COMMUNITY HEALTH NEEDS ASSESSMENT

June 2018

MT. WASHINGTON PEDIATRIC HOSPITAL

Approved by Hospital and Foundation Boards: June 14, 2018

Mt. Washington Pediatric Hospital

Where Children Go to Heal and Grow

An affiliate of University of Maryland Medical System and Johns Hopkins Medicine

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Executive Summary

Background

Located in Baltimore, Maryland, Mt. Washington Pediatric Hospital (MWPH) has provided specialty rehabilitative and transitional medical care to children for over 96 years. We treat infants, adolescents, and young adults with medically complex illnesses or chronic disabilities such as developmental delays, cerebral palsy, pervasive respiratory diseases, and brain damage. The hospital is guided by a family-centered philosophy to not only help youth with complex medical issues, but assist the entire family in understanding and living with the challenges ahead. It is our mission to provide the highest possible quality care and to improve both health outcomes and experiences for the populations we serve. We are dedicated to improving the lives of children and young adults with complex medical needs through patient care, professional training and community initiatives.

MWPH vision is to lead the region in producing or facilitating comprehensive, supportive, culturally competent, respectful, and high-quality health care services for children with ongoing special health care needs. We will continue active participation in projects with government, private, and philanthropic organizations both locally and nationally to help ensure unconditional access to services by all chronically disabled populations.

Beginning in July 1 2017, MWPH undertook a comprehensive community health needs assessment (CHNA) to evaluate the health needs of children with special health care needs in Baltimore City, Maryland. The aim of the assessment is to reinforce MWPH's commitment to the health of residents and align its health prevention efforts with the community's greatest needs. The assessment examined a several health indicators including chronic health conditions, access to health care, and social determinants of health.

The completion of the CHNA enabled MWPH to take an in-depth look at its community. The findings from the assessment were utilized by MWPH to prioritize public health issues and develop a community health implementation plan focused on meeting community needs. This CHNA targets the needs of children and young adults with developmental disabilities and other disorders in Baltimore City as well as their families. This CHNA Final Summary Report serves as a compilation of the overall findings of each research component.

To focus the organization's efforts around community health improvement and provide structure for addressing the determinants of health and illness in the community, MWPH utilized the Association of Community Health (ACHI) Community Needs Assessment nine-step pathway for guidance, infrastructure and developing implementation strategies.

This Included:

- **Reflect, Establish Infrastructure, and Strategize**: Before beginning a new assessment cycle, MWPH reflected on its previous CHNA to identify what elements worked well, areas for process improvement and whether the implementation strategies had their desired impact.

- **Identify and Engage Stakeholders**: The Community Advocacy Team continues to establish robust, trusting relationships with community stakeholders and foster a welcoming and inclusive environment, creating a stronger sense of joint ownership of the CHNA process.

- **Community Engagement**: To engage the community MWPH collaborated with other Baltimore City hospitals to collect 4,755 surveys. MWPH collected 1,236 of its own responses through surveys at public events. MWPH also held 10 focus groups, local health improvement meetings, and discussions with health experts.

- **Define the Community**: To specify the geographic focus and population characteristics for the scope of the assessment and implementation strategies, MWPH accessed data by ZIP code (top 60% of admissions/outpatient visits), census tract, and the Baltimore City Health Department Neighborhood Profile data. The team also connected with the parents of children with special health care needs through The Parents Place of MD and hospital support groups to truly understand their concept of community.

- **Collect and Analyze Data**: Data analysis included a combination of quantitative and demographic data. The data was summarized and synthesized to develop an overall picture of community health and to highlight the particular health needs of various populations.

- **Prioritize Community Health Issues**: On April 30, 2018 a community stakeholder meeting was held to determine the most pressing community health needs. Attendees included community members, community leaders, hospital management and executive board, and members of the hospital and foundation board.

- **The Criteria for Prioritization**:
    - Magnitude of the problem
    - Severity of the problem
    - Need among vulnerable populations
    - Ability to have a measurable impact on the issue
    - Existing interventions focused on the issue

- Whether the issue is a root cause of other problems
- Trending health concerns in the community
- Alignment with MWPH's exiting priorities and whether finances/resources to address the health concern
- Potential barriers or challenges to addressing the need

- **Priorities Identified**:
  - **Health Literacy & Chronic Disease Prevention Education**
  - **Violence & Child Maltreatment**
  - **Transportation**
  - **Behavioral Health & Substance Abuse**
  - **Access to Health Care**
  - **Mental Health**
  - **Obesity and Access to Healthy Foods**

- **Social Determinants of Health Identified as Priorities/Unmet Community Health Needs**: There were several social determinants of health or external factors identified as "primary needs" or "root causes" in the prioritization process. These included: health equity, poverty/unemployment, and housing. These priorities will be identified in the implementation plan as "Community Support Services." It is impractical for MWPH to prioritize these as part of the CHNA, given the inability to make a considerable impact in a 3-year period.

- **Previous CHNA and Prioritized Health Issues:** MWPH conducted a comprehensive CHNA in 2014 to evaluate the health needs of individuals living in the hospital service area within Greater Baltimore. The purpose of the assessment was to gather information about local health needs and health behaviors. The assessment provided guidance to MWPH to prioritize six health issues and develop a community health implementation plan to improve the health of the surrounding community The prioritized health issues were:
  - Maternal/Child Health
  - Childhood Obesity/Chronic Disease(CVD/Diabetes)
  - Injury, Trauma, Violence Prevention
  - Lead Poisoning
  - Health Literacy (Education & Outreach)
  - Access to Health Care

- **Previous CHNA Outcomes:**
  - 10,123 Families received education about lead poisoning through Health Education and Outreach
  - 38,027 families received education on preventable injures
  - 703 participants in 36 Safety Baby Showers receiving education on preventable injuries such as scalding/burns, traumatic brain injury as a

result of poor child passenger safety, falls, furniture tip-overs, child maltreatment, poisoning, and sudden infant death syndrome.

- 668 Children completed obesity prevention school-based program Healthy Living Academy.
- 304 Regular attendees to support groups for diabetes, weight management, traumatic brain injury, and parents with children who have medically complex needs.
- 106 Providers participated in health literacy education training and motivational interviewing

- **Document and Communicate Results:** Hospital Board approved CHNA on June 14. 2018. Next MWPH engaged internal and external partnerships in the implementation planning and an action plan was developed for each strategy and includes a detailed description of specific activities, roles and timelines. Finally, to assess the impact of MWPH's strategies and progress towards its goals, MWPH will use a modified version of the Center of Disease Control's evaluation guidelines to establish process metrics, criteria, and framework.

Introduction

Organization Overview of MWPH

Mt. Washington Pediatric Hospital (MWPH) is a specialty hospital that serves children with medically complex conditions, from birth to the age of 21. Founded in 1922, the hospital is coming close to its centennial year. Since our founding, MWPH has retooled itself to take care of a whole host of children and their illnesses.

Today, we are very contemporary in taking care of children who are medically complex and come out of pediatric or neonatal intensive care units. In 2006, we became a co-owned facility with the University of Maryland Medical System and Johns Hopkins Medicine.

Our values: Mt. Washington Pediatric Hospital will act in a manner consistent with these values:

Quality - Adhere to the highest standards of care in a safe environment
Integrity - Act with honesty and truthfulness in all patient care and business activities
Respect - Treat all individuals with compassion, dignity and courtesy
Education - Promote lifelong learning

The licensed bed designation of Mt Washington Pediatric Hospital (MWPH) is 102, which includes pediatric specialty, pediatric chronic illness, and neonatal transitional care. Inpatient admissions for FY17 were 801 admissions.

Our History

In 1922, a medical social worker named Hortense Kahn Eliasberg sought to open a home where children could safely recover from illness and surgery.

Thanks to her efforts, the Happy Hills Convalescent Home for Children opened later that year in Northwest Baltimore. It has since evolved into the Mt. Washington Pediatric Hospital, a leader in local pediatric care. Today, those who work at Mt. Washington Pediatric Hospital remain committed to the mission Hortense Kahn Eliasberg established so many years ago - improving the health and well-being of all children who are ill, injured, or in need of help.

Methodology and Background

To focus the organization's efforts around community health improvement and provide structure for addressing the determinants of health and illness in the community, MWPH utilized the Association of Community Health (ACHI) Community Needs Assessment nine-step pathway for guidance, infrastructure and developing implementation strategies. (Figure 1)

To complete a comprehensive assessment of the needs of the community, the Association for Community Health Improvement's (ACHI) 6-step Community Health Assessment Process was utilized as an organizing methodology. The University of Maryland Medical Systems (UMMS) Community Benefit Team (CBT) served as the lead team to conduct the Community Health Needs Assessment (CHNA) with input from other University of Maryland Medical System Baltimore City-based hospitals,

community leaders, the academic community, the public, health experts, and the Baltimore City Health Department (BCHD). MWPH adopted the following ACHI 6-step process (See Figure
1) To lead the assessment process and the additional 5-component assessment (See Figure 2) and engagement strategy to lead the data collection methodology.

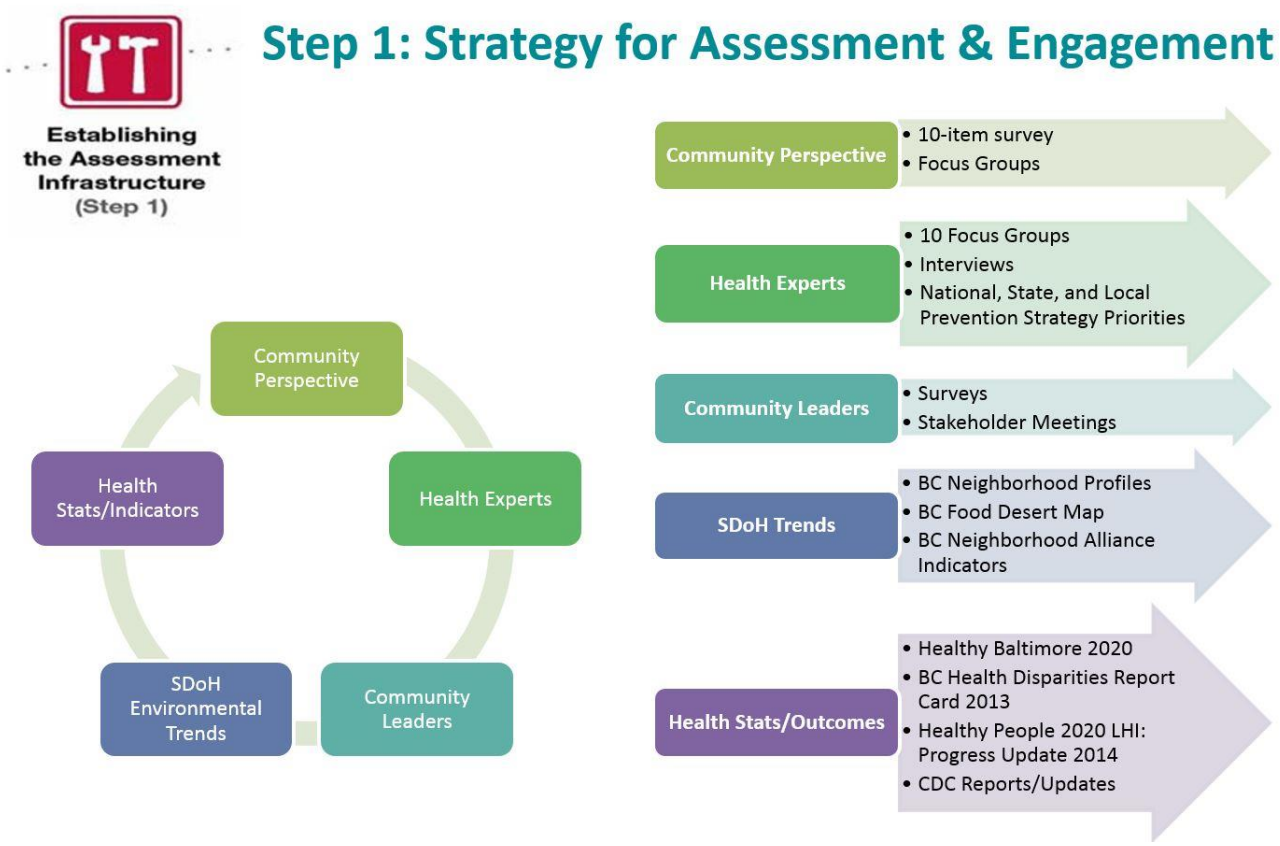
Figure 1. ACHI Needs Assessment Process

According to the Patient Protection and Affordable Care Act ("ACA"), hospitals must perform a community health needs assessment either fiscal year 2011, 2012, or 2013, adopt an implementation strategy to meet the community health needs identified, and beginning in 2013, perform an assessment at least every three years thereafter. The needs assessment must take into account input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health, and must be made widely available to the public.

For the purposes of this report, a community health needs assessment is a written document developed by a hospital facility (alone or in conjunction with others) that utilizes data to establish community health priorities, and includes the following:

1. A description of the process used to conduct the assessment.
2. Who the hospital has collaborated with to complete the assessment
3. How the hospital took into account input from community members and public health experts
4. A description of the community served
5. A description of the health needs identified through the assessment process.

Figure 2. 5-Step Assessment & Engagement Model



Data was collected from the five major areas illustrated above to complete a comprehensive assessment of the community's needs. The CHNA was comprised of both quantitative and qualitative research components.

A brief synopsis of the research components is included below with further details provided by the document:

- An Online Community Survey: Conducted from late September 2017 through late March 2018
  In collaboration with the Baltimore City Health Department, University of Maryland Medical System, Johns Hopkins University, Mercy Hospital, Medstar Health, and LifeBridge Health. All hospitals participated in data collection.
    - Summarized results in tables to follow
    - 4,755 responses from Baltimore city residents
    - 1,236 responses from MWPH (241 staff, 881 community-based surveys, 114 patient families)
  - 2016-17 PPMD Parent Calls: Data was collected on demographic and other relevant information for calls received by PPMD July 2016 through June 2017 (N=2,266).
    - Average of 188 calls/month
    - Parents seeking information or services for Children or Youth with Special Health Care Needs (CYSCHN).

        - Demographic data included child's age, gender, ethnicity, county of residence, disability and insurance type, as well as the parent's reason for calling and services provided.

    - Maryland Parent Survey (2014 & 2017): surveys were conducted by Parent's Place of Maryland (PPMD) in partnership with MDH Office for Genetics and People with Special Health Care Needs (OGPSHCN) and Bloomberg School of Public Health, Johns Hopkins University.
        - Paper and Electronic versions made available to families.
        - Surveys explored a variety of health issues related to access to health care for CYSCHN.
        - Diagnoses skewed towards children with variety of developmental disabilities and associated health problems.
    - Results
        - 839 respondents in 2017
        - 1090 respondents in 2014

- Focus Group Discussions: Community Leaders and Stakeholder focus group meeting was held on November 2, 2017. There were 30 leaders/stakeholders who participated which included but was not limited representatives from American Heart Association, American Cancer Society, American Disabilities Association, and Green & Healthy Homes Initiative. The purpose of the focus groups was to gather expert-level qualitative feedback from a variety of health and social service providers, with an active role and a broad understanding of the health care system and health needs of Baltimore City residents and parents of CSHCN.

Community Representation

Community Engagement and feedback were an integral part of the CHNA process. MWPH sought input through focus group discussions with clinical experts, family advisory committees, support groups for families with CYSCHN, leaders and partners. MWPH also included these stakeholders, as well as members of both the hospital and foundation board in the prioritization and implementation planning process (April 30, 2018).

Public health and health care professionals shared knowledge and expertise about health issues, leaders, and representatives of non –profit and community based organizations provided insight on the community, including medically underserved, low income, minority populations compounded with dealing with the diagnoses of having complex medical needs.

Research Limitations

As with all research efforts, there are some limitations related to this study's research methods that should be acknowledged. Data based on self-reports should be interpreted with particular caution. In some instances, community member survey participants may over- or underreport behaviors and illnesses based on fear of social stigma depending on the health outcome of interest or misunderstanding the question being asked. There were also times when the community member being surveyed felt the need to take the survey twice because in the first instance they were taking the survey to speak for their child and the other for themselves, noting that often they overlook their needs because of the complexity of their child's care. In other cases caregiver/parents only took the survey for themselves and did not think of the child's needs and vice versa. In

addition, respondents may be prone to recall bias where they may attempt to answer accurately, but remember incorrectly

Although every attempt was made to include the most relevant, up-to-date date for the CHNA, data for CYSHCN limitations persist, particularly those with developmental disabilities. CHNA data was collected from varying data sets, with inconsistent definitions of conditions, age groupings, and geographic boundaries among different indicators.

