STATE OF MARYLAND
Community Health Resources Commission
45 Calvert Street, Room 336 • Annapolis, Maryland 21401

Larry Hogan, Governor – Boyd Rutherford, Lt. Governor
Allan Anderson, M.D., Chair – Mark Luckner, Executive Director

March 6, 2019

The Honorable Larry Hogan
State House
100 State Circle
Annapolis, Maryland 21401-1925

The Honorable Thomas V. Miller
Senate Office of the President
State House, H-107
Annapolis, Maryland 21401-1991

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

RE: Maryland Community Health Resources Commission Annual Report

Dear Governor Hogan, President Miller, and Speaker Busch:

In accordance with the 2005 House Bill 627, the Maryland Community Health Resources Commission (the Commission) is pleased to submit the 2019 annual report on the Commission's operations and activities.

Since 2006, the Commission has awarded 210 grants totaling $64.1 million and serving more than 468,000 low-income Marylanders with complex health and social service needs. The $64.1 million in grants made by the Commission have been leveraged with an additional $23.3 million, the bulk of which ($19.5 million) comes from private and local sources. These programs have an impact on many levels, including: improving children's access to health and social services; expanding behavioral health services in the community and addressing the heroin and opioid epidemic; building the capacity of small community-based organizations; and lowering hospital costs to support Maryland's unique delivery system transformation efforts.

Thank you for your consideration of this information. If you need additional information, please contact me at mark.luckner@maryland.gov or 410.260.7046.

Sincerely,

Mark Luckner
Executive Director
Maryland Community Health Resources Commission

cc: Robert R. Neall, Secretary of Health
Allan Anderson, MD, Chair, Community Health Resources Commission
Sarah Albert, Department of Legislative Services

MARYLAND Department of Health

MCHRC
MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

# MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

# ANNUAL REPORT

# HEALTH GENERAL §19-2107

# FEBRUARY 2019

# MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

FY 2019 ANNUAL REPORT

FEBRUARY 8, 2019

**TABLE OF CONTENTS**

## I. Executive Summary

This report highlights the main activities and deliverables provided by the Maryland Community Health Resources Commission for 2017-2018. The Maryland Community Health Resources Commission (CHRC) was created by the Maryland General Assembly in 2005 with a mission to expand access to health care services in underserved communities in Maryland. The CHRC is an independent commission within the Maryland Department of Health, and its 11 members are appointed by the Governor. Since its inception, the CHRC has expanded access to health services in Maryland's underserved communities by awarding 210 grants totaling $64.1 million supporting programs in every jurisdiction of the state. These projects have collectively served more than 468,000 Marylanders who receive quality health care in health centers, clinics, and neighborhood locations. The initial funding provided by the CHRC has also enabled its grantees to leverage $23.5 million in **additional** federal and private/non-profit resources, the bulk of which is private or local ($19.5 million) and which has been used in communities to provide even more needed health care. The CHRC works with grantees to assist in post-grant sustainability, and more than 75% of the grants awarded in FY 2014 were sustained for a minimum of one year after grant funds had been expended.

CHRC grants have led to measureable improvements in health outcomes, generated cost savings by reducing avoidable hospitalizations, and grantees have leveraged their grant funds to receive significant private funding to sustain their community-based health programs for vulnerable populations. In 2016, the Commission contracted with The Hilltop Institute at the University of Maryland, Baltimore County to conduct program evaluations of four CHRC grants awarded that year to determine the extent to which projects contributed to a more cost-effective service delivery and improved health outcomes for participating Medicaid beneficiaries. The analysis by Hilltop confirmed that the four programs evaluated in fact reached their objective of reducing avoidable hospitalization and achieved linkages to community-based care. Three of the grants supported programs to provide behavioral health services, and Hilltop's assessment indicated that all three programs demonstrated some success in getting participating Medicaid beneficiaries into treatment and effecting a shift from hospital-based care to outpatient services and pharmacy treatment. For example, in one program, 88.3% of participants continued to be engaged in alcohol or other drug dependence treatment for at least 30 days after discharge from the program, and hospital-related costs (*e.g.*, hospital inpatient, ED, and other outpatient services) declined as a share of total Medicaid costs, from 63.2% during the baseline period to 45.0% during the post-intervention period. The fourth program conducted outreach to vulnerable pregnant women to connect them with obstetric and pediatric care. The ultimate goal was to improve birth outcomes and the health of the babies. The program succeeded in connecting vulnerable pregnant Medicaid women to the health care system, and findings indicated that birth outcomes for this group were similar to those for the overall Medicaid population.

The CHRC looks to support projects that are innovative, sustainable, and replicable. Recent Calls For Proposals issued by the CHRC have these strategic priorities: (1) preserving or enhancing the state's ability to serve vulnerable populations regardless of insurance status; (2) promoting health equity by reducing health disparities and addressing the social determinants of health; and (3) supporting community-based programs that are innovative, sustainable, and replicable. To fulfill its statutory responsibility of expanding access in underserved communities, the CHRC issues an annual Call for Proposals and has focused its grant making activities to support the state's public health needs and priorities. For the past two years, the CHRC has requested applications in the following areas: (1) promoting delivery of essential health services: primary/preventative care, dental, and women's health services; (2) addressing the heroin and opioid epidemic through behavioral health integration; and (3) promoting food security and addressing childhood and family obesity.

In addition to grant making, the CHRC provides technical assistance to its grantees to increase their capacity to serve residents in vulnerable communities. These services include reporting and data analytics; supporting care coordination initiatives; and connecting grantees with other sectors of Maryland's health care community. The purpose of the technical assistance program is to bolster the capacity of Maryland safety-net providers, to assist CHRC grantees in documenting program impact, to support program evaluation, and to help promote program sustainability.

In 2017, the Maryland General Assembly approved legislation that transferred the staffing responsibilities of the Maryland Council on Advancement of School–Based Health Centers from the Maryland State Department of Education to the Department of Health. Under the legislation, the CHRC provides day-to-day staffing support for the Council. The purpose of the Council is to improve the health and educational outcomes of students who receive services from school-based health centers (SBHCs). The Council is responsible for advancing the integration of SBHCs into (1) the health care system at the state and local levels and (2) the educational system at the state and local levels. The Council develops specified policy recommendations to improve the health and educational outcomes of students who receive services from SBHCs.

## II. Background and Mission

The Maryland General Assembly created the Community Health Resources Commission in 2005 to expand access to affordable, high-quality health care services in the state's underserved communities; support the adoption of health information technology in community health resources; increase access to specialty health care services for the uninsured and low-income individuals; promote interconnected systems of care and partnerships among community health resources and hospitals; and help reduce preventable hospital emergency department visits. The CHRC is an independent commission within the Maryland Department of Health, and its 11

members are appointed by the Governor (see Appendix A). The Commission is led by Chairman Allan Anderson, MD, and Vice Chair Elizabeth Chung. The CHRC fulfills its statutory responsibilities through its grant making activities, technical assistance to community-based health care providers, and special projects aimed at bolstering the capacity of Maryland's health care safety net. The Commission has awarded 210 grants totaling $64.1 million, supporting programs in all 24 jurisdictions of the state. These programs have collectively served more than 468,000 Marylanders, and the initial funding provided by the CHRC has also enabled its grantees to leverage $23.5 million in additional federal and private/non-profit resources, the bulk of which is private and which has been used in communities to provide even more needed health care. CHRC works with grantees to assist in post-grant sustainability, and more than 75% of the grants awarded in FY 2014 (last year for which sustainability data is available) were sustained after grant funds had been expended.

The CHRC supports projects that meet the health needs of local communities and projects that tailor intervention strategies to bolster the capacity of safety net providers to serve more individuals. Health disparities in terms of access, delivery, and outcomes persist in Maryland and throughout the country. Disparities can be found in rural, urban, and suburban communities. Racial and ethnic minorities, uninsured and underinsured, economically disadvantaged, elderly, homeless, those with behavioral health disorders, and immigrants are less likely to have a usual source of care or have had a health or dental visit in the previous year.[1] These groups also confront more barriers to care, are impacted by social determinants of health, and receive poorer quality care than higher-income individuals. Therefore, the CHRC has prioritized funding projects that offer innovative ways to address disparities and promote health equity. Given the uncertainty of health reform at the federal level and what impact this reform could have for Maryland's vulnerable populations, it is more critical than ever that Maryland supports and protects the integrity of the state's safety net providers. These providers have a historical mission of serving low-income individuals and have a demonstrated track record of implementing programs that serve vulnerable populations and offer innovative approaches to tackling the social determinants of health.

The CHRC looks to support projects that are innovative, sustainable, and replicable. Recent Calls For Proposals issued by the CHRC have these strategic priorities: (1) preserving or enhancing the state's ability to serve vulnerable populations regardless of insurance status; (2) promoting health equity by reducing health disparities and addressing the social determinants of health; and (3) supporting community-based programs that are innovative, sustainable, and replicable. To fulfill its statutory responsibility of expanding access in underserved communities, the CHRC issues an annual Call for Proposals and has focused its grant making activities to support the state's public health needs and priorities. For the past two years, the

[1] http://www.kff.org/disparities-policy/issue-brief/disparities-in-health-and-health-care-five-key-questions-and-answers/

CHRC has invited applications in the following areas: (1) promoting delivery of essential health services: primary/preventative care, dental, and women's health services; (2) addressing the heroin and opioid epidemic through behavioral health integration; and (3) promoting food security and addressing childhood and family obesity.

***Preserving or enhancing the state's ability to serve vulnerable populations regardless of insurance status.*** Following the passage of the Affordable Care Act, Maryland, like many states, achieved dramatic increases in health insurance coverage rates. There has been a dramatic drop in the uninsured rate for Marylanders between the ages of 18 and 64, from 11.3% in 2013 to 7.0% in 2017.[2] Despite these coverage gains, the uninsured rate remains high for certain racial and ethnic groups (the uninsured rate for Hispanic/Latino individuals was 22% in 2016).

The affordability of health insurance coverage and the continued ambiguity about the likelihood of substantive health care reform at the federal level and what this reform might mean for Maryland and its vulnerable residents place greater emphasis on the need to support Maryland's safety net providers, most of whom have a historical mission of serving low-income individuals and vulnerable populations, regardless of their insurance status. It is more important now than ever before that Maryland protect and promote the ability of the state's safety net providers to serve vulnerable populations. The CHRC supports projects that help boost the capacity of community health resources to serve additional individuals and provides support and technical assistance to safety net providers as they weather the storm of potential changes coming from the federal government.

***Promoting health equity by reducing health disparities and addressing the social determinants of health***. Despite decades of efforts to eliminate health disparities in Maryland, preventable differences in disease burden in disadvantaged populations continue to persist. While some progress has been made in narrowing the health disparities gap, efforts to eliminate these disparities must continue. Elimination of or improvement in these disparities is unlikely to be achieved without addressing the social determinants of health (SDOH). According to Healthy People 2020, SDOH are conditions in the environments in which people are born, live, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. The forces that shape these conditions include economic policies and systems, social norms, social policies and stigma, and political systems. Achieving health equity means that every person has the opportunity to achieve optimal health regardless of race/ethnicity, gender identity, educational level, sexual orientation, disability status, or the neighborhood where they live or are born.

Understanding the intersection between the social determinants and health outcomes is fundamental to advancing health equity.

[2] http://www.countyhealthrankings.org/explore-health-rankings/reports/state-reports/2018/maryland

Social determinants of health include:

- Access to health care services
- Access to educational, economic, and job opportunities
- Access to safe and affordable housing
- Access to healthy foods
- Racism and discrimination
- Access to transportation
- Health literacy
- Exposure to crime, violence, and trauma
- Residential segregation
- Poverty

The Commission continues to support projects that address one or more of the social determinants of health as part of their overall health care program. For example, projects by some recent grantees include provision of vouchers for transportation to health care appointments or counselling to link patients to education and employment opportunities to address access to health care services.

***Supporting community-based projects that are innovative, sustainable, and replicable and help accelerate overall state population health improvement goals.***

The Commission serves as an incubator for innovative programs and supports the efforts of grantees to continue programs once initial CHRC grant funding has been expended. Community health providers are at the front lines of the changing health care delivery landscape and have the ability to respond to evolving market conditions and changing health and social service needs in their communities. The CHRC, therefore, prioritizes pilot projects that utilize evidence-based intervention strategies that meet a specific community need and present quantifiable improvements in health care outcomes.

The CHRC funds programs that are **innovative**. According to the World Health Organization,[3] a health care innovation responds to "unmet public health needs by creating new ways of thinking and working with a focus on the needs of vulnerable populations. It aims to add value in the form of improved efficiency, effectiveness, quality, sustainability, safety, and/or affordability." Successful CHRC-funded programs are newly developed, evidence-based programs which improve health policies, systems, services or delivery methods, or those that have been successfully implemented in other states and brought for the first time to Maryland.

The Commission prioritizes projects that have a strong **sustainability** plan. The Commission has funded projects with sustainability plans that have included increasing the ability of a safety net provider to bill for services or to receive financial support from local hospitals, private foundations, health insurers, or municipalities.

[3] http://www.who.int/topics/innovation/en/

The CHRC also supports programs that are **replicable**. Several projects that have been funded by the Commission in the past have led to statewide adoption of initiatives in behavioral health and care coordination services in many underserved communities in the state. For example, the CHRC funded the initial Behavioral Health Home pilot implemented by Way Station in FY 2012. The Maryland Department of Health has implemented the Medicaid Behavioral Health Home Initiative statewide, and there are now 84 health homes in the state.

## III. Grant Making Activity

Since its inception, the CHRC has expanded access to health services in Maryland's medically underserved communities by awarding 210 grants totaling $64.1 million supporting programs in every jurisdiction of the state. These projects have collectively served more than 468,000 Marylanders who receive quality health care in health centers, clinics, and neighborhood locations. Each year, the requests for funding exceed the Commission's available budget, with grant awards typically equaling 18% to 19% of funding requests. The CHRC works with the Maryland Department of Health to ensure that grant funds are used to address priorities described in the State Health Improvement Process (SHIP). Grant monies have gone to programs that have focused on the following SHIP metrics: (1) increasing the numbers of women accessing early prenatal care; (2) reducing the rates of low birth weight babies; (3) reducing the rates of infant mortality; (4) reducing the rates of children and adolescents who are obese; (5) reducing the numbers of emergency department visits related to mental health conditions or (6) addictions-related conditions; and (7) increasing the rates of children receiving dental care in the last year. Previous CHRC funds have also boosted the infrastructure of Local Health Improvement Coalitions.

As shown in the table below, CHRC grants have supported programs which have provided services for 468,337 patients, resulting in 1,142,163 patient visits.

Table 1:

| Maryland Community Health Resources Commission | | | | |
|---|---|---|---|---|
| **Focus Area** | **# of Projects Funded** | **Total Award Provided** | **Cumulative Total** | |
| | | | **Patients Seen/Enrolled** | **Visits Provided** |
| Expanding access to primary care at Maryland's safety net providers | 65 | $16,619,428 | 88,252 | 274,562 |
| Providing access to integrated behavioral health services | 54 | $14,120,102 | 80,108 | 267,046 |
| Increasing access to dental care for low-income Marylanders | 39 | $7,780,606 | 64,489 | 145,478 |
| Promoting women's health and addressing infant mortality | 23 | $4,398,294 | 17,528 | 56,437 |
| Reducing obesity and promoting food security | 15 | $2,555,000 | 697 | 5,515 |
| Promoting health information technology at community health centers | 9 | $3,268,661 | Health Information Technology | |
| Health Enterprise Zones | 5 | $15,335,997 | 217,109 | 391,639 |
| **Total Grant Funding Provided** | **210** | **$64,078,088** | **468,337** | **1,142,163** |
| **Total Funding Requested** | **880** | **$412,274,716** | | |
| **Number of Patient/Clients Served** | **468,337** | | | |
| **Number of Patient/Client Encounters** | **1,142,163** | | | |
| **Additional federal and private resources leveraged** | | **$23,523,161** | | |

The CHRC awards grants by issuing a Call for Proposals approximately once a year. The FY 2019 Call for Proposals was issued on October 17, 2018 and generated 94 applications totaling $36,972,636 in requested funds. The Call for Proposals solicited project proposals in three categories: (1) promoting delivery of essential health services: primary/preventative care, dental, and women's health services; (2) addressing the heroin and opioid epidemic through behavioral health integration; and (3) promoting food security and addressing childhood and family obesity. Grant awards will be made in March 2019.

Grants are awarded in a competitive process, and priority areas are determined by the CHRC Commissioners. Grant proposals are evaluated by independent subject matter experts and CHRC staff on a range of criteria outlined in each Call for Proposals, including the ability of the grantee to achieve stated program objectives and achieve sustainability once initial grant funds are utilized. Evaluation criteria utilized include: (1) the use of evidenced-based practices in the proposed program; (2) capacity to collect and report outcomes data; (3) demonstration of a community need; (4) program sustainability; and (5) likelihood of overall program success. Applications are also prioritized based on how the applicant addressed the Commission's three strategic priorities of: (1) building capacity; (2) addressing health disparities and promoting health equity; and (3) reducing avoidable hospital utilization.

***Promoting delivery of essential health care services: primary/preventative care services, dental services, and women's health care services.*** Increasing access to affordable and accessible primary and preventative medical, dental, and women's health services are bedrock goals of the Commission. The CHRC has awarded 65 grants totaling $16.6 million for primary care; 39 grants totaling $7.8 million for dental care; and 23 grants totaling $4.4 million for women's health care services. These programs have expanded access to care for more than 170,000 Marylanders.

The Commission has prioritized interventions that reduce the barriers to accessing care using multi-sectoral approaches. It is critical that the state continue to build the capacity to deliver these health care services in the community for vulnerable populations, regardless of their ability to pay or health insurance status. Many of these individuals have underutilized or delayed accessing essential preventative care services, resulting in demonstrable poor health outcomes.

These grants have promoted the following strategies:
(1) **Increased access to primary care services** by supporting new health care access points in underserved communities. Grants in this category have supported the opening of new federally qualified health centers, community clinics, and school-based health centers.

