

Executive Summary

A decade ago public health pioneer Dr. Lester Breslow suggested that American medicine had moved into its “third revolution.” The first revolution in the nineteenth and early twentieth centuries was the conquest of infectious diseases. The second was the emergence of chronic disease as a major cause of morbidity and mortality and the progress toward chronic disease management and prevention. The third revolution is the promotion of health as more than just the absence of disease ([Breslow, 2004](#)).

While the Nation at large has made significant progress moving through these revolutions, the American inner-city unfortunately has not. Infectious and chronic diseases (HIV, TB, hypertension, obesity, diabetes, asthma) plague the urban population and for many health is illusive. *Public health* efforts (steps to assure conditions where people can be healthy) that positively affect *population health* (the health outcomes of a group of individuals) are shaped by social determinants beyond the traditional reach of the hospital or health care system (e.g. economics, physical environment, education, access to food). Thus collaborative, integrated efforts between the hospital and the local community are essential if the hospital’s patients and the local population are to realize health. This is especially true in communities where the university and medical center (“Eds and Meds”) serve as “anchors” as they do in Baltimore. The University of Maryland and Johns Hopkins universities and healthcare systems are the top employers and economic drivers in the city. ([Zuckerman 2013](#), [Baltimore Dev Corp 2011](#)).

In West Baltimore, the University of Maryland Medical Center (UMMC) includes hospitals at the University and Midtown campuses, both part of the larger University of Maryland Medical System (UMMS). These two hospitals have served as community anchors for West Baltimore since 1823 and 1881 respectively. Maryland’s vision is to transform the state’s health care system to be highly reliable, highly efficient, and patient-centered; a system in which multi-disciplinary teams can work with high need patients to manage chronic conditions to improve outcomes, lower costs, and enhance patient experience. This has crystallized UMMC’s long commitment to the health of the local population with our own overarching vision: *“To dramatically improve the health and well-being of the West Baltimore population beginning with our most complex and vulnerable patients through high-quality, integrated delivery system that improves outcomes, reduces cost and enhances the patient experience.”*

In an effort to more clearly develop our strategies to meet this goal we have modified the model of the Advisory Board’s [“Playbook for Population Health”](#) and identified four target populations. The first are termed the *“high risk”* group, those who have been historically high-utilizers of health care (patients who have complex medical problems/chronic diseases and ≥ 3 bedded encounters at UMMC in the prior 12 months). The second group we consider *“rising risk”* (with chronic disease and 1-2 bedded encounters in the prior 12 months). The *“low risk”* group are those who come to the medical center on a regular basis for the management of chronic disease that is generally well controlled (no bedded encounters in the previous twelve months).

Finally there are the *“healthy”* patients who may not have accessed healthcare or who only come for preventive services (e.g. annual exams, well-baby checks) but who are making health decisions where UMMC and its collaborating partners could play a positive role in promoting health and well-being. This population is defined by UMMC’s Community Benefit Service Area (Zip Codes: 21201, 21215, 21216, 21217, 21223, 21229, 21230) and because it is based on geography, may include many of the patients in the higher risk populations. In addition, subpopulations of specific patient groups (e.g. post-acute, post-operative) and those from outside the geographic area will also be identified for specific interventions. (Appendix 1-Figure “Defining the Population.”)

Five goals and 9 major strategies have been developed at UMMC to begin to meet the objective of improving the health and well-being of the West Baltimore population and others who choose to receive their health care from UMMC. In collaboration with our UMMS partners and the two other West Baltimore hospitals (Saint. Agnes and Bon Secours Baltimore Health System) the **first goal** is to: ***reduce potentially avoidable utilization (PAU) and redirect care delivery to the appropriate care setting***. This goal will target the high and rising risk populations through a series of strategies that links UMMC's complex care management teams with care and support personnel in ambulatory community programs and post-acute care settings. The teams will integrate and coordinate services in order to decrease potentially avoidable utilization of healthcare resources. It is hoped that the plan will be financially sustained by an HSCRC Grant.

The **second goal** is to: ***improve patient outcomes and quality of care for patients suffering from chronic disease***. This goal specifically targets the "rising risk" population with case management and other supports appropriate for these high need, complex patients. The strategies and initiatives will be designed to improve quality and efficiency of the care episode and ultimately to improve patients' chronic disease management skills and decrease their utilization of unscheduled hospitalizations and emergency room utilization.

The **third goal** is foundational to the UMMC long-term population health focus: ***to promote health and well-being through enhanced screening, prevention and health promotion***. This series of strategies will target the low-risk and healthy populations with a range of programs designed to improve health literacy, support and foster protective health behaviors and incorporate ideas for health and well-being from the community.

The **fourth goal** is a collaborative effort with the community to address the challenges of health equity; to: ***reduce and eliminate health disparities in the care provided and create a culturally competent workforce***. These strategies target our patients, the regional population and our medical staff and employees. The programs will work with a community "consumer advisory board" to educate staff and to begin to identify and address disparity in the care we provide. The ultimate goal is to integrate community resources relative to the pertinent social determinants of health. The first target will be to improve transportation options for patients, identified as a critical determinant by more than two thirds of community members surveyed in our 2014 Community Health Needs Assessment.

Finally, in keeping with the UMMS population health strategy with our **fifth goal** we will: ***participate in the UMMS Population Health Services Organization (PHSO), a population health management capability that will enable it to successfully perform under value-based contracting arrangements with various commercial and government payers***. Working with UMMS we will apply national best practices to chronic/complex disease management programs with the eventual goal of clinical consolidation and modernization to improve quality and efficiency; integrating the delivery of care for the highest risk populations.

Population health cannot be defined as merely the sum of the health of a collection of individuals. Neither can the collective health of a population fail to take into consideration the factors influencing health for the individuals within the group. In both cases, efforts must focus on the context in which health occurs (or fails to occur); how the context affects the health of the individual and the population ([Arah 2008](#)). It is this context as well as the health of the individuals and populations living within it that the UMMC long-term strategic transformation hopes to affect.

Vision: To dramatically improve the health and well-being of the West Baltimore population beginning with our most complex and vulnerable patients through high-quality, integrated delivery system that improves outcomes, reduces cost and enhances the patient experience.

Summary of Goals and Strategies:

Goal 1: Reduce potentially avoidable utilization (PAU) and redirect care delivery to the appropriate care setting.

Key Strategy 1: Implement “West Baltimore Collaborative” Complex Care Management Program in collaboration with Saint Agnes and Bon Secours Baltimore Health System. (G1♦S1)

Key Strategy 2: Reduce potentially avoidable utilization (specifically decreased readmission and ER utilization) for patients through improved transitions of care from the inpatient to outpatient environment. (G1♦S2)

Goal 2: Improve patient outcomes and quality of care for ambulatory patients suffering from chronic diseases.

Key Strategy 3: Expand existing community based chronic disease management programs and specialty care ambulatory care services into one location to provide integrated, interdisciplinary care to complex patients: The Midtown Campus Outpatient Center (projected completion June 2018). (G2♦S3)

Goal 3: Promote health and well-being through enhanced screening, prevention and health promotion.

Key Strategy 4: Implement UMMC Community Health Plan by addressing identified priorities from 2014 “Community Health Needs Assessment” (University & Midtown Campuses). (G3♦S4)

Key Strategy 5: Expand and promote preventive health services in a convenient and accessible setting in local communities. (G3♦S5)

Goal 4: In collaboration with community partners, develop and implement a health equity strategy to reduce and eliminate health disparities in the care provided and create a culturally competent workforce.

Key Strategy 6: Conduct data analysis and review to identify and understand trends in potential health disparities at UMMC. (G4♦S6)

Key Strategy 7: Increase awareness of the impact of health disparities by training UMMC staff in cultural competency and health disparity. (G4♦S7)

Key Strategy 8: Develop transportation strategy to improve patient adherence with follow-up visits. (G4♦S8)

Goal 5: In collaboration with the UMMS Population Health Strategy and industry partners, participate in the UMMS PHSO value based contracting arrangements for better patient experience, improved outcomes, reduced cost growth and enhanced provider satisfaction.

Key Strategy 9: With UMMS, Operationalize a high-performing population health management function (i.e., a Population Health Services Organization) and care delivery model that is all-payer and all-patient capable in a sample population of high-risk and rising risk individuals. (G5♦S9)

--- --- --- --- ---

Goal One: Reduce potentially avoidable utilization (PAU) and redirect care delivery to the appropriate care setting.

Key Strategy 1: Implement “West Baltimore Collaborative” Complex Care Management Program in collaboration with Saint Agnes and Bon Secours Baltimore Health System. (G1♦S1)

Target adult population: High Risk Population (for this goal using UMMS and Collaborative definition of patients who received care at more than one of the collaborating: at least 3 bedded admissions)

University of Maryland Medical Center - Hospital Strategic Transformation Plan 2015

overall without major mental health diagnosis): Estimated numbers = 810 Medicare, 681 Dual Eligible, 785 Medicaid, 456 other insurer.

Programs/Services/Initiatives:

- Complex care management services/team deployed to West Baltimore primary care practice to manage care of high utilizers
- Team consists of: patient, primary care physician, care manager, pharmacist, social worker w/mental health & addictions certification, community health worker
- CRISP care management tools
- PCP Practice assessment and best practice implementation

Process Metrics:

- Number of patients enrolled in program
- Number of patients with “Longitudinal Care Plans”

Outcome Metrics:

- Reduce per capita cost of care (total cost/capita, health care costs/capita)
- Reduce readmissions (including OBS)
- Reduce ER Visits/capita
- Increase Primary Care Visit

Additional Participants and Partners:

- Saint Agnes and Bon Secours hospitals
- UMMS
- HSCRC

Financial Sustainability Plan:

- Initially it is hoped that the program will be funded via dollars from the HSCRC’s competitive grant process. The program however should become self-sustainable in the longer term as the cost associated with the reduced utilization is eliminated.

(Appendix 2 is the UMMS Summary of “West Baltimore Collaborative” initiative)

Key Strategy 2: *Reduce potentially avoidable utilization (specifically decreased readmission and ER utilization) for patients through improved transitions of care from the inpatient to outpatient environment. (G1♦S2)*

Target adult populations: Patients hospitalized with new onset of an acute condition including post-procedural and post-ED visit patients with service-specific identified high risk diagnoses contributing to ED utilization or readmission (e.g. surgery, trauma, TIA, new complications of chronic disease).

Post-acute Programs/Services/Initiatives:

- Behavioral Health Consult/Bridge Clinic (Appendix 3 is a list of UMMC BH transition initiatives)
- Medical Transitional Care Coordination Program
- Hospitalists/ED Collaboration
- Medication Bedside Delivery
- Shock Trauma Care Coordination
- Transitional Surgery Clinic

Target adult populations: Patients with complex/chronic conditions: High Risk (≥ 1 chronic disease and ≥ 3 bedded admissions) and Rising Risk populations (≥ 1 chronic disease, and up to two bedded admissions).

Complex/Chronic Disease Programs/Services/Initiatives:

- Heart Failure Readmission Initiative
- Complex Diabetes management
- Complex HIV management
- Uncontrolled HTN
- Anti-Coagulation Clinic/ Medication Safety Clinic
- Medicine High Risk Chronic Disease

Target pediatric populations: Four most common reasons for ≥ 3 bedded pediatric admissions at UMMC: asthma, sickle-cell anemia, seizure/neurologic/developmentally delay, pneumonia/chronic lung disease.

Complex/Chronic Pediatric Disease Programs/Services/Initiatives:

- Trial specialty specific disease follow-up

Process Metrics:

- Number high risk and rising risk patients identified and enrolled
- Number of risk assessments and longitudinal care plans completed
- Number of care management contacts per patient
- 30 day supply of medications at discharge
- Follow-up call made w/in 72 hours
- 7day f/u visit
- Medication reconciliation completed
- PCP/connected to care for long term f/u

Outcome Metrics:

- Decreased ED visits per capita
- Decreased patient readmission (PAU definition: includes OBS) at 30 days
- Decreased hospital cost per capita

Additional Participants and Partners:

- UM School of Medicine faculty providers/specialty practices
- Visiting Nurses Association
- Genesis Health Care
- FutureCare
- University of Maryland Rehabilitation

Financial Sustainability Plan:

- The program will initially be funded via population health dollars however the program is intended to be self-sustainable in the long term as cost associated with the reduced utilization is eliminated.

(Appendix 4 & 5 summarize the ambulatory initiatives aimed at reducing preventable utilization at UMMC University and Midtown campuses.)

--- --- --- --- ---

Goal Two: Improve patient outcomes and quality of care for ambulatory patients suffering from chronic diseases.

Key Strategy 3: *Expand existing community based chronic disease management programs and specialty care ambulatory care services into one location to provide integrated, interdisciplinary care to complex patients: The Midtown Campus Outpatient Center (projected completion June 2018). (G2♦S3)*

Target adult populations: High Risk (UMMC definition: ≥ 1 chronic disease and ≥ 3 bedded admissions) and Rising Risk populations (UMMC definition: ≥ 1 chronic disease, and up to two bedded admissions. Chronic disease includes standard four (COPD/ Respiratory, heart disease/CHF, hypertension, diabetes) with addition of HIV/AIDS.

Target pediatric populations: Four most common reasons for ≥ 3 bedded pediatric admissions asthma, sickle-cell anemia, seizure/neurologic/developmentally delay, pneumonia/chronic lung disease.

Programs/Services/Initiatives:

- Build 100K sq ft outpatient center on Midtown Campus (to open June 2018)
- Expand Behavioral Health Homes
- Expand University of Maryland Center for Diabetes and Endocrinology (Adults, Children and Pregnant Women)
- Expand Infectious Disease Services (HIV/AIDS, Hepatitis C , Other ID specialties)
- Expand pulmonary, gastroenterology, and cardiology ambulatory programs
- Expand Primary Care Medical Homes for Complex Care Patients
- Implement Integrated Care Model Home (Psychiatry & Medicine)
- Open two UMMC Urgent care Centers (on the University and Midtown Campuses).

Process Metrics:

- Building construction / ambulatory service program expansion

Outcome Metrics:

- Decreased hospital cost per capita
- Decreased readmissions
- Decreased ER visits in affected populations
- Decreased acute admissions (includes OBS)
- Increased primary care visits

Additional Participants and Partners:

- UM School of Medicine faculty providers/specialty practices

Financial Sustainability Plan:

- The costs associated with opening the Midtown Ambulatory Center will be covered through two sources. The first source will be professional fees associated with several of the new unregulated chronic care programs. The second source of funding will be the elimination of cost associated with a reduction in hospital utilization.

--- --- --- --- ---

Goal Three: Promote health and well-being through enhanced screening, prevention and health promotion.

Key Strategy 4: Implement UMMC Community Health Improvement Plan by addressing identified priorities from 2015 "Community Health Needs Assessment" (University & Midtown Campuses) to include: Cardiovascular/Diabetes, Women's & Children's Health, HIV/AIDS Prevention/Rx, Violence Prevention and Health Literacy. (G3♦S4)

Target adult and pediatric populations: Low Risk (UMMC definition ≥ 1 chronic disease but no admissions) to include "at-risk" pregnant women in West Baltimore, children with chronic asthma, children with obesity (BMI greater than 30), and patients diagnosed with pre-diabetes.

Programs/Services/Initiatives:

- Continue "Breath-mobile" community asthma intervention
- With partners, establish a West Baltimore "Congregational Health Network."
- Continue Stork's Nest (Hi-Risk Pregnancy Program)
- In conjunction with other hospitals in Baltimore, launch year-long health literacy campaign to educate and engage patients in their own care, including health promotion to increase awareness of health risk and appropriate use of health care services and care settings. The initiative also includes a health literacy education process for our providers about meaningful and clear communication with patients and families
- Implement Chronic Disease Self-Management Education Program
- Expand the CDC's National Diabetes Prevention Program at Midtown Campus
- Continue Hypertension Reduction Initiative

Process Metrics:

- Number of individuals completing the National Diabetes Prevention Program

Outcome Metrics:

- Reduce West Baltimore infant mortality and pre-term births (Stork's Nest)
- Reduce pediatric ER utilization related to asthma
- Number of full term births (Stork's Nest)
- Number of pounds lost (DPP Program)
- Number of new hypertension patients in medical care (hypertension)
- Percent of participants with normal BPs after referrals/intervention

Additional Participants and Partners:

- March of Dimes
- Zeta Phi Beta Sorority, Inc., Alpha Zeta Chapter
- State of Maryland, Chronic Disease Office
- Baltimore City Health Department
- Zeta Center Senior Center
- Maryland Heart Association

Financial Sustainability Plan:

- The program will initially be funded via population health dollars however the program is intended to be self-sustainable in the long term as cost associated with the reduced utilization is eliminated.

University of Maryland Medical Center - Hospital Strategic Transformation Plan 2015

It is recognized however that with these type of programs financial stability is a long term goal as the utilization reductions are dependent in part on changing the behavior of the community.

Appendix 6 & 7 are the Community Health Needs Assessments for University and Midtown campuses.

Key Strategy 5: *Expand and promote preventive health services in a convenient and accessible setting in local communities. (G3♦S5)*

Target population: Healthy population (currently, no regular unscheduled contact with medical care, primarily health maintenance). Includes patients of all ages (in general) without chronic disease (Priority Zip Codes 21201, 21215, 21216, 21217, 21223, 21229, 21230).

Programs/Services/Initiatives:

- Establish 2 new primary care medical homes and partner with PCPs to assure access to preventive health services
- Expand access to annual health screenings/Health risk assessments
- Implement mobile health technology program targeting well child care during first 10 years
- Implement Mobile Health Primary Care Program
- Expand access to preventive screening programs at the Midtown Campus

Process Metrics:

- Number of patient visits on mobile health van
- Percent increase in preventive health visits in UMMC Primary Care Network practices
- Percent increase in well child care visits at UM Children's Hospital Pediatric Primary Care Practice

Outcome Metrics:

- Percent decrease in Pediatric ED visits
- Percent decrease in Adult ED visits
- NCQA PCMH indicators

Additional Participants and Partners:

- University of Maryland School of Medicine Medical Students

Financial Sustainability Plan:

- The program will initially be funded via population health dollars however the program is intended to be self-sustainable in the long term as cost associated with the reduced utilization is eliminated. There will also be increased professional fees as patient contacts will result in connecting patients to owned primary care sites.

--- --- --- --- ---

Goal Four: *In collaboration with community partners, develop and implement a health equity strategy to reduce and eliminate health disparities in the care provided and create a culturally competent workforce*

Key Strategy 6: *Conduct data analysis and review to identify and understand trends in potential health disparities at UMMC. (G4♦S6)*

Target population: All populations

Programs/Services/Initiatives:

- Conduct hospital and community focus groups (qualitative research) regarding health disparities and perceptions at both campuses
- In collaboration with the Maryland Hospital Association, review quality indicators by race, ethnicity and gender

Process Metrics:

- Identified potential areas of health disparity in our population.
- Establish a “ Population Health Advisory Board” from the West Baltimore population that meets quarterly to validate identified areas of disparity
- Establish collaborative relationships with other professional schools on the University of Maryland Baltimore campus with the goal of developing synchronized interventions with the community to address the most urgent health disparity concerns

Additional Participants and Partners:

- Southwest Baltimore Partnership
- University of Maryland School of School Work
- University of Maryland School of Medicine
- Maryland Hospital Association

Financial Sustainability Plan:

- Understanding the different cultures of our patients should allow for us to communicate with them in ways that will facilitate getting them access to necessary care. In the long term cost associated with these efforts should be paid for via reduced utilization as these patients will be better engaged with primary care therefore preventing some long term complications.

Key Strategy 7: Increase awareness of the impact of health disparities by training UMMC staff in cultural competency and health disparity. (G4♦S7)

Target population: UMMC (University and Midtown campus) staff.

Programs/Services/Initiatives:

- Cultural competency and health disparity training at hospital new employee orientation, in graduate medical education programs (residency orientation) and in medical staff grand rounds.

Process Metrics:

- Number of medical staff trained through “Grand Rounds” style presentations and hospital/GME orientation.

Additional Participants and Partners:

- University of Maryland Epidemiology Department

Financial Sustainability Plan:

- Understanding the different cultures of our patients should allow for us to communicate with them in ways that will lead to more standardization of care based on best practices. These best practices reduce unnecessary care thereby eliminating cost.

Key Strategy 8: *Develop patient transportation strategy to improve patient adherence with follow-up visits. (G4♦S8)*

Target population: All populations to include Health Population of West Baltimore (focus on Zip Codes 21201, 21215, 21216, 21217, 21223, 21229, 21230).

Programs/Services/Initiatives:

- Establish low-cost/no-cost, coordinated transportation strategy for disadvantaged patients to improve adherence with follow-up appointments after ED visits and hospitalizations.

Process Metrics:

- Number of patients utilizing improved transportation options

Outcome Metrics:

- Adherence with follow-up appointments
- Reduction in number of patients identifying “transportation” as a top health concern on next community needs assessment.

Additional Participants and Partners:

- Maryland Mobility

Financial Sustainability Plan:

- Programs are initially being funded via population health dollars however adherence with follow-up visits will reduce cost associated with readmissions. There will also be professional fee income to help defray physician cost.

--- --- --- --- ---

Goal Five: *In collaboration with the UMMS Population Health Strategy and industry partners, participate in the UMMS Population Health Services Organization (PHSO), a population health management capability that will enable it to successfully perform under value-based contracting arrangements (i.e., better patient experience, improved outcomes, reduced cost growth, and enhanced provider satisfaction) with various commercial, Medicaid, and Medicare Advantage payers.*

Key Strategy 9: *With UMMS, Operationalize a high-performing population health management function (i.e., a Population Health Services Organization) and care delivery model that is all-payer and all-patient capable in a sample population of high-risk and rising risk individuals. (G5♦S9)*

Target adult population: High risk individuals for which we have risk based contracts, i.e. the most at risk individuals within a given payer population based on a risk stratification methodology. Includes High Risk (UMMC definition: ≥ 1 chronic disease and ≥ 3 bedded admissions) and Rising Risk populations (UMMC definition: ≥ 1 chronic disease, and up to two bedded admissions. Chronic disease includes standard four (COPD/ Respiratory, heart disease/CHF, hypertension, diabetes) with addition of HIV/AIDS.

Programs/Services/Initiatives:

- Implement UMMS Pilot “Population Health Services Organization”

- Implement best practices and redirect patients to the appropriate care settings c/w PHSO model.

Process Metrics:

- Number of high risk and rising risk patients identified and enrolled
- Number of risk assessments and longitudinal care plans completed
- Number of care management contacts

Outcome Metrics:

- Decreased ED visits per capita
- Decreased patient readmission (PAU definition: includes OBS)
- Decreased hospital cost per capita
- Increased patient satisfaction
- Increased provider satisfaction

Additional Participants and Partners:

- Lumeris
- Davita / HealthCare Partners

Financial Sustainability Plan: The intention is for the PHSO to be self-sustaining based upon achieving the quality and utilization targets embedded in the risk contracts with the payers. This will produce the savings to reinvest in these programs.