Timeline and other restrictions may have impacted the ability to survey all community stakeholders. MWPH sought to moderate limitations by including representatives of diverse and underserved populations through the working with hospitals throughout Baltimore city and the health department with online and in-person surveys.

Prioritization of Needs

Following the completion of CHNA research, MWPH prioritized community health issues in collaboration with community leaders, partners, stakeholders, clinical experts, patient families, foundation board members and hospital board members (4/30/18).

- **The Criteria for Prioritization**:
  - Magnitude of the problem
  - Severity of the problem
  - Need among vulnerable populations
  - Ability to have a measurable impact on the issue
  - Existing interventions focused on the issue
  - Whether the issue is a root cause of other problems
  - Trending health concerns in the community
  - Alignment with MWPH's exiting priorities and whether finances/resources to address the health concern
  - Potential barriers or challenges to addressing the need

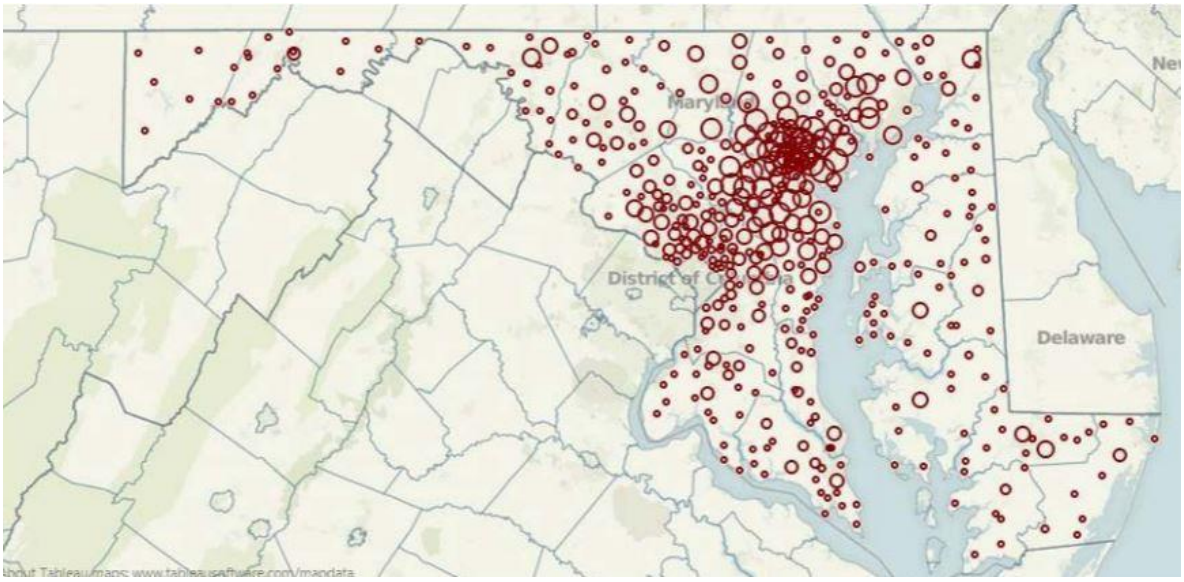
Table I. Prioritization Matrix

HEALTH ISSUE	PRIORITY ONE	PRIORITY TWO	PRIORITY THREE	PRIORITY FOUR	PRIORITY FIVE	PRIORITY SIX	
Lack of Healthy Food/Food	3	1	3	5	3	4	19
Education/ Awareness	1	3	1	5	4	7	21
Violence (Gun/Domestic/ Child Abuse)	6	3	7	5	2	2	25
Metal Health	3	7	1	1	2	1	15
Behavioral Health (Substance Abuse)	6	2	3	1	2	0	14
Poverty/Unemployment/ Housing	2	7	6	4	4	1	24
Transportation	7	2	4	1	1	2	17
Health Care/Insurance	5	8	5	5	6	2	31
Care Coordination	2	1	0	0	0	0	3
Language Barrier	0	0	2	1	1	0	4
Community Based Resources	0	0	0	0	0	2	2

The Community We Serve

MWPH serves children, adolescents, and young adults from primarily from Maryland, but also many states in the Northeast region. MWPH has two locations, one in Northwest Baltimore City and the other in Prince Georges County at UM Capital Regional Hospital. Data analyzed during the last three fiscal years---2015, 2016, and 2017---indicate that 93% of all inpatients and outpatients served by the MWPH are Maryland residents, with patients from nearly every county, as represented in Figure 1.

Figure 2. Patient Population Distribution by Zip Code (FY 2017)



Map Based on Zip Code, Size Shows details about total count of patient records.

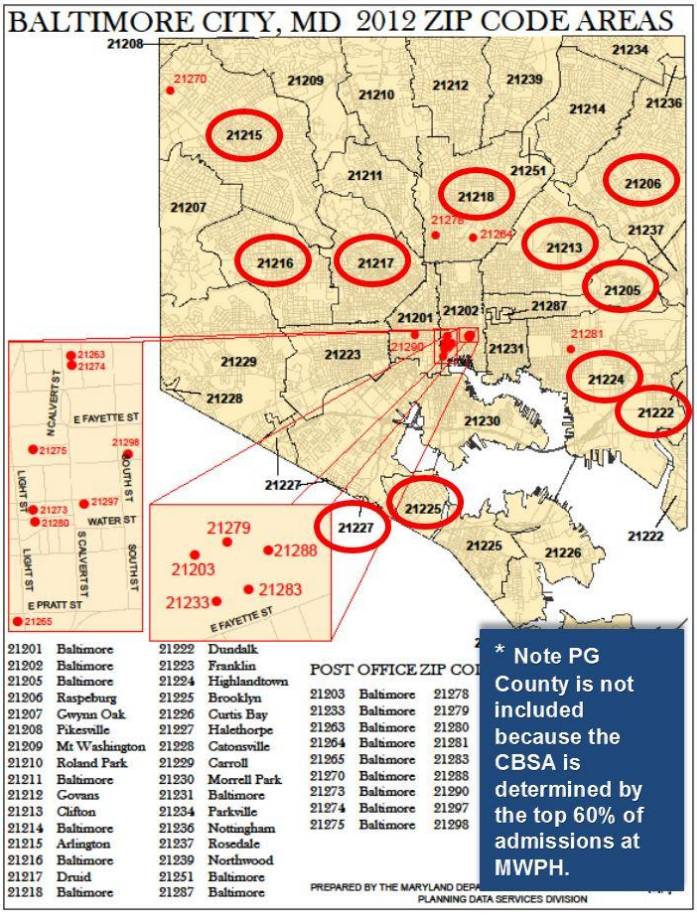
MWPH receives patients from across the state due to limited access to pediatric specialists in rural parts of Maryland. According to the 2017 Maryland Parent Survey, 73% of parents with CYSCHN reported driving 25 or more miles for pediatric specialty care, with 25% reporting that they had to drive 100+ miles roundtrip. In order to make our community programming as impactful, MWPH further defined its community by looking at the top 60% of inpatient admissions and outpatient visits, and (shown in Figures 2 & 3).

The licensed bed designation of Mt Washington Pediatric Hospital (MWPH) is 102, which includes pediatric specialty, pediatric chronic illness, and neonatal transitional care. Inpatient admissions for FY17 were 801 admissions.

Table I describes general characteristics of MWPH such as percentages of Medicaid recipients and uninsured persons delineated by primary service area zip code. The primary service areas listed below are ordered from largest to smallest number of discharges during the most recent 12-month period available (i.e. FY17), as defined by the Health Services Cost Review Commission (HSCRC). Medicaid patients accounted for 79.11% of the total MWPH admissions in FY17 and 5% of these Medicaid patients live in the 21215 zip code which is a target area of the hospital's community benefit service area (CBSA). The socioeconomic criteria of this zip code will be discussed in greater detail in Table III.

Figure 2. Top 60% Inpatient Admissions/Outpatient Visits by Zip FY17 for Baltimore City

Top 60% **Baltimore City** FY17
Inpatient Admissions by Zip-MWPH



21201	Baltimore	21222	Dundalk	POST OFFICE ZIP CO			
21202	Baltimore	21223	Franklin	21203	Baltimore	21278	Baltimore
21205	Baltimore	21224	Highlandtown	21233	Baltimore	21279	Baltimore
21206	Raspeburg	21225	Brooklyn	21263	Baltimore	21280	Baltimore
21207	Gwynn Oak	21226	Curtis Bay	21264	Baltimore	21281	Baltimore
21208	Pikesville	21227	Halethorpe	21265	Baltimore	21283	Baltimore
21209	Mt Washington	21228	Catonsville	21270	Baltimore	21288	Baltimore
21210	Roland Park	21229	Carroll	21273	Baltimore	21290	Baltimore
21211	Baltimore	21230	Morrell Park	21274	Baltimore	21297	Baltimore
21212	Govans	21231	Baltimore	21275	Baltimore	21298	Baltimore
21213	Clifton	21234	Parkville				
21214	Baltimore	21236	Nottingham				
21215	Arlington	21237	Rosedale				
21216	Baltimore	21239	Northwood				
21217	Druid	21251	Baltimore				
21218	Baltimore	21287	Baltimore				

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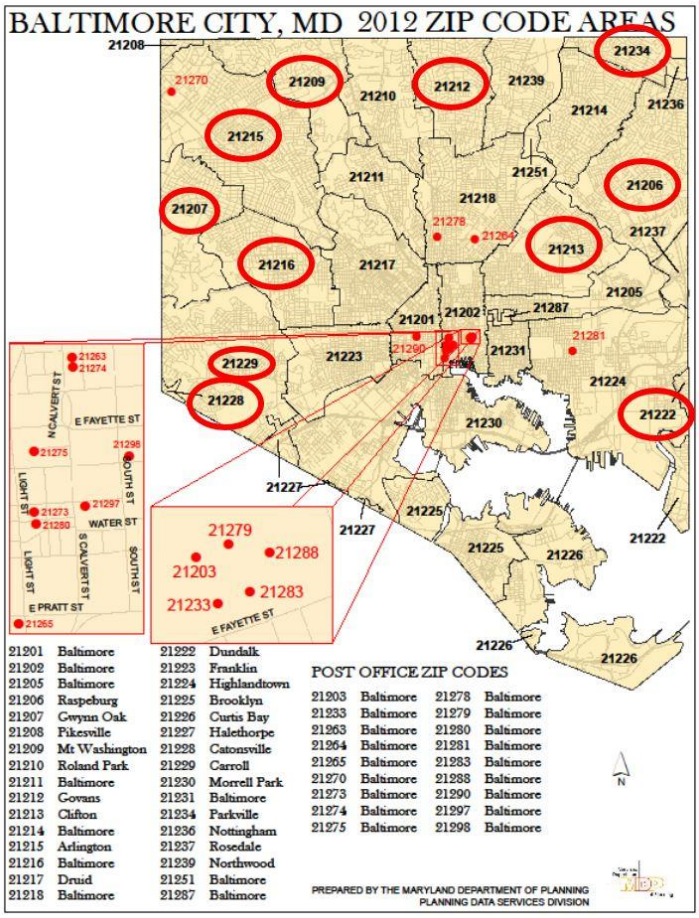
Top 60% **Baltimore City** FY17
Outpatient Visits by Zip-MWPH



21201	Baltimore	21222	Dundalk	POST OFFICE ZIP CODES			
21202	Baltimore	21223	Franklin	21203	Baltimore	21278	Baltimore
21205	Baltimore	21224	Highlandtown	21233	Baltimore	21279	Baltimore
21206	Raspeburg	21225	Brooklyn	21263	Baltimore	21280	Baltimore
21207	Gwynn Oak	21226	Curtis Bay	21264	Baltimore	21281	Baltimore
21208	Pikesville	21227	Halethorpe	21265	Baltimore	21283	Baltimore
21209	Mt Washington	21228	Catonsville	21270	Baltimore	21288	Baltimore
21210	Roland Park	21229	Carroll	21273	Baltimore	21290	Baltimore
21211	Baltimore	21230	Morrell Park	21274	Baltimore	21297	Baltimore
21212	Govans	21231	Baltimore	21275	Baltimore	21298	Baltimore
21213	Clifton	21234	Parkville				
21214	Baltimore	21236	Nottingham				
21215	Arlington	21237	Rosedale				
21216	Baltimore	21239	Northwood				
21217	Druid	21251	Baltimore				
21218	Baltimore	21287	Baltimore				

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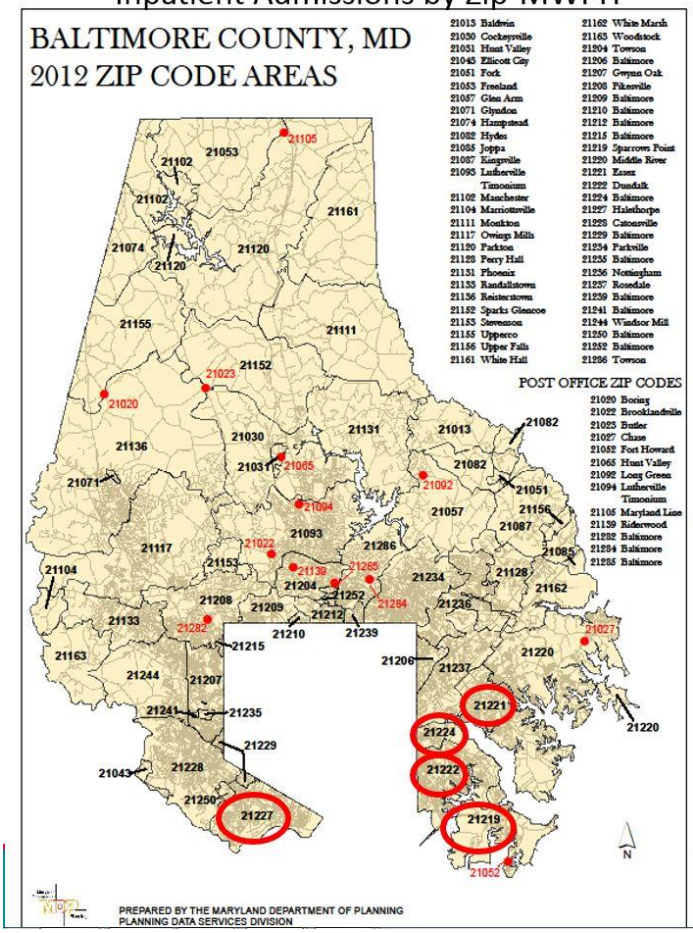
PLANNING DATA SERVICES DIVISION

Figure 3. Top 60% Inpatient Admissions/Outpatient Visits by Zip FY17 for Baltimore County

