December 2020

Community Health Needs Assessment

Baltimore Medical System
THE HEART OF COMMUNITY HEALTH

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Executive Summary

Baltimore Medical System completed an assessment to understand the health needs of its community which culminated in the development of this Community Health Needs Assessment (CHNA). The aim of the assessment is to reinforce Baltimore Medical System's commitment to the health of its residents and align its health prevention efforts with the community's greatest needs. The CHNA is a comprehensive assessment of the health care needs for the service area of Baltimore Medical System, areas within Maryland that include Baltimore City primarily and parts of Baltimore County. The CHNA examined various health indicators, key social determinants of health (SDoH) factors as well as demographic data that impact the service areas.

Baltimore Medical System

Located in the greater Baltimore metropolitan area, Baltimore Medical System is a community-based, independent, non-profit healthcare organization dedicated to improving the health, wellness, and quality of life of medically underserved communities in the greater Baltimore area. As the largest Federally Qualified Health Center (FQHC) in Maryland, Baltimore Medical System's mission is to improve the health, wellness, and the quality of life for people in the communities it serves by providing safe, high quality, accessible and affordable healthcare. Baltimore Medical System is governed by a Board of Trustees who represent diverse members of the community, business leaders, health care executives, and research scientists, and the organization is led by a highly experienced Chief Executive Officer.

Baltimore Medical System has a staff of 381 clinical and non-clinical positions which include 34 physicians, 57 nurses, 199 clinical support (pharmacists, social workers, medical assistants, community health workers, etc.) and 91 administrative support staff. Providing high quality care and resources is the keystone of serving the underserved communities and vulnerable populations in the Baltimore area. Baltimore Medical System operates eight community health centers and eight school-based health centers located in Baltimore City and Baltimore County. Baltimore Medical System also houses pharmacies at three of its center sites and provides discount medications to those in need through its 340(B) program.

Renaye James Healthcare Advisors

Baltimore Medical System partnered with Renaye James Healthcare Advisors, LLC (RJHA) to conduct the 2021 CHNA analysis for an understanding of the most pressing health needs across Baltimore Medical System's service area and guide on-going strategic and quality improvement efforts. RJHA is an outcome–based, healthcare advisory company that was founded in 2017 with the goal of improving the quality, safety, and efficiency of medical practices as they deliver care to their patients and their community.

RJHA has front-line, management, physician, and executive experience who work to transform primary care and specialty practices into high-quality, efficient, safe, patient-centered, value-based venues for healthcare. Past endeavors with health systems and key partners have included the development of strategic plans; implementation of quality and performance improvement programs; team-based care models; and care management/care coordination programs; and achievement of operational excellence.

Strengths and Priorities

Baltimore Medical System strives to provide high quality preventive and primary health care to patients, regardless of their ability to pay, by emphasizing a medical home approach that promotes reductions in health disparities for low-income individuals, racial and ethnic minorities, and other underserved populations. The Baltimore Medical System framework is well aligned with the Institute for Healthcare Improvement's (IHI) triple aim framework and County Health Rankings model to concomitantly improve population health outcomes for the communities served, improve the patients' and provider experience, and reduce unnecessary cost of care (County Health Rankings & Roadmaps, 2016). Baltimore Medical System is deeply committed to improving the health, wellness, and quality of life in the communities it serves by providing high quality, safe, accessible, and affordable healthcare services.
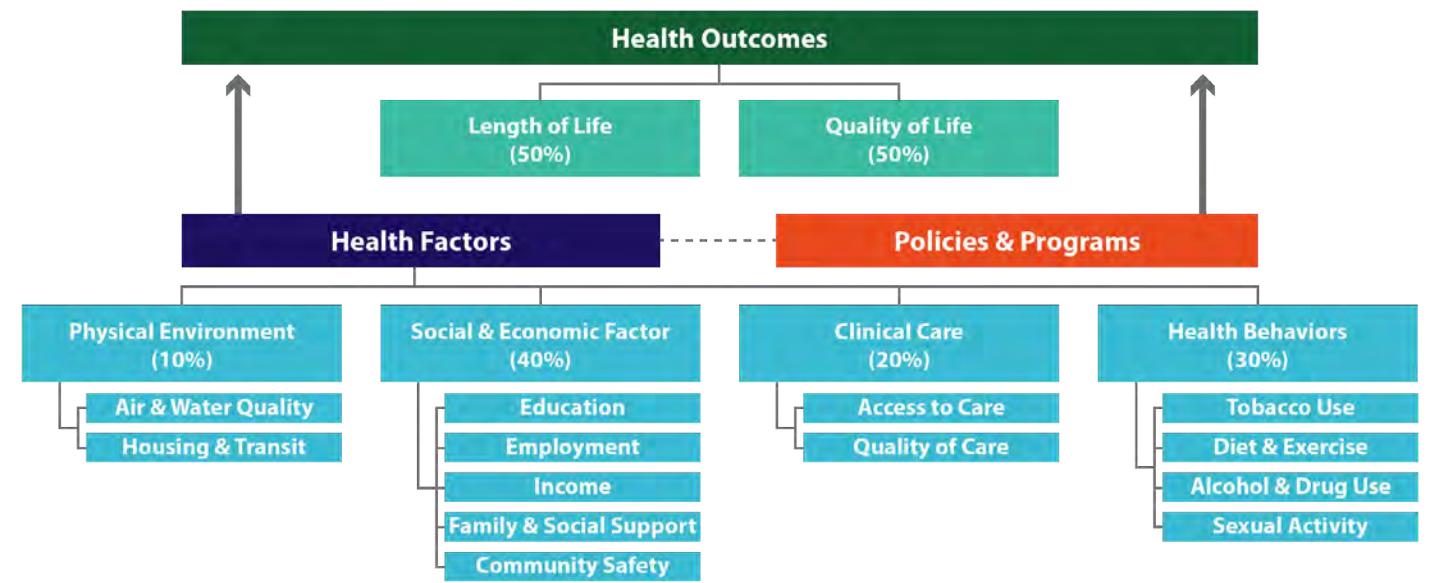

Figure 1 *County Health Rankings Roadmap (Revised)*

Methodology

The Baltimore Medical System Community Health Assessment comprises a combination of quantitative and qualitative components. These components include primary research (i.e. patient/customer satisfaction surveys, and health surveys from the patient/customer, executive leadership, staff, and community stakeholders) and secondary research (i.e. health data, population data for health indicators and conditions) to ensure representation from diverse community interests. The stakeholders provided insight into the challenges facing the medically under-served, low income, marginalized, and minority populations.

Primary Research

In October 2020, RJHA disseminated and analyzed online questionnaires to Baltimore Medical System customers/patients, Board of Trustees, senior leadership, staff, and community stakeholders (see Appendix E.) The surveys were designed to assess health status, health and community services/needs, and health care access. A total of 172 questionnaires were completed, representing the geographical, gender, and ethnic diversity of the organization and community served by Baltimore Medical System. Recognizing the importance of the customer's voice, Baltimore Medical System's patient satisfaction surveys were also reviewed in the development of this CHNA. The responses were analyzed and common themes as well as outliers were noted.

Secondary Research

The CHNA's secondary research data comes from local, state, and national governments as well as Health Center Program Grantee Data collected by the Health Resources and Services Administration (HRSA). Statistical data representing population, health behaviors, clinical care factors, socio-economic measures, household measures, morbidity rates, incident rates, and other health statistics for the Baltimore Medical System community were compiled from publicly available and internal sources. Specific sources include: UDS report, US Census, Youth Risk Behavior Surveillance System, Robert Wood Johnson County Health Rankings, and internal Baltimore Medical System documents (Strategic Plan, Quality Plan, Risk Management Plan, Annual Report).

Data Limitations and Information Gaps

Efforts were made to include accurate data that is current, but some limitations and gaps may exist. Data was primarily available at the ZIP Code Tabulation Areas (ZCTA) level. There is a disparity in the data's ability to look at ZCTA populations on the neighborhood level. There were gaps in information due to unanswered questions by staff members and stakeholders to some questions in the CHNA questionnaire. Finally, the challenges related to COVID-19 greatly hindered the ability to have direct customer (patient) contact and lead meaningful in-person focus groups. As a result, Baltimore Medical System internal and patient satisfaction surveys and online questionnaires were used to capture customer and stakeholder opinions and perceptions.

Community Analysis

The Baltimore Medical System analysis of community data utilized ZCTAs instead of traditional zip codes. Traditional zip codes are used by the United States Postal Service to indicate areas of mail delivery but may include an unpopulated zip code which makes it difficult to derive demographic information. ZCTAs are used by the US Census Bureau to provide summary statistics and are better able to define neighborhood boundaries as ZCTAs are generalized area representations of zip codes. The communities located within the ZCTAs are varied and wide. Across Baltimore, in the primary Baltimore Medical System zip code service areas, there are at least eight eclectic neighborhoods: Bel Air-Edison, Bolton Hill, Canton, Dundalk, East-Baltimore, Fells Point, Highlandtown, and Saint Agnes.
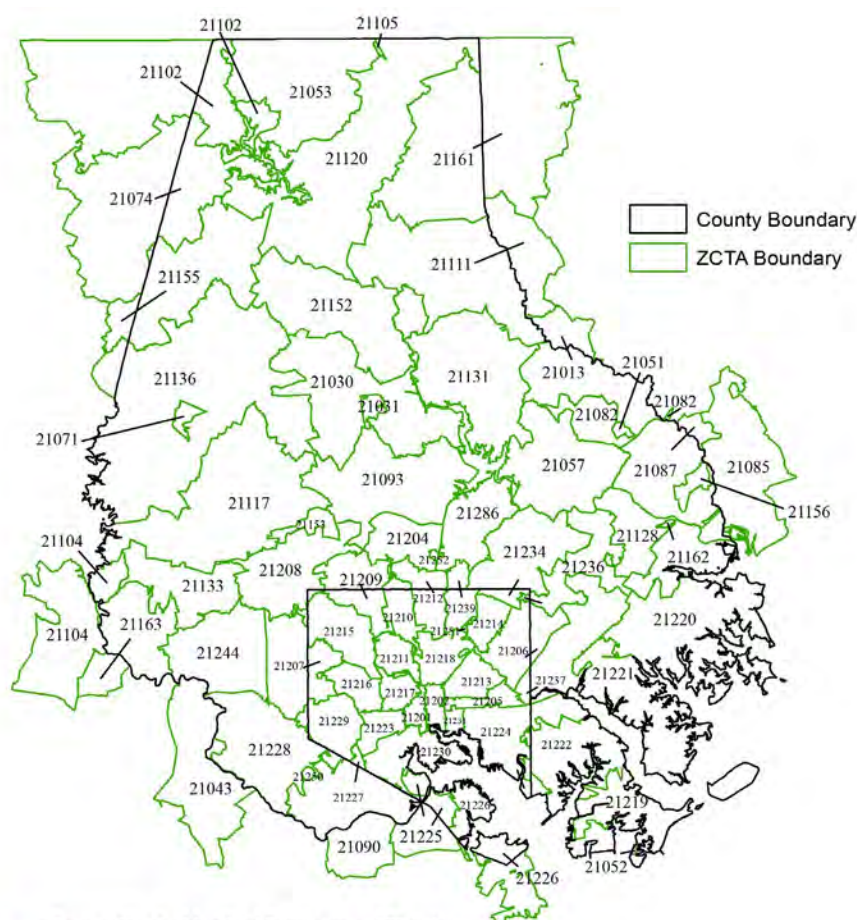
Prepared by the Maryland Department of Planning, Projections & Data Analysis / State Data Center
Source: U.S. Census Bureau, 2010 Census

Map 1 *Baltimore City & County, Maryland 2010 Zip Code Tabulation Areas*

Majority and Primary Service Areas

In its primary service area, Baltimore Medical System served patients in over 80 different zip code areas across Baltimore City and County. The primary sites are in 20 different zip codes mostly in the Baltimore County areas. There are several competing FQHC organizations as well as well as other hospital-based services located in Baltimore City; however, Baltimore Medical System is the only FQHC in eastern Baltimore County which may attribute the high number of patients served in this geographical area.

Table 1
Zip Code & Insurance Status of Customers
(Based on the Baltimore Medical System 2019 UDS Report)

Zip	Area	Uninsured	MA	MC	Private	Total	% of Pts.
21224	Dundalk	1501	3338	420	891	6150	11.1%
21206	Rosedale	665	2893	279	685	4502	8.1%
21213	Bel Air-Edison	666	2707	487	632	4492	8.1%
21221	Essex/Middle River	327	2115	351	787	3580	6.5%
21229	Caton.	282	2489	325	426	3522	6.4%
21222	Dundalk	524	2256	254	451	3485	6.3%
21227	Arbu./ Halethorp	623	1531	106	252	2512	4.5%
21205	Orangeville	397	1660	240	257	2494	4.5%
21220	Middle River	267	1229	127	355	1978	3.6%
21230	South Balto.	390	601	81	157	1429	2.6%
21223	Casino area	213	913	131	103	1360	2.5%
21237	Rosedale	250	787	60	247	1344	2.4%
21215	Woodmere	350	762	76	107	1295	2.3%
21218	Ednor Gardens	227	772	117	163	1279	2.3%
21225	Brooklyn	405	695	38	74	1212	2.2%
21231	Upper Fells	162	723	126	188	1199	2.2%
					Total	41833	75.4%

Table 1A
Zip Codes and Insurance Status of Customers
New 2020 Zip Codes for the East Baltimore Medical Center Location
(Based on the Baltimore Medical System 2020 UDS Report)

Zip	Area	Uninsured	Medicaid	Medicare	Private	Total
21201	Downtown/Seton Hill	27	377	80	59	543
21202	Penn-Fallsway/Oldtown	42	826	249	175	1292
21216	Walbrook/Forest Park	58	805	144	153	1160
21217	Druid Hill Park/Bolton Hill	50	748	148	101	1047

Table 1A represents the additional zip codes in the primary service area with the addition of the East Baltimore Medical Center in 2020. In 2020, Baltimore Medical System reported 55,455 patients served.

Secondary Service Areas

As a large secondary service jurisdiction, 64 zip codes areas are served by Baltimore Medical System. These areas are quite diverse encompassing northwest Baltimore County (Owings Mills, Randallstown), East Baltimore County (Chase), Anne Arundel County (Glen Burnie, Curtis Bay, Shady Side), Carroll County (Westminster) and Howard County (Columbia). In these 64 zip code areas, 13,597 people were served.

Competitor Site

In addition to Baltimore Medical System, there are a total of five Federal Qualified Health Centers (FQHCs) located in Baltimore City and County with 19 delivery sites (not including school-based facilities). These FQHC organizations include: Chase Brexton, Family Health Center System, Health Care for the Homeless, Park West, and Total Health

Care. The competitor FQHCs offer a wide range of health services including primary and preventative care, pediatric care, dental, and behavioral health). Chase Brexton and Health Care for the Homeless are the two closest FQHC sites to Baltimore Medical System. These FQHCs are located less than 0.7 miles from a Baltimore Medical System site. Table 2 provides a summary of the FQHC competitors and their site locations.

Site Profiles

For over 35 years, Baltimore Medical System has served as a health beacon in Baltimore providing a safety net and care for those in most need. Baltimore Medical System is a critical, regional healthcare system that delivers collaborative,coordinated and comprehensive care for over 55,430 patients annually. Table 4 provides details on the comprehensive services provided by the health centers.

Table 2 Baltimore City & County Competitor Sites	
Baltimore City & County FQHCs	**Locations**
Chase Brexton, Inc.	• 3510 Brenbrook Dr., Randallstown, 21133 • 1111 N. Charles St., Baltimore, 21201
Family Health Centers, Inc.	• 631 Cherry Hill Dr., Baltimore, 21225 • 3540 S. Hanover St., Baltimore, 21225
Health Care for the Homeless, Inc.	• 421 Fallsway, Baltimore, 21202 • 2000 W. Baltimore St., Baltimore, 21202 • 9150 Franklin Square Dr., Baltimore, 21237
Park West Health System, Inc.	• 4120 Patterson Ave., Baltimore 21215 • 3319 W. Belvedere Ave., Baltimore, 21215 • 4151 Park Heights Ave., Baltimore, 21215
Total Health Care, In	• Mondawmin Mall Health Center, 2401 Liberty Heights Ave, Baltimore, 21215 • Open Gates Health Center, 1111 Washington Blvd, Baltimore, 21230 • Mt. Royal Health Center, 922 W North Ave, Baltimore, 21217 • Men's Health Center, 1515 W North Ave, Baltimore, 21217 • Saratoga Health center, 1501 W Saratoga St. Baltimore, 21223 • Kirk Health Center, 2400 Kirk Ave, Baltimore, 21218 • 1501 Division St., Baltimore, 21217 • 400 W Lexington St (in Lexington Market) Baltimore, 21201 • Westside Health Center, Westside Shopping Center 2449 Frederick Ave, Baltimore, 21223

Site Locations and Distances

Baltimore Medical System has health services spread across Baltimore. The Highlandtown Healthy Living Center provides a vast array of primary care, women's health, and enabling services. This center is located at **3700 Fleet Street, Baltimore, 21224.** Using MapQuest, most of Baltimore Medical System sites are located within a 9-mile radius and less than 19 minutes from this flagship center.

1. **AbsoluteCare**
   1040 Park Ave. Baltimore, MD 21201
   (4.0 miles, 17 minutes)

2. **Pine Heights**
   1001 Pine Heights Ave., Baltimore, MD 21229
   (9 miles, 17 minutes)

3. **St. Agnes**
   900 S. Caton Ave., Baltimore, MD 21229
   (8.5 miles, 16 minutes)

4. **Middlesex**
   1215 Eastern Blvd., Baltimore, MD 21221
   (6.2 miles, 18 minutes)

5. **Belair-Edison Family Health Center**
   3120 Erdman Ave., Baltimore, MD 21213
   (3 miles, 12 minutes)

6. **East Baltimore Medical Center**
   1000 Eager St., Baltimore MD 21202
   (3.1 miles, 14 minutes)

7. **Highlandtown Healthy Living Center***
   3700 Fleet Stret, Baltimore MD 21224
   (Flagship)

8. **AbsoluteCare (Greenbelt)**
   7501 Greenway Center Drive, #600
   Greenbelt, MD 20770
   (30 miles, 43 minutes) *Not represented on map*
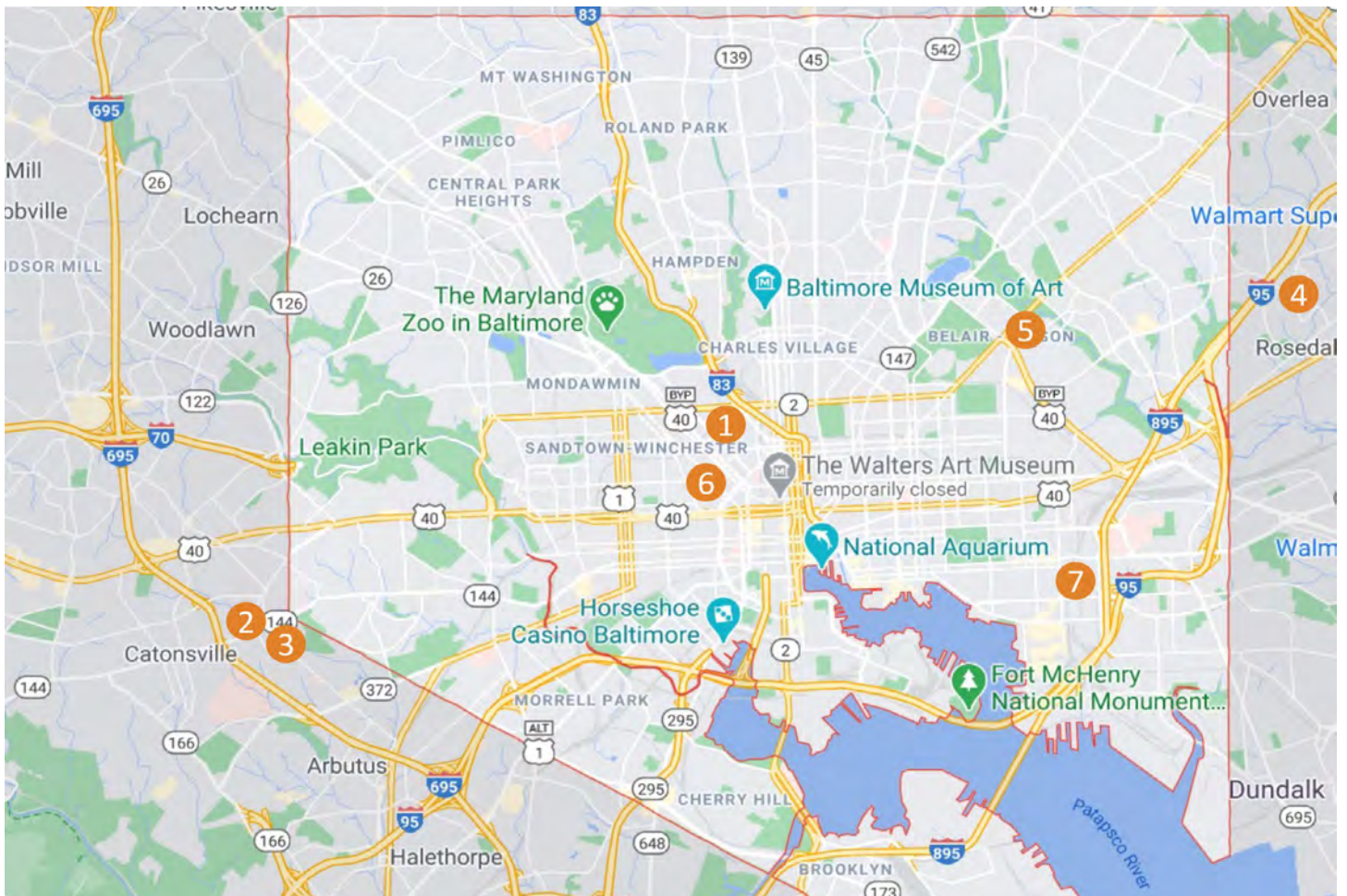
Map 2 *Baltimore Medical System Site Locations*

Table 3 provides a site comparison between Baltimore Medical System and the closest competitor delivery site.

Table 3 Closest FQHC Competitor Sites			
Baltimore Medical System Site Locations	**Closest FQHC Provider**	**Delivery Site**	**Distance**
AbsoluteCare 1040 Park Ave., Baltimore, MD 21201	Chase Brexton, Inc	1111 N. Charles St., Baltimore, 21201	.4 miles
Pine Heights 1001 Pine Heights Ave., Suite 100 Baltimore, MD 21229	Total Health Care, Inc.	Westside Health Center 2449 Frederick Ave, Baltimore, 21223	1.7 miles
Middlesex 1215 Eastern Blvd. Baltimore, MD 21221	Health Care for the Homeless (only serving people who are homeless)	Franklin Square Hospital 9100 Franklin Square Dr., Baltimore, 21237	4.0 miles
East Baltimore Medical Center 1000 Eager St. Baltimore, MD 21202	Health Care for the Homeless	Fallsway Health Center 421 Fallsway Baltimore, 21202	.7 miles
St. Agnes 900 S. Canton Ave. Baltimore, MD 21229	Total Health Care, Inc.	Westside Health Center 2449 Frederick Ave, Baltimore, 21223	1.2 miles
Belair-Edison Family Health Center 3120 Erdman Ave. Baltimore, MD 21213	Total Health Care, Inc.	Kirk Health Center 2400 Kirk Ave, Baltimore, 21218	2.2 miles
Highlandtown Healthy Living Center 3700 Fleet Street Baltimore, MD 21224	Health Care for the Homeless, Inc.	Fallsway Health Center 421 Fallsway Baltimore, 21202	2.8 miles
AbsoluteCare (Greenbelt) 7501 Greenway Center Drive, #600 Greenbelt, MD 20770	CCI Health & Wellness Services	7474 Greenway Center Drive Greenbelt MD 20770	0.1 miles

Summary of Geographic Market Position

In comparison to the primary service area, the majority service area incorporates a large and diverse geographic region encompassing Baltimore City, Baltimore, Anne Arundel, Carroll Howard, and Prince George's Counties. Several of the FQHCs are clustered together within adjacent ZCTAs in Baltimore City. There are few FQHCs in Baltimore County and as a result, this presents an opportunity to both expand site locations in the county as well as increase in the types of services provided.

Site Profiles

For over 35 years, Baltimore Medical System has served as a health beacon in Baltimore providing a safety net and care for those in most need. Baltimore Medical System is a critical, regional healthcare system that delivers collaborative, coordinated and comprehensive care for over 55,430 patients annually. Table 4 provides details on the comprehensive services provided by the health centers.

Table 4 Baltimore Medical System Service Delivery System		
Internal Medicine- Physicians specialize in the promotion of wellness through prevention, diagnosis and treatment of chronic diseases such as hypertension, diabetes and obesity.		Behavioral Health- Patients who are experiencing anxiety, depression and other mental disorders receive treatment and support so that they are not alone.
Family Practice- 7 high quality care centers provided to the entire family including the Deaf Services program.		Substance Use – Addiction counseling and medication assisted treatment is provided in a safe and compassionate environment.
OB/GYN – Exceptional women's health care is provided from the expectant mother to the newborn.		Same Day – Immediate access to healthcare is available for urgent needs such as a fever, diabetic well-check, and asthma.
Pediatrics- Board certified pediatricians provide comprehensive primary care to children of all ages. This includes immunizations, school physicals, and treatment for asthma.		School-based Health Centers - A traditional health suite for health education, maintenance and treatment for acute and chronic illnesses is available.
On-site Pharmacy- 3 pharmacies are located on-site at health centers. Prescriptions are quickly and conveniently filled, at very low cost with home delivery in some zip code areas. Contract Pharmacy Sites- 40 sites located in the service area including Rite Aide and Walgreens locations.		Enabling Services – Interpretation services are available to reach diverse patients and refugee health screenings. Community health workers and Health Benefits Advisors assist customers in a holistic approach.

School Based-Health

School-based health services have positively impacted adolescent health. Eight school-based health centers have made significant strides decreasing or avoiding asthma attacks for students. This has led to overall improved school attendance and performance.

Behavioral health services offer young people the support they need for mental health or substance use health by providing easily accessible and confidential care in a familiar setting. School-based health centers have increased the access to family planning and pregnancy prevention education. Baltimore Medical System has observed a reduction in teen pregnancy as a result.