(2) **Supported interventions that address chronic diseases**. CHRC grants have supported wellness programs in health centers and free clinics which have aimed at prevention of and treatment for diabetes and hypertension.
(3) **Provided preventative and advanced oral health care services** and oral hygiene education to both adults and children. CHRC funding has supported projects that provide sealant treatments for children and advanced dental treatment and dentures for low-income adults.
(4) **Targeted super-utilizers and involved hospital Emergency Department (ED)** diversion efforts and care coordination for these individuals. These projects have involved hospital/ community partnerships aimed at reducing non-emergent emergency department usage and have assisted high utilizers of hospital services in overcoming social and psychological barriers to better health.
(5) **Provided prenatal and perinatal services for women** otherwise lacking access to these services. Programs supported by CHRC have connected women to prenatal services, provided wrap around support for women facing the effects of adverse social determinants of health, and provided postnatal services for new mothers.

***Addressing the heroin and opioid epidemic through integrated behavioral health service delivery.*** The opioid epidemic is impacting urban, rural, and suburban communities throughout the state and is placing burdens on Maryland's health care, social service, and criminal justice systems. CHRC funds support innovative and replicable projects to address the heroin and opioid epidemic and promote access to integrated behavioral health services. In March 2017, Governor Hogan declared a state of emergency on the heroin and opioid crisis in Maryland. In 2016, Maryland saw 2,089 deaths related to overdoses, a 66% increase from the year before.[4] Opioid addiction destroys lives, resulting in an individual's inability to work and care for his or her family, and ultimately can lead to death.

The depth and breadth of the latest opioid epidemic has focused attention on and highlighted the gaps in accessing an array of community-based substance use treatment services. In light of this epidemic, the CHRC continues to prioritize supporting innovative and sustainable projects that increase access and help remove the stigma associated with accessing substance use treatment services. The Commission continues to distribute its grant funding to assist behavioral and somatic health care providers in their efforts to grow, innovate, and scale services to provide a wide range of treatment options for individuals with substance use disorder and break down social stigmas.

The CHRC has supported programs to expand access to mental health and substance use treatment services and integrate the delivery of these services in a primary care setting. Since

[4] https://bha.health.maryland.gov/OVERDOSE_PREVENTION/Documents/Maryland%202016%20Overdose%20Annual%20report.pdf

2007, the Commission has awarded 54 grants totaling $14.1 million. These programs have collectively served approximately 80,000 individuals. CHRC-funded behavioral health projects have been highlighted in two white papers that will be discussed later in this report.

Projects funded by the CHRC have included:
(1) **Access to integrated behavioral health services**, either by adding behavioral health in traditional primary care settings or adding primary care to existing behavioral health programs. Recent grants awarded in this category have included partnerships between behavioral health providers and federally qualified health centers to provide primary care services to behavioral health patients, or projects to implement Screening, Brief Intervention and Referral to Treatment (SBIRT) in community primary care settings.
(2) **Medication-assisted therapy** for those suffering from opioid addiction, including programs that involve supportive housing, peer recovery support specialists, and/or telehealth. The CHRC has funded projects to increase access to Medication-assisted treatment though telehealth services in rural underserved areas and projects to provide peer-to-peer recovery services to those presenting to the emergency department for addiction-related conditions.
(3**) Re-entry or justice system diversion programs** for those with behavioral health needs that offer assistance in transitioning back to the community. The Commission has supported a program to provide wrap around services to incarcerated individuals and their families with substance use disorders facing adverse social determinants of health.
(4) **Mobile crisis intervention programs**, **stabilization centers, and walk-in crisis centers**. The CHRC has funded Mobile Integrated Health programs for those with serious mental health issues and programs to connect patients to needed treatment in the community. CHRC funds have also supported stabilization centers in Anne Arundel County and Baltimore City and a walk-in crisis center in Frederick County whose goal is to work with patients in crisis due to substance use or serious mental illness, connect them to needed services, and help keep them out of hospitals and the criminal justice system.
(5) **ED diversion programs that promote post-hospital care coordination** and facilitate access to ongoing primary and behavioral health services. CHRC-funded care coordinators work with individuals to connect those with serious mental illness to health care providers, social services, and other needed programs to help improve their mental and physical health status.

***Promoting food security and addressing childhood and family obesity.*** Childhood obesity is a national epidemic, with one in three children being overweight and at risk for serious chronic diseases such as diabetes. In 2016, 12.6% of Maryland's adolescent high school students were considered overweight or obese, a 1.1% increase from 2015[5]. The risk factors and prevalence of childhood obesity demonstrate health disparities, since many early life risk factors for childhood obesity are more prevalent among the African American/Black and Hispanic populations. The MDH's Cancer and Chronic Disease Bureau leads childhood obesity prevention efforts to

[5] http://ship.md.networkofcare.org/ph/

improve nutrition standards and physical activity opportunities in child care, school, and community settings. The CHRC has funded 15 programs for $2.6 million aimed at preventing or reducing childhood obesity. Since 2017, the Commission has prioritized supporting evidenced-based, family-focused approaches to improve nutrition, reduce food insecurity, and increase physical activity in family, school, and community settings.

Projects recently funded in this category in this category included:
(1) **Efforts to promote food security in food deserts**. The Commission has funded projects to introduce healthy foods in corner stores in Baltimore City and projects to provide healthy foods to low-income families through food pantries and farmer's markets.
(2) **School-based interventions to identify children considered obese or at risk of obesity and provide nutritional counseling to their families**. These CHRC-funded projects have provided home visitation, nutrition education, and cooking classes to students and families facing childhood and family obesity.
(3) **Partnerships with private pediatrician offices** to provide assessment and culturally-sensitive and appropriate treatment and/or resources for children who are overweight or obese. CHRC-funded programs have trained pediatricians to recognize children at risk of becoming obese and to provide treatment for both children and their families.
(4) **Interventions that enhance community access to physical activity opportunities** and also provide alternative fitness solutions in the absence of the built environment. The CHRC has supported projects that provide afterschool programs, fitness classes, and community soccer tournaments in areas lacking resources for safe physical fitness activities.

## IV. Providing Technical Assistance to Build Capacity in Maryland's Safety Net Infrastructure

In addition to grant making, the CHRC provides technical assistance to its grantees to increase their capacity to serve residents in vulnerable communities. These services include reporting and data analytics; supporting care coordination initiatives; and connecting grantees with other sectors of Maryland's health care community. The purpose of the technical assistance program is to assist CHRC grantees in documenting program impact, to support program evaluation, and to help promote program sustainability.

### *Program Evaluation*

In 2016, the Commission contracted with The Hilltop Institute at the University of Maryland, Baltimore County to conduct program evaluations of four CHRC grants awarded that year to determine the extent to which these projects contributed to a more cost-effective service delivery and improved health outcomes for participating Medicaid beneficiaries. The four grantees selected for the evaluation involve programs (below) that provide access to substance use

treatment services and Medication-assisted Treatment; hospital ED diversion and care coordination programs; supportive recovery housing; and promoting earlier access to prenatal care. The four projects expand access in rural, suburban, and urban areas of the state.

The analysis by Hilltop confirmed that the four programs evaluated in fact reached their objectives of reducing avoidable hospitalization and achieved linkages to community-based care. Three of the grants supported programs to provide behavioral health services, and Hilltop's assessment indicated that all three programs demonstrated some success in getting participating Medicaid beneficiaries into treatment and effecting a shift from hospital-based care to outpatient services and pharmacy treatment. The fourth program conducted outreach to vulnerable pregnant women to connect them with obstetric and pediatric care. The ultimate goal was to improve birth outcomes and the health of the babies. The program succeeded in connecting vulnerable pregnant Medicaid women to the health care system, and findings indicated that birth outcomes for this group were similar to those for the overall Medicaid population.

**Potomac Healthcare Foundation** is utilizing funds to establish a 50-bed residential Recovery Support Center in West Baltimore. The project addresses three of the seven goals of the Governor's Heroin and Opioid Emergency Task Force by: (1) expanding access to treatment by removing one of the barriers for accessing care, housing; (2) enhancing the quality of treatment via an evidence-based approach that utilizes residential recovery housing; and (3) boosting overdose prevention efforts, as "stable housing and quality treatment are the bulwarks against overdose." Hilltop found that:

- 88.3% of program participants engaged in alcohol or drug dependence treatment for at least 30 days after program discharge.
- Total average Medicaid costs per user increased in the 90-day post-intervention period compared to the 90-day baseline period, but the data suggest a shift from hospital-based care to outpatient services and pharmacy treatment for substance use disorder, an objective of the program.
- 20.5% of participants relapsed as evidenced by claims or encounters for detoxification, an inpatient admission, or an ED visit with a primary diagnosis of substance disorder.

**Garrett County Health Department** is utilizing funds to support the use of telehealth technology to increase access to Medication-assisted Therapy (MAT) in a rural corner of the state. The program involves a collaboration between the Garrett County Health Department and the University of Maryland School of Medicine's Department of Psychiatry. Hilltop found that:

- Total average Medicaid costs per user decreased from $4,725 during baseline to $3,901 in the post-intervention period, or 17%.
- After discharge from the program, all participants obtained at least one MAT prescription, and 85.7% continued to be engaged in alcohol or drug dependence treatment for at least 30 days.

- Per user health care costs suggest evidence of a shift from hospital-based care to outpatient services and pharmacy treatment during the immediate 90 days after discharge.

**Lower Shore Clinic** is utilizing funds to support the CareWrap program that targets individuals with behavioral health needs who visit the hospital ED (Peninsula Regional Medical Center) in high volumes and provides intensive case management services for these individuals post-hospital discharge. Hilltop found that:

- Total average Medicaid costs per user decreased 44% in the 90-day post-intervention period compared to the 90-day baseline period, and there was evidence of a shift from hospital-based care to outpatient services and pharmacy treatment.
- ED visits related to behavioral health-related conditions decreased from 21.4% during baseline to 6.5% in the post-intervention period.
- The percentage of participants with a usual source of care in the post-intervention period nearly doubled from baseline.
- 30-day hospital readmissions was mixed, with 18.2% of participants readmitted within 30 days of their most recent hospital stay prior to enrollment in CareWrap.

**Baltimore City Health Department** is utilizing funds to support the continued implementation of the B'More for Healthy Babies Initiative, which utilizes Pregnancy Engagement Specialists who use aggressive, trauma-informed strategies to outreach pregnant women who are currently unable to be located though traditional outreach methods or who refuse to talk to care coordinators and direct vulnerable pregnant women and newborns into appropriate obstetric and pediatric homes. Hilltop found that:

- 99% of enrolled women had at least one prenatal visit during the measurement period and 46.5% completed one postpartum visit during the post-intervention period, suggesting that the objective of the intervention, connecting vulnerable pregnant women to the care system, was achieved.
- The percentage of participants who received care consistently from the same provider for two or more visits increased from 51.8% during the baseline period to 70.5% in the post-intervention period.
- The rate of very low birth weight among the babies delivered by study participants was about 3%, consistent with the overall Medicaid population.

### *CHRC/CRISP Collaboration*

Chesapeake Regional Information System for our Patients (CRISP), Maryland's state-designated Health Information Exchange, and the CHRC are collaborating to provide ongoing technical assistance to CHRC grantees to promote greater use of data/metrics and to assist in documentation of project outcomes. These services include reporting and data analytics; supporting care coordination initiatives; and connecting grantees with other sectors of

Maryland's health care community. Below are specific types of reports that CRISP has committed to providing:

- Population Health Reports
- Panel-based reports
- Pre/post reports
- Encounter Notification Service (ENS)

## V. Grantee Performance Monitoring

The CHRC takes its role as steward of public resources very seriously. The CHRC has developed and implements a robust system for grantee performance management that includes monitoring of both programmatic and fiscal performance. Grantees are required to periodically submit both programmatic and fiscal reports to the Commission. The grant monitoring system is designed to ensure that public resources are utilized efficiently and effectively and that program objectives are achieved. The CHRC requires data reporting as a condition of payment of Commission grant funds.

### *Programmatic Performance Monitoring*

Prior to the distribution of any grant funds from the Commission, CHRC staff works with the grantee to develop a **Milestone and Deliverable template (M&D)** that will be used for the programmatic reporting that is due bi-annually (Appendix C). At this time, the program metrics are discussed. The M&D includes a set of process data variables (*i.e.*, the number of patients seen, the number of patient encounters, and the number of different services provided) as well as outcome variables (*i.e.*, hospital utilization metrics, clinical metrics, funds received from billed services, and cost savings). Distribution of grant funds is contingent on this template being accepted by both CHRC and grantee.

To ensure that grant-funded programs are successfully launched, the CHRC also requires **60-day updates** that are due two months after a grant is awarded. If programs are not fully implemented at that time, additional updates are required until the program is running and patients/clients are being served. These updates not only keep the Commission informed about the early progress of a program, but they allow CHRC staff to assist grantees when problems arise. Grantees are held accountable for performance, and project delays are brought to the attention of Commissioners.

Every six months, grantees are required to submit the M&D report along with a **narrative report**. The narrative report follows a template containing 7 questions which require the grantee to provide information about program strategies, activities, results, successes, and challenges. Grantees are also asked to provide information on progress towards post-grant sustainability.

CHRC staff reviews the actual data reported by the grantees and compares these figures to the program goals. Grantees are held accountable for performance and progress towards meeting those goals. If grantees are experiencing difficulty in program implementation or progress towards achieving objectives, CHRC staff is available to provide technical assistance. If grantees are unable to improve performance, a Notice of Insufficient Progress is sent, requiring the grantee to develop a corrective action plan to improve project implementation and achieve project goals. The grantee is required to present the plan to the Commission and, if it is deemed insufficient to overcome barriers to achieving the objectives, the Commission may withhold funding from underperforming grantees and redirect grant funding to other successful grantees.

### *Fiscal Monitoring*

In addition to programmatic performance metrics, CHRC grantees are required to meet fiscal reporting requirements, providing line-item detail that accounts for how grant funds are expended. Every six months, grantees are required to submit an **expenditure report** which includes a summary of monies spent and the documentation to support the use of funds.

The expenditure report details how grant funds were utilized in the preceding reporting period and includes expenses by the budget line item. Grantees provide supporting documentation such as bills of sale, receipts for expenditures, invoices, and payroll records. CHRC staff examines these expenditures to ensure that public grant funds are spent in accordance with the original grant approved by the CHRC.

Distribution of initial grant funding correlates to the approval of the M&D template and full execution of the required grant agreement. Upon receipt of these two items, the Commission awards initial funding to the grantee, usually one-half of the year one grant award. Distribution of subsequent funding amounts requires a successful reconciliation of the supporting documentation to the amounts presented on the expenditure report and grantee fiscal performance in alignment with the original project budget approved by the CHRC. While funding is initially paid in advance of project activities, the Commission converts payments from scheduled amounts to a cost-reimbursement basis as the program progresses.

### *Audits of CHRC Grantees*

In 2016, CHRC instituted the process of performing a documented review of self-reported grantee performance results for 25% of all current/active grants on an annual basis. Eight grantees were randomly selected for audit in calendar year 2016, 10 grantees were selected for audit in calendar year 2017, and 13 grantees were selected for an audit in calendar year 2018. Each of these grantees was required to provide the documentation for each of the metrics reported on their M&D. When problems in documentation were encountered, CHRC provided

technical assistance to grantees to help them improve reporting accuracy, and a second audit was performed after the next report was submitted. The results of audits conducted in 2016, 2017, and 2018 can be found in Appendix D.

## VI. Project Impact

Promoting sustainable, interconnected systems of care in local communities to improve health outcomes for vulnerable residents and to facilitate long-term financial sustainability of CHRC funded programs are key priorities of the Commission. The Commission closely tracks the impacts in the areas of health outcomes, generating cost savings, leveraging grant funds and sustainability of programs after grant funds have been expended.

### *Improving Health Outcomes*

The Commission measures not only the delivery of promised services by their grantees, but also the improvements in health outcomes resulting from each program. Grantees report on a number of health indicators which are program dependent, but illustrate the effect of the services being provided to program participants. Examples of programs that have produced measureable improvements in health impacts include:

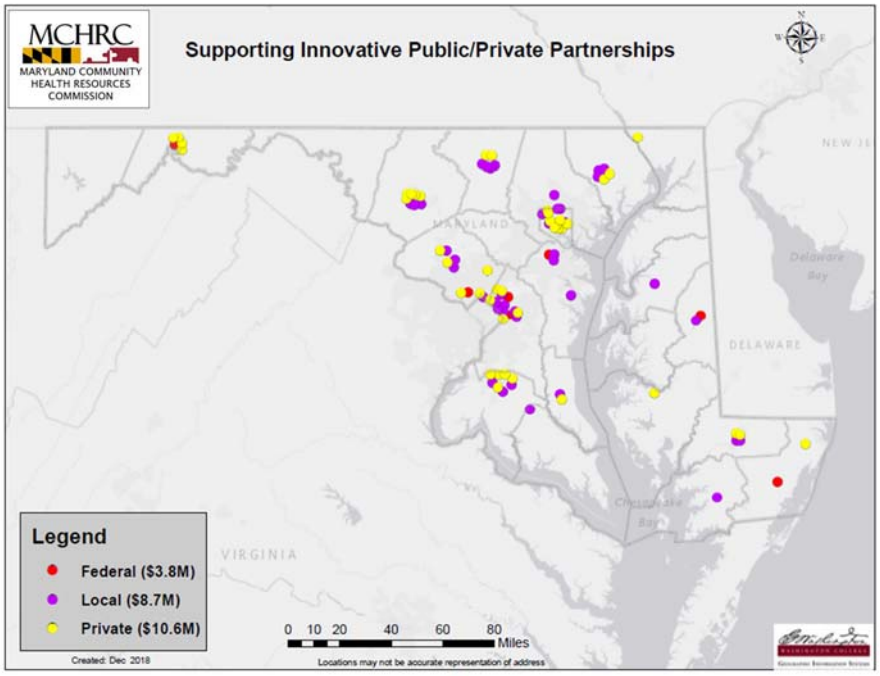
- **Shepherd's Clinic** received a two-year ($105,000) grant to support its diabetes self-management program, providing services to 390 pre-diabetic and diabetic patients in Baltimore City. Among patients who participated in diabetes self-management education, regular clinical measurements indicated that 66% lost weight and 70% had a reduced A1C. Among patients who participated in diabetes prevention counseling, just one patient converted to a diagnosis of diabetes.

- **Chinese Culture and Community Services Center** received a three-year ($200,000) grant to support the relocation and expansion of the clinic in Gaithersburg. The clinic provides primary care, case management, prescription assistance, lab testing, and free screening and vaccinations for Hepatitis B to individuals facing complex health and social needs. At the end of the second year of the grant, 35% of those diagnosed with diabetes had an A1C below 7, and 60% of individuals diagnosed with hypertension had a blood pressure of less than 140/90.