Top 60% **Baltimore County** FY17
Inpatient Admissions by Zip-MWPH



Top 60% **Baltimore County** FY17
Outpatient Visits by Zip-MWPH

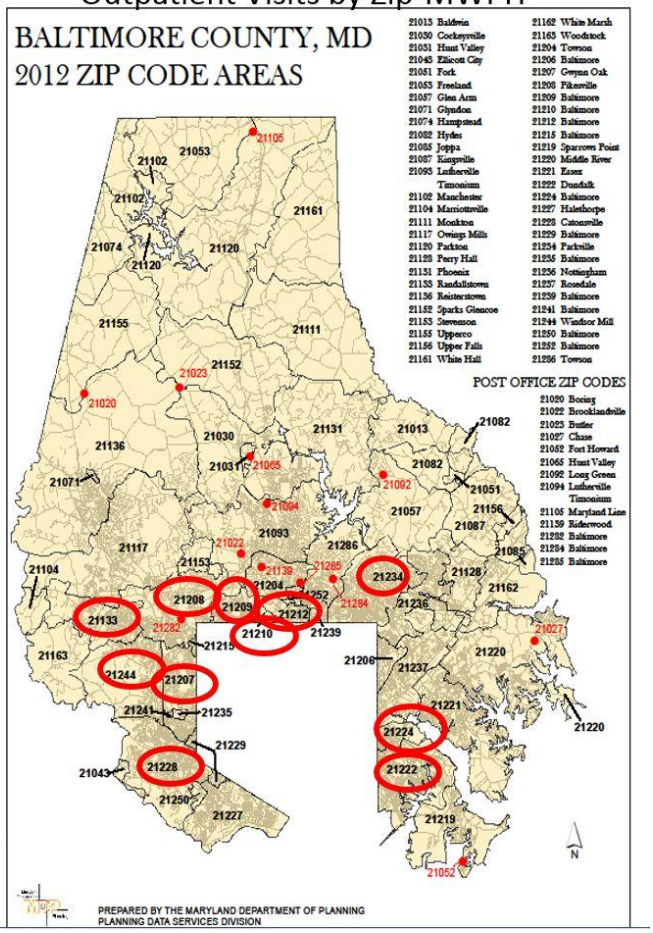


Table II. General Hospital Demographics

Bed Designation:	Inpatient Admissions:	Primary Service Area Zip Codes:	All other Maryland Hospitals Sharing Primary Service Area:	Percentage of Uninsured Patients, by County:	Percentage of Patients who are Medicaid Recipients, by County:
102 *Type* 86- Pediatric Specialty 16-CARF Accredited Rehabilitation *Location* 84-West Rogers(Baltimore) Campus 15- Prince George's Hospital Center	636	21222 21220 21206 21215 21213 21061 21221 21205 21217 21224 21227 21225 21037	UMD St. Joseph's Mercy Johns Hopkins St. Agnes Union Memorial UMD Midtown Northwest GBMC Kennedy Krieger UM Capital Regional Hospital Sinai	0% Uninsured Patients	81% of all Patients were Medicaid recipients Baltimore City 56% Baltimore County 19% Prince Georges County 9% Anne Arundel County 8 % Harford County 4% Howard County 2% St. Mary's County 2%

Community Description:

MWPH located in the northwest quadrant of Baltimore City, serving both its immediate neighbors and others from throughout Baltimore City, County and several other counties in the region. There are approximately 1.3 million children in Maryland and the Healthcare provider market has largely consolidated into three major systems, UMMS, Johns Hopkins Medicine, and Medstar. We are presently experiencing a unique regulatory environment, with almost 70,000 neonatology discharges (<25% to Hopkins and UMMS) and almost 25,000 pediatric discharges (>50% to Hopkins and UMMS). The neighborhoods surrounding MWPH are identified by the Baltimore Neighborhood Indicators Alliance (BNIA) as Southern Park Heights (SPH) AND Pimlico/Arlington/Hiltop (PAH)[1].

The primary service area zip codes do not necessarily determine eligibility for community benefit services, because MWPH is a specialty pediatric facility, our patient's residence span the state of Maryland and many

[1] **Baltimore Neighborhood Indicators Alliance (BNIA), 2014 (1-year estimates)**

more from out of state. MWPH determined that the specific zip codes of 21215 & 21216 define the hospital's Community Benefit Service Area (CBSA) and constitute an area that is predominantly African American with below average median family income, but above average rates for unemployment, and other social determinants of poor health Relying on data from the American Community Survey[2], SPH's median household income was $26,015 and PAH's median household was $32,410. This is compared to Baltimore City's median household income of $41,819 in 2014. The percentage of families with incomes below the federal poverty guidelines[3] in SPH was 46.4%, in PAH, 28.4% of rates for SPH and PAH, were 23.6% and 17.1% respectively while the Baltimore City unemployment rate recorded in 2014 was 13.1%.[4]

The racial composition and income distribution of the zip codes described below reflect the segregation and income disparity characteristic of the Baltimore metropolitan region. As indicated above, those zip codes that have a predominantly African American population, including 21215, reflect the racial segregation and poverty representative of Baltimore City. This is in contrast to neighboring Baltimore County zip codes (21208 &21209) in which the hospital is located, the median household income is much higher, and in which the population is predominately white.

The Baltimore City Health Department uses the Community Statistical Areas (CSA) when analyzing health outcomes and risk factors. The CSAs represent clusters of neighborhoods based on census track data rather than zip code and were developed by Baltimore City Planning Department based on recognizable city neighborhood perimeters. In the chart below, we present the community benefit activities at MWPH. Two zip codes (21207 & 21222) span city and county lines (see footnote below chart). At the time of this report, Baltimore County did not provide CSAs.

Table III. CBSA Socioeconomic Characteristics

Community Benefit Service Area(CBSA)[5] Target Population (by sex, race, ethnicity, and average age)			
CBSA Zip Codes	**21215 21206 21216 21213 21222**		
Total Population within the CBSA	144,744		
Sex	***Male***		66,766
	Female		77,977
Age	***0-17 yrs.***	43,423	30%
	18-24 yrs.	62,830	4.3%
	25-44 yrs.	38,024	10.6%
	45-64 yrs.	38,625	15.9%
	65+yrs.	20,471	13.4%
Race/Ethnicity	***White Non-Hispanic***	5,604	3.9%
	Black Non-Hispanic	135,480	93.6%
	Hispanic	1,530	1.05%
	Asian and Pacific Islander non-Hispanic	703	0.5%

[2] **American Community Survey, (2011-2015, 5 year estimates)**
[3] **Baltimore City Health Department, Neighborhood Health Profiles, 2017**
[4] **American Community Survey (ACS), (2011-2015, 5 year estimates)**
[5] **Baltimore Neighborhood Health Profiles 2017**

	All others		2,150	1.5%

(Table III Cont.) CBSA Community Characteristics
Socioeconomic

Baltimore City Neighborhood	Zip Code	Median Household Income	% of households with incomes below federal poverty	Unemployment
Baltimore City		$41,819	28.8%	13.1%
Pimlico/Arlington/Hilltop	**21215**	$32,410	28.4%	17.1%
Southern Park Heights	**21215**	$26,015	46.4%	23.6%
Clifton Berea	**21206**	$25,738	30.2%	17.4%
Upton /Druid Heights	**21217**	$15,950	60.1%	22.3%
Dorchester/ Ashburton	**21216**	$36,870	31.6%	21.9%
Greater Mondawmin	**21216**	$38,655	28.4%	19.0%
Dundalk	**21222**	$30,597	16.5%	19.0%
Belair-Edison	**21213**	$38,906	29.1%	16.2%

Education

Baltimore City Neighborhood	Zip Code	% of Kindergartners "ready to learn	% of High School Students missing 20+ days	% of residents with a high school diploma or less
Baltimore City		77.6%	38.7%	47.2%
Pimlico/Arlington/Hilltop	**21215**	80.9%	46.4%	66.2%
Southern Park Heights	**21215**	63.2%	43.6%	69.0%
Clifton Berea	**21206**	79.0%	46.9%	63.3%
Upton /Druid Heights	**21217**	74.0%	46.0%	60.3%
Dorchester/ Ashburton	**21216**	58.9%	32.6%	55.6%
Greater Mondawmin	**21216**	83.6%	34.7%	57.9%
Dundalk	**21222**	93.8%	44.9%	61.0%
Belair/Edison	**21213**	75.3%	37.5%	5.7%

Access to Healthy Foods

Baltimore City Neighborhood	Zip Code	Corner Store Density (# of corner stores per 10,000 residents)	Carryout Density (# of carryouts per 10,000 residents)
Baltimore City		14.1	11.4
Pimlico/Arlington/Hilltop	**21215**	18.6	14.4
Southern Park Heights	**21215**	11.3	6.0
Clifton-Berea	**21206**	20.3	12.2
Upton/Druid Heights	**21217**	23.2	16.4
Dorchester/Ashburton	**21216**	11.9	9.3
Greater Mondawmin	**21216**	15.0	12.9
Dundalk	**21222**	14.4	12.8
Belair Edison	**21213**	11.5	6.9

(Table III Cont'd) Housing				
Baltimore City Neighborhood	**Zip Code**	**Vacant Building Density (# vacant buildings/10,000 units)**	**Hardship Index* (*Description Below*)**	**Lead Paint Violation Rate (# of violations per year/10,000 residents)**
Baltimore City		562.4	51	9.8
Pimlico/Arlington/Hilltop	**21215**	1,097.3	61	12.8
Southern Park Heights	**21215**	1,374.5	73	20.9
Clifton-Berea	**21206**	2,649.3	61	48.7
Dorchester/ Ashburton	**21216**	224.1	61	10.7
Greater Mondawmin	**21216**	1039.8	62	17.9
Upton/ Druid Heights	**21217**	1136.1	82	16.2
Dundalk	**21222**	105.6	69	1.2
Belair-Edison	**21213**	276.8	55	9.9

**The Hardship Index combines indicators of public health significance from six socioeconomic indicators- housing, poverty, unemployment, education, income, and dependency. The Index ranges from 100=most hardship to 1= least hardship. This composite score of socioeconomic hardship within a CSA, relative to other CSAs and to Baltimore City.*

Community Built and Social Environment				
Baltimore City Neighborhood	**Zip Code**	**Liquor Store Density Rate (# stores/10,000 residents)**	**Youth Homicide Incidence Rate (#homicides/ 100,000 residents <25 years old**	**Infant Mortality Rate (# reported incidents/10,000 residents)**
Baltimore City		3.8	31.3	10.4
Pimlico/Arlington/Hilltop	**21215**	1.7	56.8	20.0
Southern Park Heights	**21215**	4.5	48.9	15.5
Clifton-Berea	**21206**	6.1	107.0	14.8
Dorchester/ Ashburton	**21216**	1.7	70.7	6.4
Greater Mondawmin	**21216**	3.2	46.7	5.2
Upton/Druid Heights	**21217**	2.1	27.9	49.6
Dundalk	**21222**	3.2	9.5	8.9
Belair-Edison	**21213**	2.3	42.3	10.1

Life Expectancy & Mortality			
Baltimore City Neighborhood	**Zip Code**	**Life Expectancy at birth (in years)**	**Percentage of Live Births Occurring Preterm (less than 37 wks gestation)**
Baltimore City		73.6	12.4%
Pimlico /Arlington/Hilltop	**21215**	68.2	15.0%
Southern Park Heights	**21215**	70.1	13.4%
Clifton-Berea	**21206**	66.9	14.7%
Dorchester/ Ashburton	**21216**	73.4	14.5%
Greater Mondawmin	**21216**	70.4	15.1%
Upton/Druid Heights	**21217**	68.1	13.5%
Dundalk	**21222**	72.7	11.3%
Belair-Edison	**21213**	72.0	16.1%

(Table III Cont'd) Percentage of Uninsured people by County within the CBSA (Baltimore City)				
Health Insurance Coverage	Estimate	Margin of Error (+/-)	Percent	Margin of Error (+/-)
With health insurance coverage	646,300	10,414	90.6%	0.8
With private health insurance coverage	564,262	11,439	79.1%	1.2
With public health coverage	186,337	7,005	26.1%	1
No health insurance coverage	66,699	6,013	9.4%	0.8

Life Expectancy, Infant Deaths, Low Birth Weights, Sudden Infant Death, Child Maltreatment, by County within the CBSA (Baltimore City[6])					
Measure Description	**Baltimore City Baseline**	**Baltimore City Update**	**Maryland Update**	**Race/Ethnicity City Update**	**Race/Ethnicity State Update**
Life Expectancy **(at birth)**	72.9	73.6	79.3	Black-- 71.5 White-- 76.5	Black-- 76.4 White-- 80.2
Infant Mortality **(per 1,000 births)**	12.3	10.4	6.7	Black-- 15.8 Non-Hispanic (NH) White-- 5.3	Black-- 11.8 Hispanic-- 4.1 NH White-- 4.2
Low Birth Weight **(percentage)**	12.3%	12.4%	8.8%	API-- 8.9%* Black-- 14.8% Hispanic-- 6.4% White—8.0%	API-- 8.9% Black-- 12.1% Hispanic-- 7.0% NH White-- 6.9%
Sudden Infant Death Syndrome **(per 1,000 births)**	2.07	2.10	0.93	***	NH Black—1.68 NH White—0.69
Child Maltreatment **(per 1,000 children <18 yrs. With cases reported to social services)**	13.8	13.8	5.3	N/A	4.8

The racial composition and income distribution of the zip codes described below reflect the segregation and income disparity characteristic of the Baltimore metropolitan region. As indicated above, those zip codes that have a predominantly African American population, including 21215, reflect the racial segregation and poverty representative of Baltimore City. This is in contrast to neighboring Baltimore County zip codes (21208 &21209) in which the hospital is located, the median household income is much higher, and in which the population is predominately white.

The Baltimore City Health Department uses the Community Statistical Areas (CSA) when analyzing health outcomes and risk factors. The CSAs represent clusters of neighborhoods based on census track data rather than zip code and were developed by Baltimore City Planning Department based on recognizable city neighborhood perimeters. In the chart below, we represent the community benefit activities at MWPH. One zip code (21207) spans city and county lines (see footnote below chart). Baltimore County does not provide CSAs. In Baltimore, health disparity lines are more predetermined by the neighborhood where one resides

[6] Maryland Health Improvement Process 2015
***Asian Pacific Islander**

than their zip code. MWPH has adopted the guidance set by the Baltimore City Health Department that defines the community benefit service area with neighborhoods rather than simply zip code (Figure 3).

Figure 3. Baltimore Neighborhood Map

The presence of health disparities as well as social determinants of health are a major key factor in determining what the target population for our CBSA and how MWPH might serve it best as a pediatric specialty hospital. Unlike most other hospitals that share one or more of our primary service area zip codes and because of the specialty services we provide, patients come to MWPH from all over the state of Maryland and Pennsylvania. MWPH is also located within the 21209 zip code that is a part of Mt Washington/Coldspring CSA that is one of the most wealthy and healthy neighborhoods in the city of Baltimore. Interestingly enough, MWPH is within walking distance from the 21215 zip code and Pimlico/Arlington /Hilltop neighborhood which as the aforementioned data demonstrate had several health disparities: poverty and vulnerable populations. MWPH realizes that population health improvement requires focusing beyond the healthcare clinical space and moving into the innovative non-medical healthcare space to comprehensively address all factors that determine health.

Target Population

The organization serves persons with a variety of developmental disorders and injuries. Our top outpatient diagnoses for the last fiscal year included conduct disturbance, hyperactivity disorder, autism spectrum

disorder, and language disorder. During the last three fiscal years (2015-2017) MWPH averaged 738 inpatient admissions, and 8,151 outpatient visits.

According to the Maternal Child & Health Bureau (MCHB) and Health Resources and Services Administration (HRSA) as well as US Department of Health and Human Services, 1 in 5 children in Maryland are CYSHCN, of that 1 in 7 of those children encounter one or more Adverse Childhood Experience (ACE). This data is based on a child's need for services and supports, not diagnosis. CYSHCN are defined as those who have or are increased risk for a chronic physical, development, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally. This includes chronic illness, behavioral and mental health disorders, developmental disabilities and sensory abilities.

Approach/Methodology

Expectations vary for diverse stakeholders across Maryland's regions. Because multiple organizations within Maryland are mandated to conduct CHNA, in an effort to streamline the data collection process for the CHNA and collaborate with community partners, MWPH utilized existing data sources and participated in community meetings where organizations convene with community members to discuss community needs, assets, and services. During MWPH's last CHNA, we initiated discussions with community organizations to establish a collaborative data-sharing consortium.

While a formal agreement between these entities does not exist to date, the organizations that expressed interest have readily collected and shared de-identified data to help assess community assets and needs for children and youth with disabilities and their families. While the process for this CHNA differs slightly from 2013, the outcomes reflect a richer integration of data elements, to include standardized databases, surveys distributed to the community in collaboration with all Baltimore City Hospitals and the Baltimore City Health Department, as well as non-standardized qualitative input from participation in public community meetings.

