# The Johns Hopkins Hospital & Johns Hopkins Bayview Medical Center

# Community Health Needs Assessment & Implementation Strategy

**June 2016** 



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## Introduction

With the enactment of the Patient Protection and Affordable Care Act (PPACA) on March 23, 2010, tax-exempt hospitals require community health needs assessments (CHNA) and implementation strategies, which are approaches and plans to actively improve the health of communities served by health systems. These strategies provide hospitals and health systems with the information they need to deliver community benefits that can be targeted to address the specific needs of their communities. Coordination and management strategies based upon the outcomes of a CHNA, and implementing strategies, can improve the impact of hospital community benefits.

To adhere to the requirements imposed by the IRS, tax-exempt hospitals and health systems must:

- Conduct a CHNA every three years.
- Adopt an implementation strategy to meet the community health needs identified through the assessment.
- Report how it is addressing the needs identified in the CHNA and a description of needs that are not being addressed, with the reasons why.

The Department of the Treasury and the IRS require a CHNA to include:

- 1. A description of the community served by the hospital facility and how the description was determined.
- 2. A description of the process and methods used to conduct the assessment.
  - A description of the sources and dates of the data and other information used in the assessment and the analytical methods applied to identify community health needs.
  - A description of information gaps that impact the hospital organization's ability to assess the health needs of the community served by the hospital facility.
  - Identification of organizations that collaborated with the hospital/health system and an explanation of their qualifications.
- 3. A description of how the hospital organizations took into account input from persons who represent the broad interests of the community served by the hospital. In addition, the report must identify any individual providing input that has special knowledge of or expertise in public health. The report must also identify any individual providing input who is a "leader" or "representative" of populations.
- 4. A prioritized description of all of the community health needs identified through the CHNA, as well as a description of the process and criteria used in prioritizing such health needs.
- 5. A description of the existing health care facilities and other resources within the community available to meet the community health needs identified through the CHNA.

 A description of the needs identified that the hospital intends to address, the reasons those needs were selected, and the means by which the hospital will undertake to address the selected needs.<sup>1</sup>

The CHNA process for The Johns Hopkins Hospital (JHH) and Johns Hopkins Bayview Medical Center (JHBMC) included the collection and analysis of primary and secondary data. Both public and private organizations, such as faith-based organizations, government agencies, educational systems and health and human services entities were engaged to assess the needs of the community. In total, the extensive primary data collection phase resulted in the contribution of more than 750 community stakeholders/leaders and community residents. The 2013 CHNA served as a baseline to provide a deeper understanding of the health, as well as the socioeconomic needs of the community.

Primary data in the form of an online and a paper survey gathered feedback from community residents and health system staff. Fifty-two stakeholder interviews were conducted with individuals who represented a) broad interests of the community, b) populations of need or c) persons with specialized knowledge in public health. Six focus groups with a total of 83 participants were conducted with vulnerable populations, along with the distribution and collection of a paper hand survey, which gathered a wide range of information from 648 community residents. A community health forum was facilitated with over 30 key community leaders and representatives. The forum prioritized health needs, which helped outline implementation and planning. An interactive resource inventory was created to highlight available programs and services within The Johns Hopkins Hospital (JHH) and Johns Hopkins Bayview Medical Center's (JHBMC) community benefits service area (CBSA)<sup>2</sup>. The inventory identifies organizations and agencies in the community that are serving the various target populations within each of the priority needs.

A secondary data profile was compiled with local, state and federal figures to provide essential information, insight and knowledge on a broad range of health and social issues. Collecting and examining information about different community aspects and behaviors help explain and identify factors that influence the community's health.

Information collected from secondary data provided reliable facts from multiple government and social agencies. The collection of a comprehensive database provides information to understand the health of a community overall. Data collected encompassed socioeconomic information, health statistics, demographics, children's health, mental health issues, etc. This report is a summary of primary and secondary data collected throughout the CHNA.

As part of the secondary data profile, data from Truven Health Analytics<sup>3</sup> was analyzed to gain a deeper understanding of community health care needs. The Community Needs Index (CNI), jointly

<sup>&</sup>lt;sup>1</sup> The outcomes from the CHNA will be addressed through an implementation planning phase.

<sup>&</sup>lt;sup>2</sup> The Community Benefits Service Area (CBSA) or the overall study area referenced in the report refers to the nine ZIP codes that defined the communities for JHH and JHBMC in the CHNA. The ZIP codes included are 21202, 21205, 21206, 21213, 21218, 21219, 21222, 21224 and 21231.

<sup>&</sup>lt;sup>3</sup> Truven Health Analytics, formerly known as Thomson Reuters, is a multinational health care company that delivers information, analytic tools, benchmarks, research and services to a variety of organizations and companies. Truven Health Analytics uses: Demographic data, poverty data (from The Nielsen Company) and

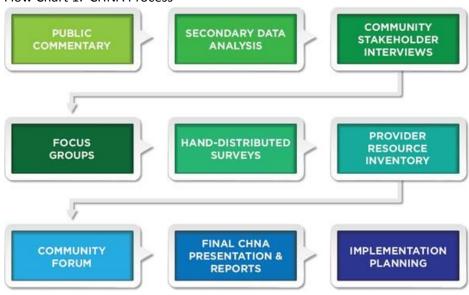
developed by Dignity Health and Truven Health, assists in the process of gathering vital socioeconomic factors in the community. The tool is a strong indicator of a community's demand for various health care services.

Based on a wide array of demographic and economic statistics, the CNI provides a score for every populated ZIP code in the United States on a scale of 1.0 to 5.0. A score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with the most need. The CNI should be used as a part of the larger community needs assessment to assist in pinpointing specific areas that have greater needs compared to others. The information collected was used to identify action items for inclusion in the Implementation Strategy.

The development of the CHNA and the Implementation Strategy was led by the Office of Government and Community Affairs (Tom Lewis, Vice President), Dr. Redonda Miller (JHH Vice President for Medical Affairs) and Dr. Richard Bennett (JHBMC President), and involved the contributions of over 750 individuals through direct interviews, surveys, focus groups and a community forum. Key stakeholder groups included but were not limited to, community residents, members of faith based organizations, neighborhood association leaders, health professionals, Johns Hopkins Medicine leadership and other experts both internal and external to Johns Hopkins.

JHH and JHBMC engaged Tripp Umbach to assist in producing a CHNA for their hospitals. This report is the result of the collaborative efforts of Tripp Umbach consultants Ha Pham and Barbara Terry and senior Johns Hopkins leadership.

The overall CHNA involved multiple steps that are depicted in the flow chart below. Additional information regarding each component of the project, and the results, can be located in the Appendices section of this report.



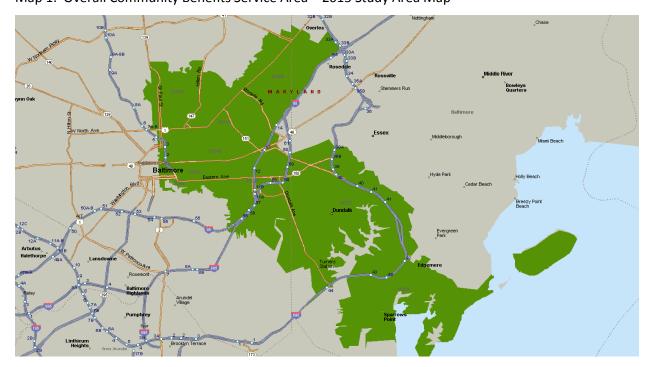
Flow Chart 1: CHNA Process

insurance coverage estimates (from Truven Health Analytics) to provide Community Needs Index (CNI) scores at the ZIP code level. Additional information on Truven Health Analytics can be found in the Appendices.

## **Community Benefits Service Area (CBSA)**

In 2015, a total of nine ZIP codes were analyzed for the Johns Hopkins Institutions. These ZIP codes represent the community benefit service area (CBSA) for The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center. The Johns Hopkins Institutions provide services to communities throughout Maryland, adjoining states and internationally. The community health needs assessment focused on nine specific ZIP codes: 21202, 21205, 21206, 21213, 21218, 21219, 21222, 21224 and 21231. This area reflects the population with the largest usage of the emergency departments and the majority of recipients of community benefit contributions and programming. Within the CBSA, JHH and JHBMC have focused on certain target populations such as the elderly, at-risk children and adolescents, uninsured individuals and households, and underinsured and low-income individuals and households.

The following map geographically depicts the community benefits service area by showing the communities that are shaded. Again, the CBSA encompasses nine ZIP codes across East Baltimore City and southeast Baltimore County (See Map 1).



Map 1: Overall Community Benefits Service Area – 2015 Study Area Map

Source: Truven Health Analytics 2015

The overall study area for JHH and JHBMC shows that all of the ZIP codes in the CBSA, with the exception of ZIP code 21213, are expected to have population growth from 2015 to 2020. ZIP code 21213 is anticipated to have a decrease in population of -0.2 percent. ZIP code 21202 and Baltimore County are expected to have the greatest population increase from 2015 to 2020, each reporting a 3.5 percent rise. (See Table 1).

Table 1: Area Population Snapshot

	21202	21205	21206	21213	21218	21219	21222	21224	21231	Baltimore City	Baltimore County
2015 Total Population	23,812	16,300	50,347	32,146	48,890	9,743	56,953	50,053	16,032	637,630	834,555
2020 Total Population	24,648	16,509	50,903	32,091	49,310	10,012	58,438	51,513	16,575	646,775	864,079
% Change 2015-2020	3.5%	1.3%	1.1%	-0.2%	0.9%	2.8%	2.6%	2.9%	3.4%	1.4%	3.5%

There is a close representation of males and females in the overall study area and the state. ZIP code 21202 has a higher percentage of males than the rest of the study area ZIP codes in 2015, a trend that is expected to continue into 2020 (See Table 2).

Table 2: Gender Snapshot

	21202	21205	21206	21213	21218	21219	21222	21224	21231	Overall Study Area	Maryland
2015 Male Population	59.7%	45.9%	46.5%	45.7%	48.1%	49.4%	48.4%	50.0%	49.3%	48.8%	48.5%
2020 Male Population	59.4%	46.3%	46.7%	46.0%	48.3%	49.4%	48.5%	50.0%	49.3%	49.0%	48.5%
2015 Female Population	40.3%	54.1%	53.5%	54.3%	51.9%	50.6%	51.6%	50.0%	50.7%	51.2%	51.5%
2020 Female Population	40.6%	53.7%	53.3%	54.0%	51.7%	50.6%	51.5%	50.0%	50.7%	51.0%	51.5%

The data reveal a higher representation in the overall study area of Black, Non-Hispanic when compared to the state and the nation. ZIP codes 21219 (92.4 percent), 21222 (76.4 percent), 21224 (57.2 percent) and 21231 (52.9 percent) are predominately White, Non-Hispanic. ZIP codes 21202 (60.6 percent), 21205 (69.3 percent), 21206 (70.2 percent), 21213 (90.5 percent) and 21218 (61.0 percent) are predominately Black, Non-Hispanic (See Table 3).

- ZIP code 21224 has the highest rate of Hispanic (21.7 percent) population.
- ZIP code 21218 has the highest rate of Asian/Pacific Islander, Non-Hispanic (6.1 percent) population.

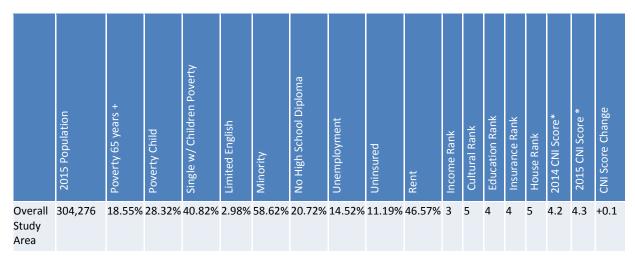
Table 3: Race/Ethnicity Snapshot

	21202	21205	21206	21213	21218	21219	21222	21224	21231	Overall Study Area	M	USA
White Non- Hispanic	29.6%	16.5%	22.6%	6.1%	27.1%	92.4%	76.4%	57.2%	52.9%	41.4%	52.6%	61.8%
Black Non- Hispanic	60.6%	69.3%	70.2%	90.5%	61.0%	3.5%	11.9%	15.8%	28.5%	45.9%	29.0%	12.3%
Hispanic	3.3%	11.0%	2.4%	1.4%	3.2%	1.5%	5.6%	21.7%	11.2%	7.2%	9.4%	17.6%
Asian/Pacific Islander Non- Hispanic	4.3%	1.1%	1.9%	0.4%	6.1%	0.8%	2.0%	2.7%	5.2%	2.9%	6.2%	5.3%
All Others	2.2%	2.2%	2.8%	1.7%	2.5%	1.8%	4.2%	2.5%	2.2%	2.7%	2.8%	3.1%

It is important to review the CNI scores obtained by Truven Health Analytics. The CNI ZIP code summary provides valuable background information to begin addressing and planning for the community's current and future needs. The CNI provides greater ability to diagnose community needs as it explores ZIP code areas with significant barriers to health care access.

In assessing the CNI scores for the overall study area or CBSA, the CNI score in 2014 was 4.2\*; while the CNI for 2015 was 4.3\*. This is an increase of +0.1 from 2014 to 2015, indicating that the overall study area now faces increased barriers to accessing care. Again, a CNI score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with significant need. It is important to note that ZIP codes with a low score (e.g., 1.0) do not imply that no attention should be given to that neighborhood; rather, hospital leadership should decipher what specifically is strategically working well to ensure a low neighborhood score (See Table 4).





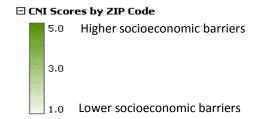
Source: Truven Health Analytics 2015

\* Weighted average of total market

Continuing to review CNI information, the map below provides a geographic representation of the CNI scores depicted from Table 4. ZIP codes that have higher socioeconomic barriers (5.0) are represented in dark green. As the socioeconomic scores decrease, the coding color lightens. There are concentrated areas within Baltimore City that signify high socioeconomic barriers to care (See Map 2).

Battimore
Battimore
Highlands
Pumphrey

Map 2: CNI Study Area Map



## **Key Community Health Needs**

The health status of a community depends on many factors, including quality of health care, social and economic determinants, individual behaviors, heredity, education and the physical environment.

Healthy People 2020 creates targets for the nation for improving health status, promoting community health, and challenging individuals, communities and professionals to take specific steps to ensure that good health, as well as long life, are enjoyed by all. Because "health" is more than just the absence of disease, a focus on socioeconomic factors is required.

Socioeconomic status is often defined as the social and economic experiences that shape and frame a person's lifestyle. The environment—in particular, where we work and live—as well as education, income and age play a significant role in an individual's socioeconomic status. It is well documented that residents who are uneducated and have limited financial resources often experience challenges such as poor housing, limited employment advancement and a low quality of life. All of these challenges ultimately affect their health outcomes.

Children attending school in poor conditions may have low educational achievements and lack a rich educational infrastructure. Parents who struggle with employment opportunities will be less likely to afford educational resources for their children such as computers, tutors and books—materials which often assist students becoming successful.

Similarly, community residents living in neighborhoods that are underserved may face higher levels of stress if their community is plagued with crime, drugs and poverty. The increased tension due to the city's social injustices and inequalities have produced higher levels of stress leading to civil unrest, mental and behavioral health problems, and the potential for increased use and abuse of drugs and alcohol products.

Residents in East Baltimore City and southeast Baltimore County are aware of the health and social inequalities and disparities that exist. Addressing these disparities and working to reduce the socioeconomic gaps can bridge and provide sustainable support for those who have limited options. Residents who have a low socioeconomic status have significant challenges when accessing resources and services.

The Johns Hopkins Institutions have significant strategies that are geared towards addressing the health and well-being of the community's marginalized youths and residents. As a large economic driver in the region, JHH and JHBMC's leaders have encouraged the health and well-being of the marginalized populations through their programs, community initiatives and economic development projects. Providing programs that offer employment opportunities, platforms which address the social and health needs of the disparate population, and continued regional support working in close collaboration with regional and local community organizations, the Johns Hopkins Institutions have placed a substantial footprint in the region.

The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center will continue to address the socioeconomics of their community residents with innovative and effective programs, community outreach efforts, and collaboration and partnerships with nonprofits and local organizations to reach vulnerable residents and those most affected by the health and social disparities across the city.

In the summer of 2015, JHH and JHBMC continued their commitment to the community through a comprehensive CHNA process and engaged a variety of community organizations, community leaders and agencies in order to identify the needs of their community residents. The CHNA focused on nine ZIP codes within the study area known as the community benefits service area (CBSA). With support from key community representatives, health officials, hospital leadership and community stakeholders with in-depth knowledge regarding East Baltimore City and southeast Baltimore County, the CHNA helped identify and prioritize the community's needs.

One of the objectives of the Patient Protection and Affordable Care Act (PPACA) is to identify ways to better coordinate health services to allow greater accessibility, while reducing health care costs for patients and caregivers. As a result, health care organizations are streamlining services and collaborating with community agencies and organizations to capitalize on the ability to share resources. By providing affordable health care insurance, a large portion of the previously uninsured population now has a pathway to affordable and accessible preventive services.

Four key need areas were identified during the CHNA process through the gathering of primary and secondary data from local, state and national resources, community stakeholder interviews, hand-distributed surveys, focus groups with vulnerable populations, a community forum and a health provider inventory (highlighting organizations and agencies that serve the community). The identified community needs are depicted in order of priority in the graph below (See Graph 1).

Graph 1: Key Community Health Needs



## **Improving Socioeconomic Factors**

While biological makeup or genetics determine some health issues an individual will experience, socioeconomic factors, like income, education and employment opportunities, can shape how people make decisions related to their health and the access they have to health care services. There is a direct and indirect correlation between community residents' overall health and low levels of educational attainment and the inability to secure employment. It is not uncommon that residents living in poverty face multiple challenges related to high crime rates, poor home conditions and low educational attainment. Often, individuals in these situations are focused on obtaining basic living needs (e.g. food, affording utilities and housing) for themselves and their families. Without access to higher education and associated employment opportunities, community residents will continue to struggle with these challenges.

The table below provides a snapshot from County Health Rankings and Roadmaps of where Baltimore City compares to Baltimore County in years 2012 and 2015. The ranking scale enables communities, organizations and agencies to assess where their communities lie in comparison to the remaining 23 counties in Maryland. Baltimore City ranks 24 out of 24 on Socioeconomic Factors in years 2012 and 2015; while Baltimore County ranks 12 in years 2012 and 2015 (See Table 5).

Factors that are used to derive the overall socioeconomic rankings are high school graduation, some college, unemployment, children in poverty, income inequality, children in single-parent households, social associations, violent crime and injury deaths.

Table 5: County Health Rankings and Roadmaps Social and Economic Factors

County Health Rankings and Roadmaps <sup>4</sup>	Social and Economic Factors Rankings
Baltimore City	
2012	24
2015	24
Baltimore County	
2012	12
2015	12

Source: County Health Rankings & Roadmaps 2015 and 2012

<sup>&</sup>lt;sup>4</sup> Maryland has 24 counties; the rating scale for Maryland is 1 to 24 (1 being the healthiest county and 24 being the least healthy). Counties are ranked relative to the health of other counties in the same state on specific measures.

#### **Education**

An individual's level of education affects their health status, as it can dictate employment opportunities and comprehension capabilities. The role of education is essential due to the connection between income and employment. Educated individuals are more likely to have job security, are often better equipped to navigate to and access the services they need, and understand the importance of services like preventive health measures and making healthy choices for themselves and their families. Educated residents are more aware of their own health status and the health status of their family. Being educated can mitigate some of the environmental factors that negatively affect the health status of disadvantaged populations by providing them with the tools they need to better understand their environment and to take advantage of opportunities to improve their situation.

Higher education attainment statistics of the overall study area compared poorly with the state and the nation. Slightly more than one-third (34.0 percent) of community residents have a high school diploma, higher than the state (26.0 percent) and the nation (28.1 percent), just 21.6 percent or one in five community residents have a bachelor's degree or greater; much lower than the overall rates for both the state (36.8 percent) and the nation (28.9 percent) (See Table 6).

Table 6: Education Level

	21202	21205	21206	21213	21218	21219	21222	21224	21231	Overall Study Area	MD	USA
Less than High School	5.6%	12.9%	4.8%	5.3%	4.9%	5.2%	6.5%	12.5%	8.1%	7.2%	4.4%	5.9%
Some High School	17.4%	23.6%	10.4%	18.2%	12.6%	12.0%	12.7%	12.6%	8.6%	13.5%	6.7%	8.0%
High School Diploma	28.3%	37.0%	37.0%	42.1%	27.5%	41.1%	43.9%	28.1%	16.5%	34.0%	26.0%	28.1%
Some College / Assoc. Degree	18.4%	19.1%	31.5%	24.0%	24.2%	30.6%	27.3%	18.4%	13.9%	23.8%	26.1%	29.1%
Bachelor's Degree or Greater	30.3%	7.4%	16.2%	10.4%	30.9%	11.1%	9.6%	28.4%	52.9%	21.6%	36.8%	28.9%

Data from The Annie E. Casey Foundation highlights the dropout rate. Baltimore City had the highest dropout rate (6.3 percent) of students in grades 9-12 in 2013-2014. This rate is more than double that of Baltimore County (2.7 percent) and the state (2.9 percent). Baltimore City saw a marked increase in the dropout rate from 2012-2013 to 2013-2014, going from 4.5 percent to 6.3 percent (See Chart 1), while both Baltimore County and the overall state rate saw a slight decline.