- **Mary's Center for Maternal and Child Care, Inc**. received a two-year ($300,000) grant to increase access to prenatal care and expand its women's health program in an effort to improve birth outcomes and reduce infant mortality in Prince George's County. The grant served 3,000 women, and the percentage of women in the program receiving prenatal care in the first trimester increased from a baseline of 63.6% to 74%. Those in the program delivering low-birth weight babies (2,500 grams or less) was 5% (the rate in Prince George's County is 9.1%, and the state is 8.6%).

### *Generating cost savings*

The CHRC prioritizes programs that yield reductions in avoidable hospital utilization and generate cost savings. Many grantees work specifically with individuals who are high hospital utilizers and provide wrap around services intended to connect these individuals to health care and social supports. In many cases, the shift in care from hospitals to community health care leads to cost savings for hospitals and the state's Medicaid system.




Programs that have generated significant cost savings include:

**Lower Shore Clinic,** an outpatient mental health clinic, received a 15-month grant in 2016 to implement the CareWrap program that targets individuals with behavioral health needs who present at the Peninsula Regional Medical Center (PRMC) ED in high volumes and provides intensive case management services for these individuals in a community setting post-hospital discharge. The grant ended in June 2017 having served 63 individuals. Chesapeake Regional Information System for our Patients (CRISP) calculated a six-month pre vs. six-month post comparison for the patients in the program and concluded that the CareWrap program achieved $923,594 in cost avoidance. Taking into account the $120,000 investment from the grant, the program's return on investment (ROI) was 670%.

- **Calvert County Health Department** received a three-year grant in 2015 to support Project Phoenix, which provides substance use treatment services, including medications, and addresses the social determinants of health impacting individuals with substance use disorders. Over the duration of the grant, the program served a total of 1,220 individuals. The program tracked the average number of ED visits by program participants, as reduction in ED use is a key outcome measure to document

program impact. From April 2016 (year one) to April 2017 (year two), the average number of ED visits dropped 60%, from 1.57 visits per participant to 0.63 visits per participant. In light of the reductions in avoidable hospital costs, Calvert Memorial Hospital is providing financial support to continue implementing the program once the initial CHRC grant funds are expended.

- **Esperanza Center**, a free clinic in Baltimore City, received a two-year, $100,000 grant in 2015 to expand service capacity. The program reported serving more than 1,500 individuals through 2,941 patient visits. Using data collected in a patient survey, the grantee reported that 1,460 of the patient visits would have resulted in an ED visit. The reduction translates into total cost savings/avoided charges of $1.8 million since the start of the program.

***Leveraging additional resources and supporting innovative public/private partnerships***

The initial grant funding provided by the CHRC ($64.1 million) has enabled grantees to leverage approximately $23.1 million in additional federal, private/non-profit, and local resources. The Commission has served as an incubator for innovative programs and supports the efforts of grantees to continue programs once initial CHRC grant funding has been expended. The following are several recent examples of CHRC grantees utilizing Commission grant funding to leverage significant additional resources.

- **Family Services, Inc.** received a two-year, $250,000 grant from the CHRC in 2017 for the Thriving Germantown program, a multi-sector and multi-generational approach focused on supporting family pathways for self- sufficiency: 1) early care and education; 2) health and wellness; 3) behavioral health; 4) household stabilization (workforce, emergency assistance, resources). Family Services has leveraged Commission funds to receive $2,014,832 from private and local funders including: (1) Healthcare Initiative Foundation; (2) Mead Family Foundation; (3) Kaiser Permanente; (4) Cafritz Foundation; (5) Meyer Foundation; (6) Montgomery Coalition for the Advancement of English Learners; and (7) Montgomery County Council.

- **La Clinica del Pueblo** received a three-year, $300,000 grant from the CHRC in 2016 to open a new Federally Qualified Health Center site in Hyattsville, Prince George's County, which serves the Langley Park, Hyattsville, Riverdale, Mt. Rainer, and Bladensburg communities, providing access to medical, behavioral health, and other social support services. In the first 18 months of the program, La Clinica has leveraged Commission funds to receive an additional $514,000 from private and local funders including: (1) Cafritz Foundation; (2) Blaustein Foundation; (3) Morningstar Foundation; (4) Eugene & Agnes E. Meyer Foundation; (5) Quality Health Foundation; (6) Quality Healthcare Foundation; (7) Greater Washington Community Foundation; (8) Prince George’s Executive Office; (9) Prince George’s Community Partnership; and (10) Prince George’s Council Members.

- **Charles County Health Department** received a three-year, $400,000 grant in 2016 to support a mobile-integrated health program that seeks to address utilization of EMS and ED services in Charles County by assisting frequent ED/EMS users to manage their chronic conditions in a primary care setting or at home. The program is a collaboration among the Charles County Health Department, Charles EMS, and Charles Regional Medical Center. Grant funding from CHRC was leveraged to obtain an additional $150,000 from the Charles Regional Medical Center**.**

***Sustainability of CHRC-funded programs***

Promoting sustainable, interconnected systems of care in local communities and facilitating long-term financial sustainability of grant programs are key priorities of the Commission. The CHRC defines program sustainability as: the core services have been maintained for a minimum of one year after Commission funds have been expended.

The CHRC prioritizes programs that include a strong sustainability plan as part of their grant application when it considers its awards. After grant awards are made, grantees are asked to comment on the status and feasibility of achieving post-grant sustainability planning in each bi-annual narrative report. Upon completion of the grant, applicants are asked to submit a plan for sustainability (*i.e.*, a system of billing for services, funding from a private partnership, other long term funding streams) in the final report. One year after the end of the program, the CHRC staff verifies whether grant-funded programs have been sustained (the program continues to exist with other funding sources). CHRC queries public sources such as the grantee's website or annual report, or directly contacts the grantee to determine whether the grantee continues to provide the services that were previously supported by CHRC funds.

In November 2018, the Commission reviewed the FY 2014 grants to determine whether these programs were sustained one year after CHRC funds were expended. Of the 21 grants awarded in FY 2014, one of these grants involved a single event training project and another grant involved providing short-term technical assistance. Both of these projects were not included in the assessment. Of the remaining 19 grants, 14 (74%) have been sustained, three (16%) have been partially sustained (services are continuing either at a reduced level or taken over by a partnership organization), and two (10%) have not been sustained. In October 2016, a similar assessment of the FY 2012 grants was performed. In FY 2012, the CHRC awarded 15 grants totaling $2.6 million. Two grants were IT projects and, by definition, one-time projects for which post-sustainability does not apply. Of the remaining 13 grants awarded in FY 2012, 11 (85%) have been sustained.

| Post-grant Sustainability of CHRC Grants | | | | |
|---|---|---|---|---|
| **Grant Cycle** | **Date** | **# of Grants** | **# Sustained** | **% Sustained** |
| FY 2012 | Oct, 2016 | 13 | 11 | 84.6% |
| FY 2014 | Oct, 2018 | 19 | 14 | 73.7% |

**Notes:**

In FY 2012, a total of 15 grants were awarded. Of this total, two involved one-time IT projects and assessing post-grant sustainability does not apply. These two projects were not included in the analysis or table.

In FY 2014, a total of 21 grants were awarded. Of this total, one project involved a single training event and another project involved providing short-term technical assistance. These two projects were not included in the analysis or table.

The CHRC defines **program sustainability** as the **core services have been maintained one year after Commission funds have been expended**. A determination is made by: (1) Reviewing the final grantee narrative report submitted to the Commission upon the close of the grant; and (2) Querying of publicly available information (i.e.grantee website or annual report); (3) Contacting the grantee, if necessary.

The full results of these assessments can be found in Appendix E.

## VII. Special Projects

### *Maryland Council on Advancement of School-Based Health Centers*

The Maryland Council on Advancement of School-Based Health Centers was created in legislation approved by the Maryland General Assembly in 2015. The purpose of the Council is to improve the health and educational outcomes of students who receive services from school-based health centers. The Council is responsible for advancing the integration of SBHCs into (1) the health care system at the state and local levels and (2) the educational system at the state and local levels. The Council develops specified policy recommendations to improve the health and educational outcomes of students who receive services from SBHCs.

In 2017, the Maryland General Assembly approved legislation that transferred the Council from the Maryland State Department of Education to the Department of Health. Under the legislation, the Maryland Community Health Resources Commission (CHRC) provides staffing support for the Council and is permitted to seek the assistance of organizations with expertise in school-based health care to support the work of the Council. The key activities of the Council in 2018 included:

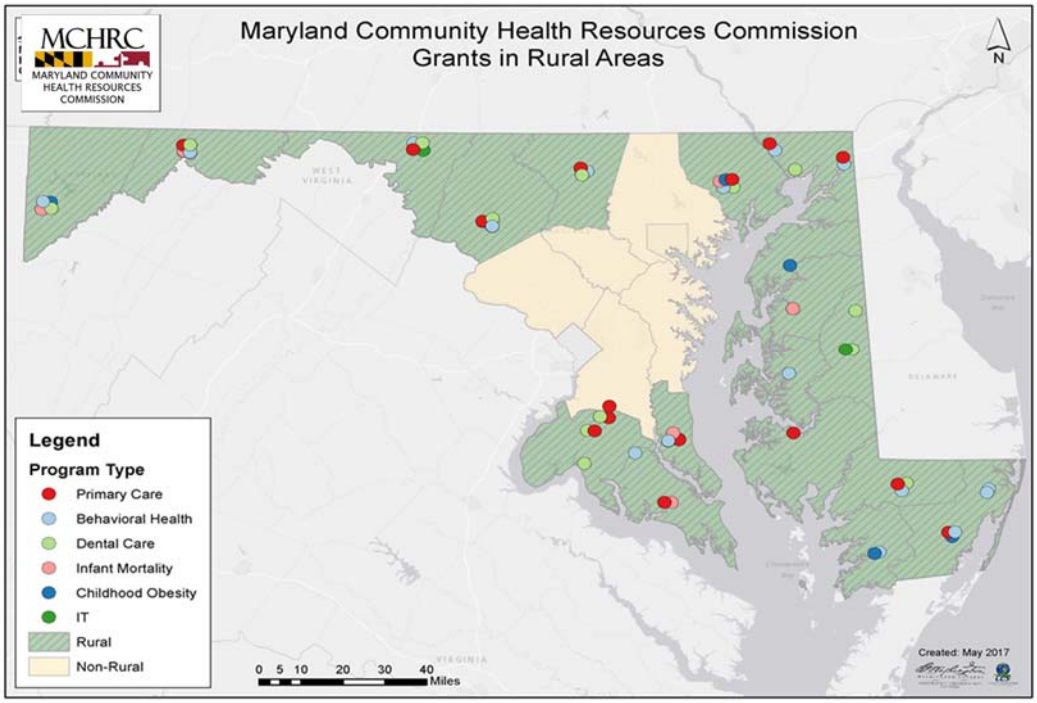
- working with MSDE to revise the annual SBHC report submitted to the state;
- providing technical assistance to SBHCs around billing third-party payors; and
- providing recommendations to MSDE to update the SBHC standards.

The Council reports specified findings and recommendations to the Department of Health, the Department of Education, and the CHRC by December 31 of each year, and the 2018 Annual Report can be found in Appendix F.

### *Rural Health*

Over the years, the Commission has provided special emphasis on supporting programs that address unmet health needs in rural areas. Of the 210 grants awarded by the CHRC, more than half (107 of 210) have supported programs in rural areas (Appendix G). CHRC rural health grants, totaling approximately $28 million, have provided 82,812 patients access to primary care, behavioral health care, dental, women's health, and childhood obesity prevention services in 18 rural jurisdictions of the state. CHRC grants have provided the start-up funding to enable safety net providers to increase their capacity and have supported innovative and replicable projects to address social determinants of health and serve vulnerable populations.

The Commission has partnered with the Maryland Department of Health, the Administration, the Maryland Rural Health Association, and CHRC grantees to celebrate Rural Health Day in 2017 and 2018. In 2017, Rural Health Day was celebrated in Southern Maryland, with visits to the Calvert County Health Department and Greater Baden Medical Systems, both recipients of multiple CHRC grants to support primary care services, dental care services, behavioral health services, and women's health services. In 2018, officials celebrated Rural Health Day with a visit to Access Carroll, an organization which has used CHRC grant funds to transition from a grant-based billing model to billing both Medicaid and private payers. The grantee, in downtown Westminster, provides access to primary care, behavioral health, and dental services for low-income individuals, all in one location.



The Maryland Rural Health Association (MRHA) and Maryland Community Health Resources Commission partnered to produce three white papers on CHRC-funded expansion of health services in rural communities. An executive summary of these white papers was published in January 2018. The first white paper in the series, "Social Determinants of Health and Vulnerable Populations in Rural Maryland," was published in December 2016 and provides an overview of some of the key social determinants of health impacting vulnerable populations in Maryland's rural communities and offers several examples of initiatives that are underway to address these issues directly and expand access in underserved areas. The second white paper in the series, "Bringing Care Where it is Needed: A Rural Maryland Perspective," was published in May 2017 and provides an overview of the difficulties in accessing health care in isolated rural communities and shows examples of current initiatives that are underway to provide health services in non-traditional settings. In October 2017, the third paper of the series, "Dental Access in Rural Maryland: Innovative Approaches to Care," was released, providing an overview of the challenges of accessing affordable dental care in isolated rural communities and examples of initiatives that increase access to dental care in vulnerable rural communities. The key themes and lessons learned from these papers include:

1. Rural communities are particularly impacted by a shortage of providers, and care coordination is an effective intervention strategy.
2. Lack of access to public transportation is a major barrier to care and bringing transportation assistance or health care to patients can be effective tools in helping people access care.
3. Integrating dental care programs into the community is an effective strategy for managing chronic conditions; and
4. Promoting health literacy may be an effective tool in improving health outcomes.

The outcomes achieved in the grants highlighted in the white papers describe how CHRC grant funding is making a lasting impact on rural health in Maryland. These papers can be found in Appendix F.

The Commission is partnering with the Maryland Rural Health Association on an ongoing Patient Testimonials Project to highlight the human impact of CHRC-funded programs in rural areas. As part of the project, six grantees and six residents served by the projects were interviewed. The programs highlighted were:

**Access Carroll Integrated Healthcare,** a community-based healthcare provider of somatic, dental, and behavioral health services, all in one location.

**Calvert County Health Department's "ealthy Beginnings Program,** a project to reduce infant mortality rates by creating a "one-stop shop" of integrated behavioral health and social services for substance-using women and expectant mothers.

**Garrett County Health Department's Tele-Buprenorphine Expansion Program,** a program to use telehealth technology to increase access to Medication-assisted Therapy and responds to the recommendations of the Governor's Heroin and Opioid Emergency Task Force. The program involves a collaboration between the Garrett County Health Department and the University of Maryland School of Medicine's Department of Psychiatry.

**Lower Shore Clinic's CareWrap Program,** a program that targets individuals with behavioral health needs who visit Peninsula Regional Medical Center in high volumes and provides intensive case management services for these individuals post-hospital discharge.

**West Cecil Health Center Smiles Program,** an expanded dental program in Cecil County through a partnership with the University of Maryland Dental School. Under a cooperative agreement, West Cecil has agreed to take over operations of the Dental School's clinic and maintain its status as a clinical teaching site.

**Wicomico County Health Department's Salisbury Wicomico Integrated Firstcare Team,** a mobile-integrated health project aimed at reducing preventable 911 calls through a team consisting of an emergency medical technician and a registered nurse who identify frequent callers to 911 for non-emergent conditions and conduct welfare checks, case management, safety planning, and refer patients to primary care physicians, medical specialists, and, if necessary, in-home care providers.

During the 2016 legislative session, Senate Bill 707 established a workgroup on rural health care delivery to oversee a study of healthcare delivery in the Middle Shore region and to develop a plan for meeting the health care needs of the five counties – Caroline, Dorchester, Kent, Queen Anne's and Talbot. Both CHRC Commissioner J. Wayne Howard and Executive Director Mark Luckner served on the workgroup. After 15 months, a report[6] was issued which recommended the creation of a rural health collaborative. The collaborative has since been formed with initial funding from the Maryland Department of Health and the CHRC.

***CHRC Behavioral Health White Papers***

The CHRC partnered with Kimá Joy Taylor MD, MPH, to issue two white papers that describe how CHRC funding has increased access to needed behavioral health services for Maryland's vulnerable populations. The first brief described programs that provide evidence-based integrated behavioral health and somatic health services throughout the state. The second brief in the series includes a focus on programs that address Substance Use Disorder and the provision

6 http://mhcc.maryland.gov/mhcc/pages/home/workgroups/documents/rural_health/final%20report/lgsrpt_finalreport_rpt_23102017.pdf

of Medication-assisted Treatment. CHRC grants have changed the landscape for the vulnerable population with behavioral health treatment needs by:

- Providing the funding to support the clinical time and the development of the infrastructure necessary for behavioral and physical health care providers to expand into new services and build partnerships.
- Increasing the capacity of providers dedicated to the population in ways that benefit the entire state.
- Providing seed funding for innovative processes and programs for the population that can be replicated statewide and providing technical assistance to organizations interested in implementing similar programs. Lessons learned with these programs can also inform local and state policies, regulations, and legislation.
- Providing leadership the time, planning assistance, and cultural adjustments needed to add or expand a lifesaving but stigmatized evidence-based service to their continuum.
- Supporting grantees' work to destigmatize medications as they work with other health care partners in both somatic and behavioral health systems of care.

These papers can be found in Appendix G.

# Appendix A

# CHRC COMMISSIONER LISTING

## FEBRUARY 4, 2019

Allan A. Anderson, MD, MMM, CMD, Chairman, CHRC

Elizabeth Chung, Vice Chair, Executive Director, Asian American Center, Frederick

Scott T. Gibson, Vice President for Human Resources at Melwood Horticultural Training Center, Inc.

