UNIVERSITY of MARYLAND REHABILITATION & ORTHOPAEDIC INSTITUTE

Community Health Needs Assessment
& Implementation Plan
Executive Summary
FY2019-FY2021

Approved by: Board of Directors, 5/24/18

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Executive Summary

Overview

The University of Maryland Rehabilitation & Orthopedic Institute (UM Rehab and Ortho) is Maryland's largest and most comprehensive rehabilitation and orthopedic specialty hospital and has been serving Maryland for more than 120 years. The highly specialized staff provides an interdisciplinary continuum of care, with four distinct rehabilitative specialty units including Stroke, Brian Injury, Spinal Cord Injury/Multi-Trauma, and Comprehensive Medical Rehabilitation in a restorative environment. The University of Maryland Rehabilitation & Orthopedic Institute is a leader in the research and treatment of musculoskeletal disease, joint replacement, and sports injuries.

In FY2017, UM Rehab provided care for 2,635 inpatient admissions, 3,411 outpatient surgical cases, and 48,559 outpatient visits. The University of Maryland Rehabilitation & Orthopedic Institute is licensed for 137 beds.   In FY2017, the UM Rehab & Ortho provided multiple community resources through its Adapted Sports Program, dental services with 8,275 visits by disabled adults and children, and support groups for the disabled population with 1,187 people in attendance. In addition, UM Rehab & Ortho provides a community outreach section on its public web site to announce upcoming community health events and activities and to post the triennial Community Health Needs Assessment (CHNA).

https://www.umms.org/rehab/community/health-needs-assessment

Our Mission

University of Maryland Rehabilitation & Orthopaedic Institute delivers innovative, high-quality, and cost effective rehabilitation and surgical services to the community and region. We provide a/an:

- Interdisciplinary continuum of care including inpatient and outpatient surgery, rehabilitation and additional services as required.

- Proactive environment for patient safety, implementing improvements as patient safety risks are identified.

- Site for public and professional health care education and research.

Vision

UM Rehabilitation & Orthopaedic Institute's vision is to become widely recognized as an integral component of the University of Maryland Medical System in its role as a:

- Regional hospital specializing in the provision of acute, chronic and outpatient rehabilitation services;

- Regional hospital specializing in the provision of a full array of orthopaedic services for adults and children;

- High quality provider of specialized medical/surgical programs.

Values

- Quality and Compassionate Care

- Excellence in Service

- Respect for the Individual

- Patient Safety

- Quality in Research and Education

- Cost Effectiveness

Source: https://www.umms.org/rehab/about/mission-vision

Our Community Health Improvement Mission:

To empower and build healthy communities for the disabled adult population

Process

I. Establishing the Assessment and Infrastructure

To complete a comprehensive assessment of the needs of the community, the Association for Community Health Improvement's (ACHI) 9-step Community Health Assessment Process was utilized as an organizing methodology. The UM Rehab & Ortho's Community Health Leadership Team served as the lead team to oversee 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. University of Maryland Rehabilitation & Orthopedic Institute adopted the following ACHI 9-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 9-Step Community Health 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) With whom the hospital has worked; (3) How the hospital took into account input from community members and public health experts; (4) A description of the community served; and (5) A description of the health needs identified through the assessment process.

Figure 2 – 5-Step Assessment & Engagement Model
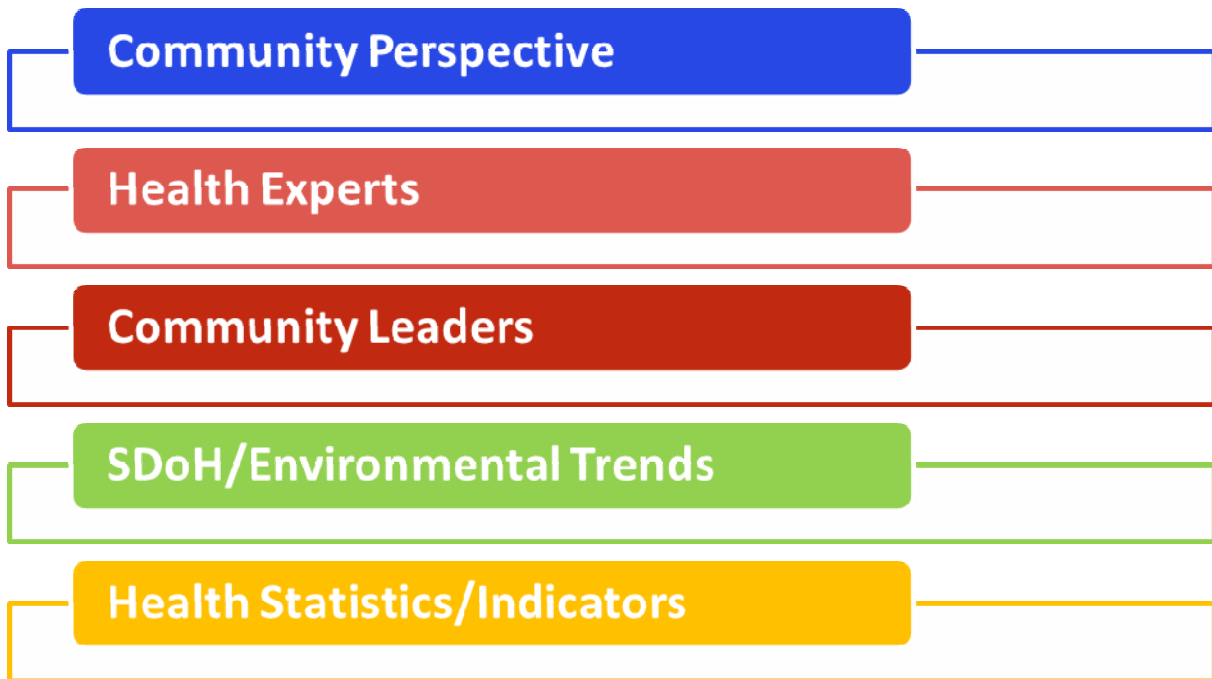
Data was collected from the five major areas outlined above to complete a comprehensive assessment of the community's needs. Data is presented in Section III of this summary and includes primary and secondary sources of data. The University of Maryland Rehabilitation & Orthopedic Institute participates in several local coalitions including, Baltimore City Mayor's Commission on Disability as well as partnerships with many community-based organizations. This assessment report was approved by the UM Rehab Community Health Leadership Team in May and by the Board of Directors on May 24, 2018.

II.   Defining the Purpose and Scope

Primary Community Benefit Service Area

The larger regional patient mix of University of Maryland Rehabilitation & Orthopedic Institute consists of disabled adults from the metropolitan area, state, and region. For purposes of community benefits programming and this report, the Community Benefit Service Area (CBSA) of UM Rehab & Ortho includes disabled adults from Baltimore City and the counties of Baltimore, Howard, and Anne Arundel.

It is estimated that 7.3% of Marylanders under 65 years of age have some type of disability. This prevalence accounts for 441,808 Marylanders who need some type of support and/or resources to improve their daily quality of life.

See Figure 3.

Figure 3 – Community Benefit Service Population

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FY2018 Community Health Needs Assessment
Community Benefit Service Area

III. Collecting and Analyzing Data

Using the previously described frameworks (Figures 1 & 2), data was collected from multiple sources, groups, and individuals and integrated into a comprehensive document which was utilized at a meeting on January 22, 2018 of the UM Rehab & Ortho Community Health Leadership Team. During that meeting, priorities were identified using the collected data and an adapted version of the Catholic Health Association's (CHA) priority setting criteria. The identified priorities were also validated by the larger leadership team of UM Rehabilitation & Orthopedic Institute.

UM Rehab & Ortho used primary and secondary sources of data as well as quantitative and qualitative data and consulted with numerous individuals and organizations during the CHNA, including other University of Maryland Medical System (UMMS) Baltimore City-based hospitals (University of Maryland Medical Center Midtown Campus, community leaders, community partners, the University of Maryland Baltimore (UMB) academic community, the general public, local health experts, and the Baltimore City Health Department.

Additionally, for the first time in the city's history, all local Baltimore City hospitals joined together in fiscal year 2018 to collaborate on several key data collection strategies for a joint community health needs assessment. UM Rehab & Ortho worked closely with the University of Maryland Medical Center who partnered with Johns Hopkins Hospital, Sinai Hospital (Lifebridge), Medstar Health, St. Agnes Health System, and Mercy Medical Center. All of the above hospitals/health systems had been collaborating on several initiatives prior to the CHNA year and agreed that it would be beneficial to work on a more detailed level on a joint city-wide CHNA. This multi-hospital collaborative worked on the following data collection components together:
- Public survey of Baltimore City residents
- Key stakeholder interviews
- Key population focus groups
- Key community partner focus groups

After the data was collected and analyzed jointly, each individual hospital used the collected data for their respective community benefit service areas to identify their unique priorities for their communities. The collaborating hospitals/health systems did agree to jointly focus on mental health as a key city-wide priority.

The following describes the individual data collection strategies with the accompanying results.

A) Community Perspective

The community's perspective was obtained through one survey offered to the public using several methods throughout Baltimore City. A 6-item survey queried Baltimore City residents to identify their top health concerns and their top barriers in accessing health care. (See Appendix for the actual survey)

Methods

6-item survey distributed in FY2018 using the following methods:

- Conducted from late September through November 2017
- All hospitals participated in data collection throughout the city
- Distributed in person and offered online
- Offered in English, Spanish, and Russian
- Collected 4,755 surveys
- All Baltimore City zip codes represented

Results

- ❑ Top 6 Health Concerns: (See Chart 1 below)
  - ❑ Alcohol/Drug Addiction
  - ❑ Mental Health
  - ❑ Diabetes/High Blood Sugar
  - ❑ Overweight/Obesity
  - ❑ Heart Disease/High Blood Pressure
  - ❑ Smoking/Tobacco Use

Analysis by CBSA targeted zip codes revealed the same top health concerns and top health barriers with little deviation from the overall Baltimore City data. The sample

size was 4,755 for all of Baltimore City and 71 for individuals from the UM Rehab's disabled community.