Immigrant and Refugee Health

As highlighted in the 2020-2021 Baltimore Medical System Strategic plan, it is notable that Baltimore Medical System has been the provider of choice for a growing population of new immigrants in the Baltimore area. Baltimore Medical System has made special efforts to become culturally competent and build a multicultural and bilingual staff. This has allowed the organization to serve over 13,000 people of Hispanic originate and approximately 3,000 refugees who have relocated to Baltimore.

Baltimore Demographic Profile

Baltimore City — Population Estimated at 614,700

Baltimore County — Population Estimated at 827,625

Baltimore City

Based on the Census Bureau American Community Survey 2014–18 5-year estimates, there are an estimated number of 614,700 people living in Baltimore City. The population density for the 80.95 square mile area is estimated at 7,593.95 persons per square mile. This is higher than the national average population density of 91.42 persons per square mile. Females make up 53% of the population and the median age of residents being 34.5 in 2014. While 21% of the population is under 18 years of age, about 65% of the children reside with single parents. The population is about 62.5% Black, 30.5% White, 5.1% Hispanic, 2.6% Asian, 1.7% other, 2.5% multiple races (Community Commons, 2018).

Black (62%)
White (30%)
Asian (3%)
Multiple/Other (5%)
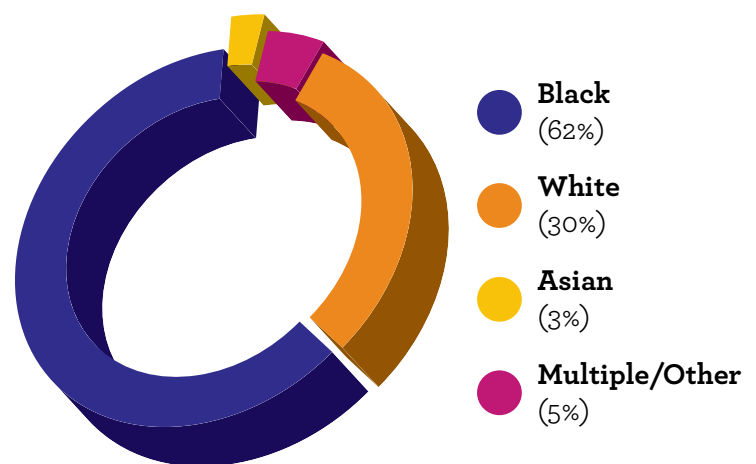
Chart 1 *Total Population by Race Alone, Baltimore City*

Baltimore County

With a total population of 827,625 people living in the 598.36 square miles in Baltimore County, similar trends are noticeable with Baltimore City demographics. The population density of 52.58% was equally higher than the national averages. 52.6% of the population is comprised of females. A key difference was in the racial composition of the population with Whites making up 61.4% of the population.

Black (29%)
White (61%)
Asian (6%)
Multiple/Other (4%)
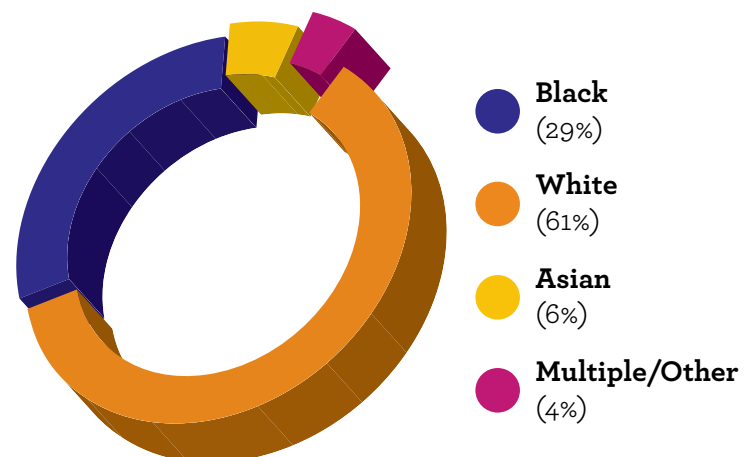
Chart 2 *Total Population by Race Alone, Baltimore County*

Transportation and Housing

The American Community Survey 2014–2018 showed that 28.9% of households in Baltimore City were without a motor vehicle which is significantly higher than the Baltimore County and state rates of 7.63% and 8.95% respectively. Disparities existed within the category of household by tenure as 49.4% of renter-occupied households did not own a vehicle compared to 11.5% of owner-occupied households with no vehicles. In general, 39.3% of residents lived in cost burdened households. That means that 93,625 of the 238,436 households faced housing costs that exceeded 30% of their total household income, owners and renters included. While 19.4% of housing units in Baltimore City could be considered vacant, while only 7.02% were vacant in Baltimore County. The housing vacancy indicators include houses not occupied at the time of the assessment (Community Commons, 2018).

Per Capita Income and Poverty

Upon reviewing the children eligible for free or reduced-price lunch, the National Center for Education Statistics data for the years 2018–2019 shows that the 79,701 students in public schools, 79,689 were eligible for the free or reduced price lunch program. This means that 100% of public-school students were from families with income between under 185% or under 130% of the US federal poverty threshold as part of the Federal National School Lunch Program. This rate for Baltimore City is significantly higher than the state average of 46.3% (Community Commons, 2018). With regards to Baltimore County, 49.6% of children in Baltimore County were eligible for the free or reduced-price lunch program which represents 56,444 public school students out of 113,814 in the area.

Additionally, the per capita income for Baltimore City was $29,700 while that for Baltimore County was $38,579. Both are lower than the state average of $40,517. This indicator is the mean income for residents and includes salaries, public assistance, and other sources (Community Commons, 2018).

Disparities existed by ethnicity alone for both jurisdictions with the per capita income for non-Hispanics at $39,487 and $30,147 and Hispanics at $22,213 and $21,423 for Baltimore City and Baltimore County respectively (Community Commons, 2018). As shown on graphs 1 and 2, 26% and 13% of children live in poverty in Baltimore City and Baltimore County, respectively. These are above the state rate of 12% and this trend has worsened over time.

Children in poverty in Baltimore City, MD
County, State and National Trends

Legend: ★ Baltimore City — ◇ Maryland — ○ United States

Baltimore City is getting worse for this measure.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
United States	17%	18%	18%	18%	18%	18%	18%	20%	22%	23%	23%	22%	22%	21%	20%	18%	18%
Maryland	10%	12%	11%	11%	10%	11%	10%	12%	13%	14%	14%	14%	14%	14%	13%	12%	12%
Baltimore City	25%	27%	27%	31%	25%	27%	25%	28%	34%	30%	33%	33%	32%	34%	31%	32%	26%

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data.
Note: Prior to 2005, children in poverty was based on the Current Population Survey, beginning in 2005, it was based on the American Community Survey.

Graph 1 *Children in Poverty in Baltimore City, MD: County, State and National Trends*

Children in poverty in Baltimore County, MD
County, State and National Trends

Legend: ★ Baltimore City — ◇ Maryland — ○ United States

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Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
United States	17%	18%	18%	19%	18%	18%	18%	20%	22%	23%	23%	22%	22%	21%	20%	18%	18%
Maryland	10%	12%	11%	11%	10%	11%	10%	12%	13%	14%	14%	14%	14%	14%	13%	12%	12%
Baltimore City	9%	10%	10%	9%	10%	9%	10%	12%	11%	13%	13%	13%	13%	12%	12%	10%	13%

Please see Measuring Progress/Rankings Measures for more information on trends. Trends were measured using all years of data.
Note: Prior to 2005, children in poverty was based on the Current Population Survey, beginning in 2005, it was based on the American Community Survey.

Graph 2 *Children in Poverty in Baltimore County, MD: County, State and National Trends*

Health insurance

The Patient Protection and Affordable Care Act (PPACA) enacted and adopted by the State of Maryland in 2010 provides expanded health care coverage, lowers health care costs, and increases access to care for many communities; however, individuals within the City are st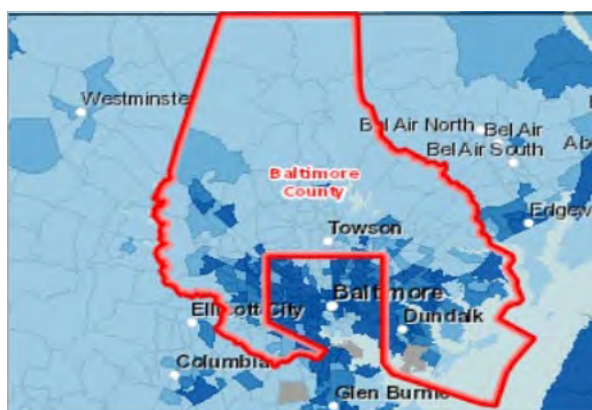ill without healthcare coverage. The maps 3 and 4 show the percentage of people in Baltimore City and Baltimore County enrolled in Medicaid.

According to the U.S. Census Bureau, there was a decrease in the percentage of adults who did not have health care coverage in the city from about 18.2% to 9.0% from 2011 to 2017 following the implementation of PPACA (Community Commons, 2018).

Much better than the national uninsured rates, disparities remain among racial and ethnic lines with a 27.8% uninsured rate for those aged 18–64 of Hispanic origin, 8.6% for non-Hispanic blacks, and 4.3% among non-Hispanic whites.

Comparatively, 7.34% of the population aged 18–64 in Baltimore County was without medical insurance with similar racial and ethnic disparities. 16.7% uninsured rate for those aged 18–64 of Hispanic origin, 6.3% for non-Hispanic blacks, and 3.3% among non-Hispanic whites (Community Commons, 2018). More so, 34.91% of the population in Baltimore City was receiving Medicaid benefits which is higher than the 22.18% at the state level. At 18.15%, Baltimore County fared much better than Baltimore City and the State in general. This indicator is key to understanding the gaps in eligibility and enrollment for the most vulnerable populations. The availability of healthcare insurance can be one of the key factors in determining an individual's access to healthcare services. Access to primary care access facilitated by health care coverage, can be considered the most impactful to underserved and low-income populations who are likely to be burdened by other SDoH factors such as lack of education, economic and financial limitations, and transportation.

Insured, Medicaid/Means-Tested Coverage, Percent by Tract, ACS 2014-18

- Over 25.0%
- 20.1 - 25.0%
- 15.1 - 20.0%
- Under 15.1%
- No Data or Data Suppressed
- Baltimore County, MD
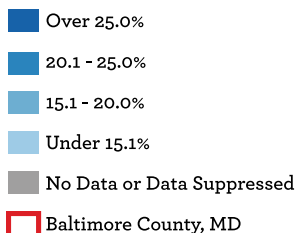
Map 3 *Percent of people recieving Medicaid in Baltimore County*

Insured, Medicaid/Means-Tested Coverage, Percent by Tract, ACS 2014-18

- Over 25.0%
- 20.1 - 25.0%
- 15.1 - 20.0%
- Under 15.1%
- No Data or Data Suppressed
- Baltimore City, MD
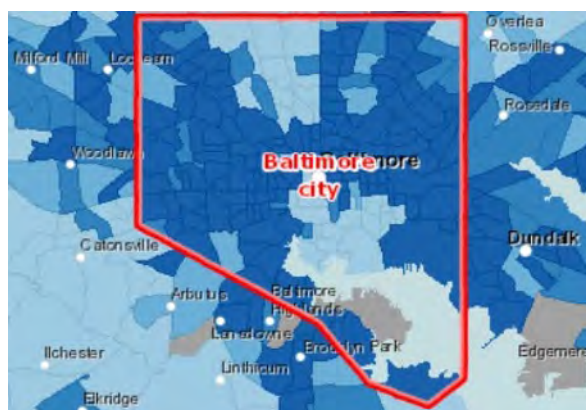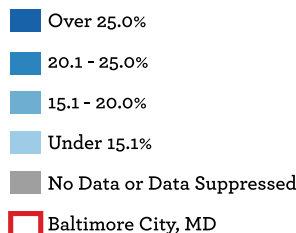
Map 4 *Percent of people recieving Medicaid in Baltimore City*

Education

There is strong evidence that suggests education is a predictor of an individuals' health status. Data from the US Census Bureau 2014–18 Community Survey period, 15.10% of individuals aged 25 years of age and older did not have a high school diploma in Baltimore City.

This is higher than the 8.89% and 9.96% in Baltimore County and the State of Maryland respectively (Community Commons, 2018). As seen on charts 3 and 4, racial disparities exist within the two jurisdictions.

Black
(21%)

White
(60%)

Asian
(9%)

Multiple/Other
(10%)

Black
(69%)

White
(24%)

Asian
(2%)

Multiple/Other
(5%)
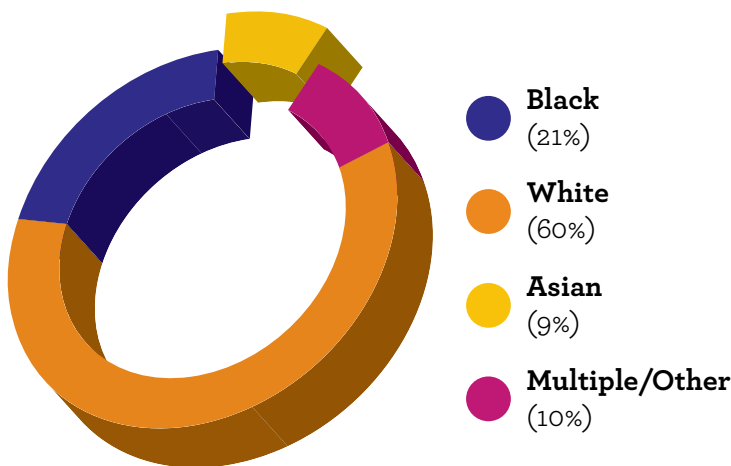
Chart 3

Baltimore County | No High School Diploma by Race Alone
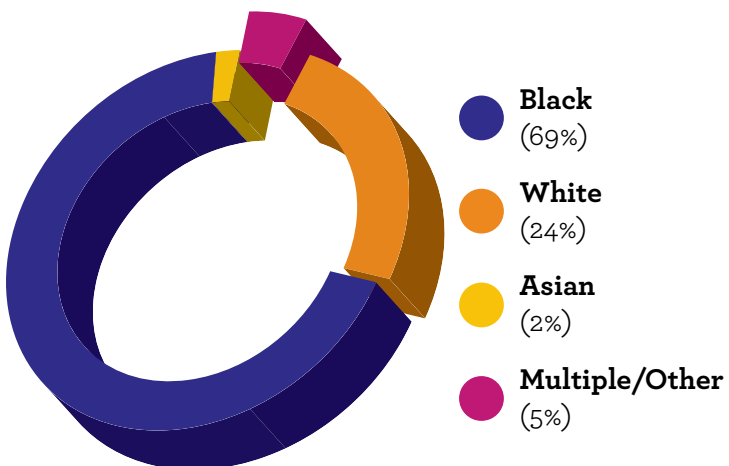
Chart 4

Baltimore City | No High School Diploma by Race Alone

Food environment

According to the Feeding America 2017 report, an estimated 21.3% of residents experienced food insecurity at some point during the year. This means that over 131,860 people had limited or uncertain access to adequate food in the city. This is higher than the state and national rates of 10.7% and 12.6%, respectively. Of those who experienced food insecurity, 21.8% were children under age 18 and of this group, 26% were ineligible for the State or Federal nutrition assistance. Comparatively, 11% of residents in Baltimore County experienced food insecurity which is still higher than the state and national rates (Community Commons, 2018).

The 2018 Baltimore City's Food Environment Report asserts that 23.5% of the population live in Healthy Food Priority Areas. These are areas that are poorly rated for the following factors: access to healthy food, commute time to supermarkets, household income, and vehicle ownership or access. Although the percentage of people living in Healthy Food Priority Areas has declined from 25% in 2015 to 23.5% in 2018, inequalities still exist within population segments. For example, 28% of children and 24% of seniors in the city live in these areas and 31% of Blacks live in Healthy Food Priority Areas compared to only 9% of Whites (Misiaszek, Buzogany, & Freishtat, 2018).
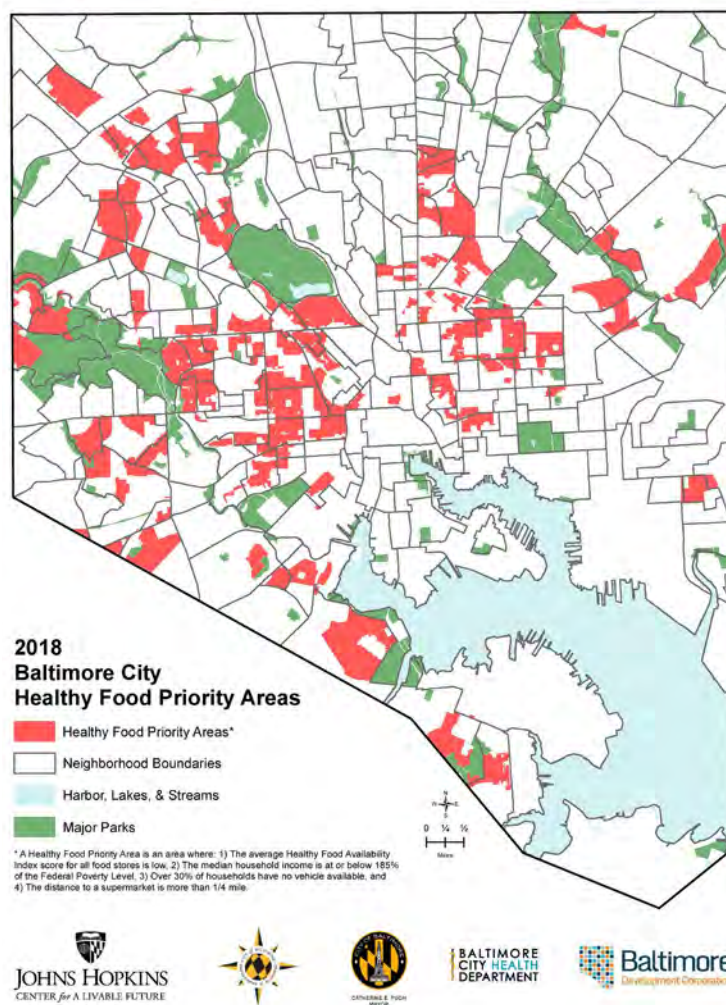
Map 5 *2018 Baltimore City Healthy Food Priority Areas*

Employment

Studies have shown that there is a strong correlation between unemployment and poor health outcomes as gainful employment can improve an individuals' standard of living (Antonisse & Garfield, 2018). Data shows that there are significant disparities in employment rates in Baltimore City as compared to the state. The City data illustrate that 9.1% of the population in the city is unemployed compared to the 6.9% unemployment rate at the state level (Community Commons, 2018). At 6.9%, the unemployment rate for Baltimore County is better than that for Baltimore City and aligns with the state trends. This is important because the financial instability resulting from unemployment can contribute to a poor health status through lack of access to resources to address the Social Determinants of Health (SDoH.)

Baltimore County
(6.9%)

Maryland
(6.9%)

United States
(7.7%)

Chart 5 *Unemployment rates in Baltimore County*

Baltimore City
(9.1%)

Maryland
(6.9%)

United States
(7.7%)

Chart 6 *Unemployment rates in Baltimore City*

Migration

According to the United States Census Bureau, 2014–18 report period, an estimated 6.51% of the population relocated to the Baltimore City area. These include individuals who migrated from outside their county or state of residence or from outside the country. This rate was slightly higher than the state and nation averages at 6.4% and 6.2%, respectively. A breakdown by race showed that 26.98 were Native Hawaiian, 19.94% were Asian, 9.96% were White, and 4.13% Black. With regards to those born outside the country, 8.1% are of foreign birth which is less than the state and national averages of 15.05% and 13.48%, respectively (Community Commons, 2018). Geographical mobility was less prevalent in Baltimore County as an estimated 5.56% relocated to the area. 12.44% are of foreign birth which is less than the state and national averages of 15.05% and 13.48%, respectively. Migration patterns are important as they can impact the availability of healthcare access to providers as well as community resources.
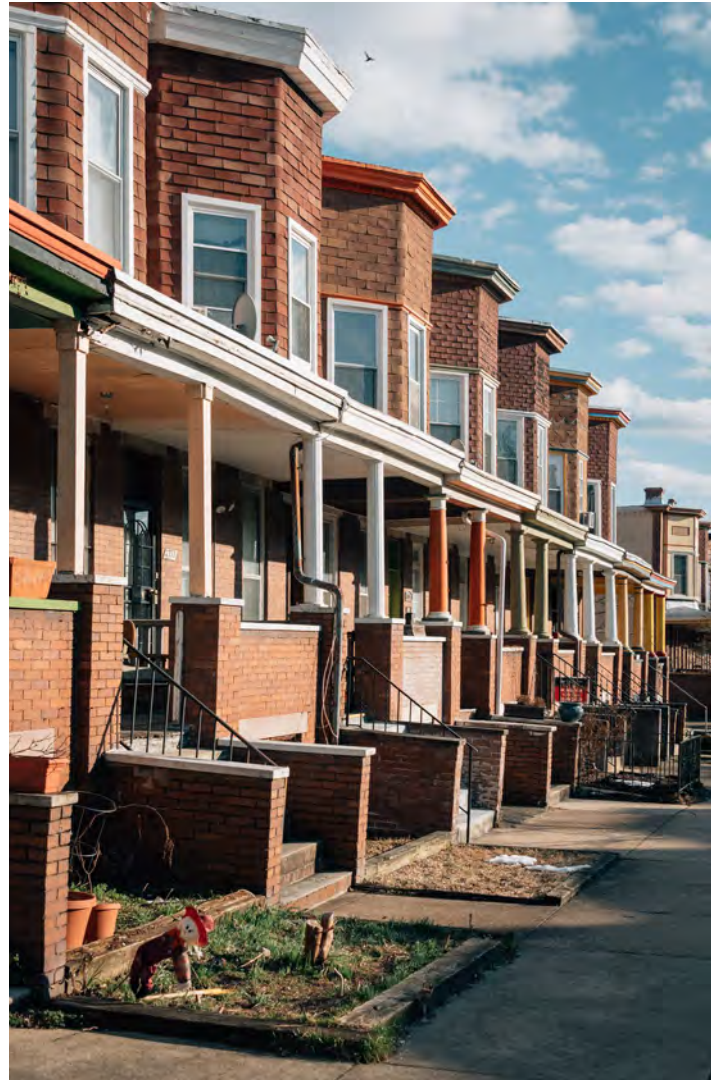
Language

Data from the 2014–2018 American Community Survey indicated that 2.1% of the population in Baltimore City aged five (5) years and older reside in Limited English-speaking households (Community Commons, 2018). These are households where 2.1% of the residents speak a language other than English or where no household member aged 14 years and above speaks only English at home. Of these, 34.8% are individuals of Hispanic or Latino descent as compared to the 2.03% non-Hispanic population. More importantly, these groups may need English-language assistance as they are at higher risk for low literacy and comprehension. Of the non-English languages spoken at home, Spanish was the highest at 10,676, other Indo-European languages followed suit at 4,729, and Asian and Pacific Island languages at 3,687 and other languages at 1,471 (Community Commons, 2018). Comparatively, Baltimore County has more (5.24%) residents living in Limited English-speaking households. Although this is higher than Baltimore City, it is lower than the state rate of 6.78%. (Community Commons, 2018). Racial disparities were present in both jurisdictions as seen on charts 7 and 8.

Black (18%)

White (40%)

Asian (22%)

Multiple/Other (20%)
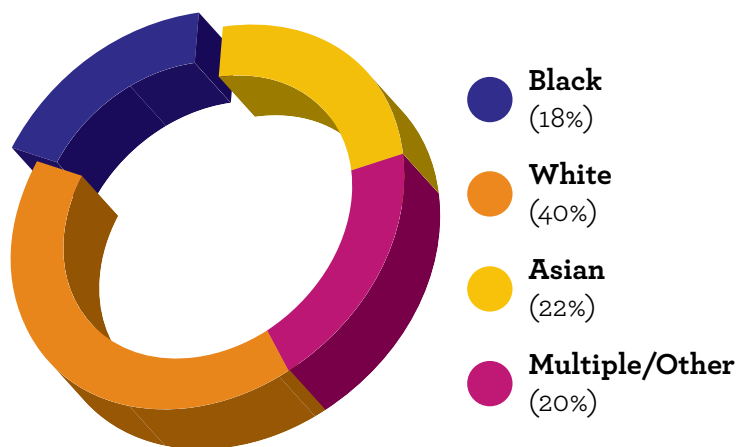
Chart 7
Baltimore City LEP
Population with Limited English Proficiency by race alone

Black (13%)

White (40%)

Asian (36%)

Multiple/Other (11%)
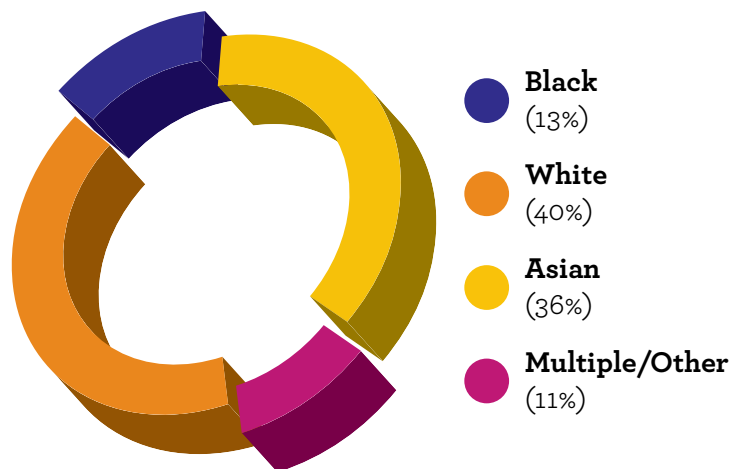
Chart 8
Baltimore County LEP
Population with Limited English Proficiency by race alone

Baltimore Health Report

Baltimore Medical System takes a strategic, holistic, and global approach using health outcomes, health factors and clinical care outcomes to ensure high quality programming and services. The Baltimore area hospital systems are key stakeholders and partners with Baltimore Medical System in the overall health care delivery system. There are over 14 community hospitals and one Veteran's Administration hospital that serve Baltimore City/County and the surrounding areas. The Johns Hopkins Hospital Community Health Needs Assessment (2019) asserts that the "health status of a community depends on many factors, including quality of healthcare, social and economic determinants, individual behaviors, heredity, education, and the physical environment. Health is more than just the absence of disease, a focus on socioeconomic factors is required". The map above depicts the various hospital systems which serve the Baltimore City and County communities.