For the 2018 CHNA, we used predominately the following methodologies to derive the priority areas:

1. Review of Census Data
2. MCDD Needs Assessment Pathfinders Community Forums on Adolescent Transition
3. Participation in Maryland Consortium of Care Quarterly Meetings
4. Review of data collected by multiple partner organizations
5. Attendance at Maryland Community Health Resources Commission Regional Meetings: Sustaining Community-Hospital Partnerships to Improve Population Health
6. Attendance at Baltimore City Health Department Local Health Improvement Committee Meetings
7. Attendance at other community and group meetings across the city focused on specific communities and populations
8. Input from Parent's Place of Maryland and the Office of for Genetics and People with Special Health Care Needs.
9. 2016 National Survey of Children's Health
10. US National Prevention Strategy's 7 priority areas
11. Maryland Department of Health State Health Improvement Process (SHIP)'s 39 Objectives in 6 Vision areas for the state, with specific targets for Baltimore City.
12. Healthy Baltimore 2020: A Blueprint for Health: Health Equity Objectives and Strategic Priorities
13. A Call to Action on Behalf of MD Children and Youth with Special Health Care Needs

Description of Selected Resources Used in Collecting Data

i. ***MCDD Needs Assessment: Pathfinders Community Forums on Adolescent Transition***

The MCDD entered into a formal partnership with Pathfinders for Autism to conduct four community forums in each Maryland region (Western, Eastern, Southern, Capital, and Central) to gain insight into parent perspectives about transitioning for children and youth on the autism spectrum, topics discussed include school-based transition, healthcare, transition, adult services, and other topics as identified.

ii. ***Maryland Title V Agency 2015 Needs Assessment***

The Title V Maternal and Child Health Block Grant provides federal funds to states to improve the health of mothers, children and families. In Maryland the OGPSHCN administers the Title V CYSHCN program. From fall 2013 through spring 2015, OGPSHCN worked with multiple stakeholders in Maryland to compile data via surveys, interviews and participation in public meetings to identify priority issues for the CYSHCN in Maryland

iii. ***PPMD/Maryland Parent Survey 2018/Maryland Consortium of Care***

The Parent's Place of Maryland (PPMD) is a nonprofit, family-directed (and staffed) center serving parents of children with disabilities and special health care needs. In close partnership with OGPSHCN, PPMD serves an integral role in design and implementation pf services for CYSHCN and their families. PPMD, with the OGPSHCN, leads the Maryland Consortium of Care. Meetings occur quarterly and include stakeholders from across the state interested in issues targeting CYSHCN. In 2014 & 2017, PPMD and OGPSHCN conducted the Maryland Parent Survey, resulting in 839 respondents in 2017 and 1,090 respondents in 2014, respectively. The survey was conducted online via paper and pencil. Participants were recruited through PPMD, MCDD, local health departments, Pathfinders for Autism, Abilities Network, and other community stakeholders. The survey results provide data on the impact of autism spectrum disorder developmental disabilities, and epilepsy/seizure disorder on families, and their unmet needs.

iv. ***Maryland State Department of Education Parent Survey***

The Maryland State Department of Education conducted a survey to discover the "percentage of parents with a child receiving special education who report to schools facilitated with parent as a means of improving services and results for children with disabilities." Parents/caregivers of children who received special education services during the 2017-2018 school years were invited to complete a Preschool Survey and a School-Age Survey.

v. ***Maryland Resource Health Commission (MRHC) Hospital Community Forums Summary***

The Maryland General Assembly created MRHC in 2005 to expand access to healthcare services in underserved communities in Maryland. In 2015, the MRHC conducted regional forums across Maryland to discuss promising community collaborative practices focused on promoting the capacity and sustainability of Maryland's health system for the underserved. While the population focus was not specific to developmental disabilities, the population health issues influence all groups across Maryland communities and rely on community resources for ongoing healthcare. The findings from these MRHC community forums contribute to the **State Health Improvement Process (SHIP).**

vi. ***MWPH Focus Group Sessions***

Focus groups were conducted by to bring together people with different clinical experts and diverse backgrounds and disciplines to identify the assets, barriers, and recommendations would

best improve the health outcomes of children treated at MWPH. These sessions included providers, families, self-advocates, and community stakeholders. This collaborative effort and engagement forum provided an opportunity for those involved to look at health care and its access from different perspectives as well as identify gaps and disparities. The goal for these sessions was not only to obtain qualitative data, but for all parties involved to attempt

vii. Other Community Meetings

MWPH participated in the Baltimore City Council Education and Youth Committee Meeting, Public Safety Meeting, LHIC Steering Committee Meetings, Neighborhood Association Meetings for CSAs.

viii. What is Healthy People 2020 Telling US in 2018?

Since 2010, the objectives identified by *Healthy People 2020* have guided the focus of our nation's health priorities. The *Healthy People 2020* objectives most relevant to our target population include Disability and Health (DH) objectives and Maternal Infant and Child Health (MICH) goals and objectives. Data updates in these areas inform our nation and state communities how well we are doing overall in certain areas as identified by the objectives.

Disability and Health Objectives (*no data reported for objectives marked with an asterisk*)

- *Reduce the proportion of people with disabilities who report delays in receiving primary and periodic preventive care due to specific barriers (DH-4).

- Increase the proportion of youth with special health care needs whose healthcare provider has discussed transition planning from pediatric to adult healthcare (DH-5).

- *Reduce the proportion of people with disabilities who report physical or program barriers to local health and wellness programs (DH-8).

- *Reduce the proportion of people with disabilities who encounter barriers to participating in home, school, work, or community activities (DH-9).

- *Increase the proportion of people with disabilities who participate in social, spiritual, recreational, community, and civic activities to the degree that they wish (DH-13).

- Objective MICH-29: Increase the proportion of young children with autism spectrum disorder (ASD) and other developmental delays that are screened, evaluated, and enrolled in early intervention services in a timely manner.

- MICH-29.1 Increase the proportion of children (aged 10-35 months) who have been screened for ASD and other developmental delays.

- Objective MICH-30: Increase the proportion of children, including those with special health care needs, who have access to a medical home.

- MICH-30.2 Increase the proportion of children with special health care needs who have access to a medical home.

- MICH-1.9 Reduce the rate of infant deaths from sudden unexpected infant deaths (includes SIDS, Unknown Cause, Accidental Suffocation, and Strangulation in Bed)

ix. SHIP

The SHIP framework provide accountability, local action, and public engagement in order to advance the health of Maryland residents (https://pophealth.health.maryland.gov/Pages/SHIP.aspx). The measures are aligned with *Healthy People 2020*.

x. Healthy Baltimore 2020

In 2017, with the guidance or the BCHD Health Commissioner, Dr. Leana Wen the health department generated a strategic plan for health in the city. Its vision, is a Baltimore where health disparities are cut by half in the next ten years. To be intentional in the work the agency identified organizational values to provide clarity about its priorities. These values include; *Race, Equity & Inclusion, Focus on Well- Being, and Health-in-All-Policies.*

Race, Equity & Inclusion- It is impossible to talk about health in Baltimore without addressing the significant disparities that exist as a result of structural discrimination, racism, poverty, and historical practices of exclusion. As a result, BCHD programs services, advocacy -- is rooted in combatting health inequity and ensuring that all residents of Baltimore city have the right to a healthy, robust life.

Focus on Well- Being- BCHD wants to not merely treat the symptoms of poor health -- but also address the barriers to overall well-being. In Baltimore, this specifically means applying a trauma-informed approach to all the services that are provided, recognizing the cyclical, generational nature of trauma and its impact on both physical and mental health. Effective services cannot be provided without acknowledging the role that trauma plays across the life course, and working with community partners to promote healing and awareness.

xi. A Call to Action on Behalf of MD Children and Youth with Special Care Needs

This report collected date from five key sources; *National Survey of Children's Health (NSCH) 2016; 2014 and 2017 surveys conducted by PPMD in partnership with MDH OGPSHCN; 2016-17 PPMD data collected from parent's calls for assistance; Focus group interviews with families throughout Maryland in 2017 regarding care coordination.* All of these sources paint a consistent picture of the challenges face. The report focuses on four areas identified through these processes that are of greatest importance to Maryland families raising children and youth with special health care needs. The four areas include:

- Lack of access to needed services and supports
- Adequacy of health insurance (private and public insurance)
- Fragmentation of the system of services and supports; and
- The burdens—financial and other—that the first three issues place on families. The report is based on quantitative and qualitative data that illustrates the daily reality for Maryland families in their own words. The "call to action" clearly spells out what is needed from local service and support agencies, health and related services providers, families, and advocates.

xii. County Rankings

County Health Rankings and Roadmaps is a partnership between the Robert Wood Johnson Foundation (RWJF) and the University of Wisconsin. Based on the RWJF priority to build a culture of health, this program helps communities:

- Build awareness of multiple factors that influence health,
- Provide a reliable sustainable source of local data to communities to help them identify opportunities to improve their health,
- Engage and activate local leaders from many sectors in creating sustainable community change, and
- Connect and empower community leaders working to improve health.

The County Rankings are influenced by policies and programs, and measure health factors that drive health outcomes. The data provide a starting point for communities as they work to improve health and wellness of their citizens.

xiii. ***Other Available Data***

Other Data collected through community meetings, reports, and survey findings by partner organizations provided a holistic view of the needs of the population. These data, available at different levels –local, state, and national---were analyzed and synthesized. Appendices I and J list major sources of data reviewed and used for this CHNA.

Data Gaps

Data for some indicators were only available at the national or state level. The Annual Disability Statistics Compendium, compiled by the Institute on Disability at the University of New Hampshire, had the most consistent data trend across populations, although it lacked data specific to children and youth.

Access to and awareness of resources was a continued topic of many meetings across communities. While there are multiple resource programs serving Maryland and certain counties, not one can fulfill the need of any one community.

Community Perspective

Participants were asked to select the top 3 out of 14 different health care issues. Surveys completed in collaboration with BCHD, University of MD Medical System, Johns Hopkins University Medicine, MedStar Health, Mercy Hospital, Saint Agnes and LifeBridge Health.

Methods

- Conducted from late September 2017 through late March 2018
- All hospitals participated in data collection
- Distributed in person and offered online
- Offered in English, Spanish, and Russian
- Collected 4,755 surveys
- All Baltimore City zip codes represented
- Community Health Surveys (CHSs) were modeled on national surveys like the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS)

Goals

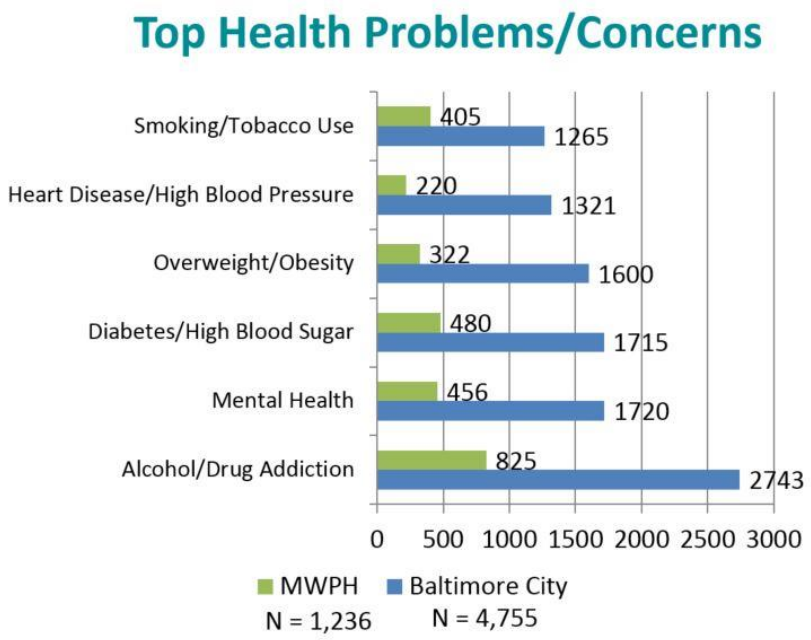
- Assess the health status and needs of city residents
- Identify gaps in access to health services
- Assess the use and perception of the Affordable Care Act (ACA) and the Maryland Health Insurance Exchange

Results (Chart 1-6)

- Summarized results in chart to follow
- 4,755 responses from Baltimore city residents
- 1,236 responses from MWPH (241 staff, 881 community-based surveys, 114 patient families)
- Top 5 Health Concerns for **Baltimore City**:
    - **1) Substance Abuse**
    - **2) Mental Health**
    - **3) Diabetes**
    - **4) Obesity**
    - **5) Heart Disease**
    - **6) Smoking**
- Top 5 Health Concerns for **MWPH** Population:
    - **1) Substance Abuse**
    - **2) Diabetes**
    - **3) Mental Health**
    - **4) Smoking**
    - **5) Obesity**
    - **6) Heart Disease/Blood Pressure**

Analysis by CBSA targeted zip codes reveled very similar top health concerns and top health barriers, with little deviation other than order of priority from the overall Baltimore City data.

Chart 1. Community Perspective of Top Health Problems: Participants selected 3 out of 14 choices



MWPH realizes that health starts in the homes, schools, workplaces, neighborhoods, and communities. MWPH acknowledges the overall influence good health outcomes has as much to do with a patient eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when sick.

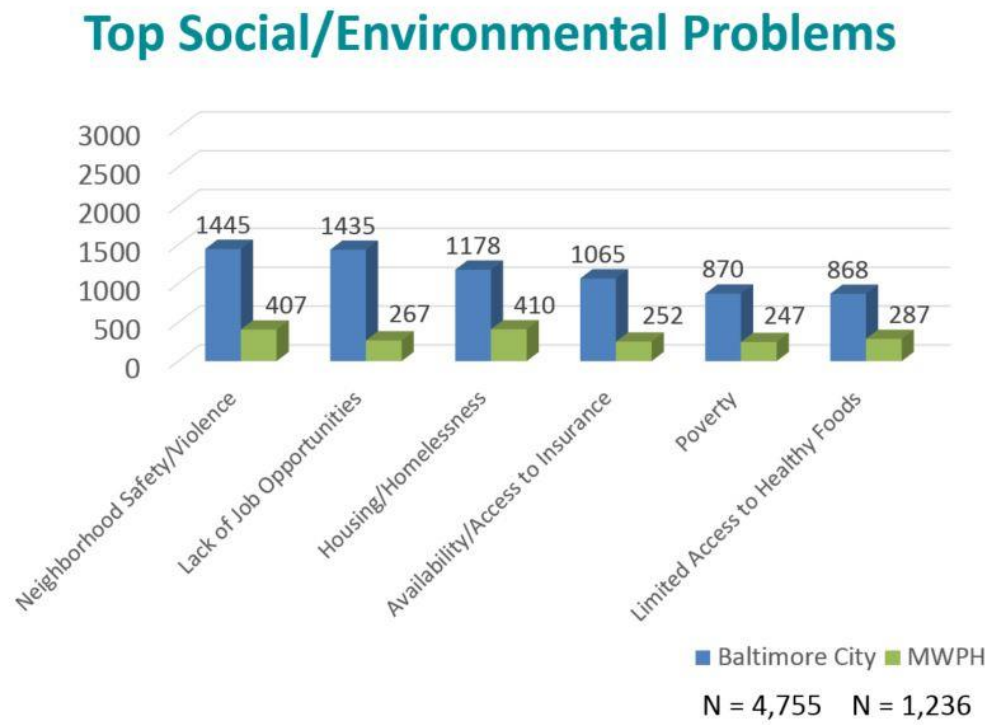
Health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of social interactions and relationships. The conditions in which patients live explain in part why some are healthier than others and why others more generally are not as healthy as they could be. To gain the community perspective on social environmental problems impacting their health MWPH surveyed the greater Baltimore area and obtained the following results (see Chart 2).

Results

- Summarized results in chart to follow
- 4,755 responses from Baltimore city residents
- 1,236 responses from MWPH (241 staff, 881 community-based surveys, 114 patient families)
- Top 6 Social or Environmental Problems for **Baltimore City**:
    1) Neighborhood Safety Violence
    2) Lack of Job Opportunities
    3) Housing/Homelessness
    4) Availability/Access to Ins.
    5) Poverty
    6) Limited Access to Healthy Foods

- Top 6 Social or Environmental Problems for **MWPH** Population:
    1) Neighborhood Safety Violence
    2) Housing/Homelessness
    3) Lack of Job Opportunities
    4) Limited Access to Healthy Foods
    5) Availability/Access to Ins.
    6) Poverty

Chart 2. Community Perspective of Top Social/Environmental Problems: Participants selected 3/14 choices



To evaluate the community perspective on barriers to access care MWPH evaluated data from three different groups 1) the greater Baltimore City Community 2) Parents of CYSCHN 3) MWPH staff and clinical experts or partners. Access to services is a key concern for families of children and youth with special health care needs Maryland, and more specifically Baltimore City. It is reflected in focus groups conducted statewide, parent calls to PPMD, and in all the other sources.