Appendix 8 is a summary of the University of Maryland Medical *System* Population Health Strategy
Appendix 9 is a summary of the University of Maryland Medical Center Population Health Work Group Structure

--- --- --- --- ---

List of Appendices

- 1) UMMC: Defining the Populations (Figure)
- 2) UMMS Summary of "West Baltimore Collaborative" initiative
- 3) UMMC Behavioral Health Transition Initiatives
- 4) UMMC (University Campus) Ambulatory PAU Reduction Initiatives Inventory
- 5) UMMC (Midtown Campus) Ambulatory PAU Reduction Initiatives Inventory
- 6) Community Health Needs Assessment (University Campus)
- 7) Community Health Needs Assessment (Midtown Campus)
- 8) UMMS Population Health Strategic Overview
- 9) UMMC Population Health Work Group Structure
- 10) References

Prepared by:

Charles W. Callahan, DO, FAAP
Vice President, Population Health
University of Maryland Medical Center
110 South Paca Street, 2nd Floor Room 2N177
Baltimore MD 21201
o.410-328-0050 / c.410-303-3795 / pc. 301-875-9499
charlescallahan@umm.edu

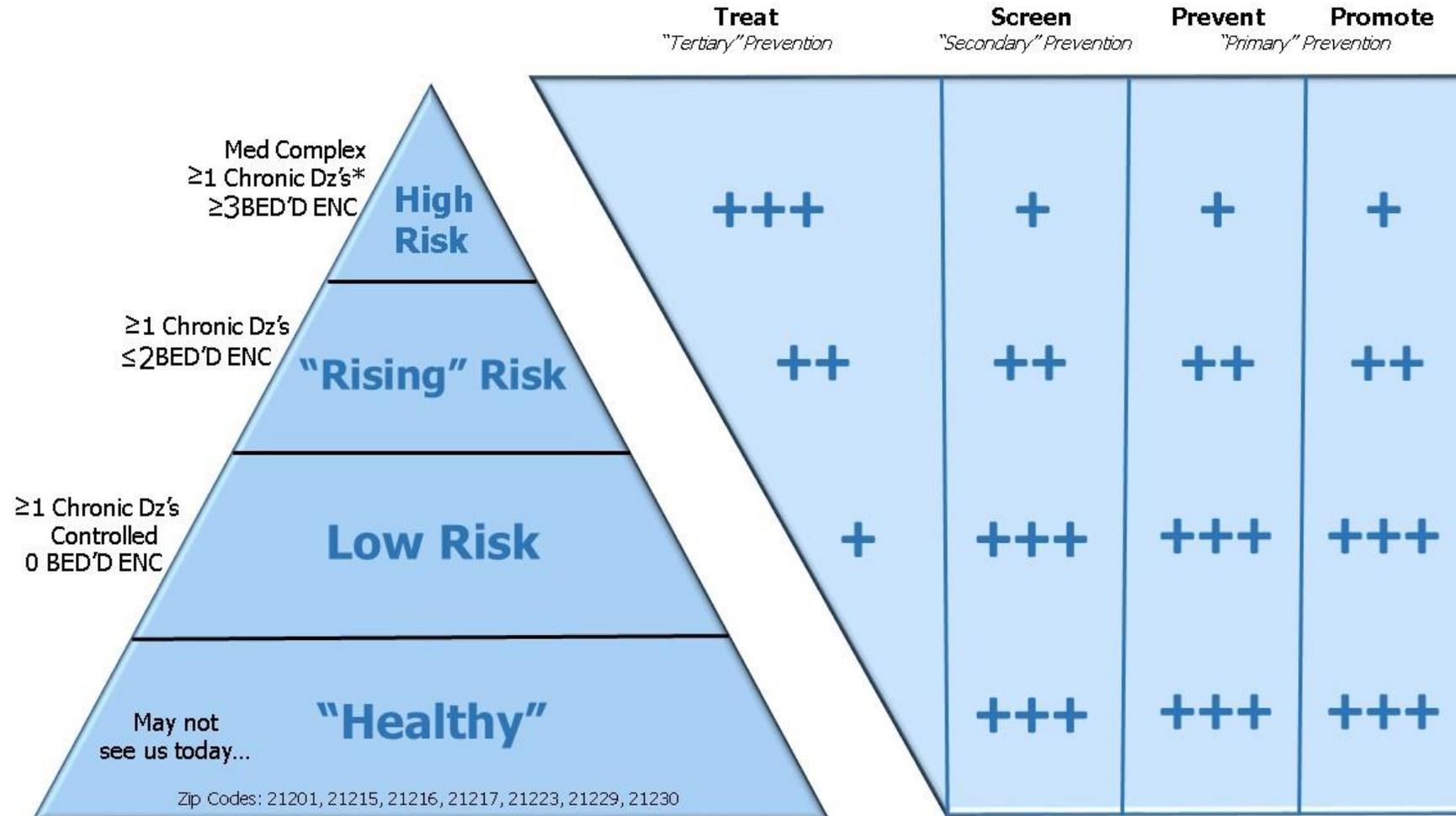
Dana Farrakhan, FACHE
Senior Vice President, Strategy, Community and Business Development
University of Maryland Medical Center
22 S. Greene Street
Baltimore, MD 21201
410 - 328-1314 (Office)
410 - 328-8664 (Fax)
DFarrakhan@umm.edu

Michael R. Jablonover, MD, MBA, FACP
Senior Vice President and Chief Medical Officer
University of Maryland Medical Center
22 S. Greene St.
Baltimore, MD 21201
mjablonover@umm.edu
Tel: 410-328-2769
Fax: 410-328-7595

Appendix 1
UMMC Population Health Graphic

UMMC Population Priorities

“Identify the Population”



* Hypertension, Chronic Obstructive Pulmonary Disease, Diabetes, Congestive Heart Failure
 (Pediatric: asthma, sickle-cell anemia, seizures/neurologic/developmental delay, pneumonia/chronic lung disease)

Appendix 2
Planning Grant Final Report for West Baltimore Collaborative

Regional Partnership for Health System Transformation

Regional Transformation Plan – Final Report

Due: December 7, 2015

Regional Partner: West Baltimore Collaborative

Goals, Strategies and Outcomes

Articulate the goals, strategies and outcomes that will be pursued and measured by the regional partnership.

In order to better improve healthcare access and outcomes for patients with chronic conditions identified as high utilizers of hospital services, the four hospitals located in West Baltimore: Bon Secours, St. Agnes, University of Maryland Medical Center and University of Maryland-Midtown have collaborated to create the West Baltimore Collaborative (“WBC”). The WBC will contract with the Population Service Health Organization (“PHSO”), operated by the University of Maryland Medical System, to address the health and social concerns of individual patients who receive care from WBC member hospitals, PCPs, and other affiliated entities. The PHSO will hire and manage care team members and support staff, provide human resource functions to include record and schedule maintenance, and centralize IT infrastructure.

- The WBC will focus on a targeted patient population as defined by the criteria described below. While program participation will not be limited by a patient’s domicile, a portion of these patients who will be provided access to and benefit from the program are concentrated within West Baltimore, as defined by zip code;
- The goal of the WBC is to provide comprehensive, robust health management services to a targeted patient population of high utilizers of hospital services;
- Strategies include the development of care teams made up of an RN/Care Manager, a Social Worker, and a Community Health Worker. These teams will be responsible for the care of approximately 100 patients. Additionally, ancillary staff to include a Clinical Pharmacist would carry a caseload of 150 patients;
- Successful outcomes will be determined by patients’ ability to achieve goals established in their individualized care plans and to avoid hospital readmission and reduce utilization of hospital services.

Describe the target population that will be monitored and measured, including the number of people and geographical location.

- The targeted patient population will be comprised of patients from WBC member hospitals that meet the following criteria:
 - Medicare or Dual Eligible patients
 - In CY 2014, the patient had 3 or more bedded hospital encounters of greater than 24 hours in the following settings:
 - Inpatient

- Inpatient Observation
 - ED
- The patient suffers from 2 or more chronic conditions
- The patient does not suffer from a Major Mental Health Diagnosis
 - Including Bipolarity, Schizophrenia, other Psychotic disorders
 - This criterion would **not** exclude mental health diagnoses of depression, anxiety, etc. Patients with these diagnoses who meet additional criteria would be eligible for the program.
- Based upon CY 2014 data of WBC members, there were approximately 1,500 patients that met the listed criteria. Future program iterations, expanding criteria to all payers, will capture approximately 3,600 patients
- Geographic consideration: patient domicile will not disqualify a patient from program participation, but each WBC member is located in and provides service to the West Baltimore community. The institutional collaboration manifested in the WBC formation will positively benefit the patient population of West Baltimore.

Describe specific metrics that will be used to measure progress including patient satisfaction, quality, outcomes metrics, process metrics and cost metrics. Describe how the selected metrics draw from or relate to the State of Maryland's requirements under the new model.

To ensure accuracy in the measurement of program success, the WBC will evaluate utilization of the balance of identified outcome, process and ROI metrics provided in the application as the program proceeds through rollout to full functionality and beyond. Understanding that the HSCRC and others, including CRISP, are still refining the recommended set of metrics, the WBC will make any necessary adjustments as the process evolves.

Programmatic Metrics will include:

- Does the patient have an appointment with a primary care provider prior to discharge and within 7 days of discharge?
- Did the patient connect with the scheduled primary care provider?
- Reduce emergency room visit rates
- Reduce readmission rates
- Was medication reconciliation completed prior to discharge?
- Was a follow-up call by the transitions team completed within 72 hours?
- Home visits within 30 days are completed
- Care Plans will be completed on all patients in care management
- HEDIS and MU measures for program
- Total hospital cost per capita
- Total hospital admits per capita
- Total healthcare cost per person
- ED visits per capita

These metrics, while focused on programs also lend to the overarching outcome metrics captured in the Core Outcomes Measures listed in Table A of the Implementation Grant Request for Proposals. Measures germane to the program, including reduction of PAU's, readmissions, and avoidable utilization of the emergency department will be captured.

Currently, based on CY 2014 WBC data, the baseline for the targeted patient population (TPP) reflects the following:

- WBC TPP
 - 1,491 Unique Patients
 - 8, 216 Total Visits
 - \$130,740,898M Total Charges
- WBC TPP Revisit Information
 - Inpatient Readmissions
 - 1,540 Cases
 - \$31,583,989 Charges
 - Observation Revisits
 - 346 Cases
 - \$2,076,385 Charges
 - ER Revisits
 - 575 Cases
 - \$680,763 Charges
- WBC TPP Prevention Quality Indicators
 - 677 Cases
 - \$11,115,755M Charges

Additionally, there are efforts underway to identify and align with metrics across institutions citywide. These efforts will be further explained in the grant application. See Note (1), below.

Describe the regional partnership's current performance (target population) against the stated metrics.

In the first year, the West Baltimore Collaborative's targeted patient population is focused on approximately 1,500 patients; this is a combination of Medicare high utilizers and Dual Eligibles age 50 years and above. This target patient population has had 3 or more bedded encounters within the past 12 months. Patients are medically complex and without a major mental health diagnosis. The metrics which have been outlined above are geared towards care coordination and care management activities which will impact the utilization of the acute care setting.

Define the data collection and analytics capabilities that will be used to measure goals and outcomes.

Please see Data and Analytics section, in the subsection describing the regional partnership's plan for

capturing CRISP data. It is located on page 7 of this report.

List the major areas of focus for year one. (For the completion of this plan, if various areas of focus require different descriptions, please identify each area under the following sections of the plan.)

Within the first several months of funded operation, the WBC will bring organizational infrastructure online and begin program operations, endeavoring to meet the following schedule:

- Upon grant award,
 - Patients identified as eligible will be contacted
 - Securing program's physical space will occur
 - A refresh of inter-hospital data to confirm accuracy of metrics and patient capture
 - If necessary, program scalability will occur
 - Model implementation for Medicare and Dual Eligible Patients will commence at the member institutions
 - Candidate evaluations based upon prior position publication will commence
 - WBC appoints interim program Director to provide day-to-day leadership during recruitment process
- Within 30 days of grant award
 - Participating hospitals will execute a Memoranda of Understanding, which will dictate member association and organizational structure
 - FQHCs, hospital-affiliated practices and community-based physicians will begin to execute Participation Agreements
 - Vetting of potential hires will continue, and the beginning of the hiring process will commence
- Within 60 days of grant award
 - Initiation of practice assessments to identify practice needs and provide appropriate resources and support
- Within 90 days of grant award
 - Enrollment of patients into the program will begin
- Within 6 months of grant award
 - Analysis of captured data metrics will begin
 - Patient and Provider surveys will begin
- Within 9 months of grant award
 - It is anticipated that 75% of the target population will be enrolled
- Within 12 months of grant award
 - Evaluation of program performance will begin
 - Considerations will be made regarding expansion of the targeted patient population
 - Finalize budget for year 2

Formal Relationships and Governance

List the participants of the regional partnership such as hospitals, physicians, nursing homes, post-acute facilities, behavioral health providers, community-based organizations, etc. Specify names and titles where possible.

WBC primary participants will be the four hospitals located in West Baltimore, collaborating via executed Memoranda of Understanding.

- University of Maryland Medical Center (University and Midtown campuses)
 - Dana Farrakhan, SVP, Strategy, Community and Business Development
- Saint Agnes Hospitals-
 - F. Joseph Meyers, CSO
- Bon Secours Hospital
 - Katie Eckert, Director of Operations Finance

Additional participants and collaborators, many of whom have submitted letters of intent to participate in the WBC's mission include:

- Mercy Medical Center
 - Christopher Thomaskutty, Chief of Staff & SVP, Clinical Programs
 - Michael Mullane, Senior Advisor to the President & CEO
- St. Agnes Medical Group
 - Patrick Mutch, Interim President and CEO
- Total Healthcare
 - Faye Royale-Larkins, CEO
- Baltimore Medical System (BMS)
 - Shirley Sutton, President/CEO
- Chase Brexton
 - Richard Larson, CEO
- University of Maryland Rehabilitation & Orthopedic Institute
 - Cindy Kelleher, CEO
- University of Maryland, Faculty Physicians, Family Medicine
 - David Stewart, M.D., Chair
- Bon Secours affiliated physicians
 - Arsalan Sheikh, D.O., Chair, BSHS Department of Medicine
- University of Maryland, Faculty Physicians, Community Psychiatry
 - Jill RachBeisel, MD
- B'more Clubhouse
 - Jason Woody, Executive Director

Describe the governance structure or process through which decisions will be made for the regional partnership. List the participants of the structure/process.

The WBC will utilize the following governance structure

- West Baltimore Governing Council
 - Core membership will be CEOs, CFOs, CMOs and CIOs from Saint Agnes, Bon Secours, and UMMC (University and Midtown campuses)
 - Providing advisory resources and stakeholder perspectives to the Governing Council will be 2 panels:

- Community Advisory Committee
- Medical Advisory Committee
- Management Committee
 - Committee will directly manage activities of the WBC as it provides for patients
 - Committee will consist of 6 members (finance, care management and strategy) from the participating hospitals/health systems plus the WBC Director
 - The Committee will also manage the contract with the Population Health Services Organization (“PHSO”)
 - The PHSO will provide patient services through the following mechanisms
 - Care management teams
 - Manage relationships with PCPs
 - Oversee network of providers
 - Collect patient data, review analytics and program performance

Identify the types of decisions that will be made by the regional partnership.

Decisions made by the WBC, through its governance structure will include

- Decisions regarding the scope of partners’ and participant involvement
- Monitoring programmatic design to achieve targeted patient and financial outcomes
- Monitoring funds flow
- Directing decisions regarding program management
- Directing decisions on vendor contracts
- Decisions affecting savings management

Describe the patient consent process for the purpose of sharing data among regional partnership members.

- Upon determination of program eligibility by Collaboration member and WBC staff, identified patients will be enrolled during hospitalization, or shortly after discharge. Patients may also be identified by participating PCPs.
- There will be a standard enrollment form used by WBC staff advising patients of the program’s data collection and sharing among the regional partners.
- Any sharing of data will be for the express purpose of patient care coordination and management

Describe the processes that will be used by the regional partnership to improve care and the MOUs or other agreements that will be used to facilitate the legal and appropriate sharing of care plans, alerts and other data as described in the process.

Data-sharing procedures among Collaborative members will be contained in executed MOUs. The WBC will also enter into an agreement with CRISP to capture and maintain data for enrolled patients.

Attach the list of HIPAA compliance rules that will be implemented by the regional partnership.

The sharing of patient level data will be governed by BAAs that will be executed among all parties participating in the WBC. Further HIPAA compliance rules regarding data collection, storage and security protection are currently covered by the existing policies and procedures of the WBC member organizations. A complete review of these policies and procedures will be complete to ensure

compliance within the operations of the WBC. Similar to the operations in the WBC member organizations, access to patient level data will be provisioned based on a staff member's roles and responsibilities in the patient care and/or program evaluation.

Data and Analytics

Define the data collection and analytics capabilities that will be used to measure goals and outcomes, including specific metrics and measures.

Data collection and analytics will be completed by analysts hired by the West Baltimore Collaborative via the PHSO. This will be an effort that combines CRISP, the West Baltimore medical records, publically available data, and data collected by care teams and PCPs.

Describe with specificity the regional partnership's plan for use of CRISP data.

Once MOUs have been signed between the participating entities, CRISP will provide a consolidated PATH report to the WBC. This will be used to support the WBC's targeted care management efforts. Additionally, the WBC will provide a panel of patients to CRISP in order to track the utilization of patients enrolled in the WBC program. This will enable the WBC to track utilization (including readmissions and other PAU metrics) and savings across the four hospitals of the collaborative and across the state of Maryland for enrolled patients. This will also enable the WBC and participating care providers to receive ENS alerts for WBC patients. The WBC is also working closing with CRISP to develop Care Profiles and Care Plans in CRISP. The WBC plans to communicate critical care management information via this new CRISP capability.

Risk Stratification, Health Risk Assessments, Care Profiles and Care Plans

Describe any plans for use of risk stratification, HRAs, care profiles, or care plans. Describe how these draw from or complement the standardized models being developed.

- Care profiles will be utilized via CRISP on all patients
- Care plans will be created by the primary care provider/care team and uploaded into CRISP
- Expectation that efforts to standardize ambulatory care plans across the WBC will continue
- HRA's will be completed by care managers and/or the transitions of care team
- Risk stratification will be completed by the health system
- Each of these tools will draw upon CRISP which is in the process of standardization across the state

For risk stratification, include the types of patients, risk levels, data sources, accountabilities (who is accountable to do what?)

- Assessments will be conducted on the identified high utilizer patients
- Risk stratification will be conducted by an RN Care Manager, and stored in CRISP or an

informatics and workflow program available to the WBC.

Data will be pulled from the EMR, where applicable. The accountable party will be the analyst who will be pulling data

For HRAs, include the types of screenings, who is accountable for completing, and where information is recorded.

- HRAs will be completed and recorded in the patient's medical record
- The RN/Care Manager and other members of the care management team are responsible for completing the HRA during the initial visit with the patient following program enrollment

For care profiles and/or care plans, include the key elements that will be included, the systems through which they will be accessible, the people who will have access. Standardized care profiles are anticipated to be developed by the state-level integrated care coordination infrastructure.

- Comprehensive, individualized care plans for WBC patients, in consultation with PCPs, will incorporate and contain the following elements:
 - Patient assessment and identification of health concerns
 - Tasks
 - Treatment goals
 - Timelines
 - Responsibilities of patient
 - Barriers
 - Disease management guidelines
 - Identified Providers and services
- Care profiles will include information regarding the patient's:
 - Lifestyle
 - Clinical history
 - Psychosocial Issues
 - Patient and family education and engagement
- Care Plans will be accessible by WBC team members responsible for the patient, and PCPs providing treatment. Parties will continually monitor the plan's efficacy
- Care plans will be accessible via CRISP

Identify the training plan for any new tool identified in this section.

All training will come through the PHSO, any new tools that are utilized by the West Baltimore Collaborative will be produced and implemented by the PHSO and training will be given on those tools.

Care Coordination

Describe any new care coordination capabilities that will be deployed by the regional partnership.

The WBC will contract with the University of Maryland Population Health Services Organization (“PHSO”) to provide comprehensive care management services to enrolled participants. The PHSO will hire staff to provide services exclusively to WBC participants. These staff members, consisting of RN/Care Managers, Social Workers and Community Health Workers will be joined as teams, tasked with managing the care of about 100 patients. Teams will:

- assist the patient in obtaining a PCP
- complete HRAs
- coordinate care for those patients already seen by a PCP,
- perform medication reconciliation, HRA, risk stratification
- provide health education services,
- maintain a calendar of scheduled appointments and document results,
- follow the patient into the community to address social welfare needs

Team members will engage patients:

- While hospitalized
- By embedding in PCP practices, where appropriate
- At the patients’ residences
- Via telephonic contact

The WBC will also maintain an information hub allowing remote contact by patients, providers and team members. The hub will employ a clinical pharmacist to complete medication reconciliation, an IT manager and Analysts to support evaluation and data analysis.

Identify the types of patients that will be eligible for care coordination and how they will be identified and by whom.

Patients eligible for care coordination will be those individuals identified by the WBC’s target patient population criteria. These patients will be identified by:

- WBC member staff while admitted to the hospital;
- By WBC team members:
 - Engaging patients at the hospital
 - Embedded in participating PCPs
 - Via telephonic health services

Define accountability of each person in the care coordination process.

Each member of the care team will be responsible for assisting patients in coordinating their care. Tasks will include:

- Obtaining appointments for patients with their primary care physicians when needed

- Assisting patients in establishing obtainable patient goals, to manage their symptoms and disease process
- Making appropriate referrals for services including substance abuse and mental health

Programmatic metrics will be established to monitor productivity of the care team and their progress with their patients.

Describe staffing models, if applicable.

The following staff members will be hired by the UMMS PHSO as employees dedicated to the activities of the WBC.

Care Management Team

RN/Care Manager

- Licensed individual who does the following:
 - Assesses and enrolls patients into the program
 - Conducts and/or telephonic follow-up or home visits to educate patients on medications, chronic illness and sign and symptoms
 - Use teach-back method and motivational interviewing
 - Works with patients to establish a care plan and establishes goals with patient to engage patient in their own plan of care
- Requires clinical assessment skills, advocacy, joint care planning with other providers and the use of motivational and teach-back skills
- In a primary care setting (under the auspices of a PCP)
 - can assist patients and review with them their illness
 - help to identify patient needs
- In a community setting:
 - can be called upon by patient to discuss illness signs and symptoms
 - help patients get into the PCP for urgent visit
 - work with physicians to have patient take an urgent dose of medication
 - Educate patients on diet and lifestyle changes
- Work with other team members to bring needed resources to the patient
 - Social workers
 - Behavioral health professionals
 - Community health workers

Social Worker (SW)

- Works to aid patients to obtain financing for medications, health care or other social needs
- Works to provide other community resources such as meals on wheels, or senior housing
- Helps with placement in post-acute care facilities (if needed)
- Helps to obtain behavioral health resources
- Serves as a behavioral coach or as a behavioral health resource
 - A portion of the SW team members will be trained and certified in Behavioral Health

Community Health Worker

- Assists the RN and or SS worker to help patients get to appointments
- Assists care team in ensuring patients are adhering to medications
- Visits patient in community in between visits of RN or SW
- Assist the care team in reinforcing patient engagement and care plan goals
- Promotes nutrition and personal care
- Some healthcare screening

WBC Staff

WBC Senior Director

- Oversees all care coordination or care management activities
- Accountable to WBC Governance Council and hospital members for overall program performance
- Helps to assign patients
- Ensures work load are distributed appropriately
- Ensures team quality and training
- Measures team productivity

Clinical Pharmacist

- Works to ensure medication reconciliation is completed on all patients
- Advises physicians of correct dosing, other drug interactions and supervision of drug usage and dosing in therapeutic procedures
- Works with the care team in renewal of prescriptions
- Helps with providing education for patients
- Helps high risk patients with obtaining generics or other prescription options

Practice Transformation Experts

- Use of data, registries, quality data, cost data, etc. to assess practices
- Assuring availability of practice to patients (hours, urgent care, call center, etc.)
- Imbedding of practice guidelines for chronic diseases and other common conditions
- Expanding span of in-office procedures
- Patient and family engagement
- Shared decision making and advanced care planning
- Getting the most out of specialist care
- Managing transitions of care
- Creating teams and getting all staff “to practice at the top of their license.”

IT Team/Analysts

- Provide phone and computer connectivity
- Manage software used to attribute patients to Care Management teams
- Maintain central data resource of patients’ records and appointments

- Conduct data analytics and tracks and publishes performance dashboards which include identified program metrics

Describe any patient engagement techniques that will be deployed.

Care team members, including community health workers, will engage in:

- Extensive education and training focused on addressing needs of diverse patient population to effectuate change in health behavior
- Motivational interviewing
- Development of teach-back method

Physician Alignment

Describe the methods by which physician alignment will be created.