Chart 1 - Community's Top Health Concerns (All Baltimore City)

- ❑ Alcohol/Drug Addiction
- ❑ Mental Health
- ❑ Diabetes/High Blood Sugar
- ❑ Overweight/Obesity
- ❑ Heart Disease/High Blood Pressure
- ❑ Smoking/Tobacco Use

Top Health Problems

Category	Value
Alcohol/Drug Addiction	2743
Mental Health	1720
Diabetes/High Blood Sugar	1715
Overweight/Obesity	1600
Heart Disease/High Blood...	1321
Smoking/Tobacco Use	1265

■ Top Health Problems
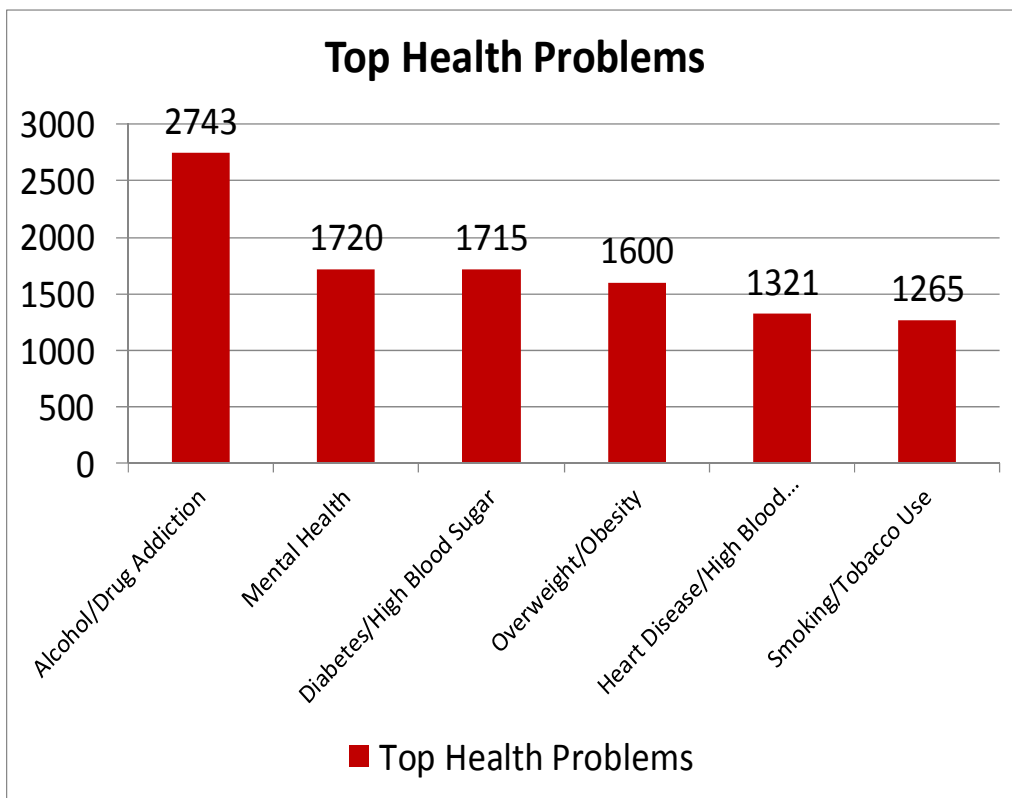
(N=4,755)

Chart 1A – UM Rehab's Disabled Community's Top Health Concerns

- ❑ Alcohol/Drug Addiction
- ❑ Diabetes/High Blood Sugar
- ❑ Overweight/Obesity
- ❑ Mental Health
- ❑ Smoking/Tobacco Use
- ❑ Heart Disease/High Blood Pressure

Top Health Problems

Category	Value
Alcohol/Drug Addiction	29
Diabetes/High Blood Sugar	25
Overweight/Obesity	24
Mental Health	22
Smoking/Tobacco Use	18
Heart Disease/High Blood...	16

■ Top Health Problems
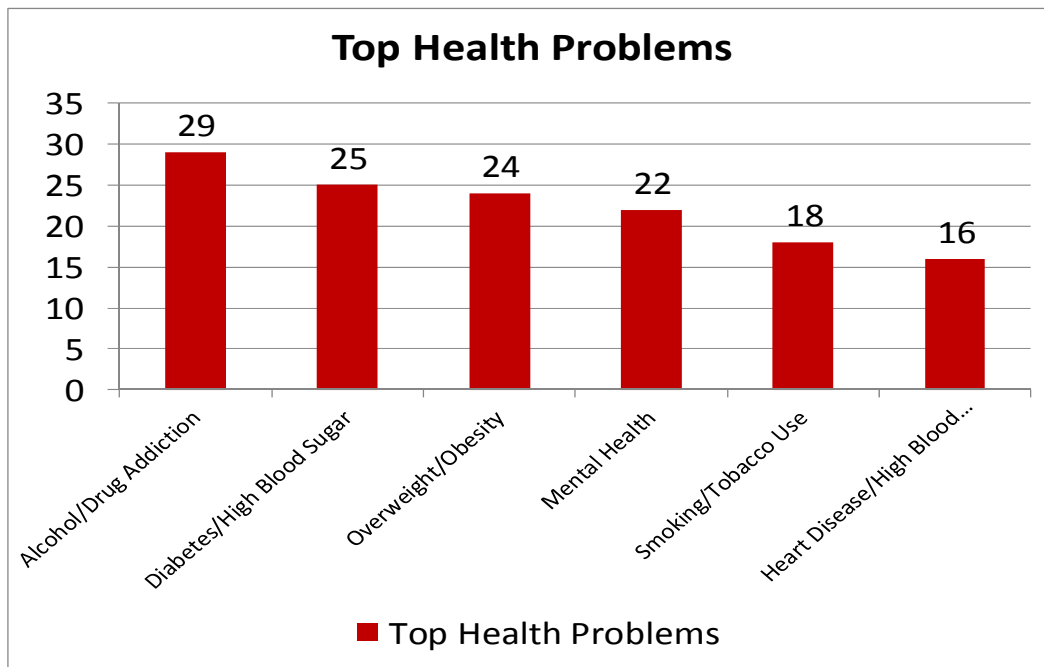
N= 71 in CBSA

Chart 2 - Community's Top Social/Environmental Issues (All Baltimore City)

- ❏ Neighborhood Safety/Violence
- ❏ Lack of Job Opportunities
- ❏ Housing/Homelessness
- ❏ Availability/Access to Insurance
- ❏ Poverty
- ❏ Limited Access to Healthy Foods

Top Social/Environmental Problems

Category	Value
Neighborhood Safety/Violence	1445
Lack of Job Opportunities	1435
Housing/Homelessness	1178
Availability/Access to Insurance	1065
Poverty	870
Limited Access to Healthy Foods	868

■ Top Social/Environmental Problems
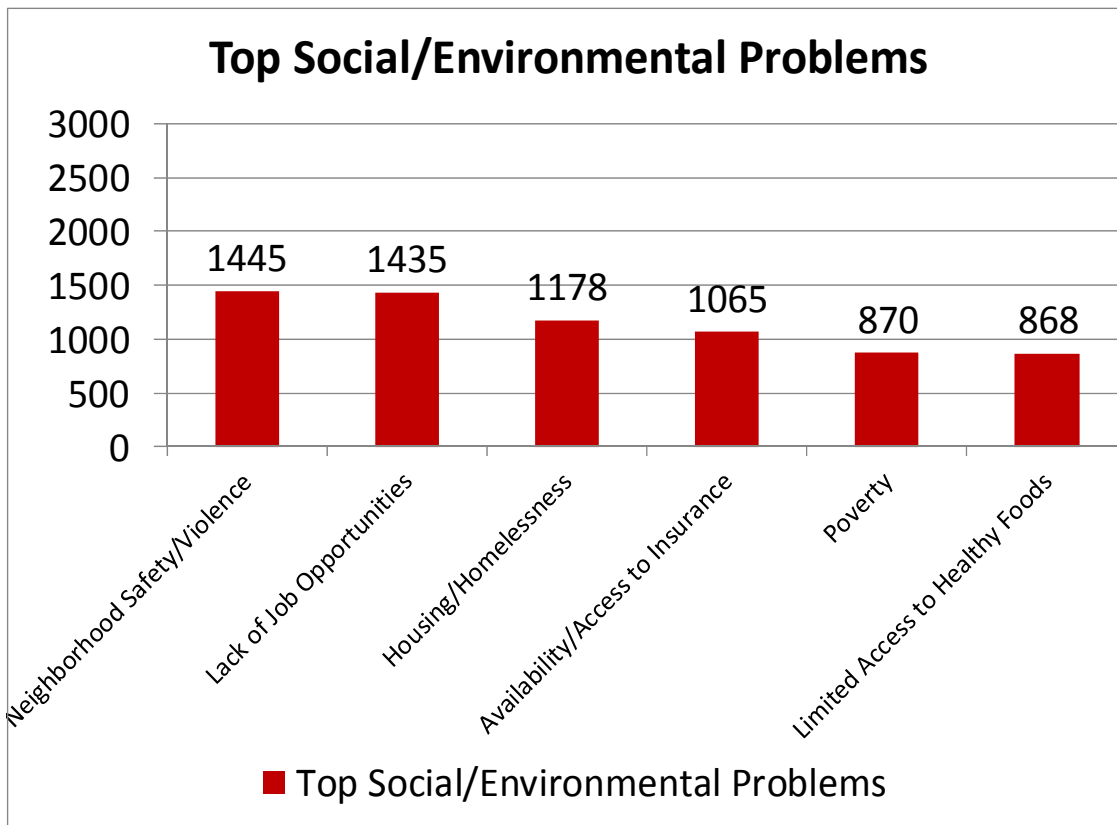
N= 4,755

