BROOKDALE HOSPITAL MEDICAL CENTER
One Brookdale Plaza
Brooklyn, New York 11212

2016-2018

Internal Revenue Service
(IRS)

COMMUNITY HEALTH NEEDS ASSESSMENT
(CHNA)

And

IMPLEMENTATION STRATEGY

December 30, 2016
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Brookdale Hospital Medical Center (“Brookdale Hospital” or “Brookdale”) is a nonprofit 501(c) (3) hospital provider that is licensed under Article 28 of New York State Public Health Law, and exempt from federal taxation under 501(c) (3) of the Internal Revenue Code. Brookdale is a critical part of the healthcare delivery system in the borough of Brooklyn, in New York City (NYC). Located in the heart of Brownsville, one of the most economically challenged communities of NYC, Brookdale remains dedicated to its founding mission, which is as follows:

*Brookdale Hospital is committed to being the focus of a healthy community, stressing the organization’s values of caring and respect for everyone.*

**Community Health Needs Assessment (CHNA) Development**

The process of developing a New York State Department of Health (NYS DOH) Community Service Plan (CSP) and an Internal Revenue Service (IRS) Community Health Needs Assessment (CHNA) and Implementation Strategy (IS) to support healthcare delivery to Brookdale’s service areas during the period 2016-2018, has become an integral part of Brookdale’s ongoing planning discussions, involving Brookdale’s senior leadership, medical staff, community residents, public health officials partners, and other key community stakeholders. The goal of developing a CSP and a CHNA is: *To adapt and enhance Brookdale’s service delivery model, to continue to meet the healthcare needs of the communities that it serves.*

**Description of Community**

Brookdale’s primary service area encompasses the four contiguous, densely populated communities of Central Brooklyn, East New York/Brownsville, Canarsie and Flatlands, and its secondary service area stretches as far as East Flatbush, Crown Heights, Bedford Stuyvesant and
Bushwick. Together, both service areas have a population of just over one million residents.\textsuperscript{1} The majority of residents from both service areas are Black/African American (approximately 70%). Both service areas have a large concentration of immigrants and a myriad of ethnicities; 38% of residents are foreign-born. A growing Hispanic immigrant population accounts for approximately 18% of residents. (Table 1 in the appendix shows the racial composition of each zip code in the two service areas.)

\textit{Public Input/Community Engagement}

As Brookdale re-designs its healthcare delivery model to become more efficient and responsive to the needs of the communities of East Brooklyn, securing a broad range of perspectives from the public is a high priority. Brookdale has a robust community engagement agenda that involves community residents, elected officials, community-based organizations, other healthcare providers, and government entities.

\textit{Process and Methodology}

This CHNA reports on a variety of primary and secondary health and healthcare data sources as follows:

(i) Analyses of clinical diagnosis and treatment data for Brookdale’s patient population.

(ii) “\textit{Voice Your Vision East Brooklyn},” a survey of community residents, administered at a community healthcare forum, convened by the NYS DOH in 2016.

(iii)“\textit{The Brooklyn Study: Reshaping the Future of Healthcare},” is a comprehensive assessment of East Brooklyn’s healthcare needs, the viability of area hospitals (including Brookdale), and transformation recommendations. The study, conducted by Northwell Health in 2016, was commissioned by NYS DOH.


\textsuperscript{1} U.S. Census. 2010
The “NYC Health Provider Partnership Brooklyn Community Needs Assessment” (CNA), conducted and published in 2014 by the New York Academy of Medicine (NYAM), as part of the application process for Delivery System Reform Incentive Program (DSRIP) funding. This was a wide-ranging review of all health needs for the borough of Brooklyn.

These studies confirm the findings from a health needs assessment of community residents conducted by Brookdale in 2013. Brookdale continues to use its 2013 findings as a guide, since the health and other social disparities that impact residents in East Brooklyn have not changed much since 2013, and therefore, the results are still valid today – healthcare needs and the disease burden are still overwhelming, and the lack of resources in the area means that progress on both fronts will be slow. In addition, Brookdale is engaged in analysis of healthcare needs in East Brooklyn on an ongoing basis, as Brookdale works with the community, elected officials, NYC DOH and NYS DOH and other agencies, to redesign its healthcare model, to meet the needs of East Brooklyn residents.

**Significant Findings**

Brookdale’s review of the latest data continues to validate the overwhelming healthcare needs in East Brooklyn. Brookdale categorized the major healthcare needs found in its service areas as: (i) Prevalent diseases; and (ii) Barriers to care. Brookdale prioritized each need based on the results of surveys conducted, statistics analyzed, and conversations with community partners and public health officials.

Overall, the disease burden in East Brooklyn is among the highest in NYC, with chronic diseases like obesity, HIV/AIDS, and diabetes disproportionately prevalent. Many barriers to healthcare contribute to the high disease burden. Brookdale views all of the barriers to healthcare present in East Brooklyn as high priority. Economic challenges, a lack of primary care facilities, a lack of healthcare prevention programs, and linguistic and cultural isolation are just some of the barriers that impact the communities served by Brookdale.
Conclusion

In summary, the high disease burden combined with the multiple barriers to healthcare identified in Brookdale’s service areas result in major health disparities. Brookdale is making changes to its service delivery, investments in infrastructure, and building the strategic collaborations with community partners, public health officials and other stakeholders, to reverse the negative healthcare trends, and achieve healthcare parity for the residents in its service areas.
1. INTRODUCTION

Brookdale Hospital Medical Center (“Brookdale Hospital” or “Brookdale”) is a nonprofit 501(c) (3) hospital provider that is licensed under Article 28 of New York State Public Health Law, and exempt from federal taxation under 501(c) (3) of the Internal Revenue Code. Brookdale is a critical part of the healthcare delivery system in the borough of Brooklyn, in New York City (NYC). Opened in 1921 as a single facility with basic healthcare capability, Brookdale has expanded during the last 95 years to become a full-service teaching hospital campus, with multiple ambulatory care sites that offer healthcare services ranging from pre-natal care to elder care. Located in the heart of Brownsville, one of the most economically challenged communities of NYC, Brookdale remains dedicated to its founding mission, which is as follows:

*Brookdale Hospital is committed to being the focus of a healthy community, stressing the organization’s values of caring and respect for everyone.*

Today, Brookdale’s reach is extensive. Brookdale’s primary service area encompasses the four contiguous, densely populated communities of Central Brooklyn, East New York/Brownsville, Canarsie and Flatlands, and its secondary service area stretches as far as East Flatbush, Crown Heights, Bedford Stuyvesant and Bushwick. As one of four major healthcare providers in a three-mile geographic area with a population of approximately one million residents, Brookdale is a *vital resource* and *safety net.* Brookdale’s patient volume is among the highest in Brooklyn, receiving approximately 100,000 emergency room visits and more than 275,000 outpatient visits annually.

*Overview of Current Status*

Brookdale, like so many Brooklyn hospitals, continues to grapple with a fiscal crisis caused by a variety of factors. Brookdale’s fiscal viability is threatened by the prolonged
strain on all aspects of its operations resulting from the high demand for high-cost medical treatments and services, by a patient population that has overwhelming chronic disease treatment and management needs, and largely dependent upon government assistance for their medical care. Since 2012, Brookdale’s senior leadership has been working with key New York State (NYS) and other stakeholders to implement operational and financial restructuring measures that are intended to strengthen Brookdale’s position as a healthcare leader in East Brooklyn.