MWPH (staff and patient families) and Greater Baltimore Community was asked what the top barriers in access healthcare services, the results were the following (Chart 3).

Results:

- Summarized results in chart to follow
- 4,755 responses from Baltimore city residents
- 1,236 responses from MWPH (241 staff, 881 community-based surveys, 114 patient families)
- Top 4 Reasons to Not Access Healthcare for **Baltimore City**:
    - **1) Cost Too Expensive/Can't Pay**
    - **2) No Insurance**
    - **3) Insurance Not Accepted**
    - **4) Inadequate Transportation**

- Top 4 to Not Access Healthcare for **MWPH** Population:
    - **1) Inadequate Transportation**
    - **2) Insurance Not Accepted**

3) No Insurance
4) Cost

Chart 3. Top Reasons to Not Access Healthcare

*****For Demographic data of survey participants please see Appendix**

The aforementioned results reflected what many families were reporting in focus groups as to why many patients are having difficulty accessing healthcare services, and more specifically pediatric specialists in communities throughout Maryland and across Baltimore for families with CYSHCN. Almost 16% of parent calls to PPMD from rural areas addressed the issue of no appropriate pediatric specialist in their area compared with 4% of calls from urban areas like Baltimore. In Western Maryland, a full one-third of parent calls related to having no specialist in the area. Families are traveling to metropolitan areas in Central Maryland and to West Virginia for services.
The impact of lack of providers is that Maryland (MD) CYSHCN may not be getting needed medical services and visits, As reported in the 2016 National Survey Children's Health, 9.1% of MD CYSHCN had no preventative medical visits during the last 12 months and 10.3% of MD CYSHCN with more complex health needs had no preventative medical visits during the same time period.

In the MWPH focus groups, transportation was highlighted as the biggest barrier for every department. Clinicians detailed how patients missed appointments frequently due to having medical assistance and transportation only being available to the patient and parent, and the parent being a single parent and not being able to leave their other children.

There were the top ten priorities identified in the MWPH CYSHCN community stakeholder survey. Some were already priorities (bold). Some are newly emerging. All are somewhat linked to each other, but the most

overarching are the core outcomes. There were two core outcomes that did not make the top 10 list from the stakeholder survey – Family/Professional Partnerships and Transition.

1. **Adequate health insurance and health care financing**
2. Access to specialty care
3. **Medical Home** for every child (primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective)
4. Families receive needed services
5. Mental health screening, treatment, and services
6. Access to primary care
7. Early intervention services
8. Access to oral health care
9. **Organized, community-based system of care** for CYSHCN that is easy to use (i.e. being able to find services)
10. Developmental **screening**

Based on findings from the 2016 National survey of Children's Health, children with special health care needs in MD are significantly more likely to be insured (98.6%) and to be insured continuously over the past year (95.8%), this is largely due to the extensive coverage brought about the Affordable Care Act. However the issue goes beyond coverage. With their increased needs for medications and services, the adequacy of the insurance they have is a critical issue. It is reported that 30% of CYSHCN lack adequate health insurance and 52% CYSHCN families paid $500+ out of pocket for medical expenses per year, which is illustrated in Charts 4 (Out of Pocket Expenses) & 5 (Out of Pocket Expenses by Category). It should be noted that this expense does not include insurance deductibles as a part of the expenses.

A key issue related to family's ratings of their insurance was out-of-pocket costs for their children's services. Those responding to the survey had, on average, children with more severe special health care needs. Families with private insurance or combination of private/public were more like to have out of pocket expenses.

Chart 4. Out-of-Pocket Expenses for CYSHCN medical care (over 12 months)

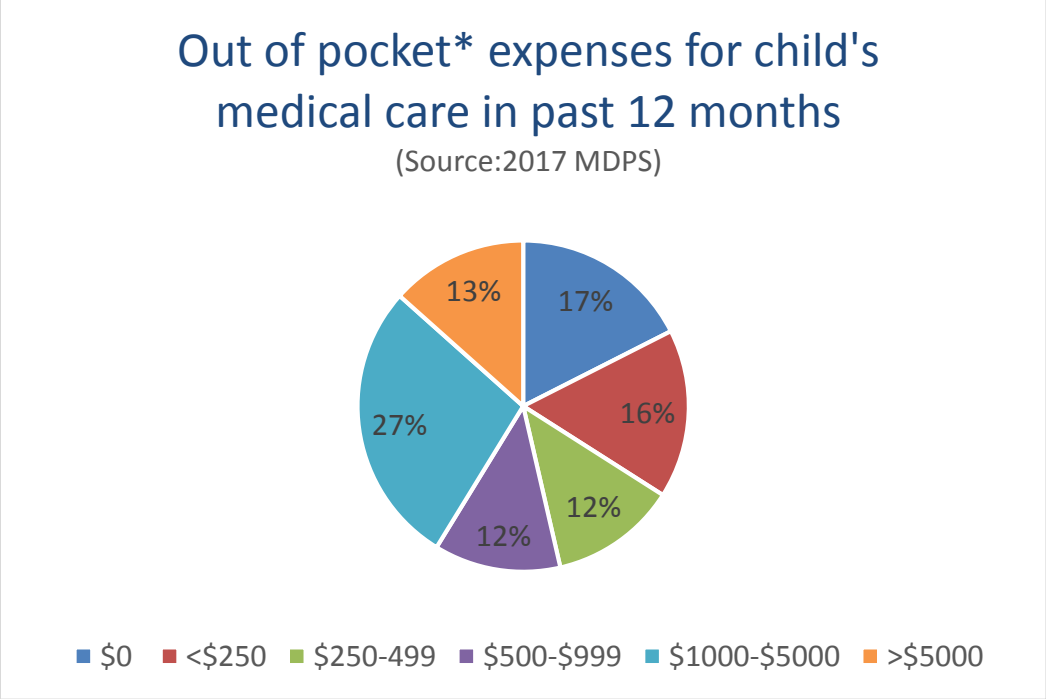
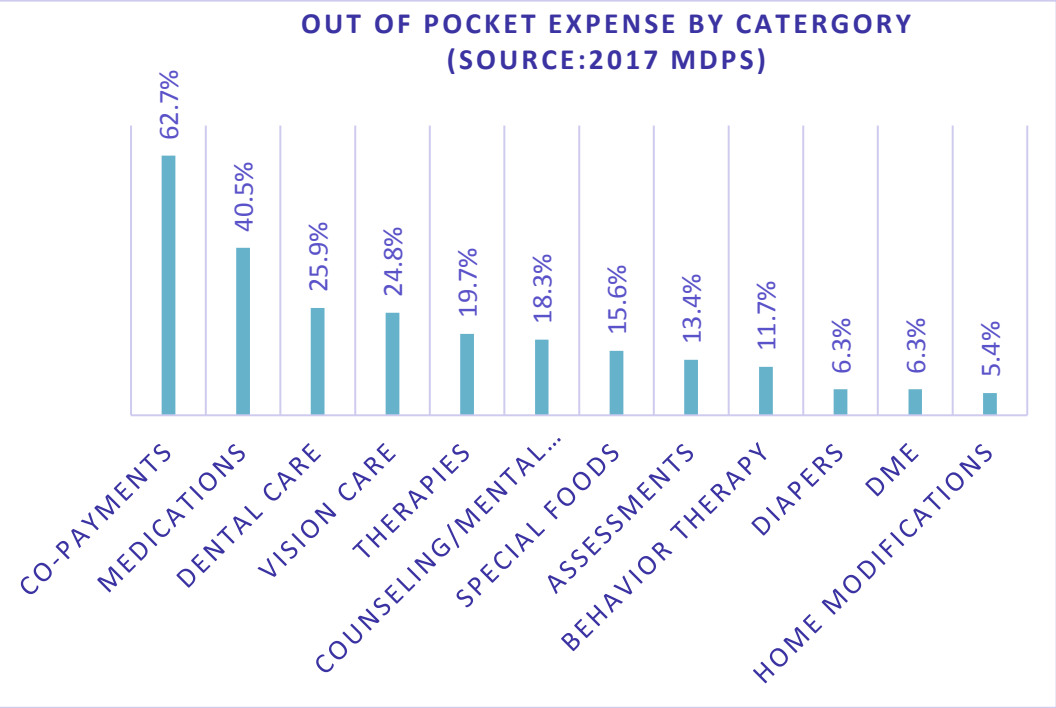
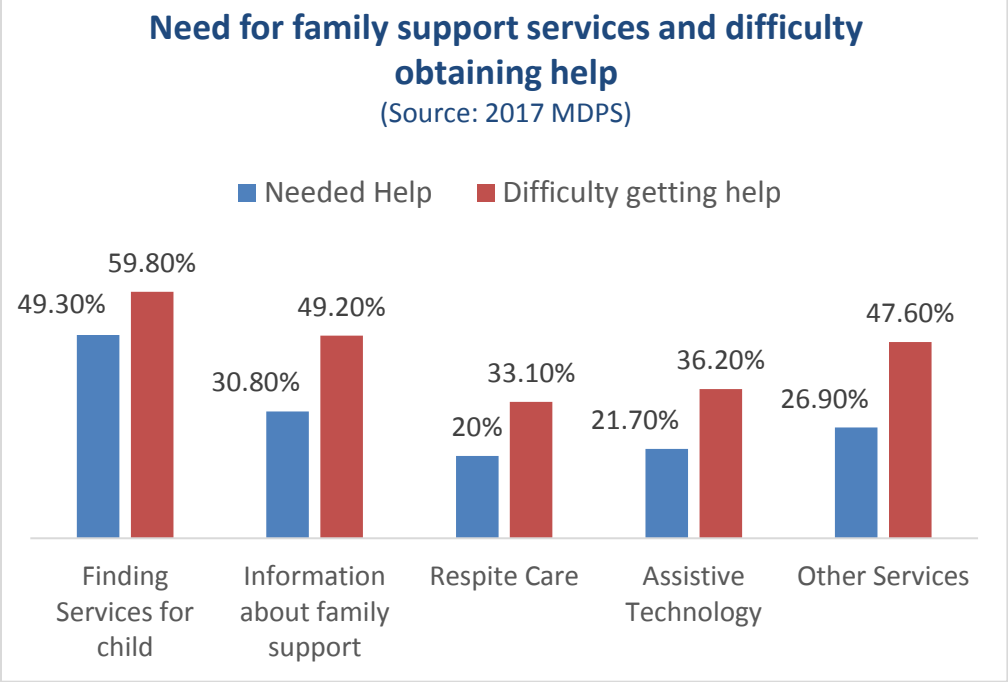


Chart 5. Out-of-Pocket Expenses by Category



Other issues revealed with regard to barriers for health care access were care coordination. Data collected of the parent calls (N=2277) indicated that 49% of families needed help finding services, 60% had difficulty getting help, and 32% did not receive needed help, this is further illustrated in Chart 5 below.

Chart 5. Need for family support services and difficulty obtaining help



Resources Needed to Improve Access

Affordable healthcare (medical and dental) services top the list for most services to improve health in Baltimore City for CYSHCN. Participants thought the Maryland should implement a provision that allows families of CYSHCN to buy into Medicaid for their CYSHCN with its often broader array of covered services and lack of co-pays and co-insurance costs to families. Free low/low cost mental health services followed closely in as a key resource that several respondents felt weren't readily available in the community. Improved and adequate transportation followed closely after, as well as for insurance to cover telemedicine services so that transportation, for many services would not be as much of an issue. Substance abuse services and the lack of them or how limited they are was also strongly indicated by many participants. Parents vocalized concern about their child's pain management for their ailment were afraid that this could potentially be an issue. Other parents with children in the Neonatal Abstinence Syndrome (NAS) program are still struggling with addiction. Neonatal Abstinence Syndrome (NAS) is a complex condition that occurs when a mother uses drugs, such as opioids, during pregnancy. The drugs pass through the placenta to the baby's circulatory system resulting in drug dependence at birth (See Table IV).

Table IV. Resources Needed to Improve Access

Rank	Health Issue	Count	%
1	Free/Low Cost Medical Care	625	50.6%
2	Free/Low Cost Dental Care	588	47.6%
3	Mental Health Services	473	38.3%
4	Improved Transportation	447	36.2%
5	Health Literacy (Navigation)	414	33.5%
6	Substance Abuse Services	409	33.1%
7	Access to Affordable Healthy Food	365	29.5%
8	Health Education & Outreach	257	20.8%
9	Family Education on ACES	232	18.8%
10	Care Coordination	227	18.4%

**Respondents could select more than one option, therefore the percentages will be greater than 100%*

In addition, respondents indicated through an open-ended question a variety of resources and services that they felt were missing. The text box below highlights some of the verbatim comments.

Select Comments Regarding Missing Resources in the Community:

- ✓ **"Make health insurance and transportation more affordable for people"**
- ✓ **"Access to jobs. Education"**
- ✓ **"health education in the local churches"**
- ✓ **"Make it less expensive so a lot more can get help"**
- ✓ **"Transportation Free check-ups at the local clinic"**
- ✓ **"Provide more affordable health insurance and to have a health fair twice a year in the community"**
- ✓ **"More mental health resources without stigma. Access to economically responsible fresh food"**
- ✓ **"need more community exercise programs"**
- ✓ **"Teaching courses in the schools (education system)"**
- ✓ **"Better health care, transportation, no insurance, no jobs, living is expensive."**
- ✓ **"Bringing about the awareness of more affordable options for health insurance as well as the importance of being proactive."**
- ✓ **"Simplify insurance. There are too many exceptions and rules and failure to follow the rules leaves the patient holding the bag"**
- ✓ **"outreach to the people, they don't believe anyone cares so most have stopped caring themselves. Most so called health care establishments are really about learning and making money. Since they don't really care about the people they must be learning to make more money."**
- ✓ **"My community does not have great access to public transportation, nor does it have walkable sidewalks/paths. There are numerous clinics, doctor's offices, and excellent grocery stores within 1-2 miles of my apartment complex, but without a car those spaces are difficult to access."**
- ✓ **"Insurance and medical access for all; education on prevention of domestic violence, child abuse, drug/alcohol abuse and gun safety; education and access to healthy foods"**

Suggestions and Recommendations

To round out the feedback from survey participants, respondents were asked to provide suggestions/recommendations that they felt would be helpful in addressing the health needs of CYSHCN in Baltimore City. Most survey participants expressed the need for providing affordable health care and insurance plans, especially for CYSHCN with private insurance, and free/affordable mental health/substance abuse services. Respondents also pointed out the need for more health education and outreach with regard to health literacy, health navigation, asthma, preventable injuries, food desserts, and chronic disease management such as diabetes, obesity and heart disease.

Focus Group Discussions Overview

Background

This section gives an overview of the clinical, medical, and public health experts conducted on several dates in the month of April 2018 (See Appendix). All focus groups were conducted within MWPH, each group involved a small number of involved approximately 20 participants, depending on size of department. The participants represented a variety of health and social service sectors, with an active role and in-depth understanding of the healthcare system and health needs of CYSHCN in Baltimore City. A list of attendees and dates for session can be found in the Appendix

Access to Care

Focus group attendees were asked to discuss barriers related to accessing health care services for CYSHCN in Baltimore City. The following themes emerged from the discussions in the sessions

Lack of Specialty Care Providers and Long Wait Times

Lack of specialty care providers was commonly voiced as a significant barrier in these sessions. This issue often correlated with longer wait periods to see a specialist. Four issues related to access to specialists were cited repeatedly:

1) Families reported problems getting needed specialist care, especially CYSCHN with emotional, behavioral, or developmental (EBD) issues.
2) Families reported long wait times for specialist appointments especially for diagnostics or mental health services.
3) For families who reported their health insurance was not adequate, they also said that their child did not see a specialists in the last 12 months.
4) Most families reported getting referrals, but a small sub-section (about 10%) reported they had problems getting referrals when needed.

Insurance Deductibles and Price of Durable Medical Equipment (DME) and Medications for CYSHCN

Difficulties with access to care, dealing with insurance coverage and piecing together needed services from a fragmented system takes its toll on families at MWPH raising CYSHCN. The toll is both emotional and financial. Families are frustrated by the impact the fragmented system has on their ability to parent all of their children. For families whose children utilize DME such as wheel chairs, braces orthotics, diapers, and even special glasses, problems with adequacy of coverage were noted.