8.0% 7.0% 6.3% 5.5% 6.0% Baltimore 4.7% 4.5% 5.0% County, MD 4.2% 3.5% 4.0% Baltimore 3.2% 3.0% City, MD 2.9% 3.0% 2.5% 3.6% 3.3% Maryland 3.0% 2.9% 2.7% 2.0% 1.0% 0.0% 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014

Chart 1: Dropout Rate (Students in Grades 9-12)

Source: Kids Count 2015, The Annie E. Casey Foundation

Community stakeholders reported that education begins at the elementary stage, addressing and reinforcing information beyond basic subjects (e.g., nutrition, health topics/disease, mental health, etc.). It was cited that most often community residents do not foresee nor comprehend how education is linked to a pathway towards a healthier, more productive life.

A greater emphasis needs to be placed on the correlation between education and income, noting there are greater employment opportunities, options and availability to those who have a higher level of educational attainment. Higher education enables community residents to understand concepts and theories, expanding their overall knowledge base; which in turn, leads to residents having a stronger understanding of their community, environment and health.

In February 2014, a new Baltimore City School Superintendent was appointed. With this appointment, there is hope that education in the City will improve and community residents and their children will be able to obtain and secure the education needed to prosper in their communities.

## **Employment**

Employment and income provide a lifestyle that offers choices and options that influence health status and environmental factors such as housing, food, skill building for better employment opportunities, transportation, health care and more. Data reveal that there are significant income disparities in the CBSA as compared to the state.

Table 7 provides a detailed breakout of household income within the CBSA and how the CBSA compares to state and national statistics. In the CBSA, or the overall study area, there is a high percentage of households who earned an income in 2015 of \$25,000-\$50,000 a year (24.5%). The overall study area analysis also showed income disparities when compared to the state. There are more low-income households within the CBSA compared to state percentages. For example, within the overall study area or CBSA, there are more households who earn under \$15,000 and more households who earn \$15,000-\$25,000.

Studying data at the neighborhood level, ZIP codes 21202 and 21205 have a high percentage of households who earn less than \$15,000 a year (33.5% and 30.6% respectively). These percentages are more than three times higher when compared to the state (8.5%) and more than doubled compared to national (12.7%) income percentages.

Neighborhoods 21205 (19.2%) and 21213 (15.5%) have higher percentages of households who earn \$15,000-\$25,000 yearly, when compared to the remaining ZIP codes in the study area.

Table 7: Household Income Detail

	21202	21205	21206	21213	21218	21219	21222	21224	21231	Overall Study Area	MD	USA
<\$15K	33.50%	30.60%	14.10%	23.40%	23.20%	11.00%	12.30%	13.60%	21.30%	18.7%	8.50%	12.70%
\$15-25K	12.60%	19.20%	10.70%	15.50%	14.30%	9.20%	11.30%	11.00%	9.00%	12.3%	7.00%	10.80%
\$25-50K	21.60%	24.90%	27.30%	27.20%	24.40%	22.30%	27.40%	22.40%	14.40%	24.5%	17.90%	23.90%
\$50-75K	14.00%	13.80%	20.10%	18.00%	15.80%	21.80%	20.80%	16.20%	14.30%	17.6%	17.00%	17.80%
\$75- 100K	6.00%	5.80%	12.70%	7.70%	8.10%	14.00%	12.60%	11.60%	11.30%	10.4%	13.10%	12.00%
Over \$100K	12.30%	5.60%	15.20%	8.20%	14.30%	21.70%	15.50%	25.10%	29.60%	16.6%	36.60%	22.80%

Providing an average household income snapshot across all ZIP codes, we can note that ZIP codes 21205 (\$36,740) and 21213 (\$44,740), on average, have the lowest yearly household income compared to their counterparts in the CBSA. The average household income in the overall study area (\$60,305) is significantly lower than the state (\$99,758) and the nation (\$74,165) (See Chart 2).



Chart 2: Average Household Income

Source: Truven Health Analytics 2015

Community residents with a low household income can struggle to afford basic necessities such as food, shelter and clothing; these community residents fare worse than those with a higher income bracket on many levels. Residents who are economically disadvantaged will continue to face significant life challenges affecting the ability to obtain resources and improve their living environment. Without employment prospects and access to a sustainable living wage, these residents are more likely to engage in unhealthy behaviors, ignore mental health issues, not engage in preventive health practices and perpetuate the generational cycle of living in poverty.

Community leaders are aware that employment opportunities for low income residents can improve their quality of life on multiple levels. It is often necessary to provide training, education, work force development and resources to those in need.

The lack of employment opportunities for many community residents has not changed over the years, and the employment prospects for those with limited skills and those who have been incarcerated are bleak; thus, re-entry opportunities from businesses continue to provide hope. Community residents in the focus group cited extreme employment challenges due to multiple factors. Prior criminal history,

lack of skills and not being properly educated are some barriers that prohibit many from securing and obtaining employment. While obtaining steady employment can be difficult, it is a goal many want to achieve.

Focus group participants stated that employment training or workforce development programs can assist those struggling to gain the skills and resources they need. It comes as no surprise that community residents who actively seek employment cite the lack of transportation options as hindering their job prospects.

Community leaders' concerns about employment opportunities were often communicated in conjunction with residents' need for affordable transportation. Improved transportation can increase employment opportunities for low income residents. It was voiced that strong employment opportunities exist outside of the city; however, many residents struggle to secure reliable transportation due to limited and insufficient bus routes. Light rails and buses do not extend far enough to access employment opportunities in outlying areas.

Having a strong, economically healthy community contributes to a healthier environment for residents and for neighborhoods overall. Community organizations and area agencies work diligently trying to connect residents to services and programs. Community leaders and community participants reported that area residents are loyal and faithful; many have great pride in their neighborhoods, and many hope to obtain the education and employment opportunities in order to be better citizens.

## **Access to Livable Environments**

Within the context of the CHNA's key identified needs, a healthy or livable environment refers to the surroundings in which one resides, lives and interacts. A livable environment refers to the availability of safe, affordable, clean housing, a community with healthy food options and low crime rates. A poor or unlivable environment can lead to a shorter lifespan, poor health outcomes and health disparities. Often, the environment and the lifestyle choices of community residents affect the overall health and mental well-being of the individual. Without a proper and healthy surrounding, especially for people who already have a compromised health status, individuals will struggle and perform poorly on tasks.

Families are often deterred from engaging in outdoor activities in neighborhoods where high crime rates and safety issues are prevalent. The inability to be outside will hinder residents from walking and playing, thus contributing to higher rates of physical inactivity and obesity. This is detrimental, in particular, for community residents whose primary form of exercise is walking.

In the CBSA, safe and affordable housing is a critical environmental need. Outdated and unsafe infrastructures in many Baltimore City homes can also present hazardous elements that can trigger and elevate chronic conditions. The lack of affordable, clean housing, the inaccessibility of healthy foods and the area's high crime rates are common issues for families and individuals who struggle to secure employment in order to improve their environmental conditions.

## Housing

Baltimore City, in 2015, ranked 16<sup>th</sup> out of 24 counties in relationship to physical environment according to County Health Rankings and Roadmaps; improving from a 2012 ranking of 24. The calculations used to produce the ranking number under physical environment include air pollution, drinking water violations, severe housing problems, driving alone to work and long commutes (drive time) as factors in how the rank score was achieved. The physical environment in Baltimore County has gotten worse, going from a ranking of 22 in 2012 to a ranking of 24 in 2015. It is important to note that there is a high percentage of commuters in Baltimore County, which could influence the poor ranking score.

Under the physical environment ranking, County Health Rankings and Roadmaps defined severe housing as the percentage of households with at least one out of four housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities. County Health Rankings do not take into consideration lead paint violations, energy cut-off rates, etc. (See Table 8).

Table 8: County Health Rankings & Roadmaps Physical Environment

County Health Rankings and Roadmaps	Physical Environment Ranking
Baltimore City	
2012	24
2015	16
Baltimore County	
2012	22
2015	24

Source: County Health Rankings and Roadmaps 2015 and 2012

When examining lead paint violations and data related to lead poisoning among children, the highest number of lead paint violations is found in the neighborhoods of Madison/East End (90.3), Greenmount East (64.6), Clifton-Berea (63.6), Midway-Coldstream (47.1) and Patterson Park North & East (34.0). Children in these specific neighborhoods are also found to have elevated levels of lead in their blood (See Table 9). Children under the age of 6 are vulnerable to lead poisoning, which affects mental and physical development. Lead poisoning at very high levels can be fatal.

Older homes and buildings in the city are common sources of lead poisoning. Other sources include contaminated air, water and soil. Adults who complete home renovations, who are employed in auto repair shops, and who work with batteries may also be exposed to unhealthy levels of lead.

Table 9: Lead Paint Violations & Children with Lead Poisoning<sup>5</sup>

	ZIP Code	Lead Paint Violation*	Children with Elevated Blood Lead Levels (>10 µg/dL)^
1. Downtown/Seton Hill	21202	0.9	0.0
2. Greenmount East	21202	64.6	11.5
3. Jonestown/Oldtown	21202	1.1	2.2
4. Midtown	21202	1.5	3.6
5. Claremont/Armistead	21205	1.3	0.6
6. Madison/East End	21205	90.3	10.7
7. Perkins/Middle East	21205	24.9	5.7
8. Cedonia/Frankford	21206	2.5	1.2
9. Hamilton	21206	2.2	2.5
10. Lauraville	21206	5.2	2.9
11. Belair Edison	21213	9.3	2.9
12. Clifton-Berea	21213	63.6	8.2
13. Greater Charles Village/Barclay	21218	7.7	4.2
14. Greater Govans	21218	12.6	5.9
15. Midway-Coldstream	21218	47.1	5.9
16. Northwood	21218	1.8	3.5
17. The Waverlies	21218	9.1	1.8
18. Highlandtown	21224	4.5	3.8
19. Orangeville/East Highlandtown	21224	9.3	1.9
20. Patterson Park North & East	21224	34.0	5.5
21. Southeastern	21224	0.5	0.0
22. Canton	21231	1.3	1.2
23. Fells Point	21231	3.3	2.8
24. Baltimore City	N/A	11.8	4.1

Source: Neighborhood Health Profiles 2011

Primary data collected from the hand survey identified affordable housing/homelessness (9.2 percent) as the second top health concern among a list of 24 available options,. Findings from primary data collected during the CHNA align with secondary data findings regarding housing problems in the City. Overall, the top five health concerns in the community, according to survey responses, were drug and alcohol abuse (11.5 percent), affordable housing/homelessness (9.2 percent), crime/assault (8.4 percent), access to affordable healthy foods (7.3 percent) and high blood pressure (6.5 percent).

<sup>\*</sup>Per 10,000 households in each specific neighborhood

<sup>&</sup>lt;sup>5</sup> Information related to ZIP codes 21219 and 21222 was not available.

Affordable, clean and safe housing was a common theme discussed by community stakeholders. Public housing and rental properties are often in poor condition and can contain harmful elements that can lead to respiratory conditions. Landlords often do not maintain their rental properties nor adhere to building codes, and families are often unsure where to seek housing assistance. There are limited services and programs for residents who struggle with homelessness.

Community stakeholders also reported that residents in transitional housing situations are there, in part, due to the lack of affordable homes. Additional factors such as unemployment and lack of education prohibit residents from finding better housing options. Older row homes, common to the Baltimore region, present challenges because many are not conducive to current building regulations needed for individuals with disabilities and mobility issues, in particular seniors who require the use of assistive walking devices (e.g., walkers, canes or wheelchairs).

Focus group participants indicated that access to safe, clean and affordable housing is not easy to obtain and is especially difficult for minorities and those with a limited or fixed income. Contractors and large construction companies are purchasing and renovating properties, then increasing rent and limiting access to residents who need affordable homes. The lack of affordable housing is leading to homelessness in the community. Group participants agreed that low-cost housing in their communities is in poor condition and that there are limited resources and housing services for people seeking clean and safe housing.

It is important to evaluate and strategize on ways to assist community residents in addressing the growing housing crisis that plagues the region. There are multiple factors that prohibit community residents from affordable, clean and safe housing, and understanding the societal elements can help resolve some disparities that Baltimore residents face.

#### **Food Environment**

A healthy food environment ensures that residents have the ability to purchase nutritious foods and that those foods are affordable and conveniently located. The term "food desert" describes geographic regions where affordable, nutritious healthy foods are typically difficult to obtain, especially for residents with limited transportation options. Healthy food choices, such as fruits and vegetables, are often unavailable or expensive in the small convenience-type stores characteristic of underserved and low-income areas. Food options found in such convenience stores are usually processed, high caloric and high in unhealthy fats. The unavailability of large grocery stores, supermarkets and farmers' markets and the vast convenience of junk foods have contributed to the obesity epidemic. It is important to address the food environment to reduce the health disparities and improve diet-related health conditions such as obesity, high blood pressure, high cholesterol and diabetes, etc.

In Chart 3, additional data highlight the breakdown in Baltimore City, where supermarkets are not available in designated food desert locations (0 percent). There were more convenience stores/small grocery stores (78.0 percent) in food desert locations when compared to non-food desert locations (50.0 percent).

This information emphasizes the need for more grocery stores and supermarkets in Baltimore City in order to provide fresh produce and healthy food options to residents. Creating a pathway and providing access to healthy foods would impact the long-term health outcomes of residents who typically rely on sugary and cheap processed food options.

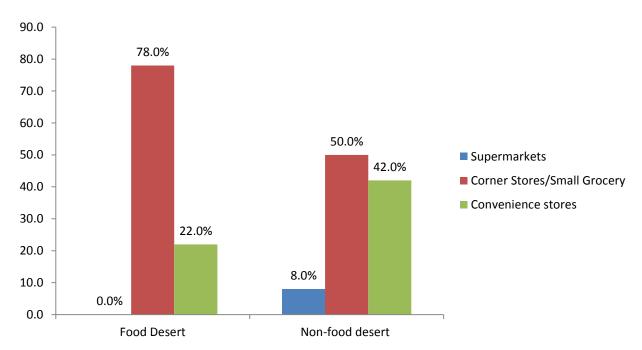


Chart 3: Percent of Food Stores in Food Deserts and Non-Food Deserts

Source: Mapping Baltimore City's Food Environment: 2015 Executive Summary

In Baltimore City, the food retail environment for small grocery/corner stores (435) and convenience stores (300) were dramatically higher when compared to supermarkets (45), farmers' markets (17), public markets (6), and virtual supermarkets (4) in the region. The information validates what community leaders and focus group participants reported regarding the lack of supermarkets and grocery stores in their immediate neighborhoods (See Table 10).

Table 10: Food Retail Environment

Types	Numbers
Supermarkets	45
Small grocery and corner stores	435
Convenience stores	300
Farmers' markets	17
Public markets	6
Virtual supermarkets	4

Source: Mapping Baltimore City's Food Environment: 2015 Executive Summary

There are expansive initiatives underway in Baltimore City to combat the food environment problem. One initiative from B'more Fresh, Baltimore's Food Desert Retail Strategy, is to reduce the number of people living in food deserts and to grow the economy using five key approaches: Expand and Retain Supermarkets, Improve Non-Traditional Grocery Retail Options (e.g., small grocery stores, corner stores, pharmacies, and virtual supermarkets), Improve Healthy Food Availability in the Public Market Setting, Expand Homegrown Baltimore to Serve Food Desert Neighborhoods, and Transportation Strategy).

The affordability of healthy foods is problematic in these neighborhoods. Healthy foods in the form of fresh fruits and vegetables are costlier than canned varieties that often contain unhealthy additions of sugar, salt and fat. Processed foods tend to be vastly cheaper and more widely available, and many families, already on a fixed-income or on a limited budget, are unable to afford fresh produce.

It was reported by the U.S. Census Bureau American Community Survey that more than one-third of Baltimore City residents (44.8 percent) live below 200 percent of the Federal Poverty Level (FPL); this is twice the level of the state (22.8 percent) and higher than the U.S. (34.2 percent). The 2015 Annual Guidelines state that a family of four below 200 percent FPL has an average household income below \$48,500.

Fortunately, the Supplemental Nutrition Assistance Program (SNAP) offers nutrition assistance to millions of eligible, low-income individuals and families and provides economic benefits to communities. This program is essential to many as it assists community residents with food options that allow them to

be healthy and maintain their well-being. The U.S. Census Bureau reported 22.3 percent of Baltimore City community residents receive SNAP benefits; this is higher than Baltimore County (8.61 percent), the state (9.4 percent) and the U.S. (12.4 percent).

Of the 621,000 people living in Baltimore City, the 2015 Food Environment reported that 25 percent (158,271 people) live in food deserts. 48 percent of neighborhoods (as defined by the Department of Planning) contain food deserts. In some cases, this could be the whole neighborhood, while in others it may be only a few blocks. Baltimore City residents have limited access to healthy foods and certain groups are affected disproportionately.

In Baltimore City, there were more African Americans (34 percent) living in a food desert when compared to Whites (8 percent), Asians (11 percent), Hispanics (15 percent) and Other races (18 percent). The overall City average of community residents living in a food desert is 25 percent. Looking at groups of citizens by age, more than one-fourth of children (30 percent) live in Baltimore City's food desert (See Chart 4).

A variety of factors have shaped the landscape regarding food deserts. Socioeconomic factors play a significant role in how the low income residents are more likely to face environmental challenges.

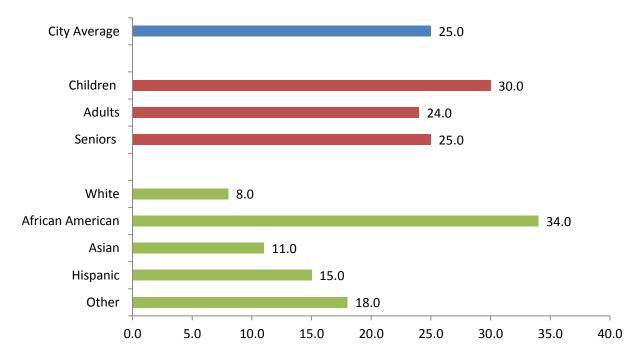


Chart 4: Percentage of Each Population Group Living in Food Deserts

Source: Mapping Baltimore City's Food Environment: 2015 Executive Summary

Community leaders are aware, from the residents they serve, that access to fresh, healthy foods is limited. Typically, residents have little access to grocery stores, yet a clear path to fast foods and highly processed meals.

Leaders also cited that the region has a large population of people with diabetes, including a growing number of youth, individuals with high blood pressure and obese people. Community leaders are aware that African Americans are more likely to have diabetes, and state data reinforce that notion. The Maryland Vital Statistics Annual Report (2013) stated that Black males were more likely to die from diabetes than were White Males (39.3 vs 18.6 per 100,000 population); this holds true for Black females as well. Black females were twice as likely to die from diabetes when compared to White females (27.3 vs. 12.8 per 100,000 population). The rate of all citizens who have diabetes in Maryland in 2013 was 19 per 100,000 population.

The inaccessibility of healthy food options paired with the absence of health education and the inability to participate in outdoor activities or in a structured physical exercise regimen creates an environment that perpetuates chronic health problems. Access to proper nutrition is vital to maintaining good health, according to focus group participants. There is general awareness regarding the connection between nutrition and making healthy food choices, and the role both play in overall health.

Focus group participants reported cultural eating habits, the lack of quality grocery stores (living in a food desert) and the unaffordability of healthy foods are underlying factors causing high rates of diabetes, in particular, among African Americans. There was a perception that food establishments and restaurants were more inclined to serve unhealthy foods (e.g., fried foods, salty foods, etc.) and limit healthy food options to their customers due to the popularity of fried or salty foods in neighborhoods they serve. Fast food restaurants and convenience stores are widely available in their communities; unfortunately, large, full-scale grocery stores are not available.

Another barrier for many low-income residents is education. Community residents may not have the proper health education and understanding of how to prepare a healthy meal. Proper educational information and dietary guidelines can assist those who want to eat healthy; however, the availability of healthy food choices must be present.

#### Crime and Safety

While many families and individuals live in a comfortable and safe environment, there are a number of Baltimoreans who do not. Crime and safety factors significantly impact the ability of an individual to enjoy a livable environment. Neighborhoods with high crime rates increase the likelihood of individuals engaging in unhealthy behaviors (e.g., substance abuse, assault, prostitution, etc.). Lack of a livable environment affects the ability of individuals to access adequate preventive health care services, engage in outdoor activities and obtain other basic needs. Unfortunately, City residents face the threat of crime each day. Access to a livable environment is an imperative part of each individual's overall well-being, as it promotes healthy lifestyles and enhances quality of life.

In 2013, the overall rates of crime decreased in the state. There was a 2.3 percent reduction in total crime with 4,394 fewer crimes reported in 2013 compared to 2012. This marks the lowest number of

total index crimes and total crime per 100,000 residents since 1975, with 185,422 and 3,127.5 respectively. The violent crime rate (467.5) and property crime rate (2,659.9) were also the lowest ever reported in Maryland.

Violent crime is a major problem across the United States. Maryland and Baltimore City are no exception. Data obtained from the FBI indicate that Baltimore City's violent crime rate surpasses Baltimore County, the state and the U.S. combined at 1,448.90 per 100,000 population. Compared to other locations, Baltimore City's crime rate is nearly triple that of its counterparts (See Chart 5).