Nationally, the average life expectancy (ALE) is 78.70 years. In Maryland, the ALE is slightly higher at 79.14 years. In Baltimore City and County ALE is 72.78 and 78.08 years, respectively.
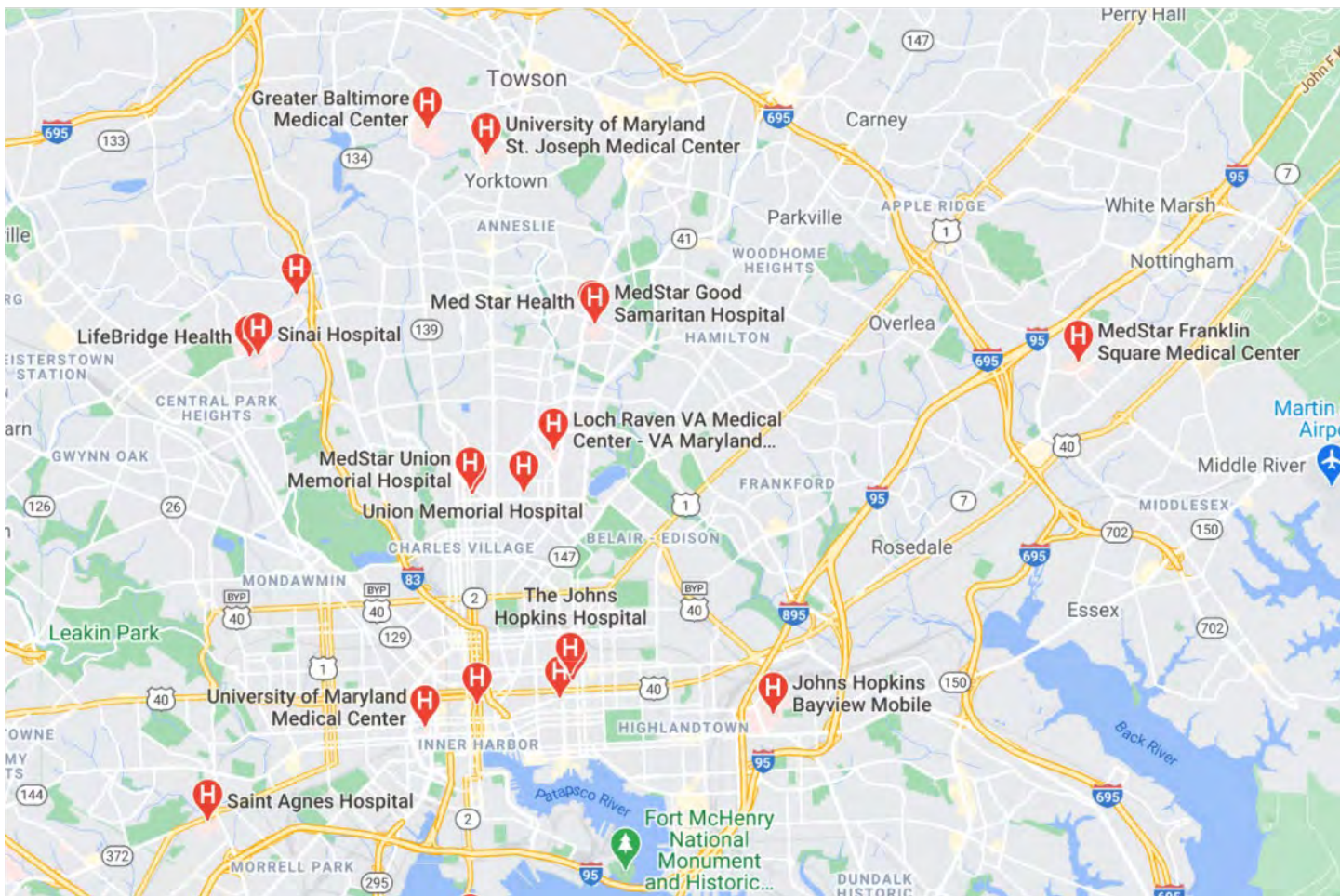
Map 6 *Key Health Systems in the Services Area*

Chart 9 depicts that the life expectancy of residents in Baltimore City and County vary greatly as compared to those in the State of Maryland and the US. Taking a look at the lifespan, there is a 12- year gap in average life expectancy of residents across counties in Maryland as referenced in Table 5.

Baltimore City	National Average	**72.78** YEARS
	50 100	
Baltimore County	National Average	**78.08** YEARS
	50 100	
Maryland		**79.14** YEARS
	50 100	
United States		**78.70** YEARS
	50 100	
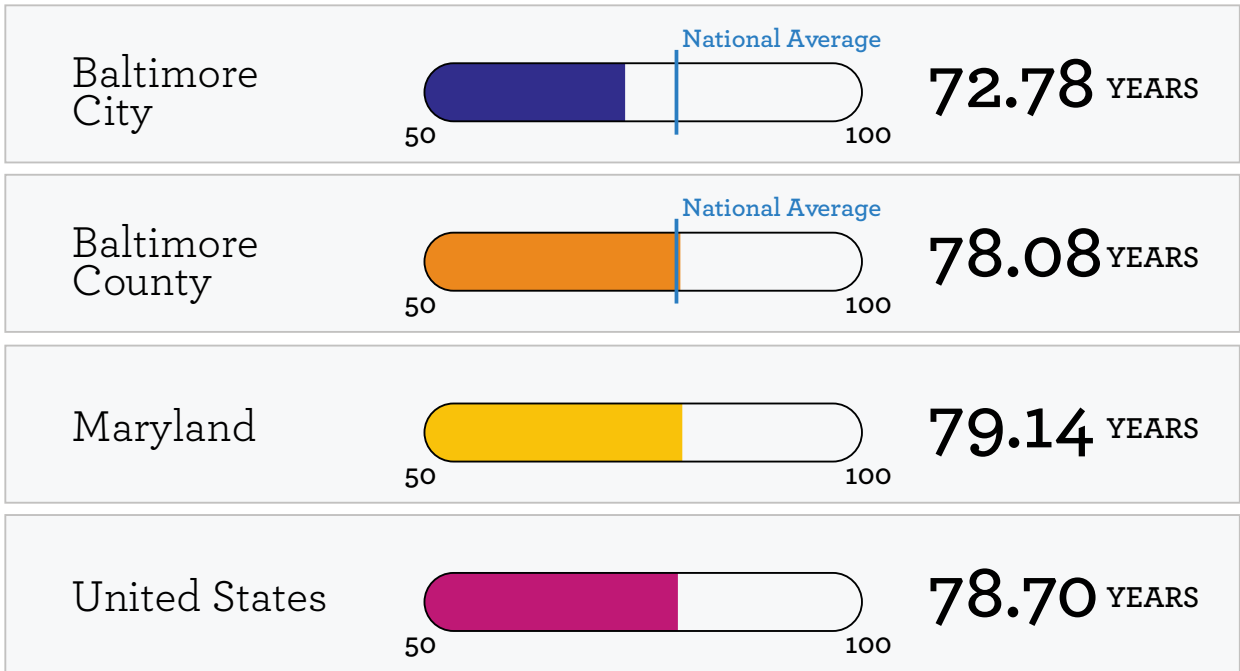
Chart 9 *Life Expectation Comparison Baltimore, State of Maryland, US*

Table 5 also illustrates the disparities between Montgomery and Howard County residents versus Baltimore City and County residents.

Table 5 Life Expectancy Comparison Across Maryland	
Average Life Expectancy of Balitmore City/County Residents	
• 84.44 yrs. - Montgomery County • 83.38 yrs. - Howard County • 79.14 yrs. - Maryland • 78.08 yrs. - Baltimore County • 72.78 yrs. - Baltimore City	**Location Matters** **There is a 12 year geographic disparity in average life expectancy across Maryland.**

https://www.rwjf.org/en/library/interactives/whereyouliveaffectshowlongyoulive.html

Health Outcomes

In examining health outcomes, Baltimore City ranks 24th (out of 24 Maryland counties and county equivalents) and Baltimore County ranks 15th in the State of Maryland (Robert Wood Johnson, County Health Rankings, 2019). Baltimore City residents have a greater number of overall poor health, poor physical health and poor mental health days as compared to the state average.

Both Baltimore City and County residents have a higher rate of premature death than the State of Maryland. The Maryland Vital Statistics Administration (2018) reports that the top three leading causes of death in Maryland, Baltimore City and County include heart disease, neoplastoma (cancer) and cerebrovascular (stroke). The leading causes of death in Baltimore City specifically are heart disease, cancer, vascular, accidents and diabetes. Baltimore County health outcomes are like Baltimore City; however, it records

a higher rate of respiratory deaths as compared to the State of Maryland.

The 2019 UDS data for Baltimore Medical System reports the primary health conditions for its patients. Top conditions include heart disease, behavioral health conditions (and tobacco use), and diabetes. Many of these top conditions mirror the primary causes of death across the State, and in Baltimore City and County.

Behavioral Health (14,686)

Tobacco (2337)

Vasular (756)

Asthma (1,528)

Heart/Statin (3,647)

Diabetes (4,667)
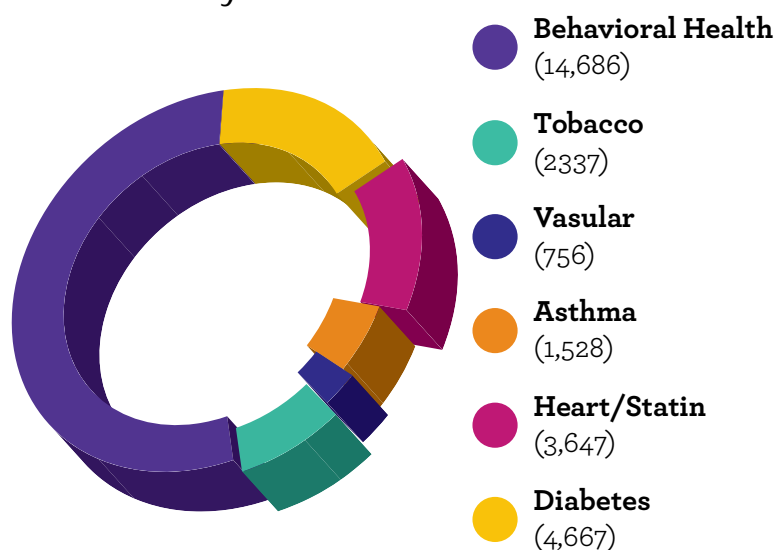
Chart 10
2019 ~ BMS Customer Health Conditions

Health Behavior Factors

Baltimore Medical System continues to focus on the health and well-being of marginalized populations in Baltimore City and County through their programs, community initiatives, and strategic partnerships. Building and maintaining healthy behaviors are critical in preventing people from developing diseases. Based on the American Action Forum, most recent estimates attribute health outcomes to the following:

- 10–20% to medical care
- 30% to genetics
- 40 to 50% to behavior and
- 20% to the social and physical environment

It has long been established and documented that practicing healthy behaviors reduces the likelihood of developing diseases. Healthy behaviors include lifestyle changes such as avoiding tobacco use, maintaining a healthy weight/body mass index, partaking in regular physical activity, and eating a healthy diet. These behaviors and activities can improve overall health outcomes and increase longevity of life. The Robert Wood Johnson County Health Rankings & Roadmaps (2019) ranks Baltimore City as 23rd in the State of Maryland (out of 24 jurisdictions) for Healthy Behaviors. Baltimore County ranks 8th.

Leading to this poor ranking are the higher rates of drug overdoses, excessive drinking, unhealthy food environments, food insecurity, obesity, smoking, sexually transmitted disease, and teen births in Baltimore City.

Community Health Needs

A variety of data sources were used to identify and prioritize health needs in the Baltimore City community service areas. These included prioritized focus areas from key partners such as the Baltimore City Health Department, Johns Hopkins Health System, Greater Baltimore Medical Center, and the University of Maryland Health System. All partners identified and prioritized these factors based on the age-adjusted death rate for the first three causes is significantly higher than the state. Additionally, in 2016, the State Department of Health produced a Health Indicator Rankings by Jurisdiction Matrix, using data from the Maryland Vital Statistics Administration and the State Health Improvement Process to assess counties using 54 health indicators (i.e. heart disease and stroke) at the jurisdictional level. The areas of greatest need in Maryland were identified based on these indicators. Baltimore City demonstrated the worst outcomes. Based on data analytics performed, feedback from key stakeholders both internal and external to the organization, and from a comprehensive assessment of health services and community gaps, the following have been identified as prioritized areas of focus.

Obesity

Baltimore City ranks 24th out of 24 jurisdictions in the State of Maryland in health outcomes and factors to include SDoH. As of 2014, approximately one in three Baltimore City residents were obese. With a 35% prevalence rate, this is higher than the state and national trends at 31% and 29%, respectively (Community Commons, 2018). Although there was a slight decline in 2015, the overall rate of obesity in Baltimore City has not changed significantly since 2011. Similarly, 30.6% of adults self-reported as being overweight, that is a body mass (BMI) between 25.0 and 30.0 (Community Commons, 2018). Obesity is also linked to cardiovascular conditions, diabetes, and poor quality of life. Being overweight is also a risk factor of cardiovascular disease and may be indicative of less than healthy lifestyle behaviors and eating habits.

Diabetes

The percentage of adults who self-report that they have ever been diagnosed with diabetes increased from 12.2% in 2016 to 12.8% in 2017 (Community Commons, 2018). This is higher than the state and national rates of 9.9% and 9.5%, respectively. Although the rates were evenly split between males (12.8%) and females (12.8%), there were disparities within the age breakdown category. There were 24,414 residents diagnosed with diabetes out of the 71,866 Medicare beneficiaries which is a 34% higher rate compared to the 29.7% at the stated level (Community Commons, 2018).

Hypertension and Other Diseases of the Heart

The leading causes of death in Baltimore City and Baltimore County are heart disease, cancer, stroke, unintentional injuries, and chronic lower respiratory diseases (Vital Statistics, 2018). In Baltimore City, 4.2% of adults have been diagnosed with coronary heart disease or angina which is slightly higher than the State average of 4%. This is a key indicator as it is highly correlated with and could be a risk factor for conditions such as heart attacks, high cholesterol, and high pressure. 161,546, or 33.40% of adults aged 18 years and older have been told by a doctor that they have high blood pressure or hypertension (Centers for Disease Control and Prevention, 2019).

Prenatal Care

This indicator reports the percentage of women who do not obtain prenatal care during their first trimester of pregnancy. This indicator is relevant because engaging in prenatal care decreases the likelihood of maternal and infant health risks. This indicator can also high- light a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/ or social barriers preventing utilization of services. Over 7% of mothers in Baltimore City received late or no prenatal care as compared to the state average of 6.1% (Community Commons, 2018).

Mental Health and Substance use and Misuse

There has been a steady increase in the use of opioids and deaths from opioid overdose in Baltimore city. Reviewing the rate of death due to drug overdose per 100, 000 population (reported as rates age-adjusted to year 2000 standard), the average annual deaths due to drug poisoning was 296 among the total population of 620,550. The age adjusted death rate of 45.7 per every 100,000 people is greater than the state and national rates of 19.98 and 15.6, respectively (Community Commons, 2018). This trend is similar in Baltimore County which experienced 224 average annual deaths due to drug poisoning in a population of 825,910 and had an age adjusted death rate of 27.5 per every 100,000 people.

Sexually Transmitted Infections Including HIV/AIDS

Both prevalence and mortality rates for HIV have significantly decreased in Baltimore City. However, the prevalence for HIV in Baltimore City is still higher than the state rate and the city reported the highest rates of new HIV diagnoses (Maryland Department of Health, 2018). Graph 3 from the Baltimore City's Health department's report on interventions to end the HIV epidemic in Baltimore City, reports that there has been an 80% decrease in incidents with 36.6% of new infections with individuals 30 years of age and under.

To address disparities in the incidence and prevalence of HIV in Baltimore City, Baltimore Medical System is partnering with the Baltimore City Health Department and the AIDS Education and Training Center. The purpose of the partnership is to increase provider champions and care team capacity, expand testing for HIV, HCV and HBV, add clinical pharmacy support for PREP/nPEP and link HIV positive patients to treatment and community resources.

80% decrease new infections	1,831 people living with HIV per 100,000 population	1 in 33 men and 1 in 73 women in Baltimore are living with HIV	36.6% new infections <30 years old
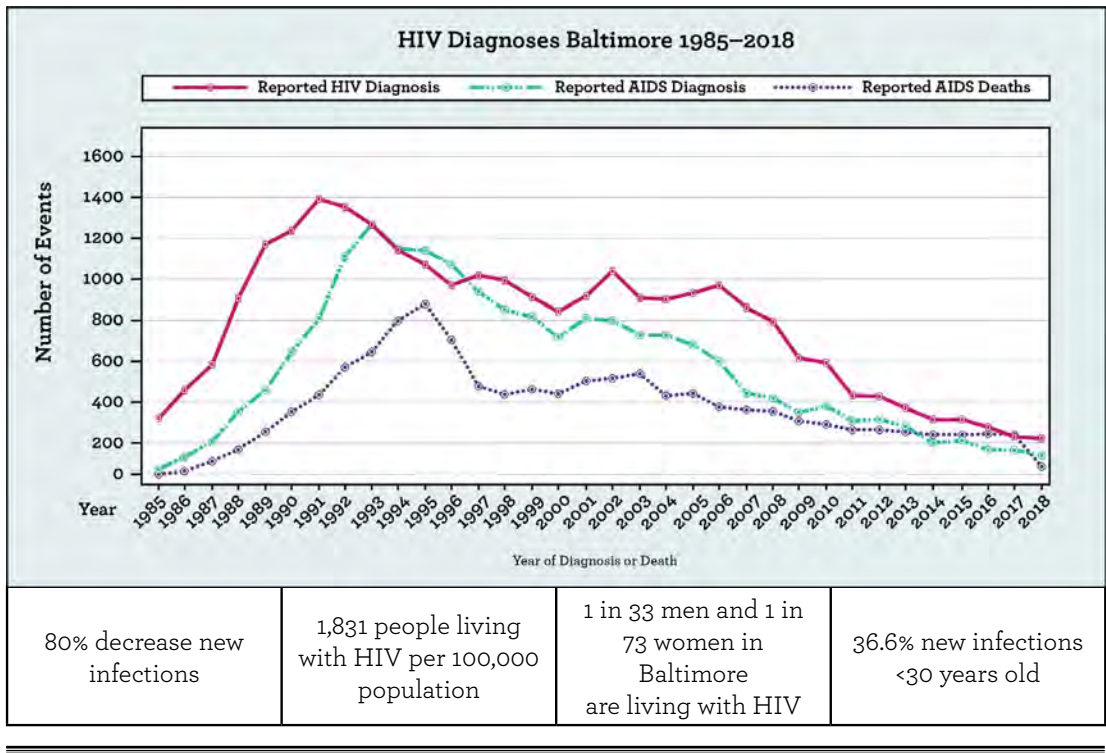
Graph 3 *HIV Diagnoses in Baltimore City*

Further analysis indicate that SDoH play a factor in HIV transmission rates as areas in Baltimore City experiencing high poverty levels, have higher levels of transmission and areas of lower poverty rates report lower HIV transmission rates (see Appendix C).

Health Questionnaire Key Findings

To better understand the needs at Baltimore Medical System, questionnaires were developed and administered to a diverse group of individuals including Baltimore Medical System customers/patients, clinical and non-clinical staff, senior leadership, human resources, and board of trustees. A total of 172 responses were collected. Staff completed an online questionnaire while customers/patients were administered a paper questionnaire at five locations (Highlandtown Healthy Living Center, Belair-Edison Family Health, Middlesex, Saint Agnes, and Pine Heights).

Patient/Customer (60%)

Staff (30%)

Senior Leadership/ Board (8%)

Human Resources (2%)
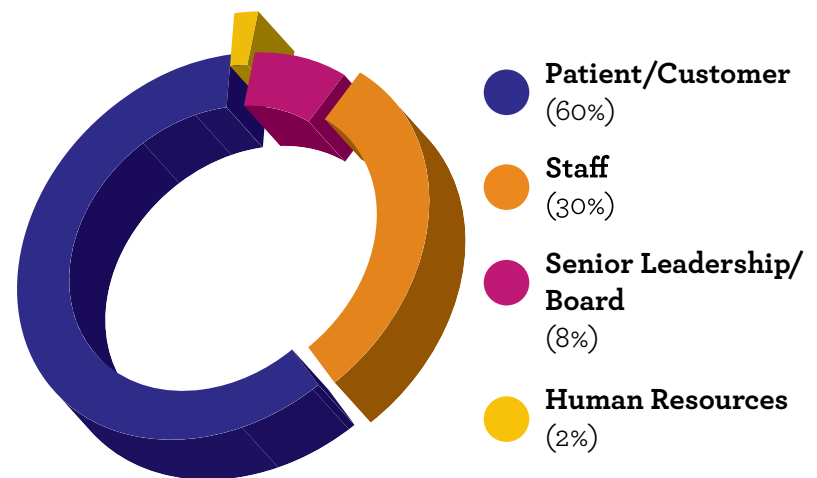
Chart 11 *Questionnaire Responses*

In addition to the questionnaire, individual interviews were conducted with key staff (behavioral health, refugee/international services, and administration). Nineteen (19) central questions were asked about health challenges, socioeconomic challenges facing the community, challenges that exist to access healthcare in their community and the effects of the COVID-19 Pandemic. Saint Agnes and Pine Heights data were combined. Some responses have been combined to provide greater insight into the data. Limitations to data collection for the paper questionnaires include:

- Incomplete questionnaires or missing responses

- Individualized/written responses toa question

- Multiple answers selected for one question.

It is notable that 17% of staff (who completed the questionnaire) identified themselves as receiving healthcare services at Baltimore Medical System. The following include a high-level summary of responses in key areas. A detailed summary of the questionnaire responses can be found in Appendix E. A total of 172 responses were received from various stakeholders. The categories of respondents are identified in chart 11. Of note, no responses from community providers, outside of Baltimore Medical System, were received.

Overall, senior leadership demonstrated an understanding of the community needs. This could be attributed to their involvement in the communities they serve as over 70% of senior leadership either sit on boards or participate in community coalitions and councils serving the service area.

Patients and staff were satisfied with services provided by Baltimore Medical System and being an employee of the organization, respectively. There was a consensus from patients, staff, and senior leadership that access to healthcare and the affordability of care was primordial. Expansion of services and locations were key factors to meeting the needs of patients and the communities served. The top service expansion needs identified are Behavioral Health and Dental Services.

With the outbreak of the COVID-19 pandemic, Baltimore Medical System made efforts to be responsive to the needs of its patients and the communities at large. This is reflected in the feedback from patients who perceived only a slight decrease in their ability to access care when they needed it during the pandemic. The augmentation of telehealth services helped maintain continuity of care; however, staff, including senior leadership, identify telemedicine as a service that Baltimore Medical System could invest and improve upon.

Barriers to Healthcare & General Wellbeing

Medically Underserved Areas/Populations

In 2015, Baltimore City had the largest number of Medically Underserved Areas (MUA) designations in the state with 15 out of the designated 46 areas. 77.3% of residents reside in one of these areas which are "areas or populations designated by HRSA as having too few primary care providers, high infant mortality, high poverty or a high elderly population" (HRSA, n.d.). Map 7 shows the designations for Baltimore County as well as the existing Health Professional Shortage Areas. The Maryland Department of Health conducted a comprehensive primary care needs assessment in 2016 with the goal of identifying priority areas to promote access to care in Maryland. Baltimore City performed poorly and was ranked 4th out of four (4) quartiles ranking with four being the worst. Baltimore County ranked 3rd out of 4 quartile system based primarily on the Maryland State Health Improvement Process measures, the Agency for Healthcare Research and Quality Prevention Quality Indicators (see Appendix D).
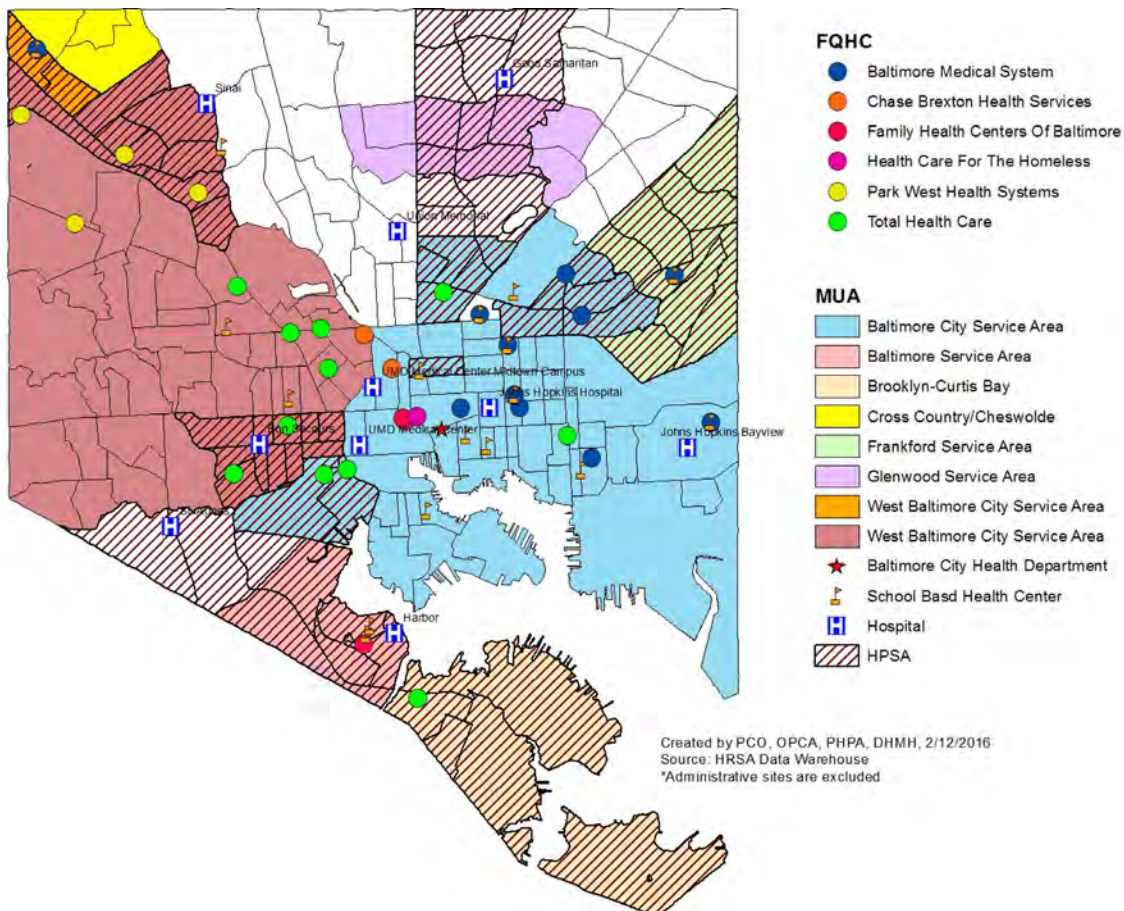
Map 7 *Baltimore City Medically Underserved Areas (MUAs)*
Federally Qualified Health Centers (FQHCs), Hospitals, Local Health Departments, and School Based Health Centers

Designation Type

✚ Comprehensive Health Center (FQHC)*
● Correctional Facility
◆ Native American Tribal Population
▉ Geographic Designation
▉ Low Income Designation
▉ Medicaid Eligible Designation

*Only the headquarter sites are displayed.