J. Wayne Howard, Management Consultant, Mid-Shore Mental Health Systems, Inc.

Celeste James, Executive Director of Community Health and Benefit, Kaiser Permanente of the Mid-Atlantic States

Surina A. Jordan, PhD, President and Senior Health Advisor, Zima Health, LLC

Barry Ronan, President and CEO, Western Maryland Health System

Erica I. Shelton, MD, Physician and Assistant Professor, Johns Hopkins University School of Medicine, Department of Emergency Medicine

Carol Ivy Simmons, PhD

Julie Wagner, Vice President, Community Affairs, CareFirst BlueCross BlueShield

Anthony C. Wisniewski, Esq., Chairman of the Board and Chief of External and Governmental Affairs, Livanta LLC

# Appendix B

The Hilltop Institute

# Summary Report:
# Maryland Community Health Resources Commission Program Assessment

November 6, 2018

UMBC
AN HONORS UNIVERSITY IN MARYLAND

**Summary Report:**
**Maryland Community Health Resources Commission Program Assessment**

## Table of Contents

**Summary Report:**
**Maryland Community Health Resources Commission Program Assessment**

## Background

The Maryland Community Health Resources Commission (CHRC), established by the Maryland General Assembly through the *Community Health Care Access and Safety Net Act of 2005*, aims to expand access to health care for low-income Marylanders and underserved communities and increase the capacity of the state's health care safety net infrastructure to deliver high-quality, affordable health care. The CHRC sponsors a grants program that has awarded 210 grants totaling $64.1 million since the CHRC's inception. Each year, the CHRC issues a call for proposals, inviting eligible "community health resources"[1] to apply for grants. Strategic priorities for the grants change from year to year but generally focus of the CHRC's mission, which is to increase access to care and build capacity among the state's safety net providers. Primary and preventive care, dental services, behavioral health services, and food insecurity and obesity prevention are common areas of focus.

In 2015, the CHRC sought guidance from The Hilltop Institute at the University of Maryland, Baltimore County (UMBC) on strategies for evaluating CHRC's grants program to determine the extent to which funded projects contributed to more cost-effective service delivery and improved health outcomes in Maryland. The CHRC approached Hilltop because many CHRC projects serve beneficiaries of the Maryland Medicaid program and Hilltop—through its long-standing partnership with the Maryland Department of Health (the Department)—is recognized for its expertise in Medicaid policy analysis, research, and data analytics. Additionally, Hilltop has ready access to Medicaid administrative data. Projects funded by the CHRC vary widely—e.g., by type of grantee organization, population and geographic areas served, health issues addressed, type of program or service, and whether the program or service is an innovation or a continuation or expansion of an ongoing initiative. While this approach to grantmaking has enabled the CHRC to support a variety of organizations and initiatives and to test a number of promising program approaches, it poses substantial challenges to developing a comprehensive evaluation strategy.

As a first step to addressing the challenges of evaluating the CHRC's grants program, Hilltop recommended conducting assessments of a small number of grants awarded in 2016 that aimed to serve a significant number of Medicaid beneficiaries. With approval of the Department, Hilltop could access Medicaid administrative data for the assessments in order to examine service utilization and costs for program participants. The CHRC agreed to this approach. In spring 2016, the CHRC contracted with Hilltop to conduct assessments of four projects selected

[1] As defined by COMAR 10.45.01.02(7).

from among the 2016 grant recipients using these criteria: 1) the goals of the intervention were clearly stated; 2) the enrollment process and timeline were clearly specified; 3) data were available to support the stated outcome measures, either through intervention-specific primary data collection by the grantee and/or Medicaid administrative data available through Hilltop; and 4) the staff of each project was committed to and capable of participating in an assessment and expected sufficient Medicaid participants to enroll so that statistically valid conclusions could be drawn.

The four grantees whose projects were selected for assessments are Potomac Healthcare Foundation, Lower Shore Clinic, Garrett County Health Department, and Baltimore City Health Department. The objective of the assessments was to determine the extent to which the programs had an impact on health services utilization and costs for participating Medicaid beneficiaries. For Medicaid participants, Hilltop examined service utilization and costs during the 90-day period immediately preceding program enrollment ("baseline"), during participation in the program ("post-intervention"), and in the 90-day period immediately following discharge from the intervention ("post-intervention"). The duration of the intervention varied by program. Given the short duration of the post-intervention period, the lack of comparison groups, and the limited number of participating Medicaid beneficiaries, conclusions as to whether or not the four programs resulted in sustained changes in Medicaid service utilization and costs beyond the 90-day post-intervention period cannot be made without further study.

The assessment methodology and limitations are discussed below, followed by key findings.

## Assessment Objectives and Methodology

The objective of the assessments was to determine the extent to which the programs implemented by the four grantees had an impact on health services utilization and costs for participating Medicaid beneficiaries. As discussed below, the specific aims of each project varied, as did the outcome measures that were examined.

So that Hilltop could identify the study population for each of the four programs, grantees provided Hilltop with the names, Medicaid identification numbers, dates of program enrollment and discharge, and disposition at discharge (e.g., completed the program or withdrew) for participants in their programs. Then Hilltop identified participants who could be matched to Medicaid enrollment files. To qualify for the study population, participants had to be continuously enrolled in Medicaid for at least 90 days prior to program enrollment, during enrollment in the program, and at least 90 days after discharge from the program.

Hilltop conducted the assessments using a pre/post evaluation design. Medicaid service utilization and costs were examined during the 90-day period immediately preceding program enrollment ("baseline"), during participation in the program ("intervention"), and in the 90-day period immediately following discharge from the intervention ("post-intervention"). The duration of the intervention varied by program. Measurement periods were specific to each

participant, depending on the dates of program enrollment and discharge. Outcome measures for each program are listed in Appendix A and include the following:

- **Service Utilization Measures:** Hilltop counted the number of participants who had an inpatient admission, ED visit, or ambulatory care visit, and the average number of visits per user. Clinical outcome measures specific to each program were also examined.
- **Cost Measures:** Hilltop examined Medicaid costs for each user of services and then calculated average per-user costs. Fee-for-service claims and managed care organization (MCO) encounters for each user were grouped into three service types: hospital inpatient and outpatient costs (e.g., surgical centers and outpatient clinic services), professional fees from treatment and evaluation by individual health care providers, and costs for retail pharmacy. For each of the three service types, Hilltop calculated the average cost per user using as the denominator the total number of participants who used at least one service of that type during the measurement period. Similarly, the denominator for the calculation for average total Medicaid cost per user was based on the number of participants who used any of the three service types during the measurement period (more detail on the methodology for calculating per user costs is provided in Appendix B).

## Limitations of the Assessments

The assessment was limited to program participants who met the Medicaid eligibility requirements described above.

While the number of participants in the study population varied significantly across the four programs, the number of study participants was generally small. The small study populations, the lack of comparison groups for the pre/post study design, and a post-intervention period of only 90 days limits the extent to which findings can be applied to the broader population of program participants or Medicaid beneficiaries.

Costs for MCO services were estimated from fee-for-service fee schedules and other external sources. Thus, reported participant costs are estimates only and may not represent the actual cost to the Medicaid program or reimbursement to providers.

This was a preliminary study, and conclusions as to whether or not the four programs resulted in sustained changes in service utilization and costs beyond the 90-day post-intervention period cannot be made without further study.

## Key Findings

With grant support from the CHRC, Potomac Healthcare Foundation, Lower Shore Clinic, and Garrett County Health Department launched programs in 2016 targeting individuals with behavioral health conditions that aimed to stabilize program participants, connect them with

appropriate community-based services and treatment, and reduce the use of inpatient and emergency department (ED) services. Preliminary findings indicate that all three programs demonstrated some degree of success in getting individuals into treatment and effecting a shift from hospital-based care to outpatient services and pharmacy treatment.

With its grant from the CHRC, the Baltimore City Health Department conducted outreach to vulnerable pregnant women with the objective of connecting them with obstetric and pediatric care to improve birth outcomes and the health of their babies. The program succeeded in connecting pregnant women to the health care system, and preliminary data suggest that birth outcomes were similar to those for the overall Medicaid population.

In the descriptions of each program below, program aims are listed as described in the grantees' 2016 proposals to the CHRC. Assessment findings related to those aims are highlighted in the "key findings" for each grantee.

More research will be required before definitive conclusions can be reached regarding the efficacy and cost-effectiveness of these four programs, all of which were in the developmental stages when assessed by Hilltop. In order to conduct a more comprehensive evaluation, the four programs will require further development to clearly define the target population, the intervention or "treatment," the criteria for enrollment and disenrollment, and the desired outcomes. Additionally, the interventions must be designed to ensure sufficient enrollment to produce statistically significant findings and facilitate defensible cost savings calculations. The CHRC now has the opportunity to leverage the work of these four grantees and the findings from this assessment to design and test next-phase program models.

## *Potomac Healthcare Foundation*

Potomac Healthcare Foundation received a three-year, $275,000 grant to establish a 50-bed residential Recovery Support Center in West Baltimore to provide a stabilizing setting where individuals with substance use disorder (SUD) can stay up to 12 weeks and receive a full continuum of treatment and support in transitioning to outpatient treatment. Individuals are admitted to the program after a crisis-driven acute care episode in the hospital or ED. Often such individuals do not have access to addiction treatment services.

**Aim of the Program:** The aim of the Recovery Support Center is to provide a systematic process for immediately linking individuals with SUD who are discharged from the hospital or ED to stabilizing care and addiction treatment in order to prevent future hospitalizations, readmissions, and revolving use of the ED.

**Study Population:** Participants were enrolled from July 2016 to June 2017 and remained in the program for 1 to 28 days, with an average length of enrollment of 13 days. Program staff

reported that 60.8 percent of participants completed the program.[2] Participants had an average age of 38 years, ranging from 20 to 65 years. About 46 percent of participants were White and 32 percent were Black.

**Service Utilization:** The number of participants who had an inpatient visit or ED visit decreased by 16.0 and 8.5 percentage points, respectively, from baseline to the post-intervention period. Almost all participants continued treatment for an SUD during the post-intervention period, either through medication and/or outpatient treatment. After discharge from the program, 88.3 percent of participants continued to be engaged in alcohol or drug dependence treatment for at least 30 days.[3] A total of 91.2 percent of participants had at least one medication-assisted treatment (MAT) following program discharge, a 5.2 percentage point increase from baseline. After discharge from the program, 20.5 percent of enrollees had claims or encounters for detoxification, an inpatient admission, or an ED visit with a primary diagnosis of an SUD, suggesting relapse. The relapse rate may be under-reported as some participants who relapsed may not have received care through an ED or in an acute care setting.

**Potomac Healthcare Foundation Key Findings**

- Program participants demonstrated evidence of continuing treatment for an SUD during the post-intervention period, with 88.3 percent engaged in alcohol or drug dependence treatment for at least 30 days after program discharge.
- After discharge from the program, 20.5 percent of participants relapsed as evidenced by claims or encounters for detoxification, an inpatient admission, or an ED visit with a primary diagnosis of substance disorder.
- Even though total average estimated Medicaid costs per user increased slightly in the 90-day post-intervention period compared to the 90-day baseline period, the data suggest a shift from hospital-based care to outpatient services and pharmacy treatment for an SUD, an objective of the program.

**Health Care Costs:** While total average estimated Medicaid costs per user increased from $9,512 during the baseline period to $9,827 in the post-intervention period—an increase of 3.3 percent—service utilization patterns suggest a shift from hospital-based care to outpatient services. Average per-user hospital-related costs (e.g., hospital inpatient, ED, and other outpatient services) declined as a share of total average per user Medicaid costs, from 63.2 percent during baseline to 45.0 percent during the post-intervention period (Appendix B, Table 1). At the same

[2] Program staff indicated that program completion occurred when the participant and staff mutually agreed that treatment goals had been met.

[3] Defined as two or more inpatient admissions or outpatient visits related to alcohol or other drug dependence treatment within 30 days of program discharge, or medication-assisted treatment (MAT) within 34 days of program discharge.

time, average costs per user for professional and pharmacy services each increased approximately 50 percent from baseline to the post-intervention period.

## *Lower Shore Clinic*

Lower Shore Clinic received a fifteen-month grant of $105,000 to support CareLink, a new program targeting individuals with multiple chronic diseases as well as behavioral health needs who had three or more ED visits and/or admissions to Peninsula Regional Medical Center within a six-month period.

**Aim of the Program**: CareLink aims to reduce 30-day hospital readmission rates by providing intensive case management for participants post-discharge from the hospital and helping participants establish connections with primary care providers, behavioral health treatment providers, and other health care resources in the community.

*Note: The number of Medicaid beneficiaries participating in the CareLink program during the assessment period of May 2016 to June 2017 was very small, so the following findings must be interpreted with caution. Almost half (41.7 percent) of Medicaid beneficiaries in the study population were also enrolled in Medicare. Hilltop's analysis examined Medicaid service utilization and costs only as Medicare data were not available for this study. Thus, health care costs incurred by Medicare-Medicaid enrollees during the measurement period are understated.*

**Lower Shore Clinic**
**Key Findings**

- The experience with 30-day hospital readmissions was mixed, with 18.2 percent of participants readmitted within 30 days of their most recent hospital stay prior to enrollment in CareLink.
- However, ED visits associated with behavioral health-related conditions decreased from 21.4 percent during baseline to 6.5 percent in the post-intervention period.
- The percentage of participants with a usual source of care in the post-intervention period nearly doubled from baseline.
- Total average estimated Medicaid costs per user decreased 44 percent in the 90-day post-intervention period compared to the 90-day baseline period, and there was evidence of a shift from hospital-based care to outpatient services and pharmacy treatment for chronic conditions and behavioral health needs.

**Study Population:** Participants were enrolled from May 2016 to June 2017 and remained in the program for 12 to 344 days, with an average length of enrollment of 111 days. Program staff reported that 50 percent of enrollees completed the program.[4] The average age of participants

[4] Parameters for program completion were loosely defined in this pilot program, with program staff stating that disenrollment occurred when there were no longer scheduled visits with the participant.

was 50 years, with a range of 20 to 72 years. About two-thirds (62.5 percent) of participants were women. Over two-thirds (70.8 percent) were White and 25 percent were Black.

**Service Utilization:** The proportion of ED visits pertaining to behavioral health-related conditions decreased from 21.4 percent during baseline to 6.5 percent in the post-intervention period. The decrease was most pronounced for mental health diagnoses but was also evident for an SUD diagnoses. Of the participants who had an inpatient admission during the baseline period, 18.2 percent were readmitted during the 30-day period immediately following discharge from the intervention. The percentage of participants with a usual source of care (defined as two consecutive ambulatory visits with the same provider) in the post-intervention period nearly doubled from 33.3 percent at baseline to 62.5 percent during the post-intervention period. The experience with hospital readmissions is mixed: 18.2 percent of participants were readmitted to the hospital within 30 days of their most recent hospital admission before enrolling in CareLink; 36.4 percent were readmitted during the intervention period; and 36.4 percent had no admissions during the 90-day post-intervention period.

**Health Care Costs:** Total average estimated Medicaid costs per user decreased from $15,990 during baseline to $8,954 in the post-intervention period, or 44 percent (Appendix B, Table 2). Average per-user hospital costs declined from $13,303 during baseline to $7,902 in the post-intervention period, or 41 percent, and average Medicaid costs per user for professional services declined from $2,960 to $2,471, or 17 percent. At the same time, average Medicaid costs per user for pharmacy increased from $1,563 during baseline to $2,421 in the post-intervention period, evidence of a shift from hospital-based care to outpatient services and pharmacy treatment for chronic conditions and behavioral health needs.

## *Garrett County Health Department*

Garrett County Health Department received a three-year grant of $180,000 to support the use of telehealth technology to increase access to MAT in a rural area of the state. At the time of proposal submission to the CHRC, the Garrett County Center for Behavioral Health was the only certified addiction treatment service in the county. The telehealth program was a collaboration between the Garrett County Health Department and the Department of Psychiatry at the University of Maryland, School of Medicine. Participants in the program received outpatient substance use treatment and buprenorphine prescriptions through real-time video conferencing with physicians.

**Aim of the Program:** The telehealth program aims to improve MAT compliance and improve recovery rates in order to reduce overdose deaths and overdose admissions to EDs.

*Note: The number of Medicaid beneficiaries receiving MAT via telehealth technology during the assessment period was exceedingly small, so the following findings must be interpreted with caution*.

**Study Population:** Participants were enrolled from November 2016 to April 2017 and remained in the program for 8 to 134 days, with an average length of enrollment of 66 days. Program staff reported that 71.4 percent of participants completed the program.[5] The average age of participants was 31 years, ranging from 23 to 46 years. The majority of participants were male (57.1 percent) and White (85.7 percent).

**Service Utilization:** No inpatient admissions were reported during the 90-day post-intervention period, although the number of participants with at least one ED visit increased from 42.9 percent to 74.4 percent. After discharge from the program, 85.7 percent of participants continued to be engaged in alcohol or drug dependence treatment for at least 30 days.[6] All participants obtained at least one MAT prescription following program discharge.

**Health Care Costs:** Total average estimated Medicaid costs per user decreased from $4,725 during baseline to $3,901 in the post-intervention period, or 17 percent (Appendix B, Table 3). Average per user hospital costs declined from $5,420 during baseline to $541 in the post-intervention period. At the same time, average Medicaid costs per user for professional services held steady, while average per-user pharmacy costs increased from $149 during baseline to $1,268 in the post-intervention period. This suggests evidence of a shift from hospital-based care to outpatient services and pharmacy treatment during the immediate 90 days after discharge, which aligns with the objectives of Garrett County's program. However, average estimated Medicaid costs per user must be interpreted with extreme caution because of the small number of participants in the study population.

**Garrett County Health Department Key Findings**

- While no inpatient admissions were reported during the 90-day post-intervention period, the number of participants with at least one ED visit increased from 42.9 percent in the baseline period to 74.4 percent in the post-intervention period.
- After discharge from the program, all participants obtained at least one MAT prescription and 85.7 percent continued to be engaged in alcohol or drug dependence treatment for at least 30 days.
- Average estimated Medicaid costs per user suggest evidence of a shift from hospital-based care to outpatient services and pharmacy treatment during the immediate 90 days after discharge.

## *Baltimore City Health Department*

Baltimore City Health Department received a two-year grant of $250,000 from the CHRC to support the continued implementation of B'More for Healthy Babies Initiative. Pregnancy

[5]Program staff report that program completion was defined as when a participant's treatment plan was reduced to only one scheduled session per week of outpatient therapy.
[6] Defined as two or more inpatient admissions or outpatient visits related to alcohol or other drug dependence treatment within 30 days of program discharge, or MAT within 34 days of program discharge.

engagement specialists use proactive, assertive trauma-informed strategies to conduct outreach to pregnant women and newborns and refer them to obstetric and pediatric homes.