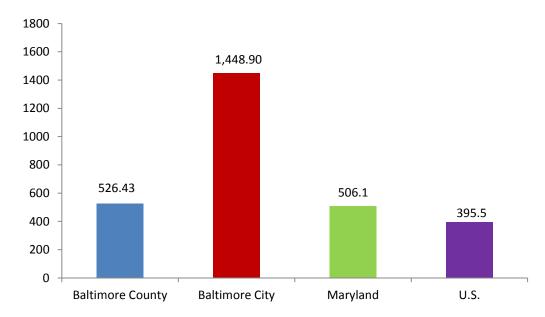


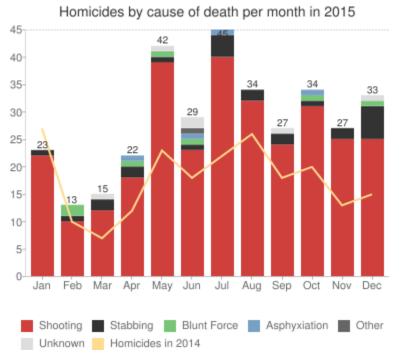
Chart 5: Violent Crime (per 100,000 Population)

Source: Federal Bureau of Investigation, FBI Uniform Crime Reports 2010-2012

Data from the hand survey revealed more than one-half of survey respondents (62 percent) feel 'somewhat safe' from crime in their neighborhood/community; while 11.3 percent do not feel safe at all. Crime, violence and drugs were the top reasons why respondents do not feel safe in their neighborhood/community.

Within the community, many stakeholders reported that serious crime is prevalent in Baltimore City. Trauma experienced at a young age, drug addiction and incarcerated family members can create an emotional toll. Many families are one-parent households struggling to support and provide a safe and positive environment for their families.

Chart 6: Baltimore Homicides



Source: The Baltimore Sun 2016

Progress made in 2013 has recently been negated as Baltimore reached its highest ever per capita homicide rate in 2015. As shown in Chart 6, homicides in Baltimore City for the year 2015 increased by 63% over the previous year. The increase for a five year period is 49.1% as total homicides reached 344, compared to 224 in 2010.

Community leaders are aware that safety is a significant concern for many parents, and children are often forced to stay inside as a result of their unsafe environment. Regions within the city are also plagued with urban decay, further creating an atmosphere to attract unwanted illegal activities. Having an unsafe community creates an environment conducive to drug use and limits the ability to attract employment opportunities to the region.

Focus group participants stated that residents are exposed to drugs, alcohol abuse and violence in their neighborhoods on a regular basis. Domestic violence and other types of assaults were also mentioned as issues that the community deals with regularly. For residents of the City, crime is a significant part of their communities.

Reducing the crime rate and providing a safe environment requires participation from all City entities. Some would argue that improvements in law enforcement and more aggressive consequences could deter offenders. However, if the ultimate outcome is to have community residents contribute fruitfully as part of society, income disparities must be reviewed. Closing the gap and providing economic opportunities for residents could prove to be a long-term solution and a pathway to assist those who have limited future opportunities.

## **Access to Behavioral Health Services**

Across the nation and during the CHNA process, access to behavioral health services, which includes mental health and substance abuse services, arose as a key priority in the study area. Secondary data, results from the hand-distributed survey, discussions with community leaders and focus groups with vulnerable populations also highlighted the growing national and local need to increase access to behavioral health services.

With the growing aging population, the need and the demand for mental and behavioral health services will continue to grow. The shortage of mental and behavioral health providers played a key role in seeking care for community residents who struggle with their mental and behavioral health issues. Residents who experience the loss of being independent, loss of a loved one and the overall decline of health are also some contributable factors that make mental health a critical concern. Mental health is shaped in part by the socioeconomic factors and physical environment where people live. Primary and secondary data collected from the CHNA reinforced these statements.

## **Mental Health**

There are many factors linked to mental health, such as genetics, age, income, education, employment, and environmental conditions. As identified by primary and secondary data, mental health provider shortages, overall access issues, high rates of co-occurring mental disorders, and substance abuse issues all create significant growing concerns about the state of behavioral health issues and the need to bring additional focus on providing behavioral health services.

Community residents also struggle with environmental stress such as loss of or limited employment opportunities, poor living environments and an overall sense of hopelessness creating feelings of depression and anxiety, all of which impact the mental and spiritual well-being of the individual. The use and abuse of drugs and alcohol are attractive avenues for community residents who struggle to face their mental health problem. In many cases, residents who have a mental health issue also are substance abusers.

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), behavioral health is essential to overall health, with prevention and effective treatment measures allowing individuals to recover from mental health crises. Direct access to health professionals and health services for behavioral health problems enables community residents to obtain proper care and treatment, leading to healthier lives.

Across the nation, mental illness continues to be a major issue for individuals and families. The Centers for Disease Control and Prevention define mental illness as "collectively all diagnosable mental disorders" or "health conditions that are characterized by alterations in thinking, mood, or behavior associated with distress and/or impaired functioning." Affecting more than 26 percent of the U.S. adult population, depression is the most common type of mental illness.

Data show that roughly 60 percent of adults with mental illness received no mental health treatment within the last year, indicating a nationwide issue with individuals being able to receive proper mental health services and treatment. This is due, in part, to the lack of mental health providers across the U.S.

According to the U.S. Department of Health and Human Services, almost 91 million adults live in areas where shortages of mental health professionals make obtaining treatment difficult.

Looking at a regional perspective, the Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System reported that 17.4 percent of Maryland residents aged 18 and older reported mental illness in the past year, compared to 17.6 percent in Baltimore County and 17.7 percent in Baltimore City. More than one-fourth (29.1 percent) of Baltimore City residents lacked social or emotional support they needed compared to 20.3 percent in Baltimore County, 19.8 percent in Maryland and 20.7 percent in the U.S. (See Chart 7).

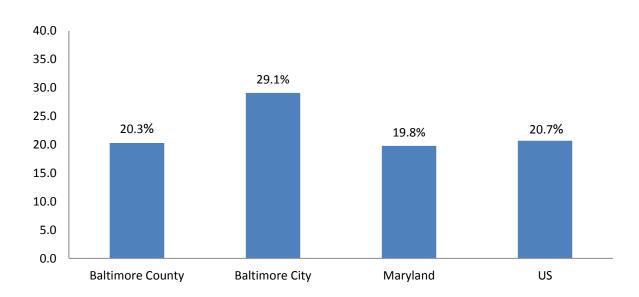


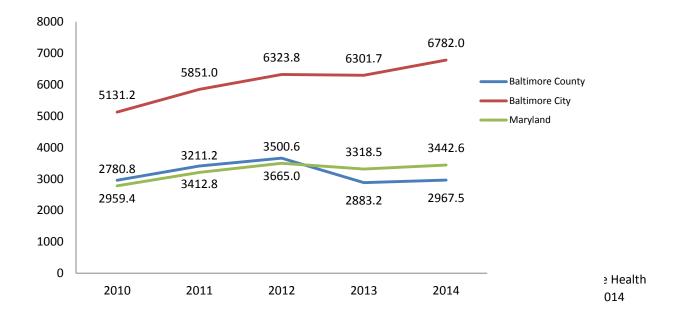
Chart 7: Lack of Social or Emotional Support

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. 2006-2012

The Maryland State Health Improvement Process data revealed that Baltimore City residents saw a steady increase in emergency room visits from 2010-2014 related to mental health conditions, compared to Baltimore County and the state. In 2014, there were 6782 per 100,000 population of Baltimore City residents who visited the emergency room related to a mental health condition, compared to 3442.6 in the state and 2967.5 in Baltimore County (See Chart 8).

It was also revealed that Baltimore City emergency department visits related to mental health conditions beginning in 2010, with 5131.2 visits per 100,000 population, steadily rose throughout the years with a minor decrease in the number of visits in 2013 with 6301.7 (per 100,000 population). However, an additional 480 visits occurred from 2013-2014 (See Chart 8).

Chart 8: Emergency Department Visits Related to Mental Health Conditions (Per 100,000 population)



Residents who attempt suicide are typically depressed and/or face another significant mental health challenge. Residents who attempt suicide are typically depressed and/or face a mental health problem in which they believe there are limited solutions to their problems. The Maryland State Health Improvement Partnership from 2011-2013 reported 9 suicides per 100,000 population among Maryland residents. Suicide is a serious public health problem and is a preventable cause of death. There is a correlation between mental health disorders and substance abuse among those who have committed suicide. Approximately 500 lives are lost each year in the state of Maryland due to suicide.

Information from the hand-distributed survey showed that community residents in the CBSA are faced with mental health challenges. More than one-fourth of survey respondents reported having depression (29.7 percent); while 25.1 percent reported having problems remembering things or concentrating, and 23.2 percent reported having anxiety, nervousness and/or panic attacks.

Among survey respondents, more than one-third received mental health services in the past 12 months (36 percent). Of those survey respondents who received mental health services, 41.5 percent obtained services from a mental health counselor or provider; 18.6 percent obtained services from their community or neighborhood organization or hospital/emergency room.

Reviewing additional hand survey results, 16 percent of respondents needed but did not receive mental health services in the past 12 months. 18.4 percent of those survey respondents (who needed mental health services but did not receive care) reported that their insurance did not cover the care. Other responses to the question included that they did not know where to go (13.2 percent) and or preferred alternative forms of treatment (13.2 percent). It was reported that 20.3 percent had a mental/emotional problem that affected their daily activities. Information collected from the hand survey highlights the

growing local problem and the opportunity to increase the availability of mental health providers to this population.

Community stakeholders reported the need to continue to invest in improving access to health care, focusing primarily on mental health and addiction recovery services. Shortages in mental health providers and facilities, lack of access and challenges with the inability to obtain employment can interfere with individuals seeking the mental health services they need.

According to community stakeholders, residents with a mental and or a behavioral health issue also tend to have a substance abuse problem. Poor socioeconomic factors contribute to the use and the abuse of drugs. Some underlying chronic diseases such as diabetes, high blood pressure, heart disease, high cholesterol and asthma are the physical results due to the inability to control and seek treatment for a mental health issue. Daily trauma (e.g., not having enough food for the family, being homeless, etc.), adapting to new cultural surroundings and domestic violence are additional perceived concerns that affect whole communities within the region. Community leaders reported that community residents who also have mental health issues also tend to have dual behavioral diagnoses, making access to care and treatment essential.

Additional primary data collected from focus group participants reported mental health is a significant issue that affects all members of the community, regardless of age or race. Barriers such as the lack of insurance coverage, negative social stigmas and lack of health education prevent individuals from seeking needed care. Educating community members on the signs and symptoms of depression and other mental health issues can enable those to be more aware of the disease in order to seek and obtain needed services.

Focus group participants also cited stress and anxiety many families face because they are unable to meet the basic needs of their children. The prevalence of violence and crime in neighborhoods are contributing factors to increased mental health issues. Focus group participants reported that youth in middle school are overwhelmed trying to address issues related to violence, peer pressure, depression, abuse, sexually transmitted diseases and early pregnancy. One solution cited was that if funding were available, students could take advantage of school sponsored therapy sessions, providing long-term benefits to those students who struggle with a mental health problem. Overall, both community leaders and focus group participants were aware of their communities' mental health problems, yet access and the availability of treatment options hinder residents from obtaining needed care.

#### Substance Abuse

Another major growing concern along with mental illnesses is substance abuse, which refers to the abuse of alcohol, the use of illegal drugs, prescription medicine and marijuana.

According to the Substance Abuse and Mental Health Services Administration (SAMSHA) 2013 National Survey of Drug Use and Health, 24.6 million individuals 12 years or older were current illicit drug users during the time of survey admission. The most commonly used drug is the U.S. is marijuana with 19.8 million users in 2013 compared to 14.5 in 2007. Additionally, more than one-half of Americans aged 12

or older were current alcohol users in 2013. In 2013, 22.7 million individuals aged 12 or older needed treatment for an illicit drug or alcohol problem; however, only 2.5 million received treatment in a specialty facility.

Data at the national level from the Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System revealed more Baltimore County residents (56.1 percent) and Marylanders (56.1 percent) aged 12 and older used alcohol in the past month compared to Baltimore City (48.9 percent) residents. The percentages of drinkers in Baltimore City (48.9 percent) aged 12 or older was lower than the state (56.1 percent). However, close to one-fourth of Baltimore City residents (24.5 percent) had five or more drinks on the same occasion compared to residents in Baltimore County (21 percent) and the state (21.8 percent).

SAMSHA also reported that the use of illicit drugs among Baltimore City residents (10.5 percent) aged 12 and older was higher compared to residents in Baltimore County (7.5 percent) and the state (7.6 percent). There were lower percentages of Baltimore County residents (7.5 percent) aged 12 and older that used illicit drugs in the past month compared to the state (7.6 percent).

Additional data revealed that Baltimore City residents saw a steady increase of emergency room visits for addiction-related conditions from 2010-2014. In 2014, Baltimore City had 5249.6 (per 100,000 population) emergency room visits for addiction-related conditions compared to 1390.1 in Baltimore County and 1591.3 in the state. Baltimore County residents fell below the state and Baltimore City on visits to the emergency room for addiction-related conditions starting in 2011-2014 (See Chart 9).

6000 5249.6 4745.6 5000 4410.4 **Baltimore County Baltimore City** 3659.6 4000 3357.9 Maryland 3000 2000 1591.3 1474.6 1398.2 1237.5 1122.4 1000 1390.1 1280.7 1289.3 1067.2 1125.2 0 2010 2011 2012 2013 2014

Chart 9: ED Visits for Addiction-Related Conditions (Per 100,000 population)

Source: Maryland State Health Improvement Process 2014

Community residents recognize the dangers associated with drug and alcohol abuse. Results from the hand-distributed survey, community leaders input and focus groups emphasize their awareness of the problem. Hand-distributed survey results showed 21.7 percent of respondents always smoke cigarettes. 11.5 percent of survey respondents were most concerned about drug and alcohol use/addiction in their community. Discussions with community leaders echoed the concerns of survey respondents. Community leaders understood the severity of substance abuse in the community and the negative impact it has on the community at large. Poor socioeconomic factors tend to create environments where community residents are more susceptible to the use and abuse of drugs, especially among those with preexisting mental health issues.

Community stakeholders reported that substance abuse is rampant in the city. Many community residents, especially young African American males, struggle with the disease, and this contributes to a higher incidence of crime and violence. Without counseling and treatment options, community residents are less likely to obtain employment due to their erratic behavior, typical of individuals with substance abuse issues. Programs and services are lacking in the community and counseling and treatment options are scarce. Focus group participants expressed a strong need for more community resources and funding to combat the substance abuse problem, as well as a need for more mental and behavioral health programs.

Behavioral health disorders, which include mental illness and substance abuse, left undiagnosed and untreated can lead to physical, emotional and spiritual issues manifesting into larger health problems. Community residents dealing with behavioral health issues need access to adequate services and resources, as well as the knowledge of where to obtain care. Communities will suffer and face damaging effects if behavioral services and treatment options are not addressed.

## **Access to Health Services**

Access to health care services is a recurring problem in the community. As a point of reference, this typically refers to the ability and ease with which people can obtain health care or use health care coverage.

In the community, health services should be effective and relevant for community residents to be able to obtain them. Health insurance coverage can only go so far for those living in the community. There are a multitude of factors and barriers that prohibit residents from obtaining care and services, such as affordability, health literacy, navigation through the health care system, the availability of providers, transportation, etc.

The CHNA identified specific areas of focus regarding access to health services. They include obtaining dental care, providing access to the uninsured population and access to services related to chronic diseases. Addressing the needs of the uninsured and creating an accessible pathway provides community residents with the ability to obtain needed health care services.

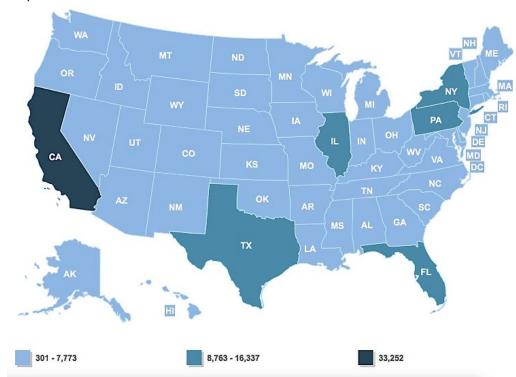
#### **Dental Care**

Dental care is an important part of basic health care; however, for many Americans, there is a great need to make it more available. There are many factors that cause access to dental care to be an issue within communities, such as, but not limited to: age, cultural and racial background, economics and access to transportation.

Today, countless individuals will prioritize basic living necessities such as food, housing and standard health care over other types of care. In most cases, awareness and understanding of primary, preventive oral health services will take a back seat to other health care needs. The importance of good oral hygiene and its relationship to physical well-being are not commonly understood among a majority of people. Oral hygiene is a must to ensure proper health; otherwise, the risk of severe mouth diseases is present. The American Dental Association (ADA) recommends regular dental visits. However, individuals who are more prone to or are considered high-risk for dental diseases (e.g., smokers, people with diabetes, people with gum disease, etc.) may need frequent visits to a dental care provider.

Certain diseases such as diabetes and HIV/AIDS can lower the body's resistance to infection, making oral health problems more severe. Oral health might affect, be affected by, or contribute to various diseases and conditions, such as endocarditis, cardiovascular disease, premature birth, low birth weight, diabetes, HIV/AIDS, osteoporosis, Alzheimer's disease and other conditions.

The Patient Protection and Affordable Care Act has provided Americans with improved access to dental health care since its inception; however, there are still significant gaps that need to be addressed. In 2015, the number of residents living in a defined Health Professional Shortage Area (HPSA) within Baltimore City is 68 percent when compared to Baltimore County (20.2 percent), the state (26.3 percent) and the U.S. (34.1 percent). While Maryland is home to one dental school, accessibility to providers and care remains a challenge for many in the community. In 2016, Maryland reported having 4,769 professionally practicing dentists, according to the Henry J. Kaiser Family Foundation (See Table 11 and Map 3).



Map 3: Professional Active Dentists

Source: The Henry J. Kaiser Family Foundation 2016

Table 11: Professional Active Dentists

Location	Dentists, 2016
USA	210,036
Maryland	4,769

Source: The Henry J. Kaiser Family Foundation 2016

Baltimore City residents will face additional access barriers to dental providers based upon availability. City residents have less access to dental care providers at 57.1 per 100,000 than in Baltimore County (72.9 per 100,000 population) (See Chart 10). The inaccessibility of dentists has placed a significant toll on the oral health of residents.

Chart 10: Access to Dental Providers (Per 100,000 Population)

Source: US Department of Health Human Services, Health Resources and Services Administration 2013

National data indicate that 20.4 percent of Baltimore City residents aged 18 and older had six or more teeth removed due to poor dental health; as compared to residents in Baltimore County (16.2 percent), the state (13.4 percent) and the nation (15.7 percent) (See Chart 11). Preventive dental measures and good oral practices could decrease the amount of teeth community residents have extracted. Education and the dissemination of information play a vital role to those who are unaware of the correlation between good oral hygiene and preventive actions.

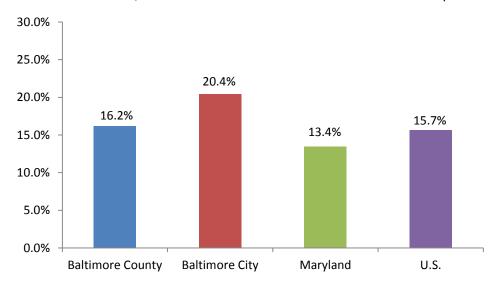


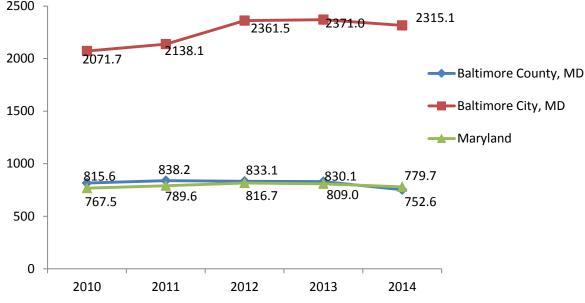
Chart 11: Poor Dental Health; Adults who had six or more teeth removed due to poor dental health

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System 2006-2010

The rate of residents in Baltimore City from 2010-2014 who visited the emergency room for dental care was much higher than Baltimore County residents and the state. Starting in 2013, Baltimore County (830.1) and the state (809) started to see decreased rates of residents who visited the emergency room for dental care (See Chart 12).

100,000 population) 2500 2315.1 2361.5 2138.1

Chart 12: Emergency Department Visit Rate for Dental Care (ED rates related to dental problems per



Source: Maryland State Health Improvement Process 2014

The need for dental care in the U.S. is growing and the need for dental care in Baltimore City is no different. Community residents identified oral health care as a top priority and identified lack of dental coverage, access and out-of-pocket costs as limiting their ability to obtain proper and consistent dental care. Community leaders reported oral health as an area of concern and specified that provider shortages, high costs and limited preventive information often keep residents from obtaining oral health care.

When examining data from hand-distributed surveys, more than one-half of survey respondents (58.2 percent) seek dental care at a dentist's office, while 16.1 percent do not go to the dentist. Additionally, fewer than one-half of survey respondents (48.6 percent) had an appointment with a dentist or dental clinic within the past year, and 11.6 percent indicated that they have not seen a dentist in five or more years.

Financial barriers are another issue that decreases the accessibility of oral health care for individuals in the community. In a majority of cases, health insurance does not often cover dental care, causing residents to forgo routine dental maintenance or wait until an emergency occurs. Close to one-quarter of survey respondents (23.1 percent) reported having to pay out-of-pocket costs for their dental services, while 11.9 percent reported that they did not pay for their dental services.

Closing the gap for residents to obtain needed dental care is essential. Information on the importance of oral health and the adoption of good oral hygiene coupled with effective preventive measures can reduce disparities in accessing dental treatment services.