Physician alignment in the WBC will be created via collaborative requirements conditioned on participation, including:

- Sharing patient data with WBC members and CRISP
- Participation in quality improvement activities
- Meeting HIPAA requirements
- Utilizing CRISP tools and reports
- Providing availability to targeted patients
- Collaborating and partnering with care coordination team and complex care practice guidelines

Further efforts undertaken by the WBC will include:

- Assisting physicians to work to the top of their license
- Developing of clinical protocols
- Investigating the availability of the Chronic Care Management fee based on HSCRC research
- Assessing practice needs
- Providing additional staff and services, as needed

Describe any new processes, procedures and accountabilities that will be used to connect community physicians, behavioral health and other providers in the regional partnership and the supporting tools, technologies and data that will assist providers in the activities associated with improved care, cost containment, quality and satisfaction.

The WBC will seek input from the Medical Advisory Committee, which provides advisory services to the WBC Governance Committee. Made of PCP representatives from FQHCs, hospital-employed physicians, UM Faculty Practices and UM Rehab and Orthopedics, and Independent PCPs, the committee will suggest additional methods of creating and strengthening alignment, in addition to those listed above.

Describe any new value-based payment models that will be employed in the regional partnerships

Similar to the HSCRC’s evaluation of the permissibility of using Value Based Payments, the WBC is currently evaluating ways to successfully engage PCPs by way of value-based payments for program participation and looks forward to working with the HSCRC to achieve shared goals.

Organizational Effectiveness Tools

Attach the implementation plan for each major area of focus (with timelines and task accountabilities)

The implementation plan for the WBC is currently under development and will be included in the WBC implementation grant application.

Describe the continuous improvement methods that will be used by the regional partnership.

The WBC is uniquely positioned to engage in constant, direct patient monitoring from the hospital to the community. Methods for program improvement are built directly into the entity structure:

- Team members will be able to directly evaluate patients in a variety of environments and adjust treatment plans in real time to maximize effectiveness
- The information hub component will allow for programmatic outcomes of patient data, enabling comparison to program metrics to established benchmarks and targets
- The Medical and Community Advisory Committees will provide clinical and communal expertise, ensuring successful process refinement
- The governance structure will allow collaborators to address variances to goals rapidly and directly
- Performance dashboard will be developed for monitoring metrics

Attach a copy of the metrics dashboard that will be used to manage performance over time with an explanation of associated processes that will be used to monitor and improved performance.

When the HSCRC finalizes performance metrics, the WBC will develop specific outcome, programmatic and financial measures as listed above. A performance dashboard will be operational at the time of program start-up. The dashboard will be subject to monthly review by the WBC Program Director and Management Committee, with specific input on metric evaluation from the Community and Medical Advisory Councils.

Describe the work that will be done to affect a patient-centered culture.

The WBC is implementing a complex care management program centered around the medical and social needs of patients. Care Management teams will integrate with PCPs to assist patients achieve the highest health and quality of life.

New Care Delivery Models

Describe any new delivery models that will be used to support the care coordination outcomes. (For instance, tele-visits, behavioral health integration or home monitoring.)

- The care team will bring together health and community social resources to provide comprehensive care services to patients outside of the hospital. The mobility of the care team allows for continual patient contact and assessment, and reduces travel burden on the patient
- Contact will be maintained through team home visits
- If a home visit is not practicable, the WBC central information hub will permit telephonic services by care team members if a personal visit with the patient is not practicable
- The data collection services and the IT infrastructure

Identify how the regional partnership will identify patients, new processes, new technology and sharing of information.

Patients will have eligibility determined by evaluations based upon the target patient population criteria. This screening will be specific to the location of the patient:

- For hospitalized patients, high-level screens will be conducted by hospital staff. A referral will then be made to a WBC team member, who will conduct a comprehensive patient evaluation, provide program information, and secure patient enrollment
- For patients at PCPs that have a high volume of eligible patients in the practice, embedded WBC care management members will assist in enrolling eligible patients at the practices
- The central information hub will allow providers to contact staff members, who will assign potential patients to care teams, who will conduct full evaluations
- The WBC will endeavor to have all PCPs within the WBC enroll with CRISP thus enabling data-sharing within the WBC. We note, however, that we may need to prioritize enrolling key PCPs within WBC with CRISP based on resources available to CRISP.

Financial Sustainability Plan

Describe the financial sustainability plan for implementation of these models.

- Detailed financial and budget analysis will be contained in final grant application
- Current financial analyses yield anticipated savings within 3-5 years that may enable expansion of services beyond Medicare and Dual Eligibles to all-payers
- With a reduction in PAUs, it is anticipated there will be savings to be reinvested in the Collaborative's efforts
- Per the estimated Return on Investment calculation, we are expecting to reinvest savings into model expansion, to eventually capture high utilizers in all payers

Describe the specific financial arrangements that will incent provider participation.

- Physicians who participate with the WBC in the care of chronic care Medicare patients would be eligible for Medicare's Chronic Care Management reimbursement amount
- The WBC is actively seeking mechanisms to reward providers for successful patient outcomes e.g. pay for performance within the limits of financial and legal feasibility
- Detailed financials will be provided in the final grant application

Population Health Improvement Plan

Provide detailed description of strategies to improve the health of the entire region over the long term, beyond just the target populations of new care delivery models. Describe how this plan aligns with the state's vision, including how delivery model concepts will contribute and align with the improvement plan, as well as how it aligns with priorities and action plans of the Local Health Improvement Coalitions in the region.

The WBC is working with the hospitals across Baltimore City to devise compatible systems of care to attend to the medical and social needs of patients. The hospitals are collaborating in several important areas including care profiles, metrics and patient assignment for care management. Further, the Baltimore City Hospitals Community Benefit Collaborative is another important forum that seeks to improve the health of residents of Baltimore City. Representatives of the Community Benefits programs of most of the city hospitals meet once a month to discuss how the hospitals can work together to maximize the impact of our collective community health improvement efforts. This collaborative is considering whether it is possible to effectively combine and capitalize on efforts related to their Community Health Needs Assessments and Community Health Implementation Plans. The group prioritizes social determinants of health, and for the coming year has committed to focus on health literacy, and specifically on messages encouraging positive engagement with the healthcare system by establishing a relationship with a primary care provider. The goal is to help people understand how to

use the healthcare system effectively, which will reduce ED and inpatient utilization.

NOTES:

- (1) The University of Maryland Medical Center was the lead applicant for this planning grant proposal and Johns Hopkins Hospital was the lead applicant on another. Since the time of the initial award, and in fact during the development of the proposals, the two partnerships have been committed to working together, knowing that many high-cost, high-use patients visit multiple hospitals across the City, and that the goals of the partnership cannot be achieved without improving health and lowering costs for all City residents. One of the goals of the planning process—and a charge to us by the HSCRC/DHMH staff when the planning grants were awarded—was to identify the areas that most lend themselves to being developed jointly. This was explored during meetings of the Alignment Committee, with participants from both partnerships. The Committee identified Patient Attribution, Care Profiles, and Quality Measures as priority areas for joint development. The results of the work of the subcommittees addressing these areas will be described in the Implementation Grant Application.
- (2) The information contained in this text reflects current analyses, processes and thinking of the WBC. Minor changes to the proposed operation may be reflected in the final implementation grant submission.

Appendix 3

Behavioral Health and Addiction Services: UMMC and UM School of Medicine

Behavioral Health and Addiction Services

Department of Psychiatry - UMMC & School of Medicine

In addition to the Acute Care services at the UMMC [25 adult, 13 Geriatric, 10 Latency Age inpt. Beds, Inpatient ECT, an Adult/Geriatric partial hospitalization program and a Psychiatric Emergency Room] the following mental health and addiction services are provided to our West Baltimore Community:

Addiction Services

1. Outpatient Addition Treatment Services
 - a. Location- 701 West Pratt Street
 - b. Includes- Intensive Group and Individual outpatient treatment for any addiction
 - c. Suboxone Treatment
 - d. Addictions for Pregnancy Women including acupuncture
2. Methadone Maintenance & ADAPT Program
 - a. Location- 1001 W. Pratt Street
 - b. Includes Specialized Health Home for persons with Opiate addictions
 - c. Deaf Addiction outpatient program
 - d. Suboxone Treatment
3. Substance Abuse Consult Service
 - a. 22 S. Greene Street
 - b. Provides specialized consultation for any medical/surgical patient admitted to UMMC
4. The Center on Problem Gambling at the University of Maryland is available for West Baltimore community residents, organizations and providers for education, referrals to treatment and crisis intervention. Our program is committed to providing outreach and education to this

General Adult & Community Mental Health **Recovery Oriented, Trauma Informed & Person Centered Care**

1. Behavioral Health Home for Medicaid Recipients managing comorbid severe medical problems.
2. Outpatient Mental Health Clinics serving west Baltimore
 - a. Location- 701 West Pratt Street & Midtown campus on Linden street
 - b. Includes ages 6-end of life individual, group, couple, and family therapies
 - c. Treatment for individuals with Mental Health and Addiction Disorders
 - d. RAISE Program for First Psychotic Episode – ages 14-25
 - e. Trauma Informed Care with focus on Adult PTSD
3. Programs of Assertive Community Treatment for Adults and Children
 - a. Location- within the West and South West Baltimore community
 - b. Includes- in home/in school /in community evaluation and treatment
 - c. Treatment for individuals with Mental Health and Addiction Disorders
4. Adult targeted Case Management
 - a. Location- Main office- 701 West Pratt Street

- b. Includes person to person assistance with access to community resources including housing assistance, benefits and access to treatment
- 5. Psychiatry Psychiatric and Residential Rehabilitation- Harbor City Unlimited
 - a. Location- 1227 West Pratt St, Mount Claire Station & 18 homes within the West Baltimore Community
 - b. Includes in home supervision of an intensive and lower level degree for individuals recovering their lives and managing their mental illness with goal to live independently in their community, 2 homes for Transitional Age Youth
 - c. Includes group classes for life skills, illness management, smoking cessation and coping and social skills for 18 years and older
 - d. Program for Transitional Age Youth
 - e. GED prep class available on site

Senior Adult Services

- 1. Specialized Mental Health Services for Seniors
 - a. Location- 701 W. Pratt St
 - b. Includes evaluation and Treatment of Mental illness and cognitive disorders ages 65 & Up.
- 2. S.O.S. Program- Senior Outreach Services- provides in home psychiatric consultation and care for home bound seniors
- 3. Nursing Home Psychiatric Consultation – Currently serving Alice Manor
- 4. Outpatient ECT Services Available at the UMMC

Child and Adolescent Services

- 1. Outpatient Mental Health Services for children, adolescents and families including individual and group therapies, Psychological testing and a specialized Trauma Informed approach to care.
 - a. Location- 701 W. Baltimore
 - b. Includes Trauma Informed CBT, specialized treatment for PTSD in children, ADHD and Anxiety disorders
- 2. Center for Infant Study is a specialized program working with parents and children ages 1-5
 - a. Specialized Parent bonding program
- 3. School Based Mental Health Program providing assessment and treatment of children and adolescent in 20 West Baltimore Community schools. Tele-Mental- Health consultation is currently being provided to West Baltimore Schools.
- 4. BHIP Program (Telephone Behavioral Health Consultation to Pediatricians in our community)
- 5. Peer to Peer review of physicians prescribing antipsychotic medication to ages 1-17.
- 6. Specialized Consultation and treatment for all teens to identify prodromal states of psychosis

General Psychiatric Consultation Services

The Division of Consultation Liaison provides integrated behavioral health services in a variety of medical outpatient programs to better serve our West Baltimore population including our Diabetes and HIV clinics, The Greenbaum Cancer Center and our Neurology Clinics.

Appendix 4

University Campus Ambulatory Potentially Avoidable Utilization Initiatives

UMMC (University Campus) Ambulatory PAU Reduction Initiatives Inventory

Ongoing High or Moderate Risk <u>Acute</u> Population Initiatives	
Children's Heart & Allergy Program	<p>Diagnosis including: Combined - Prematurity, Chronic Lung Disease, Congenital Heart Defect, Single Ventricle Or SVT, Post Cardiac Surgery with ≥ 2 ED visits</p> <ul style="list-style-type: none"> • Weekly f/u and appointment facilitation • Medication refill f/u • Formula assist
Digestive Health Center	<p>Patients determined high risk</p> <ul style="list-style-type: none"> • Telephone f/u • Reinforce discharge instructions • Individualized care plan
Evelyn Jordan Center	<p>Diagnoses: HIV Associated Disease with CD4 Count < 200; Viral Load > 10,000</p> <ul style="list-style-type: none"> • Care coordination letter to provider • RN & SW at am rounds • Weekly f/u calls
Neurology Center	<p>Stroke or TIA Diagnosis with ≥ 2 ED visits</p> <ul style="list-style-type: none"> • Pt list priority by # indicator • Phone follow up • MyPortfolio enrollment
Otorhinolaryngology Center	<p>Surgery Inpatient Selected CPT Codes:</p> <ul style="list-style-type: none"> • Calls w/in 72 hours of discharge • Assess DME needs, pain, enteral feeding status, med review • Specialty referrals
Surgery Specialty Clinics	<p>Selected CPT Codes:</p> <ul style="list-style-type: none"> • Phone follow up • Discharge instructions reinforcement • Individualized care plan

	Shock Trauma Clinic	<p>Patients identified based on identified medical & psychosocial risk factors</p> <ul style="list-style-type: none"> • Inpatient care coordination visit • Calls w/in 72 hours of discharge • Assess behavioral needs, transportation & housing needs • PCP and specialty referrals • Individualized care plan
	Medication Rx Bedside Delivery prior to discharge	<ul style="list-style-type: none"> • Pharmacy Tech on unit assists pt. to process insurance and fill RX for delivery to ensure pt. has supply
	Get Well Program (Grant ended May 31, 2015 and converted to Transitional Care Coordination Program below)	<ul style="list-style-type: none"> • Followed 250 Cardiac, & Pulmonary pts for 30-45 days <ul style="list-style-type: none"> • Patient calls w/in 48 hrs • Home visit prn • Schedule f/up appt w/in 7 days • Social wk support
	Transitional Care Coordination Program (TCC)	<ul style="list-style-type: none"> • Follow a panel of 90 patients/month for 30-45 days until transitioned to a 'home' clinic <ul style="list-style-type: none"> • Identified Cardiac, HIV, Freq Readm Pats, and High Risk /High Utilizers in Medicine • Schedule f/up appt. w/in 7 days • Patient calls & home visit prn • Medication management, social/behavioral support & education
	<p>Post ED Urgent Visit Follow-Up Project</p> <p>Medicine Post – Discharge Access Project</p>	<p>Same day, up to 72 hour primary care appointments for all patients to address limited access to outpatient follow-up.</p> <ul style="list-style-type: none"> • Creation of appointment slots available throughout day at Family Medicine (Mon-Sat am) and UHC GIM clinic for UHC GIM patients (m-Fri) • ED clerks have direct IDx access to schedules at both practice sites • Creation of slots 3-8 slots/day every afternoon/Monday for a walk-in clinic • Designated scheduling facilitator with refined appointment –making goals & access via direct line to clinic scheduler • Implement process for outreach to patient from clinic- checklist from TCC

	Anti-Coagulation Clinic	Patients requiring anticoagulation therapy are scheduled to be seen by an authorized provider (MD, PharmD or RN per protocol) within 7 days of discharge
	Transitional Surgery Clinic	<p>Post- surgical patients at risk for infection/ complications for 30 days. Expected volume 150-400 pts/month. Pilot included Surgical Oncology, Vascular & Urology patients.</p> <ul style="list-style-type: none"> • General Surgery, as well as MIS, Cardiac, Thoracic, Plastic, Surgery patients will be included in 2016. <ul style="list-style-type: none"> ○ Robust IP education to post op pts by service NP ○ Implement discharge readiness tool ○ Telephone triage w/ 2-3 days post-discharge ○ Same day visit if needed ○ Reconciliation with Crisp/EPIC for inter/intra-hospital readmissions • Transplant and Trauma – will share tools & strategies with them for local implementation.
Ongoing Ambulatory <i>Chronic Disease Management</i> Initiatives		
	Longitudinal TCC Subset	<p>Super Utilizers–High Risk Care and Frequently Re-admitted Patients (FRAP): Subset of the Acute TCC but this patient panel is followed with <u>no restricted time period</u></p> <ul style="list-style-type: none"> ○ Patient calls & home visit PRN ○ Schedule routine f/up care ○ Pharmacist support ○ Medication management, social/behavioral support & education
	University Health Center – Medical Clinic	<p>Uncontrolled Hypertension with Blood Pressure Levels > 140/90; ≥ 2 ED visits</p> <ul style="list-style-type: none"> • Medication review • Appt reminders • Transportation outreach • Assess DME, transportation & mobility & housing needs
	Center for Diabetes & Endocrinology	<p>Diabetes Diagnosis (250.xx) on > 8 medications with a A1C > 10 & > 2 ED visits</p> <ul style="list-style-type: none"> • Med Management • Schedule f/u appts • Community resources
	Heart Failure Readmission Initiative	NP follows pt. panel for 30-90 days

		<ul style="list-style-type: none"> ○ Referral sources include Inpt., ED, and Observation (OBS) patients. ○ Medical management ○ Medication titration & education
	Behavioral health Integrated Care Initiative (aka “Med/Psych co-management”)	<ul style="list-style-type: none"> ● Psychiatrist & Mental Health Soc Wkr integrated in Medical teams for <ul style="list-style-type: none"> ○ Mental health & substance abuse screening ○ Treatment initiation & Discharge planning ○ 30-45 day F/U (bridge) with handoff to longitudinal F/U care ● Program to be implemented Jan, 2016; weekly meetings
New Ambulatory Initiatives a/o December 2015		
	Hospitalists/ED Collaboration	<ul style="list-style-type: none"> ● Embed Hospitalist Medicine Admitting Officer (MAO) role in the ED <ul style="list-style-type: none"> ○ Train on admission criteria and strategies ○ Review pts for educated admission decision making ○ Facilitate Amb. Clinic appointment ● Status and expected timeline?
	Medicine High Risk Chronic Disease	<ul style="list-style-type: none"> ● Initial plan: target Transplant and other high risk medications ● Identified anti-coagulation as first priority ● Status and expected timeline:
	<ul style="list-style-type: none"> ● Immediate/Transitional Care Program (TCC) ● Frequent Re-visits ED (FRED) 	<ul style="list-style-type: none"> ● Embed a Transition Care Coordinator in the ED with strategies to mitigate repeat ED visits and the 50% no-show rate for F/U appts. ● Status and expected timeline: <ul style="list-style-type: none"> ○ Pursuing an Urgent Care Clinic Model and may embed this role there instead ● Unclear what the intention of this proposed program was

December 4, 2015

Appendix 5

Midtown Campus Ambulatory Potentially Avoidable Utilization Initiatives

UMMC (MidtownCampus) Ambulatory PAU Reduction Initiatives Inventory

Ongoing High or Moderate Risk Acute Population Initiatives	
Center for Infectious Disease	<ul style="list-style-type: none"> • EJC, Jacques, IVH and Hep C clinics are all consolidating into one clinic space in Feb/March 2016 • Opportunities for initiative with this merger
Ongoing Ambulatory <i>Chronic Disease Management</i> Initiatives	
<p>West Baltimore HEZ Care Coordination 2.0</p> <p>(Grant ended May 31, 2015 and converted to Transitional Care Coordination Program below)</p>	<ul style="list-style-type: none"> • Targeting high utilizers between UMMC, MTC, Bon, Sinai and St. Agnes <ul style="list-style-type: none"> ○ Home visits ○ Phone contact ○ Clinic visits- connect to PCP
Transitional Care Coordination Program (TCC)	<ul style="list-style-type: none"> • 3 members follow high risk patient population <ul style="list-style-type: none"> ○ 30 day readmissions ○ Freq. Readmitted Patients ○ ED utilizers • Patient calls provided for 30 days, addressing barriers to care • Follow up appointments scheduled • Connect to PCP if necessary • 2 additional members have been hired to provide home visits beginning in Dec/Jan 2016
Post ED Urgent Visit Follow-Up	<ul style="list-style-type: none"> • Standing appointments for all patients to address limited access to outpatient follow-up. • 4-5 appointment slots available (for Heritage Crossing and Bolton Hill clinics) per week for ED patients without primary care

	<ul style="list-style-type: none"> • ED case managers have direct access to schedule at both practice sites
Discharge Clinic (Pilot Phase)	<ul style="list-style-type: none"> • Provides 6 appointment slots per week for high risk patients • Case management identifies patient and schedules for clinic • Patient meets with nurse, PCP, case management and social work as needed • Program limited due to space, but hope to expand to hospitalist patients and community providers
EDBU (Emergency Department Behavioral Unit)	<ul style="list-style-type: none"> • Social worker coverage available 24/7 for ED patients
New Ambulatory Initiatives a/o December 2015	
Anticoagulation Clinic	<ul style="list-style-type: none"> • Equipment has been purchased • Working on policy and procedures, engaging physicians. • (Will likely be a physician model)
Medical provider in Triage	<ul style="list-style-type: none"> • Embed (most likely NP) in ED triage • Need to further develop position description
Behavioral Health Provider	<ul style="list-style-type: none"> • Embed a staff psychiatrist in EDBU to provide services in ED • Psychiatrist to also provide outpatient medication management

December 4, 2015

Appendix 6
University Campus Community Health Needs Assessment Executive Report



***Community Health Needs Assessment
& Implementation Plan
Executive Summary
FY2016-FY2018***

June 30, 2015

**Approved by: Community Health Improvement Team - 5/12/15
Approved by: UMMC Quality, Patient Safety, and Patient Care
Committee of the Board - 6/18/15**

Table of Contents

Executive Summary	3
• Overview	3
• Mission, Vision, Values	3
• Community Health Improvement Mission	4
Process	
I. Establishing the Assessment and Infrastructure	5
II. Defining the Purpose and Scope	7
III. Collecting and Analyzing Data	9
a) Community Perspective	9
b) Health Experts	12
c) Community Leaders	13
d) Social Determinants of Health (SDoH)	15
e) Health Statistics/Indicators	17
IV. Selecting Priorities	17
V. Documenting and Communicating Results	17
VI. Planning for Action and Monitoring Progress	18
a) Priorities and Planning	18
b) Unmet Needs	19
VII. Appendix 1: Public Survey	21
VIII. Appendix 2: Social Determinants of Health Summary by Zip Code	22
IX. Appendix 3: Health Outcomes Summary by Zip Code	26
X. Appendix 4: Community Partner Focus Groups	29
XI. Appendix 5: Priority Setting Matrix	33
XII. Appendix 6: Implementation Plans (FY16-FY18)	34
XIII. Appendix 7: Community Health Improvement Team Members	43
XIV. Appendix 8: Community Health Needs Assessment Stakeholders/Partners	45
XV. References	46

Executive Summary

Overview

The University of Maryland Medical Center (UMMC) serves Baltimore City and the greater metropolitan region, including patients with in-state, out-of-state, and international referrals for tertiary and quaternary care. UMMC is a private, non-profit acute care hospital and is the flagship academic medical center of the University of Maryland Medical System. It is the second leading provider of healthcare services in Baltimore City and the state of Maryland and has served the state's and city's populations since 1823.

