STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Laura Herrera Scott, MD, MPH, Acting Secretary

January 20, 2015

The Honorable Martin O'Malley
Governor
State House
Annapolis, MD 21401

The Honorable Thomas V. Mike Miller, Jr.
President of the Senate
H-107 State House
Annapolis, MD 21401-1991

The Honorable Michael E. Busch
Speaker of the House
H-101 State House
Annapolis, MD 21401-1991

RE: Senate Bill 234 (Ch. 3 of the Acts of 2012), the Maryland Health Improvement and Disparities Reduction Act of 2012 and Health – General Article § 20-1407 – 2014 Legislative Report of the Health Enterprise Zones Initiative

Dear Governor O'Malley, President Miller, and Speaker Busch:

Pursuant to Senate Bill 234 (Chapter 3 of the Acts of 2012), the Maryland Health Improvement and Disparities Reduction Act of 2012 (the "Act"), the Maryland Department of Health and Mental Hygiene and the Maryland Community Health Resources Commission submit this 2014 report on the progress and accomplishments of the Maryland Health Enterprise Zones Initiative in calendar year 2014.

The Act requires the Department and the Commission to submit an annual report to the Governor and Maryland General Assembly that includes: (1) Number and types of incentives utilized in each HEZ; (2) Evidence of the impact of tax and loan repayment incentives in attracting practitioners to the HEZs; (3) Evidence of the impact of incentives offered in HEZs in reducing health disparities and improving health outcomes; and (4) Evidence of the progress in reducing healthcare costs and hospital admissions and readmissions in HEZs. This information is addressed in the report.

If you have questions or need more information about this report, please contact Allison Taylor, Director of Governmental Affairs, at (410) 767-6481, Mark Luckner, Executive Director, Community Health Resources Commission, at (410) 260-7046 or Michelle Spencer, M.S., Director, Prevention and Health Promotion Administration, at (410) 767-1454.

Sincerely,

Laura Herrera Scott, M.D., M.P.H.
Acting Secretary

John Hurson
Chairman, Community Health Resources Commission

Enclosure

cc: Michelle Spencer, M.S.
Mark Luckner
Maura Dwyer

MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE

and

COMMUNITY HEALTH RESOURCES COMMISSION

Health - General Article § 20-1407
Annotated Code of Maryland

HEALTH ENTERPRISE ZONES

2014 REPORT

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Joshua M. Sharfstein, M.D.
Secretary
Department of Health and Mental Hygiene

Honorable John Hurson
Chairman
Community Health Resources Commission

Maryland Health Enterprise Zones Program (HEZ)
2014 Annual Report

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I. Executive Summary

Maryland has a number of advantages that allow its citizens access to quality health care. Despite these advantages, Maryland lags behind other states in several health indicators. Health disparities by race/ethnicity and by place of residence are seen throughout the State. In response, the Maryland Health Quality and Cost Council's Health Disparities Workgroup was charged in 2011with investigating strategies to reduce and eliminate health disparities. In 2012, the recommendations of the Workgroup led to the introduction of SB 234 (Ch. 3 of the Acts of 2012), the Maryland Health Improvement and Disparities Reduction Act of 2012 (the "Act"). The Act created the policy framework to establish and implement the Health Enterprise Zones (HEZs) Initiative to target state resources to: (1) Reduce health disparities; (2) Improve health outcomes; and (3) Reduce health costs and hospital admissions and readmissions in specific areas of the State. After a competitive application and review process, five HEZs were designated by the DHMH Secretary in January 2013.

The State HEZ Team provides technical assistance (TA) to the Zones through written guidelines, on-site consultation, conference calls and All-Zone meetings. TA domains include utilization of HEZ incentives, cultural competency, accessing health data, performance management, strategic planning, chronic disease management, behavioral health, and sustaining HEZ efforts.

The HEZ Statute provides financial incentives to recruit and retain health care providers to HEZs, including loan repayment assistance and income tax credits for newly hired practitioners, and hiring tax credits for the employers of new HEZ practitioners. The income tax credit was made available in April 2014 and the hiring tax credit will be available in January 2015.

As a new initiative, the first year (April 1, 2013 through March 31, 2014) was primarily dedicated to recruitment of staff, establishment of protocols, and training of practitioners and community resources. The primary focus of Year 2 is linking the unmet need in the HEZ communities with the added provider and community service capacity developed in Year 1. Eighteen months into implementation, the Zones report the following accomplishments: expanding capacity to deliver services by opening or expanding 15 health care delivery sites and recruiting 37.43 practitioner FTEs to provide services in the HEZs, including 20.50 Licensed Independent Practitioner FTEs; providing 93,495 visits to 50,290 patients; expanding access to self-management supports and community enabling interventions; and improving health information technology, cultural competency, and community capacity. Most of the Zones, especially those in rural areas, report challenges in recruiting primary care physicians. The Zones are also confronting challenges in attracting patients and participants to the new programs and practices, in collecting and reporting individual patient clinical outcomes data, and in aggregating this data across multiple different EMR and paper-based systems.

The HEZs are collecting data on their activities and working to collect health outcome data to determine the effectiveness of the program. An evaluation of the Initiative is being conducted by the Johns Hopkins Bloomberg School of Public Health's Center for Health Disparities Solutions. In Year 3 of the Initiative, the State HEZ Team will continue to implement its TA Plan, work closely with the evaluation team to finalize program impact metrics, and ensure the Zones' efforts are sufficiently focused on the legislatively mandated outcomes.

II. Authorizing Legislation, Funding and Joint Management

A. Maryland Health Improvement and Disparities Reduction Act

Maryland has a number of advantages that allow its citizens access to quality health care. The State has outstanding medical schools, and among the 50 states, it has the highest median household income and the second highest number of primary care physicians per 100,000 population. Despite these advantages, Maryland lags behind other states in several health indicators. In America's Health Rankings, a ranking system where 1st is best, Maryland ranked 31st in infant mortality, 30th in cardiovascular deaths, 20th in cancer deaths, and 22nd in obesity prevalence. For these and for other key health indicators, important and persistent health disparities by race/ethnicity and by place of residence exist in the State.

In response to the State's persistent health disparities, the Maryland Health Quality and Cost Council's Health Disparities Workgroup was convened, composed of public health experts, research scholars, and community health leaders, and was charged with investigating strategies to reduce and eliminate health disparities. The Workgroup, led by Dean E. Albert Reece, MD, PhD, MBA, of the University of Maryland School of Medicine (UM SOM), articulated the concept of applying principles of economic development and revitalization to public health and health care delivery. The final report of the Workgroup recommended a range of incentives including tax credits, loan repayment assistance, and grant funding to expand access in underserved areas, reduce health disparities, and improve health outcomes. These incentives would serve to attract primary care clinicians to expand or open practices and would support community-level interventions such as community health workers and other strategies to address social determinants of health. The key recommendation of the Workgroup was the creation of "Health Enterprise Zones," defined as contiguous geographic areas where the population experiences poor health outcomes that contribute to racial/ethnic and geographic health disparities and are small enough for incentives to have a measurable impact.

In 2012, the recommendations of the Workgroup led to the introduction of SB 234, the Maryland Health Improvement and Disparities Reduction Act of 2012 (the "Act"). The Maryland General Assembly passed SB 234 during the 2012 session, and Governor Martin O'Malley signed the bill into law in April 2012. The purpose of the Health Enterprise Zones (HEZs), enabled by the Act, is to target State resources to: (1) Reduce health disparities; (2) Improve health outcomes; and (3) Reduce health costs and hospital admissions and readmissions in specific areas of the State. The Act created the policy framework to establish and implement the HEZ Initiative. Funding for this initiative was placed in the budget of the Maryland Community Health Resources Commission (CHRC) consistent with their charge to direct resources to communities where poor health persists despite ongoing services provided by the public and private sectors. The Department of Health and Mental Hygiene (DHMH) was charged to apply their public health expertise in Core Public Health Services and their State authority to ensure *assessment, policy development, and assurance* that quality, safe and effective health services are delivered. The Maryland General Assembly authorized the two organizations (DHMH and CHRC) to collaborate in implementing provisions of the HEZ Initiative.

B. Funding and Resources

The Act provides $4 million per year over the four-year duration of the program and creates the Health Enterprise Zone Reserve Fund, a special, non-lapsing fund which is administered by the Community Health Resources Commission. The Act provides access to a range of incentives and resources for Health Enterprise Zones, including: (1) Income tax credits; (2) Hiring tax credits; (3) Loan repayment assistance; and (4) Grant funding provided by the CHRC. In addition to these incentives and resources, the State also supports the Zones with specific technical assistance (TA) and program guidance, which are described in more detail in section V of this report.

C. DHMH and CHRC Shared Management

Secretary Joshua M. Sharfstein (DHMH) and Chairman John A. Hurson (CHRC) established an HEZ Team under the direction of the DHMH Secretary. Members of the Team include staff from CHRC and leaders in DHMH from Health Systems Infrastructure Administration (HSIA), Prevention and Health Promotion Administration (PHPA), Office of Minority Health and Health Disparities (OMHHD), Behavioral Health and Disabilities Administration (BHD), and the Virtual Data Unit (VDU). The HEZ Team meets frequently, working together to establish guidelines for implementation, reporting metrics and measures, periodic reporting, budget expenditure guidance, and TA.

A shared management model is being used, with leadership of the overall TA HEZ Team's work guided by DHMH and CHRC, and with each program area expert providing guidance and technical assistance. The HSIA guides the Loan Repayment project, the PHPA provides chronic disease guidance, the OMHHD provides principles for Cultural Competency assessment and training, the BHD provides behavioral health guidance, and the VDU along with the entire HEZ Team assists with identifying performance and program evaluation metrics. CHRC staff provides fiscal oversight and accounting of HEZ resources.

III. HEZ Implementation

A. Solicitation and Designation

After the Act was signed into law, DHMH and the CHRC held a public comment period to solicit feedback on the selection criteria for the HEZs, the potential uses of HEZ funding, and the outcome metrics that should be developed to monitor the progress and implementation of the HEZs. Public comments were incorporated into the Call for Proposals issued by CHRC. Under the Act, non-profit community-based organizations or local government agencies were eligible to apply for HEZ designation status on behalf of a local community. Applicants were encouraged to reflect inclusion, community participation, and collaboration and to support the priorities identified by Local Health Improvement Coalitions. Applications for HEZ must have demonstrated need and intervention strategies to improve health outcomes in the potential Zone. The Call for Proposals generated a total of 19 applications from 17 jurisdictions, representing rural, urban, and suburban areas of the state. These applications were evaluated competitively on 13 review principles by an independent HEZ Review Committee comprised of experts in the

fields of public health, health care finance, health disparities, and health care delivery. On January 24, 2013, based on recommendations from CHRC, DHMH Secretary Sharfstein designated Maryland's first five HEZs.