Chart 2A – UM Rehab's Disabled Community Top Social/Environmental Issues

❑ **Availability/Access to Insurance**

❑ **Lack of Job Opportunities**

❑ **Housing/Homelessness**

❑ **Limited Availability of Recreational Activities**

❑ **Transportation Problems**

❑ **Limited Access to Healthy Foods**

Top Social/Environmental Problems

Category	Value
Availability/Access to Insurance	21
Lack of Job Opportunities	21
Housing/Homelessness	20
Limited Availability of Recreational...	18
Transportation Problems	15
Limited Access to Healthy Foods	14

■ Top Social/Environmental Problems
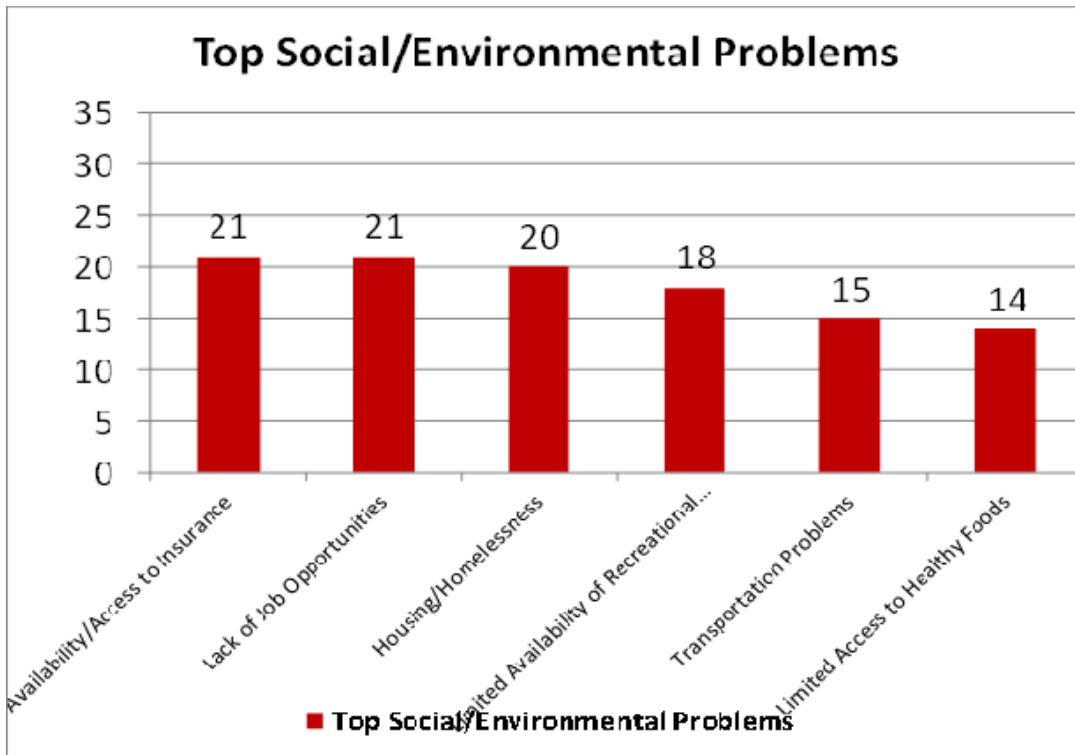
N = 71 in CBSA

Chart 3 – Community's Top Barriers to Healthcare (All Baltimore City)

❑ Cost/Too Expensive/Can't Afford
❑ No Insurance
❑ Insurance not Accepted
❑ Lack of Transportation

Top Reasons to Not Access Healthcare

Category	Value
Cost/Too Expensive/Can't Pay	3203
No Insurance	2719
Insurance Not Accepted	1319
Lack of Transportation	1263

■ Top Reasons to Not Access Healthcare
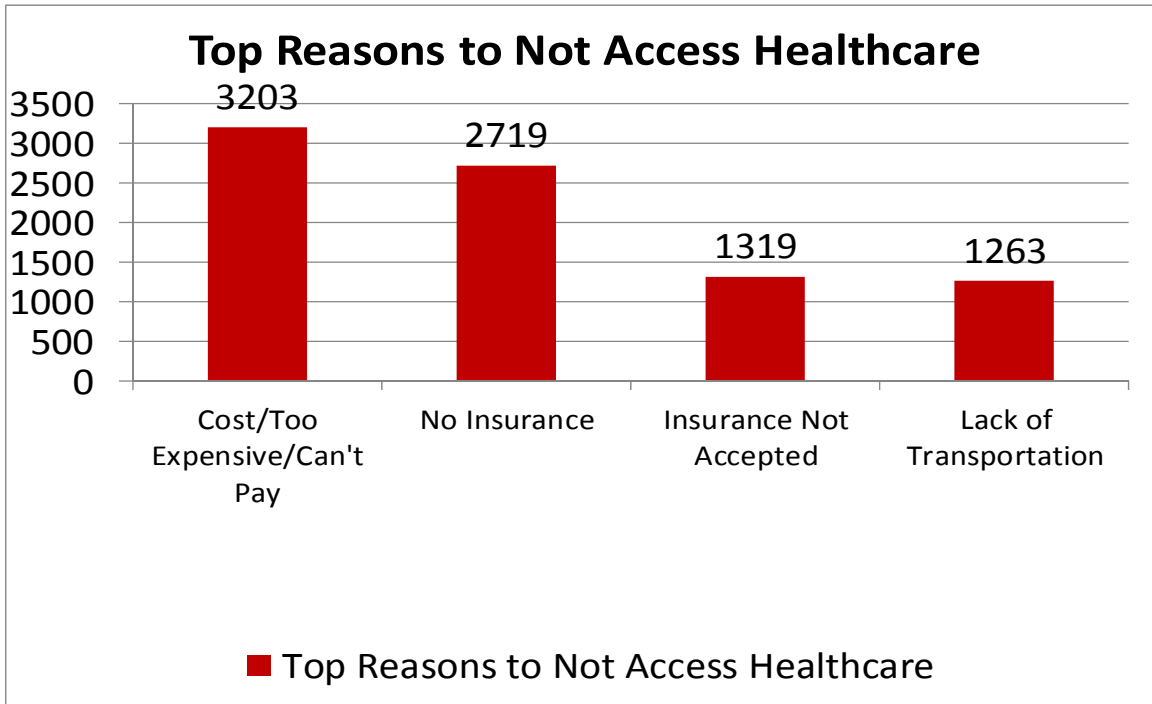
N = 4,755

Chart 3A – UM Rehab's Disabled Community Top Barriers to Healthcare

- ❏ Cost/Too Expensive/Can't Afford
- ❏ No Insurance
- ❏ Insurance not Accepted
- ❏ Lack of Transportation

Top Reasons to Not Access Healthcare

Category	Value
Cost/Too Expensive/Can't Pay	43
No Insurance	35
Insurance Not Accepted	22
Lack of Transportation	14

■ Top Reasons to Not Access Healthcare
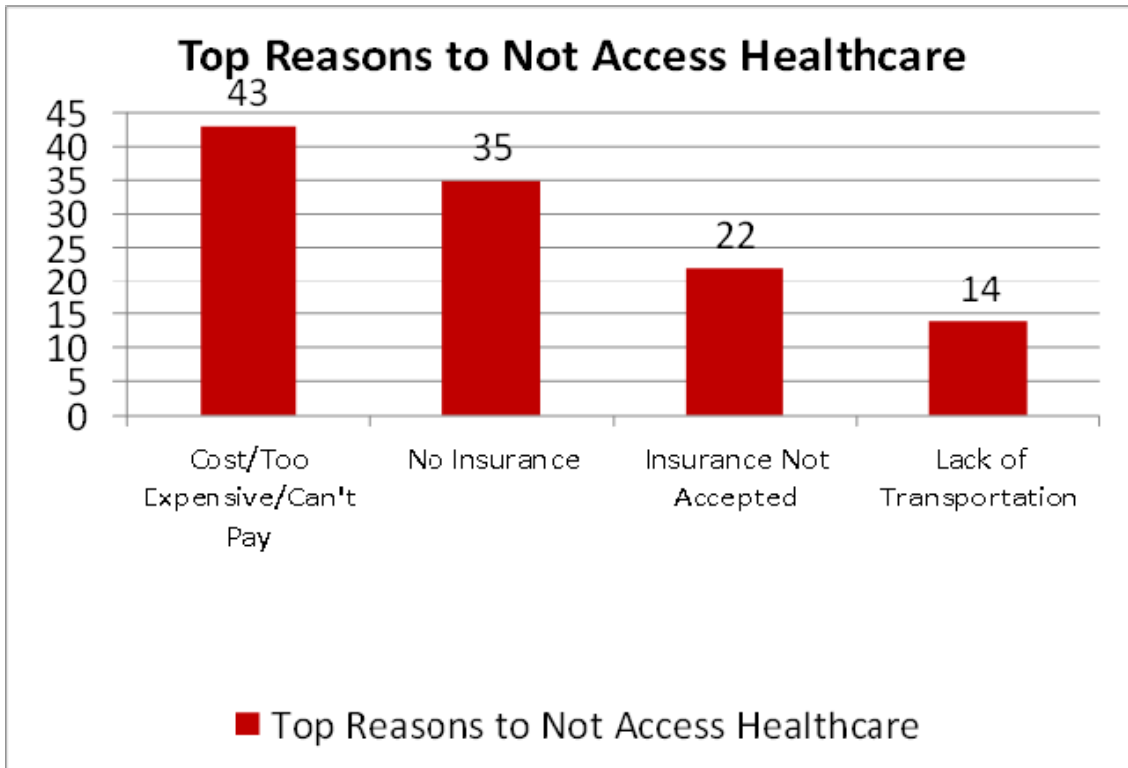
N = 71 in CBSA