In some cases, families stated that health plans simply provided no coverage for needed equipment, other times there were dollar limits that did not match the actual cost of items. Approval processes were reported as difficult and time consuming. As noted earlier in this CHNA, 17.7% of families reported out of pocket expenses for DME 10.4% of that on diapers for their child with special health care needs.

Again, the severity of the child's health care needs related to out of pocket costs with 26.6% of the children who parent's rated their problems as severe having families reported spending over $1,000 out of pocket in the past year. Families with private insurance or a combination of public and private were more likely to have higher out of pocket expenses.

CYSHCN have chronic conditions that require advance care and close follow-up to help their parents effectively manage their conditions. However the inability to afford high deductibles often pose a significant challenge and create a chair reaction where those who can't afford their medications or regular appointments often end of having a medical emergency.

Fragmentation of Health Care System/Care Coordination

The issue of lack of coordination of services and supports for CYSHCN was a frequent theme in group discussions with families. Overall 7603% of CYSHCN had parents who reported that services and supports did not receive care in a well-functioning system. And even higher percentage (81.1%) of parents with children rated as having the most severe conditions and the highest needs reported that the system was not easy to use. Children with family incomes of 100-199% of the federal poverty level had even more parents who were having difficulty using the system (89.3%).

Families reported that finding services were difficult, time consuming and the processes and forms were overwhelming. It was reported that at times there was a lack of coordination within the same institution or agency. For example, in hospitals some departments participated in a health plan and others in the same hospital did not. Families were perplexed by this and felt they could not understand how to access covered care. For CYSHCN, they might have to go to one hospital for that care, yet be unable to access other aspects of health care at that same institution. There were concerns that there is no reimbursement to health care providers for care coordination needed to support families in dealing with the fragmented system. At the same time, families noted that children who were involved with multiple public programs might have more than one care coordination, yet there was no integration of those services.

Lack of Transportation

Transportation was the most discussed area of concern in all focus groups at MWPH, from executive level staff, clinical content experts, and parents of CYSHCN the like, transportation was identified as a major barrier. As one participant put it "I don't drive, so I have to rely on family and friends or Medicaid Transportation and it is often an unreliable system. I have utilized the free shuttle service, problem is… the shuttle doesn't always work with Mass Transportation schedules for the bus… one time I had to walk over 2 hours because the shuttle service made me miss the last bus. Also because I am a single parent, if I don't have child care I can't keep my appointment. Medicaid Transportation will only transport myself and the child who is receiving treatment.

Several participants (and later staff) echoed that transportation posed a huge problem for children who are severely delayed, autistic, or have severe aggressive behavior diagnoses.

Lack of Mental Health Providers and Stigma

When parents were asked if there were certain health care related services for CYSHCN were delayed or not received in the past 12 months, participants overwhelmingly identified therapies, mental health services, and behavioral supports as the most frequently delayed or not received services.

In addition, almost one third of families reported a delay in their own health care or a family member's care due to the child's special needs (31%). Slightly more than six in ten parents (61%) reported anxiety problems in their children during the past year. Other frequently reported behavioral issues included anger/conflict management, depression, and an increase in problem behaviors. For each behavior cited, parents sough help between 67%-96% of the time (PPMS Parent Calls); ye the majority of parents reported accessing the help they needed was either somewhat difficult or very difficult. The chart bellows identifies each reported behavioral issue and the difficulty in getting help (Table V)/.

Table V. Unmet Needs Based on Child Behavioral Health Issue

Unmet Needs Based on Child Behavioral Health Issue	
BEHAVIORAL HEALTH ISSUE	**% OR REPORTING DIFFICULTY IN GETTING HELP**
Anxiety	60.6%
Suicidal Thoughts/Behaviors	44.7%
Increase in Problem Behaviors	51.2%
Depression	50.5%
Anger/Conflict Management	50.4%
Bullying	40.4%
Drug/Alcohol Abuse	35.7%

Other needs identified by parents included finding therapies, child care, psychiatrists and other mental providers or services, Applied Behavior Analysis (ABA) therapies, camps and general financial assistance for middle income parents. In most cases, parents had sought help from someone in getting this need or service but many found this difficult to obtain.

Impact on Family Well Being

Families reported that the burden of the out of pocket costs can have an impact on the financial status of the family. In addition, the time spent dealing with insurance issue seeking and coordinating care and providing care for their children has resulted in some parents having to reduce or give up employment.

Less visible is the financial impact on families of the time spent providing, coordinating, and arranging care for their children and youth with special health care needs. Because of care for their CYSHCN. Because of the time needed to provide, arrange or coordinate care, some parents had to alter their employment status provides additional financial impact on the families. Others report that they avoided changing jobs because of concern about their child's health coverage. 51% reported either cut hours, stopped working, or avoided changing jobs because of their child's care.

37% of parents of CYSHCN and 34.7% of parents of children with EBD felt aggravation from parenting. Many parents stated that they were receiving no emotional help parenting their child and expressed not coping very well with the demand of raising a child with special health care needs.

Nearly 40% of parents with CYSHCN and EBD stated that they sometimes, usually, or always feel angry with their child. As in this parent's statement "We're parents. We all want to everything we can so our children can reach their potential. But none of us signed up to be parents of children with additional needs—it's just so much harder for our kids. So we want to make sure in every way we know how, that our kid has everything they need. And you're a great mom or dad for doing that, that's something we don't do enough for each other, tell each other that."

Where the need mental health services for CYSHCN is clearly documented for various sources of data, what is often overlooked is the well-being, health care, and mental health of the caregiver/parent.

Case Managers

It was acknowledged that MWPH patients interact with any number of care providers across multiple settings it would make it easier for patient families to get better and be healthier if they could have case managers who help streamline their different care and assist with navigating the health system. The difficulty to navigate the health care system again was mentioned as a barrier. This would also help to improve the health outcome of Spanish speaking families if they had access to a bilingual case manager or advocate to assist in access of health care services and care coordination

Training Caregivers

Parents were mentioned as an important existing force in the service delivery process. Educating these caregivers to better understand the medical needs of their CYSHCN was mentioned as the best alternative to improve the health outcome of patients. Many agreed that the health system should provide more support to these parents who typically have their hands full with full time jobs, other children and their needs, and caring for their CYSHCN by teaching them about available local resources to take care of the patient-child, as well as themselves.

Community Involvement, Advocacy and Partnership

Focus group participants were then asked, "What do you think could encourage more community involvement, advocacy, and partnership around health issues that would benefit the public/your child as it pertains to your organizations services?"

Coalition

The need to coalesce around cross-cutting causes and objectives was emphasized in the discussions, to this end, an active convener that would help partners to form coalitions was cited as a potentially useful resource.

Outreach (Community Paramedicine/Telemedicine)

The overwhelming majority of participants seemed to agree that many people have difficulty getting to pediatric specialty services and suggested the need for being proactive in rethinking the current health care system of delivery so to get providers out in the neighborhoods and communities where people reside. This was believed to potentially enhance access to care, especially for medically underserved populations in rural areas. CYSHCN are at a high disadvantage because their transportation depends on the availability of parent's work schedule, other appointments, and access to means of transportation, which makes it difficult for them to attend medical appointments in a timely matter, or often at all.

MWPH's telemedicine service is growing. Many families have provided positive feedback about its availability as a convenience and a recommended solution for dealing with the barriers of transporting a CYSHCN to several appointments.

Volunteers

The value of volunteers bring to health care delivery was discussed extensively in all focus groups. One participant mentioned that there are a lot of parents, who want to become more engaged and enhance their training and knowledge. Another participant recommended using students in the health discipline (community health educators, nursing, medical, etc.) was an effective way to bring health education to different parts of Baltimore City.

Challenges Facing Providers when helping people navigate health care services

Focus group participants were then asked, "From your perspective, what is the greatest challenge you face when helping people navigate health care services at MWPH?"

Participants noted that helping patients understand and navigate the health benefits exchange was very challenging because even after people have insurance coverage, they didn't know how to use it. "It's a time and system issue and in some aspects it's a language issue… We have a whole new market of people out there who have insurance and don't know how to access it or don't know why they should access it or don't know why they should access it."

Lack of specialty providers was brought up again as posing an enormous challenge and providers often struggle where to send patients for further diagnosis. Specifically speaking, psychiatry and physiatry.

Transition

OGPSHCN and PPMD conducted a 2017 Parent Youth Transition Survey, a follow-up to the 2011 Transition Survey, which included similar questions to those asked on the

Health Experts

Methods

- Facilitate focus group meetings to include local schools of Medicine, MWPH Nursing, Recreational Therapy, Psych, Rehab, Social Work and other employees who engage in community affairs. (See Appendix for detailed notes)
- Telephone Interview with Baltimore City Health Dept. Commissioner, Dr. Leana Wen
- Review and include National Prevention Strategy Priorities, State Health Improvement Plan (SHIP) indicators, and Healthy Baltimore 2020 plan from BCHD

Results

- National Prevention Strategy – 7 Priority Areas
- SHIP: 39 Objectives in 6 Vision Areas for State, includes targets for Baltimore City
- Healthy Baltimore 2020 A Blueprint For Health: Health Equity Objectives and Strategic Priorities

BCHD Local Health Improvement Committee/ Interview with Health Commissioner (2/15/18).

Method: Interview, Dr. Leana Wen, MPH, MSc, Office of Chronic Disease Prevention, Baltimore City Health Department (2/15/18)

Results:

Identified the top 4 health problems per Baltimore City Mayor's health priorities:

1. **Behavioral Health**– (opioid overdose deaths)
2. **Violence Prevention**– (youth homicides, high school absences and child deaths)
3. **Chronic Disease**– (obesity, food insecurity, child lead poisoning)
4. **Life Course and Core Services**- (life expectancy and infant mortality)

Top Barriers to Health:

- Race, Equity and Inclusion
- Focus on Well-Being (Cyclical Nature of Trauma)
- Health-in-all-policies (Health impacts all policies whether it is education, labor, or transportation, health must be a part of the conversation. "a sick child cannot go to school and a sick adult cannot work"
- Knowledge deficit with respect to health insurance
- People don't know how to use (navigate) the system---need care connectors and/or health navigators.
- Families experience difficulty understanding Medicaid and MCOs
- General Education/Literacy (SDoH)

MWPH Health Expert Interviews & Clinical Focus Groups

On the status of pediatric health and wellness in Baltimore city:

- Very divergent by income; health determined by income
- Pimlico and Park heights are not wealthy; have poor health outcomes; there is a correlation between race, income and those outcomes.
- Access to healthcare
    - Access to good employment, role models, and schools—Neighborhood have lost their core.

Maryland is very good at providing coverage→ other social issues prevent positive health outcomes. Providing connections to these (social) services for children is hard. It seems as if there are more social issues other than number of physicians available.

Mental/Behavioral Health

- With behavioral health, the law requires that patients must receive services in a regulated facility before reimbursement can be made. In most cases, there are no incentives in the community for behavioral health.
- Chronic pain mgmt.- substance abuse concerns
- Providers understanding all resources that are available for NAS babies.
- Undiagnosed Trauma/need to self-medicate
- The epidemic of substance abuse in Baltimore City plays a role in healthcare and child care.
- Insurance not covering needed services like group therapy
- Paraprofessionals needed for better coordinated services and care
- Education (school system), School based mental health services
- Lack of pediatric specialty services in rural areas
- Health literacy- parents ability to understand the complexity of treatment/diagnoses.

Trauma

- Children with autism have access to services in the home where TBI patients do not have that additional support (paraprofessionals)

SDoH/Environmental

- The gaps in care when a woman becomes pregnant. It usually takes usually 6-8 weeks to be eligible for insurance. This delays women in receiving care until their second trimester.
- Affordable reliable child care. Many parents do not meet the income requirements for early education programs/aftercare such as Head Start.

Language Barriers

- Finding primary care is challenging for a CYSHCN has its own complex challenges, but it is enhanced exponentially when a family does not have English as a primary language.
- Transition from MWPH to a primary care provider is often delayed because the primary providers that provide services to children with complex medical needs often will not accept the patient if no one speaks English because they don't have the ability to provide translation services.

Healthy People 2020

Data are available for the following Healthy People (HP 2020) Disability and Health objectives:

- Objective DH-5: Increase the proportion of youth with special healthcare needs whose healthcare provided has discussed transition planning from pediatric to adult healthcare

HP 2020	Baseline Year 2005-06 = 41.2%

HP 2020	2009-2010 United States = 40.0%
HP 2020	2009-2010 Maryland = 36.8%
HP 2020 TARGET = 45.3%: NOT MET	

Progress toward this objective continues to be addressed. This objective presents greater disparities when adjusted for race and ethnicity. At baseline, the best group rate for this objective, 46.5 percent, was attained by the White only, not Hispanic or Latino population. The Hispanic or Latino population attended the worst group rate for this objective 26.3 percent, at baseline.

Data are available for the following Maternal, Infant, and Child Health objectives:

- Objective MICH-29: Increase of the proportion of young children with autism spectrum disorder (ASD) and other developmental delays that are screened, evaluated, and enrolled in early intervention services in a timely manner.
    - MICH-29. Increase the proportion of children (ages 10-35 months) who have been screened for ASD and other developmental delays.

HP 2020 Baseline Year 2005-06 = 22.6%
HP 2020 2009-2010 United States = 38.0%
HP 2020-2009-2010 Maryland = 36.8%
HP 2020 TARGET = 24.9%: MET

Progress in screening for ASD and other developmental delays is moving in the right direction.

- MICH-30.2 Increase the proportion of children, including those with special healthcare needs, who have access to a medical home.
    - MICH -30.2. Increase the proportion of children with special healthcare needs who have access to a medical home.

HP 2020 Baseline Year 2005-06 = 47.1%
HP 2020 2009-2010 United States = 43.0%
HP 2020 2009-2010 Maryland = 44.2%
HP 2020 TARGET = 51.8%: NOT MET

Progress toward the target level has decreased since baseline. Activities informing providers and caregivers of the importance of a medical home are needed. This objective presents greater disparities when adjusted for race and ethnicity. At baseline the best group rate for this objective, 52.8 percent, was attained by the White only, not Hispanic or Latino population. The Hispanic or Latino population attained the worst group rate for this objective, 32.2 percent, followed by Black or African American (36.0 percent) at baseline.

Healthy Baltimore 2020

Current Snapshot of Health in Baltimore City

Behavioral Health:

1. Over 10% of residents in the Baltimore metro area 12 and up are estimated to have a drug or alcohol abuse disorder. Nearly 20,000 people are estimated to use heroin[7][8]
2. 30 percent of children in Baltimore, compared to 19 percent statewide, have Adverse Childhood Experience (ACE) scores of 2 or more, meaning that they have experienced more than two incidences of events such as domestic violence, living with some with a n alcohol/drug problem, the death of parent, or being a victim/witness of neighborhood violence.

Violence:

1. Baltimore City experienced 344 homicides in 2015, the 3rd highest murder rate nationally and highest rate per capita in Baltimore's history.[9]

Values: Race- It is impossible to talk about health in Baltimore, without addressing significant disparities as a result of structural discrimination, racism and poverty, and historical practices of exclusion. Moving forward community benefit programs must be rooting in combatting health inequity, and ensure all residents have a right to a healthy life.

Well-being: this is about not just addressing the symptoms of poor health but also the barriers, trauma is generational and cyclical in nature, impacting mental and physical health and that spans across a life course. We look forward to collaborations with community partners in this room to promote healing and awareness. Health in All Policies- simply put, health is foundational to every issue. Unhealthy children cannot learn, and unhealthy adults cannot be productive parts of the workforce. As we examine these critical issues, whether it is the economy, public safety or education, health must be a critical driver of legislation and must have a seat at the decision-making table.

Data-Driven: Utilizing evidenced based models to ensure long tem health impact
Community Informed: engage the community in setting goals
Place Based: Meet the people where they are, public health information is delivered directly to Community members
Upstream: tackle the root causes of poor health.

Prioritization of Needs

Based on the data reviewed and the meetings attended in the communities, prioritization, of identified needs included several considerations. Each priority was considered the following criteria:

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[7] Maryland Vital Statistics Annual Report 2014. Baltimore, MD: Vital Statistics Administration, Department of Health and Mental Hygiene.

