indicates significant difference between neighborhoods ($p < .05$) based on non-overlapping 95% confidence intervals

c- columns sum to more than 100, as percent do not include missing observations

d- We calculated an emotional well-being score based on responses to 3 items from the Mental Health

Continuum (MHC-SF), specifically asking how often in the past month respondents felt 1) happy, 2) interested in life, and 3) satisfied (Lamers et al. 2011). We adapted the scoring of the MHC-SF subscale to create a continuous score, averaged across the three items, with each item response coded from 0 "None of the time" to 4 "all of the time" so that higher scores indicated greater emotional wellbeing

Demographic Characteristics

Respondents predominantly identified as non-Hispanic Black or Hispanic/Latino, and a larger percentage of East Flatbush residents than in the other neighborhoods identified as Black. Only 5% of all respondents identified as White. The proportion of Hispanic/Latino respondents in Bedford Stuyvesant (16.9%) was two times as large as in Crown Heights, and 4.5 times as large as in East Flatbush. Over 55% of respondents identified as female and almost 40% were under the age of 35. Though the researchers attempted to oversample seniors in East Flatbush, just over 10% of respondents from East Flatbush were seniors.

Socioeconomic characteristics

Over 40% of respondents had an income below \$2,100 per month or \$25,200 per year. A small percentage (7.4%) of Bedford Stuyvesant residents were in the highest income category (more than \$8,300 per month), and this proportion of respondents was significantly larger than in the other two neighborhoods. Despite the large percentage of low-income respondents, the majority, almost 65%, were employed. Overall, fewer than a quarter of residents had a college degree, and roughly one in eight had less than a high school degree.

Household Characteristics

A strong majority of respondents rent (80%), and only 15% own homes. An additional 3% of respondents lived in shelters, and 1.6% had no housing. Among renters, 32% lived in market-rate housing and another 30% lived in rent stabilized or controlled units, though these percentages varied significantly by neighborhood. An additional 15% lived in Section 8 housing, and 13% lived in NYCHA housing. More than four times as many Bedford Stuyvesant residents lived in public housing as respondents from the other two neighborhoods. Across the neighborhoods, median household size was 3.4 people, though this number was lower in East Flatbush (2.96). Almost a quarter of residents moved in the past five years. Over 40% of respondents thought they would likely leave in the next five years, and another 18% were not sure if they would move. Among those who thought they would move, over 50% said it would be because of affordability.

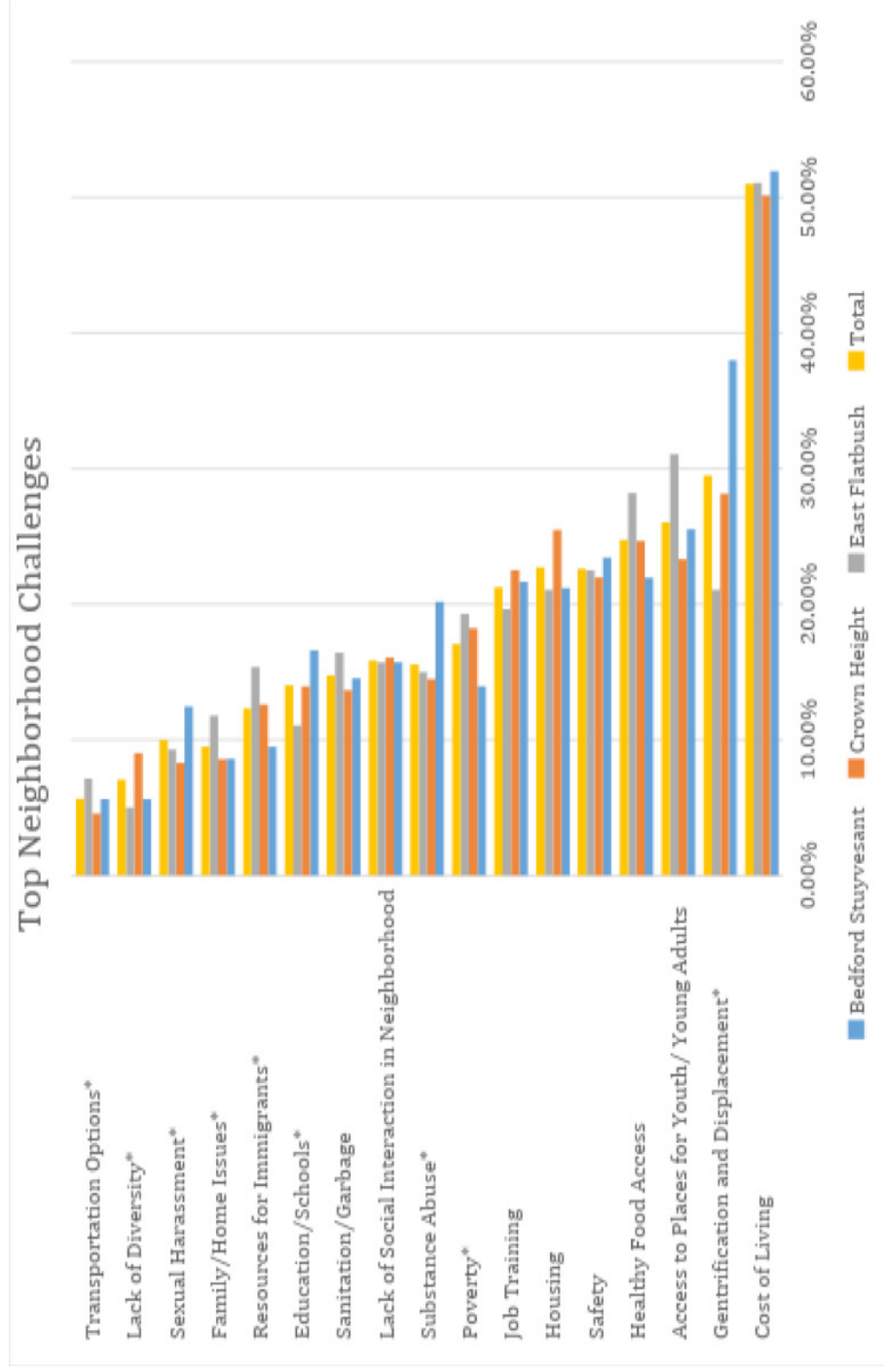
Health

The sample largely reported good health, with an average self-reported health score of 3.4. A score of 3 corresponds to good health whereas a score of 4 corresponds to very good health. Four out of five respondents reported excellent, very good or good health. Bedford Stuyvesant residents reported better health than residents of Crown Heights or East Flatbush, and more than one-quarter of East Flatbush residents reported fair or poor health compared to only 14% of Bedford Stuyvesant residents. The median emotional well-being score was 3.3, which corresponds to being emotionally well most of the time to all of the time.

Neighborhood Challenges

Respondents were asked to choose the top challenge in their neighborhood from a list of challenges. Over 50% of all survey respondents felt the cost of living was the top challenge. Cost of living was the most commonly identified challenge in all three neighborhoods. Gentrification and displacement was the next most frequently identified challenge (29%), though the proportion of respondents choosing this as the most important priority varied significantly by neighborhood, from 40% in Bedford Stuyvesant to 21% in East Flatbush. Access to places for youth and young adults was also a major concern for more than a quarter of all respondents. Differences between neighborhoods for this indicator were not significant. Almost a quarter of respondents also felt healthy food access was a major challenge.

Figure 7: Top neighborhood challenges by survey respondents



* significant (p < 0.05) using chi-square tests for differences in each challenge across the three neighborhoods

** sum to more than 100 as many respondents identified more than one challenge

Additional Quantitative Analysis

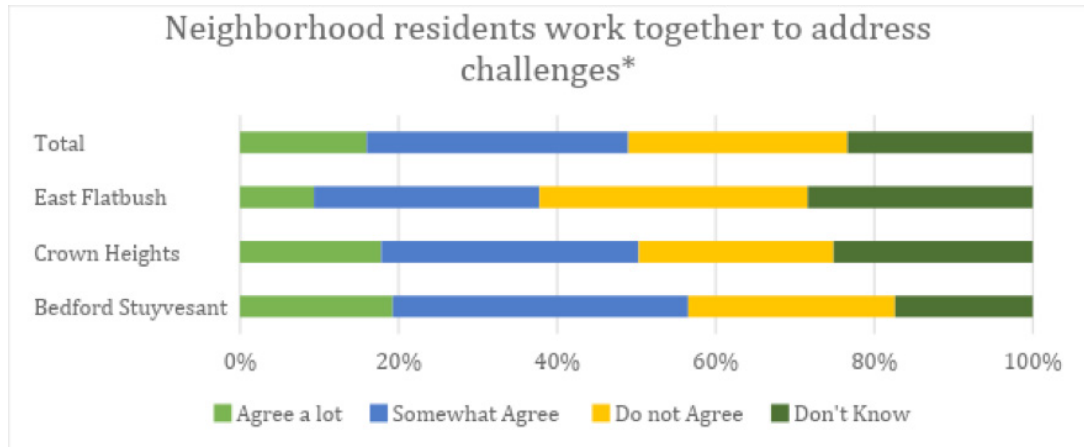
NextShift also tested the relationship between the neighborhood of residence and neighborhood challenge using chi-square tests, and found that there were statistically significant differences in rates by neighborhood for the following challenges: poverty, family/home issues, substance abuse, education/schools, and sexual harassment. In response to inquiries from CCB and the PIs, NextShift assessed the statistical relationship between basic demographic characteristics of respondents (race, age, and gender) and respondents prioritizing cost of living, gentrification and displacement, or access to places for youth/young adults as a key challenge.

Both gender and age were associated with prioritizing cost of living as a challenge: women were more likely than men, and people between 25-34, 35-44, and 45-54 were more likely than those in other age groups, to identify this challenge. Concern with gentrification was significantly associated with age and was identified as a priority among young adults and those less than 65 most commonly. Black respondents were significantly more likely than White respondents to prioritize access to public space for youth and young adults as a critical neighborhood challenge.

Community Mobilization

Across the study neighborhoods, the WEB team compared respondents' assessment of their neighbors' response to local challenges. This inquiry sought to gain a comparative understanding by neighborhood of how residents perceive capacity for community mobilization and agency to effect change and address structural challenges. Below is a sample of the questions.

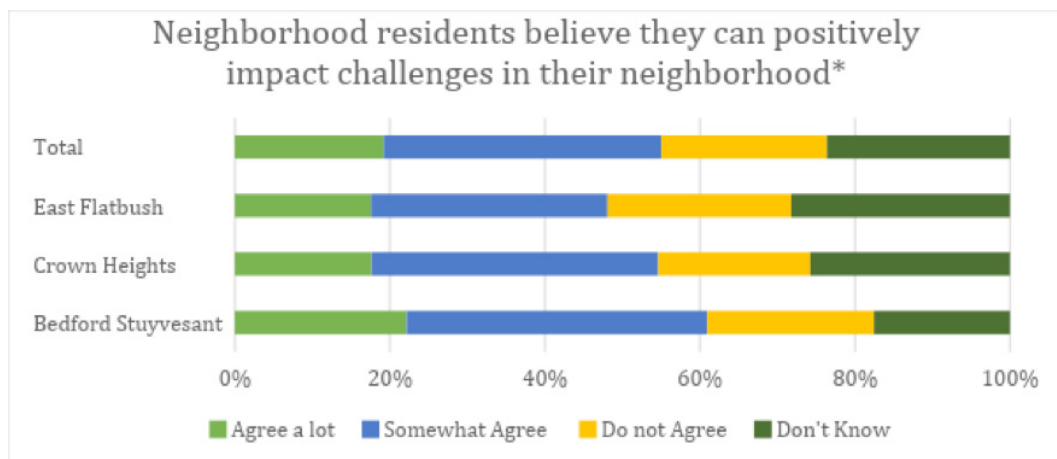
Figure 8: Neighborhood residents work together to address challenges



*indicates a statistically significant relationship ($p < 0.001$) between neighborhood and category of response.

In Bedford Stuyvesant and Crown Heights, only about one out of five residents strongly believe that people in their neighborhood work together to address challenges. In East Flatbush, the number is as small as one in ten. In all three neighborhoods, residents were more likely to disagree than strongly agree with the statement that residents work together to address challenges.

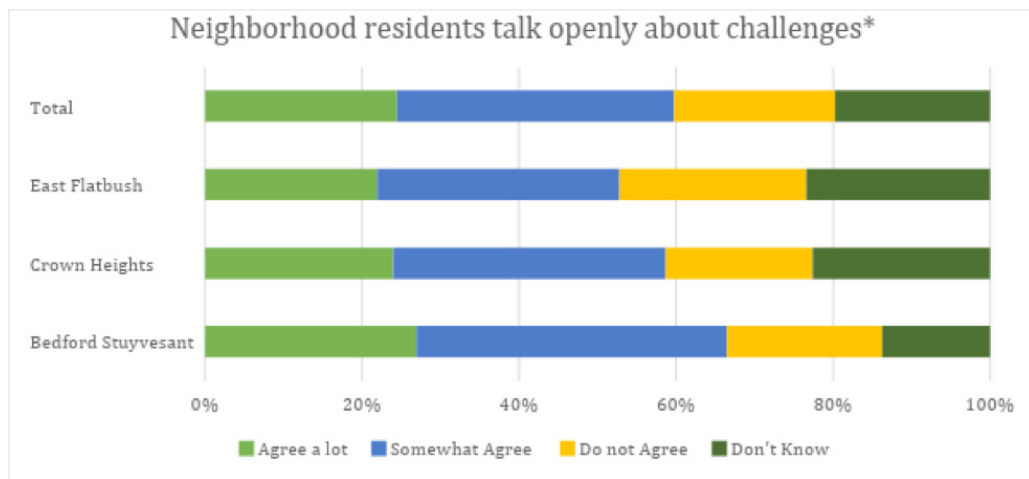
Figure 9: Residents positive impact on the community



*indicates a statistically significant relationship ($p < 0.05$) between neighborhood and category of response.