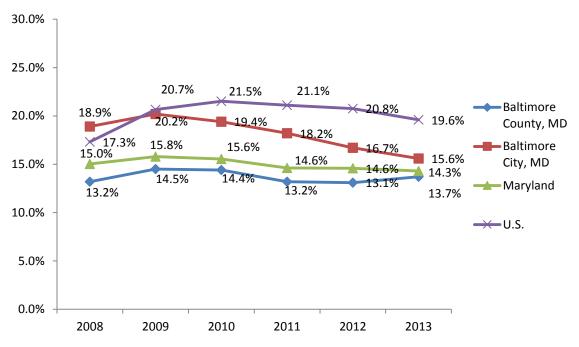
#### **Uninsured**

Availability of health care insurance is one of the most important pieces in obtaining primary health care access; however, for many Americans, there is a great need to make it more available. The limitations in health care coverage readily affect the vulnerable, underserved and low-income populations. Many factors contribute to the availability of health insurance, such as economic factors, language, knowledge, citizenship and ease of accessibility.

Since the enactment of the PPACA, access to health insurance has become a basic right and necessity for all. This Act provides Americans with better health security by putting in place comprehensive health insurance reforms that expand coverage, holds insurance companies accountable, lowers health care costs, guarantees more choice and enhances the quality of care for all Americans. Although this legislation introduced historical reform, millions of Americans still find themselves unable to afford health insurance. Often choosing to meet basic needs versus paying health insurance premiums, Americans will go without health insurance coverage, increasing the risk of injury and illnesses, as well as deterring a healthy lifestyle.

The availability and ease of use for insurance have increased with the passage of the PPACA. In 2014, the U.S. Census Bureau cited that 7.9 percent of Marylanders, compared to 10.4 percent of the U.S. population, lives without any type of health care insurance. These numbers are a good indication of progress made, as 2013 levels were significantly higher with 10.2 percent of Marylanders and 13.3 percent of the U.S. population living without insurance coverage. In 2013, the U.S. Census Bureau reported Baltimore City and Baltimore County fell below the nation's rate of 19.6 percent for the uninsured population for those aged 18 to 64 years—with 15.6 percent and 13.7 percent, respectively (See Chart 13). While the coverage of community residents in Baltimore City is above the national rate, the uninsured population still remains vulnerable to the inability of obtaining health care services. Data also revealed that more than one-third of Baltimore City residents (34.2 percent) compared to 14.2 percent in Baltimore County reported Medicaid as their health care insurance provider.

Chart 13: Uninsured Population Aged 18-64 years



Source: U.S. Census Bureau, Small Area Health Insurance Estimates 2010

The County Health Rankings database provided a snapshot and benchmark data on how each county ranks in comparison to one another on multiple measures. Maryland has 24 counties; thus, each county is ranked one through 24.

Exploring clinical care rankings, Baltimore County had increased their clinical care score in 2012 from a five to a ranking of eight in 2015; this represents a negative change in the clinical care ranking score. Baltimore City increased ranking scores from a 15 to a 19 between 2012 and 2015, which indicated that a specific measurement affected the ranking negatively. The increased ranking scores indicated that specific health care issues such as the uninsured, primary care physicians, dentists, mental health providers, preventable hospital stays, diabetic monitoring and mammography screening rates have been impacted; thus, altering the overall ranking outcome (See Table 12). It is recommended to examine and explore what specifically affected the higher ranking scores as a community group.

Table 12: County Health Rankings; Clinical Care

	Clinical Care Rankings
Baltimore City	
2012	15
2015	19
Baltimore County	
2012	5
2015	8

Source: County Health Rankings and Roadmaps 2015 and 2012

The CNI insurance rankings for the CBSA shows ZIP codes 21202, 21205, 21213 and 21218 had a score of 5, which indicates that community residents in these specific neighborhoods have additional insurance access issues when compared to the remaining neighborhoods.

In reviewing information from Table 13, CNI data revealed neighborhoods 21205 (26.34 percent), 21213 (21.26 percent), 21202 (15.72 percent) and 21218 (14.69 percent) had higher percentages of unemployment when compared to the remaining ZIP codes in the CBSA. CNI calculates the percentage of the unemployed population in the labor force, aged 16 and older, and the percentage of the population without health insurance when calculating the insurance barriers.

Additionally, the CNI measures income barriers based on:

- a. Percentage of households below poverty line, with head of household age 65 or more
- b. Percentage of families with children under 18 below poverty line
- c. Percentage of single female-headed families with children under 18 below poverty line

Therefore, even though zip code 21231 had the highest average income within the CBSA (as shown previously in Chart 2), Table 13 shows a calculated CNI income score of 5, indicating significant barriers. This is due to the high percentages for seniors in poverty at 29%, children in poverty at 47%, and single households who have children in poverty at 69%.

There are several socioeconomic issues community residents face when the inability to obtain employment is a factor. Higher unemployment rates add greater accessibility issues to health, social and daily living factors.

Table 13: CBSA CNI ZIP Codes and Scores: Specific Data and Measures

Zip	2015 Population	Poverty 65+	Poverty Children	Poverty Single w/kids	Limited English	Minority	No H/S Diploma	Unemployed	Uninsured	Rent	House	Income	Culture	Education	Insurance Rank	Housing	2015 CNI Score
21202	23,812	33.00%	47.07%	57.42%	1.13%	70.41%	23.04%	15.72%	18.18%	78.29%	5	5	5	5	5	5	5.0
21205	16,300	30.63%	46.69%	55.48%	3.88%	83.52%	36.55%	26.34%	17.85%	60.52%	5	5	5	5	5	5	5.0
21206	50,347	12.66%	20.19%	28.69%	1.60%	77.37%	15.23%	12.98%	9.26%	39.80%	5	2	5	4	4	5	4.0
21213	32,146	23.72%	30.38%	42.37%	1.08%	93.94%	23.55%	21.26%	14.10%	43.05%	5	4	5	5	5	5	4.8
21218	48,890	22.22%	23.90%	36.41%	0.72%	72.89%	17.43%	14.69%	13.40%	55.22%	5	3	5	4	5	5	4.4
21219	9,743	8.67%	13.01%	24.48%	0.54%	7.64%	17.19%	10.62%	6.46%	18.64%	2	2	2	4	3	2	2.6
21222	56,953	11.38%	20.30%	30.65%	1.69%	23.65%	19.13%	12.99%	6.93%	33.58%	4	2	4	4	3	4	3.4
21224	50,053	13.67%	30.85%	49.26%	9.79%	42.81%	25.12%	10.76%	9.23%	42.36%	5	4	5	5	4	5	4.6
21231	16,032	28.51%	46.54%	69.38%	4.66%	47.11%	16.73%	11.08%	11.73%	63.48%	5	5	5	4	4	5	4.6

Source: Truven Health Analytics 2015

While hand survey results reported that a majority of community residents had insurance, for the percentage of residents who did not have health insurance the most common reasons were: cost (29.6 percent) and the belief that that they did not qualify (25.4 percent).

Community leaders believe there are a number of factors that affect insurance status within the community. Fear and a lack of trust were two consistent points that surfaced during community leader discussions.

Input from focus group sessions found that many residents do not have health insurance because they do not know how to obtain it and do not have access to affordable health services. There was belief that the process is difficult and that 'Obamacare' does not provide adequate coverage. Some stated that they avoid seeking health services because they are not eligible, nor can they afford health insurance

premiums or the costs associated with uninsured medical care. For those aware of existing health resources, there was a claim for needed information to come from trusted organizations. Overall, the cost of care, insurance and lack of community awareness are barriers to receiving health care. Many feel that payment for health care services is expensive, which includes out-of-pocket costs, prescription medications and high deductibles.

Disparities and gaps in services plague communities and neighborhoods. Primary and secondary data figures collected provide in-depth information to address and pinpoint areas of concern for improvement.

#### **Chronic Diseases**

Heart disease, cancer, diabetes and stroke, which are chronic diseases, are a few leading causes of death and disability among citizens. Chronic diseases are responsible for seven of 10 deaths each year, and treating people with chronic diseases accounts for 86 percent of our nation's health care costs according to the CDC.

Obesity, a nationally growing concern, has affected many communities and neighborhoods and shows no signs of waning. Communities are seeing children as young as two years old diagnosed as being overweight and/or obese. According to The State of Obesity, Maryland has the 26th highest adult obesity rate in the nation. Maryland's adult obesity rate is currently 29.6 percent, up from 19.6 percent in 2000 and from 10.8 percent in 1990. Specifically examining the BMI of adults, the CDC reported that there were more Baltimore City (34.1 percent) residents aged 18 and older with a BMI greater than 30 (which indicates that they are obese) when compared to residents in Baltimore County (27.9 percent) and the state (28 percent) in 2012.

The toll and the overall health care costs associated with chronic diseases are staggering. The CDC reports, 86 percent of all health care spending in 2010 was for people with one or more chronic medical condition. Costs of heart disease and stroke in 2010 were estimated to be \$315.4 billion. Of this amount, \$193.4 billion was for direct medical costs, not including costs of nursing home care. Medical costs linked to obesity were estimated to be \$147 billion in 2008.

Although common, many of the chronic diseases diagnosed in community members are preventable. Living a healthy lifestyle by incorporating exercise, eating healthy and avoiding tobacco and alcohol can assist community residents from developing certain diseases.

Maryland State Health Improvement Process reported that Marylanders and Baltimore County residents have roughly the same life expectancy (79.6 years of age and 79.4 years of age respectively); while dramatically lower, Baltimore City residents have a life expectancy of 73.9 years of age.

Data obtained from Neighborhood Health Profile identify the top leading causes of death in Baltimore City as heart disease, cancer and stroke. These top three leading causes of death mimic those of the overall state of Maryland (See Table 14).

Additional causes of death such as HIV/AIDS, homicide, drug-induced deaths of undetermined manner and injury were not reported in Maryland's overall top leading causes of death. Identifying causes of death can assist health systems, organizations, community groups and community resources in

allocating and assisting in the direction where funding can be properly assigned for maximum impact. For example, education and health literacy regarding HIV/AIDS can assist community residents who are unaware of how the disease is transmitted, how to avoid contracting the disease and how to seek treatment options, potentially avoiding death.

HIV/AIDS, homicide, drug-induced deaths of an undetermined manner and injury are leadings causes of death found in Baltimore City. Primary data collected from the CHNA echo the secondary data findings.

Table 14: Top 10 Causes of Death in Baltimore City

		Rate (per 100,000)	Percent of Total Deaths	Percent of YPLL <sup>6</sup>
1.	Heart Disease	28.4	25.8	15.4
2.	Cancer	23.1	20.8	14.8
3.	Stroke	5.2	4.7	2.6
4.	HIV/AIDS	3.9	3.5	7.6
5.	Chronic lower respiratory	3.9	3.5	1.6
	disease			
6.	Homicide	3.5	3.4	12.5
7.	Diabetes	3.5	3.2	2.0
8.	Septicemia	3.5	3.1	2.1
9.	Drug-induced deaths of	3.2	2.8	6.9
	undetermined manner			
10.	Injury	2.8	2.5	4.8

Source: Neighborhood Health Profiles 2011

In 2013, the ten leading causes of death in Maryland were diseases of the heart (25 percent), malignant neoplasms (23 percent), cerebrovascular diseases (5 percent), chronic lower respiratory diseases (4 percent), accidents (4 percent), diabetes mellitus (3 percent), septicemia (2 percent), nephritis (2 percent), influenza and pneumonia (2 percent) and Alzheimer's disease (2 percent) (See Table 15).

<sup>&</sup>lt;sup>6</sup> Years of Potential Life Lost

Table 15: Leading Causes of Death in Maryland

2013		Percent
1. Diseases of heart		25.0
2. Malignant Neoplasr	ns	23.0
3. Cerebrovascular dis	ease	5.0
4. Chronic lower respi	ratory diseases	4.0
5. Accidents		4.0
6. Diabetes Mellitus		3.0
7. Septicemia		2.0
8. Nephritis		2.0
9. Influenza and Pneu	monia	2.0
10. Alzheimer's disease		2.0

Source: Maryland Department of Health and Mental Hygiene Vital Statistics 2013

The mortality breakdown reveals that 72.5 deaths per 10,000 population occur between the ages of 15 and 44 (See Table 16). Within this age group, it is likely or plausible that a percentage of these deaths may be preventable. Further analysis to determine the causes of death among this population could provide additional insight regarding how to best disseminate, distribute and promote health education/information, prevention efforts and awareness on diseases, which could assist those who are vulnerable.

Table 16: Mortality by Age

Age Group	Baltimore City (per 10,000)
Less than 1 year old	12.1
1-14 years old	1.8
15-24 years old	28.9
25-44 years old	43.6
45-64 years old	115.0
65-84 years old	489.9
85 years and up	1,333.3

Source: Neighborhood Health Profiles 2011

The Centers for Medicare and Medicaid Services reported that there were more residents aged 18 years and older with coronary heart disease or angina who are on Medicare in Baltimore County (30.4 percent) than residents who have the same condition in Baltimore City (28.6 percent), the state (28.5 percent) and the nation (28.6 percent). There were more Baltimore County (62.3 percent) and Baltimore

City residents (62.7 percent) aged 18 and older with high blood pressure on Medicare than the state (59.5 percent) and the nation (55.5 percent) that also had the same condition. Close to one-third of Baltimore City diabetic residents aged 20 and older are on Medicare (31.4 percent).

The rate of residents in Baltimore City from 2010-2014 who visited the emergency room due to their diabetes was much higher than Baltimore County and the state (See Chart 14).

Information gathered related to causes of death, high blood pressure and diabetes, etc. all point towards the need for community action. Education, information and improving access for those in the area can have a significant impact in reducing the chronic conditions of residents.

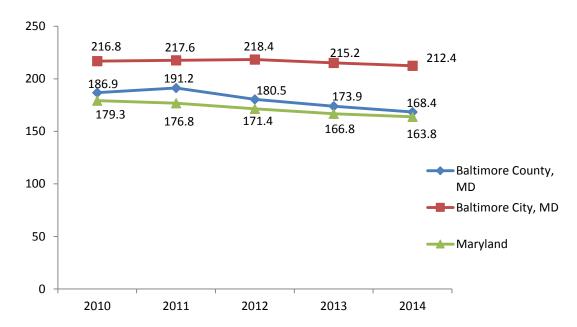


Chart 14: Emergency Department Visit Rate Due to Diabetes (per 100,000 population)

Source: Maryland State Health Improvement Process 2014

Sexually transmitted diseases (STDs) are significant health issues that are largely preventable. Socioeconomic factors have a direct relationship with how STDs are spread. Racial and ethnic disparities, poverty, drug abusers and access to care are some factors that contribute to the spread of the disease. The Maryland State Health Improvement Process reported from 2011-2013 a 73.8 HIV incidence rate per 100,000 population among Baltimore City residents. This rate is more than double the rate of Marylanders (28.1) and four times the rate of Baltimore County residents (17.8).

Maryland Department of Health and Mental Hygiene Vital Statistics reported in 2013, the HIV death rate per 100,000 in population for black males (13) was ten times higher when compared to white males (1.3).

Baltimore City residents had higher rates of chlamydia, gonorrhea and syphilis when compared to Baltimore County. Baltimore City residents had more than double the cases of chlamydia, more than three times the gonorrhea cases, and more than six times the syphilis cases when compared to Baltimore County (See Table 17).

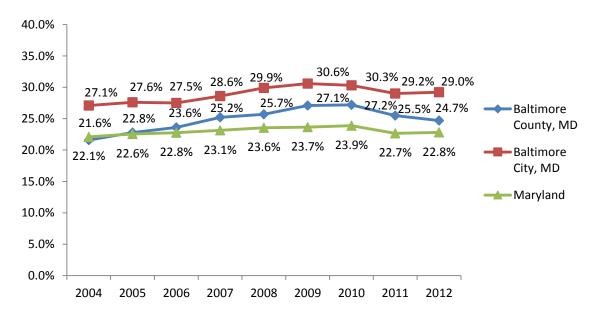
Table 17: Sexually Transmitted Diseases

	Population in 2013	2013 Chlamydia Cases	2013 Gonorrhea Cases	2013 Syphilis (Primary and Secondary) Cases
Baltimore County	823,015	1 in 277	1 in 1,404	1 in 23,515
Baltimore City	622,104	1 in 80	1 in 288	1 in 2,948
Maryland	5,939,000	1 in 222	1 in 922	1 in 13,024

Source: Maryland Dept. of Health and Mental Hygiene; Center for STI Prevention (CSTIP) 2008-2013

The Maryland State Health Improvement Process reported more physically inactive adults aged 20 and older living in Baltimore City when compared to Baltimore County and the state. Both Baltimore City and Baltimore have more adults, aged 20 and older, who are physically inactive compared to the state and the nation beginning in 2005-2012 (See Chart 15).

Chart 15: Physical Inactivity (Percent of Adults Aged 20 and Older Who Are Physically Inactive)



Source: Maryland State Health Improvement Process, 2014

Hand survey results identified more than one-third of survey respondents (40.2 percent) have been told by a health professional that they are overweight or obese. More than one-half of survey respondents (51.5 percent) reported that they have high blood pressure, 22.5 percent have diabetes and 20.6 percent have heart problems. Top health concerns reported by survey respondents include drug and alcohol abuse, affordable housing/homelessness, crime/assault, access to affordable healthy foods, high blood pressure, diabetes, mental health/illness, cancer, obesity/overweight and domestic violence.

Community stakeholders reported lifestyle choices to be a major factor that contributes to the development of chronic diseases. Many cited smoking, obesity, substance abuse, high blood pressure and poor food choices to be underlying causes of chronic diseases in residents. It was noted that more education and information are needed for community residents and patients who have these conditions in order to reduce complications and improve the health of the residents. Some stakeholders reported the lack of available community resources to assist diabetic patients in complying with treatment plans (e.g., diet, weight loss, exercise and medications). Lack of access to affordable healthy food, safe venues for physical exercise, and adequate education and support are major road blocks to many who want to improve their health. Many feel a need for a more concerted effort to make a significant change in the community. Community leaders believed that African Americans and Latinos have the highest rates of cardiovascular disease, and that environmental influences are the main contributors of the disease.

Obesity, according to community stakeholders, has become a community epidemic. While obesity can be considered an intergenerational issue, there are additional contributing factors, for example, the limited availability of fresh healthy foods in the community. Low-income areas are stricken with poverty and regions in the city only have access to fast food. It is understood from community stakeholders that accessibility is an issue, and socioeconomic factors play a significant role in the obesity epidemic.

Information cited from focus group participants also revealed their growing concerns over obesity in the community. The group discussed the role obesity plays in an individual's overall physical health, as well as mental health issues. The lack of accessibility to affordable healthy foods along with limited opportunities for physical fitness contribute to the rise in obesity. The inability to engage in outdoor activities due to factors such as crime and safety pose limited options for residents to engage in exercise. Focus group participants are aware that obesity can lead to diabetes and that exercising and eating healthy can alter and manage the condition. However, not having access to primary care services makes chronic diseases difficult to diagnose, treat and manage.

Focus group attendees are aware of the high rates of African Americans who have diabetes and many cite cultural eating habits, the lack of quality grocery stores (living in a food desert) and the affordability of healthy foods as being underlying factors, which contribute to the high rates of diabetes in their community.

Chronic diseases can be managed and many are preventable; however, generational attitudes along with the ability to obtain necessary health care services need to be addressed in order to allow community residents the opportunity to live a healthier life.

# **Conclusions and Recommendations**

With the completion of the 2015 CHNA, JHH and JHBMC will develop goals and strategies for the CHNA implementation phase. In this phase, the health institutions will leverage their strengths, resources and outreach to help community partners best identify ways to address their communities' health needs; thus improving overall health and addressing the critical health issues and well-being of residents in their communities. The community health needs assessment and implementation planning builds on the previous 2013 CHNA assessment and planning reports. The comprehensive CHNA addressed who was involved, what, where and why; while the implementation planning phase will address the how and when JHH and JHBMC will address the identified community health needs.

The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center, partnering with community organizations and regional partners, understand that the CHNA document is not the last step in the assessment phase, but rather the first step in an ongoing evaluation process. Communication and continuous planning efforts are vital throughout the next phase of the CHNA. Information regarding the CHNA findings will be important to residents, community groups, leaders and other organizations that seek to better understand the health needs of the communities surrounding JHH and JHBMC and how to best serve their needs.

In the assessment process, common themes and issues rose to the top as each project component was completed. The data collected from the overall assessment included feedback and input from community leaders, and hard-to-reach, underserved and vulnerable populations. The information collected provides JHH and JHBMC with a framework to begin evaluating, identifying and addressing gaps in services and care, which will ultimately alleviate challenges for individuals living in the community.

Solidifying and reinforcing existing relationships and creating new relationships must be paramount in order to address the needs of community residents. Expanding and creating new partnerships with multiple regional entities is vital to developing community-based strategies to tackle the region's key community health needs.

The key community health needs identified by JHH and JHBMC include Improving Socioeconomic Factors (Education and Employment), Access to Livable Environments (Housing, Food Environment, Crime and Safety), Access to Behavioral Health Services (Mental Health and Substance Abuse), and Access to Health Services (Dental Services, Uninsured and Chronic Diseases).

The collection and analysis of primary and secondary data provided the working group with an abundance of information, which enabled the group to identify key health services gaps. Collaborating with local, regional, statewide and national partners, JHH and JHBMC understand the CHNA is one component to creating strategies to improve the health and well-being of community residents.

Implementation strategies took into consideration the higher need areas that exist in regions that have greater difficulties in obtaining and accessing services.