**Aim of the Program:** B'More for Healthy Babies targets vulnerable pregnant women and aims to increase access to prenatal care, home visits, and other services that have been shown to improve outcomes in comparable populations, with the ultimate goal of improving birth outcomes and reducing the infant mortality rate in Baltimore.

**Assessment Approach**: Baltimore City Health Department enrolls vulnerable women in B'More for Healthy Babies at any time during a pregnancy. Enrollment spans from initial outreach to the pregnant woman until the woman is connected to services at an appropriate obstetric or pediatric home. Hilltop's study population consisted of women who met the study's Medicaid eligibility requirements and were enrolled in the program during the period of November 2016 to June 2017. Hilltop analyzed administrative data for each participant-specific 90-day baseline period, intervention period, and 90-day post intervention period. For those women who did not give birth during the intervention or post-intervention period, Hilltop examined birth outcomes to the extent that data were available prior to submission of the final assessment report to the CHRC.

**Study Population:** The study population totaled 112 women. The women were enrolled in the program anywhere from 1 to 198 days, for an average of 22 days. Program staff reported that all were referred to care. The average age of participants was 25 years, and the majority of participants were Black (71.4 percent). The number of days from initial enrollment to the participant's delivery date ranged from 4 to 252 days, with an average of 127 days.

**Baltimore City Health Department Key Findings**

- 99 percent of enrolled women had at least one prenatal visit during the measurement period, and 46.5 percent completed one postpartum visit during the post-intervention period, suggesting that the objective of the intervention—connecting vulnerable pregnant women to the care system—was achieved to some extent.
- The percentage of participants who received care consistently from the same provider for two or more visits increased from 51.8 percent during the baseline period to 70.5 percent in the post-intervention period.
- The rate of very low birthweight among study participants' newborns was about 3 percent, consistent with the overall Medicaid population. However, more comprehensive research will be required to determine the extent to which the intervention has an impact on birth outcomes and the health of babies.

**Service Utilization:** Nearly all participants completed a prenatal visit at some point during their pregnancy, indicating that the objective of the intervention—a connection to obstetric services—was achieved. For example, 99 percent of enrolled women had at least one prenatal visit during the measurement period; however, the limitations of the study period precluded determining the

extent to which these women were receiving prenatal care on the recommended schedule. Almost half of the participants (46.5 percent) completed one postpartum visit within the post-intervention period. The percentage of participants who received care consistently from the same provider for two or more visits increased from 51.8 percent during the baseline period to 70.5 percent in the post-intervention period.

**Healthcare Costs:** Estimated Medicaid costs per user for hospital services averaged $8,819 in the post-intervention period, reflecting labor and delivery charges and any hospital-based visits related to pregnancy or postpartum care (Appendix B, Table 4).

**Birth Outcomes:** While birth outcomes could not be identified for 10 percent of the study population,[7] the data on the 90 percent for whom birth outcomes were available in the Medicaid administrative data indicated that 3 percent of live births were for very low birthweight babies (less than 1,500 grams). This is consistent with the rate of very low birthweight in the overall Medicaid population. The remaining birth events were for normal (2,500 grams or more) or low birthweight babies (1,500 to 2,499 grams). Medicaid MCOs, which were responsible for 97 percent of the births to study participants, receive an enhanced "kick payment" for very low birthweight babies. Kick payments for very low birthweight babies delivered to MCO-enrolled study participants were an average of $69,697 per very low birthweight baby. This compares to an average kick payment of $15,456 for normal or low birthweight babies.

[7] These pregnancies possibly ended in miscarriage or voluntary termination, delivery may have occurred after the conclusion of the study period, or there may have been a lag in providers submitting claims to Maryland Medicaid.

# Appendix A. Assessment Outcome Measures by Type and Grantee

| Outcome Measure | Grantee | | | |
|---|---|---|---|---|
| **Health Care Expenditures** | **Baltimore City Health Department** | **Garrett County Health Department** | **Lower Shore Clinic** | **Potomac Healthcare Foundation** |
| Institutional | ✓ | ✓ | ✓ | ✓ |
| Professional | ✓ | ✓ | ✓ | ✓ |
| Pharmacy | ✓ | ✓ | ✓ | ✓ |
| **Program-Specific Expenditure Measures** | | | | |
| Maternal Delivery Expenditures | ✓ | | | |
| **Health Care Utilization** | | | | |
| Emergency Department Visits | ✓ | ✓ | ✓ | ✓ |
| Inpatient Hospitalizations | ✓ | ✓ | ✓ | ✓ |
| Ambulatory Care Visits | ✓ | ✓ | ✓ | ✓ |
| Usual Source of Ambulatory Care | ✓ | ✓ | ✓ | ✓ |
| **Program-Specific Utilization Measures** | | | | |
| Use of Medication Assisted Treatment | | ✓ | | ✓ |
| Substance Use Relapse Event | | ✓ | | ✓ |
| Engagement in Alcohol or Other Drug Dependence Treatment | | ✓ | | ✓ |
| Prenatal Care Visits | ✓ | | | |
| Postpartum Visits | ✓ | | | |
| Family Planning Services | ✓ | | | |
| Maternal Delivery Outcomes | ✓ | | | |
| Inpatient Hospital Readmissions | | | ✓ | |
| Post Inpatient Hospital Visit Primary Care Visit | | | ✓ | |
| Post Inpatient Hospital Visit Pharmacy Utilization | | | ✓ | |
| Mental Health Utilization | | | ✓ | ✓ |

## Appendix B. Total and Average Per User[8] Estimated Medicaid Costs by Expenditure Type and Phase

**Table 1. Potomac Healthcare Foundation (n = 444)**

| Type | Hospital | Professional | Pharmacy | Total |
|---|---|---|---|---|
| **Baseline Period** | | | | |
| % of Total Medicaid Cost | 63.2% | 28.8% | 8.0% | **100%** |
| Total Users | 269 | 386 | 310 | **394** |
| Average Cost per User | $8,806 | $2,799 | $961 | **$9,512** |
| **Intervention Period** | | | | |
| % of Total Medicaid Cost | 4.7% | 84.1% | 11.2% | **100%** |
| Total Users | 39 | 437 | 403 | **439** |
| Average Cost per User | $2,082 | $3,343 | $484 | **$3,957** |
| **Post-Intervention Period** | | | | |
| % of Total Medicaid Cost | 45.0% | 42.2% | 12.8% | **100%** |
| Total Users | 205 | 401 | 357 | **411** |
| Average Cost per User | $8,863 | $4,249 | $1,451 | **$9,827** |

[8] Hilltop examined Medicaid costs for each user of services and then calculated average per user costs. Fee-for-service claims and MCO encounters for each user were grouped into three service types: hospital inpatient and outpatient costs (e.g., surgical centers and outpatient clinic services), professional fees from treatment and evaluation by individual health care providers, and costs for retail pharmacy. The cost of MCO professional encounters was imputed using Medicaid fee schedules. For hospital services, Hilltop calculates the MCO payment amount as 94 percent of the charge regulated by the Maryland Health Services Cost Review Commission (HSCRC). The Maryland Department of Health prices all pharmacy encounters. For each of the three service types, Hilltop calculated the average cost per user using as the denominator the total number of participants who used at least one service of that type during the measurement period. Similarly, the denominator for the calculation for average total Medicaid cost per user was based on the number of participants who used any of the three service types during the measurement period. Not every program participant used each of the three service types during the various phases of the study. In a few cases, Hilltop found no Medicaid claims or encounters for individuals reported by the grantees as program participants either for some or all of the phases of the measurement period; these individuals were not included in the per user calculations.

**Table 2. Lower Shore Clinic**

| Type | Hospital | Professional | Pharmacy | Total |
|---|---|---|---|---|
| **Baseline Period** | | | | |
| % of Total Medicaid Cost | 76.0% | 18.5% | 5.5% | **100%** |
| Total Users | * | * | * | * |
| Average Cost per User | $13,303 | $2,960 | $1,563 | **$15,990** |
| **Intervention Period** | | | | |
| % of Total Medicaid Cost | 64.6% | 21.7% | 13.7% | **100%** |
| Total Users | * | * | * | * |
| Average Cost per User | $10,344 | $3,143 | $3,219 | **$13,235** |
| **Post-Intervention Period** | | | | |
| % of Total Medicaid Cost | 60.2% | 25.1% | 14.7% | **100%** |
| Total Users | * | * | * | * |
| Average Cost per User | $7,902 | $2,471 | $2,421 | **$8,954** |

*The number of individuals in Lower Shore Clinic's study population was very small. In this table, the number of users has been suppressed to protect program participants from possible re-identification.

**Table 3. Garrett County Health Department**

| Type | Hospital | Professional | Pharmacy | Total |
|---|---|---|---|---|
| **Baseline Period** | | | | |
| % of Total Medicaid Cost | 49.2% | 49.0% | 1.8% | **100%** |
| Total Users | * | * | * | * |
| Average Cost per User | $5,420 | $2,317 | $149 | **$4,725** |
| **Intervention Period** | | | | |
| % of Total Medicaid Cost | 6.9% | 61.0% | 32.0% | **100%** |
| Total Users | * | * | * | * |
| Average Cost per User | $426 | $214 | $1,128 | **$3,519** |
| **Post-Intervention Period** | | | | |
| % of Total Medicaid Cost | 9.9% | 57.6% | 32.5% | **100%** |
| Total Users | * | * | * | * |
| Average Cost per User | $541 | $2,246 | $1,268 | **$3,901** |

*The number of individuals in Garrett County Health Department's study population was exceedingly small. In this table, the number of users has been suppressed to protect program participants from possible re-identification.

**Table 4. Baltimore City Health Department (n = 112)**

| Type | Hospital | Professional | Pharmacy | Total |
|---|---|---|---|---|
| **Baseline Period** | | | | |
| % of Total Medicaid Cost | 70.5% | 22.0% | 7.5% | **100%** |
| Total Users | 96 | 110 | 88 | **112** |
| Average Cost per User | $4,247 | $1,157 | $495 | **$5,166** |
| **Intervention Period** | | | | |
| % of Total Medicaid Cost | 75.3% | 17.7% | 7.0% | **100%** |
| Total Users | 55 | 72 | 39 | **78** |
| Average Cost per User | $3,278 | $590 | $428 | **$3,070** |
| **Post-Intervention Period** | | | | |
| % of Total Medicaid Cost | 77.1% | 16.7% | 6.2% | **100%** |
| Total Users | 90 | 108 | 94 | **109** |
| Average Cost per User | $8,819 | $1,588 | $683 | **$9,444** |

**The Hilltop Institute**

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1000 Hilltop Circle
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# Appendix C

# CHRC Grantee Monitoring Report

| | |
|---|---|
| **Grantee Name:** | **Prince George's County Fire/EMS** |
| **Grantee Contact Information:** | Evan Sanna - Email: etsanna@co.pg.md.us, Phone: 240.825.9867 |
| **Grantee #:** | 18-005 |
| **Grant Period:** | May 1, 2018 - April 30, 2020 |
| **Total Award:** | $175,000 |
| **Amount Paid to Date:** | $50,000 |
| **Date of this Report:** | Friday, November 30, 2018 |
| **Additional Funds Leveraged:** | |

**Grantee Payout and Report Schedule**

| Reporting Period | Due Date | Proposed Fund Distribution | Actual Fund Distribution | Actual Expenditures | Required Items |
|---|---|---|---|---|---|
| N/A | | $50,000 | | | Signed grant agreement and approved performance measures |
| Project update 1 | June 4, 2018 | $0 | | | |
| Project update 2 | August 6, 2018 | $0 | | | |
| Report Period One<br>May 1, 2018 - October 31, 2018 | November 30, 2018 | $35,000 | | | **Report 1**: narrative, M&D report, expenditures report and invoice |
| Report Period Two<br>November 1, 2018 - April 30, 2019 | May 31, 2019 | $35,000 | | | **Report 2**: narrative, M&D report, expenditures report and invoice |
| Report Period Three<br>May 1, 2019 - October 31, 2019 | November 30, 2019 | $35,000 | | | **Report 3**: narrative, M&D report, expenditures report and invoice |
| Report Period Four<br>November 1, 2019 - April 30, 2020 | May 31, 2020 | $20,000 | | | **Final Report**: narrative, M&D report, expenditures report and invoice |
| | Total | $175,000 | $0 | $0 | |

# CHRC Grantee Monitoring Report

| | |
|---|---|
| **Grantee Name:** | Prince George's County Fire/EMS |
| **Grant #:** | 18-005 |

**SHIP Focus Area(s) & Measure(s): ED Visits due to Diabetes, Hypertension, Mental Health Conditions**

**Attestation:** I attest that, to the best of my knowledge and belief, all the information contained in this report is accurate and complete. I attest that, to the best of my knowledge and belief, that the information reported by any subcontractors is accurate and complete, and that my organization has in place policies and procedures to monitor and ensure the accuracy of this information. Documentation to support the data will be kept for 5 years and provided to CHRC upon request. Signed_____Date:_____

**NOTE #1:** Any measurement counting "Unique" patients **CANNOT** include the same patients over different reporting periods. The "Totals" column for these measures should sum only unique individuals. For example, if an individual is counted in reporting period 1, then that person should **not** be counted again in reporting period 2.

**NOTE #2:** The program data with its associated data source reported by the grantee on this M&D report is subject to audit by the CHRC.

**NOTE #3:** The CHRC will utilize output **1a** for its "**Total patients/clients seen**" measure, and output **1b** for its "**Total patient/client encounters**" measure.

**NOTE #4:** "Patient/Client Encounters" is defined as any face-to-face visit to a clinician in a clinical setting or a face-to-face meeting with a care manager in a care coordination program.

**Process Metrics**

| Key Project Milestones | Output | Data Source | Reporting Period #1 (May 1, 2018 - October 31, 2018) | Reporting Period #2 (November 1, 2018 - April 30, 2019) | Totals | Goal |
|---|---|---|---|---|---|---|
| **To increase to essential health care services** | 1a) # unduplicated patients served | Grantee database | | | **0** | **100** |
| | 1b) # face to face patient encounters (i.e.. home visits) | Grantee database | | | **0** | |
| | 1c) # of patient encounters via telephone | Grantee database | | | **0** | |
| | 1d) # patients referred to primary care services | Grantee database | | | **0** | |
| | 1e) # patients receiving primary care services | Grantee database | | | **0** | |
| | 1f) # of patients referred to behavioral health services | Grantee database | | | **0** | |
| | 1g) # of patients receiving behavioral health services | Grantee database | | | **0** | |
| | 1h) # of patients referred to other specialist health care services* | Grantee database | | | **0** | |
| | 1i) # of patients receiving other specialist health care services* | Grantee database | | | **0** | |
| | 1j) # of patients receiving other social supports* | Grantee database | | | **0** | |

* describe in narrative

| CHRC Grantee Monitoring Report | | SHIP Focus Area(s) & Measure(s): ED Visits due to Diabetes, Hypertension, Mental Health Conditions |
|---|---|---|
| **Grantee Name:** | Prince George's County Fire/EMS | |
| **Grant #:** | 18-005 | |

**Outcome Metrics**

| Key Project Objectives | Output | Data Source | Reporting Period #1 (May 1, 2018 - October 31, 2018) | Reporting Period #2 (November 1, 2018 - April 30, 2019) | Totals | Goal |
|---|---|---|---|---|---|---|
| **Reduce use of 911 services** | 2a) # program participants calling 911 | First watch/EMR | | | **0** | |
| | 2b) # calls to 911 from program participants | First watch/EMR | | | **0** | Reduce by 60%** |
| **Reduce avoidable hospitalization** | 3a) # of ED visits by program participants | CRISP | | | **0** | |
| | 3b) # of hospital admissions by program participants | CRISP | | | **0** | |

** As determined from 4 mo pre/post and described in narrative

# Appendix D

STATE OF MARYLAND

# Community Health Resources Commission

45 Calvert Street, Room 336 • Annapolis, Maryland 21401

Larry Hogan, Governor – Boyd Rutherford, Lt. Governor
Allan Anderson, M.D., Chair – Mark Luckner, Executive Director

**TO**: CHRC Commissioners

**FROM**: Mark Luckner, Executive Director, CHRC
Moira Lawson, Senior Health Policy Advisor, CHRC

**DATE**: February 4, 2019

**RE**: CHRC Grantee Audits in CY 2018

In 2014, the Maryland Office of the Inspector General conducted a fiscal compliance audit of the Maryland health care commissions. The audit of the CHRC resulted in 3 recommendations:
(1) ensure all grant agreements are properly executed prior to making payments to the grantees;
(2) perform a documented review of self-reported grantee performance results and expenditure reports; and (3) obtain supporting documentation, at least on a test basis, to ensure the grantee is meeting grant milestones and deliverables and to ensure grant funds are spent in accordance with the grant agreements. For the past 3 years, CHRC staff has implemented an enhanced performance review process, documenting the review of grantee progress and performing audits of 25% of all open grants to obtain supporting documentation of milestones and deliverables.

As of July 1, 2018, there were 51 open grants, including those awarded in FY 2018. Programs eligible for an audit have been open for at least one year and have submitted a minimum of two M&D reports (one full year of implementation). A program previously audited is exempt from audit for the 12 months following the audit. In 2018, thirteen grants (26% of open grants) were audited.

| CHRC Grantee Audits 2018 | | | | |
|---|---|---|---|---|
| **Grantee** | **Focus Area** | **Date** | **Result*** | **2nd Audit** |
| MedStar Union Memorial Hospital/15-009 | Primary Care | August 2 | Passed | N/A |
| Catholic Charities Arch. Of D.C./16-002 | Dental | Oct 10 | Passed | N/A |
| Charles County Health Dept./16-013 | Primary Care | September 25 | Passed | N/A |
| Health Partners/17-002 | Primary Care | July 19 | Passed | N/A |
| Family Services Inc./17-003 | Primary Care | August 21 | Passed | N/A |
| Worcester Youth and Family Serv./17-005 | Behavioral Health | August 16 | Not Passed | Passed on 2nd audit |
| Pascal/17-006 | Behavioral Health | August 30 | Not Passed | Passed on 2nd audit |
| Muslim Medical Community/17-009 | Behavioral Health | October 22 | Passed | N/A |
| Baltimore City Health Department/17-012 | Food Security | Sept 20 | Not Passed | 2nd audit scheduled February 2019 |
| West Cecil Health Center/17-013 | Dental | September 12 | Passed | N/A |
| Anne Arundel County Health Dept./17-014 | Dental | October 16 | Passed | N/A |
| Allegany County Health Dept./17-015 | Dental | July 23 | Passed | N/A |
| Family Tree/17-017 | Infant Mortality | July 9 | Passed | N/A |

* Note: Grantees have passed an audit when they are able to successfully document the metrics reported to the CHRC on the Milestone and Deliverables report. Those who fail to document these metrics have not passed the audit and are required to undergo a second audit after the next report is submitted.