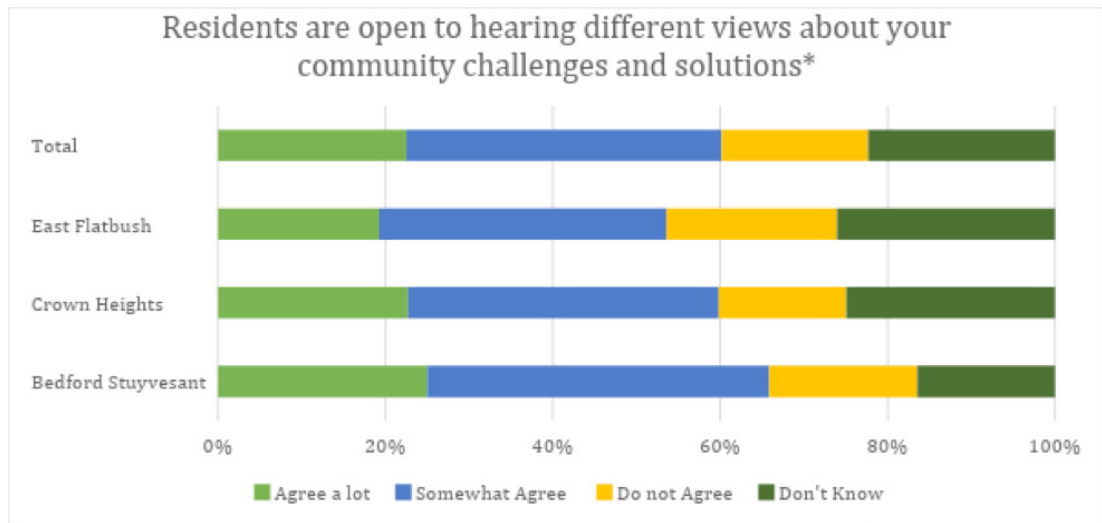
Bedford Stuyvesant residents were approximately 4.5 percentage points more likely than residents of the other two neighborhoods to strongly believe residents can positively impact neighborhood challenges; 60% of respondents there either agreed or strongly agreed with the statement.

Figure 10: Neighbors talk openly about neighborhood challenges



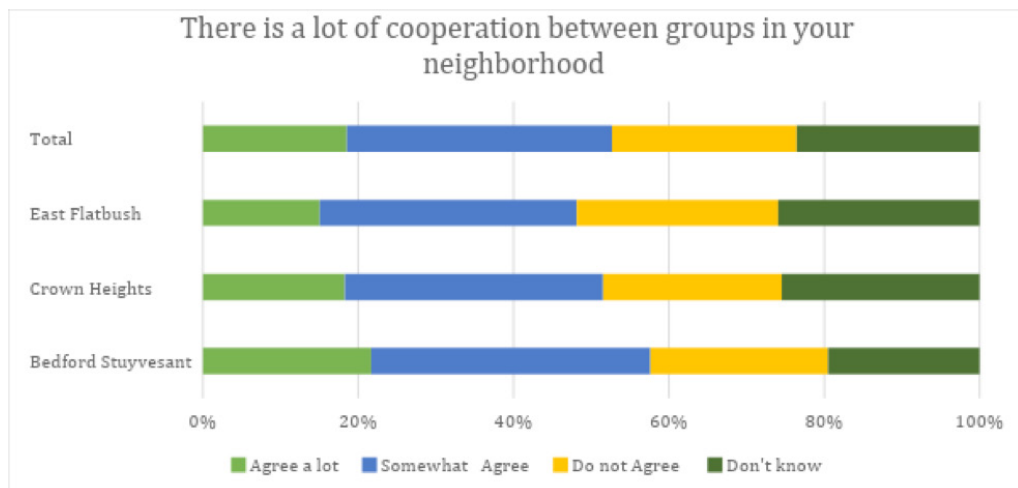
*statistically significant relationship ($p < 0.05$) between neighborhood and category of response.

Figure 11: Neighbors’ openness to hearing different points of view about community challenges and solutions



*indicates a statically significant relationship (p<0.05) between neighborhood and category of response.

Figure 12: Degree of cooperation between groups in the neighborhood



Among the study neighborhoods, Bedford Stuyvesant residents were most likely to agree strongly with statements indicating higher levels of capacity for mobilization and community action. Crown Heights residents were less likely to agree with such statements and East Flatbush residents were even less likely. For all questions of community mobilization, except for cooperation between groups, there was a significant relationship between neighborhood of residence and category of response. In East Flatbush, less than one in five respondents agreed strongly with all statements regarding the capacity for mobilization and community action except the statement about talking openly about challenges. In Bedford Stuyvesant, more than one in five strongly agreed with all statements except on the statement about working together to address challenges.

Leadership

Respondents were asked to identify from a list the leaders in their communities. An additional open-ended option received responses such as, “the Youths” or “me,” however, no open-ended response received more than 0.01% of total responses.

Table 9: Neighborhood Leadership

LEADERS	TOTAL	BEDFORD STUYVESANT	CROWN HEIGHTS	EAST FLATBUSH
Don't Know/ None	40.20%	34.42%	43.97%	42.14%
Pastors/Spiritual Leaders	22.02%	24.33%	21.18%	20.36%
Political /elected officials	20.10%	20.47%	18.50%	21.79%
Advocates/organizers*	19.80%	25.52%	19.57%	13.21%
Block Associations*	18.99%	24.04%	17.96%	14.29%
Elders	15.76%	18.69%	14.75%	13.57%
Health Professionals*	6.36%	10.68%	4.02%	4.29%

Responses do not sum to 100 as some respondents were asked to select multiple leaders, if applicable.

*indicates statistically significant p<.05 using chi-square tests for differences in each leadership type across the three neighborhoods.

The most common response to the leadership question was “Don’t know” or “None,” with over 40% of respondents selecting this option. This percentage varied from a high of 44% in Crown Heights to 34.4% in Bedford Stuyvesant, though the differences by neighborhood were not significant. Almost twice as many people didn’t know or felt there were no leaders in their neighborhood as felt political/elected officials or pastors/spiritual leaders were leaders. The relationship between neighborhood and the percentage of respondents selecting “don’t know/none,” was statistically significant, with a lower probability of selecting this option in Bedford Stuyvesant than the other two neighborhoods. For instance, Bedford Stuyvesant residents were almost ten percentage points more likely than East Flatbush residents to identify block associations as leaders, and over a quarter of Bedford Stuyvesant residents identified advocates or organizers as leaders -- almost twice as many as East Flatbush residents.

Income, Employment and Economic Stability

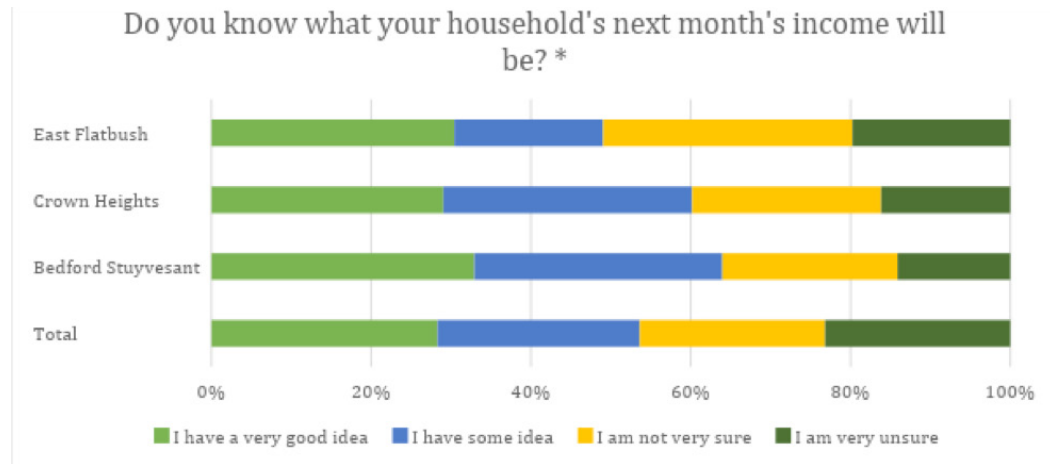
Income

Nearly one quarter (23.3%) of respondents classified their monthly income in the lowest income bracket -- less than \$1,250 per month or \$15,000 per year. Over 55% of survey respondents were living in poverty, with incomes under 100% of the Federal Poverty Level, which for a family of four in New York is \$45,500 annually. Additionally, 40% of respondents with available data were the working poor, or currently working but making less than the federal poverty level.

Economic Stability

We asked several questions to evaluate respondents’ economic stability and further understand how people manage on the incomes they earn.

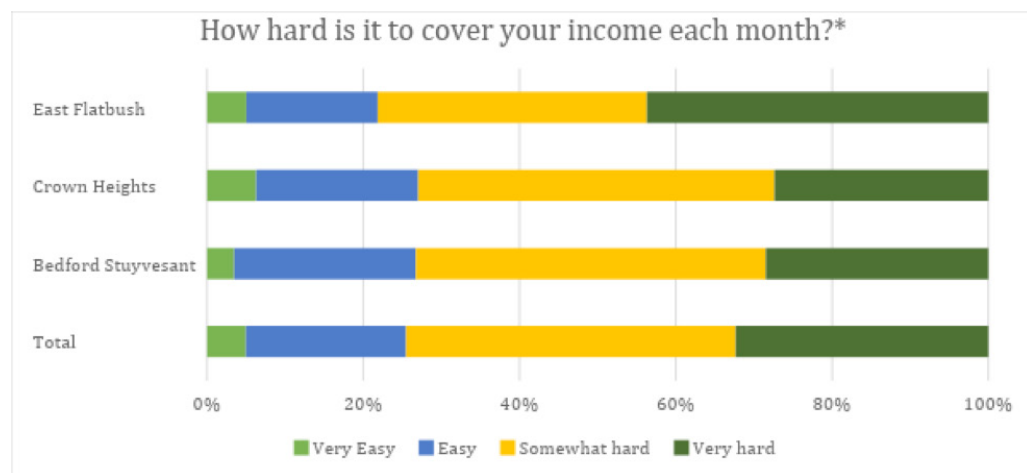
Figure 13: Predictability of Next Month's Household Income



* indicates a statistically significant relationship (p<0.05) between neighborhood and category of response.

Overall, more than half of respondents were unsure about the following months' income, East Flatbush residents were more likely to be unsure than residents of the other neighborhoods.

Figure 14: Difficulty covering monthly bills and expenses



* indicates a statistically significant relationship (p<0.05) between neighborhood and category of response.

Less than one in twenty respondents found it very easy to cover expenses each month, and about one in three found it very hard. Combined, almost 75% of respondents found it hard or very hard to cover expenses each month. As expected, difficulty covering expenses was significantly associated with income level, where rates of difficulty paying expenses were higher in lower income brackets. These two questions paint a bleak picture: the majority of those surveyed in the three neighborhoods are not economically secure. Their monthly income is not stable, and it is difficult to cover all their expenses and bills each month.

Employment

Overall 64% of respondents reported being employed.²³ Employed respondents worked an average of 39 hours a week, 65 % were working full time (more than 35 hours per week), and 42% were employed in their neighborhood.

Benefits

Benefits can help to cover the costs of various needed services and programs, and are often an added employment incentive.

Table 10: Percentage of respondents reporting employment benefits

BENEFIT	TOTAL	BED STUYVESANT	CROWN HEIGHTS	EAST FLATBUSH
Counseling	8.80%	8.24%	7.52%	11.06%
Disability	14.27%	17.98%	13.16%	11.06%
Domestic Partner Benefits	5.87%	6.74%	4.51%	6.45%
Medical Insurance	46.53%	50.19%	39.85%	50.23%
Paid Sick Time	29.07%	31.84%	29.32%	25.35%
Retirement	24.40%	26.22%	22.18%	24.88%
Saving Plan	16.93%	20.97%	13.53%	16.13%
Paid Time Off	27.33%	30.34%	26.69%	24.42%

Less than one in three respondents reported getting paid sick time and only 27% reported paid time off. Almost 50% of respondents reported receiving health insurance, the most common employment benefit reported. Retirement and savings plans were uncommon: 24.4% and 16.9% respectively, reported these types of benefits.

Healthcare Access

Almost 20% of respondents said they had delayed care because of cost in the past year, and one in five respondents also had not had a check-up in the past year. Survey takers were also asked where they customarily go if sick or in need of health advice: 61% identified a doctor or nurse practitioner's private clinic or office; 12% indicated a community health center or public clinic; 13% said they would go to a hospital outpatient clinic; 13% chose the emergency room; 4% went to alternative healthcare providers such as an acupuncturist, chiropractor, traditional healer, or herbalist. Bedford Stuyvesant residents were almost two times more likely to say they would go to a community health center than East Flatbush residents.

Additional Survey Questions

The survey asked additional questions about negative community impacts of immigration, but no significant relationships emerged in the analysis, nor were these data points emphasized in the collaborative data analysis.

More than half (54%) of respondents either agreed or strongly agreed that violence was a problem in their neighborhood, while only 27% disagreed or strongly disagreed. Overall, 75% of respondents felt their neighborhood was safe to walk around alone during the day, but only 50% felt it was safe to walk around alone at night. Nearly two-thirds of respondents felt the park or playground closest to their homes were safe during the day. Just over 50% felt it was safe for children to play outside during the day. We tested differences by gender in how safe people felt and found that men were more likely to feel safe walking alone during the day or night than women or people who did not identify as female or male. Older people felt significantly safer than younger people walking in their neighborhood during the day.

23 For detailed sampling plan, strategy, and adjustment please see Appendix

In terms of police presence, 50% felt the police protected them and about 47% felt police responded to their community's needs in a timely manner. This response did not statistically differ based on respondents' race or gender.

Neighborhood Challenge

This section provides analysis of our qualitative and quantitative data and integrates the results for the neighborhood challenges dataset.