In FY2014, UMMC provided care for 33,700 inpatient admissions, 7,030 outpatient surgical cases, 194,700 outpatient visits, and 70,430 emergency department visits. The University of Maryland Medical Center is licensed for 800 acute care beds. Beyond the Medical Center's facilities in FY2014, the Community Health Improvement Team provided over 65 health fairs in local faith-based organizations, schools, and community centers, led two health promotion grants from the Baltimore City Health Department and co-sponsored five major UMMS health fairs/screening events with 41,518 encounters in the community. In addition, the Medical Center provides a community outreach section on the UMMC public web site to announce upcoming community health events and activities in addition to posting the annual Community Benefit Report and triennial Community Health Needs Assessment (CHNA). (www.umm.edu/community)

Our Mission

University of Maryland Medical Center is the academic flagship of the University of Maryland Medical System. Its mission is to provide health care services on its two campuses for the Baltimore community, the State of Maryland and the nation. In partnership with the University of Maryland School of Medicine and the University of Maryland health professional schools, we are committed to:

- Delivering superior health care

- Training the next generation of health professionals
- Discovering ways to improve health outcomes worldwide

Source: [Vision, Mission and Values - University of Maryland Medical Center](http://umm.edu/about/mission-and-vision#ixzz3cUw0vRnF)
<http://umm.edu/about/mission-and-vision#ixzz3cUw0vRnF>

Our Vision:

UMMC will be known for providing high value and compassionate care, improving health in Maryland and beyond, educating future health care leaders and discovering innovative ways to advance medicine worldwide.

Source: [Vision, Mission and Values - University of Maryland Medical Center](http://umm.edu/about/mission-and-vision#ixzz3cUwFj4UW)
<http://umm.edu/about/mission-and-vision#ixzz3cUwFj4UW>

Our Commitment to Excellence:

Five Pillars We Focus on Every Day



Our Community Health Improvement Mission: To empower and build healthy communities

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) 6-step Community Health Assessment Process was utilized as an organizing methodology. The UMMC/Midtown Community Health Improvement Team (CHI Team) 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. The UMMC CHI Team 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 6-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 illustrated 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 Medical Center participates in a wide variety of local coalitions including, several sponsored by the Baltimore City Health Department, Cancer Coalition, Tobacco Coalition, Influenza Coalition as well as partnerships with many community-based organizations like American Cancer Society (ACS), Susan G. Komen Foundation, Ulman Foundation, American Diabetes Association (ADA),

American Heart Association (AHA), B'More Healthy Babies, Text4baby, and Safe Kids to name a few. This assessment report was approved by the UMMC CHI Team in May, UMMC Executive Leadership in May, and the Board of Directors in June 2015.

II. Defining the Purpose and Scope

Primary Community Benefit Service Area

Despite the larger regional patient mix of UMMC from the metropolitan area, state, and region, for purposes of community benefits programming and this report, the Community Benefit Service Area (CBSA) of UMMC is within Baltimore City.

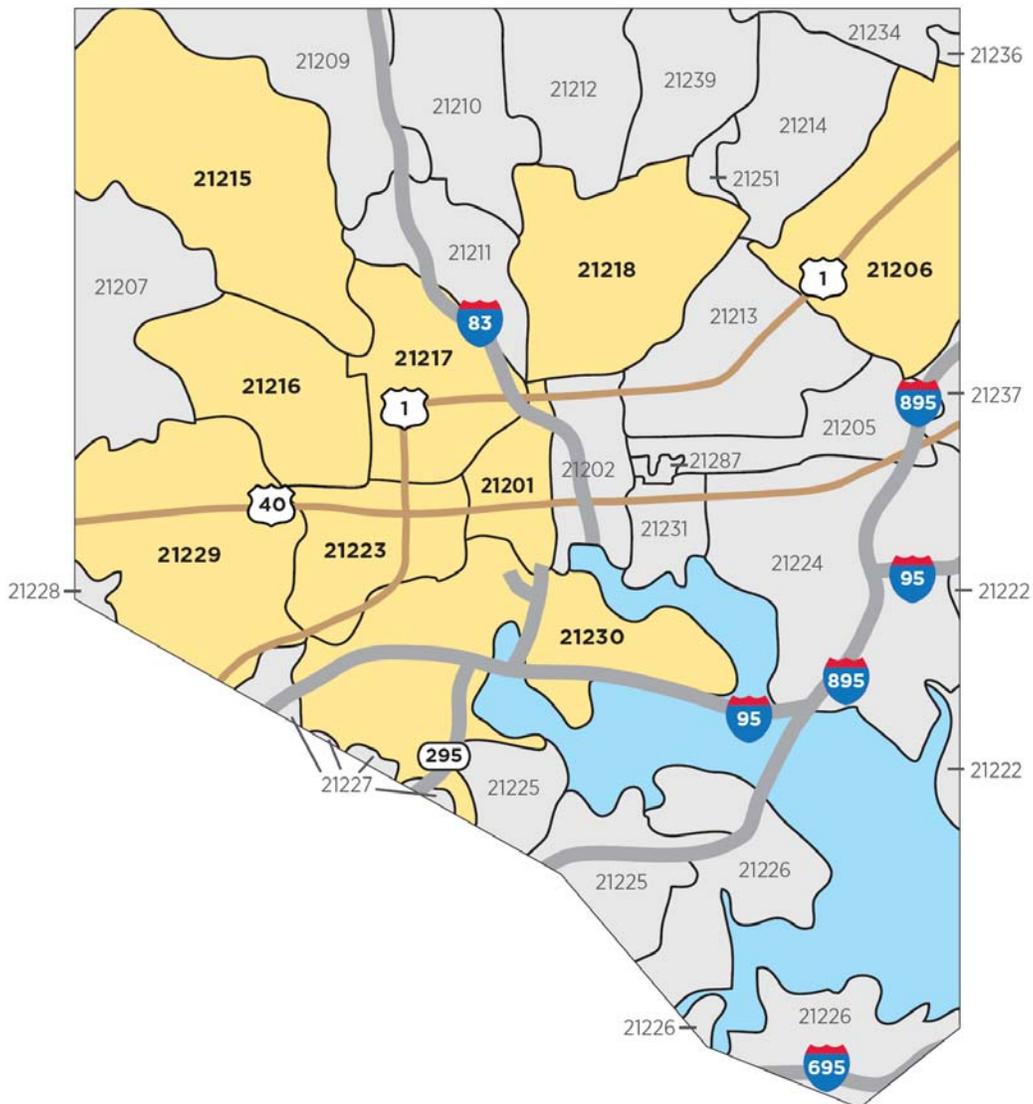
The top nine zip codes within Baltimore City displayed in Figure 3 represent the top 66% of all Baltimore City admissions in FY'14. These nine targeted zip codes (21201, 21215, 21216, 21217, 21218, 21206, 21223, 21229, and 21230) are the primary community benefit service area (CBSA) and comprise the geographic scope of this assessment. See Figure 3.

Figure 3 – Top Baltimore City FY'14 Admissions to UMMC by Zip Code



Defining the Community Benefit Service Areas within Baltimore City

YELLOW HIGHLIGHTED ZIP CODES = Top 60% of City Discharges



III. Collecting and Analyzing Data

Using the above frameworks (Figures 1 & 2), data was collected from multiple sources, groups, and individuals and integrated into a comprehensive document which was utilized at a retreat on March 11, 2014 of the UMMC/Midtown Community Health Improvement (CHI) Team. During that strategic planning retreat, 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 a panel of UM Clinical Advisors and UMB Campus experts.

UMMC 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, University of Maryland Rehabilitation and Orthopedic Institute, and Mt Washington Pediatric Hospitals), community leaders, community partners, the University of Maryland Baltimore (UMB) academic community, the general public, local health experts, and the Baltimore City Health Department.

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 FY2015 using the following methods:

- Survey insert in *Maryland Health Matters* (health newsletter) distributed to over 40,000 residents within the CBSA
- Online survey posted to www.umm.edu website for community to complete
- Waiting rooms (Ambulatory clinics and EDs) at both campuses
- Health fairs and events in neighborhoods within UMMC's CBSA

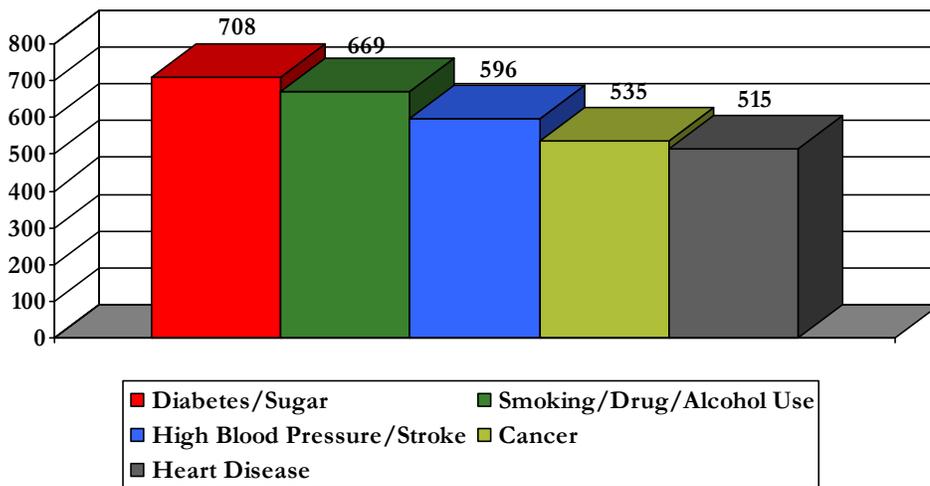
Results

■ Top 5 Health Concerns: (See Chart 1 below)

- Diabetes/Sugar
- Smoking/Drug/Alcohol Use
- High Blood Pressure/Stroke
- Cancer
- Heart Disease

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 1,212 Baltimore City residents from the identified CBSA.

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

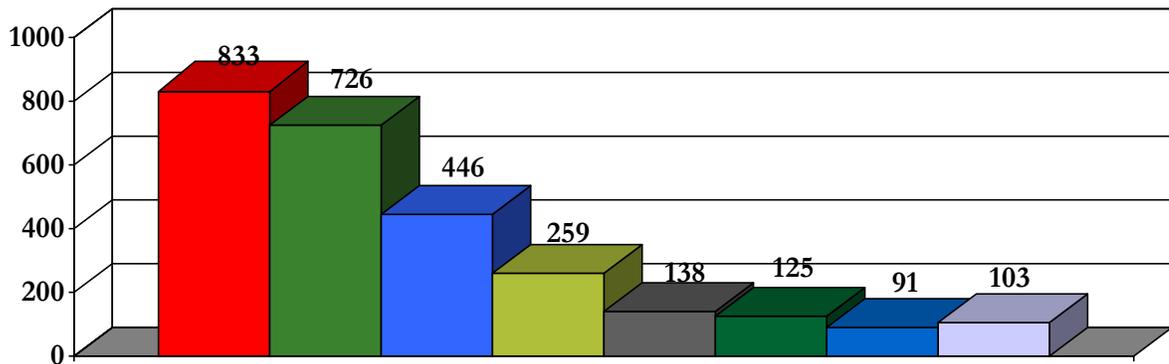


(N=1,212)

■ Top 5 Barriers to Health Care: (See Chart 2 below)

- No Health Insurance
- Too Expensive
- No Transportation
- Local MDs Not Part of Plan
- Couldn't Get Appt w/Doctor

Chart 2 – Community’s Top Barriers to Healthcare (All Baltimore City)



(N = 1,212)

B) Health Experts

Methods

- Reviewed & included National Prevention Strategy Priorities, Maryland State Health Improvement Plan (SHIP) indicators, and Healthy Baltimore 2015 plan from the Baltimore City Health Department
- Reviewed Maryland's State Health Improvement Plan (SHIP) and attended state-wide health summit in October 2014.
 - Progress to date on SHIP measures were presented as well as state-wide health priorities for upcoming multi-year cycle.
- Conducted campus-wide stakeholder retreat in March 2015, including University of Maryland Schools of Medicine, Nursing, Social Work and UMB Community Affairs office
- Interviewed Director of Chronic Disease Prevention at Baltimore City Health Department

Results

- National Prevention Strategy – 7 Priority Areas
- SHIP: 39 Objectives in 5 Vision Areas for the State, includes targets for Baltimore City
 - While progress has been made since 2012 - with 16 out of 41 measures meeting the identified targets at the state level, Measures within Baltimore City have not met identified targets; Even wider minority disparities within the City
- Healthy Baltimore 2015: Ten Priority Areas (See Figure 4)
- Baltimore City Health Department and Mayor's Top Health Priorities:
 - #1 Cardiovascular Disease (CVD) – Decrease premature mortality (as defined as death prior to 75 years)
 - #2 Asthma - Particularly pediatric asthma
 - #3 Heroin Use – While a priority, no major initiatives to date
 - #4 Diabetes – As related to CVD as a comorbidity
- Health Expert UMB Campus Panel Focus Group Top Action Items included:
 - Improve communication and synergy across Campus schools and UMMC
 - Include University of Maryland Medical Center on UMB Community Action Council
 - Look for 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 2015
Tobacco Free Living	Healthy Beginnings	Promote Access to Quality Health Care for All
Preventing Drug Abuse & Excessive Alcohol Use	Healthy Living	Be Tobacco Free
Healthy Eating	Healthy Communities	Redesign Communities to Prevent Obesity
Active Living	Access to Healthcare	Promote Heart Health
Injury & Violence Free Living	Quality Preventive Care	Stop the Spread of HIV & other ST Infections
Reproductive & Sexual Health		Recognize & Treat Mental Health Needs
Mental & Emotional Well-Being		Reduce Drug Use & Alcohol Use
		Encourage Early Detection of Cancer
		Promote Healthy Children & Adolescents
		Create Health Promoting Neighborhoods

C) Community Leaders

Methods

- Hosted a focus group in collaboration with the other Baltimore-based UMMS hospitals for community-based organization partners to share their perspectives on health needs (October 30, 2014)

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...

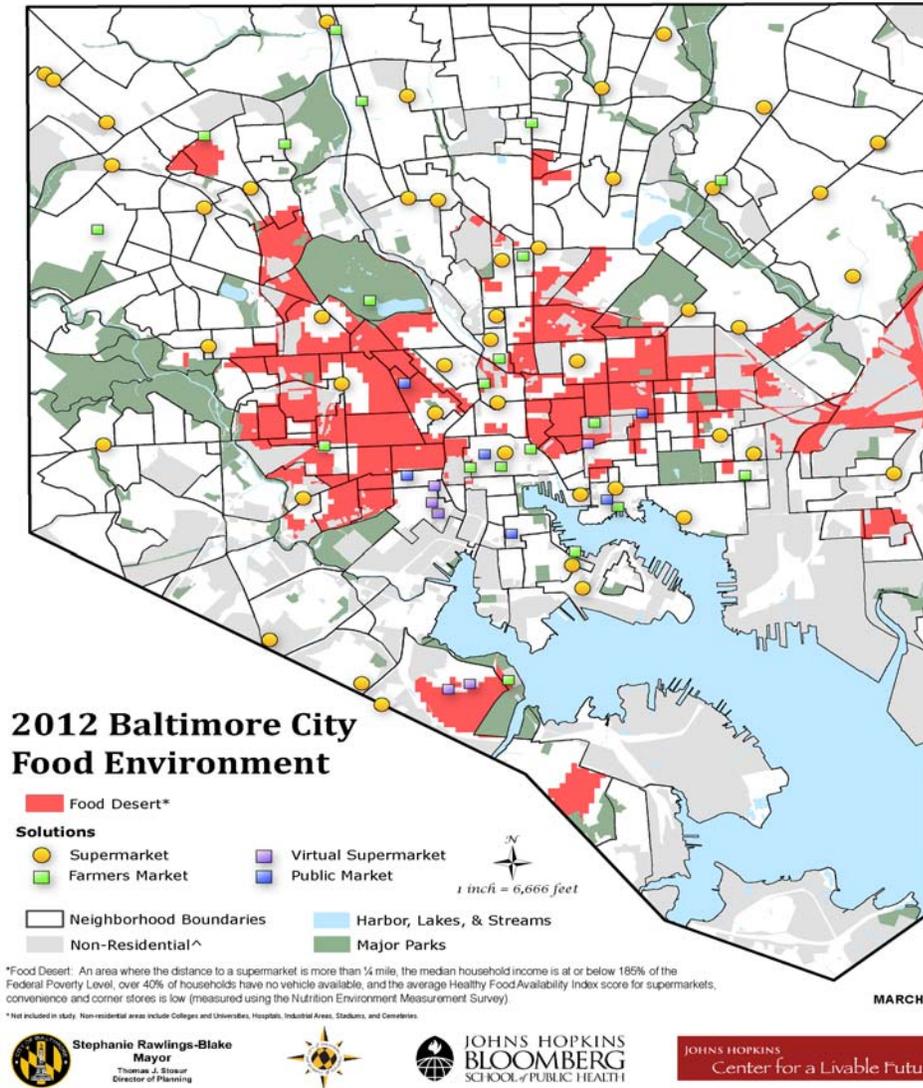
Methods

- 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 Food Desert 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



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
- F as in Fat: Executive Summary (RWJF)

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

IV. Selecting Priorities

Analysis of all quantitative and qualitative data described in the above section identified these top five 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 UMMC/Midtown CHI Team and validated with the health experts from the UMB Campus Panel:

- 1. Cardiovascular Disease**
 - 2. Workforce Development (as a shared component of literacy and SDoH)**
 - 3. Maternal & Child Health**
 - 4. Violence Prevention (related to behavioral/mental health)**
- **Health Literacy (shared UMMS priority)**

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 UMMC website under the Community Outreach webpage at www.umm.edu/community Highlights of this

report will also be documented in the Community Benefits Annual Report for FY'15. 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). UMMC will also track the progress with long-term outcome objectives measured through the Maryland's Department of Health & Mental Hygiene (DHMH). Short-term programmatic objectives, including reach and outcome measures will be measured annually by UMMC 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, UMMC employs the following prioritization framework which is stated in the UMMC Community Outreach Plan. Because the Medical Center, 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.

UMMC will 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

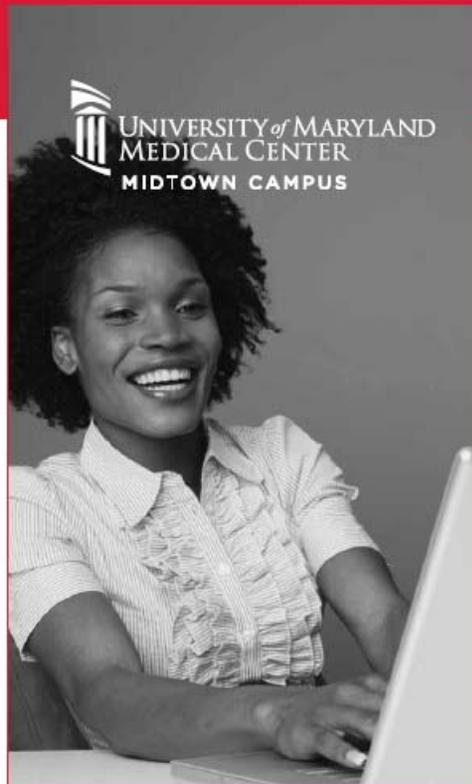
Several additional topic areas were identified by the Community Health Improvement Team during the CHNA process including: Behavioral/mental health, safe housing, transportation, and substance abuse. While the Medical Center will focus the majority of our efforts on the identified strategic programs 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 (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 – Stork’s Nest and Violence Prevention programs. The additional unmet needs not addressed by UMMC will also continue to be addressed by key Baltimore City governmental agencies and existing community-based organizations.

The UMMC 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 - UMMC Strategic Programs and Partners
FYs '16-'18**

Maryland SHIP Vision Area	UMMC Priorities	UMMC Strategic Community Programs	UMMC Partners
Healthy Beginnings & Quality Preventive Care	Maternal/Child Health	Stork's Nest Breathmobile	March of Dimes, Zeta Phi Beta Sorority, Inc., B'More Healthy Babies Text4Baby, Baltimore City Health Dept, Kohl's Cares Foundation
Healthy Communities	Trauma/Violence Prevention Safe Kids	Violence Prevention Program PHAT My Future, My Career Safe Kids (Helmets, Fire Safety, Car Seats)	Baltimore City Health Dept., Roberta's House, MIEMSS Safe Kids, Baltimore City Fire Dept, Maryland Car Seat Safety Program
Quality Preventive Care		(See UMMC priorities for Breathmobile & Pressure's On Programs)	
Healthy Living & Quality Preventive Care	Cardiovascular Disease/ Obesity	Farmer's Market, Kids to Farmer's Market, Pressure's On Program, Obesity Prevention Initiative (Adults & Children) (See UMMC Midtown for additional priorities)	AHA, ADA, UMB Campus, UMMS City Hospitals, various Baltimore City Health Dept and other City agencies
Access to Healthcare & Healthy Communities	Workforce Development	Project Search, BACH Fellows, Youthworks, NAHSE, Healthcare Career Alliance, Urban Alliance	Baltimore City Public Schools, Baltimore Healthcare Career Alliance, Center for Urban Families, Dept. of Social Services, Mayor's Office of Employment Development

Appendix 1 – Public Survey



**Take our survey
for the chance to
win one of
25 first-aid kits!**

Or take the survey online at
umm.edu/about/community/survey
by Dec. 31.

Community Health Needs Assessment Survey

Help us build a healthier Baltimore by taking the **University of Maryland Medical Center Midtown Campus** Community Health Needs Assessment Survey by Dec. 31, 2014. This information will help us provide much-needed outreach and wellness programs in the area, keeping you and your family as healthy as possible. The results from this survey are confidential. Thank you.

1. What is your zip code? _____

2. What is your age range?

- Under 18 years 19-24 years 25-30 years 31-40 years 41-50 years 51-60 years 61-65 years Older than 65 years

3. What is your gender?

- Male Female

4. What is your race/ethnicity?

- African American Asian/Pacific Islander Caucasian Hispanic Other (please specify) _____

5. What do you believe are some of the biggest health problems in Baltimore City today?

(Please check top three)

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Heart disease | <input type="checkbox"/> Mental health issues (depression, anxiety) | <input type="checkbox"/> Traffic accidents | <input type="checkbox"/> Sexually transmitted diseases |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Dental health (tooth decay, cavities) | <input type="checkbox"/> Injuries | <input type="checkbox"/> Sudden infant death syndrome (SIDS) |
| <input type="checkbox"/> Diabetes/sugar | <input type="checkbox"/> High blood pressure/stroke | <input type="checkbox"/> Overweight/obesity | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Asthma/lung diseases | | <input type="checkbox"/> Access to health care/No health insurance | |
| <input type="checkbox"/> Smoking/drug and alcohol use | | <input type="checkbox"/> HIV/AIDS | |

6. What do you think are the problems that keep you or other Baltimore residents from getting needed health care? (Please check top three)

- | | | |
|---|---|---|
| <input type="checkbox"/> No health insurance | <input type="checkbox"/> No transportation | <input type="checkbox"/> Local doctors are not on my insurance plan |
| <input type="checkbox"/> Too expensive/can't afford it | <input type="checkbox"/> Doctor is too far away from home | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Couldn't get an appointment with my doctor | <input type="checkbox"/> Service is not available in the city | |

7. Do you have any ideas or recommendations to help decrease the health problems in the city or to solve the issues with access to health services?

NAME (please print) _____

ADDRESS _____

CITY/STATE/ZIP _____

TELEPHONE _____

E-MAIL _____

Your information is kept strictly confidential and is never sold or shared.