# Appendix E

STATE OF MARYLAND
Community Health Resources Commission
45 Calvert Street, Room 336 • Annapolis, Maryland 21401

Larry Hogan, Governor – Boyd Rutherford, Lt. Governor
Allan Anderson, M.D., Chair – Mark Luckner, Executive Director

**TO**: CHRC Commissioners

**FROM**: Mark Luckner, Executive Director, CHRC
Moira Lawson, Senior Health Policy Advisor, CHRC

**DATE**: November 20, 2018

**RE**: Post-Grant Sustainability of CHRC Projects

The following memo summarizes recent analysis performed by CHRC staff of the post-grant sustainability of CHRC-funded projects. Post-grant sustainability is determined by CHRC staff as to whether the core services of the grant have been maintained one year after Commission funds have been fully expended. This determination is made by: (1) reviewing the final grantee narrative report submitted to the Commission upon the close of the grant; (2) querying of publicly available information (*i.e.*, grantee website or annual report), and (3) contacting the grantee, if necessary.

The post-grant sustainability of CHRC grants is a key accountability measure that the Department of Budget and Management (DBM) and Maryland Department of Health (MDH) consider when evaluating the CHRC's annual budget allowance. CHRC staff has performed two determinations of post-grant sustainability; once in October 2016, which evaluated grants awarded in FY 2012, and again in October 2018, which evaluated grants awarded in FY 2014. The table below summarizes these findings. A more detailed, per project assessment follows later in this briefing memo.

**Post-grant Sustainability of CHRC Grants**

| Grant Cycle | Date | # of Grants | # Sustained | % Sustained |
|---|---|---|---|---|
| FY 2012 | Oct, 2016 | 13 | 11 | 84.6% |
| FY 2014 | Oct, 2018 | 19 | 14 | 73.7% |

**Notes:**

In FY 2012, a total of 15 grants were awarded. Of this total, two involved one-time IT projects and assessing post-grant sustainability does not apply. These two projects were not included in the analysis or table.

In FY 2014, a total of 21 grants were awarded. Of this total, one project involved a single training event and another project involved providing short-term technical assistance. These two projects were not included in the analysis or table.

The CHRC defines **program sustainability** as the **core services have been maintained one year after Commission funds have been expended**. A determination is made by: (1) Reviewing the final grantee narrative report submitted to the Commission upon the close of the grant; and (2) Querying of publicly available information (i.e.grantee website or annual report); (3) Contacting the grantee, if necessary.

**FIRST REVIEW BY CHRC STAFF - OCTOBER 2016**

As part of a special review of the three regulatory commissions performed by the Department of Legislative Services several years ago, CHRC staff performed its first determination of the sustainability of its grants. This review included grants awarded during FY 2012, the first grant cycle where the grants had been closed for at least one year. This review included a total of 15 grants awarded and is summarized in the table below. Two of the fifteen grants awarded in FY 2012 involved one-time health information technology grants and are not included in the post-grant sustainability assessment. Of the remaining 13 grants from FY 2012, 11 were found to have been sustained.

| Post- grant Sustainability of CHRC Grants Awarded in FY 2012 | | |
|---|---|---|
| **Grantee / Number** | **Sustained ?** | **Notes/Assessment** |
| Harford County HD/12-001 | **Sustained** | The grantee continues to provide women's health and family planning services. (Final report and website) |
| Tri-State Community Health Center/12-002 | **Sustained** | The grantee continues to provide comprehensive women's and child's health services. (Final report and website) |
| Baltimore City Health Department/12-003 | **Sustained** | The grantee continues to provide children's dental services through their dental clinics. (Final report and website) |
| Walnut Street Community Health Center/12-004 | **Sustained** | The grantee has continued the "Healthy Smiles in Motion" mobile dental program. (Final report and website) |
| Bel Alton/12-005 | **Not Sustained** | Organization Closed |
| Mobile Medical Inc./ 12-006 | **Sustained** | The grantee continues to provide integrated primary care and behavioral health services (Final report and website) |
| Lower Shore Clinic/12-007 | **Sutained** | The grantee continues to provide integrated primary care and behavioral health services. (Final report and website) |
| Community Clinic, Inc/ 12-008 | **Sustained** | The clinic continues to provide services utilizing CHWs. (Final report and website) |
| Catholic Charities-Esperanza Center/12-009 | **Sustained** | The grantee continues to employ nurse practitioners to provide care to their clients. (Final report and website) |
| Shepherd's Clinic/12-010 | **Sustained** | The grantee continues to provide comprehensive primary care services . (Final report and website) |
| Prince George's Health Department/12-011 | **Not applicable** | Health IT project |
| Way Station, Inc./12-012 | **Sustained** | The grantee continues as a Health Home. (Final report and website) |
| Walden Sierra, Inc./12-013 | **Sustained** | The grantee continues to partner with both Greater Baden and MedStar St. Mary's to provide behavioral health services to their primary care patients. (Final report and website) |
| Mary's Center/12-014 | **Not Sustained** | Not sustained |
| Omni House Behavioral Health System/12-015 | **Not applicable** | Health IT project |

**Notes:**

In FY 2012, the CHRC awarded 15 grants totaling $2.6 million. The grants awarded in 2012 are the latest round of grants that have been closed as of October 2016. Grants awarded in FY 2014, 2015, 2016, 2017, and 2018 are currently under implementation. **Of the 15 grants awarded in FY 2012, 11 have been sustained, 2 have not been sustained, and 2 are one-time IT programs.**

**SECOND REVIEW BY CHRC STAFF - OCTOBER 2018**

The second determination of post-grant sustainability by CHRC staff was performed in October 2018, which evaluated grants awarded in FY 2014. Of the 21 grants awarded in FY 2014, one of these grants involved a single event training project and another grant involved providing short-term technical assistance. Both of these projects were not included in this assessment in the table below. Of the remaining 19 grants, 14 have been sustained, three have been partially sustained (services are continuing either at a reduced level or taken over by a partnership organization), and two have not been sustained.

| Post-grant Sustainability of CHRC Grants Awarded in 2014 | | |
|---|---|---|
| **Grantee/Number** | **Sustained?** | **Notes/Assessment** |
| Access to Wholistic & Productive Living/14-001 | **Sustained** | The grantee continues to provide services for pregnant women in the program. (Final report and website) |
| Mary's Center/14-002 | **Sustained** | The grantee continues to provide services for pregnant women in the program. (Final report and website) |
| Planned Parenthood of Maryland/14-003 | **Sustained** | The grantee continues to provide LARC and other women's health services. (Final report and website) |
| Calvert County Health Department/14-004 | **Sustained** | The grantee continues to provide services funded by Calvert memorial hospital. (Final report and website) |
| Allegany Health Right, Inc./ 14-005 | **Partially Sustained** | The program is currently being run through Allegany County Health Department. (Final report and website) |
| Charles County Health Department/14-006 | **Sustained** | The grantee continues to provide dental services. (Final report and website) |
| Frederick Community Action Agency/14-007 | **Not sustained** | The grantee ended services when FMH Monocacy dental clinic opened. (Final report and website) |
| West Cecil Community Health Center/14-008 | **Sustained** | The grantee continues to provide primary care services (Final report and website) |
| Health Care for the Homeless/ 14-009 | **Sustained** | The grantee continues to provide primary care services. (Final report and website) |
| Mobile Medical/14-010 | **Sustained** | The grantee continues to provide primary care services. (Final report and website) |
| HealthCare Access Maryland/ 14-011 | **Partially sustained** | The program is currently being run through Sinai Hospital. (Final report and website) |
| Mental Health Association of Frederick County/14-012 | **Sustained** | The grantee continues to provide behavioral health services. (Final report and website) |
| Mosaic Community Services/ 14-013 | **Not sustained** | The grantee no longer has a partnership with Baltimore Medical System. |
| Worcester County Health Department/14-014 | **Partially sustained** | The grantee continues to provide behavioral health services, but fewer days per week. (Final report and website) |
| Access Carroll/14-015 | **Sustained** | The grantee continues to provide primary care services. (Final report and website) |
| Health Partners/14-016 | **Sustained** | The grantee continues to provide primary care services. (Final report and website) |
| Allegany County Health Department/14-017 | **Single event training** | N/A |
| University of MD Dept of Pediatrics/14-018 | **Sustained** | The program continues to run in Baltimore schools. (Final report and website) |
| Baltimore City Health Department/14-019 | **Sustained** | The program continues to provide services. (Final report and website) |
| Somerset Health Department/ 14-020 | **Sustained** | The program continues to provide services. (Final report and website) |
| Behavioral Health Leadership Institute/14-021 | **TA funding** | N/A |

**DESCRIPTION OF FY 2014 CHRC GRANTS**

**Access to Wholistic and Productive Living** – The program expanded services for pregnant and early postpartum women in order to improve birth outcomes and rates of first trimester prenatal care in underserved communities in Prince George's County. Services include targeted case management, home visiting, linkage to prenatal care, smoking cessation services and/or health education. Grant funds were used to support staff in the Bright Beginnings program.

**Mary's Center** – This program sought to reduce health disparities and the State's infant mortality rate by expanding the grantee's prenatal services at the Adelphi clinic to include primary health care for women of reproductive age so that if they become pregnant, they will be in good health and will give birth to healthy birth weight babies. Grant funds were used to support the salary costs of a Primary Care Adult/Family Medical Doctor, a Certified Nurse Midwife, a Family Support Worker, and a Life Cycle Health Educator at the Adelphi health center, which targets underserved communities in Prince George's County.

**Calvert County Health Department** – This program sought to improve overall health outcomes for reproductive age women and reduce infant mortality rates by creating a new, "one-stop shop" of integrated behavioral health and social services for substance abusing women and expectant mothers. CHRC grant funds were utilized to support staff to develop and implement the multi-disciplinary program, which included intensive case management and linkage to local obstetric providers, family planning, folic acid supplements, behavioral health services, WIC, social services, dental care, health insurance enrollment, and community resources such as education and job training opportunities.

**Planned Parenthood-Maryland** – This program sought to reduce infant mortality rates by increasing access to comprehensive women's health services in Baltimore, Anne Arundel, and Wicomico Counties, building on evidenced-based strategies currently used in Baltimore City. Grant funds were utilized to provide same-day access to Long Acting Reversible Contraception (LARC), prevent substance-exposed pregnancies by implementing use of SAMHSA's evidence-based practice of Screening, Brief Intervention, and Referral to Treatment (SBIRT) tool, and outreaching to clients to educate and connect those eligible to provisions of the Affordable Care Act.

**Allegany Health Right** – This program targeted low-income, special needs patients with low health literacy and provide access to dental care services and oral health education for underserved communities in Allegany County. Grant funds were utilized to support the salary of a Dental Case Manager, to pay for discounted dental treatment, and to support collaboration with the Western Maryland Health System Emergency Department to divert dental patients to discounted urgent dental care services.

**Charles County Health Department** – This proposal supported a school-based dental program that will screen children in the Charles County public school system and provide access to fluoride, dental sealants, and clinical services in an area of southern Maryland that is lacking in oral health safety net infrastructure. Grant funds were utilized to support the salaries of a dentist, dental hygienist, dental assistant, and community health worker.

**Frederick Community Action Agency** – This program sought to improve oral health and reduce hospital emergency department visits for non-emergent dental needs by expanding access to oral health care for underserved residents in Frederick County. CHRC grant funds were utilized to recruit dentists

to provide non-emergent dental services and a Registered Dental Hygienist to provide fluoride varnish and oral health education to lower income children and adults.

**West Cecil Community Health Center** – This program expanded primary care access in a Medically Underserved Area (MUA) in Harford County. Grant funds were utilized to support the start-up operational costs of opening a new Federally Qualified Health Center site that serves residents of Cecil and Harford Counties.

**Health Care for the Homeless** – This program supported an emergency department diversion/referral program that targeted homeless individuals in Baltimore City who utilize hospital emergency departments at high rates and established a "medical home" for these individuals. CHRC grant funds were utilized to enable the grantee to implement an emergency room diversion team, partner with three Baltimore hospitals, facilitate access to comprehensive primary and preventative care services, and promote health insurance enrollment for homeless individuals in Baltimore.

**Mobile Medical Care Aspen Hill Multicultural Clinic** – This program supported the opening of a multicultural, safety net health clinic in Aspen Hill, a Medically Underserved Area of Montgomery County. Grant funds were utilized to open the new clinic and expand access for a highly diverse and underserved area of Montgomery County.

**Health Care Access Maryland** – This program targeted individuals with chronic disease conditions who frequently utilized hospital emergency departments and promoted access to primary and preventative care services in the community. Grant funds were utilized to support new ED diversion teams deployed in one Baltimore City hospital (Sinai).

**Mental Health Association of Frederick County –** This program expanded access to behavioral health care services in the region and sought to reduce behavioral-health related hospital emergency department visits at Frederick Memorial Hospital. CHRC grant funds were utilized to expand the hours of a new behavioral health urgent care/walk-in service that was available to residents regardless of ability to pay or health insurance status.

**Mosaic** – This program promoted access to bi-directional, integrated health care by co-locating Mosaic behavioral health professionals and Baltimore Medical Systems (BMS) primary care services in four clinic locations. CHRC grant funding was utilized to support two physicians and two full time care managers to implement the integrated model at two BMS locations and two Mosaic locations.

**Worcester County Health Department** – This program developed an integrated behavioral health unit in Worcester County by adding access to primary care services in an existing behavioral health facility, providing screening and preventive services. CHRC grant funds were utilized to support the salary costs of one nurse practitioner, one community health nurse, one health services clerk, and one community health worker. The new unit provides team-based care and access to publicly supported psychiatrists and therapists.

**Access Carroll** – This program sought to promote the long-term financial sustainability of the grantee, a free clinic in Westminster, as it transitions to a revenue model that involves billing third-party payors. Grant funds were utilized to hire a full time biller/coder and consultant help to design and implement billing systems and enhance the use of its IT system.

**Health Partners** – This proposal sought to promote the long-term financial sustainability of the grantee, a free clinic in Waldorf, as it transitions to a revenue model that involves billing third-party payors. Grant funds were utilized to support the salary costs of four new health clinicians in a patient-centered medical home model.

**Allegany County Health Department –** The program addressed the workforce challenges in this rural area of the state by supporting a behavioral health learning collaborative that provided training and technical assistance to providers in the region. CHRC grant funding was utilized to support the start-up costs of the collaborative, which provided access to training and technical assistance and enabled behavioral health providers to participate in Maryland's ongoing efforts to promote functional behavioral health integration.

**University of Maryland-Baltimore Department of Pediatrics** – This program sought to reduce rates of childhood obesity by engaging three public schools in the Promise Heights neighborhood of West Baltimore. Grant funding was utilized to support efforts to promote adoption of healthy lifestyle choices and increase physical activity, including the development of home and school environments that support those healthy choices.

**Baltimore City Health Department** – This program supported efforts to reduce childhood obesity by addressing food insecurity for residents in known food deserts throughout the city. Grant funds built on the current Virtual Supermarkets Program, a national, award-winning program that uses online grocery ordering and delivery to bring food to community sites in food desert neighborhoods. The program engaged corner stores to provide retail options for affordable, healthy food options.

**Somerset County Health Department** – This program supported a public outreach campaign that will build community awareness and support for healthy lifestyle choices to reduce rates of childhood obesity. Grant funds were utilized to create new after-school opportunities for physical activity, expanded access to affordable healthy food options, and provided home visitation and health coaching for youths between the ages of 4 and 18 deemed at highest risk of obesity by their health care provider.

# Appendix F

STATE OF MARYLAND
Community Health Resources Commission
45 Calvert Street, Room 336 • Annapolis, Maryland 21401

Larry Hogan, Governor – Boyd Rutherford, Lt. Governor
Allan Anderson, M.D., Chair – Mark Luckner, Executive Director

December 5, 2018

The Honorab1e Larry Hogan
State House
100 State Circle
Annapolis, Maryland 21401-1925

The Honorable Thomas V. Miller
Senate Office of the President
State House, H-107
Annapolis, Maryland 21401-1991

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

RE: Council on Advancement of School-Based Health Centers Annual Report

Dear Governor Hogan, President Miller, and Speaker Busch:

Pursuant to section 19-22A-05 of the Health – General Article, the Council on Advancement of School-Based Health Centers respectfully submits its 2017 annual report. The enclosed report provides an overview of the current SBHC landscape, including the number and location of SBHC programs in Maryland. Additionally, a summary of the Council's structure and priorities for 2018 are included in the report.

Thank you for your consideration of this information. If you need additional information, please contact me at mark.luckner@maryland.gov or (410) 260-7046.

Sincerely,

Mark Luckner
Executive Director
Maryland Community Health Resources Commission

cc: Robert R. Neall, Secretary of Health
Karen B. Salmon, Ph.D., State Superintendent of Schools
Allan Anderson, MD, Chair, Community Health Resources Commission
Sarah Albert, Department of Legislative Services

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MARYLAND Department of Health

MCHRC
MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

# Council on Advancement of School-Based Health Centers

## Annual Report
## Health – General § 19-22A-05
## HB 221, Ch. 199 (2017)

## December 2018

**Larry Hogan**
Governor

**Boyd Rutherford**
Lieutenant Governor

**Robert R. Neall**
Secretary of Health

**Dr. Allan Anderson, Chair**
Community Health Resources Commission

**Dr. Katherine Connor, Chair**
Council on Advancement of
School-Based Health Centers

**Barbara Masiulis, Vice Chair**
Council on Advancement of
School-Based Health Centers

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# Council on Advancement of School-Based Health Centers
# Table of Contents

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# Executive Summary

The Council on Advancement of School-Based Health Centers works to improve the health and educational outcomes of students who receive School-Based Health Center (SBHC) services by advancing the integration of SBHCs into the health care and education systems at the State and local levels. The Council is staffed by the Community Health Resources Commission, an independent commission operating within the Maryland Department of Health (MDH).