Table 11: Key Neighborhood Challenges by Research Tool

TOP NEIGHBORHOOD CHALLENGES	
Quantitative Data (Surveys)	Qualitative Data (Interviews + Focus Groups)
Cost of Living	Public Space
Gentrification and Displacement	Community Cohesion
Access to Places for Youth and Young Adults	Gentrification
Healthy Food Access	Housing Cost and Availability
Safety	Systemic Challenges

The key challenges identified by qualitative and quantitative methods show substantial overlap. Gentrification and cost of living were among the top challenges across research tools. The interviews and focus groups identified public space as a priority; access to places for youth and young adults were a higher priority for the survey respondents. Housing cost and availability ranked among the key challenges identified in the qualitative data, coming in as the 6th most important issue in the survey data. Systemic challenges were a top issue in the qualitative data, but this category encompasses many of the issues identified in the survey.²⁴ Significant overlap in major findings of the qualitative and quantitative tools suggest that a broad range of community members and stakeholders recognize similar challenges and indicate strong community agreement that the principal challenges across the study neighborhoods are cost of living and gentrification.

Looking at neighborhood challenges identified by both the quantitative and qualitative instruments, indicates there is need and opportunity to explore multiple interventions at various scales to improve community health in Bedford Stuyvesant, Crown Heights, and East Flatbush.

Communities Driving Change

Communities in Central Brooklyn have a long history of asserting the right to shape and direct their own development. One example is the community control movement in Ocean Hill-Brownsville and Bedford Stuyvesant in the 1960s during which African American and Latino parents struggled to improve the education of their children and for a more democratically run educational system (Berube, & Gittell, 1969); Isaacs, 2014). The overarching research questions framed by residents in both PAR processes -- “How do we *mobilize the Brownsville and East New York communities* to address the social, physical and environmental inequalities that affect health?” (PAR I); and “How can residents *build power to pool existing assets and demand increased investment in* a healthier, more supportive and more affordable Central Brooklyn now, and in the future?” (PAR II) (emphasis added) – suggest that residents today desire to shape the direction of healthcare and development in their own neighborhoods.

²⁴ The stakeholder interviews and the focus groups were open ended, allowing for a diverse range of responses, while the survey included a list of 17 challenges from which to choose. In analyzing the qualitative data several structural issues were grouped together to create the “systemic challenges” category.

Findings highlighting residents' desire to see themselves represented in local institutions that are accountable and collaborative, and their articulation of the need for stronger local civic infrastructure, support this idea. Importantly, these findings varied across neighborhoods, with Bedford Stuyvesant residents showing the highest level of confidence in their collective ability to shape neighborhood change, while East Flatbush residents demonstrated the lowest levels. At the same time, when combined with survey and focus group findings regarding the lack of local leadership and residents' pessimism about the capacity to work together and affect positive change, these data indicate that residents perceive a gap between their own aspirations for their community and current conditions. The tension between residents' aspirations, what now exists, and what is needed to ensure community well-being was expressed frequently in individual stakeholder interviews:

"Folks are working so they can empower their families and better support their children... Our communities have grown skilled at making do with limited resources."

- Bedford Stuyvesant community organization leader

"[A major economic justice challenge the community is facing is] jobs, good jobs, unionized jobs. *Workers need to have voice.* Workers without voice is a major problem. That is a major part of building community wealth." (emphasis added)

-Central Brooklyn community organizer

"This needs to be a *civic engagement responsibility.* We are looking for an infrastructure that affordable housing is a part of. If there is no infrastructure, then we will always need to start over." (emphasis added)

-Central Brooklyn community organizer

"Gentrification in general is an opportunity for conversation -- *to question what the soul of the neighborhood is...* Time to lift up and center long term residents and low-moderate income people. Opportunity to *build institutions that really see themselves as resiliency mechanisms*. Economic resiliency mechanisms." (emphasis added)

-Central Brooklyn stakeholder

"The traditional market-driven approach to healthcare has been a disaster in Central Brooklyn, wasting billions of dollars. One of the greatest shared visions of this period for leaders of Central Brooklyn has to do with the recognition that community *residents must be active participants in the planning and organizing of the institutions* that are expected to support the community's survival. *The community has got to be the creators of their own tomorrow in order to truly prosper.*" (emphasis added)

-Central Brooklyn labor union leader

RECOMMENDATIONS

Developing the Recommendations

The survey, interview, and focus group findings were aligned with policy interventions to develop recommendations proposed by the community. Though the research team aligned the research findings with key ongoing policy interventions, direct community participation determined the final recommended actions. The primacy of community voice was ensured by including community residents and stakeholders in every step of the research process; scheduling a series of stakeholder discussions to consider and respond to the findings;²⁵ deriving explicit recommendations from the data collected by the community (identified below as “community-identified recommendations”); presenting preliminary recommendations for deliberation and feedback at a community forum;²⁶ and eliciting feedback from community.²⁷ The research team and community arrived at four key categories of findings:

- 1) Gentrification, housing affordability, and neighborhood change are seen as top challenges affecting health in Central Brooklyn
- 2) There is a need to increase and support economic development and mobility
- 3) A redesigned health system can increase community health by building relationships between the community and health care leaders
- 4) Building a sustainable civic infrastructure is key to achieving any community-based health initiative goals

Result Summary. The data illustrated the central importance of increasing the availability of affordable housing and addressing challenges related to gentrification and displacement. It also revealed opportunities for making stronger connections among the community, local organizations, and local healthcare institutions to support collaborations and advance initiatives to improve community health. Further, the findings highlighted the need for increased wages and stable employment via local economic development, and emphasized the need to build a sustainable civic infrastructure that can be deployed for public advocacy campaigns in support of the other recommendations.

²⁵ The key findings of the research data were developed during the PAR project’s midterm meeting, hosted by Community Resource Exchange. This meeting involved the high school and college researchers, CCB, IMC, and Kingsbrook representatives.

²⁶ The outreach and turnout strategy for the community briefing also included high school students and their parents. However, this strategy found limited success and CCB, IMC and Kingsbrook intend further outreach activities that target students, parents, and current community and institutional actors (e.g. Community Board meetings, senior centers, resident associations, and community-based organizations).

Recommendations

The community-identified recommendations and accompanying actionable strategies enumerated below call for systems-level changes and are dynamic, attempting to address both social determinants of health and individual-level factors that challenge people's ability to invest in their own health.

Investment in these recommendations has the potential to motivate a transformation in the relationship between Central Brooklyn neighborhoods and the Brooklyn healthcare system. The recommendations are also interconnected and aligned with strategic investments at the State, City, and borough levels. Some opportunities described below can be led by CCB and its partner hospitals, while others require external leadership or leveraging of non-traditional partners for further investment. The recommendations acknowledge the role of health care providers as major Central Brooklyn economic anchors and encourage expanding this role into that of social and community anchors. The community-generated recommendations and strategies begin a discussion, one that recognizes that shifts in organizational culture and partnerships are necessary to unleash an urgently-needed radical shift towards healthy Central Brooklyn neighborhoods.

GENTRIFICATION, NEIGHBORHOOD CHANGE, AND HOUSING AFFORDABILITY

Key PAR Finding: Gentrification, housing affordability, and neighborhood change were overwhelmingly identified as top neighborhood challenges.

Data:

- 60% of stakeholders interviewed during the asset mapping process identified gentrification, neighborhood change, and the housing crisis as a top challenge for neighborhood health.
- Gentrification and displacement were the second most commonly-cited neighborhood challenge, by 29% of survey respondents; housing was separately cited, by 24% of survey respondents, as the sixth most common challenge.
- Almost a quarter of survey respondents reported moving in the past five years and over 40% thought they would likely leave the neighborhood in the next five years. Among those survey respondents who said they would leave, over half said it would be for affordability reasons.

27 Community Resource Exchange hosted this community briefing with over 80 attendees to elicit feedback and identify key recommendations for implementation. The briefing brought together healthcare executives, healthcare workers, and undergraduate student research assistants - however there was limited attendance by non-hospital or ambulatory care affiliated community members.

<p>Recommendation: Make investments in equitable development strategies and the promotion of local housing affordability, which helps maintain racially and culturally diverse neighborhoods, particularly for low-income and impacted residents.</p>	
COMMUNITY-IDENTIFIED RECOMMENDATION	ACTIONABLE STRATEGY
<p>Create a cross-sector collaboration to address housing affordability and availability in Central Brooklyn</p>	<ul style="list-style-type: none"> ● Partner with social services providers, Community Development Corporations (CDC), Community Development Financial Institutions (CDFI) and housing/tenant advocates to co-advance an affordable housing agenda ● Promote new home ownership models including, housing cooperatives, community lands trusts, and nonprofit housing development ● Advocate to increase supply and access to subsidized housing units and programs for renters and owners ● Fund local housing rehabilitation programs and community based organizations to address unhealthy housing conditions (e.g. molds, pests, injury risks) ● Repurpose city and hospital campus parcels for affordable and supportive housing capital projects
<p>Redefine affordable housing metrics to reflect neighborhood specific incomes</p>	<ul style="list-style-type: none"> ● Enable CCB as a decision-maker in the development of local affordability standards that take into account income levels in Central Brooklyn
<p>See Appendix H.1.1 for case studies</p>	

ECONOMIC DEVELOPMENT AND MOBILITY

Key PAR Finding: Many neighborhood residents face income instability and despite working many hours are not making enough to make ends meet. Residents also report receiving limited benefits from their employment.

Data:

- 64% of survey respondents reported being employed (the “not employed” category included students, those caring for family, or who are retired or homemakers), and 65% of employed respondents worked more than 35 hours per week (Bedford Stuyvesant - 69%; Crown Heights - 64%; East Flatbush - 61%).
- Over 60% of survey respondents found it hard or very hard to cover their costs and expenses each month and more than half of respondents were unsure about their income next month.
 - Less than half of survey respondents received health insurance from work; 50% reported having sick leave; 27% received paid time off; 24% received retirement benefits; and only 17% had a savings plan.
 - Over 55% of survey respondents were living in poverty (had income under 100 percent of the Federal Poverty Level, which for a family of four in New York is \$45,500 annually), and nearly one quarter (23%) made less than \$15,000 per year
 - Over 1 in 5 survey respondents felt job training was a top neighborhood challenge

Recommendation: Partner with local institutions, entrepreneurs, and small businesses to generate opportunities that increase employment, entrepreneurship, and local business capacity so as to build community and increase individual income and community wealth for long-term neighborhood residents.

COMMUNITY-IDENTIFIED RECOMMENDATION	ACTIONABLE STRATEGY
Support community-centered research efforts led by youth and young adults (e.g. PAR Summer Research)	<ul style="list-style-type: none"> ● Invest in a permanent space for young adults and community residents to generate knowledge, build career and leadership skills ● Use the PAR research findings and lessons to inform neighborhood, institutional, and non-clinical policies and actions ● Develop communication pathways to inform community using digital and analog/in-person methods of engagement ● Build community awareness and knowledge by disseminating results, findings, and planned interventions to community ● Partner with local high school staff (guidance counselors, career tech teachers, or assistant principals) for recruitment and orientation for PAR research programs

<p>Support the economic prosperity of local (minority, women, and LGBTQ²⁸) owned businesses</p>	<ul style="list-style-type: none"> ● Financially support, and connect with, community- based organizations that provide small businesses with technical assistance and grants, accelerator programs, assistance gaining local-state-federal regulation ● Investigate pathways to reroute hospital procurement to source from equipped local business <ul style="list-style-type: none"> • Support the city and state designation of minority, women, and LGBTQ local business to meet hospital procurement needs • Assessment of hospital procurement supply chain to identify contracts for minority, women, and LGBTQ local business • Work with local chambers of commerce to educate minority, women, and LGBTQ local business on hospital procurement needs
<p>See Appendix H.1.2 for case studies</p>	

²⁸ Though during the various community meetings and forums, the community heavily advocated for the increase and support of local businesses, NextShift has included the language of supporting minority, women, and LGBTQ to enhance the vitality of healthy businesses that reflect the most marginalized groups.

SUSTAINABLE CIVIC INFRASTRUCTURE

Key PAR Finding: Residents feel their neighborhoods lack social cohesion and leaders, and many do not believe that their community can address challenges and create positive change.

Data:

- The stakeholder interview and focus group participants indicated that a strong social infrastructure is important to the future of their communities. They indicated, that a healthy community requires accountability and collaboration from leaders. They also cited the impact of social isolation and the lack of community spaces for both recreation and communal gathering as drivers of poor health.
- 40.4% of survey respondents reported either that there were no leaders, or they did not know whether there were leaders, in their community.
- In Bedford Stuyvesant and Crown heights, nearly 50%, and in East Flatbush nearly 60%, of survey respondents do not believe that people in their neighborhood work together to address challenges.
- More than 50% of survey respondents do not believe they can positively address challenges in their community.
- Over a quarter of Bedford-Stuyvesant residents identified advocates or organizers as leaders, almost twice as many as East Flatbush residents who felt that way.

Recommendation: Create cross-sector collaborations between the healthcare system, philanthropy, policy makers, and community-based organizations to address community identified challenges. Build local organizing capacity and campaigns to support systems level changes in Central Brooklyn. Invest in and partner with community-based organizations already doing the work on the ground.

COMMUNITY-IDENTIFIED RECOMMENDATION	ACTIONABLE STRATEGY
<p>Create a cross-sector collaboration to address top neighborhood challenges in Central Brooklyn</p>	<ul style="list-style-type: none"> ● Invite nontraditional local actors, addressing community organizing, economic development, housing, and community health to join CCB's Community Action and Advocacy Working Group to initiate a joint planning working group ● Use local asset maps to align and expand the ecosystem of partners, stakeholders, and decision-makers ● Develop a multi-year strategic plan, including a joint timeline and work plan that accounts for the sunset of DSRIP funds in 2020. Such a strategy ideally would include policy interventions ranging from shovel-ready to system level, with clear metrics and indicators for potential health impact on individual and neighborhood health
<p>Engage and partner with residents and community-based organizations</p>	<ul style="list-style-type: none"> ● Partner with and/or fund local community-based organizations focused on community organizing, economic development, housing, and community health ● Jointly advocate for Vital Brooklyn funding, initiatives, and activities to prioritize the primary issue areas -- housing, community mobility and economic development, and community organizing-- and for a robust civic infrastructure.