Appendix 2
UMMC - CHNA FY2015
Social Determinants of Health (SDoH) Summary

SDoH	Baltimore City	Upton/ Druid Hts	SW Balto	Mondawmin	Pimlico/ Arlington/ Hilltop
Socioeconomic Characteristics		(21201)	(21223)	(21216 & 21217)	(21215)
Median Income	\$38,346	\$13,811	\$28,514	\$37,035	\$28,815
Unemployment Rate	13.9	29.9	25.3	20.4	19.6
HH below Poverty % 2011	18.8	48.8	26.2	12.2	21.3
Education					
Kindergarten Readiness/ Ready at 5 %	73.0	78.1	68.0	83.6	56.7
HS Completion Rate %	80.3	75.7	76.2	82.4	86.8
Community Built Environment					
Liquor Outlet Density (#stores/1,000 residents)	1.2	1.0	2.6	0.6	1.0
Tobacco Retail Density * (#stores/10,000 people)	21.8	39.0	51.4	27.8	32.2
Community Social Environment					
Homicide Rate * (#of homicides/10,000)	20.9	37.9	44.2	31.1	27.9
Domestic Violence * (# of incidents/1,000)	40.6	55.0	66.3	52.8	51.8

Housing	Balto City	Upton/ Druid Hts (21201)	SW Balto (21223)	Mondawmin (21216/21217)	Pimlico/ Arlington/ Hilltop (21215)
Energy Cut-off Rate * (# per 10,000/month)	39.1	45.2	79.6	62.6	73.2
Vacant Building Density* (#of buildings/10,000 housing units)	567.2	1,380.5	2,081.5	844.9	918.7
Food Environment (# of/10,000 people)					
Fast Food Density*	2.4	2.1	2.2	5.4	0.0
Carryout Density*	12.7	16.4	24.0	11.8	18.6
Corner Store Density*	9.0	12.3	25.7	10.7	12.7
Supermarket Proximity* (by Car in min.)	3.7	1.0	2.0	3.0	2.0
Supermarket Proximity* (by Bus in min.)	12.3	1.0	8.0	11.0	8.0
Supermarket Proximity* (by Walking in min.)	16.6	1.0	9.0	12.0	9.0
Health Food Availability Index (HFAI) 0-25	10.3	9.8	10.3	14.0	9.8

SDoH	Baltimore City	Inner Harbor/ S. Balto	Allendale/ Edmondson	Wash Vill./ Morrell Park	Cedonia/ Frankford	Belair-Edison
Socioeconomic Characteristics		(21230)	(21229)	(21230)	(21218)	(21206)
Median Income	\$38,346	\$77,888/69,813	\$33,563/40,122	\$47,179/40,645	\$39,556	42,921
Unemployment Rate	13.9	6.1/8.2	19.2/20.9	12.7/13.4	12.9	16.3
HH below Poverty % 2011	18.8	8.8	15.1/13.3	20.8/11.4	17.3	8.9
Education						
Kindergarten Readiness	73.0	89.1/92.1	70.6/74.5	82.2/78.7	74.6	57.6
HS Completion Rate %	80.3	73.1/76.2	78.1/83.6	75.0/91.5	83.9	77.4
Community Built Environment						
Liquor Outlet Density (#stores/1,000 residents)	1.2	2.6	0.9	3.1	0.8	0.7
Tobacco Retail Density * (#stores/10,000 people)	21.8	38.1/18.7	17.9	50.9/17.6	13.2	21.8
Community Social Environment						
Homicide Rate * (#of homicides/10,000)	20.9	6.2/0.0	22.2/19.0	23.6/4.4	6.8	24.1
Domestic Violence * (# of incidents/1,000)	40.6	14.5/15.9	50.8/43.3	46.1/40.2	42.7	47.6

Housing	Balto City	Inner Harbor/ S. Balto (21230)	Allendale/ Edmondson (21229)	Wash Vill./ Morrell Park (21230)	Cedonia/ Frankford (21208)	Belair-Edison (21206)
Energy Cut-off Rate * (# per 10,000/month)	39.1	3.3/8.0	58.9/61.2	45.8/15.5	51.6	42.9
Vacant Building Density* (#of buildings/10,000 housing units)	567.2	49.2/103.7	344.4/251.9	1,028.7/1,109.8	39.0	152.1
Food Environment (# of/10,000 people)						
Fast Food Density*	2.4	5.4/6.2	1.2/0	3.6/3.3	2.5	0.0
Carryout Density*	12.7	21.0/9.4	6.8/1.3	20.0/12.1	11.9	12.6
Corner Store Density*	9.0	4.7/10.9	6.8/8.9	14.5/5.5	4.7	9.2
Supermarket Proximity* (by Car in min.)	3.7	4.0/1.0	3.0/0.69	8.0/5.0	4.0	2.0
Supermarket Proximity* (by Bus in min.)	12.3	11.0/13.0	8.0/29.0	22.0/11.0	10.0	N/A
Supermarket Proximity* (by Walking in min.)	16.6	18.0/8.0	15.0/43.0	26.0/22.0	19.0	7.0
Health Food Availability Index (HFAI) 0-25	10.3	12.4/18.1	7.8/6.4	9.8/10.4	12.3	10.3

Appendix 3
UMMC CHNA FY2015 - Health Outcomes Summary

Health Outcomes	Baltimore City	Upton/ Druid Hts (21201)	SW Balto (21223)	Mondawmin (21216 & 21217)	Pimlico/ Arlington/ (21215)
Life Expectancy at Birth (in years)	73.9	67.3	67.8	71.7	69.1
Causes of Death (% of Total Deaths)					
1 – Heart Disease	25.8	26.5	26.4	24.9	26.8
2 – Cancer	20.8	17.5	20.2	19.5	18.9
Lung	6.3	5.5	7.0	4.3	5.5
Colon	2.1	1.8	1.6	2.1	3.2
Breast	3.2	1.5	2.7	4.6	2.6
Prostate	2.5	2.8	2.2	3.0	3.2
3 – Stroke	4.7	3.6	3.6	6.8	4.8
4 – HIV/AIDS	3.5	7.4	4.0	3.8	4.8
5 – Chronic Lower Respiratory Disease	3.5	1.4	2.6	2.4	2.1
6 - Homicide	3.4	5.0	4.3	4.3	3.4
7 – Diabetes	3.2	4.4	3.3	3.5	3.1
8 – Septicemia	3.1	3.6	3.1	2.9	4.3
9 – Drug Induced Death	2.8	4.1	5.0	3.3	2.5
10 - Injury	2.5	2.3	2.9	2.4	2.0
Maternal & Child Health					
Infant Mortality	9.7	10.3	15.0	17.7	21.0
Low Birthweight % (LBW < 5 lbs, 8 oz)	12.8	14.1	13.8	18.0	14.4
%Prenatal Care 1 st Tri.	62.7	57.2	51.2	65.2	52.9
% Births to Moms- Smokers	8.8	10.4	17.0	11.3	10.0

Health Outcomes	Baltimore City	I. Harbor/ S. Balto (21230)	Allendale/ Edmondson (21229)	Wash Vill./ Morrell Park (21230)	Cedonia/ Frankford (21218)	Belair-Edison (21206)
Life Expectancy at Birth (in years)	73.9	77.8	70.4	69.8	72.8	72.5
Causes of Death (% of Total Deaths)						
1 – Heart Disease	25.8	27.5	28.9/27.4	26.6/26.1	33.2	29.3
2 – Cancer	20.8	20.0/26.3	20.3/22.6	21.8/19.8	26.6	23.6
Lung	6.3	6.7/9.7	6.2//7.1	8.9/5.7	8.2	7.3
Colon	2.1	1.8/2.9	2.1/3.3	1.7/2.5	2.4	3.8
Breast	3.2	1.3/2.8	3.1/3.3	1.8/2.6	3.2	4.0
Prostate	2.5	1.8/3.0	2.3/2.2	1.4	4.0	3.2
3 – Stroke	4.7	3.8/2.2	5.2/4.8	4.9/4.0	5.9	5.9
4 – HIV/AIDS	3.5	1.6/0.7	2.8/3.7	3.7/2.6	1.9	2.7
5 – Chronic Lower Respiratory Disease	3.5	8.9/6.5	2.8/3.7	5.5/7.4	4.3	4.9
6 - Homicide	3.4	0.4/0	3.8/2.9	3.1/0.7	3.3	6.0
7 – Diabetes	3.2	3.3/2.9	2.8/3.1	3.4/2.0	3.6	4.0
8 – Septicemia	3.1	3.3/1.8	2.7/2.5	4.1/2.9	2.8	2.5
9 – Drug Induced Death	2.8	1.6/2.9	2.7/2.1	2.7/3.8	2.2	2.5
10 - Injury	2.5	2.4/1.1	3.1/1.5	3.4/2.3	2.9	2.9
Maternal & Child Health						
Infant Mortality	9.7	6.9	16.9	13.3	15.2	15.0
Low Birthweight % (LBW < 5 lbs, 8 oz)	12.8	6.5/5.1	16.4/15.2	14.4/10.5	15.7	15.1
%Prenatal Care 1 st Tri.	62.7	76.3	57.0	67.0	63.8	63.2
% Births to Moms- Smokers	8.8	0.6/3.4	6.3/6.3	20.0/14.3	8.1	10.4

Sources:

- Social Determinants - All data obtained through Vital Signs 12 Community Statistical Area (CSA) Profiles. (2012). www.bniajfi.org
EXCEPT where noted with an *
Baltimore City Health Department (2011). 2011 Neighborhood Health Profile Report. www.baltimorehealth.org
- Health Outcomes - Baltimore City Health Department (2011). 2011 Neighborhood Health Profile Report. www.baltimorehealth.org
with the exception of Life Expectancy, Infant Mortality, and % Prenatal Care during 1st Trimester. Vital Signs 12 Community Statistical Area (CSA) Profiles. (2012).
www.bniajfi.org
- Map of Baltimore City Neighborhoods. www.baltimorehealth.org

Appendix 4 Community Partner Focus Group Attendees October 30, 2014

Company	Contact	Title	Telephone	Email	Attending	Notes
MD HZE	Joan D. Plisko, PhD	Technical Director	(410) 706-2107	jplisko@som.umaryland.edu	0	NOT ATTENDING
American Cancer Society (ACS)	Kira Eyring	Representative for Hospitals	(410) 931-6850	kira.eyring@cancer.org	1	Sending Suzi Ford, suzi.ford@cancer
American Diabetes Association (ADA)	Kathy (Katherine) Rogers	Executive Director, MD Area	(410) 265-0075 x4672	krrogers@diabetes.org	1	May need to leave early
Associate Black Charities	Diane Bell-McCoy	President & CEO	(410) 659-0000 x1202	DMcCoy@abc-md.org	1	Adar Aylre (AAylre@abc-md.org) attending / Valencia King (VKing@abc-md.org) Valencia is not available
Baltimore City Health Department	Dr. Jacquelyn Duval-Harvey	Interim Commissioner of Health	(410) 396-3835	Jacquelyn.Duval-Harvey@baltimorecity.gov	1	Sending Shannon Mace Heller, JD, MPH, Director, Office of Policy and Planning.
Bmore Healthy Babies, Upton/Druid Heights Program, School of Social Work	Stacey Stephens	Program Director	(410) 396-0882 X1097	ststephens@ssw.umaryland.edu	1	
Center for Urban Families	Joe (Joseph) Jones	Founder, President & CEO	(410) 367-5691	jjones@cfuf.org	1	
Coppin School of Nursing	Dr. Tracey Murray	Interim Dean, College of Health Prof.	(410) 951-3971	tmurray@coppin.edu	1	Sending Ms. Sharon Darden, Associate Director of CSU Community Health Center, sdarden@coppin.edu
Green and Healthy Homes	Ruth Ann Norton	President & CEO	(410) 534-6447	ranorton@ghhi.org	1	
Health Enterprise Zone (HEZ), Bon Secours Health System	Novella Tascoe, JD, MSHA	Health Policy, Advocacy & Proj Mgmt Spec	(410) 362-3183	NOVELLA_TASCOE@bshs.org	1	
Health Enterprise Zone (HEZ), Bon Secours Health System	Tiffany Tate			tiffany_tate@msn.com	1	
Institute for Healthiest Maryland, University of Baltimore	Renee Ellen Fox, MD	Executive Director	(410) 706-5279	rfox@umaryland.edu	1	
LIGHT Health and Wellness Comprehensive Services, Inc	Debbie J. Rock, MSW	Executive Director	(443) 524-0220	drock@lehthealth.org	1	
Michelle Gourdine & Associates	Dr. Michelle Gourdine	CEO	(443) 801-7932	migourdine@gmail.com	1	
Mosaic Community Services	Lori Doyle, ED	Chief Operating Officer	(410) 453-8553 x1150	Lori.Doyle@mosaicinc.org	1	Sending Timothy Allen, Director, Outreach Services Div., Timothy.Allen@mosaicinc.org
Power to End Stroke & American Heart Association	Kimberly Mays	Senior Director, Community & Multicultural Health	(410) 685-7074	kimberly.mays@heart.org	1	
Safe Kids Baltimore/MD CARES Program, Univ of MD Hospital Children's Hosp	Karen Hardingham	Clinical Program Coordinator	(410) 328-7532	khardingham@umm.edu	1	Maybe a little late
Total Health Care, Inc.	Faye Royale-Larkins, RN, MPH	Chief Executive Officer	(410) 728-4090	Froyale-larkins@totalhealthcare.org	1	sending Nedra Beulah, Director of Community and School-Based Programs, NBeulah@totalhealthcare.org
University of Maryland Baltimore School of Nursing	Jane M. Kirsching, PhD, RN	Dean and Professor, DEAN	(410) 706-6741	jkirsching@som.umaryland.edu	1	Sending Pat McLaine, DrPH, MPH, RN, Asst Prof, UMSON, Dept of Family & Community Health, Pat McLaine
Violence Intervention Program in Shock Trauma (VIP)	Tara Reed Carlson MS, RN	Business Development Manager	(410) 328-7347	trcarlson@umm.edu	1	
Baltimore City Schools	Naomi Gubernick	Chief of Staff	(410) 396-8905	NGubernick@bcps.k12.md.us		
Baltimore Medical System	Jay Wolvovskiy	President	(410) 732-8800	jay.wolvovskiy@bmdc.org		
Chase Brexton Health Care	Richard Larison	Chief Executive Officer	(410) 837-2050	rlarison@chasebrexton.org		
Department of Mental Health & Hygiene	Josh (Joshua) Sharfstein	Secretary	(410) 767-4639	joshua.sharfstein@maryland.gov		
Donate Life	Elizabeth (Libby) Wolfe	Executive Director	(410) 242-7000	EWolfe@DonateLifeMaryland.org		
Healthcare Access Maryland	Kathleen Westcoat, MPH	President and CEO	(443) 451-4050	kwestcoat@hcamaryland.org		
Healthy Start	Alma Roberts	President & CEO	(410) 396-7318	Alma.Roberts@baltimorecity.gov		
Komen	Sarah Cordi	Development Manager	(410) 938-8990	scordi@komenmd.org		
NAACP - Baltimore City Branch	Tessa Hill-Aston	President	(410) 366-3300	tessansacp@yahoo.com		
Sisters Together & Reaching, Inc.	Rev. Debra Hickman		(410) 276-8969	debbie7rev@aol.com		
United Way	Mark Furst	President & CEO	(410) 547-8000	mark.furst@uwm.org		
					19	Total Invited Guest
Hosts						
Jeff Jones					1	
Donna Jacobs					1	
Anne Williams					1	
Melissa Stokes					1	
					4	Total Host
					23	Grand Total

Appendix 4 (Continued)
Community Partner Focus Group Notes
October 30, 2014

Needs

- Asthma → healthy homes
- Mental Health → stress & stress management w/ crises
 - Addictions → lack of integrated systems
- Health literacy
- Health education for teens
- Obesity
- People living in crisis lifestyle
- Lack of coordinated services integrated care
- Care coordination
- Access to primary care → integrated w/ PCMH
- Access to health resources → physical fitness
- Literacy/ Health Literacy
- Pre-natal & First 100 days → focus on children
- Infant mortality → complications in women's health/healthy women
- Sufficient employment to support families
- Structural inequities → shifting power structure
- Lack of education
- Lack of "True Soldiers" → "real" comprehensive neighborhood centers
- CVD/stroke
- Restrictive hiring policies – for people who have a criminal record, can't get healthcare jobs

Barriers

- Wrong focus – focus on outcome and not the root of the problem
- Bureaucracy – measures of success haven't changed
- Fresh informed perspective
- Working in silos
- Shared vision w/ stakeholder meeting
- Our vision of a healthy community
- Inter-agency collaboration
- Lack of community voice
- “Us” ⊗
- We get in our own way
- Perceived vs. real barriers 80%/20%?
- Trust
- Fear within communities about success → “share power”
- Resistance to change → making something a “belief”
- Organization's missions/conflict
- Funding allocation – real vs. perceived
- Break through “fatalistic” attitude
- Misalignment of incentives/payment structures
- TOO much talking and not enough action
- Misinformation in the community

What can we do about it?

- Shore up Mental Health/Beh. Health – us CB \$ → Generate savings \$ from preventative readmissions
- Behavioral health should not be separate from public health
 - Invest in social/economic determinates
 - Add civil/legal attorney
- Leverage exiting resources, use expertise to seamlessly address issues
- Work w/ mental health experts (Mosaic)
- Leverage partnerships in connecting w/ our community partners
- Listen to community
- Fund the root causes (moisture in homes)
- Use more CHWs
- Use community-based organizations for grant writing
- What are the goals of UMMC/Midtown?
- Can't spread resources too thin → prioritization is critical
- Join policy advocacy issues

Appendix 5

CHNA Priority Setting Matrix FY 2015									
	HIV	CVD	Diabetes	Substance Abuse	Mental/ Behavioral Health	Maternal/ Child Health	Health Literacy/ Education/ Employment	Prevention	TOTAL
Problem s greater in the city compared to the state or region.	70	64	63	73	70	59	66	8	473
Impact on vulnerable populations is significant.	66	66	60	67	62	60	66	10	457
Cost to the community can be achieved by addressing this problem/aligned with Pop Health.	61	68	60	64	61	63	60	6	443
Major improvements in the quality of life can be made be addressing this problem.	60	66	60	67	62	63	62	6	446
Issue can be addressed with existing leadership and resources.	63	63	57	55	37	51	59	8	393
Progress can be made on this issue in the short term.	61	64	52	53	36	49	60	10	385
TOTAL	381	391	352	379	328	345	373	48	

Appendix 6
Community Health Improvement Implementation Plan
FY2016-FY2018

Priority Area: Maternal/Child Health					
Long Term Goals Supporting Maryland SHIP Healthy Beginnings:					
1) Reduce the percentage of births that are low birth weight (LBW): Baltimore City = 11.9% > MD 2017 Goal: 8.0%					
2) Reduce sudden unexpected infant deaths (SUIDS): Baltimore City = 1.90 > MD 2017 Goal 0.86/1,000 live births					
3) Increase the proportion of pregnant women starting prenatal care in the 1 st trimester: Baltimore City = 49.5% > MD 2017 Goal: 66.9%					
4) Reduce the ED visit rate due to asthma: Baltimore City = 223.5/10,000 > MD 2017 Goal: 62.5/10,000					
5) Reduce the pedestrian injury rate on public roads: - Baltimore City = 109.9/100,000 > MD 2017 Goal: 35.6/100,000					
Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Increase the percentage of babies born >37 weeks gestation Reduce the percentage of births that are low birth weight Increase the percentage of women breastfeeding upon discharge	Provide education and information on healthy pregnancies, breastfeeding, and early infant care through engaging, evidence-based program: Stork's Nest	Women in West Baltimore Communities	Stork's Nest prenatal education program is a free, points-based incentive program for pregnant women and their partners. Women earn points when they complete prenatal classes and keep prenatal visit appointments.	<u>Reach:</u> 1) # of women enrolled <u>Outcomes:</u> 1) % of babies born > 37 wks gestation 2) % of babies born > 2500 grams 3) % of women initiating breastfeeding	UMMC Department of OB/GYN, UMMC Family Medicine, March of Dimes, Zeta Phi Beta Sorority Inc., Faith Based Partners
Decrease the ED visit rate due to asthma (pediatric) Decrease hospitalizations due to asthma	Provide primary care and health education through evidence-based program: Breathmobile	School-age children in Baltimore City Schools, primarily West Baltimore	The Breathmobile is a free, mobile primary care clinic focusing on pediatric asthma. The Breathmobile visits Baltimore City Schools during the school year providing care, treatment, and health education to children with asthma.	<u>Reach:</u> 1) # of site visits 2) # of individual students seen 3) # of total visits <u>Outcomes:</u> 1) # of ED visits	UMMC Dept of Pediatrics, Baltimore City Public Schools, Baltimore City Health Dept, and Kohl's Cares Foundation

Decrease missed school days due to asthma				2) # of Hospitalizations 3) # Missed school days	
Decrease number of fire-related deaths to children under 14 years of age Decrease the pedestrian injury rate on public roads Increase the percentage of correctly installed child safety seats Increase in participants' knowledge and awareness of fire safety, pedestrian safety, and child passenger seat safety	Provide education and information on child passenger safety, fire safety, pedestrian safety, and distracted pedestrian awareness through engaging programs: Safe Kids	Pre-school and school-age children and their families in Baltimore City, primarily West Baltimore	Safe Kids strives to reduce unintentional injury to children through free education and training on fire safety, pedestrian safety, and child passenger safety. This program also provides child passenger seat testing and provides smoke detectors and helmets through its programming.	<u>Reach:</u> 1) # of encounters with children and/or families <u>Outcomes:</u> 1) # of Fire-related deaths of children under 14 yrs in Balto City 2) # of Pedestrian injuries 3) # of Child passenger safety seat errors identified and corrected 4) Increase in knowledge using pre/post-tests for: Fire Safety Pedestrian Safety Child Passenger Seat Safety	UMMC Dept of Pediatrics, Baltimore City Public Schools, Baltimore City Health Dept., Baltimore City Fire and Police Depts., DHMH, MIEMSS Child Passenger Programs

**Community Health Improvement Implementation Plan
 FY2016-FY2018**

Priority Area: Chronic Disease – Cardiovascular Disease/Obesity

Long-Term Goals Supporting Maryland State Health Improvement Plan (SHIP) Healthy Living & Quality Preventive Care:

- 1) Increase the proportion of adults who are at a healthy weight: Baltimore City : 35% > 2017 MD Target: 36.6%
- 2) Reduce the proportion of youth (ages 12-19) who are obese: Baltimore City: 14.9% > 2017 MD Target: 10.7%
- 3) Age adjusted mortality rate from heart disease: Baltimore City: 242.7/100,000 age-adjusted 2017 MD Target > 166.3/100,000
- 4) Reduce emergency department visit rate due to hypertension: Baltimore City: 599.6/100,000 > 2017 MD Target: 234/100,000

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
<p>Increase the proportion of adults who are at a healthy weight</p> <p>Reduce the proportion of youth who are obese</p>	<p>Provide education & information on the importance of heart healthy lifestyle through engaging, evidence-based programs:</p> <p>Know Your Numbers, Rethink Your Drink, Hypertension Screening & Outreach Program</p>	<p>Adults & Youth in Priority Targeted Zip Codes</p>	<p>Engage targeted communities on healthy lifestyles through the sponsorship or provision of:</p> <ul style="list-style-type: none"> - Community-wide education - Store Tours - Cooking Classes/Demos/Tastings - Community Screenings & Referrals (Blood pressure, BMI/Weights, & Cholesterol) <p>Develop resource guide (pdf) to be used on website and for smaller community events as handout</p> <p>Provide info on healthy weight resources at every major outreach event:</p> <ul style="list-style-type: none"> - Take a Loved One Event - Spring into Health Event - B'More Healthy Expo - Nurses' Week Lexington Market Fair 	<p><u>Reach:</u></p> <ul style="list-style-type: none"> 1) # of campaigns 2) # of events featuring information 3) # of people attending events <p><u>Outcomes:</u></p> <ul style="list-style-type: none"> 1) # of people screened 2) % of referrals for abnormal findings 3) % followed through for follow-up 4) % of participants with normal BPs after referrals/intervention 5) # of pounds lost through DPP education (also reported through Midtown) 6) Self-reported knowledge/awareness through Pre/Post Participant Survey 	<p>Physician Clinical Advisor, UMMC Nutrition Dept., UMMC/Midtown Nursing, UMB Campus, ADA, AHA, Shopper's Food Warehouse, Buy-Rite, Giant</p>