Red numbers indicate a HPSA score

Created by Office of Primary Care Access, PHPA, Maryland DHMH. Last reviewed 12/31/2015
Source: HRSA Data Warehouse and 2010 U.S. Census. For more information on federal shortage designations, visit http://hpsafind.hrsa.gov

Map 8 *Maryland Health Professional Shortage Area (HPSA) Designations for Primary Care as of 2015*

Provider Shortage Areas

In addition to designating MUA, HRSA (through a stratified methodology) focuses on identifying Health Professional Shortage Areas (HPSAs) in three health areas namely, primary care, dental care, and mental health care. These are primarily areas with shortages of primary medical care, dental or mental health providers and may be a geographic population or facility (HRSA, n.d.). Baltimore City met the criteria for designation in all three health disciplines. In general, 33 of the 77 HPSA designations in Maryland were in Baltimore City with 59.2% of the population living in an area affected by a HPSA. Eleven (11) of the 32 primary care designations in Maryland in 2015 were in Baltimore City covering 42.3% of the city's population. This percentage of residents in a primary care HPSA was significantly higher than the statewide percentage of 14% (Community Commons). This aligns with the State of Maryland HPSA designations for primary care as seen in Map 8.

While the rate of dentists per 100,000 population from 2010 through 2015, increased from 45.6% to 64.3%, it was still lower than the state and national rates of 74.2% and 65.6%, respectively (Community Commons, 2018). The percentage of residents in a dental HPSA designation in Baltimore City was higher when compared to the statewide percentage as well. There were 20.4% of adults age 18 years and older in the City who self-reported to have had six or more teeth removed which is higher than the state and national rates of 13.4% and 15.7% respectively (Community Commons, 2018). This indicator reinforces the lack of access to dental care and utilization of dental services.

Identifiable Social Determinants of Health

An analysis of primary data sources on disease prevalence, comorbidities, and barriers to care identified the following as key elements to be addressed:

- Provider shortage,

- Transportation,

- Behavioral health concerns (i.e., substance use, mental health),

- and Nutrition.

This was supported by our secondary data analysis from sources such as interviews and surveys with internal and external stakeholders who stressed the importance of health insurance, food, transportation, and interpretation services. On the other hand, patients were able to identify services that are missing from the communities where they reside that are important for their family. These included access to fresh fruits and vegetables, vocational services, youth centers, and educational services.

Addressing Community Needs General Wellbeing

As an organization and in priority service areas, Baltimore Medical System has actively taken steps to meet the needs of the diverse communities in which they serve. Embracing the Patient Centered Medical Home model through the Agency for Healthcare Research and Quality (AHRQ), AHRQ defines the Patient Centered Medical Home as a promise to improve health through:

- Comprehensive care,

- Relationship-based/whole person approach,

- Coordinated care,

- Accessible services and

- Quality and safety.

Baltimore Medical System, in partnership with hospitals and other community providers, is a resource for both the insured and uninsured in the region by expanding in capacity to provide primary care, prenatal care, OB/Gyn capabilities, pharmacy, and many other services.

Based on the Johns Hopkins Hospital Community Health Needs Assessment (2019), "Socioeconomic status is a reflection of an individual's economic and social position in relation to others based on income, education, and occupation. 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 have limited education and limited financial resources often experience challenges such as poor housing, limited opportunities for employment advancement, and a low quality of life. All these challenges ultimately affect their health outcomes".

" *It is well documented that residents who have limited education and limited financial resources often experience challenges...*

Physical environment, a crucial pillar to health and wellness, is defined by the quality of air, drinking water, housing access/environment, commute time, etc. Table 7 reveals that in 2019 Baltimore County ranked 24 out of 24 in physical environment while Baltimore City is ranked 4th.

Table 7 Physical Environment Ranking 24 Maryland Counties		
County Health Rankings	Baltimore City	Baltimore County
2012	24	22
2015	16	24
2017	12	23
2019	4	24

According to the most recent Baltimore County Community Health Needs Assessment (CHNA) (Baltimore County Health Government, 2020), the council districts for the area served by the Middlesex clinic, Districts 4, 6, and 7, are the areas of greatest need in the county. Specifically noted was the need for increased prenatal care and education, and additional primary and preventive healthcare providers particularly for Medicaid populations. These priorities are supported by the 2018 CHNA of the hospital covering this service area, MedStar Franklin Square Medical Center (MFSMC).

The hospital's priorities include chronic disease prevention and management, behavioral health, maternal and child health, and concrete resources such as transportation, etc. While Baltimore City is ranked 4th in the state for its physical environment, this ranking does not take into consideration individual neighborhoods. This aligned with insights gained through questionnaires administered to the Baltimore Medical System patient population. When Baltimore Medical System patients were asked to rate their most difficult health conditions to manage, chronic disease like obesity and high blood pressure were reported by patients as difficult to manage. The center-based responses are found in Appendix H.

Baltimore Medical System continues to prioritize access to care by addressing identified SDoH within the communities it serves. Significant investments have been made in the electronic health management systems which enable real-time communication between community health workers, outreach team and health care providers. Quality dashboards and data analytic products help support quality improvement initiatives. An analysis of the senior leadership questionnaire reveals that Baltimore Medical System uses data primarily to improve service delivery and for strategic planning.

Baltimore Medical System has a strong commitment to diversity, equity, and inclusion. In the 2020 staff questionnaire, 76% of staff either agreed or strongly agreed that Baltimore Medical System has a strong commitment to diversity, equity, and inclusion. Staff are trained on ways to provide culturally competent care to best meet the needs of a culturally diverse service area (Chart 12).

Agree (2%)

Neither agree nor Disagree (12%)

Disagree (0%)

Strongly Disagree (12%)

Strongly Agree (35%)
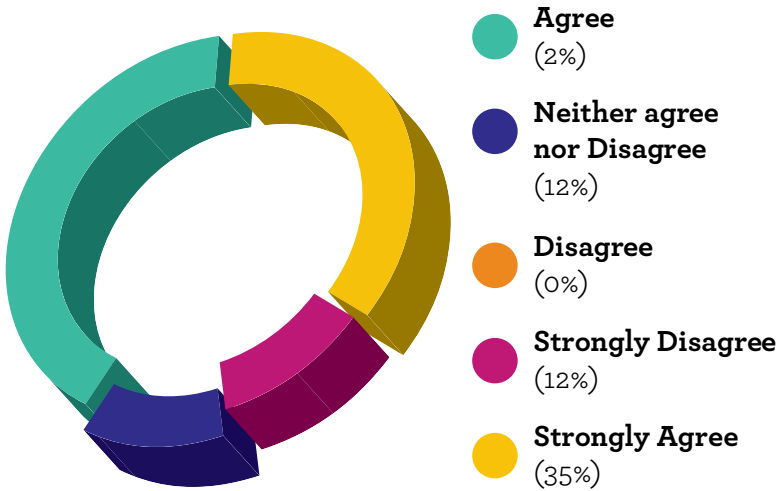
Chart 12 *Diversity, Equity, and Inclusion*

In 2020, Baltimore Medical System also played a critical role in managing COVID-19. By partnering with community partners, COVID-19 screening and testing were provided. COVID-19 vaccines will also be distributed based on State and Federal guidance and shipments.

Recommendations for Baltimore Medical System

To truly transform community health, it is important that Baltimore Medical System develop a comprehensive strategy which addresses the multiple faceted health needs of the individual and community. This strategy should proactively address health factors upstream to sustainably improve the health of the population. Based upon the framework of the American Hospital Association Community Health Improvement (AHA), this comprehensive approach includes:

- Multiple strategies: educational, environmental, policy and programming;

- Various settings: schools, communities, workplace;

- Multiple targets: focus on individuals, communities, and at-risk populations;

- Addressing medical and non-medical factors that contribute to health.

The following recommendations are based on the AHA comprehensive framework above and the information collected from primary source questionnaires from Baltimore Medical System customers, Board of Trustees, senior leadership, staff, community stakeholders as well as secondary data sources. The priorities selected were part of a formal process conducted with the Board of Trustees and senior leadership at Baltimore Medical System. These priorities are aligned with population health management strategies and mirror the needs of the community.
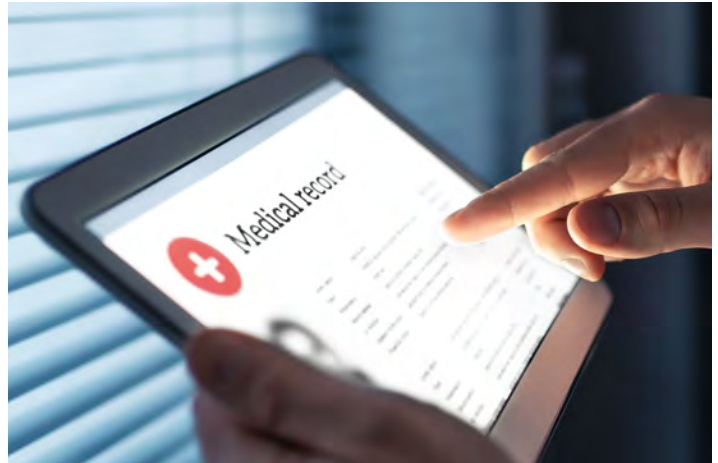
Strategic Plan Reset- COVID Recovery

Due to the COVID-19 pandemic, the executive team developed a strategic reset to reposition operations and targets for the COVID-19 recovery. The strategic reset included reviewing the current state of BMS in COVID-19 reevaluating previously set strategic priorities and goals for relevancy and opportunities moving forward; and re-evaluating annual goals, objectives, and targets for 2021, including preparation for 2022 initiatives.

The strategic redesign envisioned a new "normal" identifying technology and telehealth, facility utilization and staffing patterns, and new healthcare models and staff training as critical areas for expansion and further development. As BMS emerges from the COVID-19 pandemic, new ways of providing high quality services to our patients and delivering population health to our communities will be needed to re-engage patients and capture new demand for healthcare services.

Access and Quality

Pharmacy Alignment and Integration

The future expansion and development of the 340B pharmacy program (to provide access to affordable medications to patients) will help Baltimore Medical System improve access and health outcomes for its patient population. In addition, it will provide additional revenue streams and financial viability for the organization. New pharmacy services are planned for the Middlesex and Yard 56 locations.

Dental, Administrative Services and Comprehensive Care

Baltimore Medical System does not currently have a dental practice. Currently, patients are referred to community partners and specialists for pediatric and adult preventive dental care and comprehensive oral health services. Dental care was one of the primary services both staff and senior leadership identified as not offered by Baltimore Medical System but sought after by patients.

Baltimore Medical System plans to develop a new dental center at the Yard 56 location (5601 Eastern Avenue, Baltimore 21224). This location will be Baltimore Medical System's ninth site and it is intended to house all administrative offices as well as clinical and pharmaceutical services. It is ideally situated between Interstate 95, Eastern Avenue and across from the Johns Hopkins Bayview Medical Campus.

The dental center is a two-phased project: Phase I will complete engineering and architectural activities to develop the layout for the space, obtain permits and to do other pre-construction activities. Baltimore Medical System has a pending grant request with the Maryland Department of Health for Phase I funding to complete engineering and architectural activities. Phase II, which is the subject of this request, covers construction and capital equipment expenditures for the dental center.

Patients for dental and other oral health services will be drawn from the entire Baltimore Medical

System population, who can use either public transportation or Baltimore Medical System-provided transportation options to access Yard 56. Because of the location of the dental center, many of the dental patients may receive their primary care at the Highlandtown Healthy Living Center, the Middlesex center; and the Bel-air-Edison center. Baltimore Medical System is well-positioned to provide oral health services as it currently serves the target population.

Adding dental services in-house is aligned with the Patient Centered Medical Home model and one-stop approach for quality, comprehensive and coordinated care for patients.

Geriatric Care

In 2020, Baltimore Medical System closed one of its clinical sites at Orleans Square. This site served a significant elderly population. It would be beneficial for additional options to be implemented that would target this older adult population such as increasing geriatric providers and partnering with more geriatric facilities.

Additionally, Baltimore Medical System should continue to collaborate with insurance third party payors to ensure that the senior adult population is well educated on their health care coverage for care continuity especially for specialty care services; augmenting its patient care team approach with additional community health workers and nurses who can effectuate home visits for enhanced linkages to clinical care and community-based resources.

These efforts, if well-coordinated and implemented, will be a win-win for all especially considering the economic burden of aging that is anticipated in 2030 due to the aging baby boomers population (Knickman & Snell, 2002).

As of 2020, Baltimore Medical System was selected to be a provider of the Maryland Primary Care Program (MDPCP) to enhance care coordination services for the Medicare population. Participation in this program aids in improving access to care, improving quality of care and managing costs for this population.

East Baltimore County, Middlesex Site Relocation and Expansion

To better serve the almost 41,000 low- income residents who are not accessing community health center services, Baltimore Medical System has identified a location at 9504 Philadelphia Road, 21237 that would increase the overall space footprint and ensure continued the mission of improving the health, wellness, and quality of life for the under-served. Expanding to this location will provide the needed community health center presence in the east Baltimore County area. This will allow for an expansion of accessible and affordable primary care, behavioral health, and enabling services in this geographical area. This strategic expansion is a product of Baltimore Medical System remaining aware of community needs and its commitment to enhancing the clinical and administrative infrastructure to support the growing population.

Migrant Population, Immigrant Care

With the high number of migrant populations in Baltimore City and serving as a refugee center, services for non-English speaking and migrant patients could be augmented for enhanced health outcomes. The adoption and implementation of the National Culturally and Linguistically Appropriate Services (CLAS) standards would be critical from a policy adoption and staff training standpoint (Health & Human Services, n.d.). Policies in this regard would enhance its commitment to culturally competent care and an annual on-going comprehensive cultural competency training could be developed for all staff and key partners as well.

Chronic Disease Prevention

Obesity, Diabetes, Heart, Vascular

Based on the health data and staff/customer questionnaires, obesity, diabetes and heart diseases ranked as high critical need areas. It is recommended Baltimore Medical System implement a chronic disease self-management program. The Living Well Chronic Disease Self-Management Program is a class for anyone with a chronic condition (arthritis, diabetes, heart disease, hypertension), or any other chronic condition that requires ongoing medication. The Stanford University developed this course to help people with one or more chronic conditions learn strategies to manage their conditions and make personal health changes. This interactive workshop is designed for people with all types of chronic conditions.

Fitness Center Partnership

To address the growing obesity epidemic, Baltimore Medical System should explore having greater access or partnerships with fitness facilities.

The American Heart Association (AHA) strategy recommendation states: "Wellness centers also are experiencing an expanding role as part of the continuum of care as they look beyond simple fitness and into how they can play a part in lifestyle modification. Promoting healthy lifestyles through wellness centers plays a vital part of population health management and becomes much more than simply providing an exercise venue". (American Hospital Association, n.d.).

Technology

The advent of the COVID-19 pandemic has brought to the forefront the importance of excellent Health Information Technology (HIT/IT) especially with regards to the value of telemedicine and/or telehealth. Baltimore Medical System can benefit from ensuring its strategic direction boosts its HIT/IT infrastructure to respond to and meet the needs of the communities it serves and the changing times. These modalities include innovative options which provide safe and sound health care and health education with minimal safety risks to all parties concerned. Concomitantly, telehealth options can also increase access to care by taking the services to the patient at a time and place that is convenient to them and reducing some of the social determinants of health barriers that may otherwise be present such as lack of transportation or childcare.

The transformation of healthcare will be made through technology. Future technology initiatives should include improving the pharmacy workflow and management by implementing a new pharmacy system. Upgrading the telehealth platform and developing virtual care model can improve the quality and performance of virtual visits including patient self-monitoring capabilities. Implementing a patient engagement platform (kiosk) can elevate patient satisfaction, improve communication to increase self-management and promote positive patient behavior.
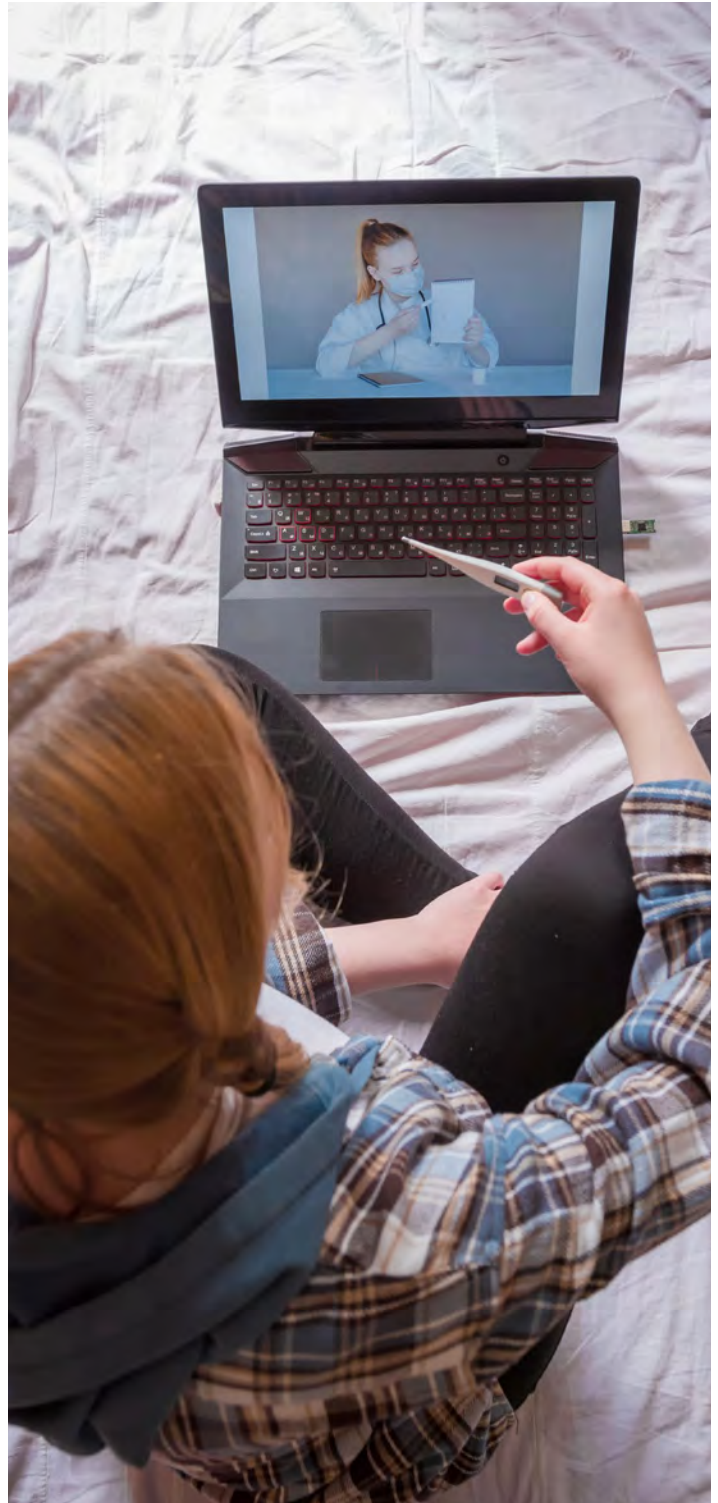
Telehealth and Telemonitoring

Baltimore Medical System provides behavioral health and primary care appointments over the phone or by video for many types of visits. Consider expanding telemedicine services to all its locations particularly to increase access for behavioral healthcare. Telemedicine allows services expanded access to care, reduced wait time for specialist care and accelerated treatment for patients.

Baltimore Medical System was awarded a HRSA grant and will begin a patient self-monitoring program for patients with hypertension in 2021. This further enhances their capabilities evaluate and treat patients remotely.

Behavioral Health

Universal Trauma Screening

Based on interviews with Baltimore Medical System Behavioral Health staff, there are increasing numbers of patients seeking care for trauma-related concerns. As a result, it is recommended that Baltimore Medical System implement a universal screening tool for trauma. There are two screening tools that could be considered to assess for post-traumatic stress disorder (PTSD). The Primary Care PTSD Screen for DSM-5 (PC- PTSD-5) is a 5-item screen designed for use in primary care settings. The screening asks if a person has had any exposure to traumatic events. The PC-PTSD-5 was designed to identify respondents with probable PTSD. A second possible screening tool is the SPRINT- Self Report- The Short Post-Traumatic Stress Disorder Rating Interview (US Department of Veterans Affairs). The SPRINT is an eight-item self-report measure that assesses the core symptoms of PTSD. Administering the trauma screening tools in primary care settings and school-based health centers may aid in early identification and intervention.

Medical Assisted Treatment and Substance Use Disorder Counseling

Baltimore Medical System's Substance Use Disorder Expansion Program (SUDEP) is a fully integrated primary care/behavioral health service model, with primary care and behavioral health providers. The SUDEP works collaboratively to improve the identification and treatment of prescription drug and opioid addiction. Questionnaires and interviews revealed the need to expand behavioral health treatment specifically for people with substance use disorders. This could include hiring dedicated substance use counselors, expanding Medical Assisted Treatment providers, and implementing group counseling sessions.

Peer Recovery Coaches

To help people with behavioral health disorders, it is recommended that Baltimore Medical System partner with the State of Maryland Behavioral Health Administration to train Community Health Workers as Peer Recovery Coaches. Peer Recovery Coaches assist with improving access and enhancing recovery efforts for people with mental health and substance use illnesses. The training program is offered through the Center for Addiction Recovery Training (CCAR) Peer Recovery Model:

https://addictionrecoverytraining.org/

Wellness Recovery Action Plan

The Substance Abuse Mental Health Services Administration (SAMHSA) encourages the use of Shared Decision Making to improve the overall health of people. SAMHSA defies Shared Decision Making as an emerging best practice in behavioral and physical health that aims to help people in treatment and recovery have informed, meaningful and collaborative discussions about their health care services. Baltimore Medical System could partner with On Our Own of Maryland to train key staff in the implementation of the Wellness Recovery Action Plan, or WRAP®. WRAP (Advocates for Human Potential, Inc., 2018) is a powerful self-care plan used by millions of people around the world to help them attain and maintain wellness, however they define it. WRAP® is used for topics including mental health difficulties, substance use disorders, physical health challenges, and relationship issues. It is a highly individualized process, which is one of the reasons for its success.

Community Partnership Opportunities

Collaborative Approach

Over 19% of adults in Baltimore City self-report having poor or fair health. This rate is higher than the state and national rates of 12.6% and 15.7% and is an indicator of general poor health status. As such, a collective effort to address the unmet needs of the communities served is warranted. Baltimore Medical System has already embarked on this path as exemplified by the multitude of partnerships it has formed throughout the years with various key influencer groups from the healthcare, workplace, local and federal government, payers, and community settings. A more unified approach with aligned priorities is still needed to ensure that resources can be leveraged and utilized for a more impactful approach and reach to improve population health outcomes. This could entail securing additional care coordination agreements with key hospital systems and community partners to improve hospital emergency departments and inpatient care transitions as well as for clinical-community linkages. Furthermore, collaborative partnerships could be established with other FQHCs in Baltimore City to explore and develop unduplicated services, one of the needs echoed by the Baltimore Medical System leadership.

Strengthen Delivery of Comprehensive Care Model

Baltimore Medical Systems will continue to develop services geared toward growth and the delivery of improved patient outcomes. The staff teams will be restructured based on the Comprehensive Care Model in order to improve performance on quality metrics. Particular focus will be on adding dental services and expanding the integrated behavioral health model at East Baltimore Medical Center. Key initiatives will include minimizing the impact of obesity on chronic illnesses through an obesity management program.

Transportation

Transportation was frequently cited as a key barrier to accessing healthcare services by all stakeholders internal and external to Baltimore Medical system. Beginning in September 2020, Baltimore Medical System began offering Uber rides to patients experiencing high no-show rates due to transportation barriers. It is recommended that Baltimore Medical System continue to develop transportation services/opportunities and/or expand the current partnership with Uber Health. As Baltimore Medical System continues to further implement Uber Health, additional stratification of patients with conditions that require multiple visits for care management (i.e., prenatal, chronic conditions, behavioral health, and SUD) should be included in the transportation model.

COVID - Community-Based Testing and Vaccination Sites

Baltimore Medical System implemented free, community-based COVID-19 testing sites on the east and west side of Baltimore City to ensure greater access to COVID testing. As a community service, Baltimore Medical System could further develop COVID-19 and Flu resources. This can include more COVID-19 testing options such as pop-up clinics, drive thru for testing and vaccinations. Care Connect, which is the same day extended hour service at the Belair-Edison, Middlesex, St. Agnes, and Highlandtown locations, could also be leveraged to offer additional testing services. In alignment with the feedback from staff (See Appendix E), additional flexibilities for staff could be made to further ensure safety during the pandemic. A significant proportion of staff indicated the need for additional supplies, ability to work remotely, and meticulous enforcement of social distancing policies.