## **Action Steps:**

- Communicate the results of the CHNA process to staff, providers, leadership, boards, community stakeholders and the community as a whole.
- Use the inventory of available resources in the community in order to explore further partnerships and collaborations.
- Implement a comprehensive grassroots community engagement strategy to build upon the resources that already exist in the community, including committed community leaders that have been engaged in the CHNA process.
- Develop working groups to focus on specific strategies to address the top identified needs of the communities in which the health system serves and develop a comprehensive implementation plan.
- Involve key community stakeholders to participate or be involved with working groups who will strategically address and provide expert knowledge on ways to address key community health needs.

# **Implementation Strategy Introduction**

The CHNA is a report based on epidemiological, qualitative and comparative methods that assesses the health issues in a hospital organization's community and that community's access to services related to those issues. The Implementation Strategy is a list of specific actions and goals that demonstrate how The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center plan to meet the CHNA-identified health needs of the residents in the communities surrounding the hospital, i.e. the Community Benefit Service Area (CBSA). This Implementation Strategy was approved by the hospitals' Boards of Trustees.

# IRS Requirements - Implementation Strategy

The Implementation Strategy which is developed and adopted by each hospital must address each of the needs identified in the CHNA by either describing how the hospital plans to meet the need or identifying it as a need not to be addressed by the hospital and why. Each need addressed must be tailored to that hospital's programs, resources, priorities, plans and/or collaboration with governmental, non-profit or other health care organizations. If collaborating with other organizations to develop the implementation strategy, the organizations must be identified. The board of each hospital must approve the Implementation Strategy within the same fiscal year as the completion of the CHNA.

#### **Health Priorities**

As noted in the CHNA, four key need areas were identified through the gathering of primary and secondary data from local, state and national resources, community stakeholder interviews, hand-distributed surveys, focus groups with vulnerable populations, a community forum and a health provider inventory (highlighting organizations and agencies that serve the community). The identified community needs are depicted in order of priority in the graph below (See Graph 1). The Implementation Strategy items which follow, provide action plan strategies that address the identified needs.

Graph 1: Key Community Health Needs



# **HEALTH NEED #1 Improving Socioeconomic Factors**

HEALTH NEED 1	A: EDUCATION		
Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
GOAL: Improve the health and well-being of our youth.	Strategy 1: Support youth mentoring	Increase number of participants enrolled in mentoring programs     Establish evaluation of program success and participant satisfaction via survey methodology	<ul> <li>Baltimore City Community College (BCCC)</li> <li>State of MD</li> <li>Dunbar HS / Baltimore City Public Schools (BCPS)</li> <li>Project REACH</li> <li>Institute of Notre Dame (JH Sponsored internships)</li> <li>Henderson-Hopkins School</li> <li>Other Mentoring program partnerships:         <ul> <li>Creative Alliance</li> <li>MERIT (SOM)</li> <li>THREAD</li> </ul> </li> </ul>
	Strategy 2: Increase child participation in Early Childhood Education and integrate health services into schools	Increase number of children enrolled in early childhood programs	<ul> <li>Weinberg Early Childhood Center</li> <li>Rales Health Center at the KIPP School with comprehensive school health</li> <li>Southeast Community Development Corp (SECDC) – Community School Coordinator Program</li> <li>Headstart</li> </ul>

HEALTH NEED	1B: EMPLOYMENT		
Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
GOAL: Increase employment opportunities to local and minority communities.	Strategy 1: Improve career development among youth  Strategy 2: Create	Increase number of youth participating in career development programs and/or number of programs available  Increase number of new	CBSA schools     Historic East Baltimore Community     Action Coalition (HEBCAC)     Civic Works      EB Jobs HUB
	new employment opportunities for local communities and minorities; increase youth and adult workforce training programs	<ul> <li>Increase number of new employees hired living within CBSA</li> <li>Increase job opportunities for residents in the CBSA</li> <li>Increase number of participants in workforce coaching and training programs</li> </ul>	<ul> <li>EB JOBS HOB</li> <li>Historic East Baltimore Community Action Coalition (HEBCAC)</li> <li>Hospital Employment Program</li> <li>BUILD</li> <li>Center for Urban Families</li> <li>Men &amp; Families Center</li> <li>Biotechnical Institute - Lab Associates Program</li> <li>Supply Chain Academy</li> </ul>
	Strategy 3: Support/Contract with local and minority vendors to improve the local economy	Increase number of contracts with local vendors     Increase amount spent with local and minority contractors	<ul> <li>Minority Contractors Associations</li> <li>East Baltimore Jobs Hub</li> </ul>

# **HEALTH NEED #2. Access to Livable Environments**

HEALTH NEE	D 2A: HOUSING		
Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
GOAL: Increase access to housing and healthy homes in the CBSA	Strategy 1: Expand capacity to identify housing issues among low-income, uninsured, and homeless residents including challenges related to asthma triggers and lead among children	Number of Neighborhood     Navigator encounters addressing     housing issues     Number of Health Leads     connections to housing resources     Increase screening rates for lead     poisoning	<ul> <li>Health Leads</li> <li>Green &amp; Healthy Homes Initiative</li> <li>Helping Up Mission</li> <li>BCHD Asthma Program</li> </ul>
	Strategy 2: Provide social support services to low-income, uninsured and homeless residents including improving homelessness initiatives	<ul> <li>Increase number of low- income, underinsured, and homeless screened for social determinants and connected to services</li> <li>Number of transition housing slots</li> </ul>	<ul> <li>Men &amp; Families         Center</li> <li>Helping Up         Mission</li> <li>Center for Urban         Families</li> <li>Southeast         Community         Development         Corp (SECDC)</li> <li>United Way 211</li> <li>Health Leads</li> <li>Healthcare for         the Homeless</li> <li>Homeless         Connect</li> </ul>

<ul> <li>American Heart Assoc./         Community Kitchen</li> <li>American Diabetes Assoc</li> <li>East Baltimore Health Fairs</li> <li>MD Food Bank Culinary Kitchen</li> <li>Amazing Grace Lutheran Church</li> <li>American Institute of Food and</li> </ul>
<ul> <li>Wine (Days of Taste)</li> <li>Rales Health Center at KIPP school</li> <li>MD Food Bank</li> <li>Meals on Wheels</li> <li>Community Food pantries</li> <li>JHM Community Farmers' Market</li> <li>Faith communities</li> <li>Amazing Grace Lutheran Churcl</li> <li>Youth organizations, schools, and churches</li> <li>Playworks (Baltimore City Yout</li> </ul>

HEALTH NEE	D 2C: CRIME AND SAFETY		
Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
GOAL: Enhance neighbor- hood safety.	Strategy 1: Establish safe haven facilities for after school programs, summer camps and neighborhood youth recreation programs	Increase number of programs/participants involved     Increase number of community organizations involved	<ul> <li>Henderson-Hopkins School</li> <li>Baltimore City Dept. of Parks &amp; Recreation</li> <li>Baltimore City/County Public Schools</li> <li>Dundalk Youth Services Center</li> <li>Youth orgs and churches</li> <li>Mary Harvin Transformation Center</li> <li>Living Classrooms</li> <li>Port Street Center</li> <li>Rales Health Center at KIPP schools</li> </ul>
	Strategy 2: Establish safety education sessions and intervention programs	Number of people counseled	<ul> <li>Baltimore City and County Police Departments</li> <li>Operation PULSE (People United to Live in a Safe Environment)</li> <li>CURE (Clergy United for Renewal in East Baltimore)</li> <li>Men and Families Center</li> <li>Baltimore City and County Fire Departments</li> <li>Saftety Center in Harriet Lane Clinic and the JH Children's Center</li> </ul>

# **HEALTH NEED #3.** Access to Behavioral Health Services

Goal	Strategies	Metrics/What we are measuring	Potential Partnering/ External Organizations
Goal: Improve access to mental health and behavioral health services.	Strategy 1: Provide individual, group, family therapy, medication treatment, and other mental health services, as well as prevention interventions	Number of schools participating in program     Number of children who receive services     Number of adults who receive services	Baltimore City and County School     Districts     Head Start Programs     Judy Center at Commodore John     Rogers school     Stulman Foundation/Baltimore     Community Foundation     After Care Clinic     Mary Harvin Transformation Center     Rales Health Center at KIPP school
	Strategy 2: Develop program(s) to support ED patients waiting for outpatient mental health and/or substance use disorder treatment	<ul> <li>Number of patients served by the Bridge Program</li> <li>Number of patients serviced by ED-based Community Health Workers</li> </ul>	HSCRC Regional Partnership

HEALTH NEE	D 3B: SUBSTANCE ABUSE (SA)		
Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
Goal: Improve access to available substance	Strategy 1: Expand outpatient treatment for homeless men needing SA services	Number of outpatient treatment slots	Helping Up Mission
abuse (SA) services.	Strategy 2: Provide substance abuse and mental health services to pregnant women with active substance use disorders	Number of pregnant women served for substance abuse and or mental health services     Number of pregnant ED patients connected to substance abuse services	
	Strategy 3: Provide addiction treatment services to address opioid addiction in local community	Number of patient visits per year	East Baltimore     Medical Center     Broadway Center for     Addictions

# **HEALTH NEED #4 Access to Health Services**

HEALTH NEE	ED 4A: DENTAL SERVICES		
Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
Goal: Increase access to dental care services for uninsured patients.	Strategy 1: Increase network of dental providers serving uninsured/underinsured patients accepting referrals from JH facilities	Increase number of dentists/providers involved     Increased referrals for dental health screenings and preventive maintenance	<ul> <li>Baltimore Medical System - BMSI</li> <li>Chase Brexton</li> <li>Univ of MD dental school</li> <li>BCCC dental hygiene program</li> <li>United Way 211</li> <li>Esperanza Center</li> <li>Healthcare for the Homeless</li> <li>Baltimore City Health Dept (BCHD)</li> <li>Baltimore VA Medical Center</li> <li>Rales Center at KIPP School</li> </ul>
	Strategy 2: Provide dental health education outreach	<ul> <li>Increased availability and distribution of dental care education materials</li> </ul>	<ul> <li>Community orgs</li> <li>Center for Urban Environmental Health</li> <li>UMD dental school</li> </ul>

HEALTH NEED 4B: UNINSURED CARE			
Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
Goal: Improve access to healthcare services for uninsured and underinsured residents across JHH/ JHBMC CBSA.	Strategy 1: Connect uninsured residents into private insurance, Medicaid, or other available coverage  Strategy 2: Reduce transportation barriers and enhance awareness of available services	Number of residents enrolled     Number of resources available to assist with identifying coverage and enrollment      Number of transportation vouchers     Resource information distribution	<ul> <li>Esperanza Center</li> <li>HealthCare for the Homeless</li> <li>Centro Sol</li> <li>Charm City Clinic</li> <li>Care-A-Van</li> <li>Baltimore Transit Service</li> <li>Esperanza Center</li> <li>Elder Plus</li> <li>Care-A-Van</li> </ul>
	Strategy 3: Provide annual training for all JHH/JHBMC medical staff on accessing and utilizing interpretive services	<ul> <li>Number of medical staff completing interpretive service training</li> <li>Number of house staff participating in interpreter testing</li> </ul>	

# **HEALTH NEED 4C: CHRONIC DISEASE**

Goal	Strategies	Metrics/What we are measuring	Potential Partnering/External Organizations
Goal: Share clinical expertise with community organizations to prevent, detect, and manage chronic diseases.	Strategy 1: Work with community organizations, congregational health networks and individuals to improve care, awareness, management and promote prevention of chronic diseases	<ul> <li>Increase number of health education/outreach encounters provided to community- based organizations and churches</li> <li>Number of participants in health events and number of screenings performed</li> <li>Number of vision screenings- (retinopathy, glaucoma, vision testing in schools etc.)</li> <li>Expand programing at the JHOC Diabetes Center</li> </ul>	<ul> <li>Area schools</li> <li>Faith based organizations</li> <li>Community meetings</li> <li>BCHD</li> <li>Comiendo Juntos</li> <li>Isaiah Wellness Center</li> <li>Mary Harvin         Transformation Center</li> <li>Vision to Learn Program</li> <li>Centro Sol</li> <li>After Care Clinic</li> <li>Rales Health Center at KIPP school</li> <li>Health Leads</li> <li>Men and Families Center</li> <li>Sisters Together And Reaching</li> <li>Visiting Nurses</li> <li>After Care Clinic</li> </ul>
	Strategy 2: Support patients with chronic conditions during transitions and in accessing resources to reduce barriers to patient engagement (i.e. social determinants)	Number of patients seen in the After Care Clinic at JHH     Number of patients connected to services addressing social determinants     Increase transition support home care services available to patients with chronic conditions	

**Note:** For more information on community benefit programs and support please see the annual Community Benefit Report for each hospital available at <a href="http://web.jhu.edu/administration/gca/CHNA">http://web.jhu.edu/administration/gca/CHNA</a>

# **Appendix A: Primary Data**

# **Primary Data**

#### **Process Overview**

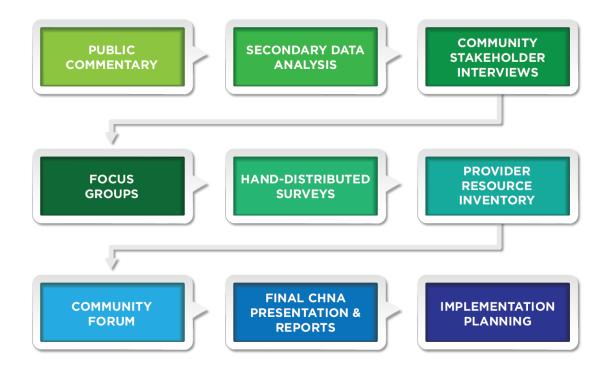
A comprehensive community-wide CHNA process was completed for The Johns Hopkins Hospital (JHH) and Johns Hopkins Bayview Medical Center (JHBMC), connecting public and private organizations, such as health and human service entities, government officials, faith-based organizations and educational institutions to evaluate the needs of the community. The 2015 assessment included primary and secondary data collection that incorporated public commentary surveys, community stakeholder interviews, a hand-distributed survey, focus groups and a community forum.

Collected primary and secondary data brought about the identification of key community health needs in the region. The Johns Hopkins leadership will develop an Implementation Strategy that will highlight, discuss and identify ways the health system will meet the needs of the communities they serve.

Tripp Umbach worked closely with JHH and JHBMC to collect, analyze, review and discuss the results of the CHNA, culminating in the identification and prioritization of the community's needs at the local level.

The flow chart below outlines the process of each project component in the CHNA (See Flow Chart 2).

Flow Chart 2: CHNA Process



#### **PUBLIC COMMENTARY**

As part of the CHNA, public comments related to the 2013 CHNA and 2014 Implementation Plan completed on behalf of the Johns Hopkins Institutions were obtained. Requests for community comments offered community residents, hospital personnel and committee members the opportunity to react to the methods, findings and subsequent actions taken as a result of the previous CHNA and planning process.

Respondents were asked to review and comment on, via a survey, the 2013 CHNA report and the 2014 Implementation Plan adopted by the Johns Hopkins Institutions. The survey was strategically placed at JHH's security desk at the Wolfe Street entrance (e.g., Main Hospital Lobby) and at the security desk at the Billings Administration Lobby. At JHBMC, surveys were collected at the main hospital lobby and in the community relations office. The survey questionnaire was also emailed to the Executive Planning Committee, which includes representatives from JHH and JHBMC for review and comment collection.

There were no restrictions or qualifications required of public commenters. The collection period for the public comments began August 2015 and continued through early September 2015. In total, 21 surveys were collected and analyzed.

### **Public Comments:**

- Close to three-fourths of survey respondents (71.4 percent) reviewed the CHNA and Implementation
  Plan for JHBMC; while the remaining 28.6 percent reviewed the CHNA and Implementation Plan for
  JHH.
- When asked if the assessment "included input from community members or organizations" 90.5
  percent of survey commenters reported that it did. 4.8 percent reported that it did not and the
  remaining 4.8 percent did not know.
- More than one-half of survey respondents (66.7 percent) reported that the assessment that was
  reviewed did not exclude any community members or organizations that should have been involved
  in the assessment; while 28.6 percent did not know and 4.8 percent reported that a community
  member/organization was excluded. The community organizations that the survey respondent
  identified as being excluded from the assessment included Helping Up Mission and Powell Recovery.
- In response to the question "Are there needs in the community related to health (e.g., physical health, mental health, medical services, dental services, etc.) that were not represented in the CHNA"; 47.6 percent of commenters indicated community needs related to health were represented and 28.6 percent did not know. However, five respondents (23.8 percent) reported that cardiac, childcare for working parents, diabetes, addiction treatment services and senior needs/barriers were not covered in the previous CHNA.
- The specific populations who experienced needs/barriers related to health were residents with addictions (especially dual diagnosis) (4.8 percent), seniors (9.5 percent), the working population (4.8 percent) and African Americans (4.8 percent).

• A majority of survey respondents (85 percent) indicated that the Implementation Plan was directly related to the needs identified in the CHNA.

According to respondents, the CHNA and the Implementation Plan benefited them and their community in the following manner (in no specific order):

- Meeting the IRS's criteria.
- Unsure if new initiatives in substance abuse were introduced.
- The CHNA provided various ongoing needs of the community and solutions to address them.
- Brought blood pressure awareness.
- Kept me in tune with body needs and health plans.
- The CHNA compiles a lot of excellent information focused on the local community. It is a tool that helps the hospital develop a structured way to track and measure impact.

Additional feedback on the CHNA/Implementation Plan (in no specific order):

- The need for more community awareness of free programs and volunteer awareness.
- JHBMC should look at community-based substance abuse programs off campus.
- Our center provides many health programs.

# **COMMUNITY STAKEHOLDER INTERVIEWS**

As part of the CHNA, telephone interviews were completed with community stakeholders in the community benefits service area to better understand the changing health environment. Community stakeholder interviews were conducted during September and October 2015.

Community stakeholders targeted for interviews encompassed a wide variety of professional backgrounds including: 1) public health expertise; 2) professionals with access to community health related data; and 3) representatives of underserved populations. The interviews offered community stakeholders an opportunity to provide feedback on the needs of the community, secondary data resources and other information relevant to the study.

Tripp Umbach worked closely with the Johns Hopkins Institutions to identify community stakeholders. A letter was mailed, along with a follow-up email to community stakeholders, to introduce Tripp Umbach and define the stakeholders' roles in the CHNA process. The letter also introduced the project and conveyed the importance of the CHNA to the community. Each interview was conducted by a Tripp Umbach consultant and was approximately 30 to 60 minutes in duration. The interviews provided a platform for stakeholders to identify health issues and concerns affecting residents in their service area, as well as ways to address those concerns.

The qualitative data collected from community stakeholders are the opinions, perceptions and insights of those who were interviewed as part of the CHNA process. A diverse representation of community-based organizations and agencies were among the 52 stakeholders interviewed.

The common themes from the stakeholder interviews were (in no particular order):

- 1) Environment (the economy, housing, educational, employment availability, crime/safety issues and parks/recreation)
- 2) Health Services (access)
- 3) Health Issues (mental health, chronic diseases)
- 4) Barriers to Health (employment, environment, transportation, physical inactivity and lack of grocery stores)
- 5) Populations/Residents (children, seniors, African-Americans, Latinos/Hispanics)

#### **FOCUS GROUPS**

Between the months of September and October 2015, Tripp Umbach facilitated six focus groups within the study area with at-risk populations. Targeted underserved focus group audiences were identified and selected with direction from hospital leadership based on their knowledge of their Community Benefits Service Area (CBSA). Tripp Umbach worked closely with community-based organizations and their representatives to schedule, recruit and facilitate focus groups within each of the at-risk communities. Participants were provided with a cash incentive, along with food and refreshments for their participation.

The number of focus group participants ranged from nine to 15 attendees, with each focus group lasting roughly 1.5 hours. The total number of participants for all six focus groups was 83. Demographic information on focus group attendees is available in the Focus Group Report.

The common themes from the focus group audiences were (in no particular order):

- 1) Asthma
- 2) Children's health
- 3) Chronic diseases
- 4) Crime and safety
- 5) Dental health
- 6) Food environment

- 7) Health disparities
- 8) Mental health
- 9) Physical inactivity
- 10) Substance abuse
- 11) Sexually transmitted infections

The table below lists the focus group audiences and the locations where each group was conducted (See Table 18).

Table 18: Focus Group Audiences

FOCUS GROUP AUDIENCE:	LOCATION OF THE EVENT:	
Providers who have access to "at risk-kids" <sup>7</sup> Number of Attendees: 9	Henderson-Hopkins	
Ex-offenders Number of Attendees: 15	Men & Families Center	
Latinos/Spanish-Speaking Number of Attendees: 15	Sacred Heart Church	
Seniors in Baltimore County Number of Attendees: 15	Edgemere Senior Center	
Seniors in East Baltimore City Number of Attendees: 14	Parkview Ashland Terrace	
Substance Abusers/Recovering Addicts Number of Attendees: 15	Center for Urban Families	

#### **HAND-DISTRIBUTED SURVEYS**

Tripp Umbach employed a hand-distribution methodology to disseminate surveys to individuals within the CBSA. A hand survey was utilized to collect input, in particular, from underserved populations. The hand survey, available in both English and Spanish, was designed to capture and identify the health risk factors and health needs of those within the study area. The hand survey collection process was implemented during September and October 2015.

Tripp Umbach worked with community-based organizations to collect and distribute the surveys to endusers in the underserved populations. Tripp Umbach's engagement of local community organizations was vital to the survey distribution process.

In total, 648 were used for analysis; 619 surveys were collected in English and 29 surveys were collected in Spanish. The information below represented key survey findings collected from the hand-distributed survey.

### Methodology:

A hand-distributed survey methodology was employed to collect input from populations in East Baltimore City and parts of southeast Baltimore County in order to identify health risk factors and health needs in the community. Hand surveys were collected in the ZIP codes that represent the Johns Hopkins Institutions' CBSA.