**Community Health Needs Assessment Development**

The process of developing a Community Service Plan (CSP) as required by the NYS Department of Health (NYS DOH), and a Community Health Needs Assessment (CHNA) and Implementation Strategy (IS), as required by the Internal Revenue Service (IRS), has become an integral part of Brookdale’s ongoing planning discussions, which involve Brookdale’s senior leadership, medical staff, community residents, public health officials, and other key community stakeholders. The central goal of this effort is: *To adapt and enhance Brookdale’s service delivery model, to continue to meet the healthcare needs of the communities that it serves.*
2. DESCRIPTION OF FACILITY

Brookdale is a non-profit teaching hospital that is located on an expansive campus at One Brookdale Plaza, Brooklyn, New York. Brookdale and its affiliates offer a full complement of healthcare services that include: inpatient care, ambulatory care, long-term care, senior living and emergency medicine. Brookdale is the only acute-care hospital between the neighborhoods of Brownsville and East New York and the Queens county border. Core assets\(^2\) that support the delivery of care to thousands of Brooklyn residents each year include:

- Approximately 50 surgical and subspecialty care clinics/services;
- 530 certified acute-care beds;
- An Emergency Department, which is a NYS-designated Level-1 Trauma Center, and one of the busiest in the region;
- A 448-bed skilled-nursing facility, and an 86-unit assisted-living and independent-living facility, which both operate at a 95% or higher occupancy rate;
- Six primary care facilities;
- A comprehensive Adult Day Care Center;
- A Level-3 Perinatal Center;
- A Mental and Behavioral Health Center;
- A Breast Health Center;
- A Bone and Joint Center;
- A 16-chair dental suite that supports dental and oral services;
- An HIV Center; and
- An Urgent Care Center.

\(^2\) These community assets are housed at either Brookdale Hospital or its affiliated entities, including: Brookdale Family Care Centers, Inc.; The Brookdale Residence Housing Development Fund Corporation (The Arlene and David Schlang Pavilion); The Schulman and Schachne Institute for Nursing and Rehabilitation, Inc.; and Urban Strategies/Brookdale Family Care Center, Inc.
3. DESCRIPTION OF COMMUNITY

Definition of Brookdale Service Areas and Demographic Composition

Brookdale serves residents primarily from East and Central Brooklyn, which include the neighborhoods of Brownsville, East New York, Canarsie, and Flatlands. These neighborhoods, which are inside the geographic boundaries of NYC Community Districts 5, 16, and 18, comprise Brookdale’s primary service area. In 2015, 73% of all hospital discharges came from four zip codes in these neighborhoods (11212, 11207, 11208, and 11236). Another 10 zip codes, which fall within the areas of east and Central Brooklyn (inside the geographic boundaries of Community Districts 3, 4, 8, 9 and 17), comprise Brookdale’s secondary service area. In 2015, 18% of all discharges came from these zip codes. Together, the two service areas account for 91% of Brookdale’s discharges.

Brookdale’s primary and secondary service areas have a population of approximately 370,000 and 662,000, respectively, a total of just over one million residents. The majority of residents from both service areas are Black/African American (approximately 71%). Both service areas have a large concentration of immigrants and a myriad of ethnicities – 37% of residents are foreign-born. A growing Hispanic immigrant population accounts for 18% of residents. The median age of residents in Brookdale’s primary service area is 32.5, with 31% under 19 years old. The median age in our secondary service area is slightly higher at approximately 35.1, with 27% under 19 years old.

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3 Zip codes: 11203, 11210, 11213, 11216, 11221, 11225, 11226, 11233, 11234, and 11239.
**Socio-economic Status of Brookdale Service Areas**

Brookdale serves a patient population in East Brooklyn that is predominantly low-income, with at least 50% receiving government income support (Temporary Assistance for Needy Families, Supplemental Security Income, and Medicaid). Most patients come from neighborhoods with a large concentration of poverty. Three of the four zip codes (11212, 11207, and 11208) in Brookdale’s primary service area have an average median household income of $32,000.\(^6\) Approximately 32% of residents live below the federal poverty level, compared to 22% for the borough of Brooklyn, and 19% for NYC overall. Five of 10 zip codes in the secondary service area have an average poverty rate of 28%. The health insurance coverage for Brookdale’s patient population is approximately: 53% Medicaid; 29% Medicare, and 18% either “self-pay,” charitable care or privately insured. The percentage of residents with no health insurance coverage ranges from 10% in Canarsie/Flatlands, to 25% in Bushwick.

Most of the neighborhoods served by Brookdale have the HHS-designations of “Health Professional Shortage Area” (HPSA) and/or “Medically Underserved Area” (MUA).\(^7\) Some of the factors that result in poor health outcomes for the population served include: a high disease burden, lack of access to care, a shortage of primary care doctors, linguistic and cultural isolation, and low health literacy. Residents suffer disproportionately from chronic diseases like HIV/AIDS, heart disease, obesity, diabetes, cancer, and sickle cell anemia. According to the 2015 NYC DOH Community Health Profile reports, the two top causes of death in Brownsville were heart disease and cancer, both rates of death significantly higher that the NYC rates. The heart disease rate was 272.9 per 100,000 deaths, 35% higher than the NYC rate of 202.6, and the cancer rate was 205.8 per 100,000 deaths, 31% higher than the NYC rate of 156.7 deaths per 100,000. Maternal and newborn health indicators are also poor in Brookdale’s target area; several zip codes have low birth weight, premature birth, teen pregnancy, and infant

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\(^6\) U.S. Census, 2010

\(^7\) U.S. Health and Human Services/Health Resources and Services Administration. [www.hpsafind.hrsa.gov](http://www.hpsafind.hrsa.gov)
mortality rates that are among the highest in Brooklyn. Brookdale’s service areas are plagued by crime, especially gun-violence. Brookdale’s Emergency Room encounters one of the highest incidences of puncture wounds in the State, including a gunshot wound victim every 36 hours.
4. PUBLIC INPUT/COMMUNITY ENGAGEMENT

As Brookdale re-designs its healthcare delivery model to become more efficient and responsive to the needs of the communities served, securing a broad range of perspectives from the public is a high priority. The CHNA development process is part of Brookdale’s on-going effort to seek input from a diverse group of stakeholders from both inside and outside of the communities served by Brookdale. Planning discussions involve community residents, Brookdale healthcare professionals who are on the frontline of healthcare delivery, local healthcare providers, CBOs and other community groups in the healthcare delivery continuum, and government entities and individuals involved in development and implementation of healthcare policy.

Dissemination of the Plan to the Public

Brookdale will distribute the CHNA and IS in the following ways:

(1) The document will be placed on Brookdale’s website (www.brookdalehospital.org) by December 31, 2016, as required by the IRS. It will be available in an easily downloadable format, with a web link available through major search engines.

(2) The document will be available through the Office of the CEO, Office of External Affairs, and all of our medical administration offices.

(3) To all CBOs and FBOs who are engaged in regular dialogue with Brookdale, Community Board Offices, elected officials, and all other community stakeholders, who will be expected to utilize the report as an important resource and planning tool, as they advocate and make policy decisions on behalf of East Brooklyn.
5. PROCESS AND METHODOLOGY

This CHNA reports on a variety of primary and secondary data sources as follows:

(i) Analyses of clinical diagnosis and treatment data for Brookdale’s patient population.

(ii) “Voice Your Vision East Brooklyn,” a survey of community residents administered at a community healthcare forum convened by the NYS DOH in 2016.

(iii) “The Brooklyn Study: Reshaping the Future of Healthcare,” is a comprehensive assessment of East Brooklyn’s healthcare needs, the viability of area hospitals (including Brookdale), and system-wide transformation recommendations. The study, conducted by Northwell Health in 2016, was commissioned by NYS DOH.


(v) The “NYC Health Provider Partnership Brooklyn Community Needs Assessment” (CNA), conducted and published in 2014 by the New York Academy of Medicine (NYAM), as part of the application process for Delivery System Reform Incentive Program (DSRIP) funding. This was a comprehensive review of all health needs for the borough of Brooklyn.