B. HEZ Legislative Expectations, Logic Model and Deliverables

The HEZs enabling legislation established the following expectations for Health Enterprise Zones:

Health improvement strategies:

- Increase health care provider capacity (attract practitioners to the Zones)
- Improve health services delivery
- Effectuate community improvements
- Conduct outreach and education

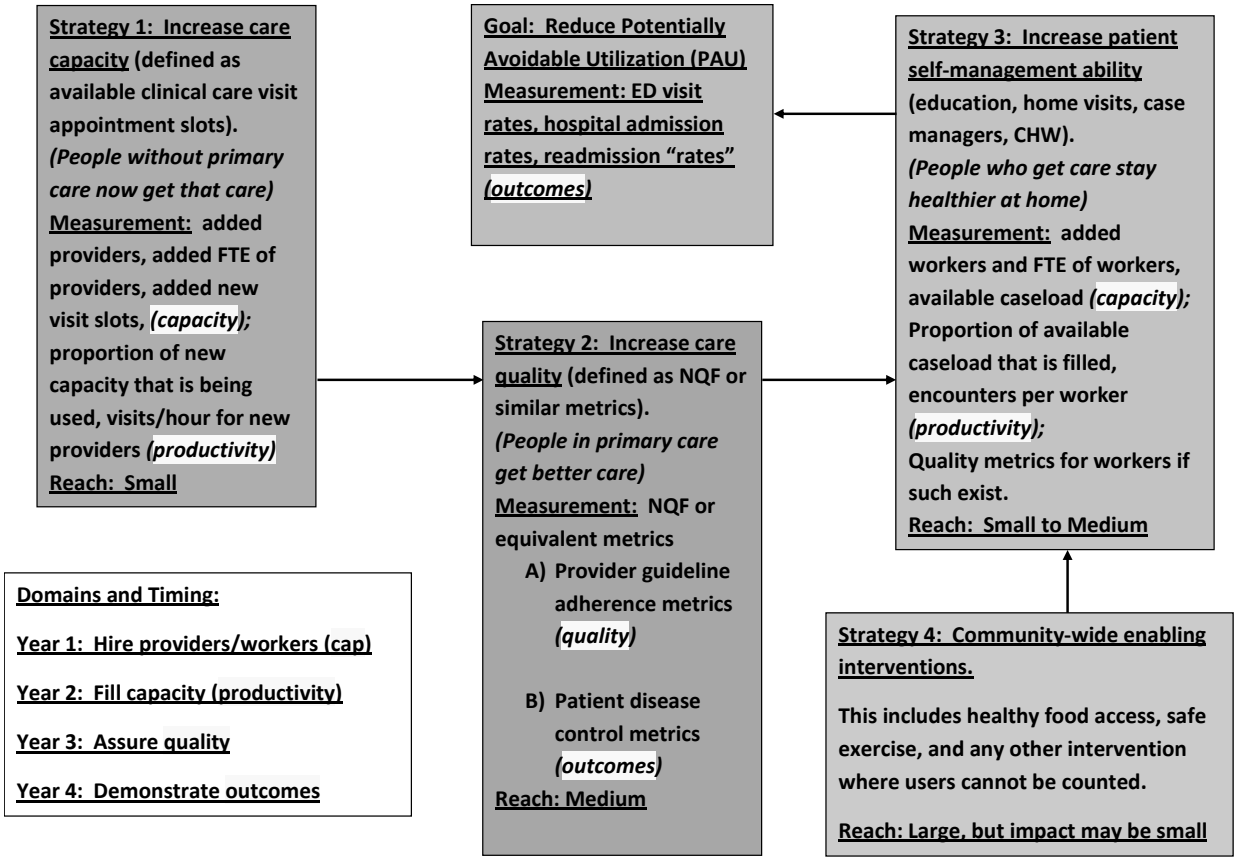
Health outcome expectations:

- Improve health outcomes
- Reduce health disparities (and implicitly, improve minority health)
- Reduce health care costs and hospital admissions and readmissions

Emergency department (ED) visit rates and hospital admission and readmission rates can be strongly affected by the degree of success with which patients can manage their chronic diseases at home. Therefore, a key strategy of the HEZ is to optimize patient self-management of chronic disease (see Figure 1). The factors that are required for successful chronic disease management include:

1. **Access to a provider.** Access involves both affordability (insurance) and availability (provider in the vicinity, who takes one's insurance, and who has convenient hours).
2. **Quality of the provider.** Quality care requires that a provider accurately assess the patient's health issues, and develops the appropriate evidence-based treatment plan. Providers should follow established chronic disease management guidelines.
3. **Patient-provider communication and patient education.** Proper communication and education make it possible for a patient to follow the instructions of a provider after leaving the office. Without the necessary information, patients may not be able to follow the treatment plans.
4. **Community supports for self-management.** Community support, which includes the involvement of case managers and community health workers, provides at-home support, allowing for patients to keep on track with their treatment plans.

Figure 1. HEZ Logic Model



Every activity of a HEZ concentrates on promoting at least one of the above strategies, with the goal of achieving at least one of the health outcome expectations. The strategies have a logical temporal sequence, which maps onto the four years of the HEZ project as follows:

- **Year 1:** Focus on **capacity expansion** – HEZ practitioners and Community Health Workers (CHWs)/case managers. Priority activities included recruitment and training.
- **Year 2:** Focus on **productivity** – HEZ practitioners and CHW/case managers. Utilize new capacity, ideally with the neediest patients. Priority activities include program development, marketing, and additional training.
- **Year 3:** Focus on **quality** – HEZ practitioners and CHW/case managers. Priority activities include defining relevant metrics for CHW/case managers and NQF or similar metrics for providers.
- **Year 4:** Focus on **health outcomes** – is hospital utilization improving? Are cost reductions being achieved? While tracking systems for this will have evolved over all four years, it is likely only in Year 4 that the intervention is mature enough (if Years 1 to 3 have been successful) to be making a difference.

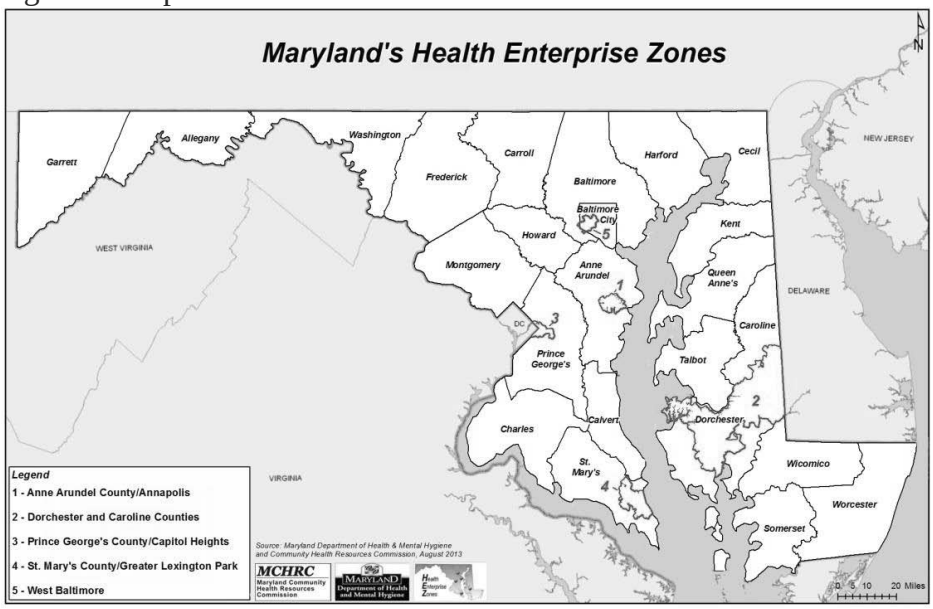
Thus, as a new initiative, Year 1 (April 1, 2013 – March 31, 2014) of the program focused on capacity expansion, including the recruitment of staff, establishment of protocols, and training

and recruitment of practitioners and community resources, such as CHWs. The primary focus of Year 2 is linking unmet need in these communities with the added provider and community service capacity developed in Year 1. The next section details the Zones' progress to date in these areas.

C. Overview of the Progress of the Five Zones

The five Zones (Figure 2) made significant progress in their efforts to expand capacity during the first year of implementation and are now working to fill the new capacity, ideally with the neediest patients.

Figure 2. Map of the Five HEZs



Annapolis/Morris Blum (Suburban)
Jurisdiction: Anne Arundel County
Community: Annapolis, Morris Blum Public Housing Building (zip code 21401)
Coordinating Organization: Anne Arundel Medical Center
Project Title: Annapolis Community Health Partnership

Goals and Intended Outcomes. The Annapolis Community Health Partnership's (ACHP) goals include establishing a trusted source of primary care within the Morris Blum senior housing facility for its residents and the surrounding community, and screening and treating patients for cardiovascular risk factors, including diabetes, hypertension, hyperlipidemia, obesity, and smoking. By addressing risk factors and managing chronic disease, ACHP expects to reduce preventable 911 calls, ED visits, admissions and readmissions for the population served.

Target Community. The geographic area served by ACHP encompasses a neighborhood just blocks from State Circle in Annapolis. The Morris H. Blum building itself was a microcosm of a persistent pocket of unmet need. Its 184 elderly and disabled residents had been experiencing crisis-driven, episodic, and fragmented care. Data from local resources revealed that in one year

there were 220 medically related 911 calls from the Morris Blum building. In six months alone, 73 Morris Blum residents experienced 175 ED visits, with 38 resulting in admissions. Fewer than ten Morris Blum residents accounted for 41% of those 175 ED visits.

Key Interventions and Milestones to Date (see Table 1, Appendix A): ACHP reports adding 4 FTEs, including 1 Licensed Independent Practitioner FTE and 1 Other Licensed or Certified Health Care Practitioner FTE, to support the new Morris Blum clinic. The clinic opened in October 2013, and as of September 30, 2014, has provided 1,942 patient visits to 1,218 patients who live in the Morris Blum residence and the surrounding community. To improve coordination of care, this new practice has been supported by AAMC's integrated electronic medical record, which is shared by the hospital and multiple specialty practices. The AAMC's integrated electronic medical record allows for identification of patients who have been an inpatient or visited the ED. Diabetes self-management and smoking cessation workshops, which started in January 2014, have been provided for 89 participants. The clinic includes onsite phlebotomy services to enhance the likelihood that patients receive needed medical testing. A care coordinator helps patients navigate the health system and a collaborating mental health provider helps integrate behavioral health with ACHP's primary care medical home (PCMH). Vulnerable ACHP patients benefit from home visits by the doctor, which are supplemented by CHW interventions provided by a collaborator. Family meetings are held to discuss goals of care for those with advanced complex illnesses and ACHP has developed a number of public health programs to support residents and clinic patients in their self-management efforts. Blood pressure screenings, medication reconciliation, nutrition classes, and walking groups have served over 1,000 participants and are integral components of the program. ACHP has also collaborated with the OMHHD to provide cultural competency training to Morris Blum staff and is currently working to develop a diabetes patient registry.

Dorchester/Caroline Counties (Rural)
Jurisdiction: Dorchester and Caroline Counties
Community: Mid-Shore Region (zip codes 21613, 21631, 21643, 21835, 21659, 21664, 21632)
Coordinating Organization: Dorchester County Health Department
Project Title: Competent Care Connections

Goals and Intended Outcomes: The Caroline/Dorchester Competent Care Connections (CCC) HEZ's goals are to: (1) Improve outcomes and reduce risk factors related to diabetes, hypertension, and behavioral health; (2) Improve behavioral health support and addiction recovery rates; (3) Increase the primary care and community health workforce; (4) Increase community health resources, access to healthy food, safe physical activity and support for optimal mental health and addiction recovery; (5) Reduce ED visits and hospitalizations for diabetes, hypertension and behavioral health; and (6) Reduce unnecessary health-care cost related to ED visits and preventable diseases.