<sup>&</sup>lt;sup>7</sup> An "at-risk child" was defined as a child under the age of 18 years old, who lives in a family whose income is below the poverty line, are/were exposed to an abusive environment/violence, have environmental health problems, have an unplanned pregnancy, or a sexually transmitted infection.

- Working through community-based organizations, community associations, faith-based organizations and FQHCs/clinics, hundreds of hand surveys were collected from residents within the CBSA.
- ➤ Community-based organizations encouraged participants to fill out the survey upon entry to their facility, while waiting in the lobby, cafeteria, meetings and or attending classes at their organizations. Engagement of local community organizations was vital in the distribution process. The information collected from the hand surveys is representative of residents who use and obtain services from community-based organizations.
  - Tripp Umbach provided assistance to community organizations in the distribution of the hand survey, as requested.
- ➤ Hard copies of the hand survey were mailed to community-based organizations and returned to Tripp Umbach for input and analysis.

# **Key Findings:**

- More than one-half of survey respondents (67.5 percent total) reported that their health was either excellent or good.
- More than three-fourths of survey respondents have a primary care physician (87.9 percent).
- Survey respondents are likely to receive medical care at a doctor's office (48.5 percent), a clinic (37.2 percent) or emergency room (6.8 percent).
- More than three-fourths of survey respondents (86.7 percent) had an appointment with their physician within the past year.
- More than three-fourths of survey respondents have health insurance (89.5 percent).
- More than one-half of survey respondents seek dental care at a dentist's office (58.2 percent).
- > Slightly less than one-half of survey respondents had an appointment with a dentist or dental clinic within the past year (48.6 percent).
- More than one-third of survey respondents have been told by a health professional that they are overweight or obese (40.2 percent) and about one-half of survey respondents have high blood pressure (51.5 percent).
- > Slightly less than one-fourth of survey respondents have been told that they have diabetes (22.5 percent) or heart problems (20.6 percent).
- ➤ Slightly more than one-fourth of survey respondents have a physical ailment that affects their daily activities (26.2 percent); while 20.3 percent have a mental/emotional ailment that affects their daily activities.
- > 52.2 percent of survey respondents 'always get a flu shot once a year', 49.6 percent of respondents 'always feel satisfied with life' and 33.3 percent 'always get 6-8 hours of sleep a night'.

- 'Word-of-mouth' (20.6 percent) and TV (19.3 percent) were the most reported avenue in how survey respondents obtained information in their community.
- ➤ 'Public transportation' (37.1 percent) and survey respondents' 'own car' (35.4 percent) were the main forms of transportation.
- More than one-half of survey respondents feel 'somewhat safe' from crime in their neighborhood/community (62 percent). Crime (25.3 percent), violence (24.2 percent) and drugs (23.7 percent) were the top three reasons why survey respondents did not feel safe in their neighborhood/community.
- > Drug and alcohol use/addiction (11.5 percent), affordable housing/homelessness (9.2 percent) and crime/assault (8.4 percent) were the top health concerns reported by survey respondents.
- More than one-fourth of survey respondents were depressed (29.9 percent) or had problems remembering things or concentrating (25.1 percent); and 23.2 percent had anxiety, nervousness, or panic attacks.
- More than one-third of survey respondents received mental health services in the past 12 months (36 percent).
- ➤ 16 percent of survey respondents needed but did not receive mental health services in the past 12 months (16 percent).

#### PROVIDER RESOURCE INVENTORY

An inventory of programs and services available in the region was developed by Tripp Umbach. The provider inventory highlights available programs and services within JHH and JHBMC's CBSA. The inventory identifies the range of organizations and agencies in the community that are serving the various target populations within each of the priority needs. The inventory provides program descriptions and collects information about the potential for coordinating community activities and creating linkages among agencies.

An interactive link of the provider resource inventory will be made available on JHH's and JHBMC's website.

### **COMMUNITY FORUMS**

As part of the CHNA process, a regional community planning forum was held at Breath of God Lutheran Church in Baltimore, MD, on December 7, 2015. Over 30 community leaders attended the event representing a variety of community organizations, health and human services agencies, health institutions and additional community agencies. Forum participants were invited to a four-hour community event where they were privy to all data collected throughout the comprehensive CHNA process. Forum participants were community stakeholders who were interviewed, sponsored and recruited participants for the focus groups, and/or were instrumental in the hand-distributed survey process. Most importantly, forum participants provided critical feedback and prioritized key need areas for the CHNA.

At the community forum, Tripp Umbach presented results from secondary data analysis, community leader interviews, hand surveys and focus group results and used these findings to engage community participants in a group discussion. Upon review of primary and secondary data, participants broke into four groups to determine and identify issues that were most important to address in their community. Finally, the breakout groups were charged with creating ways to resolve their community identified problems through concrete solutions in order to form a healthier community (this task was only completed if the breakout groups had sufficient time to brainstorm).

The following list identifies prioritized community health needs based upon input collected from forum participants. They are listed in order of mention.<sup>8</sup>

# Prioritized Key Community Needs:

Education (4)
Employment (4)
Housing (3)
Mental health (2)
Food environment (2)

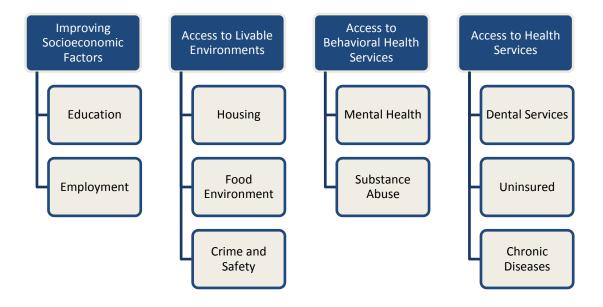
Substance abuse (2) Crime and safety (1) Health care/access (1) Dental health (1)

It is important to note that forum participants expressed and discussed at great length the direct impact and associated effects between employment and education and how these specific factors directly or indirectly impact the socioeconomic factors and health needs of community residents.

Based upon feedback and input from the Executive Planning Committee, community leaders, community residents, project leadership and extensive primary and secondary data research, four CBSA priorities were identified. Tripp Umbach categorized and grouped the key community needs into broader areas taking into account the previous CHNA results of the Johns Hopkins Institutions (e.g., chronic diseases, substance abuse/addiction, obesity, access to care and mental health). The key need areas from the 2015 CHNA are aligned and merged with the previous CHNA needs and are depicted in the chart below (See Graph 2).

<sup>&</sup>lt;sup>8</sup> The number in parenthesis indicates the number of groups that identified the listed community need (e.g., if each of the four breakout groups mentioned the need, a (4) is shown).

Graph 2: Key Community Health Needs



#### **IMPLEMENTATION PLANNING**

With the completion of the community health needs assessment, an implementation phase began with the onset of work sessions facilitated by Tripp Umbach. The work sessions maximized system cohesion and synergies. The planning process ultimately resulted in the development of an implementation plan that meets system and IRS standards.

# **Appendix B: Truven Health Analytics**

# Truven Health Analytics: Community Needs Index (CNI) Overview

Not-for-profit and community-based health systems have long considered a community's needs to be a core component of their mission of service to local communities. While specific initiatives designed to address health disparities vary across local communities (e.g., outreach to migrant farm workers, asthma programs for inner city children, etc.), the need to prioritize and effectively distribute hospital resources is a common thread among all providers.

Given the increased transparency of hospital operations (quality report cards, financial disclosures, etc.), community benefit efforts need to become increasingly strategic and targeted in order to illustrate to a variety of audiences how specific programs have been designed and developed. While local community needs assessments will always play a central role in this process, they are often voluminous, difficult to communicate, and may lack necessary qualitative and statistical justification for choosing specific communities as having the "greatest need."

Because of such challenges, Dignity Health and Truven Health jointly developed a Community Need Index (CNI) in 2004 to assist in the process of gathering vital socioeconomic factors in the community. The CNI is strongly linked to variations in community health care needs and is a strong indicator of a community's demand for various health care services.

Based on a wide array of demographic and economic statistics, the CNI provides a score for every populated ZIP code in the United States on a scale of 1.0 to 5.0. The CNI should be shared with community partners and used to justify grants or resource allocations for community initiatives.

# Methodology

The CNI score is an average of five different barrier scores that measure various socioeconomic indicators of each community using the source data. The five barriers are listed below, along with the individual statistics that are analyzed for each barrier. The following barriers, and the statistics that comprise them, were carefully chosen and tested individually by both Dignity Health and Truven Health:

### 1. Income Barrier

- Percentage of households below poverty line, with head of household aged 65 or older
- Percentage of families, with children under age 18, below poverty line
- Percentage of single female-headed families, with children under age 18, below poverty line

#### 2. Cultural Barrier

- Percentage of population that is a minority (including Hispanic ethnicity)
- Percentage of population, over age 5, that speaks English poorly or not at all

### 3. Education Barrier

Percentage of population, over age 25, without a high school diploma

#### 4. Insurance Barrier

- Percentage of population in the labor force, age 16 or older, without employment
- Percentage of population without health insurance

# 5. Housing Barrier

Percentage of households renting their home

Every populated ZIP code in the United States is assigned a barrier score of 1,2,3,4, or 5 depending upon the ZIP national rank (quintile). A score of 1 represents the lowest rank nationally for the statistics listed, while a score of 5 indicates the highest rank nationally. For example, ZIP codes that score a 1 for the Education Barrier contain highly educated populations; ZIP codes with a score of 5 have a very small percentage of high school graduates.

For the two barriers with only one statistic each (education and housing), Truven Health used only the single statistic listed to calculate the barrier score. For the three barriers with more than one component statistic (income, cultural and insurance), Truven Health analyzed the variation and contribution of each statistic for its barrier; Truven Health then weighted each component statistic appropriately when calculating the barrier score.

Once each ZIP code is assigned its barrier scores from 1 to 5, all five barrier scores for each ZIP code are averaged together to yield the CNI score. Each of the five barrier scores receives equal weight (20 percent each) in the CNI score. An overall score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with the most need.

### **Data Sources**

- 2014 Demographic Data, The Nielsen Company
- 2014 Poverty Data, The Nielsen Company
- 2014 Insurance Coverage Estimates, Truven Health Analytics

# **Applications and Caveats**

- CNI scores are not calculated for non-populated ZIP codes. These include such areas as national parks, public spaces, post office boxes and large unoccupied buildings.
- CNI scores for ZIP codes with small populations (especially less than 100 people) may be less
  accurate. This is due to the fact that the sample of respondents to the 2010 census is too small to
  provide accurate statistics for such ZIP codes.

# **Appendix C: Secondary Data Profile**

### **Secondary Data Profile**

Tripp Umbach collected and analyzed secondary data from multiple sources, including Community Commons, County Health Rankings, Maryland Department of Health and Mental Hygiene Vital Statistics,

Maryland Health Services Cost Review Commission (HSCRC), Neighborhood Health Profiles, Substance Abuse and Mental Health Services Administration, The Annie E. Casey Foundation, The Centers for Disease Prevention and Control (CDC) and Truven Health Analytics, etc.

The secondary data profile includes information from multiple health, social and demographics sources. Tripp Umbach used secondary data sources to compile information related to disease prevalence, socioeconomic factors and behavioral habits. Where applicable, data were benchmarked against state and national trends. ZIP code analysis was also completed to illustrate community health needs at the local level.

The information provided in the secondary data profile does not replace existing local, regional and national sites but rather provides a comprehensive (but not all-inclusive) overview that complements and highlights existing and changing health and social behaviors of community residents for the health system, social and community health organizations involved in the CHNA. A robust secondary data report was compiled for JHH and JHBMC; select information collected from the report has been presented throughout the CHNA. Data specifically related to the identified needs were used to support the key health needs.

Tripp Umbach obtained data through Truven Health Analytics (formerly known as Thomson Reuters) to quantify the severity of health disparities for ZIP codes in The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center's community-benefit service area. Truven Health Analytics provides data and analytics to hospitals, health systems and health-supported agencies.

The Community Need Index (CNI) data source was also used in the health assessment. CNI considers multiple factors that are known to limit health care access; the tool is useful in identifying and addressing the disproportionate and unmet health-related needs of neighborhoods. The five prominent socioeconomic barriers to community health quantified in the CNI are Income Barriers, Cultural/Language Barriers, Educational Barriers, Insurance Barriers and Housing Barriers. Additional information related to CNI can be found in Appendix B.

In 2015, a total of nine ZIP codes were analyzed for the Johns Hopkins Institutions. These ZIP codes represent the community served by The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center as portions of the health institutions' community-benefits service areas. The Johns Hopkins Institutions provides services to communities throughout Maryland, adjoining states and internationally. The community health assessment focused on these nine specific ZIP codes which fell into Baltimore City and parts of Baltimore County. They included 21202, 21205, 21206, 21213, 21218, 21219, 21222, 21224 and 21231.

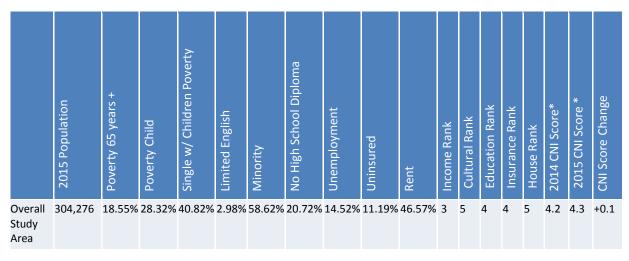
The following map geographically depicts the community benefits service area by showing the communities that are shaded. The CBSA encompasses nine ZIP codes across east and southeast Baltimore City and county (See Map 3).



Map 3: Overall Community Benefits Service Area – 2015 Study Area Map

Source: Truven Health Analytics 2015

Table 19: Community Needs Index Overall Study Area Summary



Source: Truven Health Analytics 2015

\*Weighted average of total market

Community Needs Index Overall Study Area Summary (See Table 19)

- CNI analysis for the CBSA encompassed nine ZIP codes in the 2015 CHNA study. They include 21202, 21205, 21206, 21213, 21218, 21219, 21222, 21224 and 21231.
- The median score for the CBSA is 3.0.

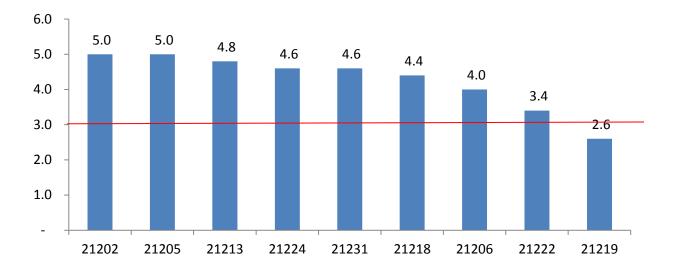
- The CNI score for the CBSA in 2014 was 4.2.\*
- The CNI score for the CBSA in 2015 was 4.3.\*
  - ➤ This is an increase of +0.1 from 2014 to 2015; indicating that the overall CBSA faces increased barriers to accessing care.

Table 20: CBSA Community Needs Index ZIP Codes and Scores: Specific Data and Measures

Zip	2015 Population	Poverty 65+	Poverty Children	Poverty Single w/kids	Limited English	Minority	No H/S Diploma	Unemployed	Uninsured	Rent	House	Income	Culture	Education	Insurance Rank	Housing	2015 CNI Score
21202	23,812	33.00%	47.07%	57.42%	1.13%	70.41%	23.04%	15.72%	18.18%	78.29%	5	5	5	5	5	5	5.0
21205	16,300	30.63%	46.69%	55.48%	3.88%	83.52%	36.55%	26.34%	17.85%	60.52%	5	5	5	5	5	5	5.0
21206	50,347	12.66%	20.19%	28.69%	1.60%	77.37%	15.23%	12.98%	9.26%	39.80%	5	2	5	4	4	5	4.0
21213	32,146	23.72%	30.38%	42.37%	1.08%	93.94%	23.55%	21.26%	14.10%	43.05%	5	4	5	5	5	5	4.8
21218	48,890	22.22%	23.90%	36.41%	0.72%	72.89%	17.43%	14.69%	13.40%	55.22%	5	3	5	4	5	5	4.4
21219	9,743	8.67%	13.01%	24.48%	0.54%	7.64%	17.19%	10.62%	6.46%	18.64%	2	2	2	4	3	2	2.6
21222	56,953	11.38%	20.30%	30.65%	1.69%	23.65%	19.13%	12.99%	6.93%	33.58%	4	2	4	4	3	4	3.4
21224	50,053	13.67%	30.85%	49.26%	9.79%	42.81%	25.12%	10.76%	9.23%	42.36%	5	4	5	5	4	5	4.6
21231	16,032	28.51%	46.54%	69.38%	4.66%	47.11%	16.73%	11.08%	11.73%	63.48%	5	5	5	4	4	5	4.6

- ZIP codes 21202 and 21205 had a 2015 CNI score of 5.0, which indicates individuals in these ZIP codes have greater barriers to accessing health care.
- ZIP code 21219 had a 2015 CNI score of 2.6, which indicates that residents in this ZIP code have fewer barriers to accessing care. This ZIP code is located in Baltimore County.

Chart 16: Community Needs Index Overall Study Area Summary



- Only ZIP code 21219 falls below the median score of 3.0 for the CBSA or overall study area. All other ZIP codes for the study area are above the median score of 3.0, indicating significant barriers to health care.
- The red line depicts the median score of CBSA or study area.

Table 21: Community Needs Index Results (Top 5 Highest CNI Scores)

ZIP Codes	City	Income Rank	Insurance Rank	Education Rank	Culture Rank	Housing Rank	2015 CNI Score
21202	Baltimore	5	5	5	5	5	5.0
21205	Baltimore	5	5	5	5	5	5.0
21213	Baltimore	4	5	5	5	5	4.8
21224	Baltimore	4	5	5	4	5	4.6
21231	Baltimore	5	5	4	4	5	4.6
21218	Baltimore	3	5	4	5	5	4.4
21206	Baltimore	2	5	4	4	5	4.0
21222	Dundalk	2	4	4	3	4	3.4
21219	Sparrows Point	2	2	4	3	2	2.6
	Overall Study Area	3	5	4	4	5	4.3*

\*Weighted average of total market

#### CBSA Community Needs Index Results (See Table 21)

The 2015 CNI score for the service area is 4.3. This is score is above the median CNI score of 3.0 for all nine ZIP codes within the study area.

At the ZIP code level, the highest CNI score in the study area is 5.0 in the ZIP codes of 21202 and 21205. This indicates that these ZIP codes have the most barriers to accessing health care when compared to other ZIP codes in the study area.

The lowest CNI score in the study area has a score of 2.6 in ZIP code 21219 (Sparrows Point). This ZIP code has the least barriers to health care access in the study area, but this does not imply that this area requires no attention.

Table 22: Community Needs Index Yearly Comparison Scores

ZIP	City	2015 Population	2014 CNI Score	2015 CNI Score
21202	Baltimore	23,812	5.0	5.0
21205	Baltimore	16,300	5.0	5.0
21213	Baltimore	32,146	4.6	4.8
21224	Baltimore	50,053	4.6	4.6
21231	Baltimore	16,032	4.8	4.6
21218	Baltimore	48,890	4.4	4.4
21206	Baltimore	50,347	3.8	4.0
21222	Dundalk	56,953	3.6	3.4
21219	Sparrows Point	9,743	2.6	2.6

#### CBSA Community Needs Index Yearly Comparison Scores (See Table 22)

- Of the nine ZIP codes in The JHH and JHBMC study area:
  - > Two saw declines in CNI score (reduced barriers to health care)
  - > Five ZIP codes remained the same
  - > Two experienced rises in CNI score (increased barriers to health care)
  - CNI scores in green indicate a positive change in scores, showing a decrease in score from 2014 to 2015.
  - ➤ CNI scores in red indicate a negative change in scores, showing an increase in score from 2014 to 2015.

Baltimore
Rosedale
Rosewite
MARYLAND
Baltimore
Essex

Baltimore
III

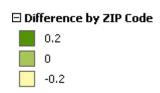
Pumphrey

Pumphrey

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Map 5: Community Need Index-Trending Map

#### **CNI Increased (More Barriers)**



#### **CNI Decreased (Fewer Barriers)**

In reviewing scores from 2014 and 2015 scores, the above map provides a geographic trending snapshot of the CBSA between the years. The dark green colors represent ZIP codes that have higher socioeconomic barriers, as the color lightens, as in southeast Baltimore, lower socioeconomic barriers to health care are present (Map 5).

# **Appendix D: General Description of the Johns Hopkins Institutions**

#### **General Description of the Johns Hopkins Hospital (JHH)**

Johns Hopkins Medicine is a renowned and leading health care system throughout the United States. It is a global enterprise which operates ix academic and community hospitals, four suburban health care and surgery centers and more than 39 primary and specialty care outpatient sites. Opened in 1889, JHH has been ranked number one by U.S. News & World Report for 22 years, most recently in 2013. JHH is a premier medical facility serving the health care needs of those in Maryland, nationally and internationally. Training and educating researchers, scientists, health care professionals and students are part of JHH's mission and tradition. The advancement of medicine, detection and treatment of diseases sets the standard in medical education and research.