These studies and data sets confirm the findings from a health needs assessment of community residents conducted by Brookdale in 2013. This study is still being referenced, since the health and other social disparities that impact residents in East Brooklyn have not changed much since 2013, and therefore, the results are still valid today – healthcare needs and the disease burden are still overwhelming, and the lack of resources in the area means that progress on both fronts will be slow. In addition,
Brookdale is engaged in analysis of healthcare needs in East Brooklyn on an ongoing basis, as Brookdale works with the community, elected officials, NYC DOH and NYS DOH and other agencies to redesign its healthcare model to meet the needs of East Brooklyn residents.
6. COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA)

The data reviewed confirm that there are a myriad of healthcare needs in Brookdale’s service areas, and in general, the economically challenged communities of East Brooklyn are disproportionately affected by health disparities. The disease burden for the communities of Brownsville and East New York is among the highest in NYC, with chronic diseases like obesity, HIV/AIDS, and diabetes being prevalent. Brookdale identified many barriers to healthcare that contribute to the high disease burden. Economic challenges, a lack of primary care facilities, a lack of specialty clinics, and linguistic and cultural isolation are just some of the barriers.

According to the 2015 NYC DOH Community Profile for East New York, death rates for homicides and HIV in East New York are more than twice the NYC average. The death rate for heart disease was 223.1 per 100,000 higher than the NYC rate of 202.6/100,000. Overall the disparities in chronic diseases are significant, with East New York leading the rest of NYC in almost all disease categories.

Following are key findings from the reports and data reviewed as part of Brookdale’s CHNA:

(a) The “NYC Health Provider Partnership Brooklyn Community Needs Assessment,” (CNA) conducted in 2014 by the New York Academy of Medicine (NYAM):

- Preventable Admissions - In Brooklyn, the greatest proportion of potentially preventable admissions (PQI) is for chronic conditions, including respiratory conditions, cardiovascular conditions (heart failure, hypertension), and diabetes. Within North/Central Brooklyn, the highest number of avoidable inpatient

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8 Most of the findings listed were taken from the NYAM 2014 Community Needs Assessment.
admissions for chronic conditions are concentrated in the United Hospital Fund (UHF) neighborhoods of East New York, Williamsburg/Bushwick, Bedford-Stuyvesant/Crown Heights, and East Flatbush/Flatbush.

- **Primary Care Access** - A key component of DSRIP is to reduce avoidable hospitalization by bolstering community-based providers and organizations to enhance coordination of care, prevention, and disease management, particularly for those with chronic conditions. Yet, the distribution of primary care providers is uneven in Brooklyn, with sparse numbers in certain low-income neighborhoods. According to CNA participants, ambulatory care providers’ capacity, perceived quality, linkages to broader health care delivery systems, and insufficient evening and weekend service exacerbate access issues in some high-need areas like North/Central Brooklyn.

- **Cost of Healthcare** - From the community perspective, the costs incurred – both in time and money – in seeking medical care remains very problematic, and acts as a barrier for low-income populations to effectively use prevention and disease management services.

- **Immigrant Population** - There are large numbers of immigrants – including undocumented immigrants – in a number of Brooklyn neighborhoods, with barriers to healthcare (e.g., linguistic, eligibility for insurance, familiarity with U.S. system) that go beyond those of other populations, and reportedly result in delayed care.
✓ **Uninsured** – Approximately 350,000 Brooklyn residents are uninsured, accounting for approximately 16% of the NYS total uninsured population. Within the borough, the highest number of uninsured appears to be clustered in the zip codes of 11220/Sunset Park and 11226/East Flatbush, with high numbers in Williamsburg/Bushwick, East New York, and East Flatbush/Flatbush.

✓ **Behavioral Health** – Medicaid beneficiaries with behavioral health conditions appear to be concentrated in North/Central Brooklyn, including Bedford-Stuyvesant, Crown Heights, Brownsville, and East New York.

✓ **PQI Diseases:**
  - **Asthma/Respiratory Conditions** – The areas of Brooklyn with the highest PQI respiratory composite hospitalizations are located in North/Central Brooklyn. Among “younger adults” (ages 18-39) Medicaid beneficiaries, potentially preventable hospitalizations for asthma are most heavily concentrated in Bushwick and Brownsville.
  - **Cardiovascular Disease** – In 2012, the number of potentially preventable hospitalizations among Medicaid beneficiaries for circulatory conditions in Brooklyn was 3,694, accounting for more than one in all admissions in NYS. The highest ratios were for the North/Central Brooklyn.
  - **Diabetes** – The Diabetes Composite PGI suggests that there are large clusters of potentially preventable hospitalizations in North/Central Brooklyn, extending from Bedford-
Stuyvesant and Williamsburg/Bushwick through Crown Heights, Brownsville, and East New York.

- **Integrated Care to Address Co-Morbidities** – Many patients with a chronic disease may suffer from multiple physical and behavioral health co-morbidities. Co-locating and integrating behavioral health and primary care services may help promote more seamless coordination of care for these patients. Integrating care into multi-service centers that include primary care providers, specialists, and lab and radiology services may provide a “one-stop” shopping location that is desired by patients who may currently use the ER to obtain this care.

(b) “**The Brooklyn Study: Reshaping the Future of Healthcare,**” conducted by Northwell Health in 2016 and published in October 2016 - This study is an assessment of the state of healthcare in East Brooklyn, commissioned by the NYS DOH. It presents a bold vision for how the current healthcare infrastructure should be completely transformed to meet the healthcare needs of the communities served now and into the future. Following are three of the many “Essential Elements of a Strategic Vision,” discussed in the report:9

- **Better Health** – The clinical care model developed by a new health system must not only focus on healthcare and curing illness, but also embrace health prevention/promotion and creatively address social determinants of health through innovative partnerships with government and CBOs. This will help people take personal responsibility for maintaining and improving their own health and work closely with physician and community partners to help communities improve health.”

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- **Better Care and Care Management** – There must be a sustained commitment to continue to improve outcomes in quality, safety and service. Care will be provided in the most appropriate setting by the most appropriate personnel who work at the top of their licenses. Care must be coordinated across the continuum around the needs of the patient. New care delivery models and systems must be designed and implemented to monitor and manage care. The new health system should establish and meet goals in the top deciles of performance and transparently report its efforts.

- **Patient and Community Partnerships** – Strong partnerships must be forged with patients, the communities which they reside and other organizations serving those communities to more effectively address socioeconomic determinants of adverse health status, and to empower and engage patients in improving health.”
(c) “Voice Your Vision East Brooklyn” – some of the responses received are highlighted below:

**Question: In general, what is the quality of your health?**

- Outstanding: [Diagram showing percentage]
- Good: [Diagram showing percentage]
- Some chronic issues: [Diagram showing percentage]
- Poor: [Diagram showing percentage]
**Question:** What are the major illnesses that you feel mostly affect your community?
Question: What do you think is missing in your community in terms of healthcare delivery?
**Question:** Please rank the most important improvement that can be made to healthcare in your community.
(d) Following are graphic comparisons of four major chronic diseases that impact East Brooklyn communities:

(i) **Obesity** - Approximately one third of adults in East New York and New Lots are obese (30%), a rate that is much higher than the Brooklyn rate (23%), and the NYC overall rate (20%). The data suggest that there is a positive correlation between poverty and obesity.

![Obesity - 3 in 10 adults in East New York and New Lots are obese](chart)


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10 Ibid.
Overweight and obesity among NYC public high school students, by race/ethnicity


Overweight and obesity, nutrition in NYC public high schools with low and high poverty

(ii) **Diabetes** - In 2011, Brownsville had 177 deaths per 100,000 residents from diabetes, the highest rate of diabetes deaths city-wide. East New York followed close behind with 135 deaths per 100,000 residents. The trend over the years indicates that this disease has a firm grip on Brookdale’s service area.\(^{11}\)

![NYC community districts with highest and lowest age-adjusted related deaths, 2011](image)

(iii) **Heart Disease** - The heart disease hospitalization rate in East New York and New Lots has increased by 35% in the past decade. The average annual heart hospitalization rate in 2003-2004 was 25% higher than the Brooklyn rate and 35% higher than the NYC rate.\(^{12}\) The age-adjusted heart disease mortality rates per 100,000 for East New York was 7% higher than the Brooklyn rate, 40% higher than the Manhattan rate, and 15% higher than the overall New York City rate.\(^{13}\)

\(^{11}\) NYC Department of Health and Mental Hygiene. “Epi Data Brief.” Jun 2013. No. 28

\(^{12}\) NYC Department of Health and Mental Hygiene. “Community Health Profiles: Take Care East NY and New Lots.” 2006

\(^{13}\) NYC Department of Health and Mental Hygiene. Epiquery Data. 2007
(iv) **Asthma** - Residents from Brookdale’s primary service area are more likely to suffer from asthma than adults in NYC overall; adults in East New York have a higher rate of self-reported asthma (7%) than in NYC (5%).\(^\text{14}\)

\(^\text{14}\) Ibid.