Target Community: The CCC HEZ encompasses seven contiguous zip codes in the rural counties of Caroline and Dorchester. Data from Maryland's State Improvement Plan (SHIP) website and DHMH OMHHD indicate that heart disease, cancer mortality, and ED visits in the Zone due to diabetes, hypertension, and behavioral health are higher than the overall State rates. Significant disparities exist between racial/ethnic groups and geographic locations. ED visits among African

Americans for these conditions were markedly greater than among whites in both counties and were much higher than Maryland averages.

*Key Interventions and Milestones to Date (see Table 2, Appendix A)***:** The Zone has expanded the primary care workforce by adding 23.11 FTEs in the Zone to date, including 3.6 Licensed Independent Practitioner FTEs and 6.93 Other Licensed or Certified Health Care Practitioner FTEs. As of September 30, 2014, these HEZ programs and practices have provided 6,188 visits and encounters to 1,429 patients and clients across the Zone. Case management services and community-wide enabling supports (such as programs that promote food access and physical activity) for patients with high hospital utilization due to chronic disease have been expanded and are expected to improve patient compliance and decrease ED visits and admissions for chronic disease. CCC reports that 346 patients have participated in care coordination, peer recovery support and weight management programs as of September 30, 2014. The expanded Mobile Crisis Team (MCT) has served 187 individuals and has reduced response time to mental health crises in Caroline and Dorchester Counties from over one hour prior to the Zone's expansion of the MCT, to 11 minutes in September 2014. Expanded outpatient behavioral health services for adolescents through School Based Wellness Centers in Caroline and Dorchester Counties have provided services to 83 students. The community-focused interventions deploy Community Health Workers who have provided education or health screenings to over 500 individuals. CCC also reports that training in cultural competency and health literacy is ongoing for all CCC-HEZ partners.

Prince George's County Health Department/Capitol Heights (Suburban)
Jurisdiction: Prince George's County
Community: Capitol Heights (zip code 20743)
Coordinating Organization: Prince George's County Health Department
Project Title: Prince George's County Health Enterprise Zone

Goals and Intended Outcomes: The Prince George's County HEZ (PGCHEZ) seeks to achieve the following primary goals by December 31, 2016: (1) Increase accessibility and availability of primary care services in zip code 20743; (2) Improve health outcomes for the residents of zip code 20743; (3) Increase the number of CHWs delivering services; (4) Increase community resources for health; (5) and Reduce preventable hospitalizations and ED visits.

Target Community: Capitol Heights leads the county in poor health outcomes including low birth weight, late/no prenatal care, and teen births. The proportion of Capitol Heights residents living below the federal poverty level and 50% below the level are 13.6% and 6.3%, respectively, in contrast to 7.9% and 3.9% for the county. Twenty-three percent of residents have not completed high school. The national median for violent crimes is 4 per 1,000 residents, but in zip code 20743, it is 5.5 per 1,000. The Medicaid enrollment and WIC participation rates in the Zone exceed State rates. Inappropriate hospital utilization is also a problem for Capitol Heights, which leads the county in ambulatory care-sensitive hospital admissions.

Key Interventions and Milestones to Date (see Table 3, Appendix A): PGCHEZ's key program interventions include expanding the primary care workforce in the Zone to staff five newly established PCMH hubs and their satellite offices. As of September 30, 2014, clinics operated

by Global Vision and Gerald Family Care have been opened and Greater Baden Medical Services (a Federally Qualified Health Center, or FQHC) and the Prince George's County Health Department have been expanded through the addition of 12.1 FTEs, including 2.6 Licensed Independent practitioner FTEs and 2 Other Licensed or Certified Health Care Practitioner FTEs. These HEZ practitioners and their enhanced practices have provided 21,552 visits to 7,800 patients. The PGCHEZ is also working to improve the quality of primary care by promoting the use of a Wellness Plan, an individualized care plan integrated into each patient's electronic health record (EHR). Development of Wellness Plans was recently completed and Plans have been created for 34 HEZ patients. Five FTE CHWs have been hired to conduct outreach and provide referral and navigation services. The CHWs work with the Prince George's County Health Department's Medical Mall care coordination hospital transition team to prevent hospital readmissions among Zone residents. As of September 30, 2014, 120 patients have been served through the CHW care coordination program. The PGCHEZ has developed a county health information exchange which is linked to Maryland's Health Information Exchange and allows for laboratory, radiology and clinical records to be delivered to HEZ providers from 96 hospitals. The PGCHEZ is working to ensure cultural, linguistic and health literacy competency of Zone operations by launching a comprehensive health literacy campaign and requiring all Zone providers and their staff to complete cultural competency training.

St. Mary's County/Greater Lexington Park (Rural)
Jurisdiction: St. Mary's County
Community: Greater Lexington Park (zip codes 20653, 20634, 20667)
Coordinating Organization: MedStar St. Mary's Hospital
Project Title: Greater Lexington Park Health Enterprise Zone

Goals and Intended Outcomes: The goals of the Greater Lexington Park HEZ (GLP HEZ) include: (1) Expand and integrate the primary care and community health workforce through the recruitment of primary care, behavioral health, and dental service providers in the HEZ; (2) Reduce unnecessary ED usage for hypertension/high blood pressure, asthma, diabetes and reduce unnecessary readmissions for congestive heart failure and chronic obstructive pulmonary disease, which translates into reduced health care costs; (3) Improve health outcomes for racial and ethnic minority populations in the HEZ through the implementation of promising practices and evidence-based approaches for delivering culturally competent health care to increase preventive health screenings and early disease detection; and (4) Increase community resources in the HEZ that will facilitate access to local health care and human services and improve the physical environment of the HEZ.

Target Community: According to 2010 U.S. Census data, approximately 28% (30,902 residents) of the County population lives in greater Lexington Park, a large percentage of which are African American/Black (31.6%) or Hispanic (7.4%). Residents of Greater Lexington Park have a lower per capita income and a higher unemployment rate than the rest of the County, and the area significantly lacks primary care providers. Medicaid panels are closed in most practices and uninsured and underinsured residents are forced to seek both primary and crisis care in the ED. According to MedStar St. Mary's Hospital (MSMH), 30.57% of patients accessing the ED in FY2012 were from the Zone zip codes.

Key Interventions and Milestones to Date (see Table 4, Appendix A): The GLP HEZ has added 12.0 FTEs in the Zone, including 0.3 Licensed Independent Practitioner FTEs and 4 Other Licensed or Certified Health Care Practitioner FTEs. These practitioners, along with existing provider resources, have collectively provided 4,947 visits to 1,955 patients through their enhanced Zone practices. This includes patients served at the Med Star St. Mary's *Get Connected to Health* mobile clinic, which has been providing in kind primary care services, integrated with Walden Sierra behavioral health services, to patients who live in the Zone until the new Community Health Center is opened in the Zone in 2015. The GLP HEZ postponed the opening of its new Community Health Center until late 2015 due to challenges with site procurement. The GLP HEZ also facilitated the opening of a primary care office in September 2014 to provide services to Zone residents while the Community Health Center is under construction. Medical stability has been provided through care coordination services, which include social support and navigation services through Neighborhood Wellness Advocates (NWAs) and nurse care coordinators, who have served 363 patients to date and provided outreach to 1,597 individuals. The NWAs also provided education through evidence-based programs to increase self-management skills for targeted diseases. The GLP HEZ developed a 16-mile Mobile Medical Route, which has provided 3,346 rides to medical appointments, pharmacies, grocery stores, parks, and other human services as of September 30, 2014, and has equipped a mobile dental van, which will start service in December 2014.

West Baltimore Primary Care Collaborative (Urban)
Jurisdiction: Baltimore City
Community: West Baltimore (zip codes 21216, 21217, 21223, 12129)
Coordinating Organization: Bon Secours Baltimore Health System
Project Title: West Baltimore Primary Care Access Collaborative

Goals and Intended Outcomes: The West Baltimore Primary Care Access Collaborative (WBPCAC) has committed to improve health outcomes in its targeted areas with the following specific and quantifiable goals: (1) By 2016, reduce by 15% cardiovascular disease risk factor prevalence among West Baltimore residents; (2) Increase by 48 the number of primary care professionals within the HEZ by 2015; (3) By 2016, reduce by 15% the number of preventable E.R. visits, and by 10% the number of preventable hospitalizations of cardiovascular disease (CVD) patients; (4) Increase by 11 the number of CHWs, by December 2013; (5) By 2014, create a mechanism to identify and implement interventions to increase community resources for health; and (6) By 2016, reduce by 10% unnecessary costs of caring for West Baltimore residents with CVD.

Target Community: The targeted area fully or partially includes sixteen neighborhoods which combined have higher disease burden than most other communities in Maryland and establish the lower extremes for health disparities in the City and State across all major chronic illnesses. Further contributing to poor health outcomes is inadequate access to health care services, earning the community's designation both as a medically-underserved area and medically-underserved population. African-Americans make up more than 81% of the population, compared to 30% and 63% in Maryland and Baltimore City, respectively. The high percentage of African-American and low-income residents in the Zone, where median household income is $31,749 compared to $72,483 in Maryland overall, contributes to the disproportionate prevalence of ethnically- and

socioeconomically-linked health conditions such as diabetes, obesity, asthma, and low birth weight.

Key Interventions and Milestones to Date (see Table 5, Appendix A): WBPCAC has improved access to and the quality of health care by adding 33 FTEs in the Zone, including 13 Licensed Independent Practitioner FTEs and 3 Other Licensed or Certified Health Care Practitioner FTEs, and provided training to many others. The HEZ practitioners and their enhanced practices have collectively provided 58,866 visits to 37,888 patients who reside in the Zone. WBPCAC has also deployed 11.5 CHW FTEs in the Zone who have reported 3,414 encounters with patients, including 1,875 health screenings, to maximize patient utilization of health and social services and integrate care coordination and community health worker services at HEZ clinical sites. A chronic disease self-management course has been developed and fitness classes have been provided to 877 Zone residents and cooking classes to 169 Zone residents. Twelve scholarships have been awarded to community members to support training for health and social service careers and efforts to improve cultural competency skills and resources have been implemented.

D. Year Two Successes

Expanding capacity to deliver services. Across all five Zones, 15 health care delivery sites (defined as locations where medical, dental or mental health assessments and disease management can be provided) have been opened or expanded to provide primary care and/or behavioral health services. These health care delivery sites include private practices, hospital clinics, federally qualified health centers (FQHCs), mobile clinics, school-based wellness centers, and behavioral health clinics.

HEZ practitioners are newly providing primary care, dental or behavioral health services in the Zone, due to the efforts of the Zone Initiative, and may or may not receive Zone funding. In the first 18 months of implementation the Zones have successfully recruited 37.43 HEZ practitioner FTEs as of September 30, 2014, including 20.50 Licensed Independent Practitioner FTEs (which include physicians, psychiatrists, physicians assistants and advanced practice nurses) and 16.93 Other Licensed or Certified Health Care Practitioner FTEs (which include registered nurses, licensed clinical social workers, certified medical assistants, and certified addictions counselors). The Zones collectively reported a total of 22.95 CHW FTEs and 84.41 total FTEs added in the Zones. The 'Jobs Added' numbers have been revised downward from previous estimates due to a change in reporting definitions following a data audit at the end of Year 1.

Providing new or expanded primary care, behavioral health and dental services in the Zones. A total of 93,495 patient visits were provided by HEZ practitioners and their enhanced practices to 50,290 patients between October 1, 2013 and September 30, 2014.