Conclusion

This comprehensive review and analysis of the community health needs assessment within the Baltimore Medical System service area has been prepared to provide critical information. The purpose is to guide the future direction necessary to continue addressing gaps in services and identify priorities to best serve customers and the overall Baltimore community.

The stakeholder, staff and customer questionnaires provided important and consistent insights about Baltimore Medical System operations and the community at large. Across the questionnaires, respondents ranked behavioral health, diabetes, hypertension, obesity, and tobacco as the most challenging health conditions to manage. Respondents reported that barriers to getting well included financial, transportation, physical environment, and costs of prescriptions.

It was noted that the expansion of dentistry, transportation, behavioral health and increasing the number of providers as priority areas for development at Baltimore Medical System. Respondents consistently noted that access to health care, good schools, spiritual/religious values, a clean environment, and parks/recreation are key attributes of a healthy community.

The priorities and gaps identified through the questionnaires are in clear alignment with the insights gained from strategic planning at Baltimore Medical System and secondary sources. Nearly all the key stakeholders who serve the same populations outlined similar priorities. This presents an opportunity for Baltimore Medical System to work collaboratively with partners across multiple settings (i.e., hospital systems, other FQHCs, school systems, community providers, faith-based organizations, and employers) to leverage resources for a collective impact at improving the clinical and general well-being of the Baltimore communities at large.

Baltimore Medical System is already taking innovative and critical strides forward to rise to the needs of its patient population and the communities at large. There are growth opportunities as can be seen from the recommendations. This includes the expansion of services such as dental care and behavioral health; HIT/IT capabilities; and community-clinical partnerships. Baltimore Medical System continues to work hard creating an exemplary healthcare service system that improves the lives of people so that they and the entire Baltimore community may be healthy and thrive.

Glossary

340B Program: Section 340B of the Public Health Service Act 340B Program: Section 340B of the Public Health Service Act requires pharmaceutical manufacturers participating in Medicaid to sell outpatient drugs at discounted prices to health care organizations that care for many uninsured and low-income patients.

Community Health Needs Assessment (CHNA): Refers to a state, tribal, local, or territorial health assessment that identifies key health needs and issues through systematic, comprehensive data collection and analysis.

Correlation: The process of establishing a relationship or connection between two or more measures.

Federally Qualified Health Center (FQHC): Community-based health care providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas.

Epidemic: A widespread occurrence of an infectious disease in a community at a particular time.

Health Professional Shortage Areas (HPSA): Designated areas that have shortages of primary care, dental care, or mental health providers. These shortages can be based on geographic area, specific population group, or by a specific type of facility24.

Medically Underserved Community (MUC): areas or populations designated by HRSA as having too few primary care providers, high infant mortality, high poverty or a high elderly population.

Medically Underserved Area (MUA): A service area with an Index of Medical Underservice (IMU) score under 62.0. IMU is the sum of the area's four weighted variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over.

Medical Underserved Population (MUP): A population group with an IMU score below 62.0. MUPs experience economic (i.e., low-income or Medicaid-eligible populations), cultural, and/or linguistic access barriers to primary medical care services. MUPs can also be designated by the governor of a state on the basis of an economic barrier.

Medication-assisted treatment (MAT): is the use of medications in combination with counseling and behavioral therapies, which is effective in the treatment of opioid use disorders (OUD) and can help some people to sustain recovery.

National Culturally and Linguistically Appropriate Services: The National CLAS Standards are a set of 15 action steps intended to advance health equity, improve quality, and help eliminate health care disparities by providing a blueprint for individuals and health and health care organizations to implement culturally and linguistically appropriate services.

Pandemic: An outbreak of a disease that is prevalent over a whole country or the world.

Peer Recovery Coaches: An employed individual who walks side by side with individuals seeking recovery from substance use disorders. They help people to create their own recovery plans and develop their own recovery pathways.

Percentage: A number or ratio expressed as a fraction of 100.

Qualitative Analysis: Subjective analysis that is used to gain an understanding of underlying reasons and provide insight into problems; examines the "why" and "how" in research methodology.

Quantitative Analysis: The numerical analysis of measurable data to formulate facts and describe trends or patterns.

Social Determinants of Health (SDoH): Economic and social conditions that affect a wide range of health, functioning and quality-of-life outcomes and risks. Healthy People 2020 organizes the SDoH around five key domains: (1) Economic Stability, (2) Education, (3) Health and Health Care, (4) Neighborhood and Built Environment, and (5) Social and Community Context.

Zip Code Tabulation Areas (ZCTA): Generalized area representation used by the US Census Bureau to provide summary statistics and define neighborhood boundaries.

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Appendix

Appendix A: Baltimore Medical System Locations

BMS Health Service Locations		
School-Based Centers	**Health Centers**	**Pharmacies**
Collington Square Elementary 1401 N. Collington Ave. Baltimore, MD 21213	AbsoluteCare 1040 Park Ave., Baltimore, MD 21201	Belair-Edison Family Health Center 3120 Erdman Ave. Baltimore, MD 21213
Forest Park Senior High 3701 Eldorado Ave. Baltimore, MD 21207	Belair-Edison Family Health Center 3120 Erdman Ave. Baltimore, MD 21213	Highlandtown Healthy Living Center 3700 Fleet Street Baltimore, MD 21224
Harford Heights Elementary 2050 N. Wolfe St. Baltimore, MD 21213	East Baltimore Medical Center 1000 Eager St. Baltimore, MD 21202	St. Agnes 900 S. Canton Ave. Baltimore, MD 21229
Mergenthaler Vocational Technical (Mervo) 3500 Hillen Rd. Baltimore, MD 21218	Highlandtown Healthy Living Center 3700 Fleet Street Baltimore, MD 21224	
Patterson High 100 Kane St. Baltimore, MD 21224	BMS at Middlesex 1215 Eastern Blvd. Baltimore, MD 21221	
Paul Lawrence Dunbar High 1400 Orleans St. Baltimore, MD 21231	Pine Heights 1001 Pine Heights Ave., Suite 100 Baltimore, MD 21229	
Tench Tilghman Elementary/Middle 600 N. Patterson Park Ave. Baltimore, MD 21205	BMS at Saint Agnes 900 S. Canton Ave. Baltimore, MD 21229	
Vanguard Collegiate Middle 5000 Truesdale Ave. Baltimore, MD 21206	AbsoluteCare (Greenbelt) 7501 Greenway Center Drive, #600 Greenbelt, MD 20770	

Appendix B: Baltimore County Health Professional Shortage Areas, Medically underserved Areas/Populations, Hospitals, Federally Qualified Health Centers and Local Health Departments

Created by PCO, OPCA, PHPA, DHMH, 2/22/2016
Source: HRSA Data Warehouse, MASBHC, and Maryland State Archives
*Administrative sites are excluded

Legend:

⭐ Local Health Department

⚑ School Based Health Care

FQHC
- 🟡 Baltimore Medical System
- 🟢 Chase Brexton Health Services
- 🔵 Health Care For The Homeless

Hospital
- H Franklin Square
- H GBMC
- H Northwest
- H St. Joseph Medical Center

MUA/P
- Lansdown/Highlands
- Middle River

HPSA
- Medicaid Eligible - Middle River

Appendix C: HIV Transmission and Poverty

HIV Transmission and Poverty, Baltimore City

Note: Two CT areas
(24510100300, 24510250600)
have no poverty data,
which were highlighted by white color.

Transmisson_Poverty20

- Low Transmission and <20% living in poverty
- Low Transmission and >=20% living in poverty
- High Transmission and <20% living in poverty
- High Transmission and >=20% living in poverty
- Parks
- Water

N

0   0.75   1.5   3 Miles

cchr
The Center for Child and
Community Health Research

Source: Baltimore City Health Department, Maryland Department of Health and Mental Hygiene, 2012 American Community Survey.

Appendix D: Rankings by Jurisdiction Based on PQI & SHIP Indicators

Chart 1: Quartile Rankings by Jurisdiction Based on PQI & SHIP Indicators, 2016 PCO Needs Assessment*

Jurisdictions	Indicator Score	
Montgomery	293	Top Quartile (Best)
Howard	339	
Queen Anne's	366	
Carroll	403	
Frederick	405	
Harford	469	
Calvert	527	Second Quartile
Garrett	532	
Anne Arundel	554	
Worcester	596	
Talbot	598	
Cecil	633	
Prince George's	640	Third Quartile
Saint Mary's	647	
Caroline	651	
Charles	689	
Somerset	690	
Baltimore County	699	
Kent	716	Bottom Quartile (Worst)
Washington	724	
Allegany	767	
Wicomico	811	
Dorchester	864	
Baltimore City	1,011	

*Ranking scores not used for tables 19, 34, 37 and 47 for overall count due to some counties not having data available.

Appendix E – Community Health Needs Assessment Questionnaire

As part of the Baltimore Medical System Community Health Needs Assessment, a questionnaire was implemented from October to November 2020 to assess perceptions of the quality and accessibility of healthcare within the BMS community. A total of 172 individuals responded to the online and hard-copy questionnaire. Of those respondents, 60% identified as patients/customers and 40% identified as staff, senior leadership, or Board of Trustees of Baltimore Medical System.

Appendix E1 - BMS Board of Trustees & Senior Leadership Community Health Needs Assessment

1. Are you a patient with BMS?

<div style="text-align:center">Answered: 13   Skipped: 0</div>

Answer Choices	Responses	
Yes	23.08%	3
No	76.92%	10
Total		13

2. Do you sit on any boards or participate in community coalitions and councils to understand and address specific community needs? This includes formal and informal partnerships within the community. If yes, please list.

<div style="text-align:center">Answered: 13   Skipped: 0</div>

Answer Choices	Responses	
Yes	76.92%	10
No	23.08%	3
Total		13

Baltimore County HIV Planning Group	Broening Manor, Graceland Park, Medford & O'Donnell Heights Neighborhood Revitalization Plan Steering Committee	GenerationNow
American Heart Association	Head Start Community Health Advisory Board	St. Agnes Community Council
Older Women Embracing Life (OWEL)	Urban Health Initiative	Metro Baltimore
JH Community Advisory	Patterson Park Neighborhood Association	Milton Montford
Diakon Lutheran Social Ministries	National Alliance on Mental Illness	

Appendix E1 - BMS Board of Trustees & Senior Leadership Community Health Needs Assessment (continued...)

3. Based on your experience and knowledge, what do you feel are the most important community services and clinical health services provided by BMS?

Answered: 13 **Skipped: 0**
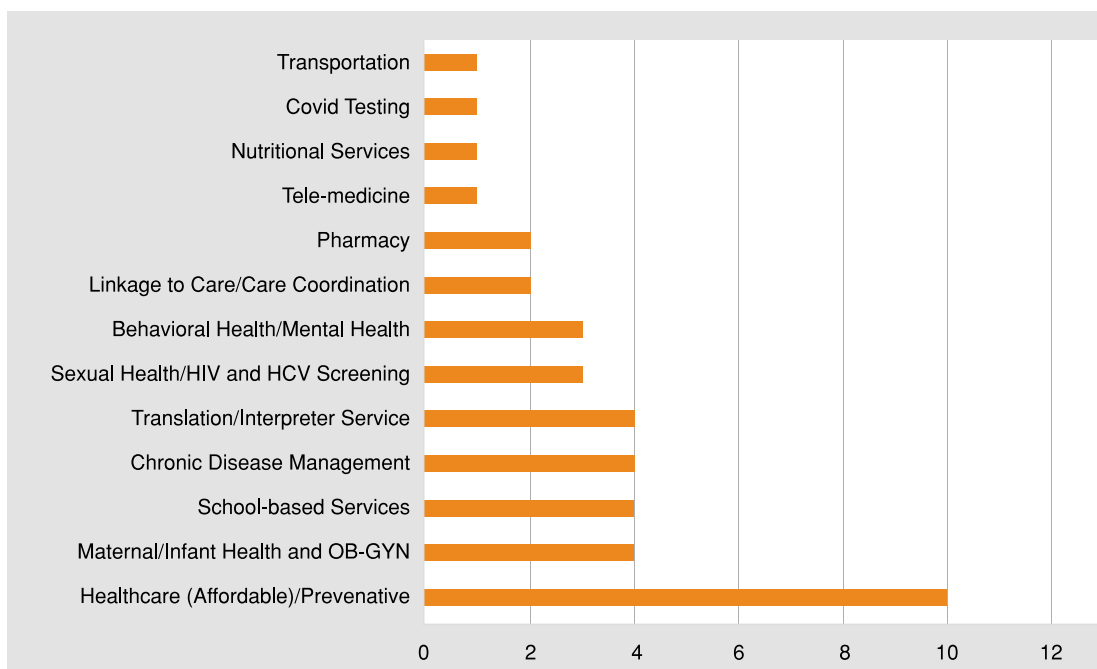
4. Based on your knowledge and experience with BMS, please explain how data is used to inform and drive organizational strategies and initiatives?

Answered: 13 **Skipped: 0**
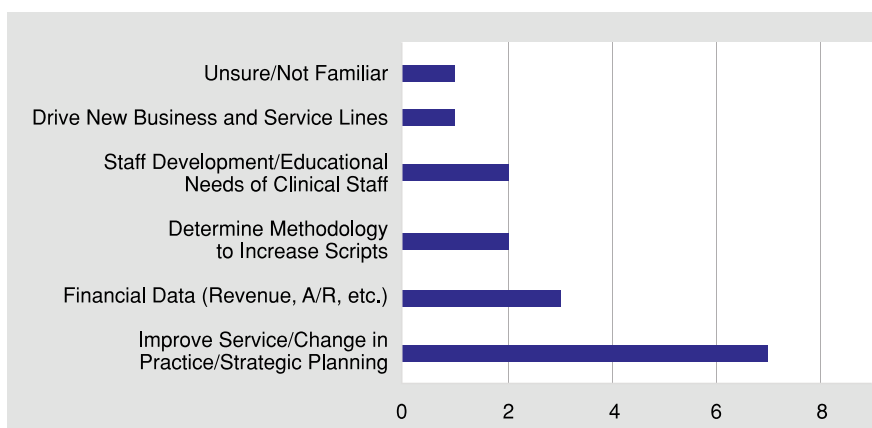
5. Are there any unique health care needs or characteristics that impact the health status of the patients served at BMS?

<div align="center">Answered: 13   Skipped: 0</div>

Answer Choices	Responses	
Yes	84.62%	11
No	7.69%	1
Unsure	7.69%	1
Total		13

a. If yes, please list the unique health care needs or characteristics:

<div align="center">Responses: 11</div>
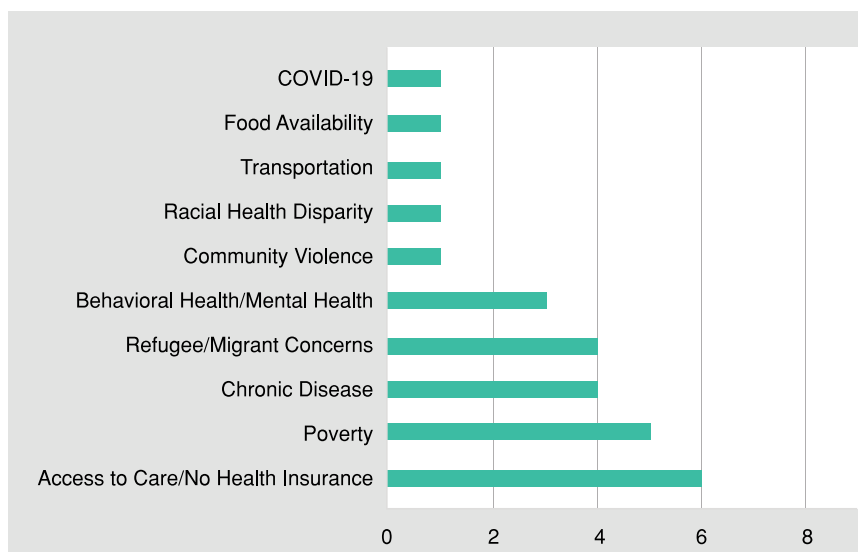
Appendix E1 - BMS Board of Trustees & Senior Leadership Community Health Needs Assessment (continued…)

6. Based on your knowledge and experience with BMS, which services are patients seeking that are not currently being offered at BMS?

Answered: 13   **Skipped: 0**

7. Are there any plans to provide additional patient services within the next 2 -3 years? If yes, which services will be provided and why?

<p style="text-align:center">**Answered: 13**   **Skipped: 0**</p>

Answer Choices	Responses	
Yes	53.85%	3
No	0.00%	10
Unsure	46.15%	6
Total		13

a. If yes, which services will be provided and why?
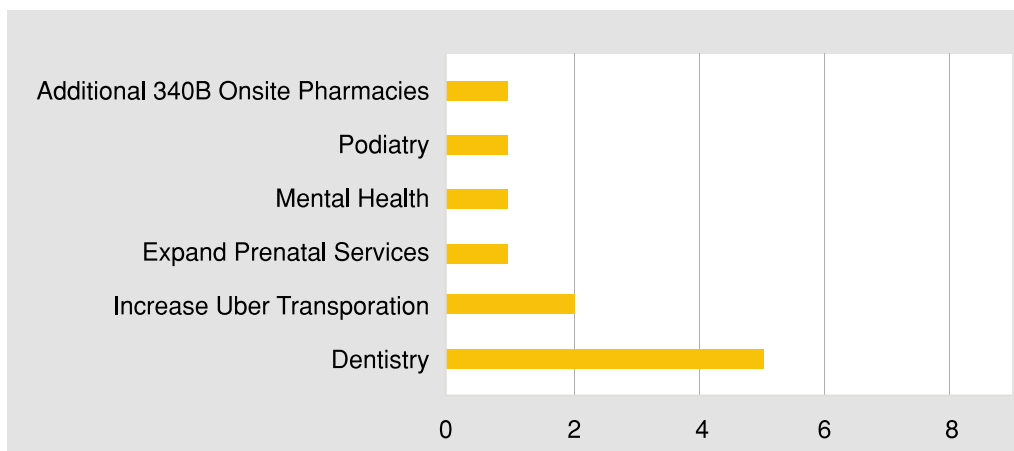
8. Based on your knowledge and experience with BMS, what activities will provide the community the greatest access to BMS healthcare, behavioral health and pharmacy services? Please rank 1= greatest impact to 7= least impact.

- **Providing Transportation** (5.54)
- **Expanding Telehealth...** (4.69)
- **Adding More Pharmacies** (2.54)
- **Adding More Behavioral...** (5)
- **Adding More Medical...** (4.58)
- **Adding Locations** (2.42)
- **Extending Hours/Weekend...** (3.54)
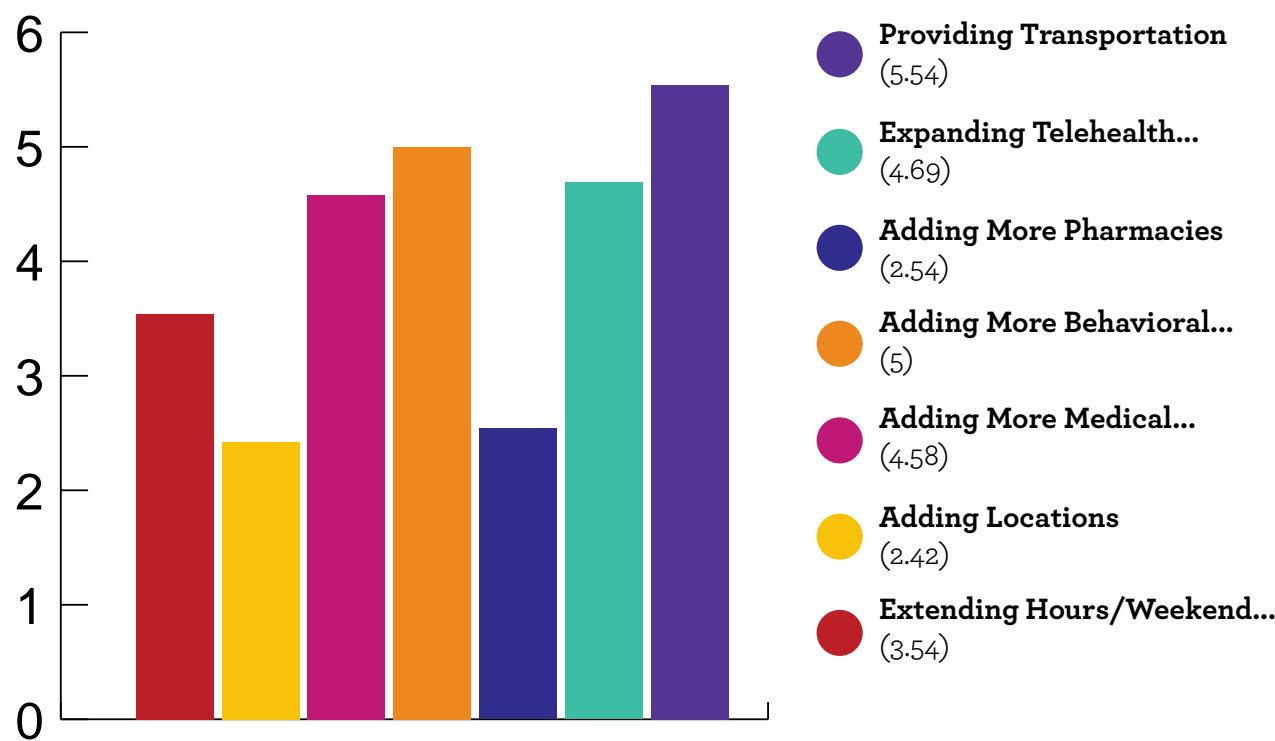
9. Please provide your assessment of this statement: "BMS has a strong commitment to diversity, equity and inclusion."

Answered: 13 **Skipped: 0**

Answer Choices	Responses	
Strongly Disagree	15.38%	2
Disagree	0.00%	0
Neither Agree nor Disagree	0.00%	0
Agree	38.46%	5
Strongly Agree	46.15%	6
Total		13

10. In the past three (3) years, what types of training have been implemented that align with the organization's mission and vision?

Answered: 12 **Skipped: 1**
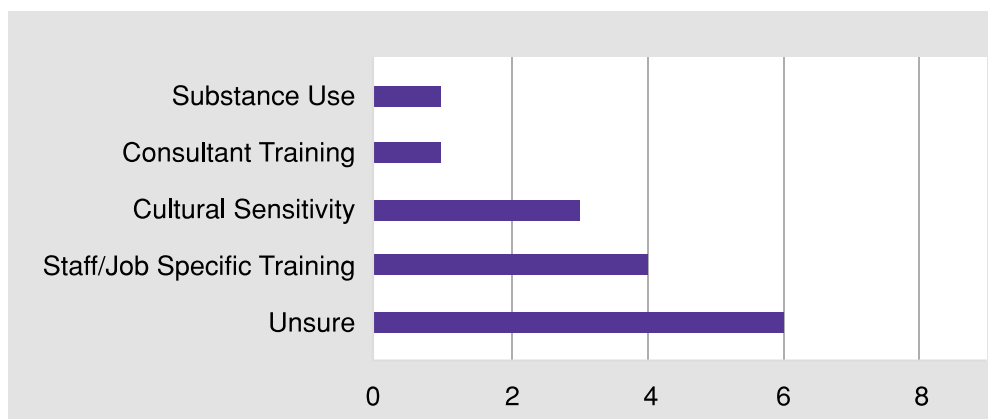
Appendix E1 - BMS Board of Trustees & Senior Leadership Community Health Needs Assessment (continued...)

11. Please provide your assessment of this statement: "The organizational and staffing structure at BMS currently meets the needs of the BMS population (i.e. proportion of staff within each service area meets the demand for services)."

Answered: 13   **Skipped: 0**

Answer Choices	Responses	
Strongly Disagree	0.00%	0
Disagree	15.38%	2
Neither Agree nor Disagree	30.77%	4
Agree	53.85%	7
Strongly Agree	0.00%	0
Total		13

12. Primary Patient Needs: On a scale from 1-5, rate the following needs of BMS customers: behavioral (mental health/substance use), dental, medical, housing, and other:
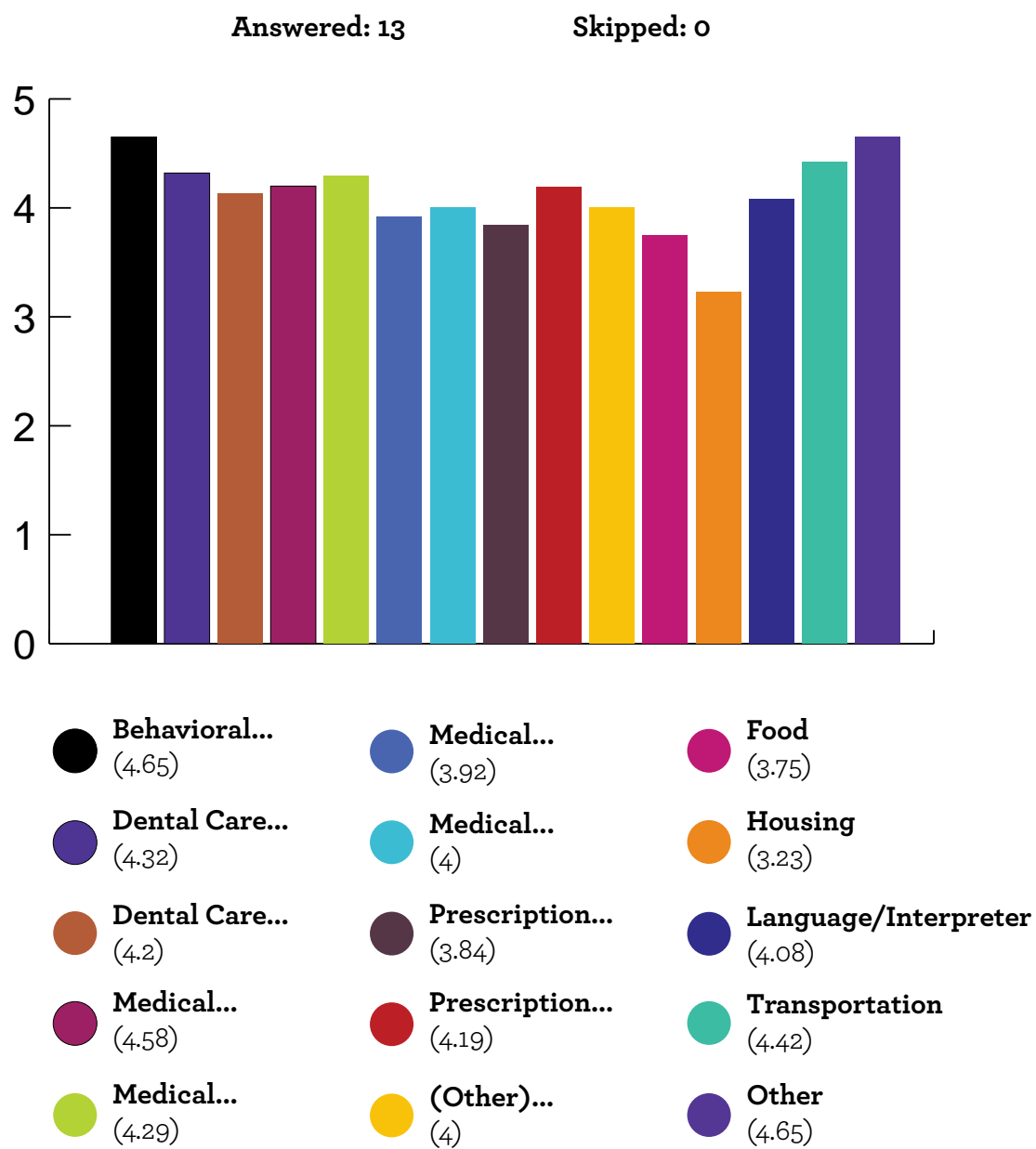
Answered: 13   Skipped: 0

⚫ Behavioral... (4.65)	🔵 Medical... (3.92)	🔴 Food (3.75)
🟣 Dental Care... (4.32)	🔵 Medical... (4)	🟠 Housing (3.23)
🟤 Dental Care... (4.2)	⚫ Prescription... (3.84)	🔵 Language/Interpreter (4.08)
🟣 Medical... (4.58)	🔴 Prescription... (4.19)	🟢 Transportation (4.42)
🟢 Medical... (4.29)	🟡 (Other)... (4)	🟣 Other (4.65)

13. Barriers to Services: On a scale from 1-5, what are the most <u>significant barriers</u> that prevent people in the community from <u>accessing BMS health services</u>.