<p>Increase the variety of fruits & vegetables to the diets of the population aged 2 yrs and older</p>	<p>Through engaging, evidence-based programs, 1) Improve access to variety of fruits & vegetables: Farmer's Market</p>	<p>Adults & Children</p>	<p>Sponsor UMMC Farmer's Market:</p> <ul style="list-style-type: none"> - Maintain WIC and SNAP voucher acceptance by vendors - Pilot prescription program promoting consumption of fruits & vegetables purchased at Farmer's Market - Explore additional Farmer's market and food access options for West Baltimore - Provide educational opportunity for local school children to attend Farmer's Market as a field trip - Provide support for local legislation supporting healthy food options and access to fresh fruits and vegetables 	<p><u>Reach:</u></p> <ol style="list-style-type: none"> 1) # of Farmer's Markets held 2) # of vendors accepting WIC & SNAP vouchers 3) # of educational materials distributed 4) # of schools and children attending Kids to Farmer's Market Program 5) # of F & V Prescriptions distributed <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1) \$ amount spent through WIC/SNAP benefits at Farmer's Market & zip codes of purchasers 2) # of Fruit & Vegetable prescriptions redeemed 3) \$ of matching funds for Fruit & Vegetable Prescription Program 3) # of children trying a new healthy food item at Farmer's Market tour 4) Self-reported knowledge in students participating in FM program 5) # of legislative bills where support was provided 	<p>UMB Campus, BCPSS, UM BioPark</p>
<p>Increase healthy food access</p>	<p>2) Promote awareness of healthy ways to prepare fruits & vegetables: Kids to Farmer's Market, Fruits & Vegetables Prescription Program (pilot)</p>				

**Community Health Improvement Implementation Plan
 FY2016-FY2018**

Priority Area: Violence Prevention Program

Long Term Goals Supporting Maryland SHIP Healthy Communities:
 Reduce the domestic violence rate: Baltimore City = 543.8 > MD 2017 Goal: 445/100,000
 Reduce firearm-related deaths: Baltimore City = 33.3 > MD Target: 11.3/100,000
 Reduce the rate of recidivism due to violent injury. (Baltimore City Baseline: > 2016 Target: Decrease by 10%)

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Reduce the rate of recidivism due to violent injury and domestic violence.	Provide education and information through access to evidence-based program: Violence Intervention Program (VIP).	Patients admitted to UM Shock Trauma Center due to violence > 15 yrs. Participants include victims of assault, sexual assault, gunshot wounds, and DV related incidents.	<p>VIP program provides structured support and education to prevent repeated violence in the community.</p> <ul style="list-style-type: none"> • Case workers enroll patients of violent injury at the bedside. • Participants are offered weekly support group meetings after discharge. • Participants receive services to help with employment, housing, mental health, substance abuse, and interpersonal skills. 	<p><u>Reach:</u></p> <ol style="list-style-type: none"> 1) 100 of participants enrolled 2) 100 of participants completing program <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1) Re-injury rate (based on the Trauma Registry and state-reported criminal activity) 2) Self-reported re-injury and self-reported criminal activity 3) VPP Survey and Program Evaluation Survey 	<p>School of Nursing</p> <p>School of Social Work</p> <p>Baltimore City Police Department and several community partners :</p> <ul style="list-style-type: none"> • Department of Juvenile Services • Department of Parole and Probation • Public and private schools, the State's Attorney's Office • Community organizations
Promote violence prevention and education in youth populations.	Provide education on the importance of violence prevention through two evidence-based	Middle and high school students in Baltimore City.	My Future – My Career is held at the Shock Trauma Center as a 4-6 weeks program, designed to engage youth who are at risk for either becoming victims and/or victimizing others. Students focus	PHAT or MFMF Survey	Baltimore City Public Schools, Promise Heights Community

	<p>programs: Promoting Healthy Alternatives for Teens (PHAT) and My Future My Career (MFMC)</p>		<p>on goals for higher education and career opportunities.</p> <p><i>Promoting Healthy Alternatives for Teens (PHAT)</i> is held at the UM Shock Trauma Center or an on-site location as a single session workshop designed to expose youth to the consequences associated with poor decision-making.</p>		
--	---	--	--	--	--

**Community Health Improvement Implementation Plan
 FY2016-FY2018**

Priority Area: Workforce Development

Long Term Goal Supporting Maryland Health Improvement Plan (SHIP) Healthy Communities & Access to Healthcare:
 1) Increase the number of adults with health insurance (through employment)

Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Increase the number of people gainfully employed	Implement a workforce pipeline that leads to career opportunities for underserved residents of West Baltimore through 7 programs: Healthcare Career Alliance, Project Search, YouthWorks, NAHSE, BACH Fellows, Urban Alliance program	1)18-21 year old Baltimore City at risk youth 2) Underemployed and unemployed populations 3) Individuals currently receiving public assistance	Provide training, coaching and employment for program participants through 7 key programs: Healthcare Career Alliance – Work readiness skills training, job training via internships and career coaching and internships Project Search – One-year academic and internship program for Baltimore City high school seniors with disabilities YouthWorks – Summer jobs program, sponsored by the Mayor’s Office, for Baltimore City Youth. The program provides a 6 week internship for youth 14-21 years of age. NAHSE – Eight week internship program for minority undergraduate and graduate students. Interns with an interest in health administration, health information technology, finance, marketing and human services are afforded the opportunity to gain meaningful experience at the hospital.	<u>Reach:</u> 1) # of students enrolled in programs <u>Outcomes:</u> 100 gainfully employed individuals	VSP Center for Urban Families Helping Up Mission Catholic Charities Sinai Hospital Mayor’s Office of Employment Development Department of Social Services

			<p>BACH Fellows – Provides rising high school seniors a six-week, career-building workshop and paid work experience in a hospital setting.</p> <p>Urban Alliance – Provide students with internships in professional settings such as law firms, banks, hospitals, financial institutions and non-profit organizations.</p>		
--	--	--	---	--	--

Implementation Plan – Health Literacy FY2016-2018

Goals:

- Develop/purchase all health educational materials at 5th grade reading level
- Develop material educating the public on appropriate use of emergency services, primary care, and urgent care
- Collaborate with UMMS hospitals on a uniform Patient Financial Assistance brochure
- Collaborate with UMMS' Baltimore City Health Literacy Initiative with other local health systems (JHH, St Agnes, & Medstar)

Appendix 7

Community Health Improvement Team

Members

UMMC Members

Dana Farrakhan, MHS, FACHE, SVP Strategy, Community, & Business Development
dfarrakhan@umm.edu, 410-328-1314

Anne Williams, DNP, RN, Director, Community Health Improvement
awilliams@umm.edu, 410-328-0910

Mariellen Synan, Community Outreach Manager
msynan@umm.edu, 410-328-8402

JoAnn Williams, MS, Manager Career Development Services
jwilliams@umm.edu, 410-328-5231

Ruth Adeola, MS, RN, Manager VIP programs

Alexandra Bessent, Director, Strategic Marketing

Justin Graves, MS, RN, Sustainability Manager

Elizabeth Groncki, Senior Planning Analyst, Strategic Planning

Dale Rose, DHA, RN, Director Ambulatory Services

Karen Warmkessel, Manager, Communications

UMMC Midtown Members

Donald Ray, JD, Vice President, Operations

Denise Marino, MS, Director, Marketing and Communications

Meredith Marr, Marketing Manager

Angela Ginn, RD, UM Center for Diabetes & Endocrinology

Robyn Palmiero, LCSW, HIV Program

Cathy Ramsel, Breast Center

Clinical Expert Advisors

Russell Lewis, MD, University of Maryland School of Medicine, Family & Community Medicine

Tina Cafeo, DNP, RN, Director of Patient Care Services, Medicine, Surgery, & Cardiovascular Medicine

Mary Taylor, MS, RN, Director of Patient Care Services, Women's & Children

Appendix 8
Community Health Needs Assessment Stakeholders/Partners

University of Maryland School of Medicine
Russell Lewis, MD

University of Maryland Baltimore President's Office
Ashley Vallis, Director, Community Engagement

University of Maryland School of Nursing
Pat McLaine, DrPH, MPH, RN, Assistant Professor

University of Maryland School of Social Work
Bronwyn Mayden, MSW, Assistant Dean, SSW

University of Maryland Baltimore Office of External Affairs
Brian Sturdivant, Director, Community Affairs

UMMS Baltimore-City Based Hospitals

Donna Jacobs, Senior Vice President Government and Regulatory Affairs, UMMS

Cynthia Kelleher, Interim Chief Executive Officer, University of Maryland Rehabilitation and Orthopedic Institute

Melissa Stokes, Community Advocacy & Injury Prevention Coordinator, Mount Washington Pediatric Hospital

References

- Baltimore City Health Department (2014). 2014-2016 Implementation Plan. November.
- Baltimore City Health Department, Office of Epidemiology and Planning. (2008). Baltimore City Health Status Report 2008, Baltimore, MD, October, p.30.
- Baltimore City Health Department (2014). Baltimore City Health Disparities Report Card, April, Retrieved from:
<http://health.baltimorecity.gov/sites/default/files/Health%20Disparities%20Report%20Card%20FINAL%202024-Apr-14.pdf>
- Baltimore City Health Department, Office of Epidemiology and Planning. (2011). Baltimore City Neighborhood Profiles, Baltimore, MD, December, Retrieved from:
www.baltimorehealth.org
- Baltimore City Health Department, Office of Epidemiology and Planning, (2011). Healthy Baltimore 2015 Report. Baltimore, MD., May.
- Baltimore Neighborhood Indicators Alliance (2015). Retrieved from: <http://bniajfi.org/>
- Burden of overweight and obesity in Maryland data update summary (2008). Retrieved from fha.maryland.gov/.../2008_Burden_of_adult_overweight_obesity_M
- Center for Livable Future Johns Hopkins School of Public Health (2010). The Baltimore City food environment. Retrieved from
http://www.jhsph.edu/clf/PDF_Files/BaltimoreCityFoodEnvironment.pdf
- F as in fat: The State of Obesity 2014: Better Policies for a Healthier America.* Retrieved 9/16/2014, 2014, from <http://healthyamericans.org/assets/files/TFAH-2014-ObesityReport%20FINAL.pdf> , Robert Wood Johnson Foundation.
- Maryland Department of Health and Mental Hygiene, (2014). Maryland State Health Improvement Plan Biennial Progress Report, Retrieved from:
<http://hsia.dhmh.maryland.gov/Documents/Biennial%20SHIP%20Progress%20Report%202012-2014.pdf>
- United Health Foundation (2014) America's Health Rankings. 25th Edition. Retrieved from:
<http://www.americashealthrankings.org/>
- US Dept of Health and Human Services, Healthy People 2020 (2011). Retrieved from:
<http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=29>
- US National Prevention Council, (2011). National Prevention Strategy – America's Plan for Better Health and Wellness. June. Retrieved from:
<http://www.healthcare.gov/prevention/nphpphc/strategy/report.pdf>

Appendix 7
Midtown Campus Community Health Needs Assessment Executive Report



***Community Health Needs Assessment
& Implementation Plan
Executive Summary
FY2016-FY2018***

June 30, 2015

**Approved by: Community Health Improvement Team - 5/10/15
Approved by: University of Maryland Medical Center Midtown
Community Benefits Committee of the Board - 6/8/15**

Table of Contents

Executive Summary	3
• Overview	3
• Mission, Vision, Values	3
• Community Health Improvement Mission	4
Process	
I. Establishing the Assessment and Infrastructure	5
II. Defining the Purpose and Scope	7
III. Collecting and Analyzing Data	9
a) Community Perspective	9
b) Health Experts	12
c) Community Leaders	13
d) Social Determinants of Health (SDoH)	15
e) Health Statistics/Indicators	17
IV. Selecting Priorities	17
V. Documenting and Communicating Results	17
VI. Planning for Action and Monitoring Progress	18
a) Priorities and Planning	18
b) Unmet Needs	19
VII. Appendix 1: Public Survey	21
VIII. Appendix 2: Social Determinants of Health Summary by Zip Code	22
IX. Appendix 3: Health Outcomes Summary by Zip Code	26
X. Appendix 4: Community Partner Focus Groups	29
XI. Appendix 5: Priority Setting Matrix	33
XII. Appendix 6: Implementation Plans (FY16-FY18)	34
XIII. Appendix 7: Community Health Improvement Team Members	39
XIV. Appendix 8: Community Health Needs Assessment Stakeholders/Partners	41
XV. References	42

Executive Summary

Overview

Since its founding more than 100 years ago as a teaching community hospital, the University of Maryland Medical Center Midtown Campus (UMMC Midtown), located in Baltimore's cultural center near the historic Mount Vernon neighborhood, has provided access to a full range of medical and surgical care. In 2013, UMMC Midtown Campus (formerly known as Maryland General Hospital) adopted its new name and more closely aligned with the University of Maryland Medical Center, the flagship of the University of Maryland Medical System, to offer a greater number of on-site services in more than 30 medical specialties.

In FY2014, UMMC Midtown provided care for 6,178 inpatient admissions, 5,050 surgical cases, 138,173 outpatient visits, and 30,577 emergency department visits. The University of Maryland Medical Center is licensed for 208 acute care beds. Beyond the Medical Center's facilities in FY2014, the Community Health Improvement Team provided over 65 health fairs in local faith-based organizations, schools, and community centers, led two health promotion grants from the Baltimore City Health Department and co-sponsored five major UMMS health fairs/screening events with 41,518 encounters in the community. In addition, the Medical Center provides a community outreach section on the UMMC public web site to announce upcoming community health events and activities in addition to posting the annual Community Benefit Report and triennial Community Health Needs Assessment (CHNA). (<http://www.ummidtown.org/about/community-outreach>)

Our Mission

University of Maryland Medical Center is the academic flagship of the University of Maryland Medical System. Its mission is to provide health care services on its two campuses for the Baltimore community, the State of Maryland and the nation. In partnership with the University of Maryland School of Medicine and the University of Maryland health professional schools, we are committed to:

- Delivering superior health care
- Training the next generation of health professionals
- Discovering ways to improve health outcomes worldwide

The University of Maryland Medical Center Midtown Campus is aligned with the same mission, vision, and values as the Medical Center.

Source: [Vision, Mission and Values - University of Maryland Medical Center](#)

<http://umm.edu/about/mission-and-vision#ixzz3cUw0vRnF>

Our Vision:

UMMC will be known for providing high value and compassionate care, improving health in Maryland and beyond, educating future health care leaders and discovering innovative ways to advance medicine worldwide.

Source: [Vision, Mission and Values - University of Maryland Medical Center](#)

<http://umm.edu/about/mission-and-vision#ixzz3cUwFj4UW>

Our Community Health Improvement Mission: To empower and build healthy communities

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) 6-step Community Health Assessment Process was utilized as a organizing methodology. The UMMC/Midtown Community Health Improvement Team (CHI Team) 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. The UMMC/Midtown CHI Team 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 6-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 illustrated 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 Medical Center Midtown Campus participates in a wide variety of local coalitions including, several sponsored by the Baltimore City Health Department, Cardiovascular Coalition and Tobacco Coalition, as well as partnerships with many community-based organizations like American Cancer Society (ACS), American Diabetes Association (ADA), American Heart Association (AHA), B'More

Healthy Babies, Text4baby, and Safe Kids to name a few. This assessment report was approved by the UMMC/Midtown CHI Team in May and the University of Maryland Medical Center Midtown Campus Community Benefit Committee of the Board on June 8, 2015.

II. Defining the Purpose and Scope

Primary Community Benefit Service Area

Despite the larger regional patient mix of UMMC Midtown from the metropolitan area, for purposes of community benefits programming and this report, the Community Benefit Service Area (CBSA) of UMMC Midtown is within Baltimore City.

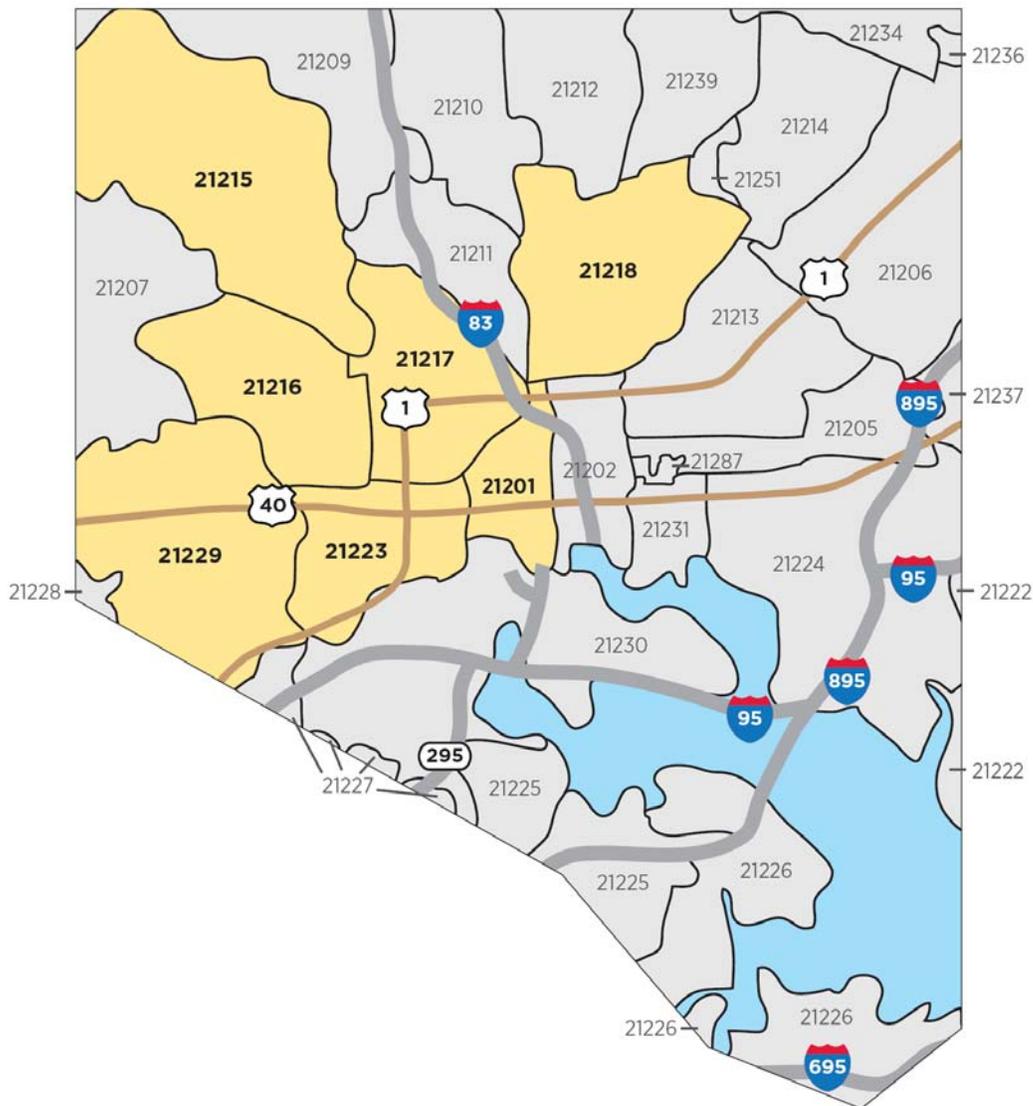
The top seven zip codes within Baltimore City displayed in Figure 3 represent the top 66% of all Baltimore City admissions in FY'14. These seven targeted zip codes (21201, 21215, 21216, 21217, 21218, 21223, 21229) are the primary community benefit service area (CBSA) and comprise the geographic scope of this assessment. See Figure 3.

Figure 3 – Top Baltimore City FY'14 Admissions to UMMC by Zip Code



Defining the Community Benefit Service Areas within Baltimore City

YELLOW HIGHLIGHTED ZIP CODES = Top 60% of City Discharges



III. Collecting and Analyzing Data

Using the above frameworks (Figures 1 & 2), data was collected from multiple sources, groups, and individuals and integrated into a comprehensive document which was utilized at a retreat on March 11, 2014 of the UMMC/Midtown Community Health Improvement (CHI) Team. During that strategic planning retreat, 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 a panel of UM Clinical Advisors and UMB Campus experts.

UMMC Midtown 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, University of Maryland Rehabilitation and Orthopedic Institute, and Mt Washington Pediatric Hospitals), community leaders, community partners, the University of Maryland Baltimore (UMB) academic community, the general public, local health experts, and the Baltimore City Health Department.

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 FY2015 using the following methods:

- Survey insert in *Maryland Health Matters* (health newsletter) distributed to over 40,000 residents within the CBSA
- Online survey posted to www.umm.edu website for community to complete
- Waiting rooms (Ambulatory clinics and EDs) at both campuses
- Health fairs and events in neighborhoods within UMMC's CBSA

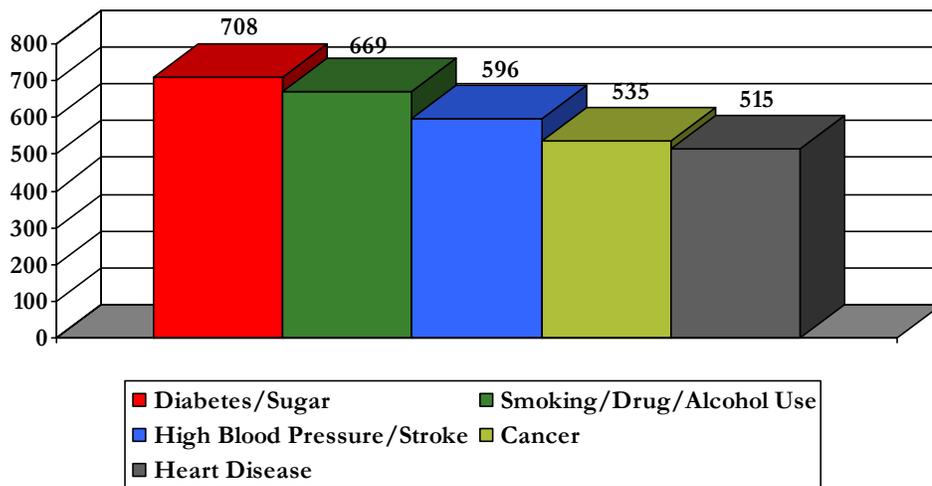
Results

■ Top 5 Health Concerns: (See Chart 1 below)

- Diabetes/Sugar
- Smoking/Drug/Alcohol Use
- High Blood Pressure/Stroke
- Cancer
- Heart Disease

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 1,212 Baltimore City residents from the identified CBSA.