B) Health Experts

Methods
- Reviewed & included National Prevention Strategy Priorities, Maryland State Health Improvement Plan (SHIP) indicators, and Healthy Baltimore 2020 plan from the Baltimore City Health Department
- Reviewed Healthy Baltimore 2020: A blueprint for health
- Reviewed Baltimore City Health Department's 2017 Community Health Assessment
- Reviewed the Center for Disease Control's data on Maryland' disability status profile

Results
- National Prevention Strategy – 7 Priority Areas
  - Tobacco Free Living
  - Preventing Drug Abuse and Excessive Alcohol Use
  - Healthy Eating
  - Active Living
  - Injury and Violence Free Living
  - Reproductive and Sexual Health
  - Mental and Emotional Well Being
- SHIP: 39 Objectives in 5 Vision Areas for the State, includes targets for Baltimore City
  - While progress has been made since 2015, measures within Baltimore City have not met identified targets; Even wider minority disparities exist within the City
- Healthy Baltimore 2020: Four Priority Areas for Baltimore City
  1) Strategic Priority 1: Behavioral Health
  2) Strategic Priority 2: Violence Prevention
  3) Strategic Priority 3: Chronic Disease Prevention
  4) Strategic Priority 4: Life Course Approach and Core Services
- Health Expert UMB Campus Panel Focus Group Top Action Items included:
  - Continue collaborative work from the UMMC/UMB Strategic Community Plan
  - Improve communication and synergy across campus schools and UMMC
  - Identify ways to partner and support each other

Figure 4 - Comparison of Federal, State, and Local Health Priorities

National Prevention Strategy: 2011 Priority Areas	Maryland State Health Improvement Plan (SHIP) 2014	Healthy Baltimore 2020
Tobacco Free Living	Healthy Beginnings	Behavioral Health
Preventing Drug Abuse & Excessive Alcohol Use	Healthy Living	Violence Prevention
Healthy Eating	Healthy Communities	Chronic Disease Prevention
Active Living	Access to Healthcare	Life Course Approach & Core Services
Injury & Violence Free Living	Quality Preventive Care	
Reproductive & Sexual Health		
Mental & Emotional Well-Being		

CDC's Disability Data for Maryland

Health Risks & Behaviors

Indicator (year)	Any Disability	Cognitive Disability	Mobility Disability	Vision Disability	No Disability
Binge drank in the past 30 days (2014)	14.3%	13.4%	13.5%	21.4%	16.8%
Obese based on body mass index (2014)	40.4%	35.8%	50.4%	37.8%	26.5%
Sufficient aerobic physical activity (2013)	35.6%	38.6%	30.4%	31.1%	52.1%
Meets both aerobic and muscle strengthening physical activity guidelines (2013)	12.4%	13.8%	DS%	13.0%	24.5%
Currently smoke cigarettes (2014)	27.2%	28.4%	28.6%	28.5%	12.1%
Smokers who attempted to quit in the past 12 months (2014)	63.0%	61.1%	55.5%	83.1%	49.9%
Tested for HIV (age 18-64) (2014)	58.2%	57.3%	61.8%	59.6%	50.6%

Prevention & Screenings

Indicator (year)	Any Disability	Cognitive Disability	Mobility Disability	Vision Disability	No Disability
Clinical breast exam in the past 2 years (women age 40+) (2014)	75.0%	73.8%	75.8%	74.0%	82.9%
Mammogram in the past 2 years (women age 50-74) (2014)	80.0%	77.7%	81.4%	69.2%	84.8%
Pap test in the past 3 years (women age 21-65) (2014)	84.2%	85.9%	81.5%	77.2%	87.7%
Up-to-date with colorectal cancer screening (age 50-75) (2014)	69.2%	66.4%	71.9%	58.2%	70.5%
Routine check-up in the past year (2014)	74.7%	72.3%	78.2%	79.0%	73.9%
Visited a dentist in the past year (2014)	56.2%	56.7%	54.5%	48.0%	73.0%
Received a flu vaccine in the past 12 months (2014)	45.6%	46.2%	43.5%	44.9%	39.4%

Barriers and Costs of Health Care

Indicator (year)	Any Disability	Cognitive Disability	Mobility Disability	Vision Disability	No Disability
Could not see a doctor due to cost in the past 12 months (2014)	24.1%	25.7%	25.1%	21.8%	7.7%
Do not have a personal doctor (2014)	16.8%	19.2%	12.7%	DS%	18.6%
Have health care coverage (2014)	84.6%	81.5%	85.2%	85.7%	91.3%

General Health Conditions

Indicator (year)	Any Disability	Cognitive Disability	Mobility Disability	Vision Disability	No Disability
Fallen in the past 12 months (age 45+) (2014)	43.5%	47.2%	48.0%	44.6%	19.1%
Fair or poor self-rated health (2014)	36.5%	40.1%	39.6%	39.8%	8.0%
14 or more physically unhealthy days in the past 30 days (2014)	31.2%	31.0%	44.4%	27.6%	5.0%
Have heart disease (2014)	9.3%	9.8%	10.4%	10.9%	3.2%
Ever had high blood pressure (2013)	43.1%	41.2%	49.6%	48.5%	27.7%
Taking medicine for high blood pressure (2013)	64.1%	62.3%	69.7%	75.8%	65.9%

Chronic Conditions

Indicator (year)	Any Disability	Cognitive Disability	Mobility Disability	Vision Disability	No Disability
Ever had arthritis (2014)	44.5%	40.3%	59.0%	37.3%	18.7%
Currently have asthma (2014)	13.9%	12.5%	17.3%	19.2%	7.6%
Ever had cancer (excluding skin cancer) (2014)	7.7%	7.7%	10.0%	8.1%	4.8%
Have chronic obstructive pulmonary disease (COPD) (2014)	14.1%	14.2%	19.5%	16.6%	3.1%
Have diabetes (2014)	16.7%	16.9%	19.3%	19.0%	7.2%
Ever had a stroke (2014)	7.0%	7.9%	7.9%	7.1%	1.7%

Mental and Emotional Health

Indicator (year)	Any Disability	Cognitive Disability	Mobility Disability	Vision Disability	No Disability
Ever had depression (2014)	39.7%	52.1%	40.9%	34.1%	11.2%
14 or more mentally unhealthy days in the past 30 days (2014)	28.1%	38.9%	24.9%	34.5%	6.5%

C) Community Leaders

Methods
- Hosted two focus groups in collaboration with the other Baltimore-based hospitals for community-based organization partners to share their perspectives on health needs (November 2017)

Results
- Consensus reached that social determinants of health (and "upstream factors") are key elements that determine health outcomes
- Top needs and barriers were identified as well potential suggestions for improvement and collaboration (See Appendix 4 for details)
- Top Needs:
  - ❑ Health Literacy
  - ❑ Employment/Poverty
  - ❑ Mental/Behavioral Health
  - ❑ Cardiovascular Health (obesity, hypertension, stroke, & diabetes)
  - ❑ Maternal/Child Health – focusing on promoting a healthy start for all children

- Top Barriers:
  - ❑ Focusing on the outcome and not the root of the problems (i.e. SDoH)
  - ❑ Lack of inter-agency collaboration/working in silos

- Suggestions for Improvement:
  - ❑ Leverage existing resources
  - ❑ Increase collaboration
  - ❑ Focus on Social Determinants of Health
  - ❑ Enhance behavioral health resources

D) Social Determinants of Health (SDoH)