Expanding access to self-management supports and community enabling interventions. Care Coordination programs, which employ community health workers and nurse case managers to identify and engage 'high utilizers,' provide home visits, and connect patients to primary care, behavioral and other health and social services, have been developed and are being implemented in all five Zones. Disease self-management programs, weight management programs, smoking cessation workshops, fitness classes, walking groups, nutrition classes, blood pressure

screenings, health education and outreach, health literacy campaigns, and transportation support have also been developed or expanded in all Zones.

Improving health information technology. All Zones have made improvements in health information technology infrastructure and capacity, including the development of three "patient-tracker" data systems, and a county-wide health information exchange and care coordination software application in Prince George's County. The Zones are also working with HEZ practices to help them transition to electronic medical records.

Improving cultural competency. All Zones have completed the OMHHD cultural competency trainings. These trainings focus on the national Culturally and Linguistically Appropriate Services (CLAS) standards, efforts to promote workforce diversity and health literacy, and steps to becoming more culturally and linguistically competent.

Enhancing community capacity. All Zones are convening and engaging the participation of HEZ partners and residents through the HEZ coalitions and community advisory boards.

E. Year Two Challenges

The Zones have encountered challenges while implementing their HEZ work plans. The State HEZ Team is working with the Zones to address these and other challenges through implementation of its HEZ Technical Assistance Plan (see Section V)**.** Key challenges to date, and strategies to overcome them, include:

Practitioner recruitment challenges. Several of the Zones, especially in rural areas, continued to report challenges in recruiting primary care physicians. Though loan repayment assistance is available, several practitioners could not benefit from the assistance because they were trained outside of Maryland (a requirement for the Janet L. Hoffman Loan Assistance Repayment Program) or because they had already paid off their student loans. Further, the regulations for the tax credit incentives were not written and approved until Year 2 of the initiative and thus were only recently made available to the Zones. The challenge to identify and recruit practitioners is not limited to HEZs however, as it exists for all health care entities in the State.

Strategy: Zones were permitted to utilize funding that was budgeted by the Zones for tax incentives to provide hiring bonuses to HEZ practitioners who couldn't benefit from, but otherwise qualified for, the HEZ hiring incentives. DHMH has increased marketing efforts for loan repayment programs, which have brought in more applications for loan repayment, but very few applications from the HEZs.

Attracting patients and participants to the new HEZ practices and programs. Each of the Zones experienced challenges in attracting patients and participants to the new HEZ practices and programs. These challenges include educational and health literacy barriers among target patients; changing patient health care utilization patterns; lack of awareness regarding the new programs and services; and lack of transportation to new practices and programs, among others.

Strategy: The State HEZ Team is currently assisting HEZs with defining service volume targets that are appropriate for the service type, defining clear reporting methods for those service volumes, understanding barriers to service uptake in the community, and working to remove barriers to service utilization. The Zones are also working to promote registration among Zone clinical practices and case management programs with CRISP (Chesapeake Regional Information System for our Patients), the regional health information exchange serving Maryland and Washington, DC, to facilitate identification of "high utilizer" patients at the practice level, and to develop a "high utilizer" identification and dissemination system at the Zone level that is compliant with HIPAA. This data will enable providers to link their "high utilizer" patients with Zone services and programs. CHWs are working to outreach to target populations in each Zone and link them to Zone programs, and services and appropriate volume targets are being established for CHWs. Finally, the State HEZ Team will be working with the Zones from January through May 2015 to develop a social marketing campaign to promote the Zones' new and expanded programs and services. This will include an assessment of barriers to utilization and factors that would facilitate utilization.

Acquiring suitable buildings for new practices. Several Zones have experienced delays in opening new clinics due to the challenges of finding suitable buildings in the Zones in which to open the clinics or practices.

Strategy: Zones have worked with partner hospitals and county governments to access funding for the necessary renovations.

Collecting data across multiple provider sites. Most of the HEZs include multiple care delivery sites and practitioners, some of whom currently have EMR systems while some do not. The Zones are confronting the challenges involved with collecting and reporting individual patient clinical outcome data and aggregating this data across multiple different EMR systems and paper-based systems.

Strategy: Several Zone practices, which previously used a paper-based record system, have transitioned to electronic records and three Zones have developed their own "patient tracker" systems to enhance HEZ care coordination efforts by tracking utilization and outcomes among HEZ patients across the Zones' programs and services. Further, the State HEZ Team has met with Zone staff to review and revise reporting metrics and requirements while monitoring and supporting their efforts to improve health information technology infrastructure. For example, the clinical outcomes metrics proved very challenging to report on a quarterly basis, and in some cases, depending on data systems, were impossible. Thus, clinical outcomes metrics will be required to be reported only on an annual basis in order to improve access to higher quality data.

IV. Measuring Progress

A. Incentives Available to the HEZs and the Impact of Incentives in Attracting and/or Retaining Practitioners to the HEZs

The HEZ Initiative provides a range of public incentives and resources to help attract private health care practitioners to serve in underserved communities. These incentives include tax

credits and loan repayment. Tax credits and loan repayment were included in the HEZ statute as incentives for recruiting and retaining providers in these underserved areas and the Act requires DHMH and the Commission to include in the annual report to the Governor and Maryland General Assembly the number and types of incentives utilized in each HEZ, and evidence of the impact of tax and loan repayment incentives in attracting practitioners to the HEZs. This information is provided below. The Act also requires the annual report to include evidence of the impact of incentives offered in the HEZs in reducing health disparities and improving health outcomes. Important outcome measures by which to assess this improvement, explicitly mentioned in the legislation, are hospital admission rates, readmission rates, and hospital costs. The hospital admissions data has about a nine month lag time between the end of a calendar quarter and the availability of the data. As a result, data on hospital admission rates that reflect any efforts beyond Zone recruitment and capacity-building in Year 1 are still pending.

Loan Repayment

Loan Repayment Assistance was provided in the Health Enterprise Zone statute as an incentive to recruit and retain providers to HEZs. DHMH is collaborating with the Maryland Higher Education Commission to offer loan repayment to eligible practitioners in HEZs through two existing State programs, the Maryland Loan Assistance Repayment Program (MLARP) for Physicians and the Janet L. Hoffman Loan Assistance Repayment Program. These State programs are being utilized to maximize current HEZ dollars. MLARP (state and federal funds) offers loan repayment to primary care physicians. The Janet L. Hoffman Loan Assistance Repayment Program offers loan repayment to nurses, nurse practitioners, physician's assistants, and social workers.

To date, four providers have been awarded loan repayment (see Table 6), all from the West Baltimore Zone, two providers from the MLARP and two providers from the Janet L. Hoffman Loan Assistance Repayment Program (Table 7). DHMH has increased marketing efforts for loan repayment programs. The increased marketing has brought in more applications for loan repayment but very few applications from practitioners in the HEZs.

Table 6. Providers Identified and who Applied for Loan Repayment, and Total Loan Repayment Awarded

	Jul-13 Year 1	Jan-14 Year 1	Jul-14 Year 2	Jan-15 Year 2	Total
Total Identified Providers from HEZs (meaning they were identified as having loans and potentially eligible for the program)	1	9	1		11
Total number of providers that applied for loan repayment	1	5	1		7
Total Awarded Loan Repayment	1	2	1		4

Table 7. Loan Repayment Awardees by Program

Loan Repayment Awardees Per Cycle					
Program	Jul-13 Year 1	Jan-14 Year 1	Jul-14 Year 2	Jan-15 Year 2	Total
State Loan Repayment Program/Maryland Loan Repayment Program – Physicians only State Loan Repayment Program (federal dollars) MLARP (state dollars from the BOP)	1	0	1		2
Janet L. Hoffman – NP, RN, PA, LCSW	0	2	0		2
Total	1	2	1		4

Tax Credits

Two types of tax credits are offered as incentives by the Act: hiring tax credits and income tax credits. The tax credits can be applied to practitioner income earned or new hires in the Zones between January 1, 2013 and June 30, 2017. To date, all tax credit materials for both of types of tax incentives have been developed, however only the Health Care Practitioner Income Tax credit is available at this time. The Employer Hiring Tax Credit will be made available in January 2015.

The Health Care Practitioner Income tax credit was launched in April 2014. Providers who worked in the Zone in 2013 have been utilizing this tax credit. Five practitioners, all from the West Baltimore HEZ, have received a tax credit from the Health Care Practitioner Income Tax Credit, totaling $26,205, since the launch of the Health Care Practitioner Income Tax credits in April 2014. The Zones requested a total of $264,145 in tax credits for Year 1 and $228,290 for Year 2.

The eligibility criteria for the Employer Hiring Tax Credit was amended by the Maryland General Assembly during the 2014 session to clarify that both for-profit and non-profit entities are eligible to apply for this refundable tax credit. Pursuant to this action by the Maryland General Assembly, DHMH has promulgated regulations which are scheduled to take effect in late December 2014. The Employer Hiring Tax Credit will be made available in January 2015. This delay will have minimal impact on the HEZs, as they must have an employee working in the Zone for at least 12 months before they can claim the hiring tax credit. A letter of support is required by the HEZ for all health care practitioners or entities that are applying for a tax credit. This letter of support was added to ensure that the practitioners or entities applying for tax credits are directly supporting the HEZ effort.

In utilizing the available State programs as a mechanism for recruitment incentives, several barriers have been identified which may be affecting the utilization of loan repayment programs. The statutory guidelines for MLARP may be too restrictive to accommodate all providers who

are interested in loan repayment through the HEZs. Barriers identified included the number of hours the provider is required to work per week and their specific work location (i.e. inpatient vs. outpatient). Barriers to the State funded program, the Janet L. Hoffman Loan Assistance Repayment Program, include a maximum salary cap, and a requirement that the provider must have graduated from a State (Maryland) institution to be eligible. DHMH is working closely with MHEC to identify possible solutions to these barriers that will make the programs more accessible to the HEZs. One strategy employed by two of the five Zones was to request the use of recruitment incentives in the form of hiring bonuses for HEZ practitioners who could not benefit from, but otherwise qualified for, the HEZ hiring incentives.

B. Impact on Disparities, Health Outcomes, Admissions, Readmissions and Costs

The ultimate goals of the HEZ program are to improve health outcomes within the HEZs generally, to improve health outcomes in racial and ethnic minority populations within the HEZs in particular, and thereby contribute to reductions in racial/ethnic and geographic health disparities in Maryland. As was previously described, important outcome measures by which to assess this improvement, explicitly mentioned in the legislation, are hospital admission rates, readmission rates, and hospital costs. The hospital admission data has about a nine month lag time between the end of a calendar quarter and the availability of the data. As a result, data on hospital admission rates that reflect any efforts beyond Zone recruitment and capacity-building in Year 1 are still pending.

Baseline trends in health outcomes at the Zone level and across the State in the years leading up to the HEZ Initiative are important to consider, however in order to understand the HEZ Initiative's impact on health care outcomes and costs. The Agency for Healthcare Research and Quality's (AHRQ's) Prevention Quality Indicators (PQI) overall composite measure and chronic conditions composite measure (Figure 3, Appendix B, and Figure 4, Appendix B, respectively), which provide hospitalization data for individuals ages 18 and older, indicate that there were downward trends in hospitalization rates overall and for chronic health conditions across Maryland and all five Zones from 2009 - 2013. While rates of hospital readmissions increased slightly in Maryland between 2012 and 2013 (readmissions data are not available prior to 2012), all five Zones experienced a decrease in hospital readmissions over that same time period (Figure 5, Appendix B).