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

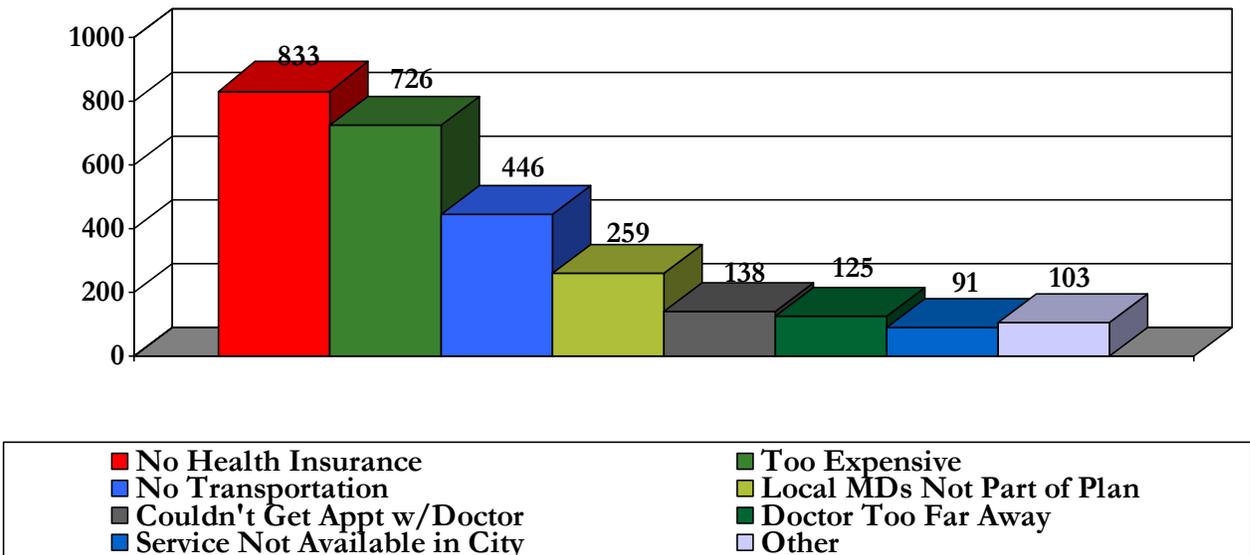


(N=1,212)

■ Top 5 Barriers to Health Care: (See Chart 2 below)

- No Health Insurance
- Too Expensive
- No Transportation
- Local MDs Not Part of Plan
- Couldn't Get Appt w/Doctor

Chart 2 – Community’s Top Barriers to Healthcare (All Baltimore City)



(N = 1,212)

B) Health Experts

Methods

- Reviewed & included National Prevention Strategy Priorities, Maryland State Health Improvement Plan (SHIP) indicators, and Healthy Baltimore 2015 plan from the Baltimore City Health Department
- Reviewed Maryland's State Health Improvement Plan (SHIP) and attended state-wide health summit in October 2014.
 - Progress to date on SHIP measures were presented as well as state-wide health priorities for upcoming multi-year cycle.
- Conducted campus-wide stakeholder retreat in March 2015, including University of Maryland Schools of Medicine, Nursing, Social Work and UMB Community Affairs office
- Interviewed Director of Chronic Disease Prevention at Baltimore City Health Department

Results

- National Prevention Strategy – 7 Priority Areas
- SHIP: 39 Objectives in 5 Vision Areas for the State, includes targets for Baltimore City
 - While progress has been made since 2012 - with 16 out of 41 measures meeting the identified targets at the state level, Measures within Baltimore City have not met identified targets; Even wider minority disparities within the City
- Healthy Baltimore 2015: Ten Priority Areas (See Figure 4)
- Baltimore City Health Department and Mayor's Top Health Priorities:
 - #1 Cardiovascular Disease (CVD) – Decrease premature mortality (as defined as death prior to 75 years)
 - #2 Asthma - Particularly pediatric asthma
 - #3 Heroin Use – While a priority, no major initiatives to date
 - #4 Diabetes – As related to CVD as a comorbidity
- Health Expert UMB Campus Panel Focus Group Top Action Items included:
 - Improve communication and synergy across Campus schools and UMMC
 - Include University of Maryland Medical Center on UMB Community Action Council
 - Look for 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 2015
Tobacco Free Living	Healthy Beginnings	Promote Access to Quality Health Care for All
Preventing Drug Abuse & Excessive Alcohol Use	Healthy Living	Be Tobacco Free
Healthy Eating	Healthy Communities	Redesign Communities to Prevent Obesity
Active Living	Access to Healthcare	Promote Heart Health
Injury & Violence Free Living	Quality Preventive Care	Stop the Spread of HIV & other ST Infections
Reproductive & Sexual Health		Recognize & Treat Mental Health Needs
Mental & Emotional Well-Being		Reduce Drug Use & Alcohol Use
		Encourage Early Detection of Cancer
		Promote Healthy Children & Adolescents
		Create Health Promoting Neighborhoods

C) Community Leaders

Methods

- Hosted a focus group in collaboration with the other Baltimore-based UMMS hospitals for community-based organization partners to share their perspectives on health needs (October 30, 2014)

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...

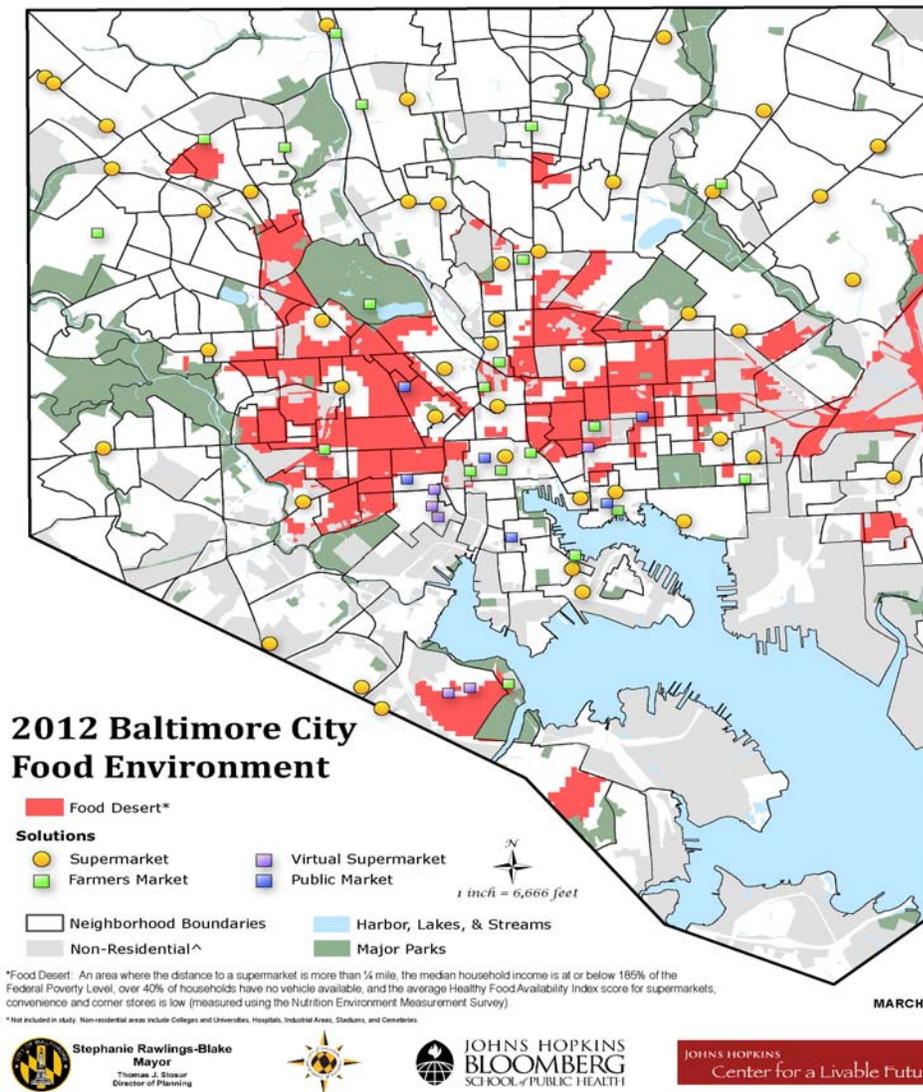
Methods

- 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 Food Desert 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



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
- F as in Fat: Executive Summary (RWJF)

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

IV. Selecting Priorities

Analysis of all quantitative and qualitative data described in the above section identified these top five 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 UMMC/Midtown CHI Team and validated with the health experts from the UMB Campus Panel:

- 1. HIV Prevention**
 - 2. Substance Abuse**
 - 3. Diabetes Prevention**
- **Health Literacy (shared UMMS priority)**

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 UMMC Midtown website under the Community Outreach webpage at <http://www.ummidtown.org/about/community-outreach>. Highlights of this report will also be documented in the Community

Benefits Annual Report for FY'15. 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). UMMC Midtown will also track the progress with long-term outcome objectives measured through the Maryland's Department of Health & Mental Hygiene (DHMH). Short-term programmatic objectives, including reach and outcome measures will be measured annually by UMMC Midtown 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, UMMC Midtown shares the following prioritization framework which is stated in the UMMC Community Outreach Plan. Because the Medical Center, 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.

UMMC Midtown will provide leadership and support within the communities served at variety of response levels in partnership with the Medical Center. 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 Team during the CHNA process including: Behavioral/mental health, safe housing, transportation, and substance abuse. While UMMC Midtown 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 (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 – Stork’s Nest and Violence Prevention programs. The additional unmet needs not addressed by UMMC Midtown will also continue to be addressed by key Baltimore City governmental agencies and existing community-based organizations.

The UMMC Midtown Campus 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 - UMMC Midtown Strategic Programs and Partners
FYs '16-'18**

Maryland SHIP Vision Area	UMMC Midtown Priorities	UMMC Strategic Community Programs	UMMC Partners
Healthy Beginnings		(See UMMC CHNA Priority)	
Healthy Social Environments		(See UMMC CHNA Priority)	
Quality Preventive Care	Diabetes Prevention		
Healthy Living	Diabetes Prevention		ADA, Zeta Phi Beta Sorority, Inc., UMMS City Hospitals, various Baltimore City Health Dept and other City agencies
Healthy Living	HIV Prevention		Institute for Human Virology, DHMH, Balto City Health Dept, UMMC, STAR TRACK Adolescent HIV Clinic, UMB
Healthy Living	Substance Abuse		Balto City Health Dept, ALA
Access to Healthcare		(See UMMC CHNA Priority)	

Appendix 1 – Public Survey



**UNIVERSITY of MARYLAND
MEDICAL CENTER
MIDTOWN CAMPUS**



**Take our survey
for the chance to
win one of
25 first-aid kits!**

Or take the survey online at
umm.edu/about/community/survey
by Dec. 31.

Community Health Needs Assessment Survey

Help us build a healthier Baltimore by taking the **University of Maryland Medical Center Midtown Campus** Community Health Needs Assessment Survey by Dec. 31, 2014. This information will help us provide much-needed outreach and wellness programs in the area, keeping you and your family as healthy as possible. The results from this survey are confidential. Thank you.

1. What is your zip code? _____
2. What is your age range?

<input type="checkbox"/> Under 18 years	<input type="checkbox"/> 25-30 years	<input type="checkbox"/> 41-50 years	<input type="checkbox"/> 61-65 years
<input type="checkbox"/> 19-24 years	<input type="checkbox"/> 31-40 years	<input type="checkbox"/> 51-60 years	<input type="checkbox"/> Older than 65 years
3. What is your gender?

<input type="checkbox"/> Male	<input type="checkbox"/> Female
-------------------------------	---------------------------------
4. What is your race/ethnicity?

<input type="checkbox"/> African American	<input type="checkbox"/> Caucasian	<input type="checkbox"/> Other (please specify) _____
<input type="checkbox"/> Asian/Pacific Islander	<input type="checkbox"/> Hispanic	
5. What do you believe are some of the biggest health problems in Baltimore City today?
(Please check top three)

<input type="checkbox"/> Heart disease	<input type="checkbox"/> Mental health issues (depression, anxiety)	<input type="checkbox"/> Traffic accidents	<input type="checkbox"/> Sexually transmitted diseases
<input type="checkbox"/> Cancer	<input type="checkbox"/> Dental health (tooth decay, cavities)	<input type="checkbox"/> Injuries	<input type="checkbox"/> Sudden infant death syndrome (SIDS)
<input type="checkbox"/> Diabetes/sugar	<input type="checkbox"/> High blood pressure/stroke	<input type="checkbox"/> Overweight/obesity	<input type="checkbox"/> Other (please specify) _____
<input type="checkbox"/> Asthma/lung diseases		<input type="checkbox"/> Access to health care/No health insurance	
<input type="checkbox"/> Smoking/drug and alcohol use		<input type="checkbox"/> HIV/AIDS	
6. What do you think are the problems that keep you or other Baltimore residents from getting needed health care? (Please check top three)

<input type="checkbox"/> No health insurance	<input type="checkbox"/> No transportation	<input type="checkbox"/> Local doctors are not on my insurance plan
<input type="checkbox"/> Too expensive/can't afford it	<input type="checkbox"/> Doctor is too far away from home	<input type="checkbox"/> Other (please specify) _____
<input type="checkbox"/> Couldn't get an appointment with my doctor	<input type="checkbox"/> Service is not available in the city	
7. Do you have any ideas or recommendations to help decrease the health problems in the city or to solve the issues with access to health services?

NAME (please print) _____

ADDRESS _____

CITY/STATE/ZIP _____

TELEPHONE _____

E-MAIL _____

Your information is kept strictly confidential and is never sold or shared.

Appendix 2
UMMC Midtown - CHNA FY2015
Social Determinants of Health (SDoH) Summary

SDoH	Baltimore City	Upton/ Druid Hts	SW Balto	Mondawmin	Pimlico/ Arlington/ Hilltop
Socioeconomic Characteristics		(21201)	(21223)	(21216 & 21217)	(21215)
Median Income	\$38,346	\$13,811	\$28,514	\$37,035	\$28,815
Unemployment Rate	13.9	29.9	25.3	20.4	19.6
HH below Poverty % 2011	18.8	48.8	26.2	12.2	21.3
Education					
Kindergarten Readiness/ Ready at 5 %	73.0	78.1	68.0	83.6	56.7
HS Completion Rate %	80.3	75.7	76.2	82.4	86.8
Community Built Environment					
Liquor Outlet Density (#stores/1,000 residents)	1.2	1.0	2.6	0.6	1.0
Tobacco Retail Density * (#stores/10,000 people)	21.8	39.0	51.4	27.8	32.2
Community Social Environment					
Homicide Rate * (#of homicides/10,000)	20.9	37.9	44.2	31.1	27.9
Domestic Violence * (# of incidents/1,000)	40.6	55.0	66.3	52.8	51.8

Housing	Balto City	Upton/ Druid Hts (21201)	SW Balto (21223)	Mondawmin (21216/21217)	Pimlico/ Arlington/ Hilltop (21215)
Energy Cut-off Rate * (# per 10,000/month)	39.1	45.2	79.6	62.6	73.2
Vacant Building Density* (#of buildings/10,000 housing units)	567.2	1,380.5	2,081.5	844.9	918.7
Food Environment (# of/10,000 people)					
Fast Food Density*	2.4	2.1	2.2	5.4	0.0
Carryout Density*	12.7	16.4	24.0	11.8	18.6
Corner Store Density*	9.0	12.3	25.7	10.7	12.7
Supermarket Proximity* (by Car in min.)	3.7	1.0	2.0	3.0	2.0
Supermarket Proximity* (by Bus in min.)	12.3	1.0	8.0	11.0	8.0
Supermarket Proximity* (by Walking in min.)	16.6	1.0	9.0	12.0	9.0
Health Food Availability Index (HFAI) 0-25	10.3	9.8	10.3	14.0	9.8

SDoH	Baltimore City	Inner Harbor/ S. Balto	Allendale/ Edmondson	Wash Vill./ Morrell Park	Cedonia/ Frankford	Belair-Edison
Socioeconomic Characteristics		(21230)	(21229)	(21230)	(21218)	(21206)
Median Income	\$38,346	\$77,888/69,813	\$33,563/40,122	\$47,179/40,645	\$39,556	42,921
Unemployment Rate	13.9	6.1/8.2	19.2/20.9	12.7/13.4	12.9	16.3
HH below Poverty % 2011	18.8	8.8	15.1/13.3	20.8/11.4	17.3	8.9
Education						
Kindergarten Readiness	73.0	89.1/92.1	70.6/74.5	82.2/78.7	74.6	57.6
HS Completion Rate %	80.3	73.1/76.2	78.1/83.6	75.0/91.5	83.9	77.4
Community Built Environment						
Liquor Outlet Density (#stores/1,000 residents)	1.2	2.6	0.9	3.1	0.8	0.7
Tobacco Retail Density * (#stores/10,000 people)	21.8	38.1/18.7	17.9	50.9/17.6	13.2	21.8
Community Social Environment						
Homicide Rate * (#of homicides/10,000)	20.9	6.2/0.0	22.2/19.0	23.6/4.4	6.8	24.1
Domestic Violence * (# of incidents/1,000)	40.6	14.5/15.9	50.8/43.3	46.1/40.2	42.7	47.6

Housing	Balto City	Inner Harbor/ S. Balto (21230)	Allendale/ Edmondson (21229)	Wash Vill./ Morrell Park (21230)	Cedonia/ Frankford (21208)	Belair-Edison (21206)
Energy Cut-off Rate * (# per 10,000/month)	39.1	3.3/8.0	58.9/61.2	45.8/15.5	51.6	42.9
Vacant Building Density* (#of buildings/10,000 housing units)	567.2	49.2/103.7	344.4/251.9	1,028.7/1,109.8	39.0	152.1
Food Environment (# of/10,000 people)						
Fast Food Density*	2.4	5.4/6.2	1.2/0	3.6/3.3	2.5	0.0
Carryout Density*	12.7	21.0/9.4	6.8/1.3	20.0/12.1	11.9	12.6
Corner Store Density*	9.0	4.7/10.9	6.8/8.9	14.5/5.5	4.7	9.2
Supermarket Proximity* (by Car in min.)	3.7	4.0/1.0	3.0/0.69	8.0/5.0	4.0	2.0
Supermarket Proximity* (by Bus in min.)	12.3	11.0/13.0	8.0/29.0	22.0/11.0	10.0	N/A
Supermarket Proximity* (by Walking in min.)	16.6	18.0/8.0	15.0/43.0	26.0/22.0	19.0	7.0
Health Food Availability Index (HFAI) 0-25	10.3	12.4/18.1	7.8/6.4	9.8/10.4	12.3	10.3

Appendix 3
UMMC Midtown CHNA FY2015 - Health Outcomes Summary

Health Outcomes	Baltimore City	Upton/ Druid Hts (21201)	SW Balto (21223)	Mondawmin (21216 & 21217)	Pimlico/ Arlington/ (21215)
Life Expectancy at Birth (in years)	73.9	67.3	67.8	71.7	69.1
Causes of Death (% of Total Deaths)					
1 – Heart Disease	25.8	26.5	26.4	24.9	26.8
2 – Cancer	20.8	17.5	20.2	19.5	18.9
Lung	6.3	5.5	7.0	4.3	5.5
Colon	2.1	1.8	1.6	2.1	3.2
Breast	3.2	1.5	2.7	4.6	2.6
Prostate	2.5	2.8	2.2	3.0	3.2
3 – Stroke	4.7	3.6	3.6	6.8	4.8
4 – HIV/AIDS	3.5	7.4	4.0	3.8	4.8
5 – Chronic Lower Respiratory Disease	3.5	1.4	2.6	2.4	2.1
6 - Homicide	3.4	5.0	4.3	4.3	3.4
7 – Diabetes	3.2	4.4	3.3	3.5	3.1
8 – Septicemia	3.1	3.6	3.1	2.9	4.3
9 – Drug Induced Death	2.8	4.1	5.0	3.3	2.5
10 - Injury	2.5	2.3	2.9	2.4	2.0
Maternal & Child Health					
Infant Mortality	9.7	10.3	15.0	17.7	21.0
Low Birthweight % (LBW < 5 lbs, 8 oz)	12.8	14.1	13.8	18.0	14.4
%Prenatal Care 1 st Tri.	62.7	57.2	51.2	65.2	52.9
% Births to Moms- Smokers	8.8	10.4	17.0	11.3	10.0

Health Outcomes	Baltimore City	I. Harbor/ S. Balto (21230)	Allendale/ Edmondson (21229)	Wash Vill./ Morrell Park (21230)	Cedonia/ Frankford (21218)	Belair-Edison (21206)
Life Expectancy at Birth (in years)	73.9	77.8	70.4	69.8	72.8	72.5
Causes of Death (% of Total Deaths)						
1 – Heart Disease	25.8	27.5	28.9/27.4	26.6/26.1	33.2	29.3
2 – Cancer	20.8	20.0/26.3	20.3/22.6	21.8/19.8	26.6	23.6
Lung	6.3	6.7/9.7	6.2//7.1	8.9/5.7	8.2	7.3
Colon	2.1	1.8/2.9	2.1/3.3	1.7/2.5	2.4	3.8
Breast	3.2	1.3/2.8	3.1/3.3	1.8/2.6	3.2	4.0
Prostate	2.5	1.8/3.0	2.3/2.2	1.4	4.0	3.2
3 – Stroke	4.7	3.8/2.2	5.2/4.8	4.9/4.0	5.9	5.9
4 – HIV/AIDS	3.5	1.6/0.7	2.8/3.7	3.7/2.6	1.9	2.7
5 – Chronic Lower Respiratory Disease	3.5	8.9/6.5	2.8/3.7	5.5/7.4	4.3	4.9
6 - Homicide	3.4	0.4/0	3.8/2.9	3.1/0.7	3.3	6.0
7 – Diabetes	3.2	3.3/2.9	2.8/3.1	3.4/2.0	3.6	4.0
8 – Septicemia	3.1	3.3/1.8	2.7/2.5	4.1/2.9	2.8	2.5
9 – Drug Induced Death	2.8	1.6/2.9	2.7/2.1	2.7/3.8	2.2	2.5
10 - Injury	2.5	2.4/1.1	3.1/1.5	3.4/2.3	2.9	2.9
Maternal & Child Health						
Infant Mortality	9.7	6.9	16.9	13.3	15.2	15.0
Low Birthweight % (LBW < 5 lbs, 8 oz)	12.8	6.5/5.1	16.4/15.2	14.4/10.5	15.7	15.1
%Prenatal Care 1 st Tri.	62.7	76.3	57.0	67.0	63.8	63.2
% Births to Moms- Smokers	8.8	0.6/3.4	6.3/6.3	20.0/14.3	8.1	10.4

Sources:

- Social Determinants - All data obtained through Vital Signs 12 Community Statistical Area (CSA) Profiles. (2012). www.bniajfi.org
EXCEPT where noted with an *
Baltimore City Health Department (2011). 2011 Neighborhood Health Profile Report. www.baltimorehealth.org
- Health Outcomes - Baltimore City Health Department (2011). 2011 Neighborhood Health Profile Report. www.baltimorehealth.org
with the exception of Life Expectancy, Infant Mortality, and % Prenatal Care during 1st Trimester. Vital Signs 12 Community Statistical Area (CSA) Profiles. (2012).
www.bniajfi.org
- Map of Baltimore City Neighborhoods. www.baltimorehealth.org