Answered: 13   Skipped: 0

- ● **Childcare-Lack of** (3.43)
- ● **Cultural/Ethnic Factors** (3.57)
- ● **Education** (3.57)
- ● **Financial** (4.04)
- ● **Food** (3.48)
- ● **Insurance** (4.04)
- ● **Housing Status** (3.25)
- ● **Language Needs** (3.84)
- ● **Transportation** (4.41)
- ● **Physical Environment/ Safety** (3.92)
- ● **Prescriptions- Inability to Pay** (4.05)
- ● **Unaware of Services BMS...** (3.58)
- ● **Unemployment** (3.58)

14. The following characteristics describe a "Healthy Community." Please select the items that apply to the communities that BMS serve.

Answered: 13   Skipped: 0

- **Access to Healthcare...** (68.4)
- **Healthy Behaviors...** (39.48)
- **Good Jobs and...** (23.6)
- **Good Schools** (53.7)
- **Strong Family Life** (46.3)
- **Affordable Housing** (37.2)
- **Low Crime/Safe** (37.2)
- **Good Place to Raise...** (25)
- **Religious or Spiritual...** (59.5)
- **Clean Environment** (46.3)
- **Parks and Recreation** (24.3)
- **Excellent Race...** (24.3)
- **Low Level of Child...** (24.3)
- **Low Adult Death and...** (23.6)
- **Arts and Cultural...** (23.6)
- **Low Infant Death** (24.3)
- **Other** (7)
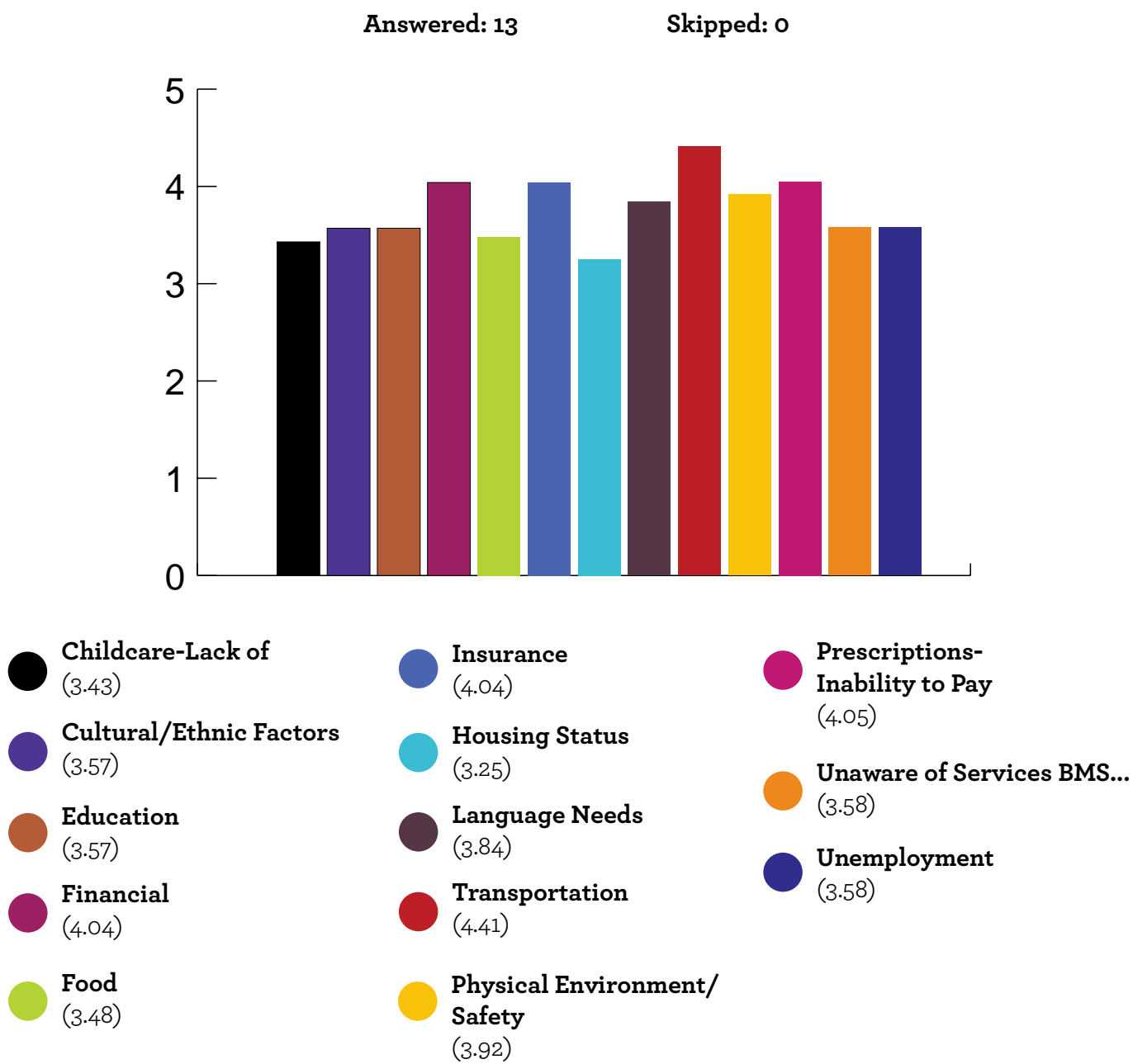
Appendix E1 - BMS Board of Trustees & Senior Leadership Community Health Needs Assessment (continued…)

15. Please rate the degree in which the COVID-19 pandemic has impacted the work of BMS staff.

<div align="center">

Answered: 12   **Skipped: 1**

</div>

Answer Choices	Responses	
Minor	0.00%	0
Low	0.00%	0
Moderate	33.33%	4
Significant	50.00%	6
Severe	16.67%	2
Total		12

16. What changes would you like to see made at BMS or in the community that BMS serves as a result of the pandemic?
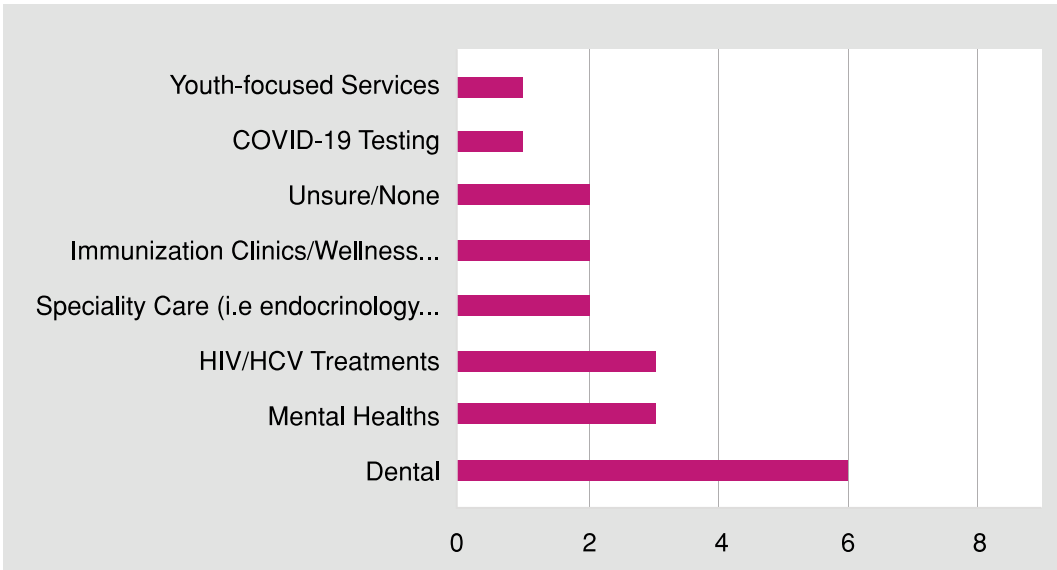
Answered: 13   **Skipped: 0**
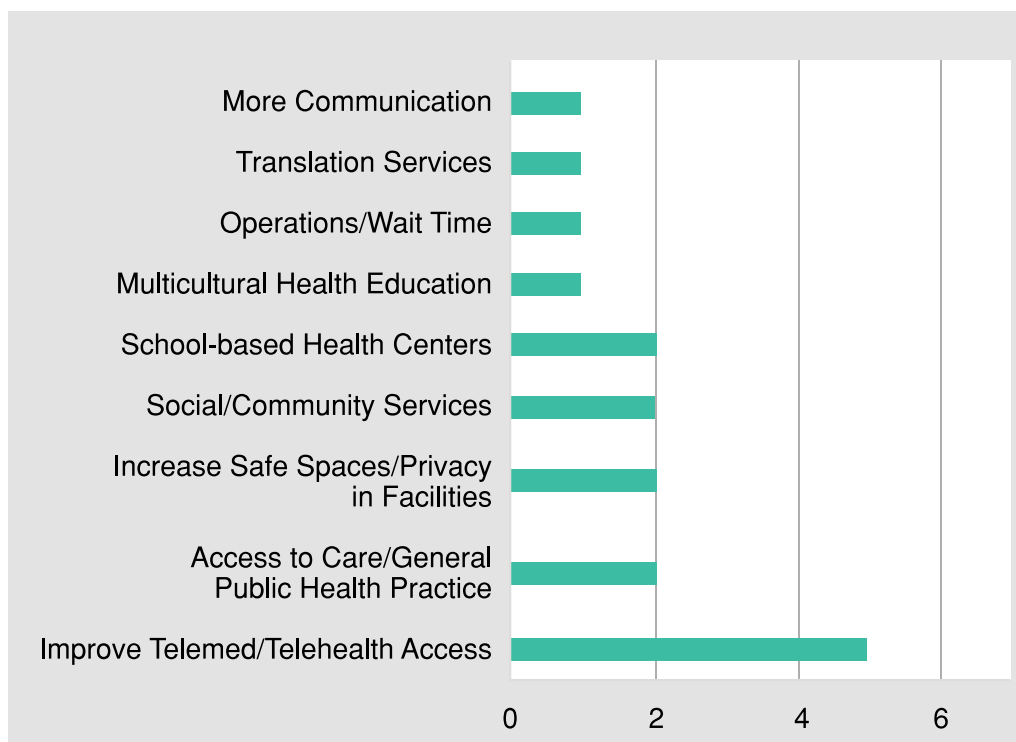
Appendix E1 - BMS Board of Trustees & Senior Leadership Community Health Needs Assessment (continued...)

17. Please provide any additional information regarding the needs of the community and the population that Baltimore Medical System serves.

    - *There should be a division that provides emergency wrap around social services and connection with community/governmental services. Increase behavioral health access and create a special youth division inside facilities.*

    - *Service needs to be improved at the Belair Edison Pharmacy. They are slow to return calls and have delivered the wrong medicine.*

    - *Strategy around working with other FQHCs in area to provide needed but unduplicated services.*

Appendix E1: BMS Staff Community Health Needs Assessment Questionnaire

1. Please select the position that best describes your role at BMS.

<div align="center">Answered: 48   Skipped: 4</div>

Answer Choices	Responses	
CHW/MA	10.42%	5
Center Manager	8.33%	4
Clinical Lead	2.08%	1
Quality Management	2.08%	1
Administrative Staff	35.42%	17
Medical Staff: MD, DO, NP, PA, RN, LCSW-C/LCPC, PHD	31.25%	15
Severe	10.42%	5
Total		48

2. Are you also a patient with BMS?

<div align="center">Answered: 51   Skipped: 1</div>

Answer Choices	Responses	
Yes	15.69%	8
No	84.31%	43
Total		51

3. Primary Needs: On a scale from 1-5, rate the following needs of your customers: behavioral health (mental health/substance use), dental, medical, population health, and other:

Answered: 51   Skipped: 1

● **Behavioral Health...** (4)

● **Dental Care - Preventive** (3.5)

● **Dental Care...** (3.15)

● **Medical - Preventive Care** (4.5)

● **Medical - Chronic...** (4.46)

● **Medical - Acute/Sick...** (4.38)

● **Medical...** (4.1)

● **Prescription - Payment** (3.82)

● **(Other) Financial...** (3.9)

● **Food** (3.17)

● **Housing** (3)

● **Language/Interpretation** (4.1)

● **Transportation** (3.5)

● **Other** (2.7)
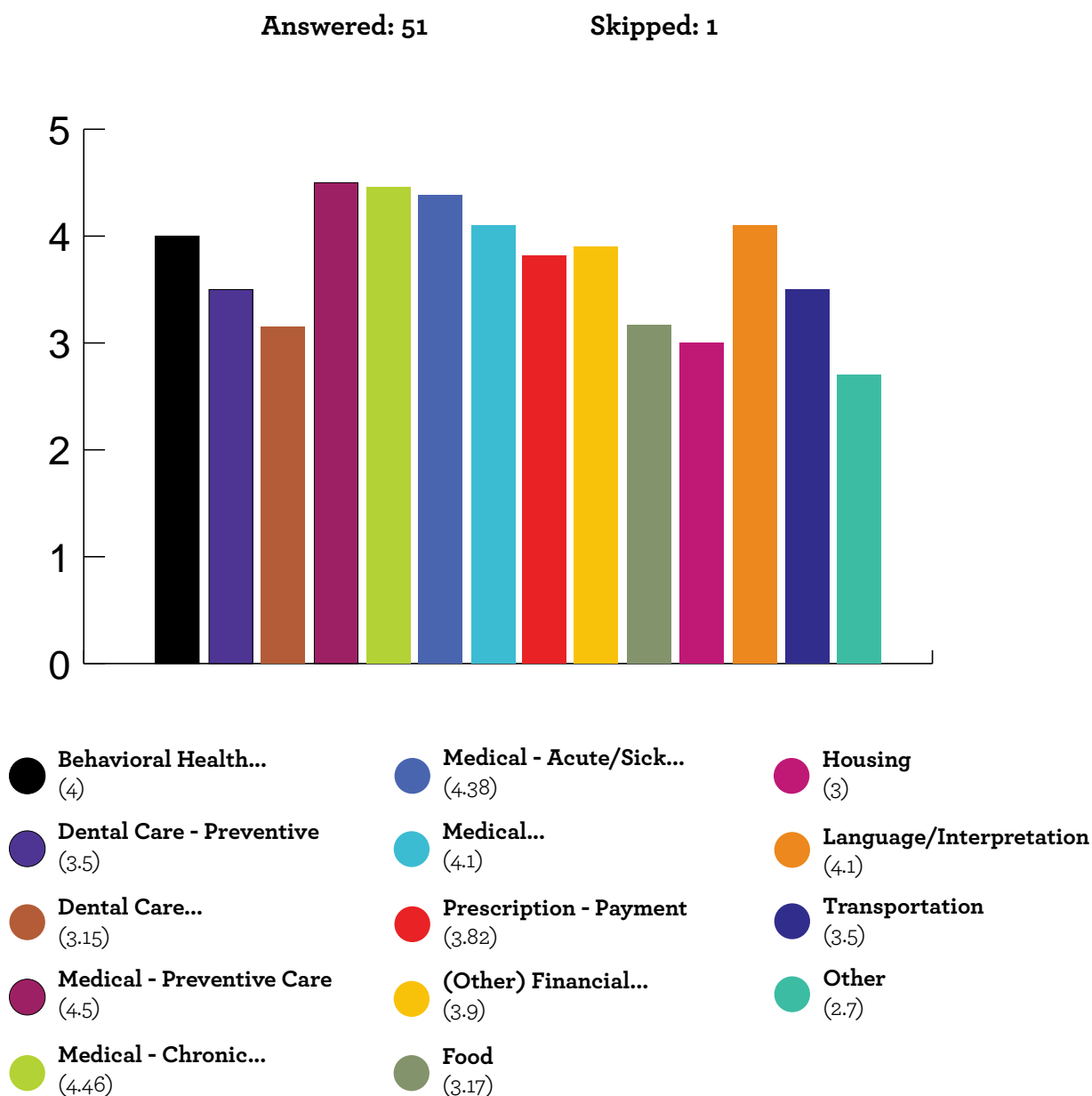
4. Health Needs: On a scale from 1-5, rate the primary medical conditions of your patients/customers? List up to 5 conditions.
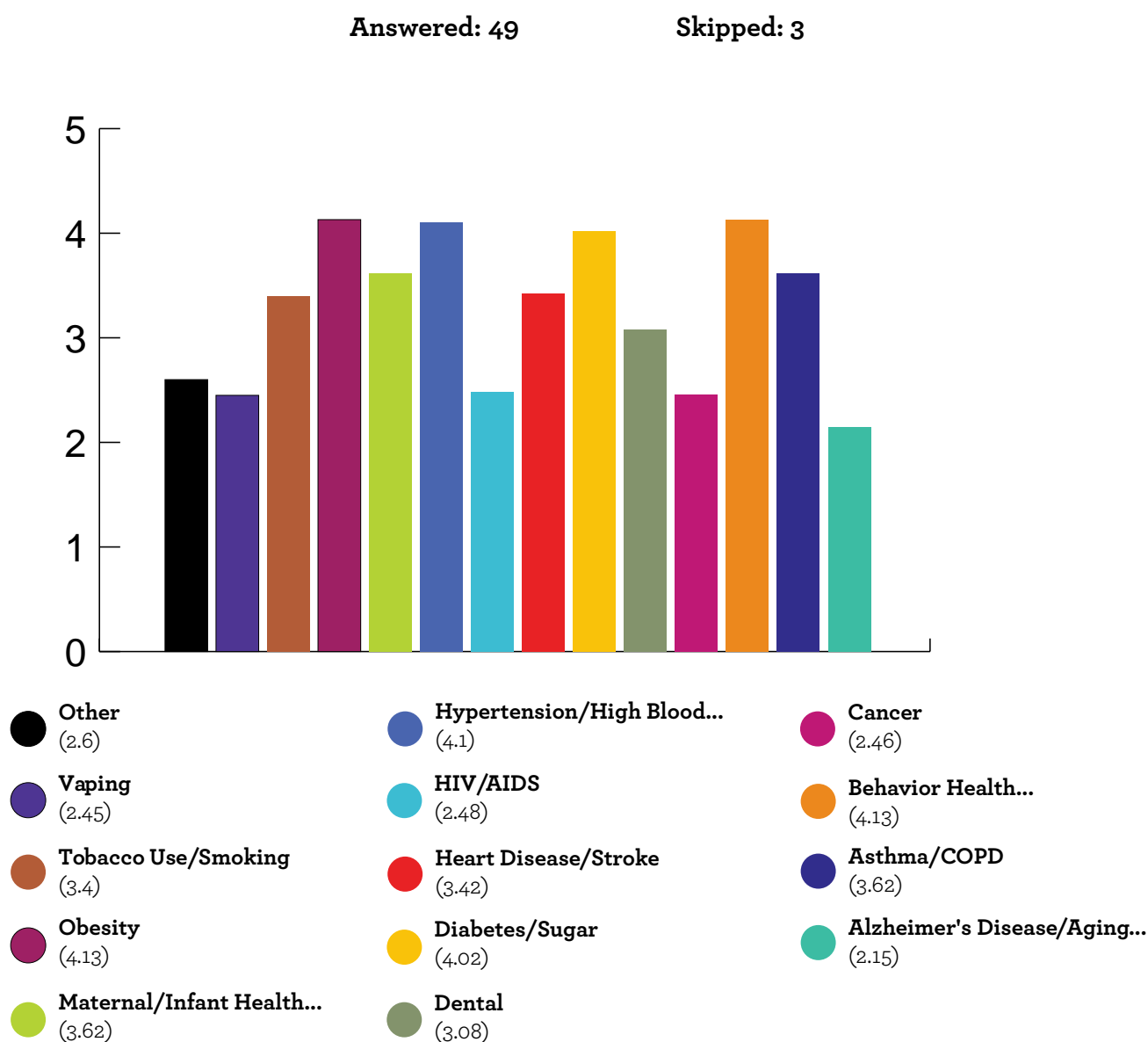
Answered: 49   Skipped: 3

● **Other** (2.6)	● **Hypertension/High Blood...** (4.1)	● **Cancer** (2.46)
● **Vaping** (2.45)	● **HIV/AIDS** (2.48)	● **Behavior Health...** (4.13)
● **Tobacco Use/Smoking** (3.4)	● **Heart Disease/Stroke** (3.42)	● **Asthma/COPD** (3.62)
● **Obesity** (4.13)	● **Diabetes/Sugar** (4.02)	● **Alzheimer's Disease/Aging...** (2.15)
● **Maternal/Infant Health...** (3.62)	● **Dental** (3.08)	

5. Health Needs: On a scale from 1-5, rate the <u>most difficult conditions to manage</u> with your patients/customers?

Answered: 49   **Skipped: 3**

- ● **Other** (2.2)
- ● **Vaping** (2.45)
- ● **Tobacco Use/Smoking** (3.2)
- ● **Obesity** (3.87)
- ● **Maternal/Infant Health...** (2.82)

- ● **Hypertension/High Blood...** (3.5)
- ● **HIV/AIDS** (2.25)
- ● **Heart Disease/Stroke** (2.48)
- ● **Diabetes/Sugar** (3.48)
- ● **Dental** (2.67)

- ● **Cancer** (2.48)
- ● **Behavior Health...** (3.75)
- ● **Asthma/COPD** (3)
- ● **Alzheimer's Disease/Aging** (2.45)
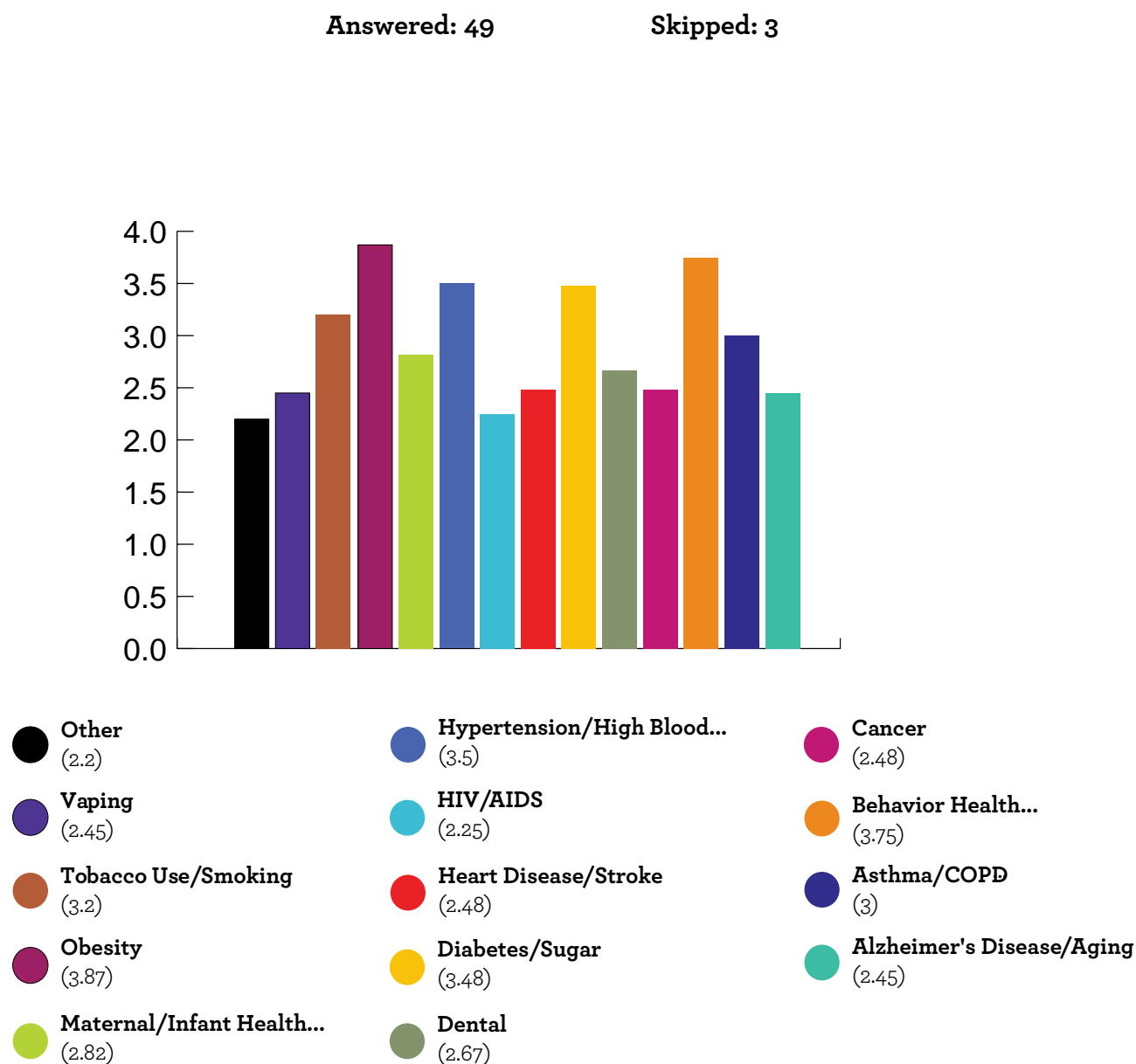
6. Barriers to Services: On a scale from 1-5, what are the most <u>significant barriers</u> that prevent people in the community from <u>accessing BMS health services</u>.