All cause ED visit rates increased slightly in Maryland overall in the years leading up to the Zone Initiative (2009 – 2013) and increased in four of the five Zones (Figure 6, Appendix B). All cause ED visit rates among Blacks decreased slightly in Maryland overall over those same years but increased in all five Zones (Figure 7, Appendix B). All cause ED visit rates among Whites (Figure 8, Appendix B) decreased over the same time period in Maryland overall and in the Anne Arundel, Prince George's and St. Mary's County Zones, but increased in the Caroline/Dorchester and West Baltimore Zones.

These trends are not attributable to the HEZ Initiative as 2013 was the first year and was focused on recruitment and capacity building, but they are important to consider in interpreting future findings relative to the HEZ Initiative. For example, a challenge will be to determine the

proportion of any future reductions in hospital admissions that are attributable to the HEZ Initiative because they were trending downward prior to the HEZ Initiative.

V. Program Guidance and Accomplishments

A. Technical Assistance Available to All Zones

The State HEZ Team, supported by a 0.9 FTE Health Policy Advisor, who was hired in January 2014, has been focused on developing and implementing the State's HEZ Technical Assistance Plan. This plan outlines TA needs, strategies and tasks for implementation by the State Team with the Zones. TA needs have evolved with the program and thus the domains of TA have also evolved and now include cultural competency; utilization of HEZ incentives; accessing health data; program performance and measurement; Zone strategic planning; promotion and marketing of Zone programs and services; development and implementation of CHW and care coordination programs; chronic disease management; behavioral health; and sustaining HEZ efforts by engaging physicians, hospitals, and payers. In Year 1 the TA was focused on recruitment and training to build capacity in the Zones. In Year 2, the focus of the TA is on filling newly added capacity, marketing, additional training, program development, and strategic planning to ensure the Zones' efforts are cohesive and sufficiently focused on the legislatively mandated outcomes.

TA is provided to the Zones through phone calls, site visits, conferences and all-Zone meetings with the Zones, State HEZ Team and other experts and stakeholders. DHMH and UM SOM held a conference on May 19, entitled "Maryland Health Enterprise Zones: Using Incentives to Drive Local Progress." This event, which was supported with a grant from the Robert Wood Johnson Foundation, brought together more than 200 local, state and national stakeholders to collaborate on ways to ensure health equity and improved health care for all Marylanders.

The conference opened with keynote presentations by respected thought leaders in health care including, Jeffrey Brenner, MD, Executive Director of New Jersey's Camden Coalition of Healthcare Providers; Robert Greenbaum, PhD, Associate Director at The Ohio State University's Center for Urban and Regional Analysis; and Gerard Clancy, MD, President of the University of Oklahoma, Tulsa. Dr. Brenner focused on the value of data as a key tool in improving health and reducing costs. Dr. Greenbaum provided strategic insights on addressing health disparities and discussed the importance of evaluation and long-term analysis of key data. Dr. Clancy offered real-life applications by highlighting the accomplishments of Tulsa's team-based model for health care and education built on the use of academic medicine to improve the health of individuals and communities in Oklahoma.

Panelists with diverse expertise in economic and social enterprise initiatives shared their experiences and provided guidance on key considerations for promoting health equity. Interactive panel and audience discussions addressed the challenges and opportunities of HEZs and provided insights into ongoing efforts to address health disparities.

Data assessment site visits were conducted with each Zone in late 2013 and Data Team site visits were conducted in the spring of 2014. "End of Year 1" site visits were conducted by the State

HEZ Team with all Zones in summer 2014 in order to assess progress, provide TA, and identify TA needs.

The State HEZ Team hosted its first All-Zone Meeting on December 3, 2014. These All-Zone Meetings will continue at least semi-annually throughout the remainder of the grant period and will serve as the primary method for providing TA to the Zones. The goals of this meeting included: renewing the focus on resources/strategies and expected outcomes specified in the Minority Health Improvement and Disparities Reduction Act of 2012; increasing knowledge about how the HEZs align with other State programs and priorities; increasing grantee capacity to maintain and sustain work toward HEZ goals and objectives by obtaining resources and tools from fellow HEZs, the State TA team, and subject matter experts; expanding and enhancing knowledge, skills, and abilities of targeted and sustainable strategies and practices that will help strengthen services and outcomes; communicating strategies and lessons learned across Zones; and celebrating the HEZ Initiative accomplishments and opportunities for success. Presentations included:

- Defining HEZ Success
- Aligning Goals, Objectives and Strategies with Other State Initiatives
- The PGCHEZ Care Coordination Program
- Accessing High Utilizer Data through CRISP
- Using HEZ Tax and Loan Repayment Incentives to Achieve the Zones' Goals
- Developing Logic Models: Fine Tuning the HEZ Model to Local Zones
- HEZ External Evaluation Update
- HEZ Reporting

B. Cultural Competency Standards

In 2013, OMHHD used assessment criteria recommended by the Cultural and Linguistic Competency Workgroup of the Maryland Health Disparities Collaborative to develop a cultural and linguistic competency assessment tool for organizations requesting tax incentives as part of the HEZ program. The HEZ tax incentive program has reporting requirements for organizations which include an assessment of cultural competency and submission of the results to DHMH. The tool, OMHHD's Cultural Competency Assessment Survey, has been made available online to the HEZs.

Additional cultural competency reporting requirements were developed by OMHHD for health care providers seeking loan repayments or tax incentives through the HEZ program. Each provider is required to complete six continuing education credits (CMEs) in cultural competency within 12 months of the initial application, with proof of completion to be sent to DHMH. OMHHD has provided a list of applicable online cultural competency training courses for providers, but any course in cultural competency which provides an adequate number of CMEs is acceptable. All providers who have applied for the health care practitioner income tax credit have completed six CMEs in cultural competency. One of the two recipients of the Maryland Loan Assistance Repayment Program has completed 6 CMEs in cultural competency and the other provider has until June 30th to complete cultural competency training.

In 2014, OMHHD held cultural competency training sessions at all of the Zones which included meetings with HEZ leadership as well as full training sessions for on-site staff (see Table 8, Appendix C). Thirty-six individuals identified as leadership attended cultural competency orientations and full trainings were held for 240 HEZ staff members. Additional training sessions were also made available for provider groups working within the HEZs, and OMHHD trained an additional 179 providers and front line staff at these organizations. At the start and completion of each session, attendees were asked to complete a questionnaire. The questionnaire measured attendees' knowledge of and opinions on health disparities in their community, the overall importance of cultural competency for an organization, the importance of cultural competency in their work, and their confidence in being able to address some of their own biases and pre-conceived notions about race and ethnicity. Participants at the sessions showed an increase in confidence and knowledge.

OMHHD's goal is to re-visit the HEZ sites to assess whether staff have adopted more culturally competent behavior, to hold additional training sessions for new staff, and refresher training sessions for those who attended previous sessions.

C. Monitoring Performance and Assessing Impact

The five HEZs have been monitored through site visits, quarterly reports that include process and outcome metrics, and semi-annual program narratives describing Zone progress, challenges, and strategies for success. A formal review of each quarterly report submission has been provided to each Zone through a Report Follow-Up Memo and subsequent phone conference to resolve any outstanding reporting issues.

An HEZ Data Team was established in July 2014 to support the Zones in their data collection and reporting efforts. This group met monthly and reviewed and provided feedback and guidance to Zones regarding data collection and storage, metrics, data reports, and data analysis. An "end of Year 1 audit" and site visits to all Zones were conducted during spring/summer 2014 and produced significant revisions to the Zones' reporting templates and metrics in an effort to capture more relevant and complete data.

The Act requires DHMH and the Commission to submit an annual report to the Governor and Maryland General Assembly that includes: (1) Number and types of incentives utilized in each HEZ; (2) Evidence of the impact of tax and loan repayment incentives in attracting practitioners to the HEZs; (3) Evidence of the impact of incentives offered in HEZs in reducing health disparities and improving health outcomes; and (4) Evidence of the progress in reducing health care costs and hospital admissions and readmissions in HEZs. These metrics are being collected through the Zones' quarterly reports to the State.

Data collection and reporting efforts in Year 1 of the initiative focused primarily on tracking capacity expansion in the Zones, and in Year 2 is focusing primarily on tracking the Zones' efforts to fill the new clinical and program capacity. The State HEZ Team is currently working with the HEZs to define service volume targets that are appropriate for the service type and clear reporting methods for those service volumes.

The State HEZ Team also reported monthly to the Governor's Office through the Governor's StateStat Program, and quarterly to the Maryland Health Quality and Cost Council.

Additionally, the State HEZ Team is working with the five HEZs to develop sustainability plans to support the activities once the four-year pilot program concludes. These strategies include exploring the means to identify reductions in hospital admission and readmission costs and redeploying the savings that are achieved to support long-term program sustainability.

There will be an independent evaluation of the HEZ Initiative, conducted by the Johns Hopkins Bloomberg School of Public Health's Center for Health Disparities Solutions. The evaluation team is working to finalize their evaluation study design and methods, which are due to the State in January 2015. The evaluation will include an assessment of the overall impact of HEZ Initiative in terms of its three policy goals: (1) Reducing health disparities among racial and ethnic groups and between geographic areas; (2) Improving health care access and health outcomes in underserved communities; and (3) Reducing health care costs and hospital admissions/readmissions by providing a variety of incentives. It will also include an assessment of the performance of the Zones towards their individual programmatic goals and the targeted health outcomes of each HEZ program, and resident and health provider experience and participation in the Zones.

Finally, an economic impact assessment of the five Zones will be conducted as part of the evaluation along the following criteria: (1) Cost savings achieved by the Zones in terms of reduced hospital expenditures; (2) Number and type of incentive programs used by the Zones and their impact on hiring and service expansion; (3) Number of direct and indirect jobs added by the Zones; and (4) Additional economic activity generated by the Zones. The evaluation team's first report of findings is due in May 2015.

D. HEZ Presentations and Publications

The HEZ Initiative was featured by the Association of State and Territorial Health Officials (ASTHO) in their Webinar Series in June 2014. The presentation was entitled, "Maryland's Health Enterprise Zones: Policy and Administrative Initiatives to Address Health Disparities and Advance Health Equity," and featured Dr. Carlessia Hussein, former Director of the DHMH Office of Minority Health and Health Disparities; Michelle Spencer, HEZ Director at DHMH; and Mark Luckner, HEZ Director at CHRC.

Michelle Spencer also gave a presentation on the HEZ Initiative at the National Association of Housing and Redevelopment Officials Conference in October 2014. Her presentation was entitled, "Health Equity and Public Housing: A Moral and Economic Imperative."

Dr. Maura Dwyer, Senior Policy Advisor at CHRC, and Dr. David Mann, Epidemiologist in the OMHHD, gave a presentation to the Johns Hopkins Bloomberg School of Public Health's Hopkins Center for Health Disparities Seminar Series in November, which was entitled "The Health Enterprise Zones Initiative: Addressing Maryland's Health Disparities."

Finally, ASTHO published a "State Story" highlighting the HEZ Initiative in December 2014, which can be found at http://www.astho.org/health-equity/md-health-enterprise-zone-story/.