<p>Continue to deepen community engagement efforts on participatory action research</p>	<ul style="list-style-type: none"> ● Disseminate final PAR results using targeted outreach strategies to the community (via community meetings, forums, etc.) • Work with local students to create a neighborhood health newsletter that keeps residents and other stakeholders informed, energized and engaged ● Integrate digital and door-to-door resident communication ● Establish website for publicizing research findings and ongoing DSRIP/ CCB community health impact related activities ● Initiate ongoing neighborhood health and organizing trainings to continue disseminating lessons and best practices for community health
<p>See Appendix H.1.4 for case studies</p>	

HEALTHCARE SYSTEM REDESIGN

Key PAR Finding: Stakeholders felt that there was a lack of community leadership within the healthcare system, yet the healthcare system could demonstrate ways to build community health and wealth by improving leadership, transparency, and coordination with the local communities and prioritizing the wellbeing of healthcare workers

Data:

- Focus group participants and stakeholders interviewed believe that the leadership and staff of local hospitals did not reflect the communities they serve.
- Stakeholders interviewed expressed the desire for healthcare workers to more deeply and visibly engage with the community.
- Across all three neighborhoods, only 6% of survey respondents felt that health professionals were community leaders.

Recommendation: Redesign the Central Brooklyn healthcare system so that hospitals can act as economic and community anchors, to deepen hospital-community relationships and build community wealth and health. Restructuring the healthcare system will include: recognizing the dual identity healthcare workers have as employees and community residents; investing and becoming champions of cross sector partnerships focused on social determinants of health; strengthening hospital executives and healthcare workers' roles as leaders in both building stronger community-hospital relationship and shaping policy decisions about the health of their communities

COMMUNITY-IDENTIFIED RECOMMENDATION	ACTIONABLE STRATEGY
Utilize PAR findings to inform future hospital community benefit plans as well as state and city policy	<ul style="list-style-type: none"> ● Utilize PAR findings to inform Community Health Needs Assessments (CHNA), community benefit planning, and other institutional community engagement initiatives. ● Employ data in shaping community service and implementation plans of IMC and Kingsbrook. ● Prioritize advocacy for Vital Brooklyn funding, initiatives, and activities to advance the primary issue areas: housing, community mobility and economic development, and community organizing
Create employment and educational opportunities in the healthcare system for local residents	<ul style="list-style-type: none"> ● Financially support ongoing efforts to retrain employees at risk of job loss from health system restructuring
Demonstrate commitment to growing community wealth and investing in the health of the hospital community (internal and neighborhood community)	<ul style="list-style-type: none"> ● Commit to ensuring living wage, stable hours, and comprehensive benefits for all hospital employees, especially low-wage workers e.g. janitors, home health aides, and housekeepers ● Expand local health care sector education-to-employment pipelines for youth and young adults by establishing partnerships between health care providers and local high schools and 2 to 4-year colleges to offer career exposure, education, paid internships, apprenticeships, and future employment opportunities ● Establish talent acquisition pipelines with public and private sector employers and job training for local young adults and adults ● Establish incumbent worker job training programs to address institutional workforce development needs, increase community resident wages/benefits, and create entry paths to careers in health

<p>Shift hospital procurement towards local purchasing to generate economic development for Central Brooklyn residents and entrepreneurs</p>	<ul style="list-style-type: none"> ● Identify local businesses with capacity to provide goods and services to participating hospitals ● Support expansion and capacity-building among minority, women, and LGBTQ local businesses to become equipped to provide goods and services
<p>See Appendix H.1.3 for case studies</p>	

CONCLUSION AND DISCUSSION AHEAD

The CCB-initiated PAR process has helped to illuminate how Central Brooklyn residents consider and define their community health, and how residents respond to the day-to-day realities of the healthcare system. It has helped residents articulate a comprehensive vision for wellness-based development that can leverage the power of local institutions both to improve healthcare delivery and address the underlying social and economic causes of poor health.

None of the stakeholders can realize this vision on their own. Systems change requires collaboration across multiple sectors. And there are practical limitations to the role each of the stakeholder groups can play. Hospitals are embedded within a healthcare financing framework that can be overly-prescriptive, and institutional healthcare providers often are unfamiliar with community engagement practices and addressing social needs. Further, funding for healthcare innovation and redesign efforts does not usually align with traditional frameworks for payment, programming, and evaluation. Altogether, these conflicting forces can stymie shifts in organizational culture and institutional and non-clinical policies. Yet under the direction of hospital leadership, hospitals can play a central role as community partners in bringing together stakeholders in neighborhood-specific policy interventions and decision-makers charged with implementing or funding interventions.

On the community side, challenges of social cohesion, along with under-investment and structural and political inequities, make it difficult for communities alone to take action to improve residents' health. Findings from the survey and interviews in this Report indicate substantial variation in residents' confidence in the possibility of community-driven change within and across neighborhoods. But as other data from this study reveals, there is a desire among residents for greater voice and a role in shaping the trajectory of health system transformation -- and residents indicate an understanding that building collective community voice can do just that. Catalyzing greater collective voice will help to build the critical capacity needed to support and generate demand for hospitals and the healthcare system to change.

The solutions proposed in this Report -- resident- and youth-led, place- and neighborhood- based, and centered on people's unique lived experience -- offer a potentially effective direction (Slade and Tamber 2016). Supporting asset-based community health improvement, as proposed in this Report, is a first step. A growing body of literature aimed at guiding partnerships and collaborations between healthcare organizations, community-based organizations, and others to achieve better health outcomes supports this approach. See, e.g. *Fostering Agency to Improve Health* (Tamber and Kelly 2017), *Building Healthy Communities Beyond the Hospital Walls* (Goldman 2014), *From Vision to Action: A Framework and Measures to Mobilize a Culture of Health* (Foundation 2015), *Developing Housing and Health Collaborations* (Spillman et al. 2017), and the January, 2018 issue of *Health Affairs: Culture of Health, Medicare and More*. This literature suggests that many of the existing multi-sector health partnerships recognize the importance of the social determinants of health, but few have taken the risk to truly broaden the scope of the healthcare system to address these upstream factors on a structural level. Further, funding for this type of work is often provided on too short a time-frame for systems change and population health improvement. Instead, community-based health collaborations, and the projects they support need sustainable funding that better reflect the time spans necessary to achieve transformational change (Siegel et al. 2018).

PAR has an important role to play in driving structural health systems change. By investing in experiential learning related to social determinants of health, it helps residents build the capacity to act intentionally to realize their own choices, and, it is hoped, to build residents' confidence that they can come together to make positive changes in their communities (See, Tamber and Kelly 2017; Gordeev and Egan 2015). The PAR projects in Central Brooklyn have already helped to convene a group of multi-sector partners, and can also help create further connections and opportunities for deeper engagement between communities and other health system stakeholders.

To help support future implementation efforts, the Appendix includes case studies of effective healthcare innovations from across the country for each priority action area (see Appendix H). Lastly, below is a planning framework for ongoing and future local healthcare innovation that outlines twelve principles for healthcare executives, providers, and healthcare workers created by the Creating Health Collaborative – an international learning hub of healthcare practitioners focused on the application of asset-based community health improvement (Tamber and Kelly 2017).

The following general principles are included to help support partnerships that work together effectively and maximize impact.²⁹

1. Recruit people who live, work, and play in that community
2. Intentionally build relationships to learn about difference in context, objectives, and power
3. Local history is a starting point to build authentic relationships
4. Invest in agency through responsiveness to neighborhood residents' values and opinions
5. Establish power sharing governance structures
6. Changes happen at the individual, community, institutional, and policy level
7. Repeat, evaluate, change, and act – this is long term work.
8. Failures and unpredictability are part of the process and ultimate success
9. Measure what is important (health and non-health)
10. Develop a space to incubate this work outside of hospital policy and research paradigm
11. Hire personnel with emotional intelligence to navigate the tension in funding and authority including a strong collaborative background
12. Sustainability is not limited to funding, it is also about process, culture, shared storytelling, and relationships

This Report, and the growing body of work on community-led processes and cross-sector collaborations aimed at improving community health, raises key questions for the current New York healthcare system, and Community Care of Brooklyn more specifically. How can healthcare executives and stakeholders manage and overcome the tension over

resource allocation in an inherently political process? Where are the spaces that community organizing and local knowledge can serve as an alternative to conventional expertise? How can policy makers' and funders' support be increased to advance an asset-based approach to improve community health? The answers to these questions are essential to forge the road ahead.

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Collaborators

NextShift Collaborative, LLC (NextShift)

NextShift Collaborative is a mission-driven firm that builds strategic partnerships for generating collective wealth and wellbeing in communities that have been marginalized by traditional economic development. NextShift helps clients develop and implement strategies that enable communities to harness their existing assets and capture the value they create to promote inclusive economic development that is environmentally sustainable, socially just, and deeply democratic.

DuBois Bunche Center for Public Policy, Medgar Evers College, RF CUNY

The DuBois Bunche Center for Public Policy (DBC) and its US Census Information Center (CIC) are renowned urban policy think tanks conducting policy and program research and development in the governmental, non-profit and private sector arenas. Affiliated with Medgar Evers College (MEC) and the Research Foundation of The City University of New York (RF CUNY), DBC played a leadership role in this Participatory Action Research (PAR) project via collaboration with IMC, Kingsbrook and Maimonides Medical Center with grant funds from the New York Community Trust. DBC-MEC provided: a highly trained undergraduate field research team; major in-kind project facilities (classrooms, computer labs, meeting rooms); and overall project leadership via Prof. John Flateau, Ph.D. (Dept. Of Public Admin., School of Business); Prof. Yvonne Graham, MPH, RN, Project Manager; and Prof. Roger Green, DBC Senior Fellow.

New York Community Trust (NYCT)

The New York Community Trust is one of the country's largest community foundations. It has helped charitable individuals, families, and businesses advance their philanthropy since 1924.

Community Care of Brooklyn (CCB)

Community Care of Brooklyn is the largest Performing Provider System (PPS) in Brooklyn under New York State's Delivery System Reform Incentive Payment Program (DSRIP). Comprised of over 1,000 participant organizations, including 70 community-based organizations (CBOs), seven hospitals, 10 Federally Qualified Health Centers (FQHCs), and more than 3,700 clinical providers, including 1,600 primary care providers (PCPs), CCB is responsible for 620,000 Medicaid beneficiaries. Many of CCB's partners focus their efforts in Central Brooklyn, including those that comprise One Brooklyn Health (Brookdale University Hospital Medical Center, Interfaith Medical Center, and Kingsbrook Jewish Medical Center.)

Interfaith Medical Center (IMC)

Interfaith Medical Center is a safety net community hospital dedicated to providing high quality health care services to the residents of Bedford Stuyvesant, Crown Heights, Prospect Heights and surrounding Central and North Brooklyn communities. IMC strives to be an anchor institution that plays a central role in the transformation of the communities it serves and in helping residents live their healthiest lives possible.

Kingsbrook Jewish Medical Center (Kingsbrook)

Kingsbrook's mission is to partner with our culturally-diverse communities to provide a continuum of outstanding healthcare services to individuals and families through a caring and trustworthy staff. Its vision is to be distinguished as a premier hospital and trusted partner that advances the well-being of the individuals, families, and communities they serve.

CCB Community Action and Advocacy Workgroup

CCB's Community Action and Advocacy Workgroup (CAAW) assists with the development and implementation of CCB's community action and advocacy initiatives, including two Participatory Action Research (PAR) projects in East New York and Brownsville, and in Crown Heights, East Flatbush and Bedford Stuyvesant.

People Focused Research: Creating Health In Central Brooklyn

Participatory Action Research in Bedford
Stuyvesant, Crown Heights, and East Flatbush

Appendix

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Appendix A: The Participatory Action Research Process

A.1 Background of PAR

Over the last three decades, a host of practitioners ranging from organizers, change agents, planners, and researchers, have employed the Participatory Action Research (PAR) pedagogical tradition as an instrument to improve health equity, deepen community participation and agency, and catalyze cross-sector collaborations. PAR contributes to understanding the root causes of inequity, and supports sustainable community-generated solutions to these challenges. It upends the role of the expert by elevating the expertise of the community, and decolonizing the structures of social science by democratizing the research design, collection, analysis, and public policy advocacy process -- and valuing experiential and cultural knowledge equally alongside academic and institutional expertise. PAR is a partnership approach to research that equitably involves community members, organizational representatives, and researchers in all aspects of the research project. This means community is involved throughout the research process, from generating the questions asked, to analyzing and publishing the data (see Appendix A.2 for all PAR shared values and goals).

Appendix B. Methods

B.1 Research Tools

The research team used various methods to engage with, and collect data from, the community. Surveys were the primary data collection tool. These were quantitatively analyzed both with the research team, and by NextShift. Additionally, the research team conducted stakeholder interviews and focus groups to complement the quantitative data with narratives and qualitative data, and provide the opportunity to further engage with and involve key community stakeholders in the research process.

B.1.1 Stakeholder Interviews

Stakeholders were defined as local leaders, community based organizations, anchor institutions, or health care providers working to improve health or underlying causes of ill health. The team contacted forty-nine stakeholders, and fifteen interviews were held for a response rate of 30.6%. In these stakeholder interviews, the team aimed to identify stakeholder perceptions of key neighborhood challenges, understand activities stakeholders were currently conducting to address health and determinants of health, and identify where stakeholders felt further work, policies, and interventions were needed.

The stakeholders, neighborhood served, and issue area are listed in Appendix B Table 1.