**Asthma - East New York and New Lots adults are more likely to suffer from asthma than adults in NYC overall**

e) **NYC Community District Profiles** – Brookdale assessed findings from the latest NYC Community Profiles for East New York and Central Brooklyn; in 2015, 59% of all of Brookdale discharges came from these areas.

f) **Healthcare Assets in the Borough of Brooklyn** - Following is a list of healthcare assets reported in the CNA\(^{15}\) for the borough of Brooklyn, and an assessment of each, as relevant to the communities served by Brookdale:

- **Hospitals** – There are 14 major hospital systems in Brooklyn, with bed capacity ranging from 134 to 711, averaging 414 per hospital. Many hospitals are located in North/Central Brooklyn, with four serving the Brookdale’s primary and secondary service areas.

- **Ambulatory Surgical Centers** – There are approximately 16 ambulatory surgery centers and 103 office-based surgical practices in Brooklyn. These services are noticeably absent in many zip codes with high proportions of Medicaid beneficiaries and uninsured, including East New York.

- **Urgent Care Centers** – There are 21 Urgent Care Centers in Brooklyn, which tend to be concentrated in higher income communities, and are inaccessible to those with Medicaid and the uninsured.

- **Health Homes** – There are four DOH-designated “health homes” in Brooklyn, providing care management and service integration to Medicaid beneficiaries with complex chronic medical and behavioral conditions.

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

\(^{15}\) “NYC Health Provider Partnership Brooklyn Community Needs Assessment.” NYAM. 2014. Page 19-30
approximately 19 FQHCs in Brooklyn. Some are located in high uninsured and Medicaid neighborhoods like Sunset Park and East New York, while others are located in neighborhoods with lower to moderate Medicaid and uninsured populations.

✓ **Primary Care Providers, including private clinics, hospital-based, and residency programs** – Brooklyn had a total of 7,074 physicians in 2013, approximately 282/100,000 population, lower than the NYC rate of 428/100,000. All physician fields have the lowest physician to population ratio for the zip codes that are served by Brookdale, earning them the HHS designations “medically underserved” and “healthcare shortage areas.”

✓ **Safety Net Physicians** – Neighborhoods with moderate to moderately high numbers of Medicaid and uninsured populations have very few NYS DOH-designated safety net providers.

✓ **Physician Assistants (PA) and Nurse Practitioners (NP)** – There are 895 NPs and 848 PAs in Brooklyn, with a total of 109 that have safety net provider designation.

✓ **Physicians Serving Self-Pay Patients** – There are approximately 390 physicians whose self-pay patients comprise 30% of their clients. The number of physicians range from 0-84 by zip code, and are noticeably absent in East New York, Bushwick, Flatbush, and Canarsie neighborhoods.

✓ **Specialty Medical Providers, including private clinics, hospital-based, and residency programs** – In addition to primary physicians, there are approximately 3,890 specialty physicians, or 153/100,000 population in Brooklyn,
compared to 271/100,000 in NYC. Approximately 40% of Brooklyn survey respondents reported that medical specialists were “not very available” or “not available at all.”

- **Palliative Care** – There are approximately 12 facilities serving Medicaid and uninsured patients in Brooklyn. Additionally, there are 23 facilities with hospice services.

- **Dental Providers** – There are approximately 1,314 dentists in the borough, or 51.7/100,000, compared to 74/100,000 for NYC. There are 54 dental clinics, located primarily in North/Central Brooklyn, Flatbush, and Sunset Park.

- **Rehabilitative Service** – There are 73 programs and services specializing in physical therapy, occupational therapy and/or speech therapy in Brooklyn. Several neighborhoods have little to none of these services, including East Flatbush/Flatbush, Canarsie, Flatlands, Greenpoint, and Red Hook.
Healthcare Needs Prioritization

Based on the assessments and data sources listed above, Brookdale categorized the major healthcare needs found in its service areas as follows:

(i) **Prevalent diseases:**

First Tier: Obesity; HIV/AIDS

Second Tier: Heart Disease; Cancer; Asthma; Diabetes; Alcoholism; Drug Addiction; Hypertension.

(ii) **Barriers to healthcare:**

Brookdale categorized all of the barriers to healthcare listed here as First-Tier priorities, since they all have a direct impact on the high disease burden in Brookdale’s service areas.

- Poverty;
- A lack of primary care facilities;
- A lack of primary care facilities with flexible schedules to accommodate working families;
- A lack of specialty clinics, especially those that target prevalent diseases in the two service areas;
- A lack of integrated treatment modules to improve outcomes for patients;
- A lack of disease prevention programs; and
- Linguistic and cultural isolation.
7. ADDRESSING THE DISEASE BURDEN IN BROOKDALE’S SERVICE AREAS AND THE IMPLEMENTATION STRATEGY FOR 2016-2018

Overall, due to the overwhelming need for healthcare and the shortage of healthcare in East Brooklyn, Brookdale continues to offer healthcare services that cover the full gamut of healthcare needs i.e. from obstetrics to elder care, with special focus on the needs that are disproportionately prevalent in its service areas (obesity mentioned earlier, diabetes, HIV/AIDS, etc.).

(I) Addressing the Prevalent Diseases Identified:

As a full-service hospital, Brookdale has specialty clinics/services that treat many of the prevalent diseases identified – lists of Brookdale’s assets and its specialty and sub-specialty clinics are included in this report (Description of Community section, and below), and a description of how Brookdale is addressing prevalent diseases follows.

For the period 2016-2018, Brookdale will seek to optimize its resources and leverage the assets in the community, to reduce the chronic disease disparity in East Brooklyn by focusing on the disease obesity and increasing access to chronic disease preventive care, as part of the NYS DOH Prevention Agenda. Brookdale selected these two healthcare priorities as a matter of urgency, practicality, and the potential long-term savings – obesity and other high-maintenance chronic diseases have reached epidemic proportions in East Brooklyn, and by focusing on prevention, Brookdale is hoping to improve outcomes for patients, as well as drive the cost of healthcare down.

In NYC, the communities of eastern and central Brooklyn have the highest number of adults and children who are obese.\textsuperscript{16} These communities are in

dire need of the healthcare resources and prevention programs that will help them fight obesity and other associated diseases. Brookdale’s *Live Light, Live Right (LLLR)* program, launched in 2003, addresses childhood obesity, and the *Advanced Bariatric Care Center* addresses adult obesity. Brookdale will continue to leverage the clinical and community infrastructures that are already in place, as well as resources from outside of Brookdale’s primary and secondary service areas, to have a measurable, positive impact on obesity and other chronic diseases. Further, since obesity is associated with multiple secondary chronic diseases (diabetes, heart disease, hypertension, cancer), which are categorized as Second Tier priority diseases, Brookdale will very likely achieve a reduction in their occurrence, by addressing obesity.

Following are summaries of how some of the major diseases are being addressed by Brookdale:

- **HIV/AIDS** – Brookdale continues to work with community partners and across Brookdale departments to diagnose and treat patients with HIV/AIDS.

- **Heart Disease and Hypertension** - Brookdale has a *Cardiology Department* that is focused on treating cardiac disease in adults and children. A *Hypertension Clinic* treats patients who have been diagnosed with hypertension. In addition, all clinicians in our primary care network are trained to treat patients with hypertension at point of service. Since heart disease and hypertension are secondary conditions that are associated with obesity, our focus on obesity is likely to have a positive impact on the rates of both diseases.