Defined by the World Health Organization as: ….the conditions in which people are born, grow, live, work and age…
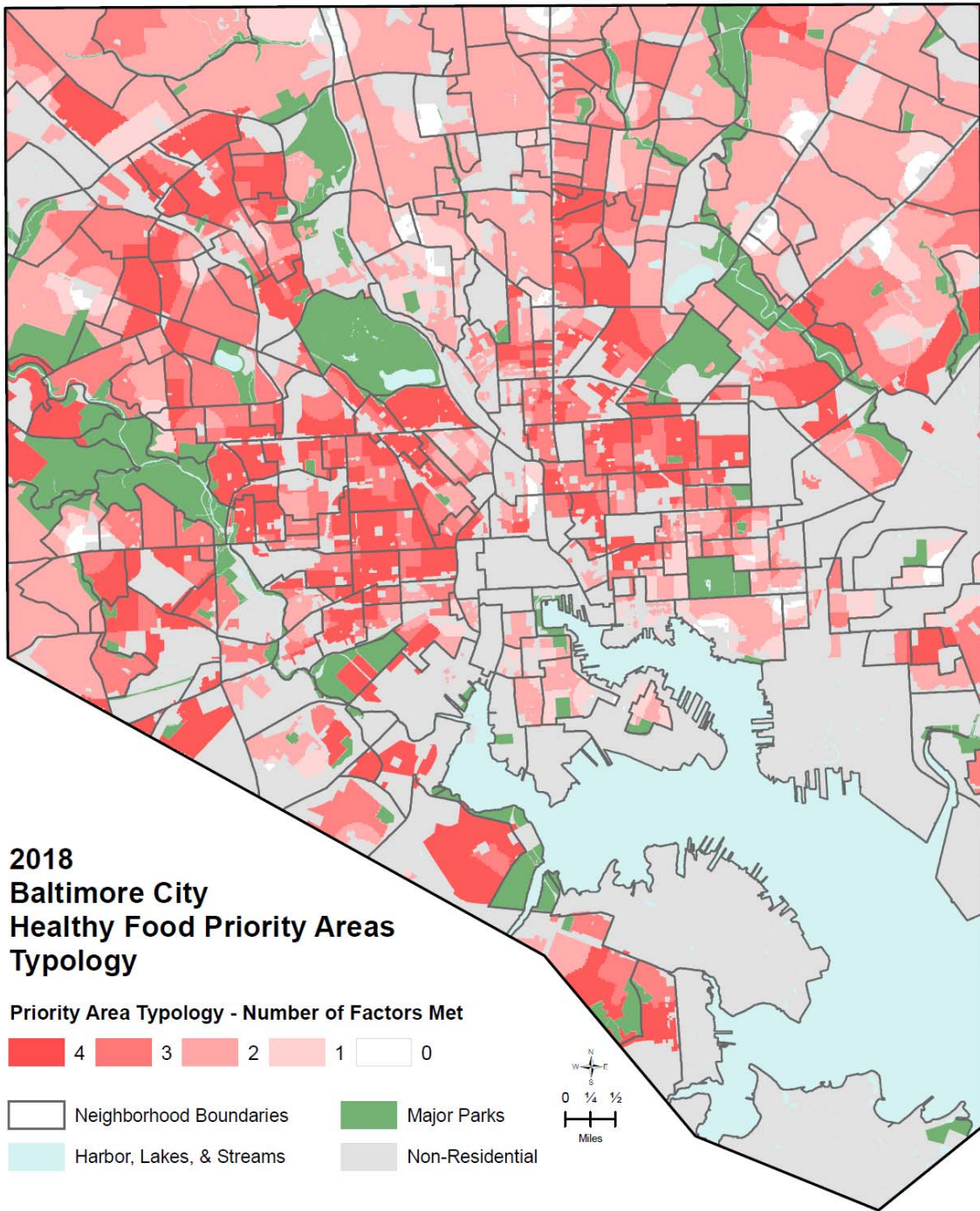
Methods
- Reviewed data from Baltimore Neighborhood Indicator Alliance (Demographic data and SDoH data)
- Reviewed data from identified 2011 Baltimore City Health Department's Baltimore City Neighborhood Profiles,
- Reviewed Baltimore City Healthy Food Priority Areas Map (See Figure 5)

Results
- Baltimore City Summary of CBSA targeted zip codes (See Appendix 2)
- Top SDoHs:
  - Low Education Attainment (52.6% w/ less than HS degree)
  - High Poverty Rate (15.7%)/High Unemployment Rate (11%)
  - Violence
  - Poor Food Environment (See Figure 5 below)
  - Housing Instability

Figure 5 – Baltimore City Food Environment Map

2018
Baltimore City
Healthy Food Priority Areas
Typology

Priority Area Typology - Number of Factors Met

4   3   2   1   0

Neighborhood Boundaries   Major Parks

Harbor, Lakes, & Streams   Non-Residential

0   ¼   ½
Miles

JOHNS HOPKINS
CENTER for A LIVABLE FUTURE

CATHERINE E. PUGH
MAYOR

BALTIMORE
CITY HEALTH
DEPARTMENT

Baltimore
Development Corporation

E) Health Statistics/Indicators
Methods
Review annually and for this triennial survey the following:
Local data sources:
- Baltimore City Health Status Report
- Baltimore Health Disparities Report Card
- Baltimore Neighborhood Health Profiles
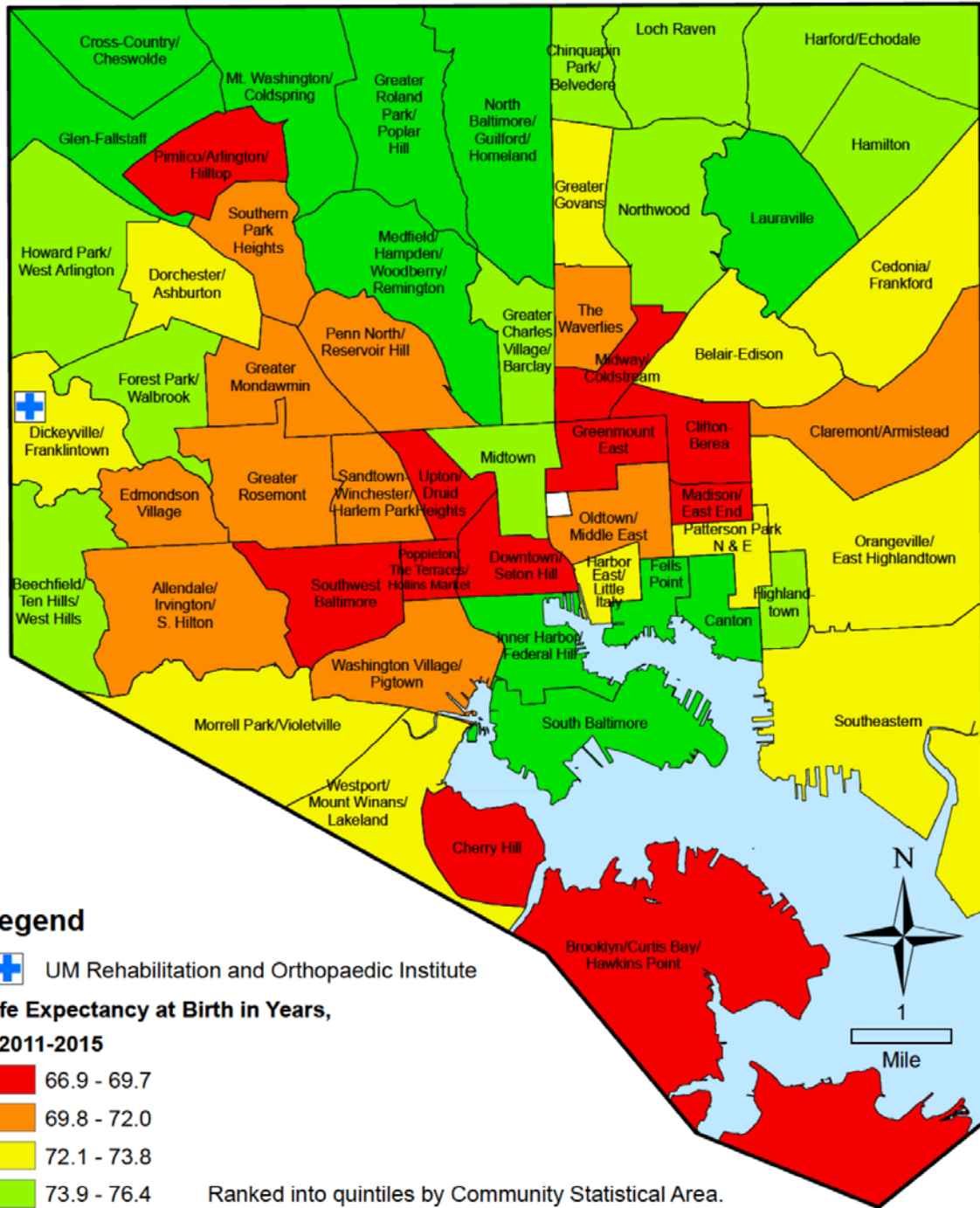- DHMH SHIP Biennial Progress Report 2012-2014

National trends and data:
- Healthy People 2020
- County Health Rankings
- Centers for Disease Control reports/updates

Results
- Baltimore City Health Outcomes Summary for CBSA-targeted zip codes (See Appendix 2)
- Top 3 Causes of Death in Baltimore City in rank order:
  - Heart Disease
  - Cancer
  - Stroke
- Cause of Pediatric Deaths
  - High rate of Infant Mortality

University of Maryland Rehabilitation and Orthopaedic Institute
Life Expectancy at Birth in Years, Baltimore City, 2011-2015

Legend

✚ UM Rehabilitation and Orthopaedic Institute

Life Expectancy at Birth in Years,

2011-2015

- 66.9 - 69.7
- 69.8 - 72.0
- 72.1 - 73.8
- 73.9 - 76.4 — Ranked into quintiles by Community Statistical Area.
- 76.5 - 87.1 — Baltimore City life expectancy: 73.6 years

Prepared by the Office of Epidemiology Services, Baltimore City Health Department, December 2017.
BCHD analysis of data provided by the Maryland Department of Health, Vital Statistics Administration.

BALTIMORE
CITY HEALTH
DEPARTMENT

IV. Selecting Priorities

Analysis of all quantitative and qualitative data described in the above section identified these top three areas of need within Baltimore City. These top priorities represent the intersection of documented unmet community health needs and the organization's key strengths and mission. These priorities were identified and approved by the UM Rehab & Ortho Community Leadership Team and validated with the larger UM Rehab & Ortho leadership team:

1) Quality of Life
2) Transition to the Community
3) Community Awareness

V. Documenting and Communicating Results

The completion of this community health needs assessment marks a milestone in community involvement and participation with input from community leaders, the academic community, the general public, UMMS Baltimore City-based hospitals, and health experts. This report will be posted on the UM Rehab website under the Community Outreach webpage at https://www.umms.org/rehab/community . Highlights of this report will also be documented in the Community Benefits Annual Report for FY'18. Reports and data will also be shared with our community partners and community leaders as we work together to make a positive difference in our community by empowering and building healthy communities.