The Council made important progress on its mission in 2018. Key accomplishments include –

1. **The Council made consistent progress on stated goals.** The Council's work is managed by three workgroups: Data Collection and Reporting (Barbara Masiulis, Chair), Systems Integration and Funding (Uma Ahluwalia, Chair), and Quality and Best Practices (Jean-Marie Kelly, Chair). These workgroups meet approximately monthly and track progress on the Council's mandated responsibilities using a Planning Grid, included in Appendix 2.

2. **The Maryland State Department of Education is working with the Council to implement the Council's recommendations for changes to the annual SBHC survey.** The Council's recommendations revise the questions and add additional questions that better capture information about services provided, patients served, and SBHC operations. MSDE and the SBHC Administrators have agreed to work with the Council on implementation.

3. **The Council hired Harbage Consulting to write a white paper demonstrating the value proposition of School-Based Health Centers in Maryland.** The white paper will include 1) a review of SBHC literature and existing data, 2) a cost-benefit analysis, 3) identification of important outcomes, and 4) recommendations about a comprehensive data reporting system to demonstrate the value of SBHCs.

4. **The Council is reviewing and providing recommendations on the process for the revision of School-Based Health Center Standards.** The Standards, managed by MSDE, provide guidance on the operation of a School-Based Health Center, including levels of service, facility requirements, sponsoring agencies and medical sponsors, and maintenance of medical records.

5. **The Council informed the School-Based Health Center recommendations made by the Kirwan Commission on Innovation and Excellence in Education.** The Commission is charged with reviewing and recommending changes to the current education funding Formulas, and making policy recommendations that would enable Maryland's pre K-12 system to perform at the level of the best-performing systems in the world. The Council helped inform the Kirwan Commission's cost estimate for School-Based Health Centers in Maryland.

The Council on Advancement of School-Based Health Centers looks forward to a successful 2019. For more information about the Council, please contact Mark Luckner, Executive Director of the Community Health Resources Commission and staff to the Council, at (410) 260-6290.

# Council on Advancement of School-Based Health Centers
# Health – General § 19-22A-05
# 2018 Annual Report

## I. Council Activities in 2018

The Council was established in 2015 to improve the health and educational outcomes of students who receive services from School-Based Health Centers (SBHCs) by advancing the integration of SBHCs into the health care and education systems at the State and local levels (Health – General § 19–22A–02(b)). It is comprised of 15 members appointed by the Governor and six ex-officio members from across state government. The Council is chaired by Dr. Katherine Connor, who serves as the Medical Director of the Johns Hopkins Rales Health Center at KIPP Baltimore. Barbara Masiulis, Supervisor of the Office of Health Services at Baltimore County Public Schools, serves as Vice Chair. The Council meets 3-4 times annually.

**Appointments.** 12 of the Council's 15 appointed seats are currently filled or in the process of being filled. The Council is working on recruiting a parent or guardian of a student who utilizes services at a School-Based Health Center to fill the open slot. A roster of Council members is included at the end of this report.

**Council Meetings.** The Council met four times in 2018. At its February meeting, the Council established its 2018 priorities. At its April meeting, the Council received an update on the recommended changes to MSDE's annual survey of SBHCs and approved a solicitation for a white paper to demonstrate the value proposition of SBHCs in Maryland. At its October meeting, the Council met with Harbage Consulting, the contractor selected to write the white paper, and received an update on the Kirwan Commission's work. At its November meeting, the Council discussed the recommendations of the Kirwan Commission and the upcoming review of School–Based Health Center Standards. Meeting minutes are included in Appendix 3.

**Workgroups.** Much of the Council's work is conducted by its three workgroups, which meet approximately every 1-2 months. The Council monitors its mandated responsibilities and the workgroups' progress using the Planning Grid included in Appendix 2. The grid includes rows for each of the Council's mandated responsibilities and commitments, and columns for activities that have been completed, and those planned for the next six to 12 months. The Council reviews the grid at each meeting to track progress.

***Data Collection and Reporting Workgroup*.** The Data Collection and Reporting Workgroup is chaired by Barbara Masiulis, the Council's Vice Chair. Building on its 2017 work, the workgroup has continued developing recommended changes to MSDE's annual survey of School-Based Health Centers. Through a series of meetings, workgroup members went through the survey line-by-line to revise the questions and add additional questions that better capture information about services provided, patients served, and SBHC operations.

The workgroup presented the survey recommendations to the Council for consideration and preliminary approval at its February meeting. The Council voted to adopt the recommendations. Since then, the workgroup has presented the recommendations to the School-Based Health Center Administrators group on three occasions (March, May, and September 2018) for discussion and feedback. The workgroup is working collaboratively with MSDE to further refine the survey and make plans for implementation.

Finally, the workgroup is recommending that MSDE develop mechanisms for analyzing the data collected in the annual survey. The workgroup will request that MSDE issue and disseminate a public report containing de–identified data to stakeholders and other interested parties on an annual basis. A copy of their activities and recommendations for 2018 is included as Appendix 4.

***Systems Integration and Funding Workgroup*.** The Systems Integration and Funding Workgroup is chaired by Uma Ahluwalia, Director of the Montgomery County Department of Health and Human Services. It is working on a number of fronts to streamline and improve financial sustainability for SBHCs. The group is currently researching recommendations regarding coordination and collaboration between school based health centers and payers, including Maryland Medicaid, Medicaid managed care organizations (MCOs), and commercial insurers. Feedback regarding improvements in care coordination, population health management, and billing for school based health centers was gathered from School–Based Health Center Administrators at their May meeting. Also at the May meeting, the workgroup convened a panel of payer representatives to (1) discuss updated Maryland Department of Health resources to assist School-Based Health Centers with billing and reimbursement, and (2) troubleshoot ongoing issues.

The workgroup also informed the development of a solicitation for a contractor to write a white paper demonstrating the value proposition of School-Based Health Centers in Maryland. The solicitation was released in June 2018, and after a competitive review, Harbage Consulting was selected. The white paper will include 1) a review of SBHC literature and existing data, 2) a cost-benefit analysis, 3) identification of important outcomes, and 4) recommendations about a comprehensive data reporting system to demonstrate the value of SBHCs. A key component of Harbage's approach to this work includes interviews with State officials, Council members, and stakeholders. The white paper will be completed by the end of 2018. A summary of their work is provided as Appendix 5.

***Quality and Best Practices Workgroup*.** The Quality and Best Practices Workgroup is co–chaired by Jean-Marie Kelly, Community Benefits Coordinator at Union Hospital of Cecil County, and Dr. Patryce Toye, Medical Director for MedStar Family Choice. The workgroup has been working with the School-Based Health Center Administrators group and MSDE on revisions to the SBHC Standards. The Standards provide guidance for the operation of a School-Based Health Center. This process marks the first time that the Standards have been revised since 2006. A copy of their recommendations is provided as Appendix 6.

Finally, the Council has been monitoring the work of the Kirwan Commission on Innovation and Excellence in Education. At its October and November meetings, the Council

received a presentation on the Commission's work on school health. The Council was invited to present to the Kirwan Commission on grants that the Community Health Resources Commission has awarded to School-Based Health Centers, which fund the expansion of primary care, oral health, and behavioral health services. The presentation helped inform the Kirwan Commission's cost estimate for School-Based Health Centers in Maryland.

Key accomplishments in 2018 include –

1. **The Council made consistent progress on stated goals.** The Council's work is managed by three workgroups: Data Collection and Reporting (Barbara Masiulis, Chair), Systems Integration and Funding (Uma Ahluwalia, Chair), and Quality and Best Practices (Jean-Marie Kelly, Chair). These workgroups meet approximately monthly and track progress on the Council's mandated responsibilities using a Planning Grid, included in Appendix 2.

2. **The Maryland State Department of Education is working with the Council to implement the Council's recommendations for changes to the annual SBHC survey.** The Council's recommendations revise the questions and add additional questions that better capture information about services provided, patients served, and SBHC operations. MSDE and the SBHC Administrators have agreed to work with the Council on implementation.

3. **The Council hired Harbage Consulting to write a white paper demonstrating the value proposition of School-Based Health Centers in Maryland.** The white paper will include 1) a review of SBHC literature and existing data, 2) a cost-benefit analysis, 3) identification of important outcomes, and 4) recommendations about a comprehensive data reporting system to demonstrate the value of SBHCs.

4. **The Council is reviewing and providing recommendations on the process for the revision of School-Based Health Center Standards.** The Standards, managed by MSDE, provide guidance on the operation of a School-Based Health Center, including levels of service, facility requirements, sponsoring agencies and medical sponsors, and maintenance of medical records.

5. **The Council informed the School-Based Health Center recommendations made by the Kirwan Commission on Innovation and Excellence in Education.** The Commission is charged with reviewing and recommending changes to the current education funding formulas; and making policy recommendations that would enable Maryland's pre K-12 system to perform at the level of the best-performing systems in the world. The Council helped inform the Kirwan Commission's cost estimate for School-Based Health Centers in Maryland.

# II. Council Recommendations and Planning for 2019

Chapter 417 of the Acts of 2015 requires the Council to report on the following items. This section of the report also includes Council recommendations and planned activities for 2019.

**The number and location of SBHCs that are not co-located within behavioral health services.**

***2017-2018 SBHC Data.*** There were 86 School-Based Health Centers operating during the 2017-2018 school year in Maryland. A School–Based Health Center is designated by its Level of Service (I through III); Level I Centers (57%) do not offer mental health services on–site, while Level II and III SBHCs (37%) are required to have a mental health professional on staff (a full definition of each Level of Service is provided in Appendix 1).

It is important to note that when mental health services and clinicians are available in a school, but are not employed by the same agency that operates an SBHC, the SBHC is still designated as Level I. For example, in the Baltimore City Public School System (BCPSS), the Expanded School Mental Health Program (ESMH) places mental health clinicians in schools. These clinicians are employed by community based mental health agencies that contract directly with BCPSS. SBHCs and ESMH providers often collaborate closely and SBHC clinicians are able to refer students to ESMH clinicians who deliver services within their school building. In the current iteration of MSDE's annual survey of SBHCs, SBHCs operating in schools with ESMH programs are designated as Level I because they do not themselves employ the mental health clinician. However, the students in these schools do have access to both somatic and mental/behavioral health services. The Council's recommended changes to MSDE's annual survey of School–Based Health Centers (described below) would better capture provision students' access to mental and behavioral health services in schools with SBHCs.

| **Measure** | **Total** |
|---|---|
| **Students Enrolled** | **40,551** |
| **Visits** | **52,254** |
| Somatic Care | 33,507 |
| Behavioral Health | 16,194 |
| Dental | 2,126 |
| Case Management or Other | 427 |
| **SBHCs – All Levels** | **86** |
| Mental health services not offered on–site (Level I) | 49 (57%) |
| Mental health services offered on–site (Level II/III) | 32 (37%) |
| Information not provided | 5 (6%) |

***MSDE Annual Survey.*** The data points above are collected through MSDE's annual SBHC survey and are illustrative of the type of information the survey provides. The current survey focuses on identification of operational activities rather than outcomes; the Council has determined that outcome data are preferable because they allow for analysis of program impact. For this reason, in 2018 the Council has recommended revisions to the survey, which include incorporation of key performance measures, in the areas of health care utilization, cost savings, educational outcomes, and financial practices.

The Council recognizes that the revised survey will require more work by SBHCs to complete, so Council representatives have been meeting regularly with the School-Based Health Center Administrators to explain the new survey and find out how the Council can best support the Administrators so they can complete it. Council representatives are also working with MSDE develop the appropriate technology to back up the survey, cut down on completion time, pre-populate information that is contained in other data sources, and address other concerns.

**Recommendations on the streamlining of the existing process for the review and approval of new School-Based Health Centers, including the Maryland Medical Assistance Program enrollment process for SBHCs.**

***Standards Review.*** The Maryland School-Based Health Center Standards were written to help SBHCs clearly define themselves as a unique service delivery model to the medical, mental health and educational communities. In order to address the critical issues around reimbursement and third party payment, the school-based health centers must be able to define who they are and what they do in a consistent manner. The Council will continue working with the School-Based Health Center Administrators group and MSDE on revisions to the SBHC Standards.

**Recommendations on the expansion of the scope of existing SBHCs by MSDE and MDH.**

***Outreach and Enrollment.*** SBHCs' impact and sustainability are enhanced when a majority of students enrolled in the school are enrolled in the SBHC. The Council arranged for the Maryland Health Benefit Exchange to provide a presentation to the SBHC Administrators about its upcoming open enrollment period. Improving insurance enrollment improves outcomes for students and allows School–Based Health Centers to generate revenue through reimbursements. The Exchange is responsible for the State's health insurance marketplace under the Affordable Care Act.

**Recommendations on the identification and elimination of barriers for managed care organizations to reimburse for services provided by SBHCs.**

***Stakeholder Engagement***. The Council works to systematically identify barriers perceived by SBHCs and stakeholders for efficient administration of a comprehensive SBHC system. To that end, the Council facilitated a series of stakeholder meetings that were completed as part of the work on the value of SBHCs conducted by Harbage Consulting. Harbage

interviewed representatives from SBHCs, state agencies, managed care organizations, private insurers, and providers. The findings from these meetings will be included in the white paper completed by Harbage.

***Billing Assistance.*** One way to eliminate barriers is through more effective billing practices. The Council will support financial sustainability of SBHCs, including through diversification of their funding streams beyond grants. To that end, the Council facilitated a preliminary dialogue between School-Based Health Center Administrators and MSDE with payer representatives. As part of this discussion, Medicaid representatives provided information regarding two resources developed by the Maryland Department of Health to assist with billing and reimbursement from Medicaid. The Systems Integration and Funding workgroup will continue to collect information about barriers to successful clinical billing and will make recommendations regarding the appropriate venue(s) for, leaders of, and schedule for billing and related information sessions for SBHC Administrators and operators.

**Recommendations on health reform initiatives under the Maryland Medicare waiver and patient-centered medical home initiatives.**

***Maryland Primary Care Program***. The Council is closely monitoring health care reform initiatives under the Maryland Medicare waiver and other advanced payment models. In some other states, SBHCs are designated as patient-centered medical homes. The Council is looking at ways SBHCs might integrate better into the patient-centered medical home model. Next year, the Council plans to understand the new Maryland Primary Care Program, a voluntary program that provides financial and technical support to eligible Maryland primary care providers to assist practices in the transformation to "advanced primary care." The program launches on January 1, 2019.

The Council on Advancement of School-Based Health Centers looks forward to a successful 2019. For more information about the Council, please contact Mark Luckner, Executive Director of the Community Health Resources Commission and staff to the Council, at (410) 260-6290.

# III. Roster of Council Members

The Council's membership is established by § 7–4A–03 of the Health–General Article. Members are listed by the seat that they fill and their professional title (*italics*).

### Appointed by the Governor

**Dr. Katherine Connor, Chair**
School-Based Health Center
*Medical Director, The Johns Hopkins Rales Health Center, KIPP Baltimore*

**Barbara Masiulis, Vice Chair**
School-Based Health Center
*Supervisor, Office of Health Services, Baltimore County Public Schools*

**Dr. Patryce Toye**
Maryland Assembly on School-Based Health Care
*Medical Director, MedStar Family Choice*

**Uma Ahluwalia**
School-Based Health Center
*Director, Montgomery Co. Health and Human Services*

**Dr. Jonathan Brice**
Public Schools Superintendents Assn. of Maryland
*Assoc. Superintendent, Montgomery Co. Public Schools*

**Cathy Allen**
Maryland Association of Boards of Education
*Vice Chairman, St. Mary's County Board of Education*

**Sharon Morgan**
Maryland Assn. of Elementary School Principals
*Principal, Flintstone Elementary School, Allegany Co.*

**Angel Lewis**
Secondary School Principal of a School with an SBHC
*Principal, Claremont High School, Baltimore City*

**Jean-Marie Kelly**
Maryland Hospital Association
*Community Benefits Coordinator, Union Hospital*

**Dr. Maura Rossman**
Maryland Association of County Health Officers
*Health Officer, Howard County Health Department*

**Karen Williams**
Federally–Qualified Health Center
*CEO, Mid–Atlantic Assoc. of Community Health Ctrs.*

**Dr. Arethusa Kirk**
Managed Care Organization
*Chief Medical Officer, UnitedHealthCare*

**Jennifer Dahl**
Commercial Health Insurance Carrier
*Credentialing Coordinator, CareFirst*

**Dr. Diana Fertsch**
Md. Chapter of American Academy of Pediatrics
*Pediatrician, Dundalk Pediatric Associates*

**VACANT:** Parent or Guardian of a Student who Utilizes a School–Based Health Center

### Ex–Officio

**Senator Richard Madaleno**
Maryland State Senate
*Senator, District 18 (Montgomery County)*

**Delegate Bonnie Cullison**
Maryland House of Delegates
*Delegate, District 19 (Montgomery County)*

**Dr. Cheryl De Pinto**
Designee of the Secretary of Health
*Director, Office of Population Health Improvement*

**Mary L. Gable**
Designee of the State Superintendent of Schools
*Assistant State Supt., Student, Family, and School Support*

**Andrew Ratner**
Designee of the Executive Director of Maryland Health Benefit Exchange
*Chief of Staff, Maryland Health Benefit Exchange*

**Mark Luckner**
Designee of the Chairman of Maryland Community Health Resources Commission
*Executive Director, Maryland CHRC*

**Appendix 1.**

**Council on Advancement of School-Based Health Centers**
**2017-2018 School-Based Health Center Data**

**Table 1. SBHC Programs and Students, 2017-2018**

| | SBHC Programs | Students Enrolled | Unique Students | Males Served | Females Served |
|---|---|---|---|---|---|
| **Baltimore County** | 13 | 2,908 | 1,135 | 577 | 558 |
| **Caroline** | 9 | 4,498 | 3,486 | 1,754 | 1,732 |
| **Dorchester** | 4 | 1,810 | 808 | 321 | 487 |
| **Frederick** | 1 | 264 | 264 | 143 | 121 |
| **Harford** | 5 | 299 | 299 | 142 | 157 |
| **Howard** | 10 | 3,009 | 593 | 299 | 294 |
| **Montgomery** | 13 | 18,422 | 2,716 | 1,394 | 1,322 |
| **Prince George's** | 4 | 423 | 377 | 126 | 251 |
| **Talbot** | 4 | 1,997 | 1,768 | 869 | 899 |
| **Washington** | 2 | 751 | 429 | 153 | 276 |
| **Wicomico** | 2 | 236 | 251 | 119 | 132 |
| **Baltimore City** | 17 | 5,934 | 2,955 | 1,295 | 1,660 |
| **TOTALS** | 86 | 40,551 | 15,081 | 7,192 | 7,889 |