The mission of The Johns Hopkins Hospital is to improve the health of our community and the world by setting the standard of excellence in patient care. Specifically, JHH aims:

- To be the world's preeminent health care institution
- To provide the highest quality care and service for all people in the prevention, diagnosis and treatment of human illness
- To operate cooperatively and interdependently with the faculty of The Johns Hopkins University to support education in the health professions and research development into the causes and treatment of human illness
- To be the leading health care institution in the application of discovery
- To attract and support physicians and other health care professionals of the highest character and greatest skill
- To provide facilities and amenities that promote the highest quality care, afford solace and enhance the surrounding community

#### General Description of the Johns Hopkins Bayview Medical Center (JHBMC)

The history of JHBMC began in 1773 by committing to superior and innovative health care, compassionate care, education and research. With the union of JHH, the medical campus of JHBMC has been transformed to connect clinical care and medical education focusing on distinctive models of care in Johns Hopkins Centers of Excellence, including the Burn Center, Women's Center for Pelvic Health, Asthma & Allergy Center, and Memory and Alzheimer's Treatment Center, etc. U.S. News & World Report highly ranked JHBMC's Geriatric Medicine and Rheumatology programs.

# Appendix E: Communities Served by JHH and JHBMC

#### Community Benefits Service Area of JHH and JHBMC9

In 2015, The Johns Hopkins Hospital (JHH) and Johns Hopkins Bayview Medical Center (JHBMC) merged their respective Community Benefits Service Areas (CBSA) in order to better integrate community health and community outreach across the east and southeast Baltimore City and County region. The geographic area contained within the nine ZIP codes includes 21202, 21205, 21206, 21213, 21218, 21219, 21222, 21224 and 21231. This area reflects the population with the largest usage of the emergency departments and the majority of recipients of community contributions and programming. Within the CBSA, JHH and JHBMC have focused on certain target populations such as the elderly, atrisk children and adolescents, uninsured individuals and households and underinsured and low-income individuals and households.

The CBSA covers approximately 27.9 square miles within the City of Baltimore or approximately 34 percent of the total 80.94 square miles of land area for the city and 25.6 square miles in Baltimore County. In terms of population, an estimated 304,276 people live within the CBSA, of which the population in City ZIP codes accounts for 38 percent of the City's population and the population in County ZIP codes accounts for 8 percent of the County's population (2014 Census estimate of Baltimore City population, 622,793, and Baltimore County population, 826,925).

Within the CBSA, there are three Baltimore County neighborhoods - Dundalk, Sparrows Point and Edgemere. The Baltimore City Department of Health has subdivided the city area into 23 neighborhoods or neighborhood groupings that are completely or partially included within the CBSA. These neighborhoods are Belair-Edison, Canton, Cedonia/Frankford, Claremont/Armistead, Clifton-Berea, Downtown/Seton Hill, Fells Point, Greater Charles Village/Barclay, Greater Govans, Greenmount East, Hamilton, Highlandtown, Jonestown/Oldtown, Lauraville, Madison/East End, Midtown, Midway-Coldstream, Northwood, Orangeville/East Highlandtown, Patterson Park North & East, Perkins/Middle East, Southeastern and The Waverlies.

The Johns Hopkins Hospital is in the neighborhood called Perkins/Middle East, and the neighborhoods that are contiguous to the campus are Perkins/Middle East including Greenmount East, Clifton-Berea, Madison/East End, Patterson Park North & East, Fells Point and Jonestown/Oldtown. Residents of most of these neighborhoods are primarily African American, with the exceptions of Fells Point, which is primarily white, and Patterson Park North & East, which represents a diversity of resident ethnicities. With the exceptions of Fells Point and Patterson Park N&E, the median household income of most of these neighborhoods is significantly lower than the Baltimore City median household income. Median income in Fells Point and Patterson Park N&E skews higher, and there are higher percentages of white households having higher median incomes residing in these neighborhoods.

Johns Hopkins Bayview Medical Center is located in east Baltimore City and southeast Baltimore County, the CBSA population demographics have historically trended as white middle-income, working-class communities; however, in the past few decades, southeast Baltimore has become much more diverse with a growing Latino population clustered around Patterson Park and Highlandtown. In Baltimore County, Dundalk, Sparrows Point and Edgemere have been predominantly white with increasing populations of Hispanic and African American residents. Many of these new residents come to JHBMC

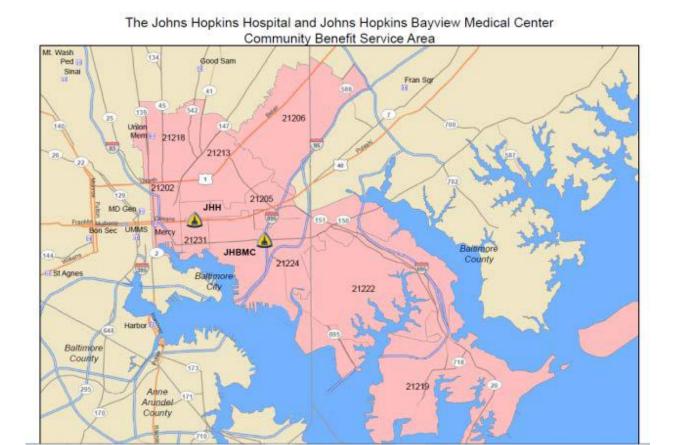
<sup>&</sup>lt;sup>9</sup> Information in this section (Communities Served by JHH and JHBMC) was obtained from the Johns Hopkins Health System Community Benefits Report.

for their health care needs. Challenges for Hispanic families include poor access to primary care, need for prenatal care for women, unintentional injury related deaths and high rates of alcohol use among Latino men. To address these disparities Johns Hopkins Bayview has increased clinical services and developed new initiatives including more language interpretations for patient services, the Care-a-Van mobile health unit, the Children's Medical Practice, and Centro SOL, which provides outreach, education, mental health support and improved access to services.

Neighborhoods farther north of The Johns Hopkins Hospital include Belair-Edison, Cedonia/Frankford, Claremont/Armistead, Clifton-Berea, Greater Charles Village/Barclay, Greater Govans, Hamilton, Lauraville, Midtown, Midway-Coldstream, Northwood and The Waverlies. Residents of these neighborhoods are racially more diverse than in the neighborhoods closest to JHH and median household incomes range from significantly above the median to close to the median household income for Baltimore City.

Since the end of the Second World War, the population of Baltimore City has been leaving the city to the surrounding suburban counties. This demographic trend accelerated in the 1960s and 1970s, greatly affecting the neighborhoods around JHH and JHBMC. As the population of Baltimore City dropped, there has been a considerable disinvestment in housing stock in these neighborhoods. Economic conditions that resulted in the closing or relocation of manufacturing and industrial jobs in Baltimore City and Baltimore County led to higher unemployment in the neighborhoods around The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center, and social trends during the 1970s and 1980s led to increases in substance abuse and violent crime as well.

Greater health disparities are found in these neighborhoods closest to the hospitals compared to Maryland state averages and surrounding county averages. The June 2012 Charts of Selected Black vs. White Chronic Disease SHIP Metrics for Baltimore City prepared by the Maryland Office of Minority Health and Health Disparities highlights some of these health disparities, including higher emergency department visit rates for asthma, diabetes and hypertension in blacks compared to whites, higher heart disease and cancer mortality in blacks than whites, higher rates of adult smoking and lower percentages of adults at a healthy weight.



# Appendix F: JHH and JHBMC CBSA Demographic Snapshot

Table 23: JHH and JHBMC CBSA Demographic Snapshot

		Data Source
Community Benefits	21202, 21205, 21206, 21213, 21218, 21219,	JHM Market Analysis &
Service Area (CBSA)	21222, 21224, 21231	Business Planning
CBSA demographics, by sex, race, ethnicity and average age	<u>Total population</u> : 304,276 <u>Sex</u> Male: 148,582/48.8%  Female: 155,694/51.2%	2015 Truven
	Race White non-Hispanic: 122,915/41.4% Black non-Hispanic: 139,602/45.9% Hispanic: 21,801/7.2% Asian and Pacific Islander Non-Hispanic: 8,701/2.9% All others: 8,257/2.7%	
	Age 0-14: 54,696/18.0% 15-17: 10,357/3.4% 18-24: 31,725/10.4% 25-34: 54,784/18.0% 35-54: 79,559/26.1% 55-64: 36,478/12.0% 65+: 36,677/12.1%	
Median household income within CBSA	Average household income: \$60,305	2015 Truven
Percentage of households (families and people) with incomes below the federal poverty guidelines within CBSA (past 12 months)	All families: 19.1%  Married couple family: 6.3% Female householder, no husband present, family: 32.3% Female householder with related children under 5 years only: 39.2%  All people: 23.8% Under 18 years: 34.1% Related Children under 5 years: 36.0%	U.S. Census Bureau, 2013 American Community Survey http://factfinder2.cens us.gov
	(Baltimore City, 2013)  All families: 6.0%  Married couple family: 3.0%  Female householder, no husband present, family: 15.0%  Female householder with related children under 5 years only: 21.9%	

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•	
11.2%	2015 Truven
37.2%	2015 Truven
73.9 years at birth (Baltimore City, 2013)	Maryland Vital Statistics
79.4 years at birth (Baltimore County, 2013)	Annual Report 2013
79.6 years at birth (Maryland, 2012)	http://dhmh.maryland.g ov/vsa
Baltimore City by Race:	
White: 76.5 years at birth	
Black: 72.2 years at birth	
·	
Baltimore County by Race:	
* *	
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•	Maryland Vital Statistics
	Infant Mortality in
•	Maryland, 2014
•	http://dhmh.maryland.g
,	ov/vsa
All: 6.9 per 1.000 live births	
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All: 6.5 per 1,000 live births (Maryland, 2014)	
•	U.S. Census Bureau,
	Quickfacts, 2013
Baltimore City food deserts map	Johns Hopkins
	Bloomberg School of
	Public Health, Center for
	a Livable Future
	http://www.jhsph.edu/b
	in/k/o/
	BaltimoreCityFoodEnviro
	nment.pdf
	Baltimore City Food
	Policy Initiative
	http://archive.baltimor
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	79.4 years at birth (Baltimore County, 2013) 79.6 years at birth (Maryland, 2012)  Baltimore City by Race: White: 76.5 years at birth Black: 72.2 years at birth  Baltimore County by Race: White: 79.6 years at birth Black: 78.1 years at birth All: 10.4 per 1,000 live births White: 7.1 per 1,000 live births Black: 12.8 per 1,000 live births (Baltimore City, 2014)  All: 6.9 per 1,000 live births White: 3.1 per 1,000 live births Black: 14.6 per 1,000 live births (Baltimore County, 2014)

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onment%20info-
map%20handout.pdf

Table 24: Primary Service Areas for JHH and JHBMC

		Data Source
Bed Designation	1529 (JHH 1,082 JHBMC 447)	MHCC
Inpatient Admissions	69,866 (JHH 50,217; JHBMC 19,649)	JHM Market Analysis
		and Business Planning
JHH/JHBMC Primary	21213, 21205, 21224, 21218, 21202, 21206,	HSCRC
Service Area	21231, 21217, 21215, 21222, 21234, 21216,	
ZIP codes	21212, 21229, 21223, 21207, 21043, 21239,	
	21208, 21221, 21220, 21228, 21044, 21225,	
	21045, 21201, 21230, 21244, 21122, 21042,	
	21061, 21214, 21236, 21237, 21093, 21209,	
	21075, 21133, 21136, 21227, 21157, 21287,	
	21784, 21740, 21401, 21211, 21040, 21060,	
	21144, 21113, 21014, 20723, 21804, 21030,	
	21015, 21210, 21146, 21204, 21009, 21701,	
	21403, 21742, 21502, 20707, 21771, 21702,	
	20854, 21801, 21046, 21219	
All other Maryland	Laurel Regional Hospital, Upper Chesapeake	JHM Market Analysis
hospitals sharing	Medical Center, Howard County General Hospital,	and Business Planning
JHH/JHBMC primary	Baltimore Washington Medical Center, Northwest	
service area	Hospital Center, Carroll Hospital Center, University	
	of Maryland Medical Center Midtown, University	
	of Maryland Medical Center, Mercy Medical Center,	
	Greater Baltimore Medical Center, UM Saint Joseph	
	Medical Center, James Lawrence Kernan Hospital,	
	Mount Washington Pediatric Hospital, Sinai	
	Hospital, Medstar Union Memorial Hospital, Bon	
	Secours Hospital, , Medstar Harbor Hospital, Saint	
	Agnes Hospital, Franklin Square Hospital Center,	
	Medstar Good Samaritan Hospital, Anne Arundel Medical Center, Western Maryland Regional	
	Medical Center, Western Maryland Regional  Medical Center, Frederick Memorial Hospital,	
	Meritus Medical Center, Peninsula Regional Medical	
	Center, Chesapeake Rehabilitation Hospital	
	dentel, encoupeake Kenabilitation Hospital	

Percentage of uninsured patients by county	JHH: Anne Arundel: 0.2% Baltimore: 0.5% Carroll: 0.1% Frederick: 0.1% Harford: 0.1% Howard: 0.3% Montgomery: 0.3% Prince George's: 0.6% Washington: 0.8% Wicomico: 0.3% Baltimore City: 0.9%  JHBMC: Baltimore: 2.7%	JHM Market Analysis and Business Planning
Percentage of patients who are Medicaid recipients by county	JHH: Anne Arundel: 20.6% Baltimore: 30.9% Carroll: 18.9% Frederick: 16.7% Harford: 18.7% Howard: 18.4% Montgomery: 11.6% Prince George's: 19.7% Washington: 24.5% Wicomico: 42.5% Baltimore City: 52.7%  JHBMC: Baltimore: 30.7%	JHM Market Analysis and Business Planning

# **Appendix G: Community Stakeholder Interviewees**

Tripp Umbach completed 52 interviews with community stakeholders throughout the region to gain a deeper understanding of community health needs from organizations, agencies and government officials that have a deep understanding from their day-to-day interactions with populations in greatest needs.

Interviews provide information about the community's health status, risk factors, service utilizations and community resource needs, as well as gaps and service suggestions.

Listed below in alphabetic order by last name are the community stakeholders.

Name	Organization
Albury, Pastor Kay	St. Matthew United Methodist Church
Bates Hopkins, Barbara	The Johns Hopkins University, Center for Urban Environmental Health
Benton, Vance	Patterson High School
Bone, Lee	The Johns Hopkins University, Bloomberg School of Public Health
Burke, Camille	Baltimore City Health Department
Cooper, Glenn	G. Cooper Construction & Maintenance Company
Dittman, Pastor Gary	Amazing Grace Lutheran Church
Evans, Janice	The Johns Hopkins Community Advisory Board Community College of Baltimore County; Dundalk Campus
Ferebee, Hathaway	Baltimore's Safe and Sound Campaign
Foster, Katrina	Henderson-Hopkins School
Gavriles, John E.	Greektown Community Development Corporation
Gehman, Robert	Helping Up Mission
Gianforte, Toni	Maryland Meals on Wheels
Guy Sr., Pastor Michael	St. Philip's Evangelical Lutheran Church
Hammett, Moses	Center for Urban Families
Hemminger, Sarah	Thread
Heneberry, Paula	The Johns Hopkins Hospital, Pediatric Social Work
Hickman, Rev. Debra	Sisters Together and Reaching, Inc.
Hobson, Carl	Millers Island Edgemere Business Association Hob's Citgo Service & Car Wash
Holupka, Scott	Greater Dundalk Communities Council
Krysiak, Carolyn	The Johns Hopkins Bayview Medical Center Board Emeritus Trustee
Land-Davis, Veronica	Roberta's House
Leavitt, Dr. Colleen	East Baltimore Medical Center
Lief, Isaac	Baltimore CONNECT
Lindamood, Kevin	HealthCare for the Homeless

Name	Organization
Long, Katie	Friends of Patterson Park
Mays, Tammy	Paul Laurence Dunbar High School
McCarthy, William	Esperanza Center Catholic Charities Board member
McDowell, Grace	Edgemere Senior Center
McFadden, Senator Nathaniel	Maryland State Senator
McKinney, Fran Allen	Office of Congressman Elijah Cummings
Menzer, Amy	Dundalk Renaissance Corporation
Miles, Bishop Douglas I.	Koinonia Baptist Church and BUILD
Mosley, Adrian	The Johns Hopkins Health System, Office of Community Health
Mueller, Dr. Denisse M.	East Baltimore Medical Center
Nelson, Gloria	Maryland Department of Human Resources
Pastrikos, Father Michael L.	St. Nicholas Greek Orthodox Church
Phelan-Emrick, Dr. Darcy	Baltimore City Health Department
Prentice, Pastor Marshall	CURE (Clergy United for Renewal of East Baltimore) Zion Baptist Church
Purnell, Leon	Men and Families Center
Redd, Sam	Operation Pulse
Rosario, David	Latino Providers Network
Ryer, D. Christopher	South East Community Development Corporation
Sabatino, Jr., Ed	Historic East Baltimore Community Action Coalition, Inc.
Salih, Hiba	International Rescue Committee Baltimore Resettlement Center
Schugam, Larry	Baltimore Curriculum Project
Scott, Pastor Dred	Sowers of the Seed
Stansbury, Carol	The Johns Hopkins Hospital, Department of Medical & Surgical Social Work
Sutton, Shirley	Baltimore Medical System, Inc.
Sweeney, Brian	Highlandtown Community Association
Szanton, Dr. Sarah	The Johns Hopkins University, School of Nursing
Guerrero Vazquez, Monica	Latino Family Advisory Board/Johns Hopkins Centro SOL

# **Appendix H: Community Organizations and Partners**

The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center came together to conduct a community health needs assessment (CHNA). As leading healthcare providers, JHH and JHBMC are dedicated to understanding community needs and offering and enhancing quality programs to address those needs and promoting population wellness.

The primary data collected in the CHNA provided invaluable input and ongoing dedication to assisting JHH and JHBMC in identifying community health needs priorities and building a foundation upon which to develop strategies that will address the needs of residents in East Baltimore City and southeast Baltimore County.

The listings below are the community organizations that assisted JHH and JHBMC with the primary collection for the CHNA.

	Community Organizations and Partners
1.	Amazing Grace Lutheran Church
2.	Baltimore City Council
3.	Baltimore City Health Department
4.	Baltimore CONNECT
5.	Baltimore County Department of Health
6.	Baltimore Curriculum Project
7.	Baltimore Medical System, Inc.
8.	Baltimoreans United in Leadership Development (BUILD)
9	Baltimore's Safe and Sound Campaign
10.	Bayview Community Association
11.	Bea Gaddy Family Center
12.	Berea East Side Community Association
13.	Breath of God Lutheran Church
14.	C.A.R.E. Community Association Inc.
15.	Catholic Charities
16.	Center for Urban Families
17.	Centro de la Comunidad
18.	Clergy United for Renewal of E. Baltimore (CURE)
19.	Community College of Baltimore County, Dundalk Campus
20.	Dayspring Programs
21.	Dundalk Renaissance Corporation
22.	Earl's Place/United Ministries
23.	East Baltimore Medical Center
24.	Edgemere Senior Center
25.	Esperanza Center
26.	Franciscan Center

27.	Friends of Patterson Park
28.	G. Cooper Construction & Maintenance Company
29.	Greater Dundalk Alliance
30.	Greater Dundalk Communities Council (GDCC)
31.	Greektown Community Development Corporation
32.	Health Care for the Homeless
33.	Helping Up Mission
34.	Henderson-Hopkins School
35.	Highlandtown Community Association
36.	Historic East Baltimore Community Action Coalition, Inc.
37.	Hob's Citgo Service & Car Wash
38.	Humanim Inc.
39.	International Rescue Committee (IRC), Baltimore Resettlement Center
40.	Johns Hopkins Center for Substance Abuse Treatment and Research
41.	Johns Hopkins Community Advisory Board
42.	Johns Hopkins Community Health Partnership (J-CHIP)
43.	Johns Hopkins Health System
44.	Johns Hopkins HealthCare
45.	Johns Hopkins Hospital Broadway Center for Addictions
46.	Johns Hopkins University Bloomberg School of Public Health
47.	Johns Hopkins University School of Medicine
48.	Johns Hopkins University School of Nursing
49.	Koinonia Baptist Church
50.	Latino Family Advisory Board/Johns Hopkins Centro SOL
51.	Latino Providers Network
52.	Light of Truth
53.	Marian House
54.	Maryland Department of Human Resources
55.	Maryland New Directions
56.	Meals on Wheels of Central Maryland
57.	Men & Families Center
58.	Millers Island Edgemere Business Association (MIEBA)
59.	Operation Pulse
60.	Parkview Ashland Terrace
61.	Patterson High School
62.	Patterson Park Neighborhood Association
63.	Paul Laurence Dunbar High School
64.	Roberta's House

65.	Sacred Heart Church					
66.	Sisters Together and Reaching Inc. (STAR)					
67.	South East Community Development Corporation					
68.	Sowers of the Seed					
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72.	THREAD					
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# Appendix J: Executive Planning Committee Members & Task Force/Working Group Members

The Johns Hopkins Institutions' Executive Planning Committee is comprised of leadership from The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center. The Executive Planning Committee is charged with providing input, feedback and advice on the identified health needs and health priorities from the 2015-2016 community health needs assessment and the implementation planning efforts. Below are members of the Executive Planning Committee in alphabetical order.