[8] American Community Survey. Poverty Status in the Past 12 Months of Related Children under 18 Years by Family Type by Age of Related Children under 18 years, 2010-2014 5-Year Estimates. American FactFinder. Baltimore City.

[9]

- Community Input→National→ State Priorities: Does the identified need align with national and state priorities, such as *Healthy People 2020 objectives*, Maternal and Child Health Bureau performance measures, and community input from public meetings?
- Responsibility/Capacity: Does the identified need fit within the mission and capacity of MWPH?
- Availability of Resources /Feasibility: Does MWPH and our partner agencies have adequate resources available and knowledge to address the identified need?
- Magnitude/Severity: By addressing the identified need, is there an impact on the well-being of the community? How do the data and indicators of the identified need compare of those of the nation and other states?

Prioritize Community Health Issues: On April 30, 2018 a community stakeholder meeting was held to determine the most pressing community health needs. Attendees included community members, community leaders, hospital management and executive board, and members of the hospital and foundation board.

The Criteria for Prioritization:

- Magnitude of the problem
- Severity of the problem
- Need among vulnerable populations
- Ability to have a measurable impact on the issue
- Existing interventions focused on the issue
- Whether the issue is a root cause of other problems
- Trending health concerns in the community
- Alignment with MWPH's exiting priorities and whether finances/resources to address the health concern
- Potential barriers or challenges to addressing the need

Priorities Identified CHNA Prioritization Matrix

CHNA Priority Setting Matrix FY 2018											
WRITE THE PRIORITIES HERE======>	Transportation	Behavioral Health/ Substance Abuse	Violence/ Child Maltreatment	Access to Healthcare	Mental Health	Obesity	Poverty	Health Literacy & Prevention Education	Care Coordination/ Transition	Health Equity	TOTAL
Problem is greater in the city compared to the state or region.	44	57	82	36	38	44	82	74	7	5	**81**
Impact on vunerable populations is significant.	61	50	87	50	48	44	80	86	16	6	**102**
Cost to the community can be achieved by addressing this problem/aligned with Pop Health.	49	59	75	47	29	37	67	70	9	6	**79**
Major improvements in the quality of life can be made be addressing this problem.	57	59	85	54	51	46	82	79	13	6	**92**
Issue can be addressed with existing leadership and resources.	44	35	54	35	29	21	43	69	6	4	**75**
Progress can be made on this issue in the short term.	46	31	40	36	28	29	43	76	9	4	**85**
TOTAL	**301**	**291**	**423**	**258**	**223**	**221**	**397**	**454**	**60**	**31**	

Social Determinants of Health Identified as Priorities/Unmet Community Health Needs: There were several social determinants of health or external factors identified as "primary needs" or "root causes" in the prioritization process. These included: health equity, poverty/unemployment, and housing. These priorities will be identified in the implementation plan as "Community Support Services." It is impractical for MWPH to prioritize these as part of the CHNA, given the inability to make a considerable impact in a 3-year period.

Previous CHNA and Prioritized Health Issues: MWPH conducted a comprehensive CHNA in 2014 to evaluate the health needs of individuals living in the hospital service area within Greater Baltimore. The purpose of the assessment was to gather information about local health needs and health behaviors. The assessment provided guidance to MWPH to prioritize six health issues and develop a community health implementation plan to improve the health of the surrounding community The prioritized health issues were:

- Maternal/Child Health
- Childhood Obesity/Chronic Disease(CVD/Diabetes)
- Injury, Trauma, Violence Prevention
- Lead Poisoning
- Health Literacy (Education & Outreach)
- Access to Health Care

Previous CHNA Outcomes:

- 10,123 Families received education about lead poisoning through Health Education and Outreach
- 38,027 families received education on preventable injures
- 703 participants in 36 Safety Baby Showers receiving education on preventable injuries such as scalding/burns, traumatic brain injury as a result of poor child passenger safety, falls, furniture tip-overs, child maltreatment, poisoning, and sudden infant death syndrome.
- 668 Children completed obesity prevention school-based program Healthy Living Academy.
- 304 Regular attendees to support groups for diabetes, weight management, traumatic brain injury, and parents with children who have medically complex needs.
- 106 Providers participated in health literacy education training and motivational interviewing

Summary and Implementation Plan

The data presented have been collected, reviewed, and analyzed by multiple stakeholders. This process has been most meaningful in that not just one organization or group has collected the data, but the information has been provided from groups across in state in different forums. A representative from the Maryland State Department of Health, Office for Genetics and People with Special Health Care Needs, has reviewed the assessment and provided input from a public health perspective. The top priority areas are:

- **Health Literacy & Chronic Disease Prevention Education**
- **Violence & Child Maltreatment**
- **Transportation**
- **Behavioral Health & Substance Abuse**
- **Access to Health Care**
- **Mental Health**
- **Obesity and Access to Healthy Foods**

Appendix A Public Survey

2018 Community Health Needs Assessment Survey

Your responses to this optional survey are anonymous and will inform how hospitals and agencies work to improve health in Baltimore City. Thank you! Instructions: You must be 18 years or older to complete this survey. Please answer all questions and return the survey as indicated. For questions about this survey, contact (410) 578-5065 or melissa.beasley@mwph.org.

1. What is your ZIP code? Please write 5-digit ZIP code. _____

2. What is your sex? Please check one.

☐ Male ☐ Female ☐ Transgender

☐ Other specify_____ ☐ Don't know ☐ Prefer not to answer

3. What is your age group (years)? Please check one.

☐ 18-29 ☐ 65-74

☐ 30-39 ☐ 75+

☐ 40-49 ☐ Not sure

☐ 50-64 ☐ Prefer not to answer

4. Which one of the following is your race? Please check all that apply.

☐ Black or African American ☐ American Indian or Alaska Native

☐ White ☐ Other/more than one race specify_____

☐ Asian ☐ Not sure

☐ Native Hawaiian/Pacific Islander ☐ Prefer not to answer

5. Are you Hispanic or Latino/a? Please check one.

☐ Yes ☐ Not sure

☐ No ☐ Prefer not to answer

6. On how many days during the past 30 days was your mental health not good? Mental health includes stress, depression, and problems with emotions.
Please write number of days. _____ days

☐ Zero days ☐ Don't know ☐ Prefer not to answer

7. What are the three most important health problems that affect the health of your community? Please check only three.

- ☐ Alcohol/drug addiction
- ☐ Mental health (depression, anxiety)
- ☐ Diabetes/high blood sugar
- ☐ HIV/AIDS
- ☐ Lung disease/asthma/COPD
- ☐ Smoking/tobacco use
- ☐ Don't know
- ☐ Alzheimer's/dementia
- ☐ Cancer
- ☐ Heart disease/blood pressure
- ☐ Infant death
- ☐ Stroke
- ☐ Overweight/obesity
- ☐ Prefer not to answer

8. What are the three most important social/environmental problems that affect the health of your community? Please check only three.

- ☐ Availability/access to doctor's office
- ☐ Availability/access to insurance
- ☐ Domestic violence
- ☐ Limited access to healthy foods
- ☐ School dropout/poor schools
- ☐ Lack of job opportunities
- ☐ Race/ethnicity discrimination
- ☐ Don't know
- ☐ Child abuse/neglect
- ☐ Lack of affordable child care
- ☐ Housing/homelessness
- ☐ Neighborhood safety/violence
- ☐ Poverty
- ☐ Limited places to exercise
- ☐ Transportation problems
- ☐ Prefer not to answer

9. What are the three most important reasons people in your community do not get health care? Please check only three.

- ☐ Cost – too expensive/can't pay
- ☐ No doctor nearby
- ☐ Language barrier
- ☐ Prefer not to answer
- ☐ Wait is too long
- ☐ Lack of transportation
- ☐ Cultural/religious beliefs
- ☐ No insurance
- ☐ Insurance not accepted
- ☐ Not Sure

10. What ideas or suggestions do you have to improve health in your community?

_____

_____

_____

- ☐ Not Sure
- ☐ Prefer not to answer

Baltimore City-wide CHNA 2017

Focus Group: Key Community Stakeholders

Date/Time: 11/10/17, 1:30pm and 11/15/17, 11am

Location/Host: Mercy Medical Center and Forest Park Senior Center # of attendees: 16 and 7

Attendee Profile: Attendees were invited by members of the city-wide CHNA Project Team, and represented a variety of organizations throughout the city. They were chosen for their knowledge of specific communities, focus areas or disease states that were important for getting a full picture of community needs. See list of attendees at end of document.

Facilitators: Lane Levine, Sinai Hospital, and Anne Williams, University of Maryland Medical System

Identified Priority Health Concerns

Alcohol and drug addiction

Mental Health

Chronic disease (generally)

Identified Priority Environmental Concerns

Safety, violence and trauma

Older adults*

Housing

Identified Priority Health Care Access Problems

Accessibility/availability of medical services and facilities in neighborhoods

Health literacy

Caregiver needs

*The meetings attracted a high proportion of people in aging services fields – however, people not strictly in these fields also touched heavily on problems concerning older adults.

Notes:

Health Concerns:

- Alcohol and drug addiction (top item)
  - Drug addiction affects all ages (even babies) and tends to impact physical health, mental health and lead to stroke, heart disease, cancer, and Alzheimer's disease.
  - Lack of employment leads to substance abuse.
- Mental Health (top item)
  - Mental health is often not talked about and is rarely ever seen as a health problem.
  - Mental health issues are on the rise and there is a lack of adequate health care to address the problem; more resources and providers are necessary.
  - It permeates all ages and it is often difficult for people to manage the symptoms of their illness and becomes a barrier to living a healthy life.

Depression and anxiety are two major issues and it was noted that the two mental illnesses can arise from being exposed to violence and being immobile. Outcomes include isolation and loneliness, which can lead to alcohol and drug addiction.

- People are often unreceptive to references to mental health that include words they are not familiar with: "trauma is not the word they use".

- Chronic Diseases (top item)
  - Obesity: Stems from poor diet, sedentary lifestyles (often due to inability to exercise), and genetic predispositions.
  - Diabetes: There is a very high rate of diabetes across the board
  - COPD: Becoming increasingly prevalent in older adults
  - Heart disease, high blood pressure, and cancer: leading cause of death for most adults

- Pregnancy complications

-Infant mortality is a huge issue: "If we allow babies to die, then we're not taking care of the health of the community as a whole"

- Preterm birth is often overlooked. Although there has been a lot of progress, it is still an issue that drives a lot of costs.
- Women with high blood pressure or drug/alcohol addiction can contribute to preterm birth

 Mental health problems can prevent mothers from receiving care.

 Tobacco use

- "HIV/AIDS gets more attention in LGBT population, but cigarettes and tobacco will kill 6x more people that HIV/AIDS will in one year"

 Inaccessible spaces for those with disabilities

 Alzheimer's and Dementia

- People generally feel helpless and it impacts caregivers

 ADHD/Autism

 Lack of oral hygiene

 Hearing impairment

 HIV/Aids

 Asthma

Social/Environmental Factors

 Safety, violence and trauma (top item)

-Murder rate is rising

Effects on youth:

 Violence is a leading cause of death for Baltimore kids

 Children encounter violence before they even encounter school

 Teen violence is on the rise

 Abused and neglected kids

 Violence has a lifelong effect on their long-term outcomes

Effects on the community:

 Even if housing is available and accessible, community violence can prevent people from moving into the community.

 Healthy food initiatives in conjunction with corner stores are jeopardized if safety to and from the stores is an issue.

Appendix C MWPH Clinical Staff/Parent Focus Group Notes

Child Life
Education and Lack of Education

1. Transportation
2. Education School System
3. Language Barriers

Really struggled this year then the years previous.

4. Culture

Willingness and desire to ask for help and how

5. NAS – Opioid (Methadone) Resources Aid
6. Do Dr.'s jump to methadone as an option?
7. Other children, being a bother especially during SRV
8. Family extended support

QM + Infection

1. Substance Abuse
   - Not sure for resources for PEDs
   - NAs
   - Older Peds gang activity
   - Pain
2. Amount of Information

Education

3. No child left behind
4. T.M.I

Saying too much info to check the box but not to meet the needs of the parents.

5. Jargon
6. MD Pt. Safety Conference

1. Geographically –No specialty programs rurally
2. Transportation

In addition to transportation a child who is severely delayed highly on the spectrum.

3. Physical support – Required PRP
4. Resources Limited for Children w/ Behavioral

Kids w/ autism of last February can receive services in the home but TB1 kids do not have additional support.

5. A girth of resources for children who's aggressive for 1yr.
6. Insurance net covering services group
7. Telepsychology
8. GAP in are for kids /

Child Life

1. CPS Service system broken

Needs to be a usable recourse.

2. Come to us from other facility and assumption that parents understand diagnoses and complexity
3. Making sure that families

4. Mom does not feel like she can bond AMA
5. Volunteers coffee bar

Gift shop opportunity

Executive Team Focus Group Notes

1. Pre-natal care access
2. Preventing
   - early delivery
   - natural delivery
3. w/ insurances self-pay cost
4. Delays in clinics
5. Lack of pediatric specialty in remote areas.
6. Insurance for remote services.
7. Behavioral health partnership
8. LCAD

1. Psych Psychiatrist not enough children

see one for $300 per hour.

2. Medicaid non [?]
3. Psychiatric nurse practitioner
4. Go into school
5. General decline in schools and not covered by psychology.

1. Multiple barriers telepsychology
2. Depression
3. Connectivity
4. Immunocompromised
5. Grandparents are barely available

1. Parent mentor group
2. Advocacy (Statewide and Governmental)
3. Go into schools and provide service.
4. Hospital admin
5. ACC Device
6. More service coordination w/ assistants transitionary

1. Special education advocates
2. Outpatient social worker
3. Transportation
4. Hours of operation → and Distance
5. Obstacle (Affordable Reliable Childcare)

No Way

Behavioral Health

1. Substance abuse → Chronic pain medication/ Management
2. Undiagnosed Trauma
3. Self-Medicate
4. Toddlers that inpatient

(No playroom) developmentally appropriate

Technology - very helpful, high on the spectrum severity.

1. Crissp → Unites Medical Records
2. Auto faxing reports capability 4yrs.
3. For service coordination by Shepard Pratt
4. By Mouth
5. Access to medical journals electronically

Rather than what is the best

1. Communication
2. School districts impact care

Recommendations

1. Donated items collected
2. Advocacy – Move
3. Generate Revenue

Community Health Concerns

1. Lead
2. Violence and Victims
3. Drug Use (Recreational Use)

Compulsive habits

4. Neglect and Maltreatment
5. Consistent access to healthy foods
6. Wounds

Barriers

1. Transportation
2. Insurance
3. Getting off from work
4. Checking work schedule to meet appointment
5. Afraid of loss of jobs
6. Availability of care only
7. Denial of services insurance
8. Parents don't understand

Health Literacy

1. Both ends of the spectrum.

Too Much Info

2. Info Constantly Changes
3. Between Parents

Central Lines

1. Counting By Hand
2. Elements Practices,

State Level

1. 3 Yrs. Ago reimbursed by purchased MAHA lumped in with psychiatric Levindale
2. We don't use data efficiently
3. Performance improvement

4. Culture

Other Factors

   a. Distrust of health care staff people who appear who are educated best do not take into consideration culture, housing, and living.
   b. Documenting needs of family to better demonstrate
   c. Access to care

Making Appointments for Children

Nursing School (Because of Office Hours)

1. More people cared to access care because of status.
2. Understand the ROI is not just revenue nut improving the health outcomes
3. Money getters have a disconnect w/ what is happening on the unit and may be able t

Quality Programs

Safety

Will produce more

Volume

Evaluate our priorities as an organization.

Focus on inpatient (Why are we not focused on keeping kids in the hospital.)

Franklin Square ED Peds/ 40% Decline. Need for Inpatient is lessening, home managed care @ priority.

MDPT Safety Center NAS collaborative reduces length of stay for those patients.

Tying reinforcement to customer gratification

Transition to Care Trauma

1. Spending months in the hospital
2. Taking that into consideration
3. Mixing bonding time w/ baby w/ teaching
   a. Making assumptions of what parents know
4. Too much paper
   a. Day or two to breathe
   b. What to expect video
   c. Overwhelmed
5. Too many new grads /not enough seasonal clinical staff.
   a. Clinical staff does not reflect the community we serve
6. Family Support / Transition to Care
   a. Call 911 but language barriers exist
7. Cultural Difference / Immigration ICE
   a. Volume Based vs. Outcome Base
   b. Infection reduction is not a priority.