- **Cancer** – Brookdale has an *Oncology Department* that is focused on treating cancer in adults and children. The most commonly diagnosed adult cancers are breast, lung, prostate and colon. Brookdale launched the *Brookdale Breast Center* in 2015 to address the incidence of breast cancer in patients. Approximately 3,000 breast cancer screenings and 4,000
mammograms are performed each year. Some of the most commonly diagnosed cancers in children are leukemia, lymphoma-Hodgkins and non-Hodgkins, and brain tumors. Only about 30% of patients diagnosed with cancer at Brookdale stay for treatment. Most patients are referred to or opt to seek treatment at other facilities with more advanced treatment protocols.

✓ **Asthma** – Brookdale’s **Pulmonary Department** treats patients with asthma. Since asthma is the most frequently occurring emergency diagnosis, Brookdale’s has a dedicated space in the Emergency Department that is fully-equipped to treat asthma patients in a timely manner.

✓ **Diabetes** – Brookdale’s outpatient clinics provide care for patients that have been diagnosed with diabetes, supported by a cutting-edge electronic health records system that is equipped to prompt primary care doctors to refer patients to the critical continuum of specialty care typically recommended for diabetic patients (Ophthalmology, Podiatry, etc.). Since diabetes is one of the secondary conditions associated with obesity, the focus on obesity is likely to have a positive impact on the patients who suffer with the disease.

✓ **Alcoholism and Drug Addiction** – Brookdale does not have an OASAS license to provide services directly to the addicted population. Instead, the hospital provides care and treatment for addictions under its article 28 license (inpatient) and its NYS Office of Mental Health (OMH)-issued license for outpatients with mental illness and substance problems. In addition, several OASAS licensed clinics in the area add to the care continuum.
(II) Addressing the Barriers to Care Identified:

Brookdale is committed to adapting its service delivery model and developing the community collaborations that will help address some of the barriers to care identified. Examples include:

✓ Primary care/Access to care – Brookdale has a network of six separate primary care facilities and other ambulatory care sites that are strategically located to ensure that thousands of patients from all socio-economic and ethnic backgrounds have access to primary care.

✓ Access to care – Brookdale’s new Urgent Care Center offers patients greater flexibility in accessing care. Designed to serve as an alternative to the Emergency Room for patients who need care for non-life-threatening conditions, the Center is open to the community every day for longer hours than most primary care services, to accommodate working families. In addition, Brookdale is changing the service delivery model of its six primary care sites, to offer patients more flexibility in care.

✓ Prevention models - Prevention models like the anti-obesity LLLR work with community partners to have a positive impact on patient health. The LLLR program has provided life-changing clinical intervention for more than 3,000 kids during the past 12 years, and engages thousands of adults through health fairs, physical fitness programs and wellness seminars each year.

✓ Specialty care – While Brookdale’s capacity in not adequate to meet the specialty care demand its service areas, Brookdale provides comprehensive medical and surgical specialty and subspecialty care for its patient population. The subspecialty clinics provide care for patients with complicated diseases that require highly trained specialist, and work in close collaboration with primary care providers. Areas of medical and surgical care include:
- Bariatric surgery;
- Ophthalmology;
- Neurological surgery;
- Hand surgery;
- Breast surgery;
- Orthopedic surgery;
- Pediatric surgery;
- Vascular surgery;
- Ear, nose and throat surgery;
- Urological surgery for men, women and children;
- Comprehensive women’s specialty health care, including gynecology for adults and adolescents, maternal-fetal medicine, gynecological oncology, prenatal care, high risk pregnancy care and postpartum care;
- Medical subspecialty care includes: Allergy; Dermatology; Nephrology; Hematology/Oncology; Neurology; Pulmonary; Cardiology; and Endocrinology, to name a few; and
- Medication management services for patients with complicated conditions that require multiple medications.

✓ **Linguistic isolation** – Brookdale offers a variety of language assistance services to non-English and Limited English Proficient (LEP) patients and their families to facilitate care. Language services include:

- Signage and forms – signage and documents that are standard to care are available in several languages throughout the hospital;

- Language Bank – employees have access to a Language Bank which is comprised of more than 150 interpreters who are skilled in interpreting in a wide variety of languages;
- Manuals - a variety of manuals which contain communication policies and procedures, a listing of all hospital qualified medical and non-medical interpreters, and tools for the hearing and visually impaired are available to staff.

(III) Three-Year Implementation Strategy:

Brookdale’s three-year Implementation Strategy, included in this report as an appendix, is structured to advance two NYS DOH Prevention Agenda focus areas: (1) Reducing Obesity in Children and Adults; and (2) Increasing Access to High Quality Chronic Disease Preventive Care and Management in Both Clinical and Community Settings. Brookdale established goals and objectives for each focus area to optimize the use of successful models that are now in place at Brookdale, community collaborations, and other relevant resources outside of our service area.
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   Director of Planning  
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   Phone: 718 – 240 – 8533  
   Fax: 718 – 240 - 6492
APPENDICES

- 2016-2018 Implementation Strategy
- Brookdale Hospital Patient Demographic Composition
- Three-mile radius map of the area.
**YEAR 1**

**Priority Area: Prevent Chronic Diseases - YEAR 1**

**Focus Area 3: Reduce Obesity in Children and Adults**

<table>
<thead>
<tr>
<th>Goal</th>
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<tbody>
<tr>
<td>GOAL 1: Prevent childhood obesity through early childcare and schools.</td>
<td>To create and implement a systems based practice for early identification and referral for infants and children at risk for obesity or with obesity; Conduct training of clinicians to support referral system at every Brookdale primary care site, as well as training for the pediatric residents; Dr. Dhuper and Live Light Live Right (LLLR) team will lead the training and work with ambulatory care team to implement.</td>
<td>Training; Screening questionnaire and referral form will be incorporated into EPIC, Brookdale EMR; Age appropriate nutrition handouts will be provided to all pediatricians and incorporated into EPIC; Patients considered “high risk” will be referred to LLLR through EPIC; LLLR program implementation.</td>
<td>Use Epic to track number of patient screenings and referrals.</td>
<td>Brookdale primary care sites; clinicians, including pediatricians and residents.</td>
<td>LLLR team and consultants will train physicians.</td>
<td>2017 Jan - Mar - Complete screening tools and incorporate in EPIC.</td>
<td>Yes</td>
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</table>

Screening high risk population for early prevention of obesity and providing age and culturally appropriate handouts with care coordination is a way to address disparities of poor preventative care, lack of resources and language barriers.
### GOAL 2: Expand the role of health care, health service providers and insurers in obesity prevention

**Objective**: Train pediatricians in early identification and referral of children with obesity; LLLR is an innovative health care model which provides medical, nutritional, behavior and exercise programs to overweight and obese children and works with community partners to provide services (livelight.org).

**Interventions/Strategies/Activities**: LLLR to continue to offer two clinics a week, with a comprehensive approach for childhood obesity, and provide medical, nutritional, behavior therapy, exercise programs and care coordination.

**Process/Measure**: Screen for medical comorbidities; Measure and track outcomes BMI, BMI Z, waist, BP, Lipids, Insulin, Liver function, glucose and Hb A1c; Screen for sleep apnea.

**Partner Role**: LLLR team

**Partner Resources**: Robin Hood Foundation support

**Date**: Ongoing and established program

**Will Action Address Disparity?**: Yes. Addresses obesity, Type 2 diabetes, Cardiovascular risk, Physical activity, Nutrition.