VI. Year Three Plans

The Zones will be submitting updated work plans, budgets and evaluation plans in March 2015 for Year 3 of the Initiative (April 2015 – March 2016) as programs, resources and needs in the Zone communities have evolved. The State HEZ Team, in partnership with the HEZs, will ensure that all Zones' work plans, budgets and evaluation activities are focused on the legislatively mandated outcomes; that operations are modified based on lessons learned; and ongoing oversight focuses on achievement of the stated objectives for each HEZ and the Initiative overall. All Zones will develop a program logic model, outlining the program inputs, activities, outputs and outcomes in their Year 3 work plans.

The State HEZ Team will be working closely with the Zones and the evaluation team to finalize program impact metrics within each HEZ and across HEZs where disease reduction and interventions are similar. The HEZ Team will also continue working collaboratively with each of the Zones to encourage their collection of individual clinical outcome metrics, which will be based on national standards.

Another 'HEZ Summit' is planned for the spring of 2015 for the purpose of bringing national experts to Maryland who can share their knowledge and experience implementing enterprise movements in communities with poverty. At this Conference, the Maryland HEZs will have an opportunity to share their experiences and increase collaboration throughout the State.

All-Zone meetings will continue between the Zones and the State HEZ Team. The next meeting, planned for March 2015, will focus on reporting and evaluation. The HEZ Team will continue to implement its HEZ Technical Assistance Plan, which in Year 3 will focus on the quality of the capacity added in these communities due to the HEZ Initiative. Additional resources will be provided as needed in the form of federal grants, data analyst experts, training and other support to strengthen each HEZ's capacity to revitalize public health with community partnerships at the local level.

Appendix A
Zone Data Tables

Table 1. HEZ Metrics for Annapolis					
	Oct - Dec 2013	Jan - Mar 2014	April - June 2014	July - September 2014	
Goal: Increase or Maintain Service Capacity	(cumulative total)	(cumulative total)	(cumulative total)	(cumulative total)	
Number of Jobs (in FTE) Added*					
Number of Licensed Independent Practitioners Added*	1 FTE	1 FTE	1 FTE	1 FTE	
Number of Other Licensed or Certified Health Care Practioners Added*	1 FTE	1 FTE	1 FTE	1 FTE	
Number of Qualified Employees Added* (CHWs and Interpreters)	0 FTE	0 FTE	0 FTE	0 FTE	
Number of Other Support Staff Added*	2 FTE	2 FTE	2 FTE	2 FTE	
Total	4 FTE	4 FTE	4 FTE	4 FTE	
***Added = new or retained positions**					
Goal: Reach Patients with Services	**Year 1 Quarter 3 (not cumulative)**	**Year 1 Quarter 4 (not cumulative)**	**Year 2 Quarter 1 (not cumulative)**	**Year 2 Quarter 2 (not cumulative)**	**Totals**
Number of HEZ (unduplicated) patients seen by clinic/practice					
Morris Blum Clinic, Morris Blum residents	45	36	39	31	151
Morris Blum Clinic, reside outside Morris Blum	252	218	275	322	1,067
Number of 911 calls from Morris Blum residents	48	57	54	53	212
Number of ED visits among Morris Blum residents	47	49	38	51	185
Numbe of patients with diabetes who received primary care services	33	37	82	91	243
Total Number of Patient Visits throughout HEZ	433	482	535	492	1,942
Total Number of Unduplicated Patients throughout HEZ	297	254	314	353	1,218
Educational/wellness/self-management interventions					
Number of participants in Care Coordination Program	N/A	N/A	8	5	13
Number of diabetic screening participants	N/A	229	220	262	711
Number of blood pressure screening participants	N/A	N/A	17	108	125
Number of participants in diabetes self-management program	N/A	17	15	0	32
Number of participants in healthy lifestyle activities	N/A	N/A	81	140	221
Number of participants in community health events	30	107	30	254	421
Number of participants in smoking cessation workshops	N/A	N/A	7	50	57
	CY 2012		**CY 2013**		
GOAL: Health Improvement*	**Annapolis HEZ**	**Maryland**	**Annapolis HEZ**	**Maryland**	
HSCRC hospital admissions per 1,000 residents	138.5	110.1	122.5	105	
HSCRC hospital readmissions rate	13.6%	13.3%	12.3%	13.8%	
**HSCRC Hospital Data includes Maryland residents hospitalized in Maryland only*					
HEZ Practitioners: Includes *Licensed Independent Practitioners* (physician, dentist, nurse practitioner, physician assistant, nurse midwife) and *Other Licensed or Certified Health Care Practitioner* (RN, social worker, certified medical assistant, licensed practical nurse, dental hygienist, certified addictions counselor) who provide primary care, dental or behavioral health services in the Zone. These practitioners are newly providing services in the Zone due to the Zone Initiative and may or may not receive HEZ funding.					

Table 2. HEZ State Stat Metrics for Caroline/Dorchester					
	Oct - Dec 2013	Jan - Mar 2014	April - June 2014	July - September 2014	
Goal: Increase or Maintain Service Capacity	(cumulative total)	(cumulative total)	(cumulative total)	Year 2 Quarter 2 (cumulative total)	
Number of Jobs (in FTE) Added*					
Number of Licensed Independent Practitioners Added*	0.6 FTE	3.6 FTE	3.6 FTE	3.6 FTE	
Number of Other Licensed or Certified Health Care Practioners Added*	5.8 FTE	6.8 FTE	7.2 FTE	6.93 FTE	
Number of Qualified Employees (CHWs and Interpreters) Added*	2.95 FTE	2.95 FTE	2.45 FTE	3.45 FTE	
Number of Other Support Staff Added*	7.07 FTE	11.07 FTE	9.93 FTE	9.13 FTE	
Total	16.42 FTE	24.42 FTE	23.18 FTE	23.11 FTE	
***Added = new or retained positions**					
Goal: Reach Patients with Services	Year 1 Quarter 3 (not cumulative)	Year 1 Quarter 4 (not cumulative)	Year 2 Quarter 1 (not cumulative)	Year 2 Quarter 2 (not cumulative total)	Totals
Number of HEZ (unduplicated) patients seen by clinic/practice					
Chesapeake Women's Health primary care	N/A	N/A	N/A	TBD	
Dorchester County School Based Wellness (somatic health)	90	43	91	140	364
Dorchester County School Based Wellness (mental health)	N/A	N/A	28	13	41
Caroline County School Based Wellness (mental health)	0	3	18	21	42
Mobile Crisis Team	40	42	47	58	187
Median response time to calls for Mobile Crisis Team	16 min	10 min	13 min	11 min	
Total Number of Patient Visits throughout HEZ	1,050	1,637	1,895	1,606	6,188
Total Number of Unduplicated Patients throughout HEZ	240	351	395	443	1,429
Number of individuals who receive education from CHOWs	13	32	133	172	350
Number of individuals who were screened by CHOWs	N/A	N/A	72	115	187
Educational/wellness/self-management interventions					
Number of participants in Care Coordination Program	14	4	22	22	62
Number of participants in Maryland Healthy Weighs	10	13	45	42	110
Number of participants in Dri-Dock Peer Recovery	9	10	46	48	113
Number of participants in Chesapeake Voyagers Peer Recovery	N/A	N/A	29	32	61
	CY 2012		CY 2013		
GOAL: Health Improvement*	C/D HEZ	Maryland	C/D HEZ	Maryland	
HSCRC hospital admissions per 1,000 residents	143.0	110.1	134.8	105	
HSCRC hospital readmissions rate	12.2%	13.3%	12.0%	13.8%	

**HSCRC Hospital Data includes Maryland residents hospitalized in Maryland only*

HEZ Practitioners: Includes *Licensed Independent Practitioners* (physician, dentist, nurse practitioner, physician assistant, nurse midwife) and *Other Licensed or Certified Health Care Practitioner* (RN, social worker, certified medical assistant, licensed practical nurse, dental hygienist, certified addictions counselor) who provide primary care, dental or behavioral health services in the Zone. These practitioners are newly providing services in the Zone due to the Zone Initiative and may or may not receive HEZ funding.

Table 3. HEZ Metrics for Prince George's County					
	Oct - Dec 2013	Jan - Mar 2014	April - June 2014	July - September 2014	
Goal: Increase or Maintain Service Capacity	(cumulative total)	(cumulative total)	(cumulative total)	(cumulative total)	
Number of Jobs (in FTE) Added*					
Number of Licensed Independent Practitioners Added*	1 FTE	2.6 FTE	2.6 FTE	2.6 FTE	
Number of Other Licensed or Certified Health Care Practioners Added*	0.5 FTE	1.5 FTE	1.5 FTE	2 FTE	
Number of Qualified Employees Added* (CHWs and Interpreters)	3 FTE	3 FTE	5 FTE	5 FTE	
Number of Other Support Staff Added*	1.6 FTE	1.5 FTE	1.5 FTE	2.5 FTE	
Total	6.1 FTE	8.6 FTE	10.6 FTE	12.1 FTE	
***Added = new or retained positions**					
Goal: Reach Patients with Services	**Year 1 Quarter 3 (not cumulative)**	**Year 1 Quarter 4 (not cumulative)**	**Year 2 Quarter 1 (not cumulative)**	**Year 2 Quarter 2 (not cumulative)**	**Totals**
Number of HEZ (unduplicated) patients seen by clinic/practice					
Global Vision		15	33	72	120
Greater Baden Medical Services		910	3,378	3,392	7,680
Gerald Family Care	scheduled to open November 2014				
Total Number of Patient Visits throughout HEZ	8,275	3,251	4,867	5,159	21,552
Total Number of Unduplicated Patients throughout HEZ	N/A	925	3,411	3,464	7,800
Educational/wellness/self-management interventions					
Number of participants in CHW Care Coordination Program	N/A	N/A	53	67	120
Number of patient encounters with Care Coordinators	N/A	N/A	1,908	2,412	4,320
Number of Wellness Plans created for Global Vision patients	N/A	N/A	2	6	8
Number of Wellness Plans created for Greater Baden patients	N/A	N/A	9	17	26
	CY 2012		**CY 2013**		
GOAL: Health Improvement*	**PGC HEZ**	**Maryland**	**PGC HEZ**	**Maryland**	
HSCRC hospital admissions per 1,000 residents	99.3	110.1	91.9	105	
HSCRC hospital readmissions rate	14.4%	13.3%	14.3%	13.8%	
**HSCRC Hospital Data includes Maryland residents hospitalized in Maryland only*					
HEZ Practitioners: Includes *Licensed Independent Practitioners* (physician, dentist, nurse practitioner, physician assistant, nurse midwife) and *Other Licensed or Certified Health Care Practitioner* (RN, social worker, certified medical assistant, licensed practical nurse, dental hygienist, certified addictions counselor) who provide primary care, dental or behavioral health services in the Zone. These practitioners are newly providing services in the Zone due to the Zone Initiative and may or may not receive HEZ funding.					