Language Services

Hardest thing in the community

   a. Set an appt.
   b. Get health info
      i. Applying process
      ii. Paperwork in English
   c. Take children to the ER and are and able to navigate health concerns.
   d. Resources
      i. Limited

ii. Para Española

1. PCP → Where to call case manager coordinate case, however won't take the patient because of language barrier.
2. List providers referring child and not understand.

Teach Back Method is Essential

1. Health Literacy teach Back Method
2. Teach parents how to advocate for their health
3. Health professional to ensure that parents understand

Responsible for punch in and lunch time

6/4 Kronos to go to Employee 1D#

1. Feedback Errors
2. Coordination
3. Education (Continuous Learning)

Perceptional Safety

1. Crisp Data Readmission
2. MHA in the Holdup

   Joint Affiliation Conflicts

   a. Do everything that others do but not take our specific
   b. Infections
3. Ventilation Assoc. Pneumonia – Resources must be tweaked for pediatrics
4. Track Sectioning

Teaching

5. Evidence Based Pediatrics

Teaching

6. Official Medication
7. Standardizing protocols for physicians

Technology

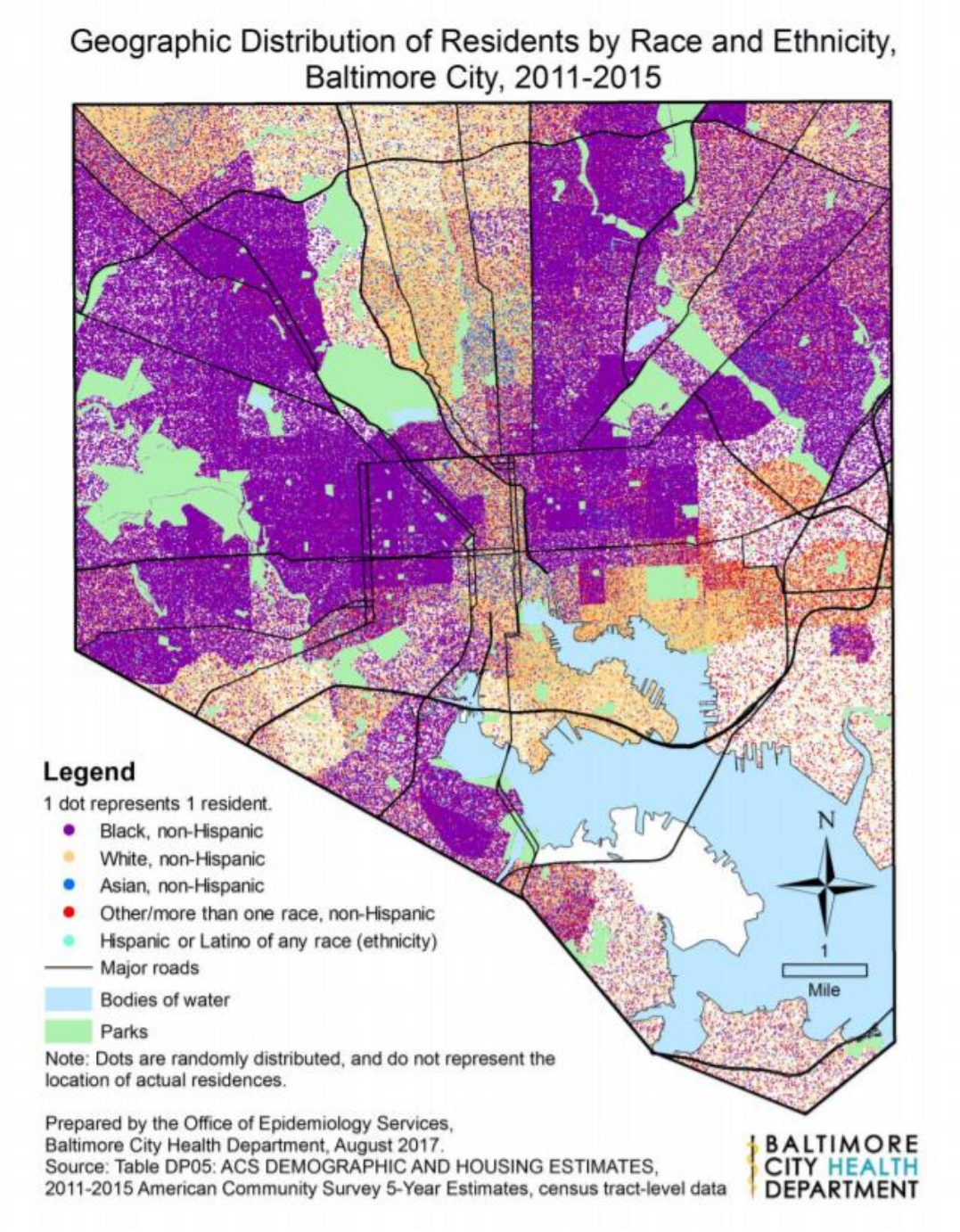
1. Pulling reports directly
2. Not validating reports
3. 60 documented errors counted

BCHD's fund structure. 10,000 students every year were not able to get glasses. Public school in grades Pre K – 12 5 years apart to prevent teen pregnancy was cut 5yrs to 3yrs. Comes at the time that teen pregnancy is cut by 61% and sids by 40%. Opioids prescribed illegal some of the most addictive substance that 700 people died.

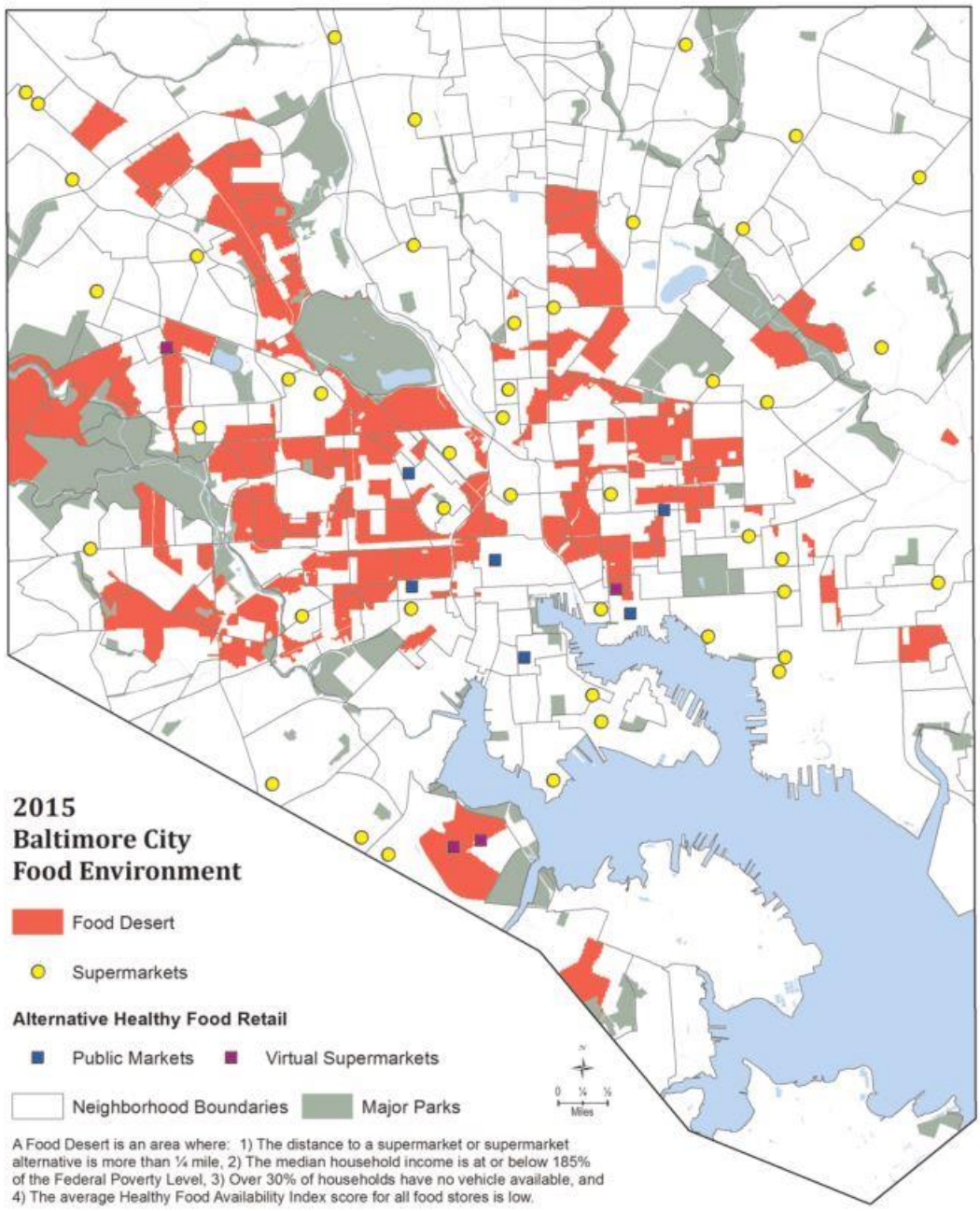
11/10/17

Band, Steven (Ph.D.) Director	Psychologist
Billings, Timothy (Ph.D.)	Psychologist
Burleson, Elizabeth (Ph.D.)	Psychologist
Derrickson, Kimberly (Ph.D.)	Psychologist
Garfinkle, Jill (Psy.D.)	Psychologist
Gatzke, Jill (Psy.D.)	Psychologist
Gelfand, Kenneth (Ph.D.)	Psychologist
Getzoff Testa, Elizabeth (Ph.D.)	Psychologist
Girard, Antonia (Psy.D.)	Psychologist
Johnston, Harper (Ph.D.)	Psychologist
Kane, Kathleen (Psy.D.)	Psychologist
Lee, Erica (Psy.D.)	Psychologist
Lefevre, Stacey (Psy.D.)	Psychologist
Logie, Sean (Ph.D.)	Psychologist
Maletsky, Allison (Psy.D.)	Psychologist
Mignone, Malynn (Psy.D.)	Psychologist
Murphy, Jillian (Ph.D.)	Psychologist
Mychailyszyn, Matthew (Ph.D.)	Psychologist
Schwimmer, Bradley (Psy.D.)	Psychologist
Senefeld, Shannon (Psy.D.)	Psychologist
Tareen, Bethany (Psy.D.)	Psychologist
Vanderwalde, Holly (Ph.D.)	Psychologist
Wilson, Reynolds (Ph.D.)	Psychologist
Ajayi-Akintade, Ajoke	Physician
Alter, Katharine E.	Physician
Burgunder, Tamara	Physician
Dockery-Cathion, Twyla (CPNP)	Nurse Practitioner
Gersh, Elliot S.	Physician
Giadom, Barinada	Physician

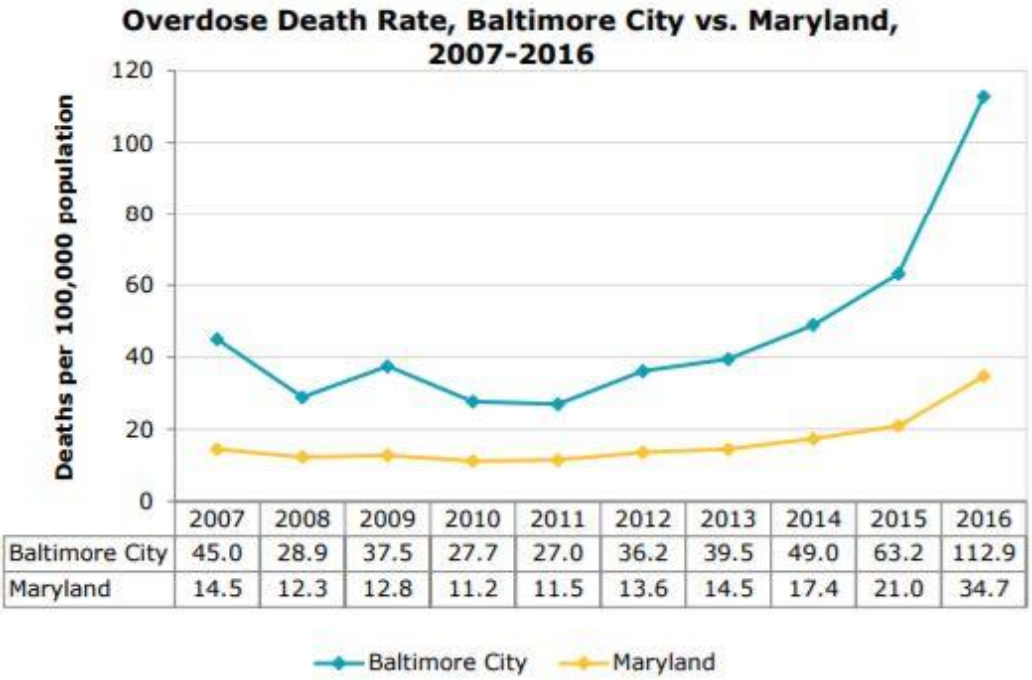
Harris, Brad	Physician
Hawkins, Lorena	Physician PG
Hillman, Bernadette	Physician
Keane, Virginia	Physician
Mathias, Kay (CPNP)	Nurse Practitioner
Moore, Barbara (CPNP)	Nurse Practitioner
Nichols, Stephen A.	Physician
Rosenstock, Julia	Physician
Satpute, Monique	Physician
Katz, Richard	Physician
Kagan, Ellie	Pediatric Nurse Practitioner and Certified Diabetes Educator
Susan Dubroff	Director, Rehabilitation and Recreational Therapy
Lois Bower	Manager, Recreational Therapy & Child Life Services
Jill Pelovitz	Parent, Chair Family Advisory Committee
Angela Sitter	Parent Mentor, Employee of the Office of Genetics and Children with Special Health Care Needs
Michelle Hanover	Family Patient Liaison
Tamara Aviles	Outpatient Social Worker
Clarissa Whitacre	Social Worker Collaborative Care
Rhea McDonald	Social Worker Collaborative Care
Ilene Devorah	Social Worker Collaborative Care
Lindie McDonough	Recreational Therapist
Adrienne Blizzard	Recreational Therapist
Erica Jones	Infection Control Specialist
Marlene Moon	Quality Control Management


Geographic Distribution of Residents by Race and Ethnicity, Baltimore City, 2011-2015
Legend
1 dot represents 1 resident.
Black, non-Hispanic
White, non-Hispanic
Asian, non-Hispanic
Other/more than one race, non-Hispanic
Hispanic or Latino of any race (ethnicity)
Major roads
Bodies of water
Parks
Note: Dots are randomly distributed, and do not represent the location of actual residences.
N
1
Mile
Prepared by the Office of Epidemiology Services, Baltimore City Health Department, August 2017.
Source: Table DP05: ACS DEMOGRAPHIC AND HOUSING ESTIMATES, 2011-2015 American Community Survey 5-Year Estimates, census tract-level data
BALTIMORE CITY HEALTH DEPARTMENT

#BmoreFoodMap



Substance Abuse



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Baltimore City	45.0	28.9	37.5	27.7	27.0	36.2	39.5	49.0	63.2	112.9
Maryland	14.5	12.3	12.8	11.2	11.5	13.6	14.5	17.4	21.0	34.7

Source: Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2016; Maryland Department of Health.

Opioid overdose deaths continue to be on the increase in many communities across America, and Baltimore City is no exception. There is a large disparity in overdose death rates between Baltimore City and the state of Maryland, and the gap appears to be widening over time [37]. In 2016, 694 people died of drug and alcohol overdoses in Baltimore City, a 56.6% increase from 2015. Of those who died of overdose in 2016, 454 people died as a result of heroin intoxication [37,38]. This is more than the number of people who died of homicide in Baltimore City in the same year [37]. Estimates by the Baltimore Mayor's Heroin Treatment & Prevention Task Force calculated that 18,916 people were using heroin in Baltimore City in 2013 [39]. The Baltimore City 2013 Homeless Point in Time count documents drug use among 2,638 people experiencing homelessness with 36% of these individuals identified as having a history of chronic misuse and addiction. Additionally, between 47 and 56% of treatment admissions to publicly funded treatment programs are for heroin use [40].

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