Appendix B Table 1: Stakeholders

Organization	Neighborhood	Service Areas
Caribbean Women's Health Association	East Flatbush, Brownsville, Bed Stuy	Immigration, Health
Arthur Ashe Institute for Urban Health	Central Brooklyn	Health Education and Advocacy
Brooklyn Plaza Medical Center	Crown Heights, Bedford Stuyvesant, Fort Greene	Health Care
Brooklyn Movement Center	Central Brooklyn	Multi-Issue Organizing
Center for Health Equity	Crown Heights, East Flatbush, Brownsville, Bedford Stuyvesant	Health Equity
Bedford Stuyvesant Family Health Center	Bedford Stuyvesant	Health Care
Brooklyn Anti-Gentrification Network	Sunset Park, Fort Greene, Bedford Stuyvesant, Crown Heights, Bushwick, Flatbush (Central Brooklyn)	Gentrification, Immigrations
Bedford Stuyvesant Restoration Corporation	Bedford Stuyvesant	Economic Self-Sufficiency
New York State Nurses Association	Brooklyn, Queens, Staten Island, New Jersey	Health Care
DuBois-Bunche Center at Medgar Evers College	N/A	Public Policy, Research
Kingsbrook Jewish Medical Center	East Flatbush	Health Care
Northeast Brooklyn Housing Corporation	Bedford Stuyvesant, Ocean Hill, Brownsville, East New York, Crown Heights (also, Bronx, Queens, Far Rockaway)	Housing, Food Justice, Youth Development
1199 SEIU United Healthcare Workers East	Brooklyn	Health Care
596 Acres	Manhattan, Brooklyn	Environmental Justice, Community Organizing
Interfaith Medical Center	Bedford Stuyvesant, Crown Heights	Health Care

B.1.2 Focus Groups

The focus groups were used as a tool to provide more detailed information on topics that were not specifically addressed in the survey, or where the research team wanted to include the voices of specific populations. Through collaborative discussions with stakeholders, the research team identified the focus of the four focus groups: seniors in East Flatbush, young adults, health care workers, and women. During each focus group, the topics and questions were tailored to each population, though some questions, for example, people's personal definition of health, were asked across all focus groups. The planning for each focus group required specialized outreach to identified community partners and organizations.

B.1.3 Survey

The development of the survey is detailed in the body of the main report.

B.2. Sampling Plan

Primary sampling unit: Sampling locations were informed by hospital service areas, as defined by neighborhoods (Crown Heights, East Flatbush, and Bedford Stuyvesant). These neighborhoods correspond with the United Hospital Fund neighborhoods of East Flatbush (population 308,108) and Bedford-Stuyvesant and Crown Heights (population 313,549).

Strata: The research team focused on 14 priority zip codes, with additional sampling from other zip codes located in the three neighborhoods. We only included the portion of the sampled zip codes that extended to the boundaries of the neighborhoods.

Sampling Strategy: The target sample for each neighborhood was approximately 333 surveys, or one third of the goal survey number. The surveying was broken up by zip code so that the intended number of surveys collected per zip code was in proportion to the size of the population in each zip code.

Appendix B Table 2 shows the target neighborhoods and zip codes, number of surveys intended to be collected by zip code, according to the sampling plan, and final number of surveys collected per zip code.

Appendix B Table 2: Final Sampling Statistics

Neighborhood	Zip code	Number of Surveys per Zip (Intended)	Final Numbers (Results)
Crown Heights	11225	106	120
	11213	118	130
	11238	44	32
	11216	41	24
	11233	25	38
Bedford-Stuyvesant	11216	88	122
	11221	110	60
	11233	60	36
	11206	75	54
East Flatbush	11226	54	93
	11210	103	72
	11203	120	74
	11212	32	47

B.2.1. Data Check and Cleaning

After surveys were collected, the respondent data was entered into a spreadsheet by the research team.

The research team manually checked outliers in the data, and conducted a random spot check of 50 surveys. Across the sampled surveys, there was an average data entry mistake rate of 0.6 errors per survey, indicating that for most surveys, less than 1 error was made in the data entry process. After the data was checked, the research team conducted an exhaustive data cleaning process, hand coding to ensure correct spelling, data type, and new variable creation based on combinations of variables.

B.3. Analysis

B.3.1. Collaborative Analysis

During the final week of the research project the team undertook a collaborative data analysis process. The team was presented with preliminary descriptive data, and based on the data, identified topics of specific importance and interest for further analysis. They additionally developed hypotheses about potential relationships in the data, based on their knowledge of these phenomena in the study neighborhoods.

B.3.2. Survey Analysis

The final analysis was conducted on 1,026 complete surveys, collected over the two and one half weeks of data collection. We calculated descriptive statistics for key characteristics of the study sample. For most data, we calculated the percent of respondents in the category for the total sample and for each neighborhood. For most data, we calculated 95% confidence intervals for the full sample and each neighborhood, and inferred a significant difference between neighborhoods if ranges did not overlap. This is a conservative measure of statistical difference. We used this analytic strategy because it is employed in the Department of Health and Mental Hygiene (DOHMH) Community health profiles, allowing better comparison of significant results across previously published secondary data reports. In the report, when differences are discussed by neighborhood, only significant differences are mentioned, otherwise statistics are reported for the full sample.

Relationships (associations) between variables in the dataset were analyzed with a chi-square, Fisher's exact, or independent samples t test. For ordinal variables, ordinal logistic regression was used. Significance was inferred for estimates with a 95% confidence interval and $P < 0.05$.

B.3.3. Focus Group and Stakeholder Interview Analysis (Qualitative Data)

The qualitative data were analyzed separately. To analyze stakeholder interview notes, questions from the survey tool and corresponding answers were organized in a spreadsheet to extract emerging themes that appropriately summarized the outcomes of the interviews. During analysis, the team connected the stakeholder's described areas of work to the five determinants of health which guided the research process. The stakeholder's answers to defining the top neighborhood challenges were also categorized. The responses revealed how expansive areas of challenges in the neighborhood are and offered up nuanced understandings of neighborhood perspectives.

The focus group response notes were organized and analyzed similarly. After first organizing the notes by question (some pre-developed and some that emerged during the focus groups), themes were traced across each focus groups' notes to identify dominating topics of discussion. Additionally, recommendations on how to improve community health in Brooklyn were pulled out to be used when determining research recommendations.

B.3.4. Qualitative and Quantitative Data Triangulation (Synthesis Across Data Collection Tools)

We first analyzed the qualitative (focus groups and stakeholder interviews) and quantitative (survey) components separately. And then, in order to create a more complete picture of our results, triangulated the two data components for one of the key themes that emerged in the analysis, by adapting the "follow the thread" method proposed by Moran-Ellis et al. (2006) for

the analysis of mixed methods research¹. We conducted the analysis in the following way: after identifying key themes and questions requiring further exploration in each of the data components, we selected a key theme, “neighborhood challenges”, and followed it from the quantitative component to the qualitative. In our analysis, we considered where there was agreement, complementary information, or contradictions between the quantitative and qualitative research components. This analysis can be found in the findings section under the Synthesis of Research Tools Findings.

B.4. Data

Data comes from the sources listed below. We used the most updated year of data available whenever possible. When not available, we reported data at the community district or zip code level. Crown Heights is split between Community District 8 and 9; North Crown Heights is combined with Prospect Heights and Weeksville in Community District 8 and South Crown Heights is combined with Lefferts Garden and Wingate in Community District 9.

U.S. Census/American Community Survey(ACS): data on overall population, age, race and ethnicity, poverty, income, rent burden, language, and foreign born population

NYC DOHMH Vital Statistics: indicators on birth and death, including infant mortality, premature mortality and life expectancy, teen pregnancy

NYC DOHMH Community Health Survey (CHS): Incarceration data, supermarket square feet, health metrics on asthma, hospitalizations, life expectancy. All health indicators are age adjusted.

Furman Center: indicators for gentrification, rent increases, in-moves, development, transport to work, foreclosure rates, affordable housing availability, park access, crime, and incarceration.

City and State Comptroller: Data on business opening and closings, employment statistics, demographic change, and crime.

¹ Moran-Ellis J, Alexander VD, Cronin A, Dickinson M, Fielding J, Sleney J, et al. Triangulation and integration: processes, claims and implications. *Qualitative Research* 2006;6:45-59)

Appendix C. PAR Project Evaluation

C.1. PAR Evaluation Process

To evaluate effectiveness of the six-week PAR camp and to make improvements for future PAR implementation efforts, we conducted an evaluation with high school students, undergraduate students, graduate students, and the internal consultant team.

To evaluate the PAR process with the high school students, we used a participatory evaluation tool called the Socratic wheel. Students defined the areas of evaluation, rated their personal and project work areas (project goals, individual skills, leadership styles, products, activities, etc.) on a scale from 1 to 5 (strongly disagree to strongly agree), and reflected in small groups about challenges and possible solutions to these challenges.

With the undergraduate and graduate researchers, NextShift hosted evaluation meetings using a Strength, Weakness, Opportunities, Threats (SWOT) analysis framework. The tables below present a summary of key takeaways, areas of evaluation, evaluation tool summary, rating, and observation notes where applicable. It is our hope that this motivates local stakeholders to continue to explore alternatives for continuous improvement of PAR processes that lead to a healthier Central Brooklyn.

C.2. PAR Evaluation Results

Appendix C Table 1 - Socratic Wheel High School Evaluation

Dashboard	Mid-Point Avg. Total	End Point Avg. Total	Mid-Point Avg. Total	End Point Avg. Total
Socratic Wheel of Evaluation	Personal		Project	
Total Participants	24	29	30	29
Training and research design was exciting	3.63	3.72	3.69	3.93
I participated enough within my team	4.50	4.41	3.90	4.31
I arrive to work on time and have been fully present	4.54	4.52	3.33	4.28
I am excited about field work	3.46	3.79	3.67	4.55
I performed my role well	4.42	4.31	3.67	4.38
I've gained new perspectives and skills	4.00	4.38	3.87	4.41
I have contributed new and innovative ideas	4.04	4.55	3.37	4.17
I am clear about my roles and responsibilities	4.71	4.55	3.80	3.93
Overall Average Total	4.16	4.28	4.16	4.25

Appendix C Table 2 - PAR Evaluation Notes

Evaluation categories	Observation Notes
Successes of PAR	<ul style="list-style-type: none"> • The main success of this iteration of PAR is the integrated communications established between both Principal Investigators, IMC, Kingsbrook, and the NextShift team before the launch of PAR. It established regular communication channels across each main partner, better preparing us to implement and troubleshoot programmatic and administrative challenges related to the PAR II project work plan. The collaboration of project partners has been key in reaching project milestones. • The mission and the PAR approach has been very motivating for all participants. As a new approach for many of the researchers, PAR was identified by many as an opportunity to be more exposed to and apply various research methods and to analyze the conditions of their own communities differently.

	<p>Overall, the community researchers have consistently inspired and encouraged us by their tenacity, insight, and deep comprehension of structural and institutional inequities.</p> <ul style="list-style-type: none"> • Graduate students built strong communication and trust channels with the undergraduate students, increasing graduate students' comfort level with giving the college team primary responsibility for leading survey collection and data entry. • The WEB team collected over 1,041 surveys from respondents in the target zip codes, conducted 14 stakeholder interviews, and 4 focus groups.
<p>Challenges of PAR</p>	<ul style="list-style-type: none"> • The lack of consistent work space impacted productivity and morale. The solution - or lack thereof - was to have team members work from home, coffee shops, Medgar Evers, and IMC. For the future, a local office and staffing would support this work in a more consistent and comprehensive fashion. • For the first few weeks of training, the high school students felt confused about their roles in the research process and their ability to affect change through the PAR process. The Nextshift and Graduate team revisited the project goals, proposed research process, and PAR theory with the high school team, provided case studies of successful PAR projects, and led several team building and empowerment exercises to demonstrate utility of PAR process and enforce knowledge of power within the research team. • Several students accepted researcher positions and then committed to external obligations during PAR hours, creating attendance challenges. We collaboratively established an attendance policy and created alternative schedules for some students, allowing the students to continue contributing to the project while also partaking in opportunities beneficial to their career and academic trajectories. • Getting the team excited and confident about doing field work had been an ongoing challenge. More pep talks and energizers to start the day are required to keep the team motivated for the day.
<p>Key Lessons Learned</p>	<ul style="list-style-type: none"> • The next iteration of the PAR curriculum should include environmental justice modules to better inspire and

	<p>educate participants on social determinants of health related to the environment, energy, and economic development.</p> <ul style="list-style-type: none"> • The Train-the-Trainer effort should focus more on preparation, planning, roles, and facilitation skills development, youth development, and organizational development for the NextShift SDOH curriculum. • PAR should include modules for skill development (e.g. script 101, role plays, simulations) related to survey outreach to better prepare students for fieldwork. • PAR is an approach or framework and not a methodology; therefore, we must acknowledge its limitations in practice and discuss more openly the role that traditional research and organizational development play in an asset-based approach to community health • Being prepared for the administration of a young adult program is essential for managing expectations, maintaining morale, and improving the overall student experience. • Due to the size of the group, there often were times when the different groups within the research team were learning at a different pace. This made engagement across the group more difficult than expected. The team realized that curriculum needed to include reflection questions and community building exercises in small groups, to account for variation in the pace of learning across the large group. • Having to balance intensive collaborative research while engaging in meaningful and exciting process has been challenging.
<p>Additional Recommendations</p>	<ul style="list-style-type: none"> • Add additional days to PAR to allow for more prep and role play to go out into field. • It is critical that the hiring of the PAR team is coordinated with and through a CBO (community based organization), outside third-party payment validator or that hospital based current summer youth job programs (e.g., The Private Industry Council - The PIC) are replicated. • The direct participation of health care providers is essential to the survey design and focus groups to fine tune the quality and relevance of questions. • The PAR high school team should be limited to 20

	<p>students.</p> <ul style="list-style-type: none">• Given the hiring requirements of the healthcare industry and the age group of young adults (16 - 24), it is critical for the future that students begin the hiring process three months from the expected start date of PAR. A hiring manual specific to PAR should also be created to help prepare partners.
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Appendix D: Research Themes

Appendix D. Table 1: Research themes as defined by the research team

The high school researchers developed the following research theme definitions, with guidance and facilitation from the undergraduate and graduate researchers. The team wanted the survey to take 15-20 minutes to complete, so the final survey did not include all the themes and specific interest areas outlined below. Given the length constraint, the team prioritized inclusion of interest areas that were explored in multiple themes.

Community and Belonging: Community and Belonging was identified as a research theme that has connections across all categories of Vital Brooklyn. A focus on building social cohesion across funding categories would help to ensure grassroots involvement. The team included this research theme because they recognized the importance of social health, a theme explored in the first iteration of PAR. Exploring the concept of community and belonging meant creating or maintaining a comfortable environment, having a communal and individualized stake in the place one lives, and ensuring the “freedom to be.”. The research team believes that emphasizing community belonging ensures healthy community development, increases personal development, builds community connections and pride, and supports the maintenance of long-term and deeply connected residents.