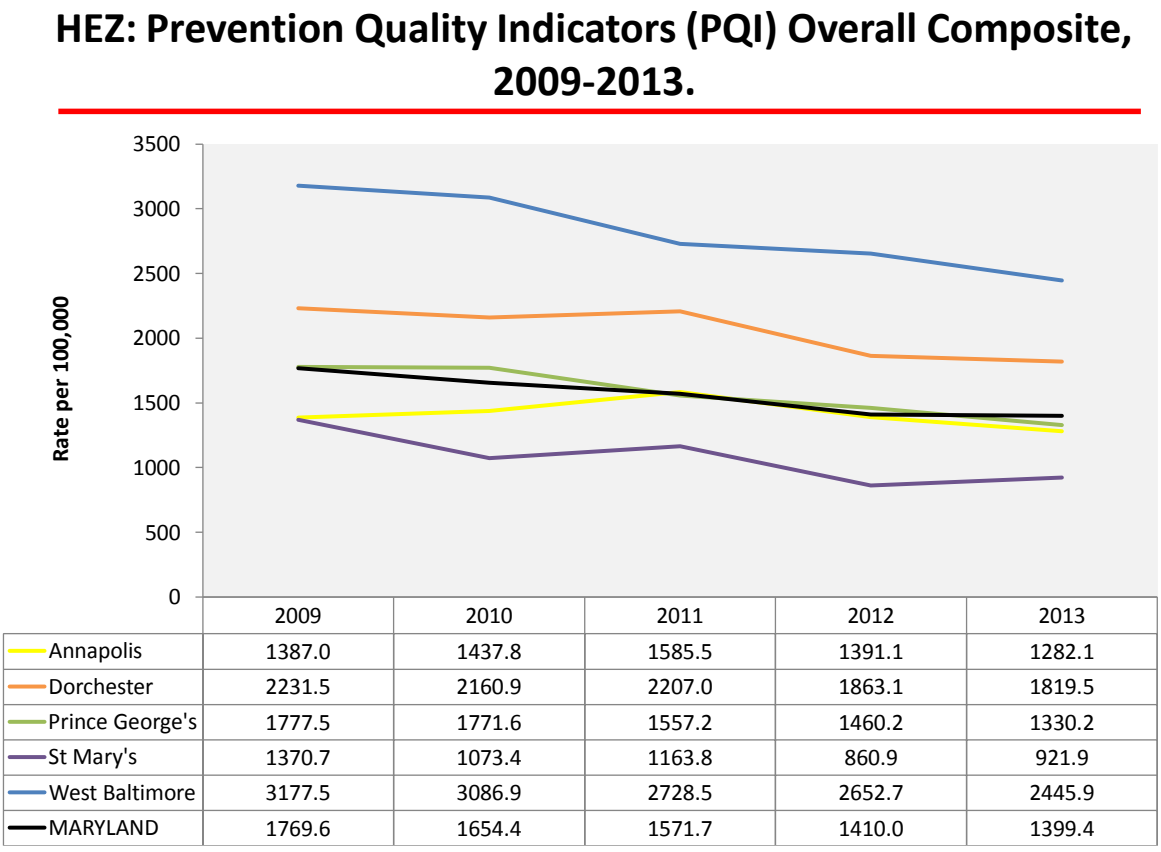
Table 4. HEZ State Stat Metrics for Greater Lexington Park					
	Oct - Dec 2013	Jan - Mar 2014	April - June 2014	July - September 2014	
Goal: Increase or Maintain Service Capacity	(cumulative total)	(cumulative total)	(cumulative total)	Year 2 Quarter 2 (cumulative total)	
Number of Jobs (in FTE) Added*					
Number of Licensed Independent Practitioners Added*	0.3 FTE	0.8 FTE	0.3 FTE	0.3 FTE	
Number of Other Licensed or Certified Health Care Practioners Added*	4 FTE	4 FTE	4 FTE	4 FTE	
Number of Qualified Employees Added* (CHWs and Interpreters)	2 FTE	3 FTE	3 FTE	3 FTE	
Number of Other Support Staff Added*	4.2 FTE	4.7 FTE	4.7 FTE	4.7 FTE	
Total	10.5 FTE	12.5 FTE	12.0 FTE	12.0 FTE	
***Added = new or retained positions**					
Goal: Reach Patients with Services	Year 1 Quarter 3 (not cumulative)	Year 1 Quarter 4 (not cumulative)	Year 2 Quarter 1 (not cumulative)	(not cumulative total)	Totals
Number of HEZ (unduplicated) patients seen by clinic/practice					
Get Connected to Health Mobile Clinic (In Kind)	175	180	187	318	860
Walden Sierra Behavioral Health	421	185	301	188	1,095
MedStar primary care practice	opened September 2014				
Total Number of Patient Visits throughout HEZ	N/A	N/A	1,764	3,183	4,947
Total Number of Unduplicated Patients throughout HEZ	N/A	N/A	488	506	1,955
Number of CHW encounters	13	72	573	939	1,597
Educational/wellness/self-management interventions					
Number of patients working with Care Coordinators	77	87	83	116	363
Number of rides on HEZ Mobile Medical Route	0	387	788	2,171	3,346
	CY 2012		CY 2013		
GOAL: Health Improvement	**GLP HEZ**	**Maryland**	**GLP HEZ**	**Maryland**	
HSCRC hospital admissions per 1,000 residents	93.8	110.1	88.3	105	
HSCRC hospital readmissions rate	9.6%	13.3%	9.0%	13.8%	
**HSCRC Hospital Data includes Maryland residents hospitalized in Maryland only*					
HEZ Practitioners: Includes *Licensed Independent Practitioners* (physician, dentist, nurse practitioner, physician assistant, nurse midwife) and *Other Licensed or Certified Health Care Practitioner* (RN, social worker, certified medical assistant, licensed practical nurse, dental hygienist, certified addictions counselor) who provide primary care, dental or behavioral health services in the Zone. These practitioners are newly providing services in the Zone due to the Zone Initiative and may or may not receive HEZ funding.					

Table 5. HEZ Metrics for West Baltimore					
	Oct - Dec 2013	Jan - Mar 2014	April - June 2014	July - September 2014	
Goal: Increase or Maintain Service Capacity	(cumulative total)	(cumulative total)	(cumulative total)	(cumulative total)	
Number of Jobs (in FTE) Added*					
Number of Licensed Independent Practitioners Added*	8 FTE	9 FTE	9 FTE	13 FTE	
Number of Other Licensed or Certified Health Care Practioners Added*	4 FTE	4 FTE	3 FTE	3 FTE	
Number of Qualified Employees (CHWs and Interpreters) Added*	11.5 FTE	11.5 FTE	11.5 FTE	11.5 FTE	
Number of Other Support Staff Added*	5.5 FTE	5.5 FTE	5.5 FTE	5.5 FTE	
Total	26.0 FTE	30.0 FTE	29.0 FTE	33.0 FTE	
***Added = new or retained position**					
Goal: Reach Patients with Services	(not cumulative)	(not cumulative)	(not cumulative)	(not cumulative)	TOTAL
Number of HEZ (unduplicated) patients seen by clinic/practice					
UMMC University Care Edmondson Village	1,833	2,951	1,254	1,343	7,381
Bon Secours Family Health and Wellness Center	62	242	329	377	1,010
Baltimore Medical System at St. Agnes	615	1,066	916	833	3,430
Peoples at Washington Blvd	70	61	closed	closed	131
Total Health Care	1,405	14,266	5,106	4,783	25,560
Park West	25	120	116	115	376
Total Number of Patient Visits throughout HEZ	8,275	25,514	12,975	12,102	58,866
Total Number of Unduplicated Patients throughout HEZ	4,010	18,706	7,721	7,451	37,888
Number of individuals who connect with CHW	2,157	240	539	478	3,414
Educational/wellness/self-management interventions					
Number of participants in Stanford Disease Management Program	84	0	0	0	84
Number of participants in WB CARE Fitness Program	88	319	189	281	877
Number of participants in WB CARE Healthy Cooking Program	21	40	84	24	169
Number of participants in Passport to Health health and fitness rewards program	N/A	468	525	785	1,778
	CY 2012		CY 2013		
GOAL: Health Improvement*	West Baltimore	Maryland	West Baltimore	Maryland	
HSCRC hospital admissions per 1,000 residents	222.0	110.1	206.2	105	
HSCRC hospital readmissions rate	17.7%	13.3%	16.9%	13.8%	
**HSCRC Hospital Data includes Maryland residents hospitalized in Maryland only*					

HEZ Practitioners: Includes *Licensed Independent Practitioners* (physician, dentist, nurse practitioner, physician assistant, nurse midwife) and *Other Licensed or Certified Health Care Practitioner* (RN, social worker, certified medical assistant, licensed practical nurse, dental hygienist, certified addictions counselor) who provide primary care, dental or behavioral health services in the Zone. These practitioners are newly providing services in the Zone due to the Zone Initiative and may or may not receive HEZ funding.

Appendix B
Hospital Utilization Data, Maryland Overall and by Zone

Figure 3.



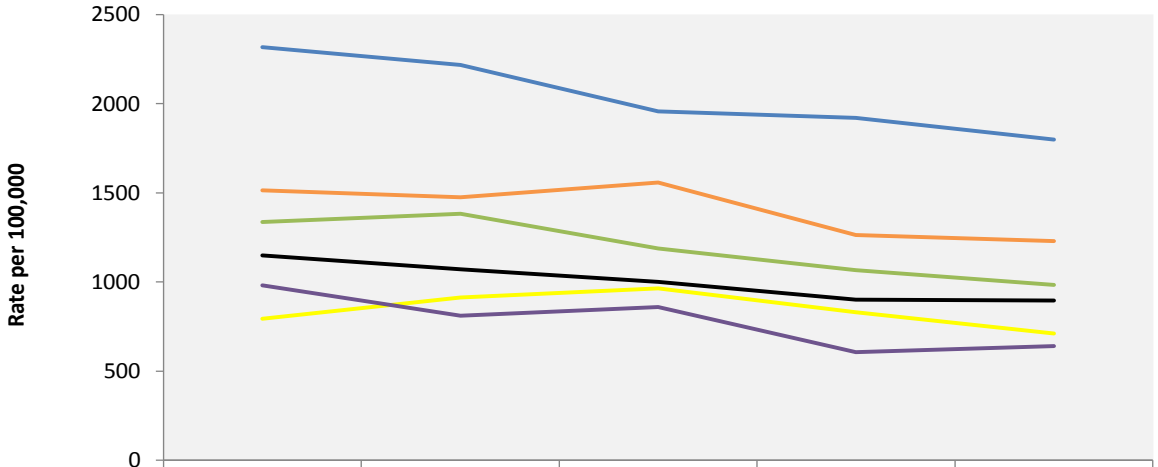
	2009	2010	2011	2012	2013
Annapolis	1387.0	1437.8	1585.5	1391.1	1282.1
Dorchester	2231.5	2160.9	2207.0	1863.1	1819.5
Prince George's	1777.5	1771.6	1557.2	1460.2	1330.2
St Mary's	1370.7	1073.4	1163.8	860.9	921.9
West Baltimore	3177.5	3086.9	2728.5	2652.7	2445.9
MARYLAND	1769.6	1654.4	1571.7	1410.0	1399.4

Source: HSCRC. AHRQ's Prevention Quality Indicators (PQI) overall composite per 100,000 population, ages 18 years and older.

The Agency for Healthcare Research and Quality's (AHRQ)'s Prevention Quality Indicators (PQI) overall composite includes hospitalizations, ages 18 and older, for one of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, angina without a cardiac procedure, dehydration, bacterial pneumonia, or urinary tract infection.

Figure 4.

HEZ: Prevention Quality Indicators (PQI) Chronic Composite, 2009-2013.