All risk factors more prevalent in low income neighborhoods.
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<td><strong>GOAL 3: Create community environments that promote and support healthy food and beverage choices and physical Activity.</strong></td>
<td>To work and expand local partnerships to support physical activity and nutrition</td>
<td>Collaborate with the Center for Health Equity (CHE) and Brooklyn DPHO; Continue to expand the Bike club for children in Brooklyn; Work with at least 2 schools to promote the Healthy Schools program; Serve as consultants to the schools and offer after school programs in schools interested; Adopt one Bodega close to Brookdale Hospital and collaborate with the Shop Healthy Program to promote healthy food items in that bodega, provide incentives such as Health bucks: Participate in 10 local health fairs, community events, provide cooking demos and workshops; LLLR and Brookdale to provide support and partner with Healthy Start programs to promote optimum nutrition to teens and pregnant women and promote breastfeeding and age appropriate feeding practices to prevent obesity.</td>
<td>Track and hold quarterly collaborative meetings and minute of meetings</td>
<td>DPHO team - Maggie Veatch, Director of physical activity; Megan Galucia - Director of school wellness program; Victoria Gardner, Creating Healthy Schools and Communities – Community Coordinator</td>
<td>DPHO has a large network of resources and funding to promote healthy environments, and will partner with LLLR to bring these services to our patients and communities; LLLR team of consultants, nutritionists, care coordinator and exercise trainers plus partners. See Livelight.org</td>
<td>2017</td>
<td>Yes</td>
</tr>
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</table>

Promote the bike club and other exercise programs

Work with 2 schools

Work with one bodega

CHE exist to implement policy and local programs to address local health disparities noted from the NYC DOH Community Health profiles 2015.
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<tr>
<td>GOAL 1: Prevent childhood obesity through early childcare and schools.</td>
<td>To create and implement a systems based practice for early identification and referral for infants and children at risk for obesity or with obesity; Training for this program will be done at every BFCC site, as well as training for pediatric residents; Dr. Dhuper and LLLR team will lead the training and work with ambulatory care team to implement.</td>
<td>Clinician training; Screening questionnaire and referral form will be incorporated into EPIC; Age appropriate nutrition handouts provided to all pediatricians and incorporated into EPIC; Patients considered high risk referred through EPIC to LLLR; LLLR care coordinator will contact the families and schedule a clinic visit or nutrition evaluation</td>
<td>Use EPIC to track numbers screened and referred; Track number of patients reached by the LLLR team and; Track number of patients seen at the LLLR clinic for evaluation and nutrition counselling</td>
<td>Brookdale Family care centers pediatricians and residents; Training and data collection by LLLR team; Epic Consultants, Brookdale hospital</td>
<td>LLLR team and consultants will train the physicians; Brownsville Early Childhood Collaborative team will work with LLLR to track process development and outcome.</td>
<td>2017 Jan-Mar: Complete screening tools and incorporate into EPIC; Jan-Jun: Train all the BFCC physicians and pediatric residents; Oct-Dec: Track outcome data for numbers screened.</td>
<td>Yes. Screening high risk population for early prevention of obesity and providing age and culturally appropriate handouts with care coordination is a way to address disparities of poor preventative care, lack of resources and language barriers.</td>
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GOAL 2:  
Expand the role of health care, health service providers and insurers in obesity prevention

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<td>GOAL 2:</td>
<td>Pediatricians to become trained in early identification and referral of children with obesity; LLLR is an innovative health care model which provides Medical, Nutritional, behavior and exercise programs to overweight and obese children and works with community partners to provide services ( livelight.org)</td>
<td>LLLR to continue to offer 2 clinics a week, with a comprehensive approach for childhood obesity and provide medical, nutritional, behavior therapy, exercise programs and care coordination.</td>
<td>Screen for medical comorbidities; Measure and track outcomes BMI, BMI Z, waist, BP, Lipids, Insulin, Liver function, glucose and Hb A1c; Screen for sleep apnea</td>
<td>LLLR team</td>
<td>Team of consultants</td>
<td>Ongoing and established program</td>
<td>Yes. Addresses obesity Type 2 diabetes Cardiovascular risk, Physical activity, Nutrition. All risk factors more prevalent in low income neighborhoods.</td>
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</table>
**GOAL 3:** Create community environments that promote and support healthy food and beverage choices and physical activity.

**Outcome Objectives:** To work and expand local partnerships to support physical activity and nutrition.

**Interventions/ Strategies/ Activities:**
- Collaborate with the CHE and Brooklyn DPHO; Continue to expand Bike club for children; Work with at least 2 schools to promote the Healthy Schools program; Serve as consultants to the schools and offer after school programs; Adopt one Bodega close to Brookdale Hospital and collaborate with the Shop Healthy Program to promote healthy food items in that bodega, encourage parents to visit this bodega, provide incentives such as Health bucks; Participate in 10 local health fairs, community events, provide cooking demos and workshops; LLLR to provide support and partner with Healthy Start programs to promote optimum nutrition to teens and pregnant women and promote breastfeeding and age appropriate feeding practices to prevent obesity.

**Process Measure:**
- Track and hold quarterly collaborative meetings and minute of meetings; Track number of participants attending exercise and bike program; Track attendance at Health fairs; Report on school interventions.

**Partner Role:**
- DPHO team: M. Veatch, Director of physical activity, M. Galucia, Director of school wellness program, V. Gardner, Creating Healthy Schools and Communities Community Coordinator; Dr. Dhuper and DPHO team will give local talks and grand rounds to create awareness of resources available to community.

**Partner Resources:**
- DPHO has a large network of resources and funding to promote healthy environments. They are partnering with LLLR to bring these services to patients and communities. LLLR team of consultants, nutritionists, care coordinator and exercise trainers plus partners. See Livelight.org

**Date:** 2017

**Will Action Address Disparity?** Yes.

CHE created to implement policy and local programs to address local health disparities noted from the NYC DOH Community Health Profiles 2015.
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| GOAL 1: Prevent childhood obesity through early childcare and schools. | To create and implement a systems based practice for early identification and referral for infants and children at risk for obesity or with obesity. Training for this program will be completed at every BFCC site as well as training for the pediatric residents. | Training will be completed; Screening questionnaire and referral form will be incorporated into EPIC EMR; Age appropriate Nutrition handouts will be provided to all pediatricians and incorporated into EPIC; The patients considered as high risk will be referred through the EPIC system to LLLR; LLLR care coordinator will contact the families and schedule a clinic visit or nutrition evaluation. | Use EMR Epic to track numbers screened and referred; Track number of patients reached by the LLLR team; Track number of patients seen at the LLLR clinic for evaluation and nutrition counseling. | Brookdale Family care centers pediatrics and residents; Training and data collection by LLLR team; Epic Consultants, Brookdale hospital | Live Light Live Right team and consultants will train the physicians; Brownsville Early Childhood Collaborative team will work with LLLR to track process development and outcome. | Track outcome data for numbers screened and referred to LLLR; Track number of patients seen by a nutritionist; Track Referral to the exercise program. | Yes
Screening high risk population for early prevention of obesity and providing age and culturally appropriate handouts with care coordination is a way to address disparities of poor preventative care, lack of resources and language barriers.
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<td>Pediatricians to become trained in early identification and referral of children with obesity; LLLR to extend its capacity as an innovative health care model which provides medical, nutritional, behavior and exercise programs to overweight and obese children, and increase collaboration with community partners to provide services. (livelight.org)</td>
<td>LLLR to continue to offer 2 clinics a week, with a comprehensive approach for childhood obesity, and provide medical, nutritional, behavior therapy, exercise programs and care coordination.</td>
<td>Screen for medical comorbidities; Measure and track outcomes BMI, BMI Z, waist, BP, Lipids, Insulin, Liver function, glucose and Hb A1c; Screen for sleep apnea.</td>
<td>LLLR team</td>
<td>Robin Hood Foundation support</td>
<td>12/27/2016</td>
<td>Yes. Addresses obesity, Type 2 diabetes, Cardiovascular risk, Physical activity, Nutrition.</td>
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<td>GOAL 3: Create community environments that promote and support healthy food and beverage choices and physical Activity.</td>
<td>To work and expand local partnerships to support physical activity and nutrition</td>
<td>Collaborate with the CHE and Brooklyn DPHO; Continue to expand Bike club for kids; Work with 2 additional schools to reach a total of 4, to promote Healthy Schools program; Serve as consultants to schools and offer afterschool programs; Adopt 2 Bodegas close to Brookdale; Work with 2 farmers markets to promote the Shop Healthy Program to encourage healthy foods and eating; Participate in 10 health fairs, community events; provide cooking demos and workshops; LLLR will work with an additional partner in Brooklyn to promote healthy eating; Work with Heath First or other insurance company to support part of the services provided; Work with Healthy Start programs to promote optimum nutrition for teens and pregnant women, and promote breastfeeding and age appropriate feeding practices.</td>
<td>Track and hold quarterly collaborative meetings and minute of meetings; Track number of participants attending exercise programs, and bike program; Track attendance at Health fairs; Report on school interventions</td>
<td>DPHO team- Maggie Veatch Director of physical activity; Megan Galucia Director of school wellness program; Victoria Gardner - Creating Healthy Schools and Communities Community Coordinator; Dr. Dhuper and DPHO team will give local talks and grand rounds to create awareness of resources available to the community</td>
<td>DPHO has a large network of resources and funding to promote healthy environments, and will partner with LLLR to bring these services to patients and communities; LLLR team of consultants, nutritionists, care coordinator and exercise trainers plus partners. See Livelight.org</td>
<td>2018</td>
<td>Yes. Providing preventive services and building local partnership to address local health Disparities reported in noted The NYC DOH Community Health profiles 2015.</td>
</tr>
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### GOAL 1: Increase screening rates for cardiovascular disease, diabetes and breast, cervical and colorectal cancers, especially among disparate populations.