VI. Planning for Action and Monitoring Progress

A) Priorities & Implementation Planning

Based on the above assessment, findings, and priorities, the Community Health Improvement Team has incorporated our identified priorities with the Maryland's State Health Improvement Plan (SHIP) since the first needs assessment in FY'12. Using the SHIP as a framework, the following matrix was created to show the integration of our identified priorities and their alignment with the SHIP's Vision Areas (See Table 1). UM Rehab & Ortho will also track the progress with long-term outcome objectives measured (as available) through the Maryland's Department of Health & Mental Hygiene (DHMH). Short-term programmatic objectives, including reach and outcome measures will be measured annually by UM Rehab & Ortho for each priority areas through the related programming. Adjustments will be made to annual plans as other issues emerge or through our annual program evaluation.

In addition to the identified strategic priorities from the CHNA, UM Rehab & Ortho employs the following prioritization framework which is stated in the UMMC Community Outreach Plan. Because both the University of Maryland Medical Center and University of Maryland Rehabilitation & Orthopedic Institute, serves the region and state, priorities may need to be adjusted rapidly to address an urgent or emergent need in the community, (i.e. disaster response or infectious disease issue).

The CHNA prioritized needs for the Sustained and Strategic Response Categories and the Rapid and Urgent Response Categories' needs will be determined on an as-needed basis.

UM Rehab & Ortho will collaborate with the UMMC to provide leadership and support within the communities served at variety of response levels. Rapid and Urgent response levels will receive priority over sustained and strategic initiatives as warranted.

- **Rapid Response -** Emergency response to local, national, and international disasters, i.e. civil unrest, weather disasters – earthquake, blizzards, terrorist attack
- **Urgent Response -** Urgent response to episodic community needs, i.e. H1N1/ Flu response
- **Sustained Response -** Ongoing response to long-term community needs, i.e. obesity and tobacco prevention education, health screenings, workforce development
- **Strategic Response -** Long-term strategic leadership at legislative and corporate levels to leverage relationships to promote health-related policy or reform and build key networks

Future Community Health Needs Assessments will be conducted every three years and strategic priorities will be re-evaluated then. Programmatic evaluations will occur on an ongoing basis and annually, and adjustments to programs will be as needed. All community benefits reporting will occur annually to meet state and federal reporting requirements.

B) Unmet Community Needs
Several additional topic areas were identified by the Community Health Improvement Leadership Team during the CHNA process including: Behavioral/mental health, safe housing, transportation, and substance abuse. While UM Rehab & Ortho will focus the majority of our efforts on the identified strategic programs outlined in the table below, we will review the complete set of needs identified in the CHNA for future collaboration and work. These areas, while still important to the health of the community, will be met through either existing clinical programs at the Medical Center (i.e. Methadone clinics, Residential Psychiatric program) or through collaboration with other health care organizations as needed. Additionally, substance abuse programming is already integrated into existing programs such as the Think First for Teens program. The additional unmet needs not addressed by UM Rehab & Ortho will also continue to be addressed by key Baltimore City governmental agencies and existing community-based organizations.

The UM Rehab & Ortho's identified core priorities target the intersection of the identified community needs and the organization's key strengths and mission. The

following table summarizes the programs either currently in use or to be developed to address the identified health priorities.

Table 1 – UM Rehab & Ortho Strategic Programs and Partners
FYs '19-'21

Maryland SHIP Vision Area	UMMC Priorities	UMMC Strategic Community Programs	UM Rehab Partners
Healthy Beginnings	NA – no maternal/child health services		
Healthy Communities	Transition to Community	Patient Navigation/ Living Well w/Chronic Disease workshops Variety of community support groups Think First for Teens Mobile Market	MAC, Inc., Stanford, UMMC UMMC, Hungry Harvest
Quality Preventive Care	Transition to Community	Dental Clinic for disabled adults & children	UM Dental School
Healthy Living & Quality Preventive Care	Quality of Life – Active Lifestyle Quality of Life – Social Support	Adapted Sports Programs Variety of community support groups	US Olympic Committee, US Paralympic Committee Amputee Coalition of America, Christopher and Dana Reeves Foundation
Access to Healthcare	Quality of Life – Social Support	Variety of community support groups	

FY 19-21 Community Health Improvement Implementation Plan – Quality of Life

Priority Area: Quality of Life – Active Lifestyle					

Long Term Goals Supporting Maryland SHIP:
  1)   Increase the proportion of adults who are <u>not</u> overweight or obese: Balto City : 30.9% ➢ 2017 MD Target: 36.6%
 	
  2) Decrease occurrence of secondary complications attributed to sedentary behavior					

Annual Objective	**Strategy**	**Target Population**	**Actions Description**	**Performance Measures**	**Resources/Partners**
Increase awareness and benefits of Adapted Sport for individuals with chronic disease/injury such as spinal cord injury, stroke, brain injury, amputation	Provide engaging opportunities for individuals with SCI, BI, CVA, and amputation to be introduced to adapted sports programming, so that they can participate in similar activities: **Adapted Sports Festival, Amputee Walking School, Wheelchair Basketball Clinic, Wheelchair Tennis Clinic and Wheelchair Rugby**.	Adults with physical disabilities Allied Health Professionals Allied Health Students	The Adapted Sports Program maximizes participation for individuals with disabilities in adapted recreational and competitive sports, in order to promote independence, self-confidence, health and overall well-being through structured, individual and team sports Programs offered are Adapted Sports Festival, Wheelchair Basketball Clinic, Wheelchair Rugby Team, Adapted Golf Program, Amputee Walking/Running Clinic Education programs offered to community organizations and allied health academic programs	<u>Reach:</u> # of community members/programs educated # of allied health professional and students educated regarding the availability and benefits of adapted sports # of participants in the Adapted Sports Programs offered through UM Rehab <u>Outcomes:</u> # of participants identifying positive impact to quality of life and overall health as a benefit of participation in UM Rehab's adapted sports programs	United States Olympic Committee- United States Paralympic Committee
Increase community awareness regarding the availability and	Provide opportunities for community involvement in adapted sports		Post participation surveys will be utilized to obtain information regarding increased awareness of physical and social benefits of participation in adapted sports		

benefits of adapted sports Increase awareness in healthcare providers and students regarding the availability and benefits of adapted sports Increase self - reported quality of life and overall wellness in individuals participating in adapted sports programs offered by UM Rehab Increase number of participants in the various adapted sports programs offered by UM Rehab	programs offered through UM Rehab & Ortho Provide education and opportunities for healthcare professionals and students to participate in adapted sport events in order to experience first-hand the benefits of physical activity and social inclusion				

FY 19-21 Community Health Improvement Implementation Plan – Quality of Life

Priority Area: Quality of Life – Social Support

Long Term Goals:
1) **Decrease social isolation resulting from onset of chronic disease/injury**
2) **Improve overall quality of life for individuals who have sustained or care for an individual who has sustained a chronic injury or disease.**

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Decrease participants feeling of isolation, depression and anxiety Increase participants sense of empowerment, control, coping skills, and sense of adjustment.	Provide support and assistance with social isolation post injury or diagnosis: **Diagnosis and peer group-specific support groups for individuals who have sustained, a stroke, brain injury, spinal cord injury, amputation, have addiction or dependency , caregiver support group:**	Individuals over 16 years of age who have had a spinal cord injury, brain injury, stroke, or amputation and caregivers	Support groups are offered monthly by rehabilitation staff. Topics are solicited by participants on a regular basis and program evaluation information is obtained regarding satisfaction and effectiveness of the program.	Reach: # of participants # of caregivers Outcomes: Percent of participants with post-group survey reporting: • Feeling less lonely, isolated or judged • Gaining a sense of empowerment and control • Improving your coping skills and sense of adjustment • Talking openly and honestly about their feelings • Reduced distress, depression, anxiety or fatigue • Developing a clearer understanding of what to expect with their condition • Getting practical advice or information from experts and peers	Amputee Coalition of America, Christopher and Dana Reeves Foundation

Priority Area: Transition to Community - Patient Navigation

Long Term Goals Supporting Maryland SHIP:
   1) Decrease preventable hospitalization related to management of chronic medical conditions

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Increase number of educational sessions made available to disabled population (provide at least 6 sessions annually) Increase participants confidence, understanding and skills in managing chronic medical conditions	Provide education and information for individuals and caregivers through engaging, evidenced-based programs: **Living Well with Chronic Conditions - (Stanford's Chronic Disease Self- Management Program)**	Adults with chronic disease/injury such as spinal cord injury, stroke, brain injury, and diabetes	Classes are offered as a 6 week course covering the following topics: • Managing Medication • Managing Stress • Attending Doctor Appointments Regularly • Healthy Eating and Exercise • Improving Quality of Sleep	Reach: # of participants # of sessions offered Outcomes: % of participants who report improved confidence in managing their chronic health condition % of participants that reported having a better understanding of how to manage the symptoms of their chronic health condition % of participants that reported knowing how to set up an action plan and follow it.	Maryland's Maintaining Active Citizens (MAC), Maryland Department of Health and Mental Hygiene, Stanford University
Initiate Mobile Market twice/month to improve access to healthy produce	**Mobile Market**		Mobile Market provides healthy produce in partnership with UMMC and Hungry Harvest. Produce is available for a significantly reduced rate and buyers can use their SNAP/WIC benefits.	Outcomes: 1) $ amount spent through WIC/SNAP benefits & zip codes of purchasers 2) Total $ amount sold 3) Self-reported servings of produce/day through survey of Mobile Market 4) # of BP screenings at Mobile Market	UMMC, Hungry Harvest