Environmental Justice: The connection to the physical environment and its impact on the three communities was an important, though difficult, area for the research team to explore. Though this theme could apply to many areas of inquiry, the team defined environmental justice as an equal distribution of environmental benefits and burdens that improve quality of life, raise awareness, and address disparities. The environmental justice theme was intended to make connections between the Resiliency, Healthy Foods, and Open Space and Recreation categories of the Vital Brooklyn Plan. The team ultimately decided to focus on food justice, unjust exposures and impact, public transportation, and the green economy.

Economic Justice: The theme of economic justice in this research became an intentional opportunity to connect community health and community wealth. The Economic Justice research theme aligns with the Economic Empowerment and Job Creation and Community Based Healthcare categories of the Vital Brooklyn plan, though connections to community opportunities were made beyond these categories. The team centered their discussions and research priorities on building and upholding generational wealth, the fair distribution of wealth, the impact of cost of living, and opportunities for training and development.

Housing and Neighborhood Resources: This research theme was designed in an attempt to

connect with the Community-Based Violence Prevention, Healthy Food, and Affordable Housing categories of investment in the Vital Brooklyn plan. Much of the research team's lived experience was incorporated in building out research priorities for this theme, including identifying which community conditions impact the availability of resources within the three neighborhoods. Gentrification, affordability, crime, and healthy foods were amongst the top identified priorities, and provided linkages between many of the additional research themes.

Youth and Families: The Youth and Family research theme was designed to align with the Comprehensive Education and Youth Development, Open Space and Recreation, and Community-Based Violence Prevention funding areas of the Vital Brooklyn plan. Within this research theme, the researchers found opportunities to explore nuances of residents' social health within the three neighborhoods. From the personal and interpersonal aspects of relationships between family members and household companions, to the ways in which the community seeks self-determination and holds established leaders accountable to their jobs in building healthier, equitable futures, this working group aimed to highlight ways in which these social systems could be improved.

D.2 Research Team's Sub-Theme

D.2.1 Youth and Families

Family Composition. The researchers were interested in understanding how family composition, and responsibilities or burdens connected to family composition, can relate to health outcomes. Constructs of interest included the impacts of the number of dependents individuals have (whether within or outside of the household) the type of services available for families, the availability of healthy and affordable food systems, and familial coping mechanisms.

Community Outreach. The researchers were interested in understanding how communities developed their own awareness. Access to information and services were main areas of inquiry, particularly how and from whom residents receive credible information about things that directly impact them.

Dynamics and Bonds. The researchers wanted to have an understanding of how family and love were defined by the community, what the community support systems looked like, and what barriers to family bonding existed.

Gentrification. The researchers were interested in understanding community mobility, potential changes in access to resources, and changes in cost of food as the neighborhood changes.

Youth Perspective. In particular, the researchers wanted to be sure they were able to get direct perspectives from youth between 18 and 24. Specific constructs they wanted to focus on included pressures, self care practices, and support systems. This perspective was the center of the young adult focus group.

D.2.2 Housing + Neighborhood Resources

Affordability. The team wanted to understand the availability, impact, and perception of homeless services in the neighborhoods, the impact of rent and mortgage costs, and the impact of the cost of housing on the decision, forced or intentional, to move.

Gentrification. The research team was interested in the impact of gentrification on potential displacement of neighborhood businesses and how the change in demographics is affecting residents' sense of belonging.

Housing Conditions. The research team was interested in understanding the differences between homeowners and renters, the prevalence of landlord neglect (i.e. dealing with dysfunctional utilities, utilities being cut off, or landlord not being available), the extent to which residents take responsibility for maintaining their own buildings, and an understanding of the conditions within the homes of respondents.

Transportation. Researchers wanted to have an understanding of resident perspectives on the quality of transit, proximity to transit, and commute time trends.

Schools. Researchers wanted to get an understanding of perceived quality of educational institutions in the communities.

Community Cohesion. Researchers wanted to understand if residents were attending any of the community-based events in their neighborhoods and how they became aware of such events.

Healthy Food. Researchers wanted to get a sense of the accessibility of fast foods versus locally-grown foods, assess whether residents were satisfied with the quality of available

produce in the neighborhood, where residents mostly purchase their foods, and whether farmers markets are accessible or actively used..

Open Space. Researchers were interested in understanding the quality and quantity of parks, whether residents actively use parks and whether park environmental systems, such as drainage, are effective.

Crime and Safety. The researchers wanted to assess residents perceptions of safety in walking in their neighborhoods during the day and night; if they were exposed to gun violence; their relationship with the police and if they perceived the police to have concern for, and protect, the community. Additionally, they were interested in whether families felt their neighborhoods were safe enough for children to play outside.

D.2.3 Community and Belonging

Safety. Researchers wanted to understand how safe people feel in their community and whether there was a perceived difference in perception of the safety of public places in the daytime versus at night.

Belonging. Researchers wanted to know what makes the residents of Bedford Stuyvesant, Crown Heights, and East Flatbush feel like they belong in their community.

Gentrification. The research team wanted to know if residents were seeing gentrification occur in their neighborhoods, and if so, how residents understood the process. Researchers also wanted to learn about community responses to gentrification: how do they cope with the impacts of gentrification and what would make them fight against gentrification related changes in their community?

D.2.4 Environmental Justice

Food Justice. Researchers wanted to discover factors contributing to communities' limited options for healthy food. The researchers also wanted to understand the ways in which local food is produced, and opportunities for increasing affordable and healthy foods that reflect community preferences.

Food Production. Researchers wanted to understand the impact of mass food production on communities' physical health and the impact such production has on the communities' physical environment. Additionally, the researchers wanted to discover the impact of targeted

advertising on the community and to understand the placement of harmful or unhealthy products in their communities.

Recycling and Sanitation. Researchers wanted to know about the impact of waste on communities and to discover ways to encourage residents to be mindful of the environment and the financial impact sustainability has on residents' finances.

Environmental Injustice. Researchers sought to understand the impact of exposure to environmental hazards and pollution, and the high volume of factories and major industries on residents' health.. Researchers were also interested in role of public transportation and the green economy and ways in which transportation can be used to better connect residents to green jobs.

Community Justice: Researchers wanted to understand the prevalence of vacant lots, opportunities to develop more safe spaces, ways to build community knowledge in uncovering the purpose of new building projects, the threat of crime and its influence on the community, and the ways in which community members interact with one another.

D.2.5. Economic Justice

Re-circulation of money within the community. Researchers were interested in job training and workforce development opportunities, education opportunities, economic literacy, wage levels, and the persistence -- or lack thereof -- of generational wealth.

Equity and access. Researchers were interested in the quality of opportunities to generate and increase the fairness of wealth distribution, access to resources and wealth, and efforts to tackle labor exploitation (immigrants and undocumented workers), and also to generate better employment opportunities.

Cost of Living. Researchers were interested in the impact of rent burden, the number of overworked households, and the impact residents' limited access to health care services has on health.

Appendix E. Focus Group Findings

Appendix E Table 1: Focus group topics and populations

Seniors in East Flatbush	Health Care Workers
<p>The Seniors in the East Flatbush focus group thematic discussion topics were developed following conversations with the Kingsbrook partners. As a key demographic for the hospital, the researchers wanted to ensure that that there was narrative, to complement the quantitative data, from this demographic, particularly of those from East Flatbush. The topic of this focus groups was about available resources and challenges related to gentrification, aging in place, and housing access.</p>	<p>The Health Care Workers focus group aimed to capture the unique experiences and perspectives of healthcare workers who both live and work in the three study neighborhoods, as these resident-employees serve a dual-identify and are integral to health care systems transformation in the study neighborhoods. The focus group topic was participants’ professional experiences working in healthcare, challenges in the workplace, the experiences and knowledge participants have as both residents and employees of their communities, and information about care provider service gaps.</p>
Young Adults	Women
<p>The young adult focus group aimed to capture information from youth between the ages of eighteen and twenty-four. Interfaith Medical Center was interested in this population because their previous CHNA included only a small number of youth, and they felt a better understanding of needs in this population was necessary. The focus group topic was experiences with networks of support and coping mechanisms when facing mental and emotional stressors, social cohesion and community-connectivity, and access to resources and services.</p>	<p>Per the NYCT deliverables, the main goal of the focus group was to collect narratives from women that can later be connected to the identified priorities, including women’s health (particularly diabetes and heart disease), assess available health and social services, and identify service gaps. The Women’s focus group was aimed to assess women residents’ understanding of the contributors to health in their community, assess access and quality of programs, and have an open ended discussion on neighborhood challenges and leadership.</p>

Appendix F Asset Map Organizational Chart

Organization	Action	Theme	Neighborhood
Arthur Ashe Institute for Urban Health	Raise The Age, Teens Helping Each Other (THEO)	Neighborhood and Housing Resources	New York City
Bedford Stuyvesant Family Health Center	Diabetes Recognition Locatio, Healthy Families, Successful Start	Neighborhood and Housing Resources, Youth and Families	Bedford Stuyvesant
Bedford Stuyvesant Restoration Corporation	Workforce Development, Farm-to-Institution, Food Venture Entrepreneurship Development, Job Training, Smoke-free Housing / Environment, Play Spaces in Low Income Housing	Economic Justice, Neighborhood Resources	Bedford Stuyvesant
Brooklyn Chamber of Commerce, Office of Economic Development	Economic Development	Economic Justice	Brooklyn
Begin Again	Warrant Clearances	Economic Justice	Brooklyn
BRIDGE Street	Housing Development, Home Ownership Services	Neighborhood and Housing Resources, Economic Justice	Bedford Stuyvesant
Brooklyn Anti-Gentrification Network	Public Housing Organizing	Community and Belonging	Brooklyn
Brooklyn Center for the Independence of the Disabled	Disabled Services	Community and Belonging	Brooklyn
Brooklyn Grandparents Coalition	Support for Grandparents raising grandchildren	Youth and Families	Brooklyn
Brooklyn Movement Center	ConEd Accountability Campaign, Alternative Energy, Food Sovereignty, Anti-Patriarchy Collective Addressing Street Harassment, Crown Heights Cop Watch, Parent Organizing	Neighborhood and Housing Resources	Central Brooklyn

Organization	Action	Theme	Neighborhood
Brooklyn Perinatal Network	Perinatal Health	Neighborhood and Housing Resources	Bedford Stuyvesant, Brownsville
Brownsville Multi-Service Center	Tenant Organizing	Neighborhood and Housing Resources	Brownsville
Brownsville Recreation Center	Exercise and Nutrition for parents	Youth and Families	Brownsville
CAMBA	Business Development, Healthcare, Advocacy, Social and Economic Development, Housing	Economic Justice	East Flatbush, Brownsville, Rockaways
Caribbean Women's Health Association	Immigrant Services, Healthcare, and Advocacy	Neighborhood and Housing Resources	East Flatbush
Center for Health Equity	Neighborhood Health Action Center	Neighborhood and Housing Resources	Bedford Stuyvesant, Brownsville
Center for Healthy Neighborhoods	All for One	Neighborhood and Housing Resources	Bedford Stuyvesant
Community Counseling and Mediation	Community support programs	Neighborhood and Housing Resources	Crown Heights, East Flatbush (Also, Manhattan + greater Brooklyn)
Crown Heights Tenants Union	Tenant Organizing	Community and Belonging	Crown Heights
Democratic Socialists-America	Bedford-Union Armory Protest	Community and Belonging	Crown Heights
Drive Change	Incarceration Workshops	Economic Justice	Brooklyn
The DuBois-Bunche Center	Vital Brooklyn	Neighborhood and Housing Resources	Central Brooklyn
Equality for Flatbush	Affordable Housing and Anti-Gentrification Organizing	Neighborhood and Housing Resources	East Flatbush, Flatbush
Families United for Racial and Economic Equality	Racial Justice work	Economic Justice	Brooklyn

Organization	Action	Theme	Neighborhood
Academy for Health Careers	Accelerated Degree Program for Students	Economic Justice	Crown Heights
Housing Works	Housing persons with for HIV/AIDS	Neighborhood and Housing Resources	Brooklyn
Ifetayo Cultural Arts Academy	Arts and Culture / Adult and Financial Education / Youth Development	Community and Belonging	Brooklyn
Kings/ Queens Against Violence	Anti-Violence	Youth and Families	Crown Heights, East Flatbush (Brooklyn Focused)
Kingsbrook Jewish Medical Center	Senior Support, Career Pathways for College Students	Community and Belonging	East Flatbush
WBC Tilden Senior Center	Senior Support	Community and Belonging	Brownsville
St. Augustine's Senior Center	Senior Support	Community and Belonging	Brooklyn
Make the Road	Civil Rights, Health Promotion, Worker Justice, Public Education, Youth Empowerment, Housing	Community and Belonging	Bushwick
Northeast Brooklyn Housing Development Corporation	Workforce Development, Feast Food Environmental Education	Economic Justice	Brooklyn
Repair the World	Activist Space	Community and Belonging	Crown Heights
Restoration Plaza	Educational Events and Programming	Youth and Families	Bedford Stuyvesant, Crown Heights
South Crown Heights Mediation Center - Save Our Streets	Conflict Resolution	Neighborhood and Housing Resources	Crown Heights
Third Roots Community Health Center	Community Health Center	Neighborhood and Housing Resources	East Flatbush

Appendix G Stakeholder Interview Tool

Brooklyn Community Health Key Stakeholder Interview Guide

During the asset-mapping phase of the Central Brooklyn Community Health project, the Key Stakeholder interviews served to: explore stakeholders' vision for community health improvement; identify assets within the study areas; collect ideas on possible medical and nonmedical interventions to explore during the broader community engagement phase; expand the key stakeholder list; and identify community residents to co-design and participate in wider-scale participatory action research. The stakeholder interview tool is included below.

Notes for the interviewer

This guide is divided into five sections:

- Introductory Comments for Interview Subject (2 minutes)
- Background Questions (15 - 20 minutes)
- Asset Questions (30 minutes)
- Asset Follow-up Questions (10 minutes)
- Suggested Next Steps Questions (5 minutes)

All required prompts **will appear in bold and be preceded by the question number**.

Introductory/Contextual comments for your interview subject *will appear in italics*.

All optional prompts that can be used to jumpstart the conversation, if needed, will appear in grey text below the main prompt.