**Assessment**: Assess current screening and disease management practices at Brookdale clinics and points of service, to determine capacity to incorporate and/or expand screenings, disease management, and patient education for East Brooklyn; Assess EPIC (Brookdale's EMR) support needed to accomplish goal.

**Interventions/Strategies/Activities**
- Conduct clinical process assessments; Establish personal "Plan of Care" protocol for chronic disease patients; Incorporate patient followup care and compliance tracking; Work with External Affairs Dept. to develop strategy around East Brooklyn community outreach and education.

**Process Measure**
- Assessment of clinics and service delivery points of service complete; strategic planning sessions for community outreach and education conducted; EPIC capacity enhancements needed to support increase in screenings and disease management identified.

**Partner Role**
- CMO and administrators take lead on assessment of clinics; clinicians - participate in assessments; External Affairs Dept - community outreach; NYC DOH - facilitate best practice sharing; Brookdale technology staff - EMR review.

**Partner Resources**
- Brookdale staff; NYC DOH staff support

**Date**
- 2016-2017

**Will Action Address Disparity?**
- Yes
### GOAL 2: Promote evidence-based care to manage chronic diseases.

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<td>Assess Brookdale's capacity to educate Brookdale clinicians on the importance of promoting disease management (using the anti-obesity program “Live Light Live Right” (LLLR) as a model) and to promote chronic disease management in East Brooklyn; Review Brookdale’s ability to accommodate all patient insurance options, to serve more patients.</td>
<td>Work with Dept. Chairs, clinic administrators to conduct assessments; Seek out funding and in-kind resources to support this goal; work with community partners to determine infrastructure that is now in place to support evidence-based disease management and promotion.</td>
<td>Assessment of Brookdale’s clinical and operational capacity to promote evidence-based care programs completed; strategic planning sessions for community outreach to promote disease management at Brookdale.</td>
<td>CMO and administrators take lead on initiating assessments; clinicians - participate in assessments; External Affairs Dept - community outreach; NYC DOH - facilitate best practice sharing.</td>
<td>Brookdale staff; NYC DOH staff support</td>
<td>2016-2017</td>
<td>Yes</td>
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</table>
### GOAL 3: Promote culturally-relevant chronic disease management education.

**Evaluate Brookdale's current chronic disease management efforts, to determine deficiencies in cultural relevance.**

- Work with Brookdale Dept. Chairs, clinic administrators, other staff to conduct assessments. Work with External Affairs Dept. staff to assess community cultural outreach needs and strategies.

- **Process Measure:** In-house assessments complete; Community feedback received.

- **Partner Role:**
  - CMO and administrators - initiate and take the lead on assessments; clinicians participate in assessments.
  - External Affairs Dept - community outreach; NYC DOH and GNYHA - facilitate best practice sharing.

- **Partner Resources:**
  - Brookdale staff; NYC DOH staff support

- **Date:** 2016-2017

- **Will Action Address Disparity?** Yes
### Goal

**Goal 1:** Increase screening rates for cardiovascular diseases, diabetes and breast, cervical and colorectal cancers, especially among disparate populations.

### Outcome Objectives

Based on Brookdale capacity and availability of financial resources, Brookdale will increase screenings for diseases like breast, cervical, and colorectal cancer; obesity, cardiovascular disease; and diabetes in East Brooklyn, and enhance EPIC's capacity to support patient Plan of Care and tracking.

### Interventions/ Strategies/ Activities

Dept. Chairs, and clinic administrators promote more screenings; routinize development of patient "Plan of Care" and treatment compliance followup; External Affairs Dept. staff promote more screenings in East Brooklyn.

### Process Measure

Number of clinics that incorporate Plan of Care, treatment compliance followup, and education into treatment model. Number of patients screened and referred to treatment programs, as reported in EPIC.

### Partner Role

CMO and administrators - promote screenings at points of service; External Affairs Dept. - community outreach; NYC DOH - facilitate best practice sharing.

### Partner Resources

Brookdale staff; NYC DOH staff support

### Date

2017

### Will Action Address Disparity?

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<td><strong>GOAL 2:</strong> Promote evidence-based care to manage chronic diseases.</td>
<td>Increase the number of patients enrolled in evidence-based care and disease management programs at Brookdale; Increase the number of community outreach events to raise awareness of chronic disease management programs at Brookdale.</td>
<td>Brookdale's chronic disease management clinics and primary care sites are making an effort to reach more patients with chronic diseases, enrolling them in education and disease management, and tracking their progress through EMR; Clinicians are aware of the importance of disease management, and actively screening and referring patients to disease management; Efforts continue to focus on developing a strong community network to support chronic disease education in East Brooklyn.</td>
<td>Number of patients utilizing clinics; Number of patients following Plan of Care; participation rates in community education efforts; Number of clinicians who utilize EPIC to promote screenings and chronic disease management by referring patients; Number of community education events held.</td>
<td>CMO and administrators - promote screenings and disease management at points of service; External Affairs Dept - community outreach; NYC DOH facilitate best practice sharing.</td>
<td>Brookdale staff; NYC DOH staff support</td>
<td>2017</td>
<td>Yes</td>
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<td>GOAL 3: Promote culturally-relevant chronic disease management education.</td>
<td>Ensure that all clinics and primary care sites are providing care in a culturally-relevant manner.</td>
<td>Ensure that physicians and staff enroll in cultural-sensitivity training; Ensure that all clinics and points of service care delivery are culturally sensitive; Ensure staff diversity; Ensure that patients and larger community are aware of language bank services.</td>
<td>Disease management delivery and education materials are culturally appropriate; Brookdale staff is diverse.</td>
<td>CMO and administrators ensure that learning and care environment are culturally-sensitive and appropriate; External Affairs Dept - ongoing community outreach; NYC DOH - facilitate best practice sharing.</td>
<td>Brookdale Hospital staff - Implementation; NYC DOH, GNYHA and HANYS - cultural sensitivity trainings and resources</td>
<td>2017</td>
<td>Yes</td>
</tr>
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</table>
### GOAL 1: Increase screening rates for cardiovascular diseases, diabetes and breast, cervical and colorectal cancers, especially among disparate populations.