#### **Executive Planning Committee Chairs:**

- 1. Dr. Richard Bennett, President, Johns Hopkins Bayview Medical Center
- 2. Dr. Redonda Miller, Sr. Vice President Medical Affairs, Johns Hopkins Health System

#### **Executive Planning Committee Members:**

- 3. Dr. Renee Blanding, Vice President, Medical Affairs, Johns Hopkins Bayview Medical Center
- 4. Dr. Tina Cheng, Chief and Professor, General Pediatrics and Adolescent Medicine, Johns Hopkins University School of Medicine
- 5. Dr. Lisa Cooper, Vice President, Health Care Equity, Johns Hopkins Medicine
- 6. Amy Deutschendorf, Vice President, Care Coordination & Clinical Resource Management, Johns Hopkins Health System
- 7. Dr. Linda Dunbar, Vice President, Population Health & Care Management, Johns Hopkins HealthCare
- 8. Sherry Fluke, Financial/Project Manager, Government & Community Affairs, Johns Hopkins Institutions
- 9. Dr. Sherita Golden, Executive Vice Chair, Department of Medicine, Endocrinology, Johns Hopkins University School of Medicine
- 10. Kenneth Grant, Vice President, General Services, Johns Hopkins Health System
- 11. Jennifer Halbert, Project Administrator, Center to Eliminate Cardiovascular Health Disparities, Johns Hopkins University School of Medicine
- 12. Dr. Dan Hale, Special Advisor, Office of the President, Johns Hopkins Bayview Medical Center
- 13. Anne Langley, Senior Director, Health Planning & Community Engagement, Johns Hopkins Health System
- 14. Sharon Tiebert-Maddox, Director, Strategic Initiatives, Government & Community Affairs, Johns Hopkins Institutions
- 15. Scott Newton, Director of Nursing, Department of Emergency Medicine, The Johns Hopkins Hospital
- 16. Selwyn Ray, Director, Community Relations, Health and Wellness, Johns Hopkins Bayview Medical Center
- 17. Melissa Richardson, Director, Care Coordination, Johns Hopkins Health System

- 18. Dr. Laura Herrera Scott, Medical Director, Population Health and Community Health Programs, Johns Hopkins HealthCare
- 19. Dr. Eric Strain, Director, Johns Hopkins Center for Substance Abuse Treatment & Research

Members of the task force/working group were charged with providing direct feedback, comments and assisted in providing direction to Tripp Umbach to completing the necessary project pieces for the CHNA and implementation planning. Members of the task force/working group are listed below.

#### **Task Force/Working Group Members:**

- 1. Dr. Redonda Miller, Sr. Vice President Medical Affairs, Johns Hopkins Health System
- 2. Dr. Richard Bennett, President, Johns Hopkins Bayview Medical Center
- 3. Tom Lewis, Vice President, Government & Community Affairs, Johns Hopkins Institutions
- 4. Sharon Tiebert-Maddox, Director, Strategic Initiatives, Government and Community Affairs, Johns Hopkins Institutions
- 5. Dr. Dan Hale, Special Advisor, Office of the President, Johns Hopkins Bayview Medical Center
- 6. Selwyn Ray, Director, Community Relations, Health and Wellness, Johns Hopkins Bayview Medical Center
- 7. Sherry Fluke, Financial/Project Manager, Government & Community Affairs, Johns Hopkins Institutions

# **Appendix K: Hand Survey (English and Spanish Version)**

# The Johns Hopkins Institutions

Please answer all of the questions to the best of your ability. Circle responses to the questions where it applies.

1.	You are: ① female ② m	ale	9c.	If <u>NO</u> , Do you <u>no</u> ① Yes ② No		cause of lack of insurance?		
2.	You are: ye	ars old						
3.	Your zip code is:		10.	What is the <u>pri</u> ① Clinic ② Urgent Care		seek dental care?  ① Dentist's office  ③ I don't go to dentist		
4.	What area do you live in?			3 Emergency		© Other		
	<ul><li>① Baltimore City</li><li>② Baltimore County</li></ul>		11	When was the	last time very be	ad an annaintment with a		
	③ Other		11.	dentist or a der  ① Within the p	ntal clinic for ar	ad an appointment with a y reason?		
5.	Would you say your healt	h is: (circle one):		② Within the p	•			
۶.	① Excellent ② Good	· · · · · · · · · · · · · · · · · · ·		3 Within the p				
	© Lacement © Good	91411 91001		4 5 or more ye	•			
6.	Do you have a doctor/pri	mary care provider?		⑤ Don't know	_			
υ.	① Yes ② No	mary care provider:		© DOIL CKHOW	/ Not sure			
	© ICS © NO		12.	How did you pa	av for dental se	rvices?		
	6a. If <b>NO</b> , why? (circle all	that apply)				③ Out-of-pocket		
	① Can't afford one	Don't need one		② Did not pay	_	Other		
	② Can't find one	© Doesn't accept my		5 2.aot pay				
	③ No Transportation	• •	13.	Have vou ever	been told by a l	nealth professional that		
				you are overwe	•	F		
7.	What is the primary place	e that you seek medical care?		•	) No			
		Doctor's office		3 . <b>33</b>				
		© Pharmacy	14.	Have vou ever	been told vou h	ave high blood pressure?		
	_	© Other		· · · · · · · · · · · · · · · · · · ·	No			
8.		When was the last time you had an appointment with a			5. Have you ever been told you have diabetes?			
		vider or medical clinic for any		① Yes ②	No No			
	reason?	_						
	① Within the past year	④ 5 or more years ago	16.		been told that y	ou may have heart		
		S Don't know/Not sure		problems?				
	③ Within the past 5 year	S		① Yes ②	) No			
9.	Do you have health insur	ance?	17	Do you have ar	ny difficulties th	at affect your daily		
٦.	① Yes ② No	ance:	17.	activities? (circ				
	© 163 © 110			① Physical	© an that apply Soci			
	9a. If <b>NO</b> , Why don't you	have health insurance?		-	otional ④ I have			
	(circle all that apply)	nave nearth mourance.		o Wierreal, Erric	rional o mave	Tione		
	① I don't qualify	④ I do not want it	18	If you have chil	dren or grando	hildren do you experience		
	② I can't afford it ⑤ I have not applied ⑥ I had insurance but lost it			•	_	munizations (shots) up to		
				date?	ceping their initial	mamzations (shots) up to		
				① Yes	③ Don't	: know		
	9b. If <b>NO</b> , Does <u>not</u> havin	g health insurance affect		② No		n't apply to me		
	your ability to get ser	=		-	2 2 3 6 6	rr / ··· ···		
	① Yes ② No							

# 19. How often do you do the following? Please **circle** your answer

Chew tobacco/snuff	Always	Sometimes	Never
Smoke cigarettes	Always	Sometimes	Never
Use illegal drugs	Always	Sometimes	Never
Drink more than 3 alcoholic drinks a day	Always	Sometimes	Never
Get exposed to people smoking at your work or home	Always	Sometimes	Never
Eat fast food more than one time a week	Always	Sometimes	Never
Use a seat belt	Always	Sometimes	Never
Use a car seat If you travel with children (If you do not have children skip question)	Always	Sometimes	Never
Wear sunscreen	Always	Sometimes	Never
Get a flu shot (once a year)	Always	Sometimes	Never
Drive the speed limit if you drive (If you <u>do not</u> drive skip question)	Always	Sometimes	Never
Wash your hands before making food	Always	Sometimes	Never
Eat at least 2 servings of vegetables a day	Always	Sometimes	Never
Eat at least 2 servings of fruit a day	Always	Sometimes	Never
Get at least 6-8 hours of sleep every night	Always	Sometimes	Never
Wash your hands after using the bathroom	Always	Sometimes	Never
Feel satisfied with your life	Always	Sometimes	Never
Practice safe sex	Always	Sometimes	Never
Participate in 30 minutes of physical activity or exercise daily	Always	Sometimes	Never
Do self-exams for breast cancer or cancer of the testicles, monthly	Always	Sometimes	Never

20.	How do you find out about community? (circle all that	<u>•</u>	21. What is your main form of t  ① Public Transportation	ransportation? ⑤ Walk
	① Newspaper	© Radio	② My car	⑥ Bicycle
	② TV ⑦ Clinics		③ Family/Friend's car ⑦ Ot	her
③ Internet		8 Library	④ Taxi/Cab	
	Word of mouth	9 Other		

⑤ Faith/religious organization

22.	Do you feel safe in your neig	shborhood/			25a.	. If <u><b>YES</b></u> , where	e did	you get services?
	community in the day or nig					① Communi	ity o	r neighborhood organization
	① Extremely safe		ıfe			② Hospital/I	Eme	rgency Room
	② Somewhat safe	Don't know				3 Mental he	ealth	counselor or provider
						④ Primary c	are o	doctor or health clinic
23.	If you don't feel safe, why do that apply)	on't you feel safe?	( <u>cir</u>	<u>cle</u> all		⑤ Other		
	<ul><li>① Abandoned buildings</li></ul>	S Lack of reso	urce	S	26.	In the past 1	L2 m	onths, have you needed but didn't get
	② Violence ⑥ Cri	me				services or t	reat	ment for mental health?
	③ Fires	① Drugs				① Yes		② No
	4 Lack of police response	® Other						
24.	Do you have any of the follo	wing?						didn't you get services / treatment you all that apply)
	① Problems remembering to	hings or concentra	ating					does not cover mental health
	② Uncontrollable eating bin	ges				-		where to go for services
	3 Eating too little / difficult	y eating enough						ernative forms of treatment
	④ Depression					•		ake it on my own without treatment
	(5) Anxiety, Nervousness, Pa	nic Attacks						seek the services
	© Other					©I became of	over	whelmed or confused by the system
						⑦It took too	o lon	g to get an appointment
25.	In the past 12 months, did y	ou get services or	trea	tment		®The couns	elin	g/medication is too expensive
	for a mental health issue?							ions against my culture/religion
	① Yes ② No							
	<ul> <li>□ Affordable Housing/Ho</li> <li>□ Asthma/Breathing Pro</li> <li>□ Cancer</li> <li>□ Child Abuse/Neglect</li> <li>□ Crime/Assault</li> <li>□ Dental Health</li> </ul>			Drug & Alcohol Family Planning Heart Disease High Blood Pres Hepatitis HIV/AIDS	/Birth	Control		Prenatal/Infant Care Sexually Transmitted Diseases Stroke Teen Pregnancy Tobacco Use Other
① A	What is your race or ethnicit merican Indian or Alaska Nat sian		pply	·)	30. 1	Number of yea	ars o	f education completed:
	lack or African American				21 \	Mhat is your y	اءدمر	y household income?
	lispanic, Latino					① Less than \$		·
	lative Hawaiian or other Pacif	fic Islander				② \$5,000 to \$		
	Vhite or Caucasian	ic isiarraer				③ \$25,000 to		
	ther					4 \$50,000 to		•
® P	refer not to answer					S More than		
•								efer not to answer
29.	Highest grade or degree com	pleted:				9 20	,	
	-							
32.	Do you have any other comm	ents? (Use the rev	/erse	e side of this page	e if yo	u need more s	spac	e

# The Johns Hopkins Institutions

Responda a todas las preguntas lo mejor posible. Encierre en un círculo las respuestas a las preguntas donde corresponda.

1.	L. Usted es: ① mujer ② hombre			9b. Si la respuesta es <b>NO</b> , ¿no tener seguro de salud afecta su posibilidad de recibir servicios?				
2.	Usted tiene: añ	os		① Sí ② No				
	Su código postal es:			9c. Si la respuesta es <u>No</u> atención debido a que n ① Sí ② No	<b>2</b> , ¿usted <u>no</u> acude para solicitar no tiene seguro?			
	① Baltimore City							
	② Baltimore County		10.	¿Cuál es el lugar princip	al donde acude para recibir			
	③ Otro			atención odontológica?				
				① Clínica	④ Consultorio de un dentista			
5.	Diría que su salud es: (encierr	e una opción en un		② Atención urgente				
	círculo):			③ Sala de emergencias	© Otro			
	① Excelente ② Buena ③ Ace	ptable ④ Mala						
			11.		ez que tuvo una cita con un			
6.	¿Tiene un médico/proveedor	de atención primaria?			dental por cualquier razón?			
	① Sí ② No		① Dentro del año pasado					
	6 6: 10:			② Dentro de los último				
	6a. Si <u><b>NO</b></u> tiene, ¿por qué? (er	ncierre en un circulo todas		3 Dentro de los último	s 5 anos			
	las que correspondan)	nagarla		4 Hace 5 o más años				
	<ul><li>① No tengo dinero para</li><li>② No puedo encontrar u</li></ul>			⑤ No sé / No estoy seg	uro			
	3 No tengo transporte	110	12	¿Cómo pagó los servicio	os adantalágicos?			
	No lo necesito		12.	① Cobertura de seguro				
	No lo acepta mi segure	0		② No pagué por los ser				
				③ Del bolsillo propio				
7.	¿Cuál es el lugar principal dor	nde acude para recibir		4 Otro				
	atención médica?	·						
	① Clínica	④ Consultorio médico	13.	¿Alguna vez un profesio	onal de la salud le dijo que tiene			
	② Atención urgente	⑤ Farmacia		sobrepeso u obesidad?				
	③ Sala de emergencias	© Otro		① Sí ② No				
8.	¿Cuándo fue la última vez qu		14.	. ¿Alguna vez le dijeron que tiene presión arterial alta?  ① Sí ② No				
	médico/proveedor de atencio							
	clínica médica por cualquier r	azón?						
	① Dentro del último año		15.	¿Alguna vez le dijeron o	jue tiene diabetes?			
	② Dentro de los últimos 2 añ			① Sí ② No				
	<ul><li>③ Dentro de los últimos 5 añ</li><li>④ Hace 5 o más años</li></ul>	OS	16	: Alguna vaz la diiaran a	una tiana arablamas sardíasas?			
	© No sabe/No está seguro		10.	① Sí ② No	ue tiene problemas cardíacos?			
	INO Sabe/INO esta seguio			U SI E NO				
9.	¿Tiene seguro de salud?		17.		l que afecta sus actividades			
	① Sí ② No			diarias? (encierre en un	<u>círculo</u> todas las que			
				correspondan)	_			
	9a. Si la respuesta es <u>NO</u> , ¿por qué no tiene seguro			① Física	③Social			
	de salud? ( <u>encierre en un círc</u>	<u>culo</u> todas las que		② Mental/Emocional	No tengo ninguna			
	correspondan)		10	Citiona biles a mister :	tions problems are most are			
	① No reúno los requisitos	nara nagario	18.	sus vacunas al día?	tiene problemas para mantener			
	<ul><li>② No tengo dinero suficiente</li><li>③ No lo necesito</li></ul>	: para pagario			D No sé			
	No lo quiero				No se  No corresponde a mi caso			
	© No lo quiero  © No lo he solicitado				7 140 corresponde a fili caso			
	© Tenía seguro pero lo perdí							
	<u> </u>							

19. ¿Con qué frecuencia hace lo siguiente? Encierre en un círculo su respuesta

3. Con que necuencia nace lo siguiente: <u>cincierre en un circulo</u> su respuesta			
Masticar/inhalar tabaco	Siempre	Algunas veces	Nunca
Fumar cigarrillos	Siempre	Algunas veces	Nunca
Usar drogas ilegales	Siempre	Algunas veces	Nunca
Beber más de tres bebidas alcohólicas por día	Siempre	Algunas veces	Nunca
Exponerse a gente que fuma en su trabajo o en su casa	Siempre	Algunas veces	Nunca
Comer comida rápida más de una vez por semana	Siempre	Algunas veces	Nunca
Usar el cinturón de seguridad	Siempre	Algunas veces	Nunca
Usar un asiento infantil si viaja con niños (Si <u>no tiene</u> hijos omita esta pregunta)	Siempre	Algunas veces	Nunca
Usar protector solar	Siempre	Algunas veces	Nunca
Vacunarse contra la gripe (una vez por año)	Siempre	Algunas veces	Nunca
Conducir dentro del límite de velocidad si conduce (Si <u>no conduce</u> omita esta pregunta)	Siempre	Algunas veces	Nunca
Lavarse las manos antes de preparar la comida	Siempre	Algunas veces	Nunca
Comer al menos dos porciones de vegetales por día	Siempre	Algunas veces	Nunca
Comer al menos dos porciones de frutas por día	Siempre	Algunas veces	Nunca
Dormir durante al menos 6-8 horas todas las noches	Siempre	Algunas veces	Nunca
Lavarse las manos después de usar el baño	Siempre	Algunas veces	Nunca
Sentir satisfacción con su vida	Siempre	Algunas veces	Nunca
Tener relaciones sexuales seguras	Siempre	Algunas veces	Nunca
Participar en 30 minutos de actividad física o ejercicio todos los días	Siempre	Algunas veces	Nunca
Hacerse un autoexamen de cáncer de mama o de testículos mensualmente	Siempre	Algunas veces	Nunca

20.	¿Cómo averigua la información en su comunidad?
	(encierre en un círculo todas las que correspondan)

⑤ Fe/organización religiosa

①	Per	riód	ico

6 Radio

② Televisión

⑦ Clínicas

③ Internet

® Biblioteca

4 Verbalmente

9 Otro\_\_\_\_\_

21. ¿Cuál es su principal forma de transporte?

① Transporte público

⑤ Caminar

② Mi automóvil

6 Bicicleta

22.	<ul> <li>3 Automóvil de su familia/amigo</li> <li>4 Taxi</li> <li>2 Se siente seguro en su vecindario/comunidad durante el día o la noche?</li> <li>1 Extremadamente seguro</li> <li>2 No muy seguro</li> <li>3 Para nada seguro</li> <li>4 No sé</li> </ul>				<ul> <li>25a. Si la respuesta es <u>SÍ</u>, ¿dónde obtuvo esos servicios?</li> <li>① Comunidad u organización del vecindario</li> <li>② Hospital/Sala de emergencias</li> <li>③ Asesor o proveedor de salud mental</li> <li>④ Médico de atención primaria o clínica de salud</li> <li>⑤ Otro</li> </ul>				
23.	Si no se siente seguro, ¿por qué no se siente (encierre en un círculo) todas las que corres (1) Edificios abandonados (2) Violencia (3) Delitos	ono	dan)	26.		o trat	12 meses, ¿ha necesitado pero no ha recibido amiento para un problema de salud mental?		
	<ul><li>③ Incendios</li><li>④ Palta de respuesta policial</li><li>⑤ Otro motion</li></ul>	vo_			servicios/	'trata	uesta es <b><u>SÍ</u>, ¿por qué no recibió los</b> mientos que necesitaba? ( <u>encierre en</u> as las que correspondan)		
24.	¿Tiene alguno de los siguientes?  ① Problemas para recordar cosas o concen: ② Deseos incontrolables de comer ③ Come muy poco / tiene dificultad para co: ④ Depresión ⑤ Ansiedad, nerviosismo, ataques de pánic ⑥ Otro	omei o	r suficiente		<ol> <li>Mi seg</li> <li>No sab</li> <li>Preferí</li> <li>Quería</li> <li>Tenía r</li> <li>Me ser</li> <li>Tomab</li> </ol>	uro n vía a c la form arreg miedo ntía a pa mu	o cubre la atención de la salud mental dónde acudir para recibir los servicios mas alternativas de tratamiento glármelas por mí mismo sin tratamiento o de solicitar los servicios brumado o confundido por el sistema icho tiempo obtener una cita		
25.	En los últimos 12 meses, ¿ha recibido servio tratamiento para un problema de salud me ① Sí ② No					cione religi	iiento o la medicación son muy costosos s de tratamiento están en contra de mi ón		
27.	¿Cuál cree que son las principales preocupacion Acceso a comida saludable a un		de salud de su comu Diabetes/niveles d				<u>n círculo</u> un <u>m<b>áximo</b> de 5 opciones) Enfermedad/Salud mental</u>		
	precio económico Salud de los adolescentes Casas a un precio accesible/personas sin hogar		Violencia doméstic Consumo/adicción alcohol	a dr	ogas y		Obesidad/sobrepeso Atención prenatal/infantil		
	Asma/problemas para respirar		Planificación famili de natalidad			_	Enfermedades de transmisión sexual		
	Cáncer Abuso infantil/Abandono infantil Delitos/agresiones Salud odontológica		Enfermedades card Presión arterial alt Hepatitis VIH/sida		IS		Accidente cerebrovascular Embarazo adolescente Uso de tabaco Otro		
28.	¿Cuál es su raza u origen? (encierre en un c que correspondan)  ① Indígena americano o nativo de Alaska	rcul	<u>o</u> todas las				s de educación que completó:		
	<ul> <li>② Asiático</li> <li>③ Negro o afroamericano</li> <li>④ Hispano, latino</li> <li>⑤ Nativo de Hawái o de otra de las islas del Pacífico</li> <li>⑥ Blanco o caucásico</li> <li>⑦ Otro</li> <li>⑧ Prefiero no responder</li> </ul>				<ol> <li>¿Cuál es su ingreso familiar anual?</li> <li>Menos de \$5,000</li> <li>\$5,000 a \$24,999</li> <li>\$25,000 a \$49,999</li> <li>\$50,000 a \$99,999</li> <li>Más de \$100,000</li> <li>No sé/Prefiero no responder</li> </ol>				
29.	Nivel educativo o título más alto que compl	etó:							
32.	¿Tiene algún otro comentario? (Use el rever	so d	— e esta nágina si nece	esita	más espaci	(O)			

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# **Appendix L: Tripp Umbach**

#### **Consultants**

The Johns Hopkins Institutions contracted with Tripp Umbach, a private health care consulting firm headquartered in Pittsburgh, Pennsylvania, with offices throughout the United States, in particular, Maryland, to complete a community health needs assessment (CHNA). Tripp Umbach has worked with more than 200 communities in all 50 states. In fact, more than one in five Americans lives in a community where our firm has worked in the past 20 years

From community needs assessment protocols to fulfilling the new Patient Protection and Affordable Care Act (PPACA) IRS 990 requirements, Tripp Umbach has turned needs assessments into practical action plans with sound implementation strategies, evaluation processes and funding recommendations for hundreds of communities. Tripp Umbach has helped more than 50 hospitals meet their IRS 990 requirements.

Changes introduced as a result of the PPACA have placed an increased level of importance on population health and well-being and on collaborative efforts between providers, public health agencies and community organizations to improve the overall health of communities.