Introductory Comments

Thank you for taking the time to speak with us. This conversation should take about an hour and we will be spending most of our time getting your perspective on the local healthcare ecosystem and working to understand some of the assets in the community, which could be used to improve community health. Our expectation is that this conversation will contribute to developing a comprehensive understanding of where efforts is currently being focused on improving community health and where there is potential to do more.

Background Questions (15 minutes)

- 1) What are the most important questions to address to create and sustain community health in Brownsville and East New York?
 - a) Who else in the community or within the city at large is asking these questions?
 - b) How is your organization beginning to address these questions with its work?
 - c) What are the big challenges you face in meeting your objectives? How have you tried to overcome them?
 - d) How will residents start to think about their health differently in the coming years if the questions that you've brought up get addressed? Do you think this has already started to happen?

Asset-Mapping (30 minutes)

*The next few questions focus on identifying strengths and resources of your community that support the emergence of solutions, which we call assets. Assets will be sorted and rendered on a map that will more readily inform how to improve overall health in East NY or Brownsville. It's easy to get stuck approaching problems from a "needs" framework, and we want to start by focusing on how to leverage current community assets. Assets can be mobilized to produce economic, social, and political value for those who live, work, and play to control it and can be leveraged to meet different needs. It could be an institution, a business, infrastructure or the capacities of local residents. We're going to ask you to brainstorm with us about six categories of assets that we believe are relevant to building community health here in Brooklyn: **Human Capital, Physical, Financial, Institutional, Culture + Identity**, and Political. Not all assets fit neatly into one category, so don't worry about that. These are just different ways to think about all the different pieces of the community that we can work with and leverage moving forward to build a strong foundation for the future of community health here.*

The first category of assets are "human," by which we mean knowledge or skills that might contribute to keeping the community healthy and/or addressing some of the societal determinants of health. (Examples of this would be anything from the knowledge of how to encourage healthy eating habits among ethnically-diverse groups of residents, to the necessary background to help community members avoid some of the typical obstacles that prevent them from living healthy lifestyles, to being excellent at organizing youth.)

2) Human Assets: Can you think of different types of knowledge and skills present in the community that you would consider to be an asset when it comes to building community health?

Optional prompts:

- What skills (professional or otherwise) or types of knowledge (ie understanding of neighborhood culture) enable people to contribute effectively to keeping the community healthy?
- What different types of knowledge and skills might local residents have that could be engaged in addressing some of the social determinants of health?
- What conditions in the community would need to change in order for more residents to live healthier? What skills and knowledge might provide unique insight about these conditions?
- What knowledge and skills would be important for addressing the conditions causing people to struggle to maintain healthy lifestyles, recover from illness, and self-manage chronic conditions?

The second category is the neighborhood's physical assets. These include infrastructure, buildings, green space, transportation infrastructure that contribute to the health of the community. Examples could be bike lanes, existing neighborhood parks, rec centers, or vacant spaces that are underutilized but could be used for a purpose that supports access to healthy food or physical activity.

3) Physical Assets: Can you think of physical locations in the community that you would consider to be assets?

Optional prompts:

- How are organizations or groups taking advantage of these locations to create programming for the community?
- Are any of these locations underutilized? Is the lack of utilization due to inadequacy or inaccessibility of the facilities, lack of capacity on the part of groups in the community to create programs, bureaucratic barriers, funding challenges, etc.?

Financial assets are an important category due to their potential to create local wealth and ownership. We're interested in local supply chain capital in East NY or Brownsville, such as investments from the private or public sector, grants, or local businesses, with a particular focus on those that have the potential to create local wealth and ownership.

4) What are some of the financial assets in East New York and Brownsville?

Optional prompt:

- Can you think of opportunities that exist locally to build community wealth...
 - ...through higher-paying jobs? What kind?
 - ...through creation of new homegrown businesses?
 - ...through building resident ownership in local assets?

Let's shift our focus to some of the area's institutions. The institutional assets we're interested in here are relationships, organizations and coalitions that have and create the capacity to lead innovative community health transformation efforts. Examples would be tenant groups, faith-based organizations, neighbors organizing to utilize vacant space, or businesses that have taken an interest in making investments in the community's health.

5) Which institutions are important assets for the East New York and Brownsville communities?

Optional prompts:

- What are the programs/efforts that are doing the most to benefit community health? What are they doing well?
- What characterizes the leadership of the institutions? What makes them able/capable in your mind?
- What does good leadership look like in this community?

Culture and Identity is something we also treat as an asset and we're trying to understand elements of the neighborhood's culture, norms, and identity that form the lens through which people understand their own health and the health of the community as a whole. Examples include different ways of healing and being well, to different strategies of building community cohesion through arts and culture.

6) Which elements of the different identities and cultures present in the community would you consider to be assets?

Finally, political capital is the ability to influence the distribution of resources in a way that contributes to the well-being of the community as a whole. Here, we're interested in how, and which, individuals/organizations are able to organize efforts to generate funding, infrastructure, and other types of resources that support local economic growth, and community health and prosperity.

7) Can you think of political capital or current political efforts in the community that you would consider to be an asset?

Optional prompt:

- Which individuals are doing the most to focus the attention of politicians and policymakers on bringing resources into the community to promote healthy living? What are they doing right?

Asset Follow-Up Questions (10 minutes)

- 8) Do you have thoughts about how you might leverage the assets you identified to build community health?**
- a) **Who would you need to have on board to do so? (both in terms of approval and collaboration)**
 - b) **Are there other assets that should be developed?**

Next Steps (10 minutes)

I want to thank you again for being open to talking to us. A couple of final questions:

- 9) Could you name a few other individuals or organizations that you would recommend we talk to in order to get a fuller picture of the health needs of this community?**
- 10) We also wanted to reach out to groups of residents to conduct surveys and get a sense of their health priorities. Would you be able to provide an address list of some sort or point us in the direction of a civic/tenant group we could coordinate with to administer a community survey?**
- 11) Do you have any questions for us?**

Appendix H Case Studies

Appendix H.1.1 Gentrification, Neighborhood Change, and Housing Affordability Case Studies

Case Studies:

- First Homes (Rochester, Minnesota) is a local community land trust and community engagement initiative (Heritage Homes), where the Mayo Clinic and the Rochester Foundation (RAF) serve as the main donors. Established in 2001 as a non-profit subsidiary of RAF, this effort has led to the creation of a private-public partnership and resulted in the creation of 1,050 rental units and single-family homes for low- to moderate-income residents (Maxfield Research, Inc), located across eleven towns in the Greater Rochester Area (southeastern Minnesota). The initiative is currently planning to build an additional 400 affordable homes.
- Housing Saves Health Care Dollars (Los Angeles, California) is a city-wide and cross-agency partnership led by Housing for Health, a division of LA County's Department of Health Service (DHS). The partnership provides wrap-around case management support and permanent housing, as well as transitional and rehabilitation housing, for the general population and the chronically homeless. The program is focused on improving overall population health by reducing homelessness, emergency department visits, and inpatient care. Established in 2012, the program is supported by a shared funding model that includes DHS, the Conrad Hilton Foundation, LA County, and hospital allocations, as well as local, state, and federal housing subsidies and programs. A recent evaluation of the initiative found that participation in the program was associated with a 20 percent net decline in costs, as well as reductions in emergency room visits, inpatient care, and use of public services overall (e.g. emergency shelter, substance abuse, or probation) (Hunter et. Al 2017), and participants mental health improved after received housing.
- Gundersen Lutheran Health System (La Crosse, Wisconsin), is a regional physician-led nonprofit healthcare system that employs 6,000 people, serves urban and rural patients, and has annual revenues of \$1.3 billion. Focused on a multi-layered local economic development approach, the health system has invested in several strategies to advance its anchor mission: affordable housing, food justice focused local and minority purchasing, energy conservation, renewable energy, waste management, and cross-sector partners to bridge community and health. All these initiatives were driven by an environmental sustainability agenda and vision called Envision©. In the summer of 2007, as part of its recycling and affordable housing goals, it repurposed and rezoned capital campus property and a community landmark with a developer, Gorman

and Company, who successfully built 85 units (65 affordable housing) using low-income housing tax credits and historic tax credits.

Appendix H.1.2 Community Mobility and Economic Development Case Studies

Case Studies:

- Rochester Health Community Partnership (Rochester, Minnesota) is a community and academic partnership, established in 2004, that promotes health and wellness for residents of Rochester through community-based participatory research, education and civic engagement. This has resulted in the co-creation of clinical programs such as the early detection of tuberculosis for hard-to-reach populations, childhood obesity prevention, and digital storytelling.
- Partners HealthCare System (Boston, Massachusetts) created its Office of Workforce Development, a division of the hospital central human resources, to offer multiple job/career pipelines for youth, community residents, and current employees. The office manages a range of programs such as career exposure and jobs for young adults at affiliate hospitals, entry-level job training and employment for community residents, and a certified nurse assistant program.
- NewBridge Cleveland Center for Arts and Technology (Cleveland, Ohio) is a public/private partnership, established in 2010, that funds and oversees a community-based arts education center as well as a high-demand career training and employment facility for young adults and community residents of Cleveland's poorest neighborhoods. Since its opening, the center has served a total of 300 people: 99 percent of its youth graduate high school, 82 percent of youth were accepted into college, and 93 percent of those trained were employed in their chosen field within 6 months of graduation.

Appendix H.1.3 Health Care System Redesign Case Studies

Case Studies:

- University Hospital (Cleveland Hospital), is an anchor member of the Greater University Circle Initiative, that employs over 24,000 people. The University Circle Initiative spends an average of \$832 million in good and services, and an additional \$100 million in construction each year. Focused on a multi-layered local economic development approach, established in 2005, the Circle Initiative employs five main strategies to advance its anchor-based mission: bridge current wealth creation efforts and

partnerships, support development of cooperative business structures, leverage major capital projects for community impact, and encourage local and diverse purchasing.

- Accountable Care Organization Reduces Cost of Care, Montefiore Medical Center (Bronx, New York) is a collective impact partnership led by Montefiore Medical and the University Hospital for Albert Einstein College of Medicine. Established in 2014, it seeks to 1) address social determinants of health, 2) improve patient health, and 3) control costs. By taking on more financial risks associated with its 23,000 Medicare patients and partnering with a wide range of human service partners (housing, legal, transportation assistance, financial, and employment) and community based organizations, the ACO reduced cost of care by 7 percent, generating \$14 million in shared savings.
- Hennepin Health in Hennepin County, MN created a county level safety-net accountable care organization demonstration pilot project with Metropolitan Health Plan, Hennepin Healthcare System Inc., NorthPoint Health and Wellness Center (FQHC), and the county's Human Services and Public Health Department (including Health Care for the Homeless, the county's Mental Health Center, and social services. Established in 2012, the ACO serves approximately 6,100 new Medicaid enrollees (18- 64-year-old adults with no dependent children, income is less than 75% FPL) who reside in Hennepin County. The Care Model centers on a primary care medical home (called "health care home" in MN) with strong care coordination, AND it emphasizes the importance of addressing the social determinants of health by coordination with local partners to address the physical, behavioral, social and economic dimension of care. Initial evaluations suggest success in reduction of hospital admissions and emergency department visits.

Appendix H.1.4 Sustainable Civic Infrastructure Case Studies

Case Studies:

- The Greater University Circle Initiative (Cleveland, Ohio), is a partnership among anchor institutions (University Hospitals, Case Western Reserve University, and the Cleveland Clinic), partners (Evergreen Cooperative and Health Tech Corridor), and community-based organizations that serve residents from Cleveland's poorest neighborhoods. Founded and convened in 2005 by the Cleveland Foundation, the partnership has adopted a "cooperative approach" to "targeted urban development" leveraging financial, educational, and institutional assets from University Circle (Poznik et al. 2015; Wright et al. 2016). This has resulted in 1,800 new jobs for target residents, 429 residents in job and career training, 500 new homeowners, \$392 million in anchor procurement spending, \$4 billion in leveraged resource investment, and the creation of additional partnerships focused on wealth creation and workforce development (Wright et. al 2016).

- The Pittsburgh Promise (Pittsburgh, Pennsylvania) is a partnership among the University of Pittsburgh Medical Center, Pittsburgh Public Schools (PPS), the Pittsburgh Foundation, and other funders supported by a cross-sector board of directors from the public and private sector. Founded in 2006 and launched in 2008 by the PPS Superintendent and Mayor, the Pittsburgh Promise adopted a secondary and post-secondary transformation initiative to address fifty years of declining population, declining public-school enrollment, and a shrinking regional workforce. Focused on improving high school graduation rates as well as post-secondary enrollment and completion, the initiative has created a robust college scholarship program that has been associated with an increased high school graduation to 80 percent from 63 percent, and increased post-secondary enrollment to 68 percent from 58 percent.
- Mayo Clinic's Community Engagement Division was established in the 1990s by the Mayo Clinic, a nonprofit health care system in Rochester, MN to oversee the implementation of its anchor-based mission. The division focuses on local economic development, neighborhood revitalization, local and minority purchasing, food sustainability, and cross-sector partnerships that address social determinants of health (youth and families, education, health and wellness, human services, and youth enrichment). The Mayo Clinic, for instance, adopted an asset-based community health improvement approach that leveraged \$1.8 billion in medical supplies, equipment, and services across five states.

Appendix I: Survey Tool

Researcher Notes:

Survey ID#: _____
Researcher's Name: _____
Location: _____

Consent to Participate in Community Health Planning Survey

You are being asked to participate in a survey being conducted by two local hospitals, Interfaith Medical Center and Kingsbrook Jewish Medical Center. The study is being supported financially by the New York community trust and community care of Brooklyn.

You should read the information below, and ask questions about anything you don't understand, before deciding whether or not to take the survey.

Purpose

The purpose of this survey is to understand how people who live in Crown Heights, Bedford-Stuyvesant and East Flatbush experience social, economic and health challenges in their community, and the types of changes they hope to see to build a healthier, more supportive, and more affordable Central Brooklyn. Based on what we learn, we will be developing community health strategies to guide how we invest our resources in the study neighborhoods over the coming years.