Priority Area: Transition to Community – Dental Clinic **Long Term Goals Supporting Maryland SHIP:**   1) **Decrease emergency room visits related to dental issues**

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Increase number of dental treatments available to special needs population Increase awareness of proper brushing Flossing home care and proper diet of patients that had comprehensive treatment under general anesthesia	Provide dental care and treatment for special needs adults and children within Maryland: **UM Rehab & Ortho Dental Clinic**	Special needs adults and children in need of dental care	Dental services are provided for special needs adults and children who may not receive care otherwise. Many dentists in the community are not comfortable performing dental services to disabled patients.	Reach: # of patients served (Adults & Children) Outcomes: % of patients receiving preventive dental care. % of high caries risk patients that had treatment under general anesthesia that return for 3 month recall over year period that will have no new lesions.	UM Dental School

Priority Area: Community Education/Awareness						
Long Term Goals Supporting Maryland SHIP:						
1) Reduction in accident/injury rate in teen population						

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Increase the number of high and middle schools scheduled for presentations Increase the number of students participating in the scheduled presentations Trend changes in behavior identified by students after presentation	Provide education and information through engaging, evidence-based programs: **Think First for Teens**	Middle and high school students in Baltimore City and Baltimore County, and potentially expanded area to other counties	Think First program director currently has contacts in several county and city high schools, as well as 1 middle school to date. Presentations are coordinated through health or physical education departments at the identified schools, with presentations then scheduled in auditorium or single class room formats. Presentations include clinical experts describing the permanent nature of SCI and TBI, as well as the importance of thinking before you act, and understanding the consequences of your actions. There is a guest speaker that attends as well. The injured speakers have sustained spinal cord or brain injuries, have been trained to appropriately share the life changes that are permanent and impact them as a result.	Reach : # of schools scheduled # of students attending presentations Outcomes: % of students identifying a positive impact of the program by identifying ways to avoid high risk behaviors and comply with injury prevention strategies.	Think First National Injury Prevention Foundation Baltimore City Public Schools, Baltimore County Public Schools SCI/TBI guest speakers (previous patients)

2017 Baltimore Health Needs 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 667-234-2102 or 1-800-492-5538.

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 ☐ 40-49 ☐ 65-74 ☐ 75+
☐ 30-39 ☐ 50-64 ☐ Don't know ☐ Prefer not to answer

4. Which one of the following is your race? *Please check all that apply.*
☐ Black or African American ☐ White ☐ Asian
☐ Native Hawaiian or Other Pacific Islander
☐ American Indian or Alaska Native
☐ Other/more than one race *specify*_____
☐ Don't know ☐ Prefer not to answer

5. Are you Hispanic or Latino/a? *Please check one.*
☐ Yes ☐ No ☐ Don't know ☐ 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

PLEASE TURN OVER FOR NEXT PAGE

7. What are the <u>three</u> most important health problems that affect the health of your community? *Please check only three.*

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

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

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

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

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

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

_____
_____
_____ ☐ Don't know   ☐ Prefer not to answer

Thank you for completing the survey!

Appendix 2
Social Determinants of Health (SDoH) Summary
UMMC - CHNA FY2018

SDoH	Baltimore City	Upton/ Druid Hts (21201)	SW Balto (21223)	Mondawmin (21216 & 21217)	Pimlico/ Arlington/ Hilltop (21215)	Allendale/ Edmondson (21229)	Wash Vill./ Morrell Park (21230)	Inner Harbor/ S. Balto (21230)
Socioeconomic Characteristics								
Median Income	$41,819 ↑	$15,950 ↑	$24,946 ↓	$38,655 ↑	$32,410 ↑	$35,958/36,648 ↑	$48,175/38,210 ↑ ↓	$88,854/88,487 ↑
Unemployment Rate %	13.1 ↓	22.3 ↑	20.4 ↑	19.0 ↑	17.1 ↑	20.0/18.4 ↑	16.4/13.1 ↑	5.4/6.0 ↑
HH below Poverty %	28.8 ↑	60.1 ↑	45.9 ↑	28.4 ↑	28.4 ↑	35.1/28.1 ↑	33.6/13.3 ↑	17.0/5.6 ↑
Hardship Index (100- most hardship- 1- least hardship)	51	82*	76*	62	61	64/54	56/61	16/17
Education								
Kindergarten Readiness/ Ready at 5 %	77.6 ↑	74.0 ↑	69.1 ↑	83.6 ↑	80.9 ↑	88.2/87.0 ↑	94.0/80.7 ↑	90.0/90.5 ↑
% of 25 and older with HS degree or less	47.2	60.3	65.6	57.9	66.2	56.9/56.8	41.5/68.5	20.3/22.2
Community Built Environment								
Liquor Outlet Density(#stores/10,000 residents)	3.8 ↑	3.9 ↓	8.9 ↓	3.2 ↓	1.7 ↓	4.3/1.3 ↓ →	3.6/2.2 ↓	4.7/3.1 →
Tobacco Retail Density (#stores/10,000	20.9	32.9	44.7	19.3	27.1	14.8/6.3	49.1/16.5	13.2/18.7

| people) | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
Community Social Environment	Balto City	Upton/ Druid Hts	SW Balto	Mondawmin	Pimlico/ Arlington/ Hilltop	Allendale/ Edmondson	Wash Vill./ Morrell Park	Inner Harbor/ S. Balto
Homicide Rate – all ages (#of homicides/10,000)	3.9 ↓	7.7 ↓	8.2 ↓	7.3 ↓	7.4 ↓	5.3/4.8 ↓	5.5/1.1 ↓	1.2/0.0 ↓ →
Youth Homicide- under 25 (# of homicides/ 100,000)	31.3	61.0	52.9	46.7	56.8	38.5/29.1	33.7/15.5	6.8/0.0
Housing								
Vacant Building Density (#of buildings/10,000 housing units)	562.4 ↓	1,136.1 ↓	2,477.9 ↑	1,039.8 ↑	1,097.3 ↑	469.6/276.4 ↑	618.6/184.4 ↓	36.2/43.6 ↓
Demographics								
No health insurance 18 and older	11.7	11.7	18.5	12.2	13.7	11.2/16.6	11.0/14.8	4.9/7.3
Food Environment (# of/10,000 people)								
Fast Food Density	2.5 ↑	2.9 ↑	2.8 ↑	4.3 ↓	0.8 ↑	1.2/0 →	5.5/5.5 ↑	5.5/7.8 ↑
Carryout Density	11.4 ↓	16.4 →	17.3 ↓	12.9 ↑	14.4 ↓	5.6/1.3 ↓ →	27.3/13.2 ↑	22.6/9.4 ↑ →
Corner Store Density	14.1 ↑	23.2 ↑	35.2 ↑	15.0 ↑	18.6 ↑	11.7/8.8 ↑ ↓	38.2/12.1 ↑	6.2/7.8 ↑
Supermarket Proximity* (by Car in min.)	3.7	1	2	3	2	3/.69	8/5	4/1
Supermarket Proximity*	12.3	1	8	11	8	8/29	22/11	11/3

(by Bus in min.)								
Supermarket Proximity* (by Walking in min.)	16.6	1	9	12	9	15/43	26/22	18/8
Health Food Availability Index (HFAI) 0-25	10.3							

Source: Baltimore City Health Department (2017). 2017 Neighborhood Health Profile Report. Neighborhood Health Profile Reports | Baltimore City Health Department

Legend:
↑- Increase in prevalence compared to 2015 data
↓ - Decrease in prevalence compared to 2015 data
→ - No change in prevalence compared to 2015 data
If data was not marked, then comparative data was not available in 2015 profile data

*Upton/Druid Heights – 2nd worst Hardship Rating in the City
*Sandtown – 4th worst Hardship Rating in the City
*SW Baltimore – 5th worst Hardship Rating in the City

Health Outcomes	Baltimore City	Upton/ Druid Hts (21201)	SW Balto (21223)	Mondawmin (21216 & 21217)	Pimlico/ Arlington/ (21215)	Allendale/ Edmondson (21229)	Wash Vill./ Morrell Park (21230)	I. Harbor/ S. Balto (21230)
Life Expectancy at Birth (in years)	73.6 ↓	68.2 ↑	68.0 ↑	70.4 ↑	68.2 ↑	70.9/71.8 ↑	70.1/73.6 ↑	79.2/76.7 ↑
Causes of Death (% of Total Deaths)								
1 – Heart Disease	24.4 ↓	28.1 ↑	21.2 ↓	23.0 ↓	23.9 ↓	24.8/23.9 ↓	25.6/21.6 ↓	24.9/21.3 →
2 – Cancer	21.3 ↑	18.9 ↑	19.8 ↓	20.1 ↑	19.5 ↑	20.4/21.9 ↑↓	15.3/18.6 ↓	26.1/20.9 ↑↓
Lung	5.9 ↓	5.7 ↑	5.9 ↓	6.3 ↑	5.5 →	5.9/7.3 ↓↑	3.8/5.5 ↓	8.2/5.2 ↑↓
Colon	2.0 ↓	1.0 ↓	1.7 ↑	1.7 ↓	1.9 ↓	1.2/2.4 ↓	1.5/1.1 ↓	2.2/3.3 ↑
Breast	1.5 ↓	0.3 ↓	0.9 ↓	1.5 ↓	1.4 ↓	1.1/1.1 ↓	1.9/0.8 ↑↓	2.9/1.9 ↑↓
Prostate	1.1 ↓	1.3 ↓	1.2 ↓	0.9 ↓	1.3 ↓	1.7/1.1 ↓	0.0/0.2 →	1.2/0.5 ↓
3 – Stroke	4.9 ↑	3.1 ↓	5.8 ↑	6.5 ↓	4.4 ↓	5.1/7.1 ↓↑	2.7/5.2 ↓↑	4.3/5.2 ↑
4 – HIV/AIDS	1.8 ↓	2.8 ↓	2.9 ↓	3.9 ↑	2.3 ↓	1.7/2.2 ↓	4.6/1.4 ↑↓	0.2/0.0 ↓
5 – Chronic Lower Respiratory Disease	3.5 →	3.6 ↑	3.7 ↑	3.0 ↑	4.0 ↑	3.7/3.9 ↑	5.7/7.4 ↑→	3.9/5.7 ↓
6 - Homicide	3.5 ↑	5.6 ↑	4.5 ↑	5.3 ↑	5.3 ↑	5.3/3.9 ↑	4.2/0.8 ↑	1.4/0.0 ↑→
7 – Diabetes	3.0 ↓	3.3 ↓	3.3 →	3.6 ↑	5.2 ↑	3.3/3.2 ↑	2.3/2.5 ↓↑	2.7/1.4 ↓
8 – Septicemia	2.7 ↓	1.8 ↓	2.4 ↓	2.6 ↓	2.0 ↓	1.8/2.8 ↓↑	1.5/2.9 ↓→	2.9/0.9 ↓
9 – Drug Induced	4.5 ↑	5.7 ↑	7.1 ↑	4.1 ↑	3.5 ↑	4.0/2.2 ↑	8.4/4.3 ↑	3.9/5.2 ↑