**Based on Brookdale capacity and availability of resources, increase screenings for diseases like breast, cervical, and colorectal cancer; obesity, cardiovascular disease; and diabetes in East Brooklyn.**

**Dept. Chairs, and clinic administrators promote more screenings, routinize development of patient "Plan of Care" and treatment compliance followup; External Affairs Dept. staff promote more screenings in East Brooklyn.**

**Number of patients screened and referred to treatment programs and following Plan of Care, as reported in EPIC.**

**CMO and administrators - promote screenings at points of service; External Affairs Dept - community outreach; NYC DOH - facilitate best practice sharing.**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Outcome Objectives</th>
<th>Interventions/ Strategies/ Activities</th>
<th>Process Measure</th>
<th>Partner Role</th>
<th>Partner Resources</th>
<th>Date</th>
<th>Will Action Address Disparity?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GOAL 1:</strong> Increase screening rates for cardiovascular diseases, diabetes and breast, cervical and colorectal cancers, especially among disparate populations.</td>
<td>Based on Brookdale capacity and availability of resources, increase screenings for diseases like breast, cervical, and colorectal cancer; obesity, cardiovascular disease; and diabetes in East Brooklyn.</td>
<td>Dept. Chairs, and clinic administrators promote more screenings, routinize development of patient &quot;Plan of Care&quot; and treatment compliance followup; External Affairs Dept. staff promote more screenings in East Brooklyn.</td>
<td>Number of patients screened and referred to treatment programs and following Plan of Care, as reported in EPIC.</td>
<td>CMO and administrators - promote screenings at points of service; External Affairs Dept - community outreach; NYC DOH - facilitate best practice sharing.</td>
<td></td>
<td>2018</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### GOAL 2: Promote evidence-based care to manage chronic diseases.

**Goal:** Increase the number of patients enrolled in evidence-based care and disease management programs at Brookdale; Increase the number of community outreach events to raise awareness of chronic disease management programs at Brookdale.

**Outcome Objectives:**

- Increase the number of patients enrolled in evidence-based care programs at Brookdale.
- Increase the number of community outreach events to raise awareness of chronic disease management programs at Brookdale.

**Interventions/ Strategies/ Activities:**

- Brookdale’s clinics and primary care sites are making an effort to reach more patients with chronic diseases, establishing Plan of Care for them, and enrolling them in education and disease management, and tracking their progress through EMR; an increase in the number of clinicians who are aware of the importance of disease management, and are actively screening, and referring patients for disease management; Brookdale is developing a strong community network that is supporting chronic disease education in East Brooklyn.

**Process Measure:**

- Patient use of clinics, enrollment in disease management, and compliance level; Participation in community education efforts; Number of clinicians who use EPIC to promote chronic disease management by referring patients; Number of community events held.

**Partner Role:**

- CMO and Administrators - promote screenings and disease management at points of service; External Affairs Dept - community outreach; NYC DOH - facilitate best practice sharing.

**Partner Resources:**

- Brookdale staff; NYC DOH staff support.

**Date:** 2018

**Will Action Address Disparity?**

Yes
<table>
<thead>
<tr>
<th>Goal</th>
<th>Outcome Objectives</th>
<th>Interventions/ Strategies/ Activities</th>
<th>Process Measure</th>
<th>Partner Role</th>
<th>Partner Resources</th>
<th>Date</th>
<th>Will Action Address Disparity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL 3: Promote culturally-relevant chronic disease management education.</td>
<td>Ensure that all clinics and primary care sites are providing care in a culturally-relevant manner.</td>
<td>Ensure that clinicians and other staff enroll in cultural-sensitivity training; Ensure that all clinics and points of service care delivery is done in a culturally sensitive manner; Ensure staff diversity; Ensure that patients and larger community are aware of language bank services.</td>
<td>Disease management delivery and education materials are culturally appropriate; Brookdale staff is diverse.</td>
<td>CMO and administrators ensure that learning and medical care environments are culturally-sensitive and appropriate; External Affairs Dept - ongoing community outreach; NYC DOH - facilitate best practice sharing.</td>
<td>Brookdale Hospital staff - implementation; NYC DOH, GNYHA and HANYS - cultural sensitivity trainings and resources</td>
<td>2018</td>
<td>Yes</td>
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### Brookale Service Area

#### 6/18/2015

<table>
<thead>
<tr>
<th>Primary Service Area</th>
<th>2015</th>
<th>2014</th>
<th>2012</th>
<th>Total Residents</th>
<th>Black / African American</th>
<th>Foreign Born</th>
<th>Not a US Citizen</th>
<th>Median Age</th>
<th>Household Income</th>
<th>% of People below Poverty</th>
<th>Wtd Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>11212 Central Brooklyn</td>
<td>26%</td>
<td>27%</td>
<td>26%</td>
<td>84,500</td>
<td>71,964</td>
<td>27,088</td>
<td>11,832</td>
<td>31.9</td>
<td>$27,278</td>
<td>33.4%</td>
<td>39,722</td>
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<tr>
<td>11207 East New York and New Lots</td>
<td>19%</td>
<td>19%</td>
<td>18%</td>
<td>93,386</td>
<td>62,417</td>
<td>28,001</td>
<td>12,933</td>
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<td>14%</td>
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<td>14,681</td>
<td>30.7</td>
<td>$35,437</td>
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</tr>
<tr>
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<td>12%</td>
<td>13%</td>
<td>93,877</td>
<td>79,835</td>
<td>44,670</td>
<td>15,372</td>
<td>36.4</td>
<td>$61,794</td>
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<tr>
<td>Sub-Total</td>
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<td>72%</td>
<td>72%</td>
<td>366,232</td>
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<td>134,202</td>
<td>54,818</td>
<td>32.5</td>
<td>$27,278</td>
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#### Secondary Service Area

<table>
<thead>
<tr>
<th>Secondary Service Area</th>
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<th></th>
<th></th>
<th>Total Residents</th>
<th>Black / African American</th>
<th>Foreign Born</th>
<th>Not a US Citizen</th>
<th>Median Age</th>
<th>Household Income</th>
<th>% of People below Poverty</th>
<th>Wtd Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>11233 Central Brooklyn</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>67,053</td>
<td>56,838</td>
<td>15,102</td>
<td>7,249</td>
<td>39.0</td>
<td>$34,633</td>
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<tr>
<td>11239 Canarsie and Flatlands</td>
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<td>3%</td>
<td>3%</td>
<td>13,393</td>
<td>7,644</td>
<td>3,800</td>
<td>543</td>
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<tr>
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<td>2%</td>
<td>2%</td>
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<tr>
<td>11234 Canarsie and Flatlands</td>
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<td>2%</td>
<td>2%</td>
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<td>37,024</td>
<td>33,200</td>
<td>9,222</td>
<td>39.1</td>
<td>$67,776</td>
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<tr>
<td>11213 Central Brooklyn</td>
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<tr>
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<tr>
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<td>12,621</td>
<td>31.9</td>
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<tr>
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<td>1%</td>
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<td>7,111</td>
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<tr>
<td>11225 Flatbush</td>
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<td>1%</td>
<td>1%</td>
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<td>42,766</td>
<td>26,416</td>
<td>12,453</td>
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<tr>
<td>11210 Flatbush</td>
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<td>1%</td>
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<td>62,008</td>
<td>35,821</td>
<td>24,861</td>
<td>9,210</td>
<td>34.1</td>
<td>$52,895</td>
<td>15.5%</td>
<td>44,014</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>18%</td>
<td>19%</td>
<td>18%</td>
<td>661,764</td>
<td>459,152</td>
<td>254,103</td>
<td>109,146</td>
<td>35.1</td>
<td>$39,722</td>
<td>27.1%</td>
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</tbody>
</table>

#### Total 3 Mile Radius

<table>
<thead>
<tr>
<th>Total 3 Mile Radius</th>
<th>90%</th>
<th>91%</th>
<th>90%</th>
<th>Total Residents</th>
<th>Black / African American</th>
<th>Foreign Born</th>
<th>Not a US Citizen</th>
<th>Median Age</th>
<th>Household Income</th>
<th>% of People below Poverty</th>
<th>Wtd Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brooklyn Total</td>
<td>90%</td>
<td>91%</td>
<td>90%</td>
<td>1,027,996</td>
<td>718,515</td>
<td>388,305</td>
<td>163,964</td>
<td>34.15</td>
<td>$42,485</td>
<td>23.2%</td>
<td>44,014</td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td>306,603,772</td>
<td>38,395,857</td>
<td>39,268,838</td>
<td>22,118,154</td>
<td>37.0</td>
<td>$32,762</td>
<td>14.3%</td>
<td>44,014</td>
</tr>
</tbody>
</table>