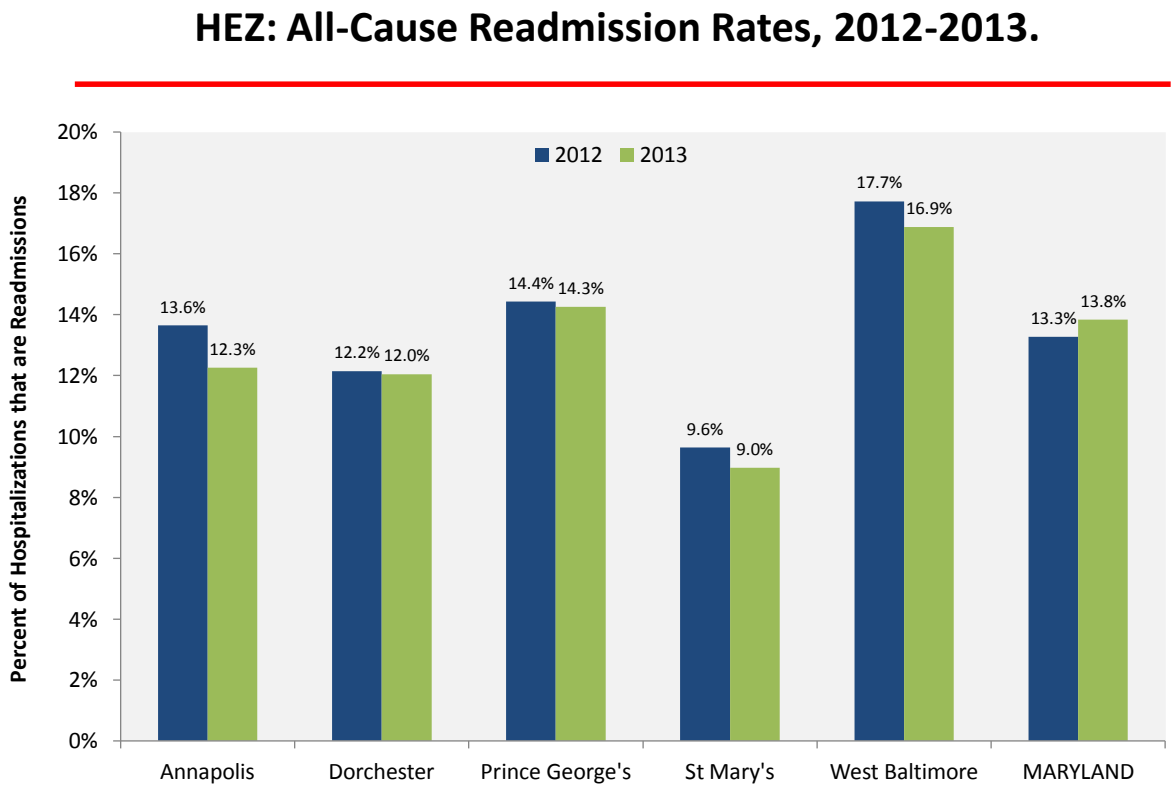
	2009	2010	2011	2012	2013
Annapolis	793.4	912.4	964.8	828.7	710.8
Dorchester	1513.3	1475.8	1557.4	1262.4	1228.8
Prince George's	1335.0	1381.5	1188.2	1066.6	984.2
St Mary's	979.5	810.5	858.4	605.3	639.8
West Baltimore	2316.8	2217.3	1955.5	1919.1	1797.7
MARYLAND	1148.0	1071.3	1000.7	899.3	896.4

Source: HSCRC. AHRQ's Prevention Quality Indicators (PQI) overall composite per 100,000 population, ages 18 years and older.

Source: HSCRC; no exclusions. (Numerator: number of hospitalizations; Denominator: HEZ population).

The Agency for Healthcare Research and Quality's (AHRQ)'s Prevention Quality Indicators (PQI) chronic composite includes hospitalizations, ages 18 and older, for one of the following conditions: diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, or angina without a cardiac procedure.

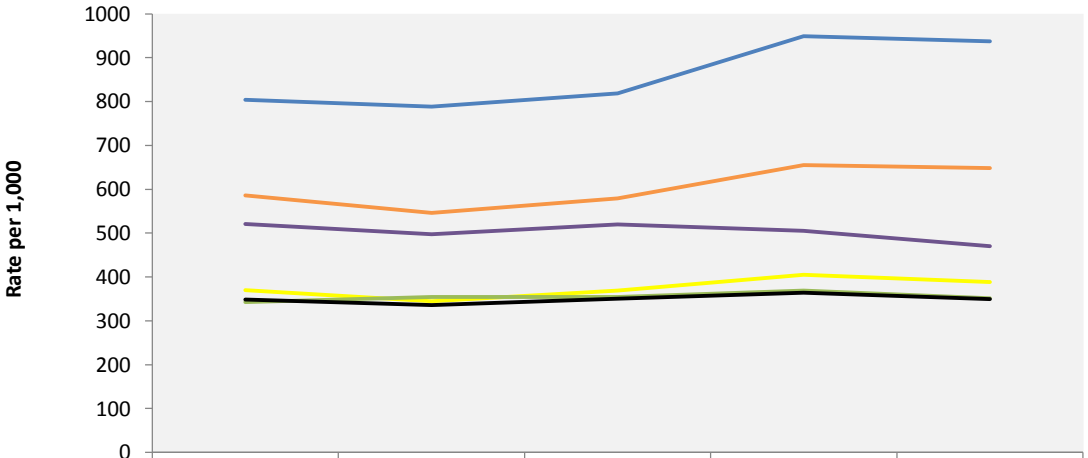
Figure 5.



Source: CRISP; Readmission of Maryland residents. Excludes readmissions occurring within one day of the previous hospital stay. 2013 readmission data is tentative. Numerator: Number of readmissions; Denominator: Number of hospitalizations that did not result in death.

Figure 6.

HEZ: All-Cause Emergency Department Visit Rates, 2009-2013.

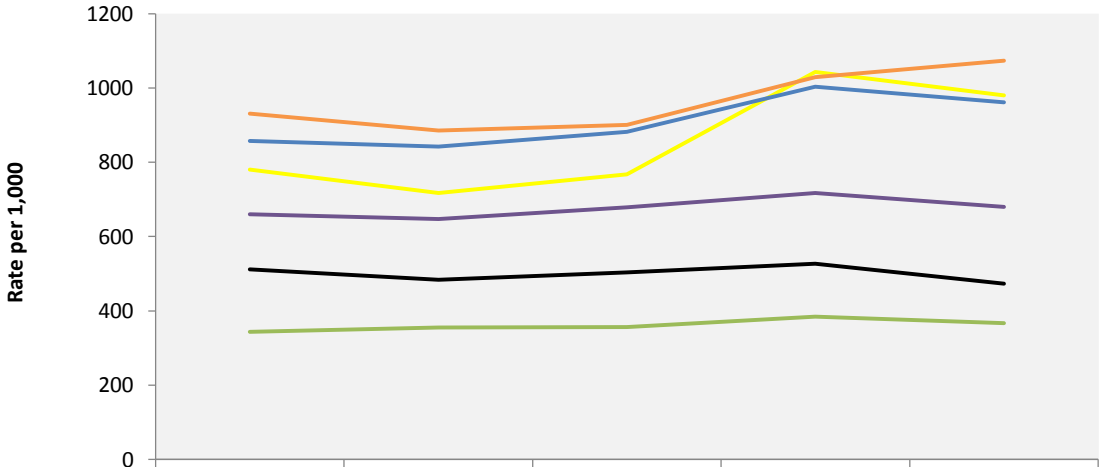


	2009	2010	2011	2012	2013
Annapolis	370.0	344.3	369.2	405.3	388.0
Dorchester	586.1	546.1	578.9	654.6	648.0
Prince George's	343.0	353.9	354.2	368.9	351.5
St Mary's	521.2	497.8	519.7	505.1	469.9
West Baltimore	803.9	788.1	818.6	948.7	937.7
MARYLAND	348.0	335.9	350.6	363.6	349.1

Source: HSCRC. Data are emergency department (ED) visits of Maryland residents. (Numerator: number of ED visits; Denominator: HEZ population.)

Figure 7.

HEZ: All-Cause Emergency Department Visit Rates for Race-Black or African American, 2009-2013.

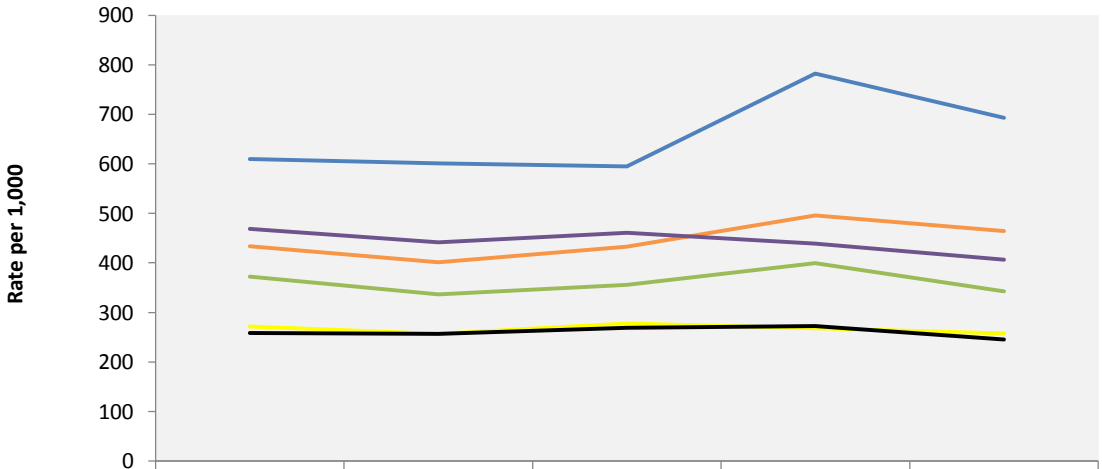


	2009	2010	2011	2012	2013
Annapolis	780.1	717.2	767.0	1042.9	979.4
Dorchester	930.4	885.2	900.2	1029.0	1073.8
Prince George's	343.5	355.2	356.5	384.7	367.3
St Mary's	660.4	647.0	679.2	717.5	679.6
West Baltimore	856.9	842.5	881.4	1003.1	961.4
MARYLAND	511.2	483.4	503.3	527.1	473.0

Source: HSCRC. Data are emergency department (ED) visits of Maryland residents.

Figure 8.

HEZ: All-Cause Emergency Department Visit Rates for Race-White, 2009-2013.



	2009	2010	2011	2012	2013
Annapolis	271.4	256.9	277.4	268.0	257.2
Dorchester	434.0	401.5	432.8	495.5	464.6
Prince George's	372.2	336.7	355.4	399.5	342.2
St Mary's	468.3	441.3	461.1	438.9	406.1
West Baltimore	609.9	600.7	594.9	782.2	693.2
MARYLAND	258.5	256.7	269.0	272.8	245.1

Source: HSCRC. Data are emergency department (ED) visits of Maryland residents.

Appendix C

Table 8. OMHHD's HEZ Cultural Competency Training

HEZ (Practice)	Date	# Leadership	# Staff
Anne Arundel County	2/11/2014	7	14
Dorchester-Caroline Counties	3/11/14	5	8
West Baltimore	4/14/14	14	-
West Baltimore	5/8/14	-	8
St. Mary's County	7/22/14	4	18
Prince George's County	7/29/14	5	14
Prince George's County (Global Health)	9/5/14	1	4
Prince George's County (Greater Baden Medical Systems)	9/26/14	-	147
Prince George's County (Gerald Family Care)	10/8/14	-	27