Death								
10 - Injury	3.5 ↑	2.8 ↑	4.3 ↑	2.6 ↑	3.7 ↑	3.0/2.8 ↓ ↑	5.3/3.8 ↑	5.1/1.9 ↑
Maternal & Child Health								
Infant Mortality Rate (per 1,000 live births)	10.4 ↑	10.0 ↓	13.9 ↑	5.2 ↓	20.0 ↑	10.6/9.8 ↓	4.6/8.2 ↓ ↑	3.3/1.5 ↓
Low Birthweight % (LBW < 5 lbs, 8 oz)	11.5 ↓	13.5 ↓	12.4 ↓	12.6 ↓	15.6 ↑	14.0/13.8 ↓	11.1/7.1 ↓	6.8/6.2 ↑
%Prenatal Care 1st Tri.	54.7 ↓	48.9 ↓	45.9 ↓	51.9 ↓	47.8 ↓	50.7/54.1 ↓	57.4/58.9 ↓	71.8/73.5 →
% Births to Mothers Who Smoke	10.7 ↑	15.9 ↑	18.9 ↑	12.1 ↑	12.7 ↑	10.9/9.9 ↑	13.4/23.1 ↓ ↑	3.7/6.6 ↑

Source: Baltimore City Health Department (2017). 2017 Neighborhood Health Profile Report. Neighborhood Health Profile Reports | Baltimore City Health Department

Legend:

↑- Increase in prevalence compared to 2015 data

↓ - Decrease in prevalence compared to 2015 data

→ - No change in prevalence compared to 2015 data

 If data was not marked, then comparative data was not available in 2015 profile data

Appendix 4
Community Partner Focus Groups

<u>**Baltimore City-wide CHNA 2017**</u>
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:
<u>**Health Concerns**</u>
- **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.

Community Building
- - - Conflict resolution training is critical
  - - "Community members need to be empowered to feel like they can work through issues instead of hurting or violating others to get what they want."

- **Older adults (top item)**
  - Abuse of older adults is increasing
  - Housing is a major problem that older adults face. Not only is cost a problem, but infrastructure that ensures safety is a problem too (i.e. lack of sturdy railings).
  - There is not enough access to resources in general for older adults.
  - Isolation, their inability to manage daily living, and basic gaps (such as lack of hearing aids to use phones to get help) are also major issues.

- **Housing (top item)**
  - Homelessness and children
    - Children are affected because of lack of stable meals and switching schools, which manifests in poor education outcomes.
    - Mental health deteriorates because living with multiple different people: "don't have own space, can't get homework done, can't sleep because there are 6 people in their room"
    - They cannot establish a community because they are always moving.
  - Accessibility and affordability
    - There is a need for more affordable housing with less discrimination against disabilities.
    - "Home based setting vs institutional housing for people with developmental disabilities leads to improved outcomes"
  - Quality Issues
    - Lead paint poisoning is a major problem: "had some homes where builders start stripping it and it goes to other homes affecting neighbors"
    - Safe infrastructure
    - Rat and roach infestation is a hindrance to health: "Roaches bring asthma, rats bring depression, lead brings depression"
    - 1/3 of house are vacant or boarded up – attracts rodents and illegal activities
    - Mold

- Law enforcement
  - Drug dealers are ignored by police
  - Over policing is meant to reduce violence, but it does the exact opposite. It creates a strong divide: police vs. community
  - "Police used to live in communities they serve and knew people there; now they are assigned to a block and know no one there"
- Green space
  - Green space is necessary for health, mental and physical.

- "Patterson park ensues violence at a certain time at night. A beautiful space tainted by sex trafficking."
- Parental guidance
  - Parent stress levels are high because they do not know how to address certain issues that arise with their children
- Lack of crisis intervention

- Employment
  - Frequent lack of opportunities and benefits (days off for medical care and lack of or ever-changing health insurance)
  - A sense of autonomy and self-determination is critical to health
  - Income: "Working 3 jobs to be able to afford the necessities"
- Education: lack of services in schools and resources
  - There is a lack of services and resources: "are they getting appropriate education?"
  - There is also a lack of leadership in Baltimore City Schools
  - Schools are underfunded: "the community cannot be supported by the schools we have"
- Food
  - Food deserts and lack of healthy food
- Institutionalized racism
  - Redlining
  - Lack of ability to accumulate wealth, have sustained environments, poverty
  - Inequities we see are a direct result of racism in the US
  - We can address the symptoms but need to get to the underlying cause
  - Hospitals can have a role in addressing it, but many initiatives get started in the Baltimore area but are not sustained

Access to Health Care:

- **Medical care accessibility (top item)**
  - "Just having health presence in the community reduces crime rate "
  - There needs to be not just access, but quality access.
- Cost
  - The cost of health care is one of the main issues.
  - "If it continues to rise at the same rate, then the amount of funds available for community health programs will not be sufficient".
- Transportation
  - Getting to locations for care is difficult, especially for older adults
- Physicians
  - Availability of physicians in the community is an issue.
  - There are also language and communication barriers: "Could be we're all speaking the same language, but things are not being explained in a way that's understandable"

- Continuity of care is usually an issue because there is not a doctor or health system nearby. In addition, there is a lack of care management. Information is dispersed, but follow ups are rare.
- There is a need for a smoother transition between pediatric and adult services.
- Health literacy
  - "Health insurance literacy – people do not understand how to navigate their insurance, how to use it to address their needs"
  - Unfamiliar terminology prohibits understanding
- Pharmacy deserts and unaffordable prescriptions
- Caregiver resources
  - Caregivers are often stressed because of the lack of resources they have, which effects patient care.
- Dental Care and Vision
  - Although important, dental care and vision are rarely a priority.

11/10/17 Participants				
Name	Title	Organization	Email	Phone
Karen Nettler	Director, Community Connections	Jewish Community Services	knettler@jcsbaltimore.org	410-843-7409
Jacke Schroeder	Director, SAFE: Stop Abuse of Elders	CHANA	jschroeder@associated.org	410-234-0030
Reba Cornman	Director	U Maryland Geriatrics and Gerontology Education and Research Program	rcornman@umaryland.edu	410-706-4327
Rhonda Chatmon	Vice President, Multi-Cultural Markets	American Heart Association, Mid-Atlantic Affiliate	Rhonda.chatmon@heart.org	
Kathryn Lothschuetz Montgomery, PhD, RN, NEA-BC	Associate Professor and Chair	U Maryland Department of Partnerships, Professional Education, & Practice	kmontgomery@umaryland.edu	410-706-8198
Elizabeth "Ibby" Tanner, PhD, RN, FAAN	Director of Interprofessional Education	Community Public Health Nursing, Hopkins	Etanner3@jhu.edu	410-614-5303
Wendy Lane		U of Maryland	wlane@som.umaryland.edu	
Bronwyn Mayden	Executive Director	Promise Heights, U Maryland SSW	bmayden@ssw.umaryland.edu	410-706-2077

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	Services			
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Appendix 5
Priority Setting Strategy/Process

Priorities were voted on by all members of the UMMC Community Health Improvement Team using Poll Everywhere with the following questions:

1) What are the top three health problems in rank order that we need to address in Baltimore?
2) What are the top three social/environmental issues in rank order that we need to address in Baltimore?

Team members were asked to consider the following criteria when voting:
- Problem is greater in the City compared to the State or region
- Impact on vulnerable populations is significant
- Cost to the community can be achieved by addressing this problem/aligned with population health
- Major improvements in the quality of life can be made by addressing this problem
- Issue can be addressed with existing leadership and resources
- Progress can be made on this issue in the short term

Appendix 6
Community Health Improvement Leadership Team

Members
Cynthia Kelleher, President and CEO

Lori Patria, Director Rehabilitation Services

Michelle Larcey, Marketing Manager

Pamela Bechtel, Director, Patient Experience

Anne Williams, DNP, RN, Director, Community Health Improvement

Appendix 7
Community Health Needs Assessment Collaborators/Partners

UMMS Baltimore-City Based Hospitals
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Anne Williams, DNP, RN, Director of Community Health Improvement, UMMS

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Darleen Won, Assistant Vice President, Population Health
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