Appendix 4 Community Partner Focus Group Attendees October 30, 2014

Company	Contact	Title	Telephone	Email	Attending	Notes
MD HZE	Joan D. Plisko, PhD	Technical Director	(410) 706-2107	jplisko@som.umaryland.edu	0	NOT ATTENDING
American Cancer Society (ACS)	Kira Eyring	Representative for Hospitals	(410) 931-6850	kira.eyring@cancer.org	1	Sending Suzi Ford, suzi.ford@cancer
American Diabetes Association (ADA)	Kathy (Katherine) Rogers	Executive Director, MD Area	(410) 265-0075 x4672	krrogers@diabetes.org	1	May need to leave early
Associate Black Charities	Diane Bell-McCoy	President & CEO	(410) 659-0000 X1202	DMcCoy@abc-md.org	1	Adar Ayire (AAyire@abc-md.org) attending / Valencia King (VKing@abc-md.org) Valencia is not available
Baltimore City Health Department	Dr. Jacquelyn Duval-Harvey	Interim Commissioner of Health	(410) 396-3835	Jacquelyn.Duval-Harvey@baltimorecity.gov	1	Sending Shannon Mace Heller, JD, MPH, Director, Office of Policy and Planning.
Bmore Healthy Babies, Upton/Druid Heights Program, School of Social Work	Stacey Stephens	Program Director	(410) 396-0882 X1097	ststephens@ssw.umaryland.edu	1	
Center for Urban Families	Joe (Joseph) Jones	Founder, President & CEO	(410) 367-5691	jjones@cuf.org	1	
Coppin School of Nursing	Dr. Tracey Murray	Interim Dean, College of Health Prof.	(410) 951-3971	tmurray@coppin.edu	1	Sending Ms. Sharon Darden, Associate Director of CSU Community Health Center, sdarden@coppin.edu
Green and Healthy Homes	Ruth Ann Norton	President & CEO	(410) 534-6447	ranorton@ghhi.org	1	
Health Enterprise Zone (HEZ), Bon Secours Health System	Novella Tascoe, JD, MSHA	Health Policy, Advocacy & Proj Mgmt Spec	(410) 362-3183	NOVELLA_TASCOE@bshs.org	1	
Health Enterprise Zone (HEZ), Bon Secours Health System	Tiffany Tate			tiffany_tate@msn.com	1	
Institute for Healthiest Maryland, University of Baltimore	Renee Ellen Fox, MD	Executive Director	(410) 706-5279	rfox@umaryland.edu	1	
LIGHT Health and Wellness Comprehensive Services, Inc	Debbie J. Rock, MSW	Executive Director	(443) 524-0220	drock@lehthealth.org	1	
Michelle Gourdine & Associates	Dr. Michelle Gourdine	CEO	(443) 801-7932	mgourdine@gmail.com	1	
Mosaic Community Services	Lori Doyle, ED	Chief Operating Officer	(410) 453-8553 x1150	Lori.Doyle@mosaicinc.org	1	Sending Timothy Allen, Director, Outreach Services Div., Timothy.Allen@mosaicinc.org
Power to End Stroke & American Heart Association	Kimberly Mays	Senior Director, Community & Multicultural Health	(410) 685-7074	kimberly.mays@heart.org	1	
Safe Kids Baltimore/MD CARES Program, Univ of MD Hospital Children's Hosp	Karen Hardingham	Clinical Program Coordinator	(410) 328-7532	khardingham@umm.edu	1	Maybe a little late
Total Health Care, Inc.	Faye Royale-Larkins, RN, MPH	Chief Executive Officer	(410) 728-4090	Froyale-larkins@totalhealthcare.org	1	Sending Nedra Beulah, Director of Community and School-Based Programs, NBeulah@totalhealthcare.org
University of Maryland Baltimore School of Nursing	Jane M. Kirsching, PhD, RN	Dean and Professor, DEAN	(410) 706-6741	jkirsching@som.umaryland.edu	1	Sending Pat McLaine, DrPH, MPH, RN, Asst Prof, UMSON, Dept of Family & Community Health, Pat McLaine
Violence Intervention Program in Shock Trauma (VIP)	Tara Reed Carlson MS, RN	Business Development Manager	(410) 328-7347	trcarlson@umm.edu	1	
Baltimore City Schools	Naomi Gubernick	Chief of Staff	(410) 396-8805	NGubernick@bcps.k12.md.us		
Baltimore Medical System	Jay Wolvovskiy	President	(410) 732-8800	jay.wolvovskiy@bmdc.org		
Chase Brexton Health Care	Richard Larison	Chief Executive Officer	(410) 837-2050	rlarison@chasebrexton.org		
Department of Mental Health & Hygiene	Josh (Joshua) Sharfstein	Secretary	(410) 767-4639	joshua.sharfstein@maryland.gov		
Donate Life	Elizabeth (Libby) Wolfe	Executive Director	(410) 242-7000	EWolfe@DonateLifeMaryland.org		
Healthcare Access Maryland	Kathleen Westcoat, MPH	President and CEO	(443) 451-4050	kwestcoat@hcamaryland.org		
Healthy Start	Alma Roberts	President & CEO	(410) 396-7318	Alma.Roberts@baltimorecity.gov		
Komen	Sarah Cordi	Development Manager	(410) 938-8990	scordi@komenmd.org		
NAACP - Baltimore City Branch	Tessa Hill-Aston	President	(410) 366-3300	tessansacp@yahoo.com		
Sisters Together & Reaching, Inc.	Rev. Debra Hickman		(410) 276-8969	debbie7rev@aol.com		
United Way	Mark Furst	President & CEO	(410) 547-8000	mark.furst@uwm.org		
					19	Total Invited Guest
Hosts						
Jeff Jones					1	
Donna Jacobs					1	
Anne Williams					1	
Melissa Stokes					1	
					4	Total Host
					23	Grand Total

Appendix 4 (Continued)
Community Partner Focus Group Notes
October 30, 2014

Needs

- Asthma → healthy homes
- Mental Health → stress & stress management w/ crises
 - Addictions → lack of integrated systems
- Health literacy
- Health education for teens
- Obesity
- People living in crisis lifestyle
- Lack of coordinated services integrated care
- Care coordination
 - Access to primary care → integrated w/ PCMH
 - Access to health resources → physical fitness
 - Literacy/ Health Literacy
 - Pre-natal & First 100 days → focus on children
 - Infant mortality → complications in women's health/healthy women
 - Sufficient employment to support families
 - Structural inequities → shifting power structure
 - Lack of education
 - Lack of "True Soldiers" → "real" comprehensive neighborhood centers
 - CVD/stroke
 - Restrictive hiring policies – for people who have a criminal record, can't get healthcare jobs

Barriers

- Wrong focus – focus on outcome and not the root of the problem
- Bureaucracy – measures of success haven't changed
- Fresh informed perspective
- Working in silos
- Shared vision w/ stakeholder meeting
- Our vision of a healthy community
- Inter-agency collaboration
- Lack of community voice
- “Us” ⊗
- We get in our own way
- Perceived vs. real barriers 80%/20%?
- Trust
- Fear within communities about success → “share power”
- Resistance to change → making something a “belief”
- Organization's missions/conflict
- Funding allocation – real vs. perceived
- Break through “fatalistic” attitude
- Misalignment of incentives/payment structures
- TOO much talking and not enough action
- Misinformation in the community

What can we do about it?

- Shore up Mental Health/Beh. Health – us CB \$ → Generate savings \$ from preventative readmissions
- Behavioral health should not be separate from public health
 - Invest in social/economic determinates
 - Add civil/legal attorney
- Leverage exiting resources, use expertise to seamlessly address issues
- Work w/ mental health experts (Mosaic)
- Leverage partnerships in connecting w/ our community partners
- Listen to community
- Fund the root causes (moisture in homes)
- Use more CHWs
- Use community-based organizations for grant writing
- What are the goals of UMMC/Midtown?
- Can't spread resources too thin → prioritization is critical
- Join policy advocacy issues

Appendix 5

CHNA Priority Setting Matrix FY 2015									
	HIV	CVD	Diabetes	Substance Abuse	Mental/ Behavioral Health	Maternal/ Child Health	Health Literacy/ Education/ Employment	Prevention	TOTAL
Problem s greater in the city compared to the state or region.	70	64	63	73	70	59	66	8	473
Impact on vulnerable populations is significant.	66	66	60	67	62	60	66	10	457
Cost to the community can be achieved by addressing this problem/aligned with Pop Health.	61	68	60	64	61	63	60	6	443
Major improvements in the quality of life can be made be addressing this problem.	60	66	60	67	62	63	62	6	446
Issue can be addressed with existing leadership and resources.	63	63	57	55	37	51	59	8	393
Progress can be made on this issue in the short term.	61	64	52	53	36	49	60	10	385
TOTAL	381	391	352	379	328	345	373	48	

Appendix 6
Community Health Improvement Implementation Plan
FY2016-FY2018

Priority Area: Diabetes Prevention					
Long-Term Goals Supporting Maryland State Health Improvement Plan (SHIP) Healthy Living & Quality Preventive Care:					
1) Increase the proportion of adults who are at a healthy weight: Baltimore City : 35% > 2017 MD Target: 36.6%					
2) Reduce the proportion of youth (ages 12-19) who are obese: Baltimore City: 14.9% > 2017 MD Target: 10.7%					
3) Reduce diabetes-related emergency department visits: Balto City: 501.7 > 2017 MD Target: 186.3					
Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
<p>Increase the proportion of adults who are at a healthy weight</p> <p>Reduce the proportion of youth who are obese</p> <p>Reduce diabetes-related Emergency Department visits</p>	<p>Provide education & information on the importance of heart healthy lifestyle through engaging, evidence-based programs:</p> <p>Community Education – Rethink your Drink, Diabetes Awareness/Risk</p> <p>CDC Diabetes Prevention Program (DPP)</p>	<p>Adults & Youth in Priority Targeted Zip Codes</p>	<p>Engage targeted communities on healthy lifestyles through the sponsorship or provision of:</p> <ul style="list-style-type: none"> - Community-wide education - Cooking Classes/Demos/Tastings <p>Offer the CDC National Diabetes Prevention Program for people at risk for diabetes (16 wk program & monthly post-core follow up) annually</p> <p>Develop resource guide (pdf) to be used on website and for smaller community events as handout</p> <p>Provide info on healthy weight resources at every major outreach event:</p>	<p><u>Reach:</u></p> <ol style="list-style-type: none"> 1) # of campaigns 2) # of events featuring information 3) # of people attending events 4) # of DPP participants 5) # of DPP participants who complete the program <p><u>Outcomes:</u></p> <ol style="list-style-type: none"> 1) # of pounds lost through DPP education (also reported through Midtown) 2) # of participants who achieve 7% weight loss 3) # of participants who achieve > 150 minutes of physical activity/week 	<p>UMCDE, UMMC Nutrition Dept., UMMC/Midtown Nursing, ADA, DHMH, AHA, CDC</p>

**Community Health Improvement Implementation Plan
FY2016-FY2018**

Priority Area: HIV Prevention					
Long Term Goals Supporting Maryland SHIP Healthy Living:					
1) Reduce the incidence of HIV infection: Balto City = 73.8 /100,000 > MD 2017 Goal: 26.7/ 100,000					
Goals of the National HIV and AIDS Strategy (NHAS)					
1. Reduce new HIV infections					
2. Increase access to care and improving health outcomes for people living with HIV					
3. Reduce HIV-related health disparities					
4. Achieve a coordinated response to the HIV epidemic					
Annual Objective	Strategy	Target Population	Actions Description	Performance Measures	Resources/Partners
Identify new HIV positive individuals in the community	Identify high risk HIV negative individuals and refer to campus-based HIV Prevention (Pre-Exposure Prophylaxis PreP) programs	Individuals at high risk for HIV per the CDC PreP guidelines	Provide PrEP information and referrals at various community events	<u>Reach:</u> 1) # of events 2) # of people attending events	Institute of Human Virology, STAR TRACK Adolescent HIV Clinic, University of Maryland PreP Taskforce, Baltimore City Health Department
Provide education to the community on HIV prevention Connect individuals into treatment options who are not currently engaged	Coordinate community outreach activities between UMMC Midtown & UMMC with key partners to provide HIV & complementary services in areas within the targeted service areas	Adults & Adolescents in targeted West Baltimore zip codes	Offer free HIV education & screenings in churches, senior centers, and various community sites	<u>Outcomes:</u> 1) # of Community members referred to PrEP clinics 2) # of Community members screened for HIV annually	Institute of Human Virology, UMMC and UMMC Midtown, UMB Office of Community Engagement, DHMH, BCHD

	Identify community members with HIV who are not engaged in HIV care	Patients newly diagnosed or not engaged in HIV care within the last 6 months	Identify community members with HIV who are not engaged in HIV care and refer to one of IHV's Connect 2 Care Clinics for immediate access to medical & psychosocial services	<u>Outcomes:</u> 1) # of Community members with HIV referred to treatment	Institute of Human Virology, UMMC and UMMC Midtown, UMB Office of Community Engagement, DHMH, BCHD
--	---	--	--	--	--

Implementation Plan – Health Literacy FY2016-2018

Goals:

- Develop/purchase all health educational materials at 5th grade reading level
- Develop material educating the public on appropriate use of emergency services, primary care, and urgent care
- Collaborate with UMMS hospitals on a uniform Patient Financial Assistance brochure
- Collaborate with UMMS' Baltimore City Health Literacy Initiative with other local health systems (JHH, St Agnes, & Medstar)

Appendix 7 Community Health Improvement Team

Members

UMMC Members

Dana Farrakhan, MHS, FACHE, SVP Strategy, Community, & Business Development
dfarrakhan@umm.edu, 410-328-1314

Anne Williams, DNP, RN, Director, Community Health Improvement
awilliams@umm.edu, 410-328-0910

Mariellen Synan, Community Outreach Manager
msynan@umm.edu, 410-328-8402

JoAnn Williams, MS, Manager Career Development Services
jwilliams@umm.edu, 410-328-5231

Ruth Adeola, MS, RN, Manager VIP programs

Alexandra Bessent, Director, Strategic Marketing

Justin Graves, MS, RN, Sustainability Manager

Elizabeth Groncki, Senior Planning Analyst, Strategic Planning

Dale Rose, DHA, RN, Director Ambulatory Services

Karen Warmkessel, Manager, Communications

UMMC Midtown Members

Donald Ray, JD, Vice President, Operations

Denise Marino, MS, Director, Marketing and Communications

Meredith Marr, Marketing Manager

Angela Ginn, RD, UM Center for Diabetes & Endocrinology

Robyn Palmiero, LCSW, HIV Program

Cathy Ramsel, Breast Center

Clinical Expert Advisors

Russell Lewis, MD, University of Maryland School of Medicine, Family & Community Medicine

Tina Cafeo, DNP, RN, Director of Patient Care Services, Medicine, Surgery, & Cardiovascular Medicine

Mary Taylor, MS, RN, Director of Patient Care Services, Women's & Children

Appendix 8
Community Health Needs Assessment Stakeholders/Partners

University of Maryland School of Medicine
Russell Lewis, MD

University of Maryland Baltimore President's Office
Ashley Vallis, Director, Community Engagement

University of Maryland School of Nursing
Pat McLaine, DrPH, MPH, RN, Assistant Professor

University of Maryland School of Social Work
Bronwyn Mayden, MSW, Assistant Dean, SSW

University of Maryland Baltimore Office of External Affairs
Brian Sturdivant, Director, Community Affairs

UMMS Baltimore-City Based Hospitals

Donna Jacobs, Senior Vice President Government and Regulatory Affairs, UMMS

Cynthia Kelleher, Interim Chief Executive Officer, University of Maryland Rehabilitation and Orthopedic Institute

Melissa Stokes, Community Advocacy & Injury Prevention Coordinator, Mount Washington Pediatric Hospital

References

- Baltimore City Health Department (2014). 2014-2016 Implementation Plan. November.
- Baltimore City Health Department, Office of Epidemiology and Planning. (2008). Baltimore City Health Status Report 2008, Baltimore, MD, October, p.30.
- Baltimore City Health Department (2014). Baltimore City Health Disparities Report Card, April, Retrieved from:
<http://health.baltimorecity.gov/sites/default/files/Health%20Disparities%20Report%20Card%20FINAL%202024-Apr-14.pdf>
- Baltimore City Health Department, Office of Epidemiology and Planning. (2011). Baltimore City Neighborhood Profiles, Baltimore, MD, December, Retrieved from:
www.baltimorehealth.org
- Baltimore City Health Department, Office of Epidemiology and Planning, (2011). Healthy Baltimore 2015 Report. Baltimore, MD., May.
- Baltimore Neighborhood Indicators Alliance (2015). Retrieved from: <http://bniajfi.org/>
- Burden of overweight and obesity in Maryland data update summary (2008). Retrieved from fha.maryland.gov/.../2008_Burden_of_adult_overweight_obesity_M
- Center for Livable Future Johns Hopkins School of Public Health (2010). The Baltimore City food environment. Retrieved from
http://www.jhsph.edu/clf/PDF_Files/BaltimoreCityFoodEnvironment.pdf
- F as in fat: The State of Obesity 2014: Better Policies for a Healthier America.* Retrieved 9/16/2014, 2014, from <http://healthyamericans.org/assets/files/TFAH-2014-ObesityReport%20FINAL.pdf> , Robert Wood Johnson Foundation.
- Maryland Department of Health and Mental Hygiene, (2014). Maryland State Health Improvement Plan Biennial Progress Report, Retrieved from:
<http://hsia.dhmh.maryland.gov/Documents/Biennial%20SHIP%20Progress%20Report%202012-2014.pdf>
- United Health Foundation (2014) America's Health Rankings. 25th Edition. Retrieved from:
<http://www.americashealthrankings.org/>
- US Dept of Health and Human Services, Healthy People 2020 (2011). Retrieved from:
<http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=29>
- US National Prevention Council, (2011). National Prevention Strategy – America's Plan for Better Health and Wellness. June. Retrieved from:
<http://www.healthcare.gov/prevention/nphpphc/strategy/report.pdf>

Appendix 8
UMMS Population Health Strategy Overview



UMMS Population Health Strategy

The University of Maryland Medical System (UMMS) is committed to transforming the current health care delivery system to better manage populations of patients, particularly those patients with multiple chronic diseases. In order to achieve this goal, UMMS has embarked on a two-pronged strategy focusing on inpatient medical management, a key driver of success under Global Budget Revenue, and the development of an ambulatory care network that engages community physicians.

Consistent with UMMS' mission and larger strategic vision, the system seeks to create a population health management capability that will enable it to successfully perform under value-based contracting arrangements (i.e., better patient experience, improved outcomes, reduced cost growth, and enhanced provider satisfaction) with various commercial, Medicaid, and Medicare Advantage payers. This vision includes the following:

- Enabling a significant and growing portion of system revenues to come from sustainable and mutually beneficial risk contracts.
- Operationalizing a high-performing population health management function (i.e., a Population Health Services Organization) and care delivery model that is all-payer and all-patient capable.
- Establishing an attractive and scalable physician clinical integration vehicle that can be systematically deployed across regions.

In implementing these strategies, UMMS has engaged two operating partners with expertise in successfully developing and implementing these types of programs – Davita HealthCare Partners and Lumeris.

Inpatient Medical Management

UMMS has engaged Davita HealthCare Partners (DHCP) to improve the inpatient medical management capabilities at each of the hospitals in the system. The goals of the engagement with DHCP are to:

- Improve the quality of care
- Improve patient satisfaction
- Reduce unnecessary admissions
- Reduce readmissions
- Reduce length of stay

UMMS' engagement with DHCP focuses on specific areas:

- Designing, developing, and enhancing hospitalist programs



- Designing, developing, and enhancing transitions of care programs. This includes developing collaborative programs with post-acute providers including Skilled Nursing Facilities, Home Health Programs, Hospices, and other providers.
- Enhancing UMMS' existing care management and discharge planning programs
- Identifying alternative sites of care for patients to utilize as an alternative to the emergency room or inpatient stays

Ambulatory care network

UMMS has engaged Lumeris as an operating partner to accelerate the transition from volume- to value-based care and deliver improved clinical and financial outcomes. With a combination of clinical, operational, and information technology expertise, Lumeris is partnering with UMMS to set up a Population Health Services Organization (PHSO) as a shared service within the organization.

The PHSO will provide services to the UMMS Quality Care Network, a Clinically Integrated Network of providers that have a shared responsibility for the care of a defined population of patients and can contract as one entity with payers.

A PHSO employs a portfolio of people, programs and interventions including but not limited to:

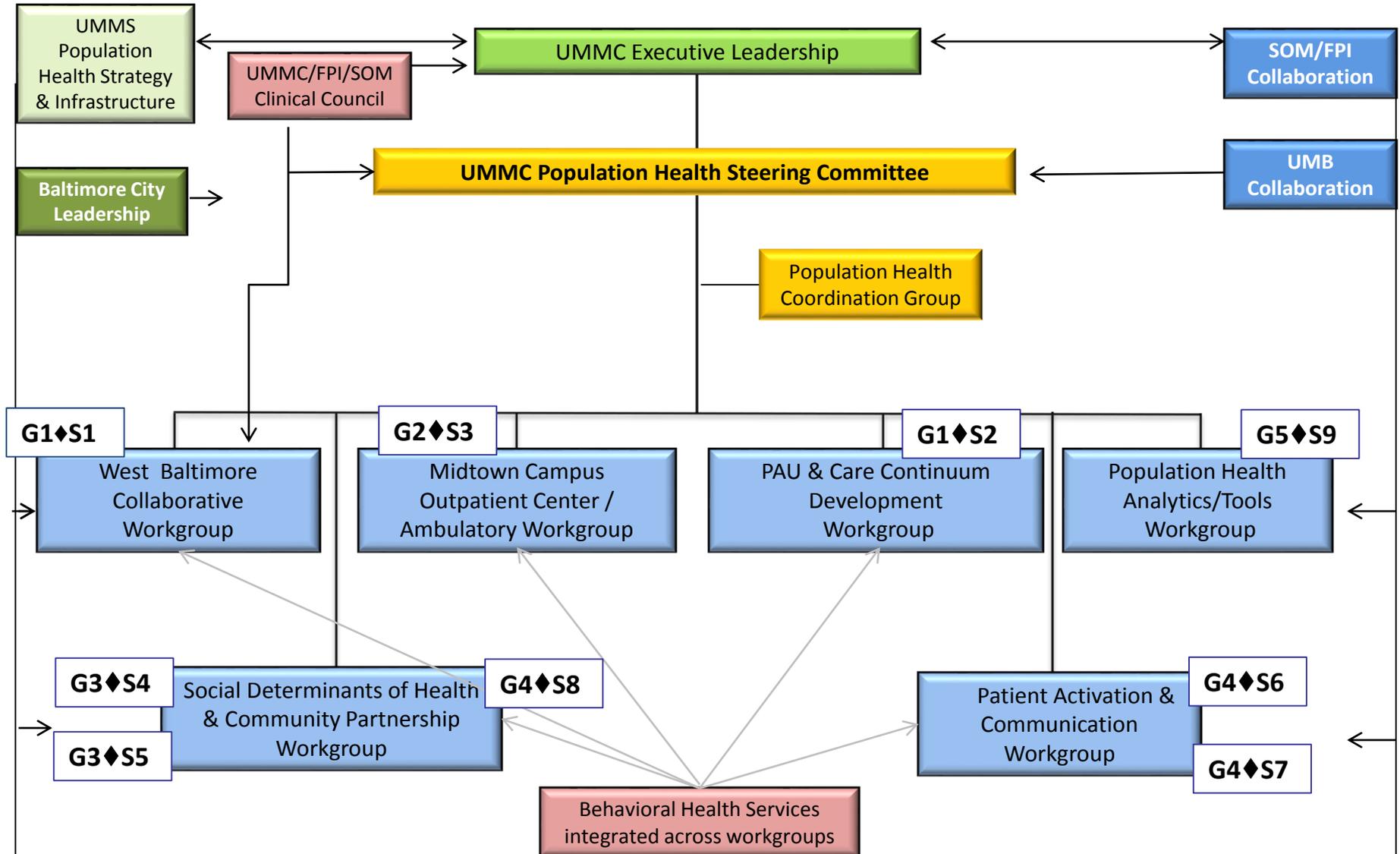
- Care managers deployed toward high risk individuals
- Transitions of care programs
- Dedicated programs for high risk patients
- Pharmacy and therapeutics management programs
- Patient engagement technologies
- Practice transformation
- Provider education, coaching, support, and information

The PHSO and its staff are enabled by robust technology that is focused on:

- Consolidating disparate data sources into a single source of truth about a patient
- Supporting deep analytics related to segmentation, utilization, costing, and expectations
- Enabling care management work flows by various care managers and affiliated providers
- Supporting active and sustainable financial management of affiliated risk bearing entities

Appendix 9
UMMC Population Health Structure

UMMC Population Health Structure



Appendix 10

UMMC Strategic Transformation Plan

References:

Breslow L. The Third Revolution in Health. *Ann Rev of Pub Health*. 2003;25:DOI: 10.1146/annurev.pu.25.022604.100011

<http://www.annualreviews.org/doi/full/10.1146/annurev.pu.25.022604.100011>

Arah OA. On the relationship between individual and population health. *Med Health Care Philos*. 2009;3:235–244. DOI: 10.1007/s11019-008-9173-8

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2698967/pdf/11019_2008_Article_9173.pdf

Zuckerman D. Hospitals building healthier communities. Embracing the anchor mission. The Democracy Collaborative at the University of Maryland. 2013. [http://community-](http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/Zuckerman-HBHC-2013.pdf)

[wealth.org/sites/clone.community-wealth.org/files/downloads/Zuckerman-HBHC-2013.pdf](http://community-wealth.org/sites/clone.community-wealth.org/files/downloads/Zuckerman-HBHC-2013.pdf)

Implementation and Evaluation: A Population Health Guide for Primary Care Models. Care Continuum Alliance, Washington DC, October 2012.

http://www.fuelvm.com/acsm_eim/assets/page_documents/PHM%20Guide%20for%20Primary%20Care%20HL.pdf

Playbook for Population Health. The Healthcare Advisory Board. 2013

<https://www.advisory.com/~media/Advisory-com/Research/H CAB/Research-Study/2013/Playbook-for-Population-Health/Playbook-for-Population-Health.pdf>

Baltimore Development Corporation. Top Employers. 2011. <http://baltimoredevelopment.com/about-baltimore/top-employers/>