Answered: 51   **Skipped: 1**

- **Childcare-Lack of** (3.18)
- **Cultural/Ethnic Factors** (3.25)
- **Education** (3.48)
- **Financial** (4.04)
- **Food** (3.62)
- **Insurance** (3.73)
- **Housing Status** (2.62)
- **Language Needs** (3.62)
- **Transportation** (3.75)
- **Physical Environment/ Safety** (3.12)
- **Prescriptions- Inability to Pay** (3.25)
- **Scheduling/Cannot....** (3.5)
- **Unaware of Services BMS...** (3.5)
- **Unemployment** (2.5)
- **Other** (2.5)

7. Barriers to Wellness: On a scale from 1-5, what are the most significant barriers that prevent your patients/customers <u>from getting well</u>?

Answered: 50   **Skipped: 2**

- **Childcare-Lack of** (2.75)
- **Cultural/Ethnic Factors** (3.5)
- **Education** (3.5)
- **Financial** (3.68)
- **Food** (2.97)
- **Insurance** (3.55)
- **Housing Status** (2.75)
- **Language Needs** (3.42)
- **Transportation** (3.48)
- **Physical Environment/Safety** (3)
- **Prescriptions-Inability to Pay** (3.47)
- **Scheduling/Cannot....** (3.5)
- **Unaware of Services BMS...** (3.49)
- **Unemployment** (2.75)
- **Other** (2.5)
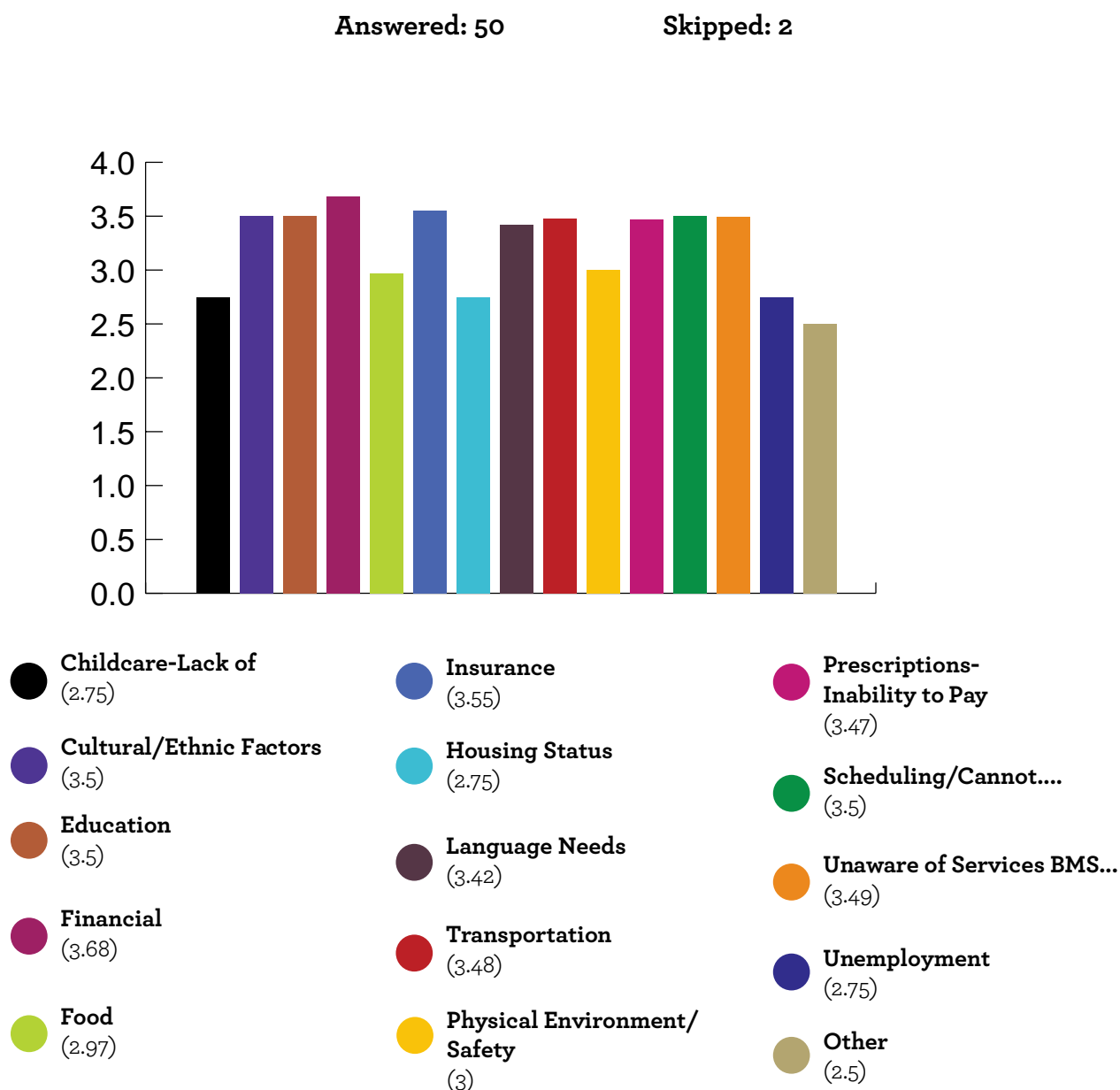
8. Which services are patients/customers seeking that are not currently being offered at BMS?

Answered: 45   **Skipped: 7**

9. The following characteristics describe a "Healthy Community." Please select the items that apply to the communities that BMS serve.

Answered: 47   Skipped: 5

● Access to Healthcare... (68.4)

● Healthy Behaviors... (44.5)

● Good Jobs and... (37.4)

● Good Schools (40)

● Strong Family Life (42.4)

● Affordable Housing (42.4)

● Low Crime/Safe (38.9)

● Good Place to Raise... (30.8)

● Religious or Spiritual... (51.4)

● Clean Environment (42.5)

● Parks and Recreation (42.5)

● Excellent Race... (42.5)

● Low Level of Child... (23.7)

● Low Adult Death and... (23.6)

● Arts and Cultural... (25.6)

● Low Infant Death (42.5)

● Other (10)

● Other (7)

10. Unique Customer Needs: What are the health care center needs or characteristics that impact the health status of BMS customers? (Location, hours, etc.)?

Answered: 49   **Skipped: 3**

- ● **Providing Transportation** (4.5)
- ● **Expanding Telehealth Services** (4)
- ● **Adding More Pharmacies** (3)
- ● **Adding More Behavioral...** (5)
- ● **Adding More Medical...** (5)
- ● **Adding Locations** (4)
- ● **Extending Hours/Weekend...** (3.5)
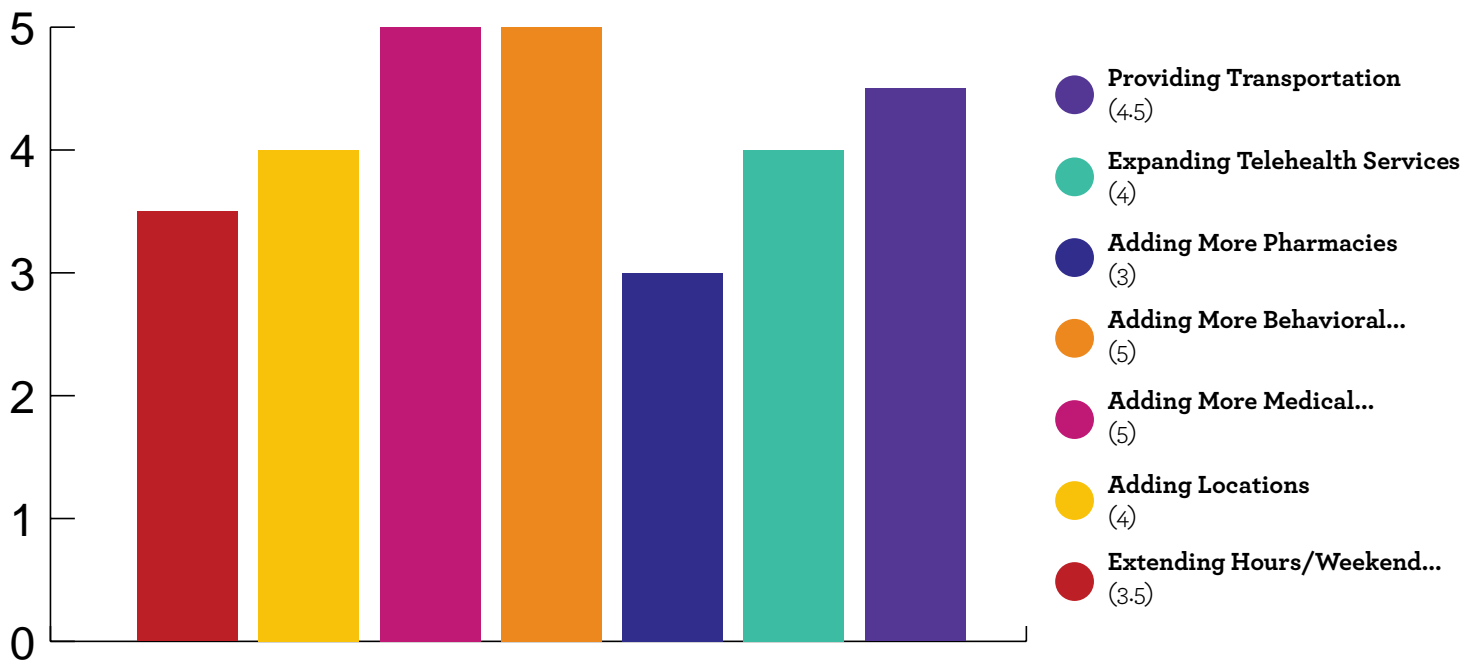
Appendix E1: BMS Staff Community Health Needs Assessment Questionnaire (continued...)

11. What are the greatest challenges you face in serving BMS patients/customers?

Answered: 50   **Skipped: 2**

Legend:
- **Other (Please Specify)** (30%)
- **Scheduling/Shift** (35%)
- **Unable to Obtain Adequate Training** (30%)
- **Technology** (60%)
- **Supplies** (20%)
- **Staffing Shortage** (73.4%)
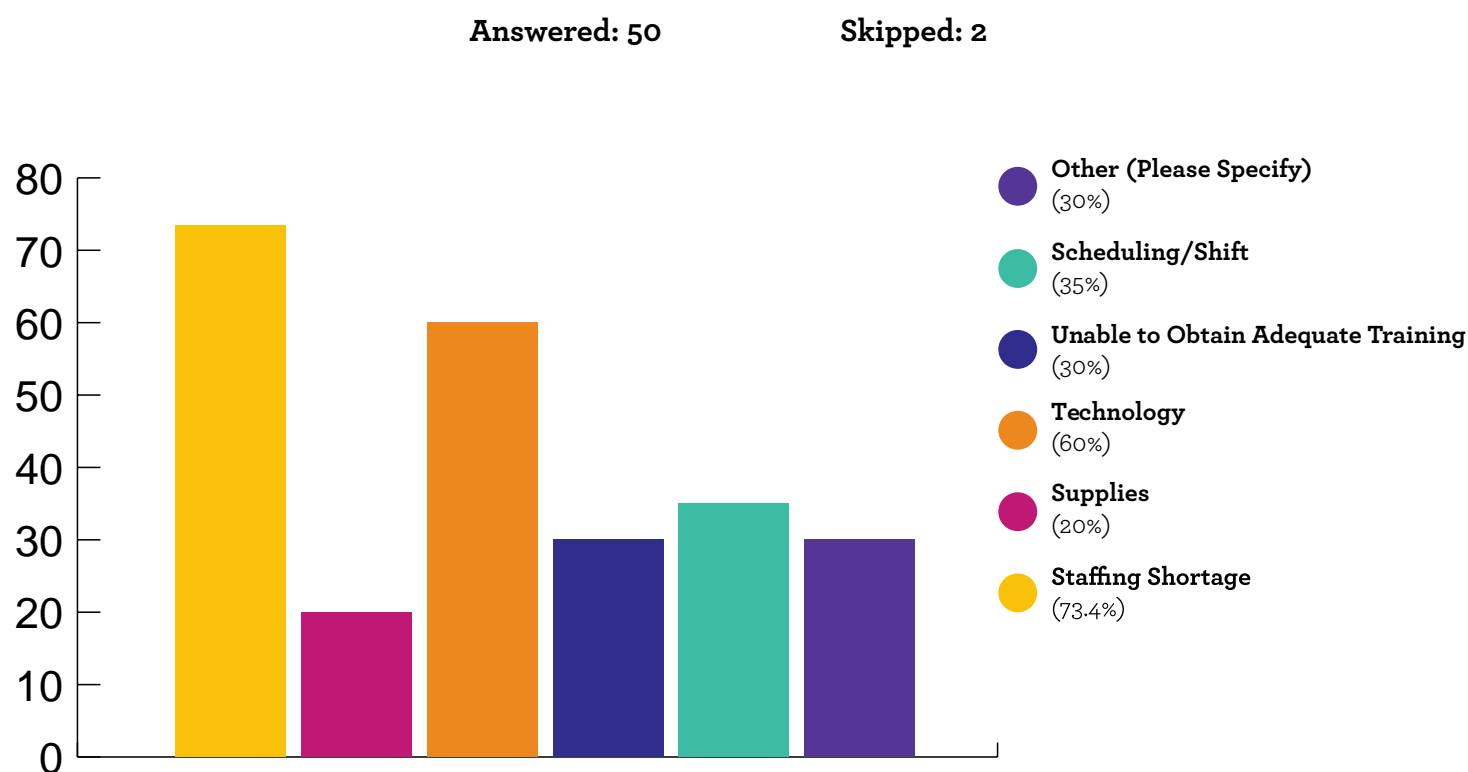
Other: Scheduling/PCP Availability – 34%, Language Barrier – 17%, IT Support 17%, Training – 8%, Communication 8%, Lack of administration support 8%, Covid19 Guidelines 8%

12. How is BMS data used to inform or drive organizational strategy and initiatives?

Answered: 38 **Skipped: 14**

- **Patient Care**
  (13)
- **Not Used/Not Used Appropriately**
  (34)
- **Quality/Performance Measures**
  (40)
- **Not Sure/Not Applicable**
  (13)

13. What formal or informal partnerships do you have within the community to promote/support your work at BMS?

Answered: 40 **Skipped: 12**

- **Hospitals**
  (13)
- **Family/Friends**
  (8)
- **External Collaboration
  (Funders, Social Services,
  Other Providers,
  Health Departments)**
  (29)
- **Not Sure/Not Applicable**
  (50)

14. Please provide your assessment of this statement. "BMS has a strong commitment to diversity, equity and inclusion."

Answered: 51   Skipped: 1

Answer Choices	Responses	
Strongly Disagree	11.76%	6
Disagree	0.00%	2
Neither Agree nor Disagree	15.69%	8
Agree	37.25%	19
Strongly Agree	35.29%	18
Total		51

15. Please rate the degree in which the Covid19 pandemic has impacted your work as a BMS staff member.

Answered: 51   Skipped: 1

Answer Choices	Responses	
Minor	3.92%	2
Low	1.96%	1
Moderate	21.57%	11
Significant	54.90%	28
Severe	17.65%	9
Total		51

Appendix E2: BMS Human Resources Community Health Needs Assessment Questionnaire

1. Please provide your assessment of this statement. "BMS has a strong commitment to diversity, equity and inclusion."

Answered: 4   Skipped: 0

Answer Choices	Responses	
Strongly Disagree	0%	0
Disagree	0%	0
Neither Agree nor Disagree	0%	0
Agree	100%	4
Strongly Agree	0%	0
Total		**4**

2. Please rate your assessment of this statement. "Staffing structure currently meets the needs of the patient population (i.e. proportion of staff within each service area contrasted to demand)."

Answered: 4   Skipped: 0

Answer Choices	Responses	
Does not meet	25.00%	1
Meets some	75.00%	3
Meet	0.00%	0
Exceedingly Meet	0.00%	0
Far Exceeds Meet	0.00%	0
Total		**4**

3. Please provide any additional information on how your staffing structure currently meets the needs of the patient population.

Answered: 2   Skipped: 2

Answer Choices	Responses	
	Would be better if able to fill a lot of open positions	1
	See previous answer.	1
Total		**2**

4. Please rate the degree in which the Covid19 pandemic has impacted the work of BMS staff?

Answered: 2   Skipped: 2

Answer Choices	Responses	
Minor	0.00%	0
Low	0.00%	0
Moderate	50.00%	2
Significant	25.00%	1
Severe	25.00%	1
Total		**4**

Appendix E3: BMS Customer/Patient Community Health Needs Assessment Questionnaire

Of the 103 customer/patient questionnaires, the majority of respondents (70%) identified their race or ethnicity as African American/Black compared to 18% identified as White. 4% identified as Native American/Alaskan Native, 2% Hispanic and/or Latin descent, 1% Middle Eastern/North African and 3% preferred to not answer. 78% of respondents identified their current sex as female and gender as woman while 21% identified their current sex as male and 20% identified their gender/gender identity as man.

Additionally, the majority of respondents (94%) have never served in the military and identify their employment status as employed full-time (49%), not employed but looking (17%) and employed part- time (12%). Most respondents have a high school diploma or G.E.D (48%) or some college or technical school (25%).

While the age of the respondents varied, the highest category of ages was 25-34 (32%) and 35-44 (22%). Those that visited Baltimore Medical System sites identified their most important needs, difficult conditions to manage, most difficult challenges to accessing Baltimore Medical System services, and missing services in the community. The following information lists the responses by site. It is notable that some respondents answered N/A (not applicable) to most important needs (23%), difficult conditions to manage (60%) and most difficult challenges with accessing Baltimore Medical System services (60%) leading to further inquiry into whether respondents have underlying health conditions, are in general good health or are coming into Baltimore Medical System for another service not listed. Examining office visit types may lead Baltimore Medical System in determining if the majority of their customers/patients visits are sick or well visits or other type of service.

1. Please provide the zip code in which your home is located.

Answered: 101   **Skipped: 2**

Location	Bel Air	EBMC	HHLC	Middlesex		St. Agnes and Pine Heights	
Patient Responses	18	29	19	17		20	
Zip Code	21040	21202	21205	21205	21220	21045	21208
	21206	21205	21222	21221	21221	21215	21216
	21214	21206	21206	21222	21224	21223	21226
	21215	21207	21224	21231	21234	21227	21228
	21216	21209	21207	21237	21239	21229	21231
	21218	21212	21234				
	21231	21213	21213				
	21787	21215	21236				
	21136	21217	21218				
	21213	21222	21244				
		21223	21221				
		21225					
		21230					
		21234					
		21236					

Appendix E3: BMS Customer/Patient Community Health Needs Assessment Questionnaire

2. What is your current age?

Answered: 103   **Skipped: 0**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Under 17	0%	-----	0%	-----	0%
18-24	6%	24%	21%	6%	5%
25-34	34%	21%	47%	41%	25%
35-44	17%	35%	11%	23%	20%
45-54	22%	7%	5%	12%	10%
55-64	17%	-----	16%	18%	25%
65-74	6%	10%	0%	-----	10%
75 or older	0%	3%	0%		5%
Prefer not to answer	0%	-----	0%	-----	0%

3. What is your current sex?

Answered: 103   **Skipped: 0**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Female	72%	86%	84%	76%	65%
Male	28%	14%	11%	24%	35%
Preferred response not listed	-----	-----	-----	-----	-----
Prefer not to answer	-----	-----	5%	-----	-----

4. What is your gender/gender identity? What is your current age?

Answered: 103   **Skipped: 0**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Female	78%	86%	79%	76%	65%
Male	22%	14%	11%	24%	35%
Transgender/Gender Non-confirming	-----	-----	5%	-----	-----
Preferred response not listed	-----	-----	-----	-----	-----
Prefer not to answer	-----	-----	5%	-----	-----

5. Please indicate the racial or ethnic groups with which you identify.

Answered: 102   **Skipped: 1**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
African- American/Black	88%	86%	60%	47%	60%
Asian American/Asian	-----	-----	-----	-----	-----
Hispanic/Latino/a	-----	-----	-----	-----	10%
Middle Eastern/North African	-----	-----	-----	-----	5%
Native American/Alaskan Native	-----	-----	5%	6%	10%
Native Hawaiian/Other Pacific Islander	6%	-----	5%	-----	-----
White	6%	10%	25%	41%	15%
Other	-----	-----	-----	-----	-----
Prefer not to answer	-----	4%	5%	6%	-----

Appendix E3: BMS Customer/Patient Community Health Needs Assessment Questionnaire

6. Have you ever served in the U.S. Armed Forces, Military Reserves, or National Guard?

Answered: 103   **Skipped: 0**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Currently serving	-----	-----	-----	-----	5%
No longer serving	-----	4%	5%	6%	5%
Never served	100%	97%	90%	94%	90%
Prefer not to answer	-----	-----	5%	-----	-----

7. What is your marital status?

Answered: 103   **Skipped: 0**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Divorced	6%	3%	5%	6%	15%
Married	27%	25%	27%	35%	20%
Member of an unmarried couple	0%	-----	5%	6%	5%
Never Married	61%	59%	58%	53%	35%
Separated	-----	7%	-----	-----	20%
Widowed	-----	3%	-----	-----	5%
Prefer not to answer	6%	3%	5%	-----	-----

8. What is the highest grade or year of school you completed?

Answered: 103   Skipped: 0

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Never attended school	-----	-----	-----	-----	-----
Some high school, no diploma	-----	10%	10%	6%	20%
High School diploma or G.E.D	50%	55%	53%	47%	35%
Some college or technical school	33%	21%	16%	41%	20%
College graduate (four years or more)	-----	7%	16%	6%	10%
Graduate-level degree	11%	7%	-----	-----	10%
Prefer not to answer	6%	-----	5%	-----	5%

9. Which of the following categories best describes your employment status?

Answered: 97   Skipped: 6

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Employed, full-time	50%	41%	58%	53%	40%
Employed, part-time	10%	15%	16%	13%	5%
Not employed, looking for work	22%	15%	16%	13%	5%
Not employed, NOT looking for work	0%	7%	0%	13%	5%
Retired	6%	7%	0%	0%	10%
Disable, not able to work	6%	4%	11%	0%	5%
Student	6%	4%	5%	7%	5%
Homemaker	0%	0%	0%	7%	0%
Prefer not to answer	0%	4%	5%	7%	10%

Appendix E3: BMS Customer/Patient Community Health Needs Assessment Questionnaire

10. On a scale from 1-5, what are YOUR Most Important Needs:

Answered: 97   Skipped: 6

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Alzheimer's disease/Aging issues	2	2	2	2	2
Behavioral Health: substance use & mental health	3	3	3	4	2
Dental	3	4	4	3	4
Maternal/Infant health (pregnancy)	2	3	3	3	2
Medical	4	4	4	4	5
Prescriptions	3	4	3	3	5
Other: such as housing, transportation, language, finances, etc.	3	4	3	4	4

11. How would you rate YOUR most difficult conditions to manage?

Answered: 95   Skipped: 8

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Alzheimer's disease/Aging issues	1	2	1	2	2
Asthma/COPD	2	3	2	2	1
Behavioral Health: substance use & mental health	2	4	2	3	2
Cancer	1	3	1	2	1
Dental	2	3	2	3	3
Diabetes/Sugar	1	3	2	2	3
Heart Disease/Stroke	1	3	2	2	2
HIV/AIDS	1	2	1	1	1
Hypertension/High Blood Pressure	2	3	3	3	2
Maternal/Infant health (pregnancy)	1	3	2	3	3
Obesity	2	3	3	3	3
Tobacco use/Smoking	2	3	3	3	2
Vaping	2	2	1	2	2
Other	1	1	0	4	1

12. What are the most difficult challenges that prevent YOU from coming to BMS for care?

Answered: 92   **Skipped: 11**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Childcare - Lack of	1	2	3	2	2
Cultural/ethnic factors	1	2	1	1	2
Disability	1	2	1	1	2
Education/Understanding	1	3	2	1	2
Finances	2	3	3	3	3
Housing	1	3	2	1	2
Insurance	1	3	3	3	3
Language	1	1	1	2	2
Scheduling/Cannot get appointment	2	3	2	3	3
Prescriptions- cost	2	4	4	2	2
Physical environment	1	3	1	2	2
Transportation	1	4	4	2	3
Unemployment	1	4	2	1	2
Other	-----	0	-----	1	-----