Your participation

If you agree to do the survey, you should know that:

- It is your choice to participate in the survey
- You may choose not to answer any question asked
- You may stop at any time
- We will protect the information you share, and keep it private. We will not record your name, address or any information that identifies who you are on the survey (including immigration status).
- Your answers are confidential and anonymous

You can call the number on the information card you are given if you have any questions about the research.

The survey takes about 15-20 minutes, depending on your answers.

Have you read or been read the consent form, and do you understand it? Have all of your questions been answered? Are you comfortable proceeding with the survey in [[English/Spanish/Haitian Creole]]?

YES _____ NO _____

*****ADMINISTRATIVE USE ONLY*****

Researcher's Signature _____ Date: _____

SECTION A. SCREENING

1. What neighborhood do you live in?

- Bedford Stuyvesant Crown Heights East Flatbush

2. What zip code do you live in?

- 11203 11206 11210 11212 11213 11216 Other:
 11221 11225 11226 11233 11236 11238 _____

3. What is your age?

- 18-19 20-24 25-34 35-44 45-54 55-64 65-74
 75+

SECTION B. HOUSING AND NEIGHBORHOOD RESOURCES

4. What type of housing do you live in?

- Rental
If so, how long have you been in this home? _____ (Please go to question 5)
- Owned home
If so, how long have you owned the home? _____ (Skip to question 6)
- Shelter (*skip to question 7a*)
- Don't have housing (*skip to question 7a*)

5. If you rent, please check all that apply:

- I rent a unit with rental government assistance (*Section 8, supportive housing, or other*)
- I rent through a NYCHA (*New York City Housing Authority*) development/public housing
- I live in a rent-stabilized or rent-controlled apartment
- I rent a market-rate unit (*no government assistance*)

6. How many rooms (not including bathrooms, kitchen, or hallways/entryways) are in your home or apartment?

- One Two Three Four Five or More

7a. In the last 12 months have you experienced mice rats, or other pests in your home?

- Yes No I don't know

7b. If YES, and you are not a homeowner: was action taken within one week?

- Yes No I don't know

8a. In the last 12 months have you experienced mold in your home?

- Yes No I don't know

8b. If YES, and you are not a homeowner: was action taken within one week?

- Yes No I don't know

SECTION C. DEMOGRAPHICS

9. What is your gender?

- Female Male Do not identify as female or male

10. Where were you born?

- In Bedford Stuyvesant Another New York City neighborhood
- In East Flatbush Another Brooklyn neighborhood
- In Crown Heights Elsewhere in the United States
- Outside of the United States.

Where (country)? _____

SECTION C. DEMOGRAPHICS (CONTINUED)

11. What is your ethnicity? (Examples: Panamanian, West Indian, Puerto Rican, Honduran)

12. What is your race? (Check ALL that apply)

- | | |
|--|--|
| <input type="checkbox"/> Black | <input type="checkbox"/> Native-American/Native-Alaskan |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Native Hawaiian or Pacific Islander |
| <input type="checkbox"/> Hispanic/Latino | <input type="checkbox"/> Multi-racial or Mixed Race |
| <input type="checkbox"/> White | <input type="checkbox"/> Other: _____ |

13. What is the highest level of education you have completed?

- | | |
|---|--|
| <input type="checkbox"/> Do not have high school diploma | <input type="checkbox"/> Associate's degree |
| <input type="checkbox"/> High school diploma, GED or equivalent | <input type="checkbox"/> Bachelor's degree |
| <input type="checkbox"/> Completed some college, but no degree | <input type="checkbox"/> Graduate or professional degree |

14. Do you have children?

- None 1-3 4 or more

15a. How many people do you live or stay with (including yourself)? # _____

15b. Who are the people you currently live or stay with? Please check ALL that apply, and DO NOT include yourself.

- | | |
|---|---|
| <input type="checkbox"/> Friends or roommates | <input type="checkbox"/> One parent (do not identify as male or female) |
| <input type="checkbox"/> Spouse/partner/ boyfriend/girlfriend/ child's parent | <input type="checkbox"/> Two parents |
| <input type="checkbox"/> Children or dependents | <input type="checkbox"/> Siblings |
| <input type="checkbox"/> One parent (male) | <input type="checkbox"/> Extended family or other relatives |
| <input type="checkbox"/> One parent (female) | <input type="checkbox"/> None |

SECTION D. HEALTHY FOOD ACCESS

The following questions are about food access in your neighborhood (Crown Heights, Bedford Stuyvesant or East Flatbush).

16. Please mark whether you strongly disagree, somewhat disagree, neither disagree nor agree, somewhat agree or strongly agree with the following statements:

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
A. The fresh produce in my neighborhood is of high quality.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. It is easy to buy fresh fruits and vegetables in my neighborhood.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. There is a large selection of fresh fruits and vegetables in my neighborhood.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. The fresh fruits and vegetables in my neighborhood are affordable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. What place do you get the majority of your food? (Choose the best answer)

- | | | |
|--------------------------------------|---|---|
| <input type="checkbox"/> Supermarket | <input type="checkbox"/> Corner store/bodega | <input type="checkbox"/> Fast food/take-out/restaurants |
| <input type="checkbox"/> Supercenter | <input type="checkbox"/> Convenience store (like CVS) | <input type="checkbox"/> Food pantry |
| (i.e., Walmart, Costco) | <input type="checkbox"/> From your job | <input type="checkbox"/> Other |

SECTION E. CRIME & SAFETY

The following questions are about things people in your neighborhood (Crown Heights, Bedford-Stuyvesant or Crown Heights) may or may not do, and about how safe your neighborhood is.

18. Please mark whether you strongly disagree, somewhat disagree, neither disagree nor agree, somewhat agree or strongly agree with the following statements:

	Strongly Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Strongly Agree
A. Violence is a problem in my neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. It is safe to walk alone in my neighborhood during the day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. It is safe to walk alone in my neighborhood <i>after dark</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. The park or playground closest to where I live is safe during <i>the day</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. It is safe for children to play outside in my neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. The police protect my neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. I feel that the police respond to my community's needs in a timely way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. My community is being negatively impacted by immigration enforcement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION F. NEIGHBORHOOD LEADERSHIP

The following questions are about leadership and challenges in your neighborhood (Crown Heights, Bedford Stuyvesant or East Flatbush).

19a. Please check the TOP CHALLENGE your neighborhood (Crown Heights, East Flatbush or Bedford Stuyvesant) faces, from the list below:

- | | | |
|---|---|---|
| <input type="checkbox"/> Access to Places for Youth/ Young Adults | <input type="checkbox"/> Cost of Living | <input type="checkbox"/> Safety |
| <input type="checkbox"/> Healthy Food Access | <input type="checkbox"/> Job Training | <input type="checkbox"/> Lack of Diversity |
| <input type="checkbox"/> Sexual Harassment | <input type="checkbox"/> Education/Schools | <input type="checkbox"/> Poverty |
| <input type="checkbox"/> Lack of Social Interaction in Neighborhood | <input type="checkbox"/> Substance Abuse | <input type="checkbox"/> Family/Home Issues |
| <input type="checkbox"/> Resources for Immigrants | <input type="checkbox"/> Sanitation/Garbage | <input type="checkbox"/> Housing |
| <input type="checkbox"/> Gentrification and Displacement | <input type="checkbox"/> Transportation Options | <input type="checkbox"/> Other |
| | | Please specify: |
| | | _____ |

SECTION G. NEIGHBORHOOD LEADERSHIP (CONTINUED)

19b. Please mark if you agree a lot, somewhat agree, or do not agree at all with the statements about the neighborhood challenge you selected:

	Agree a lot	Somewhat Agree	Do not Agree at all	Don't know
A. People in your neighborhood talk openly about this challenge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. People in your neighborhood talk about this challenge at community meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. People in your neighborhood work together to address this challenge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. People in your neighborhood believe they can positively impact this challenge in your neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. People in your neighborhood are open to hearing different views about this community challenges and solutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. There is a lot of cooperation between groups in this neighborhood (e.g. different ethnic/religious groups working together on this or other challenges)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20a. Who are the leaders in your neighborhood? (Check ALL that apply)

- Advocates/organizers
 Political/elected officials
 Don't know
 Elders
 Health professionals
 Other _____
 Pastors/Spiritual leaders
 Block associations

20b. The following statements are about political leadership in your neighborhood. Thinking about the leaders you just identified, please tell us if you agree a lot, somewhat agree or do not agree with the statement.

	Agree a lot	Somewhat Agree	Do not Agree at all	Don't Know
A. This leader(s) represents your neighborhood's interests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. The leaders in your neighborhood get a lot done for the neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. The power to make community decisions is shared among leaders and the people in this neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Leaders in this neighborhood act responsibly with the power they have	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Leaders in this neighborhood put the neighborhood's needs first, before their own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SECTION H. NEIGHBORHOOD CHANGE

This section ask you about the neighborhood you currently live in (Crown Heights, Bedford Stuyvesant, or East Flatbush), and if you might leave that neighborhood.

21a. In the last 5 years have you moved, including within the neighborhood?

- Yes (if YES, please go to 21b) No (if NO, please skip to question 23a)

21b. If YES, how many different places have you lived in the last five years? _____

22. Was your most recent move a result of rising housing cost, eviction, or foreclosure? (Eviction refers to a formal eviction notice or landlord pressure to move out when you don't want to.)

- Yes No

23a. Do you think you will leave this neighborhood within the next 5 years?

- Yes
(if YES, go to 23b and check all options you think will play a primary role in causing you to leave)
- No
(if NO, skip to the next question 24a)
- Don't know
(If DON'T KNOW, go to 23b and check all options you think may play a primary role in causing you to leave)

23b. Why will you move from your neighborhood? (Check ALL options that may play a primary role in you leaving)

- Affordability (landlord raised the rent, to find a cheaper place)
- Crime or drugs (in the building, block, or neighborhood)
- Health reasons
- Education (better schools in another neighborhood, to go to college)
- Change of culture
- Commute (distance to work)
- Social services
- Plan to rent my home out
- Plan to sell my home
- Natural disaster
- Commute (distance to work)
- Ethnic/racial tension
- Environmental quality (poor air quality; environmental hazards)
- To be closer to family
- Eviction (when your landlord forces you to move when you don't want to)
- Foreclosure (unable to pay your mortgage, or your landlord was foreclosed on)
- Job (for a new job, to move closer to job opportunities)
- Relationship change (marriage, move in/out with partner)
- Stores and facilities (none in current neighborhood)
- Other: _____

SECTION I. HOUSEHOLD RESOURCES AND EMPLOYMENT (CONTINUED)

28. If you are employed, do you have any employment benefits that come with your job? (Check ALL that apply)

- | | | |
|--|--|--|
| <input type="checkbox"/> Medical Insurance | <input type="checkbox"/> Domestic Partner Benefits | <input type="checkbox"/> Other |
| <input type="checkbox"/> Retirement/Pension Plan | <input type="checkbox"/> Paid Time-off | <input type="checkbox"/> (Please Specify): _____ |
| <input type="checkbox"/> Saving Plan | <input type="checkbox"/> Paid Sick Time | <input type="checkbox"/> None |
| <input type="checkbox"/> Disability Insurance | <input type="checkbox"/> Counseling/Referrals | <input type="checkbox"/> Not applicable (not employed) |

29. Think about your take-home earnings in one MONTH, after any taxes. Include wages, tips, income from retirement plans, etc. In your best estimate, would you say it is...

- | | | |
|---|---|--|
| <input type="checkbox"/> Less than \$1,250 | <input type="checkbox"/> \$2,901 to \$4,150 | <input type="checkbox"/> \$8,301 or more |
| <input type="checkbox"/> \$1,250 to \$2,100 | <input type="checkbox"/> \$4,151 to \$6,250 | <input type="checkbox"/> Don't know |
| <input type="checkbox"/> \$2,101 to \$2,900 | <input type="checkbox"/> \$6,251 to \$8,300 | |

30. In the past 12 months did anyone in your household receive any of the following? (Check ALL that apply)

- | | |
|---|--|
| <input type="checkbox"/> SNAP/Food stamps | <input type="checkbox"/> Temporary Assistance for Needy Families(TANF)/Welfare |
| <input type="checkbox"/> Cash Benefits (EBT) | <input type="checkbox"/> Unemployment |
| <input type="checkbox"/> Social Security Income (SSI) | <input type="checkbox"/> Medicaid |
| <input type="checkbox"/> Social Security Disability (SSD) | <input type="checkbox"/> None |
| <input type="checkbox"/> Veteran's benefits | <input type="checkbox"/> Unknown |

31. Thinking about all sources of income, do you know what your household's next month's income will be?

- I have a very good idea
- I have some idea
- I am not very sure
- I am very unsure

32. In a typical month, how hard is it for your household to cover your expenses AND pay all of your bills?

- Very hard
- Somewhat hard
- Easy
- Very easy
- Don't know

33. How many people fully depend on you financially? (Number of people you support with your income/ money within your household or otherwise) _____

34. In the past month, was there any day when anyone in your household went hungry because there was not enough money for food?

- Yes No Not sure

SECTION J. HEALTH AND HEALTH CARE ACCESS

35. In general, would you say your health is...

- Excellent
 Very good
 Good
 Fair
 Poor

36. During the last month, how often did you feel the following ways ...

	None of the time	A little of the time	Some of the time	All of the time
A. Happy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Interested with life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Satisfied with life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

37. Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?

- Yes
 No
 Don't know/Not sure

38. How long has it been since you last visited a doctor or other health provider for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

- Within the past year (anytime less than 12 months ago)
 Within the past 2 years (more than 1 year ago but less than 2 years ago)
 Within the past 5 years (more than 2 years ago but less than 5 years ago)
 5 or more years ago
 Don't know/Not sure
 Never
 Refused

39. When you are sick or need advice about your health, to which of the following places do you usually go? [Select only one]

- Doctor's/nurse practitioner's office or private clinic
 A Community health center or public clinic
 A hospital outpatient clinic
 A hospital emergency room or urgent care center
 An alternative health care provider (such as acupuncturist, chiropractor, traditional healer, or herbalist)
 Other (specify) _____
 Don't know/Not sure

40. Are there any other issues important to you that have not been asked about in the survey? Please comment below.