13. How would you rate your ability to access ANY healthcare at BMS BEFORE Covid19?

Answered: 97   Skipped: 6

Access to Healthcare at Baltimore Medical System BEFORE COVID-19
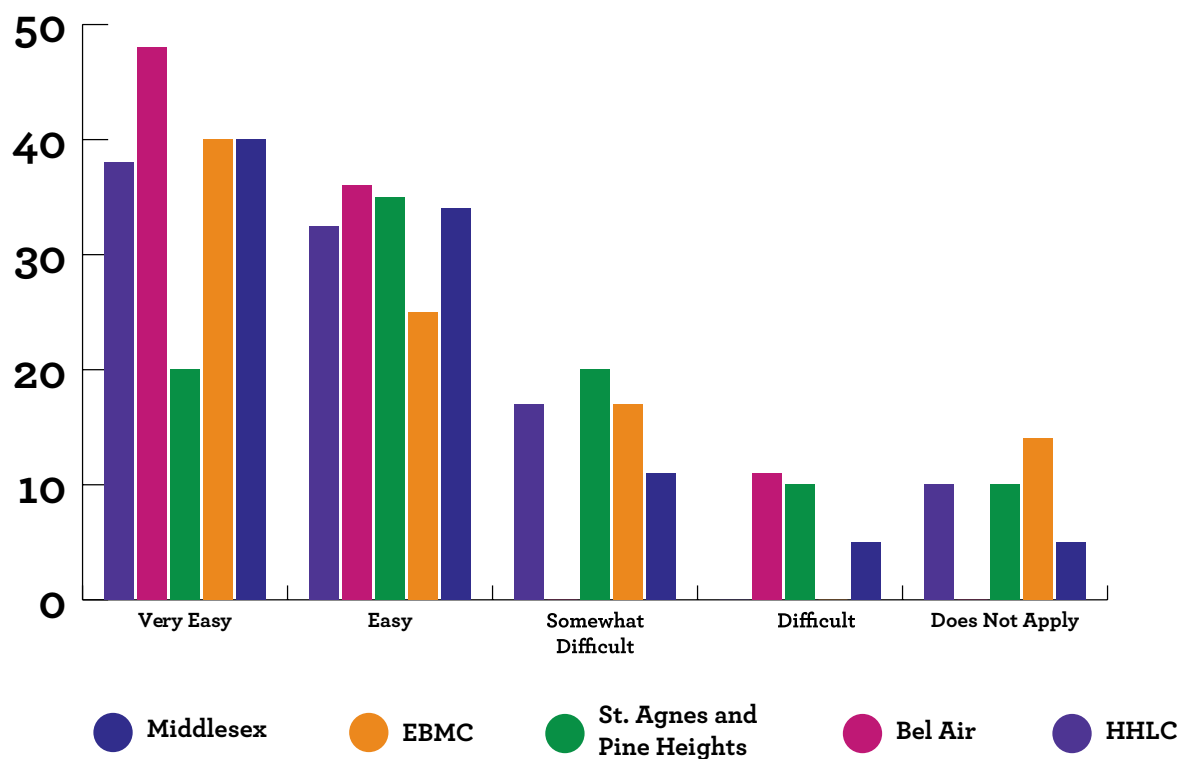
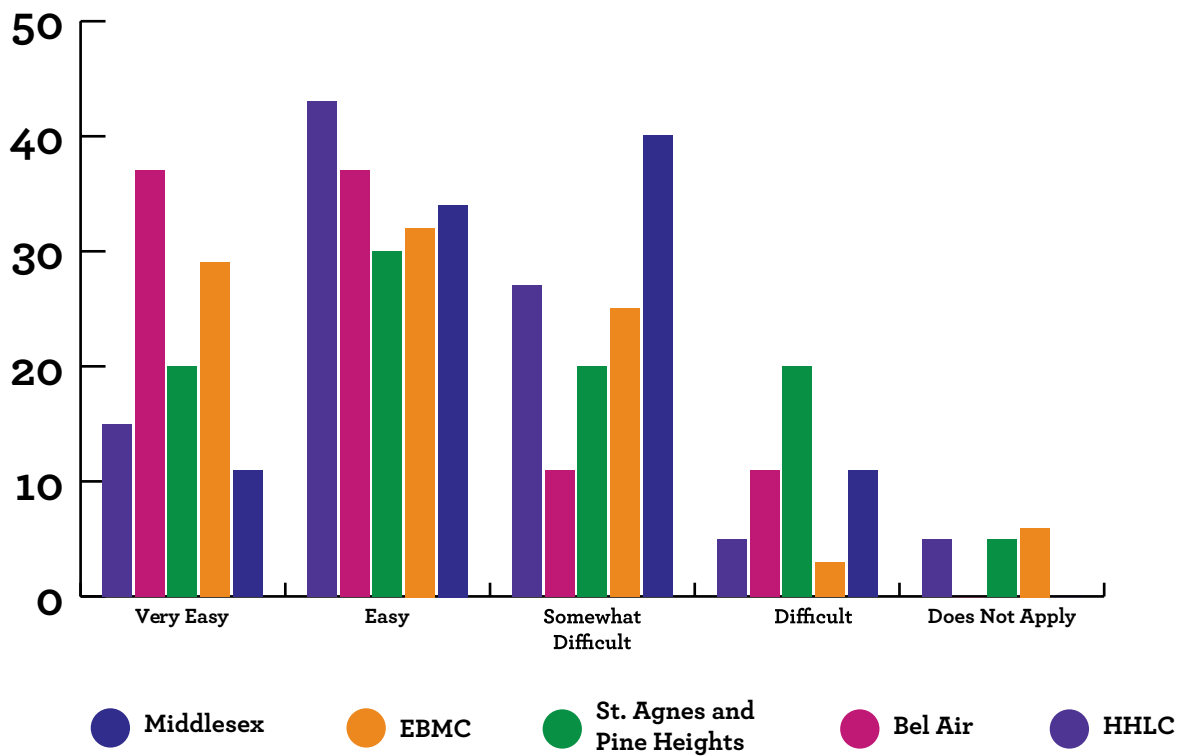14. How would you rate your ability to access ANY healthcare at BMS DURING Covid19?

Answered: 97   **Skipped: 6**

Access to Healthcare at Baltimore Medical System DURING COVID-19

Legend:
- Middlesex
- EBMC
- St. Agnes and Pine Heights
- Bel Air
- HHLC

15. Overall, how would you rate yourself during the 2020 Coronavirus Pandemic?

Answered: 98   **Skipped: 5**

● Excellent   ● Somewhat Good   ● Average   ● Somewhat Poor   ● Poor   ● Not Sure
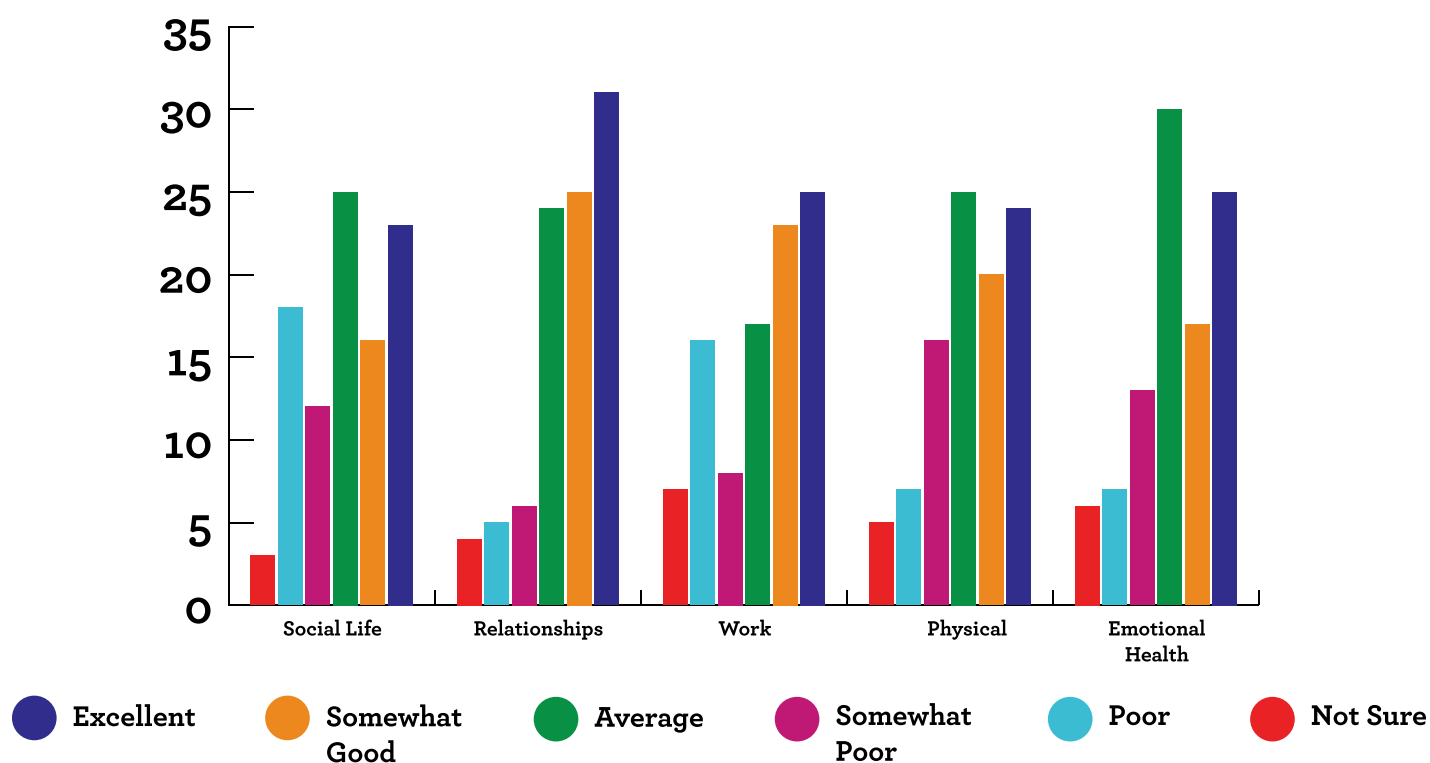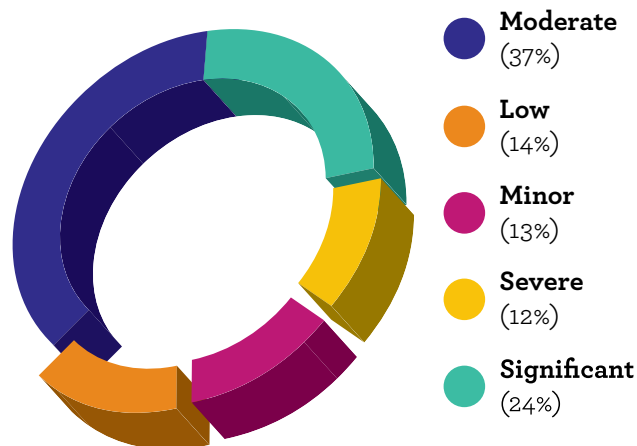
16. Please rate the degree in which the Covid19 pandemic has impacted you (including work and home life)?

Answered: 92   **Skipped: 11**

- Moderate (37%)
- Low (14%)
- Minor (13%)
- Severe (12%)
- Significant (24%)

17. Which services would you like to see at BMS that are not currently available?

Answered: 47   **Skipped: 56**

Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Direct telephone number	Dental	Hand sanitizer stations	Call Center Availability	Dental
Weight Loss Management	Food eatery/ Vending	Home buyer program	Dental	Transportation
-----	Free Shuttle	More physical health program	Contact info updated before mailing	-----
-----	Mental health facility	Patient parking lot	No call center	-----
-----	WIC	-----	Pharmacy	-----
-----	X-Ray and Ultrasound	-----	WIC	-----

18. What services are missing in the <u>community</u> where you live that are important for you and your family?

Answered: 48   **Skipped: 58**

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Alzheimer's/Aging Services	-----	30%	-----	10%	-----
Nutritional (Access to fresh fruit/ vegetables, nearby grocery store, etc.)	25%	60%	43%	30%	46%
Behavioral health (Mental health, substance use)	13%	60%	-----	40%	8%
Parks and Recreation	-----	40%	43%	40%	15%
Childcare	13%	60%	14%	40%	8%
Physical health (Gym, Yoga, etc.)	25%	40%	29%	40%	38%
Community or Youth Center	50%	80%	43%	70%	-----
Public Transportation	-----	30%	14%	10%	8%
Developmental Disability Services	13%	40%	-----	30%	-----
Vocational services (job training, job search, etc.)	50%	60%	29%	60%	31%
Educational/Tutoring	63%	50%	43%	50%	15%
Medical (including dental, vision, maternal/infant health)	-----	40%	14%	30%	15%
Other (please list) *Bel Air(Security),HHLC (Housing)*	13%	10%	14%	-----	-----

19. Is there any other information that you would like to share?

Answered: 36   **Skipped: 67**

Baltimore Medical System is amazing. I have been receiving treatment for over 20 years and have always received the Best care possible and I truly thank everyone! – Bel Air Patient

Hard to talk to the doctor or his staff. I realize they are busy. – St. Agnes/Pine Heights Patient The front desk is very friendly. – St. Agnes/Pine Heights Patient

Mental health is a big issue right now especially dealing with covid19. Wish it was more access and availability for appointments. Many places are booked months out. – Middlesex Patient

I've had a pleasant visit, thank you. – Middlesex Patient I like the clinic. – EBMC Patient

I like the clinic. – EBMC Patient

Appendix F – Baltimore Medical System Key Staff Interview Questions

Appendix F1
Focused Interview: Behavioral Health Services

1. Primary Needs: On a scale from 1-5, rate the following needs of your customers: behavioral health (mental health/substance use), dental, medical, Social Determinants of Health (SDoH), and other:

2. Barriers to Services: On a scale from 1-5, what are the most significant barriers that prevent people in the community from accessing BMS health services.

3. Barriers to Wellness: On a scale from 1-5, what are the most significant barriers that prevent your patients/customers from getting well?

4. Which services are patients/customers seeking that are not currently being offered at BMS?

5. What resources or services are missing in the community that are important for a "Healthy Community"? Examples include:

6. What are the top three behavioral health issues or challenges experienced by your patients (e.g. particular diagnosis, use of tobacco/vaping, binge drinking, lack of access to treatment, etc.)?

7. What additional behavioral health programming or services would you like to see implemented at BMS?

8. Unique Customer Needs: What are the health care center needs or characteristics that impact the health status of BMS customers? (e.g. location, hours, etc.)?

9. How is BMS data used to inform or drive organizational strategies and initiatives?

10. What formal or informal partnerships do you have within the community to promote/support your work at BMS?

Appendix F2 – Baltimore Medical System Key Staff Interview Questions
Focused Interview: Refugee Program

1. Primary Needs: On a scale from 1-5, rate the following needs of your customers: behavioral health (mental health/substance use), dental, medical, Social Determinants of Health (SDoH), and other:

2. Barriers to Services: On a scale from 1-5, what are the most significant barriers that prevent people in the community from accessing BMS health services.

3. Barriers to Wellness: On a scale from 1-5, what are the most significant barriers that prevent your patients/customers from getting well?

4. Which services are patients/customers seeking that are not currently being offered at BMS?

5. What resources or services are missing in the community that are important for a "Healthy Community"?

6. What is the proportion of patients whose primary language is not English or who have a limited English proficiency?

7. What are the top three non-English language requested languages?

8. Unique Customer Needs: What are the health care center needs or characteristics that impact the health status of BMS customers? (Location, hours, etc.)?

9. What are the key benefits of the Refugee program and services provided – list three.

10. What are the greatest challenges you face in serving BMS patients/customers?

11. How is BMS data used to inform or drive organizational strategy and initiatives?

12. What formal or informal partnerships do you have within the community to promote/Businesses in Highlandtown area

13. Are there any other insights you can provide about services, operations and gaps?

Appendix F3 – Baltimore Medical System Key Staff Interview Questions
Focused Interview: Human Resources

Please provide information on the following:

- Types and frequency of trainings to advance culturally competent care

- Types and frequency of trainings that align with the organization's mission and vision

- Types and frequency of trainings that align with the National CLAS standards

- Demographical composition of employees – e.g. sex, ethnicity, languages spoken

- Total number of employees and employee designation/categorization by job type (e.g. # of MAs, # of CHWs, # of providers, # of administrative staff)

- Patient surveys – trends within the past three years

- Top three areas of strengths

- Top three weaknesses

Appendix G: Patient Perceptions: Important Conditions in My Community

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Alzheimer's/Aging Services	-----	30%	-----	10%	-----
Nutritional (Access to fresh fruit/ vegetables, nearby grocery store, etc.)	25%	60%	43%	30%	46%
Behavioral health (Mental health, substance use)	13%	60%	-----	40%	8%
Parks and Recreation	-----	40%	43%	40%	15%
Childcare	13%	60%	14%	40%	8%
Physical health (Gym, Yoga, etc.)	25%	40%	29%	40%	38%
Community or Youth Center	50%	80%	43%	70%	-----
Public Transportation	-----	30%	14%	10%	8%
Developmental Disability Services	13%	40%	-----	30%	-----
Vocational services (job training, job search, etc.)	50%	60%	29%	60%	31%
Educational/Tutoring	63%	50%	43%	50%	15%
Medical (including dental, vision, maternal/infant health)	-----	40%	14%	30%	15%
Other (please list) *Bel Air(Security),HHLC (Housing)*	13%	10%	14%	-----	-----
Other: Belair (security), HHLC (housing)					

Patient perceptions: Important conditions to my community

- **Childcare-Lack of** (3.2)
- **Cultural/Ethnic Factors** (3.3)
- **Education** (3.49)
- **Financial** (3.6)
- **Food** (2.8)
- **Insurance** (3.9)
- **Housing Status** (2.6)
- **Language Needs** (3.6)
- **Transportation** (3.7)
- **Physical Environment/ Safety** (3.1)
- **Prescriptions- Inability to Pay** (3.2)
- **Scheduling/Cannot....** (3.5)
- **Unaware of Services BMS...** (3.5)
- **Unemployment** (2.5)
- **Other** (2.6)
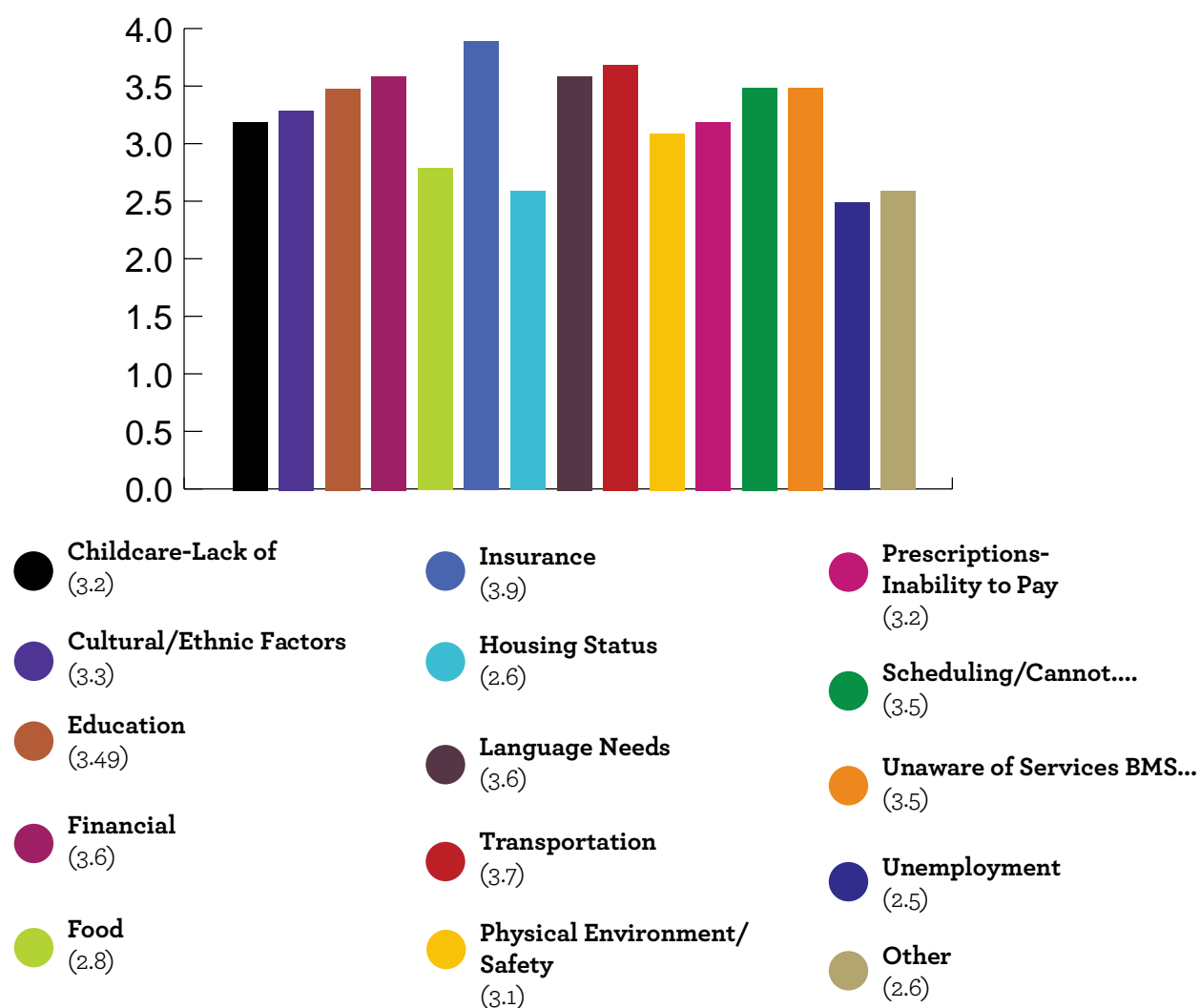
Appendix H Patient Perceptions: Difficult Conditions to Manage

Answered: 95   Skipped: 8

Location	Bel Air	EBMC	HHLC	Middlesex	St. Agnes and Pine Heights
Alzheimer's disease/Aging issues	1	2	1	2	2
Asthma/COPD	2	3	2	2	1
Behavioral Health: substance use & mental health	2	4	2	3	2
Cancer	1	3	1	2	1
Dental	2	3	2	3	3
Diabetes/Sugar	1	3	2	2	3
Heart Disease/Stroke	1	3	2	2	2
HIV/AIDS	1	2	1	1	1
Hypertension/High Blood Pressure	2	3	3	3	2
Maternal/Infant health (pregnancy)	1	3	2	3	3
Obesity	2	3	3	3	3
Tobacco use/Smoking	2	3	3	3	2
Vaping	2	2	1	2	2
Other	1	1	0	4	1

Patient perceptions: Conditions difficult to manage

Legend:

- **Other** (7)
- **Vaping** (9)
- **Tobacco Use/Smoking** (13)
- **Obesity** (14)
- **Maternal/Infant Health...** (11)
- **Hypertension/High Blood...** (14)
- **HIV/AIDS** (6)
- **Heart Disease/Stroke** (10)
- **Diabetes/Sugar** (11)
- **Dental** (13)
- **Cancer** (8)
- **Behavior Health...** (13)
- **Asthma/COPD** (10)
- **Alzheimer's Disease/Aging...** (8)
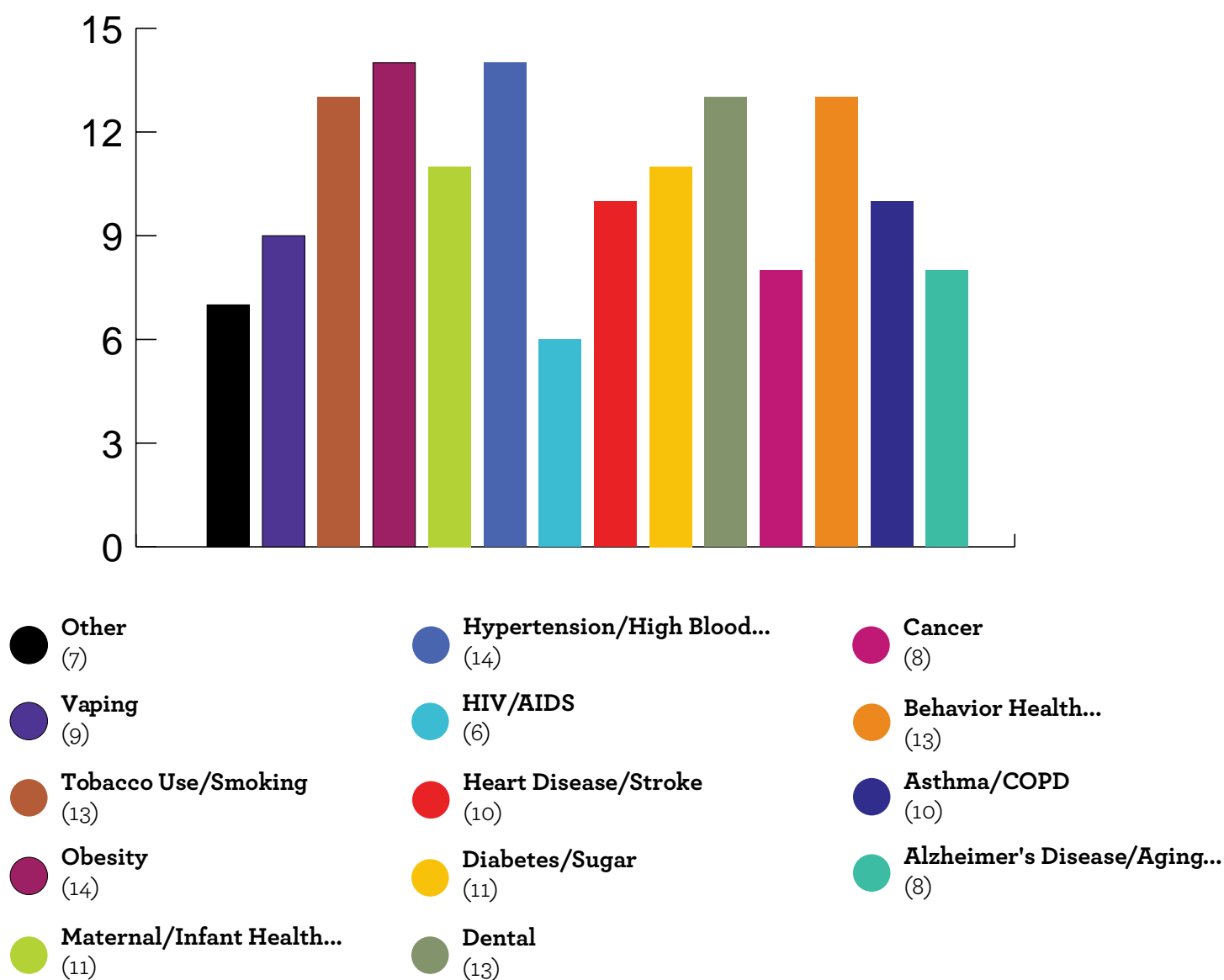
Summary of health needs ranked across all five sites as ranked by patients. This information is based on the average number of responses and rounded to the nearest number

Baltimore Medical System

THE HEART OF COMMUNITY HEALTH