Source: Maryland State Department of Education, 2017-2018 SBHC Survey (Preliminary Data)

**Table 2. SBHC Services by Type, 2017-2018**

| | Total Visits | Somatic Visits | Mental Health | Dental Visits | Substance Abuse | Case Mgt or Other |
|---|---|---|---|---|---|---|
| **Baltimore County** | 2,346 | 2,346 | 0 | 0 | 0 | 0 |
| **Caroline** | 14,864 | 5,258 | 7,870 | 1,736 | 0 | 0 |
| **Dorchester** | 4,024 | 2,595 | 1,429 | 0 | 0 | 0 |
| **Frederick** | 609 | 609 | 0 | 0 | 0 | 0 |
| **Harford** | 1,612 | 458 | 1,154 | 0 | 0 | 0 |
| **Howard** | 1,926 | 1,154 | 772 | 0 | 0 | 0 |
| **Montgomery** | 11,938 | 8,402 | 3,536 | 0 | 0 | 0 |
| **Prince George's** | 1,392 | 572 | 741 | 79 | 0 | 0 |
| **Talbot** | 1,416 | 1,105 | 0 | 311 | 0 | 0 |
| **Washington** | 2,495 | 2,495 | 0 | 0 | 0 | 0 |
| **Wicomico** | 1,095 | 586 | 509 | 0 | 0 | 0 |
| **Baltimore City** | 8,537 | 7,927 | 144 | 0 | 39 | 427 |
| **TOTALS** | 52,254 | 33,507 | 16,155 | 2,126 | 39 | 427 |

Source: Maryland State Department of Education, 2017-2018 SBHC Survey (Preliminary Data)

**Table 3. SBHC Programs by Level, 2017-2018**

| | SBHC Programs | Level I | Level II | Level III |
|---|---|---|---|---|
| **Baltimore County** | 13 | 13 | - | - |
| **Caroline** | 9 | 9 | - | - |
| **Dorchester** | 4 | - | 4 | - |
| **Frederick** | 1 | 1 | - | - |
| **Harford** | 5 | 5 | - | - |
| **Howard** | 10* | 7 | 2 | |
| **Montgomery** | 13 | - | 13 | - |
| **Prince George's** | 4 | - | - | 4 |
| **Talbot** | 4 | 4 | - | - |
| **Washington** | 3* | 1 | - | - |
| **Wicomico** | 2 | - | 2 | |
| **Baltimore City** | 18* | 9 | 7 | - |
| **TOTALS** | 86 | 49 | 28 | 4 |

Source: Maryland State Department of Education, 2017-2018 SBHC Survey (Preliminary Data)
*At the time of writing, five School–Based Health Centers had not yet received a level designation.

**Definitions** (from the Maryland School-Based Health Center Standards)

**Level I: Core School-Based Health Center**
A Level I SBHC site must have hours that are at a minimum eight hours per week with a licensed medical clinician present and are open a minimum of two days per week when school is open. Level I SBHC staff must include, at a minimum, a licensed medical clinician and administrative support staff. There may be additional clinical support staff such as a RN, LPN, or CNA. Note: the licensed medical clinician cannot replace the school nurse.

**Level II: Expanded School-Based Health Center**
The SBHC site must be operational (with an advance practice provider on site) a minimum of twelve hours per week, three to five days for medical care when school is in session. Mental health services must be available on site for a minimum of three days and a minimum of twelve hours per week. The SBHC staff must include at a minimum: A licensed medical clinician; Mental health professional; Clinical support staff (RN, LPN, or CNA); and Administrative support staff.

**Level III: Comprehensive School-Based Health Center**
Medical services must be available a minimum of five days and twenty hours per week. The availability of full-time services needs to be commensurate with the number of students enrolled in the school. The SBHC may rely on other community healthcare providers for 24-hour coverage. Level III or Comprehensive SBHC is available limited hours for defined services for enrolled students during the summer hours. The SBHC is open before, during, and after school hours. The SBHC staff must include at a minimum: A licensed medical clinician; Clinical support staff (RN, LPN, or CNA); Administrative support staff; Mental health professional; and at least one additional service provider such as a general or pediatric dentist, dental hygienist, nutritionist, or health educator for a minimum of four hours per month.

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Appendix 2.

# Council on Advancement of School-Based Health Centers
## 2018 Planning Grid

This chart lists the Council's statutory responsibilities. The first 11 are found in Health - General § 19-22A-05 and outline the Council's ongoing work. The final four are found Chapter 417 of the Acts of 2015 and outline the contents of the Council's annual report.

| # | Requirement | Authority | Workgroup | Completed Activities | Planned Activities | |
|---|---|---|---|---|---|---|
| | | | | | 6 months | 12 months |
| 1 | **Supporting local community efforts to establish or expand SBHCs capacity in primary care, behavioral health, and oral health.** | HG § 19-22A-05(a)(1) | Quality | | Review SBHC Standards of Practice. | Make recommendations to MSDE about updates to the SBHC Standards of Practice. Assess the capacity of SBHCs to collect and report the measures recommended by the School-Based Health Alliance. |
| 2 | **Integrating SBHCs into existing and emerging patient-centered models of care** | HG § 19-22A-05(a)(2) | Systems | The Council hired Harbage Consulting to complete a white paper demonstrating the value of SBHCs in Maryland. The Council also facilitated a technical assistance session on Medicaid billing for the SBHC administrators. | Harbage Consulting will complete stakeholder interviews with MDH, MSDE, SBHC Administrators, MASBHC, and representatives of private insurance and AAP. | |
| 3 | **Promoting the inclusion of SBHCs in networks of managed care organizations and commercial health insurance carriers** | HG § 19-22A-05(a)(3) | Systems | The Council facilitated a technical assistance session on Medicaid billing for the SBHC administrators. | Harbage Consulting will complete stakeholder interviews with MDH, MSDE, SBHC Administrators, MASBHC, and representatives of private insurance and AAP. | |
| 4 | **Advancing the public health goals of state and local health officials** | HG § 19-22A-05(a)(4) | Quality | MDH updated the State Health Improvement Process (SHIP) metrics. | | |

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| # | Requirement | Authority | Workgroup | Completed Activities | Planned Activities | |
|---|---|---|---|---|---|---|
| | | | | | 6 months | 12 months |
| 5 | **Promoting the inclusion of SBHCs into networks of school health services and coordinated student service models for the range of services offered in school settings** | HG § 19-22A-05(a)(5) | Systems | The Council hired Harbage Consulting to complete a white paper demonstrating the value of SBHCs in Maryland. | Harbage Consulting will complete stakeholder interviews with MDH, MSDE, SBHC Administrators, MASBHC, and representatives of private insurance and AAP. | Understand local school health councils, i.e., what is the relationship between Council and the school health councils. Identify potential opportunities to work together. |
| 6 | **Supporting state and local initiatives to promote student success** | HG § 19-22A-05(a)(6) | Quality | The Council presented to the Kirwan Commission about costs associated with SBHCs. | Continue monitoring the work of the Kirwan Commission on Innovation and Excellence in Education. Provide information and recommendations as appropriate. | |
| 7 | **Reviewing and revising best practices guidelines** | HG § 19-22A-05(a)(7) | Quality | | Review SBHC Standards of Practice. | Make recommendations to MSDE about updates to the SBHC Standards of Practice. Assess the capacity of SBHCs to collect and report the measures recommended by the School-Based Health Alliance. |
| 8 | **Supporting the long-term sustainability of SBHCs** | HG § 19-22A-05(a)(8) | Systems | The Council hired Harbage Consulting to complete a white paper demonstrating the value of SBHCs in Maryland. The Council also facilitated a technical assistance session on Medicaid billing for the SBHC administrators. | | |

Appendix 2.

# Council on Advancement of School-Based Health Centers
## 2018 Planning Grid

This chart lists the Council's statutory responsibilities. The first 11 are found in Health - General § 19-22A-05 and outline the Council's ongoing work. The final four are found Chapter 417 of the Acts of 2015 and outline the contents of the Council's annual report.

| # | Requirement | Authority | Workgroup | Completed Activities | Planned Activities | |
|---|---|---|---|---|---|---|
| | | | | | 6 months | 12 months |
| 9 | **Review the collection and analysis of SBHCs data collected by MSDE to make recommendations on best practices for the collection and analysis of the data** | HG § 19-22A-05(b)(1) | Data | The Data workgroup presented its draft recommendations for the MSDE survey to the full Council and to the SBHC administrators. The workgroup incorporated feedback from both groups. The Council hired Harbage Consulting to complete a white paper demonstrating the value of SBHCs in Maryland. | Provide final recommendations for survey changes to MSDE. Meet with MSDE and IT to discuss possible technology. | Pilot the new survey with a few SBHCs, in advance of a full rollout during the 2019-2020 school year. |
| 10 | **Provide guidance on the development of findings and recommendations based on the data** | HG § 19-22A-05(b)(2) | Data | The Data workgroup presented its draft recommendations for the MSDE survey to the full Council and to the SBHC administrators. The workgroup incorporated feedback from both groups. The Council hired Harbage Consulting to complete a white paper demonstrating the value of SBHCs in Maryland. | Provide final recommendations for survey changes to MSDE. Meet with MSDE and IT to discuss possible technology. | Pilot the new survey with a few SBHCs, in advance of a full rollout during the 2019-2020 school year. |
| 11 | **Conduct other activities that meet the purpose of the Council** | HG § 19-22A-05(c) | All | Workgroups are meeting approximately bi-monthly. | Complete white paper demonstrating the value of SBHCs in Maryland. | Workgroups (Data Collection and Reporting, Systems Integration and Funding, Quality and Best Practices) will continue meeting regularly. |
| Items to be reported in the Council's Annual Report | | | | | | |

Appendix 2.

# Council on Advancement of School-Based Health Centers
## 2018 Planning Grid

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| # | Requirement | Authority | Workgroup | Completed Activities | Planned Activities | |
|---|---|---|---|---|---|---|
| | | | | | 6 months | 12 months |
| 12 | **Number and location of SBHCs that are not co-located with behavioral health services** | Ch. 417 (2015), §2 | Data | | Receive 2017-2018 school-year data. | |
| 13 | **Recommendations on streamlining of the existing process for the review and approval of new SBHCs, including:** | Ch. 417 (2015), §2 | Systems | | | |
| 13a | Maryland Medical Assistance Program enrollment process for SBHCs | Ch. 417 (2015), §2 | Systems | The Council facilitated a technical assistance session on Medicaid billing for the SBHC administrators on May 31, 2018. | Harbage Consulting will complete stakeholder interviews with MDH, MSDE, SBHC Administrators, MASBHC, and representatives of private insurance and AAP. | Make recommendations about streamlining the application process for SBHCs and potential changes to sponsorship requirements. Make recommendations about optimal approaches to data sharing between SBHCs, MCOs, and Medicaid for panel management and assessment of cost and savings. |
| 13b | Expansion of the existing scope of SBHCs by MSDE and MDH | Ch. 417 (2015), §2 | Quality | | Review SBHC Standards of Practice. | Make recommendations to MSDE about updates to the SBHC Standards of Practice. Assess the capacity of SBHCs to collect and report the measures recommended by the School-Based Health Alliance. |

Appendix 2.

# Council on Advancement of School-Based Health Centers
## 2018 Planning Grid

This chart lists the Council's statutory responsibilities. The first 11 are found in Health - General § 19-22A-05 and outline the Council's ongoing work. The final four are found Chapter 417 of the Acts of 2015 and outline the contents of the Council's annual report.

| # | Requirement | Authority | Workgroup | Completed Activities | Planned Activities | |
|---|---|---|---|---|---|---|
| | | | | | 6 months | 12 months |
| 14 | **Recommendations on the identification and elimination of barriers for managed care organizations to reimburse for services provided by SBHCs** | Ch. 417 (2015), §2 | Systems | The Council facilitated a technical assistance session on Medicaid billing for the SBHC administrators on May 31, 2018. | | |
| 15 | **Recommendations on health reform initiatives under the Maryland Medicare waiver and patient-centered medical home initiatives** | Ch. 417 (2015), §2 | Systems | | Harbage Consulting will complete stakeholder interviews with MDH, MSDE, SBHC Administrators, MASBHC, and representatives of private insurance and AAP. | Understand the National Committee on Quality Assurance approval process for SBHC medical homes and make recommendations about how/whether this should be implemented in Maryland. |

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MARYLAND Department of Health

MCHRC
Maryland Community Health Resources Commission

**Appendix 3. Meeting Minutes**

**Council on Advancement of School-Based Health Centers**
**Meeting Minutes: Monday, February 5, 2018, 9:30 am to 12:30 pm**

**Location:** Maryland House of Delegates
6 Bladen Street, Annapolis, Maryland 21401
Call-In: (641) 715-3814, Participant Code: 313674#

**9:30 am** **Greetings and Opening Remarks**

Kate Connor, Chair of the Council, opened the meeting at 9:30 am with thanks and welcome. All members of the Council and public attendees introduced themselves. Chair Connor reviewed the agenda and minutes of the previous meeting in November. The Council approved the November minutes.

Attendees: Council: Patryce Toye, Barbara Masiulis, Kate Connor, Cathy Allen, Sharon Morgan, Angel Lewis, Jean-Marie Kelly, Judy Lichty-Hess, Arethusa Kirk, Diana Fertch, Cheryl DePinto, Mary Gable, Delegate Bonnie Cullison, Andy Ratner (for Michele Eberle), Mark Luckner, and Allison Taylor.

Public: Michelle Hinton, Beth Spencer, Sharon Hobson, Joy Twesige, Joan Glick, Brigida Krzysztofik, and Lynne Muller.

Chair Connor provided information to Council members about submitting financial disclosures. Financial disclosures are due to the State Ethics Commission by April 30 each year. Allison Taylor will provide additional information to Council members by email.

**9:45 am** **Discussion of Data Collection and Reporting Workgroup's Recommended Changes to the MSDE Annual Report**

Chair Connor thanked the workgroups for their work since the last meeting and announced that the bulk of today's meeting would be a summary of that work and and the workgroups' priorities for 2018.

Barbara Masiulis, Chair of the Data Collection and Reporting workgroup, provided an update on the workgroup's recommendations for changes to MSDE's annual survey. The survey comes out every summer and is due by the end of Septmber. SBHCs must report about services, regardless of whether they receive funding from MSDE. An overall goal is for the survey to become an "annual report" for each SBHC – a picture of what's happened over the past year.

The Chair reported that Council leadership had a very productive meeting last week with MSDE about the recommendations. As a next step, the recommendations will be presented to the SBHC Administrators group on March 1. This meeting will be structured as a dialogue, to find out what is feasible for the Administrators and what isn't. The data workgroup very much wants to make sure that the survey remains simple and feasible. After this meeting, the data workgroup will report back to MSDE and the Council.

The workgroup chair provided an overview of the SBHC application. Every May, the application is sent out. The general application has many attachments, including SBHC standards, goal setting, information about what level of service will be provided, financial information, hours of operation, and budget and assurances. The standards document is 8 pages long and lists each of the current standards and asks SBHCs to respond about whether they are meeting the standards and how.

The workgroup chair walked the Council through the recommendations. A copy of the recommendations is provided in Appendix A, and changes that were added as a result of the February 5 meeting are highlighted. A brief overview of the recommenations is below:

- The first section of the new report would be SBHC characteristics. These are items that aren't likely to change from year to year, such as location and service level.

- The second section includes school community characteristics. The workgroup thought it was important to know about the community that the school serves. The workgroup thought this info could be imputed from the MSDE school report card.

- The third section is about the SBHC population served, such as users by race, insurance, siblings in the school. This information is already in the current survey in various forms.

- The fourth section is about somatic health services. Much of this could be reported by ICD-10 codes and CPT codes.

- Further sections have information about behavioral health and case management.

Barbara Masiulis thanked the group for their comments and said that an updated version of the recommendations, reflecting the discussion, would be sent out after the meeting. Council members were invited to make additional suggestions before Monday, February 12.

**10:45 am Workgroup Reporting on Priorities and Activities for 2018**

Jean-Marie Kelly presented the Quality and Best Practices workgroup's 2018 priorities.

**SBHC Standards –** One of the Quality workgroup's primary tasks for 2018 will be to review the School-Based Health Center standards, which are maintained by MSDE, and to make recommendations to MSDE on changes. The standards provide an "operating manual" for SBHCs, but have not been revised in many years.

Council members discussed the need to clarify some inconsistencies between the SBHC standards and state regulations. One example of such an inconsistency concerns the definition of "general clinic" as a sponsoring entity. Chair Connor noted that the standards "belong" to MSDE, and that the Council's role would be purely advisory. Jean-Marie also noted that the workgroup would plan to align the standards with what's in the SBHC application and annual survey.

Chair Connor also asked whether someone would be able to take a first crack at an administrator review of the standards, and whether MASBHC has already done this. She asked the Council's MASBHC representatives who aren't already on the Quality workgroup to coordinate with Jean-Marie about a review. An administrator review of the standards would provide the state agency partners – MDH and MSDE – with preliminary information about the scope of changes that may be needed, which will help them know what to expect.

**SBHA Measures –** A second priority for the workgroup in 2018 will be assessing the capacity of SBHCs to collect and report the measures recommended by the national School-Based Health Alliance. The workgroup has representation from two MCOs, and so the overlap/intersection between HEDIS metrics and the Alliance's measures was also discussed. It was also suggested to contact Hayley Love at the Alliance to talk about data support at the national level and best practices for assessment.

Kate Connor presented the Systems Integration and Financing workgroup's 2018 priorities. The Systems workgroup is focused on two objectives – Financing and Systems Integration – and will conduct four activities that fall under those objectives:

- **Financing Objective –** to facilitate the long-term sustainability and growth of School-Based Health Centers. The Systems workgroup will 1) provide input on financial information questions that should be included in the Data Workgroup's recommended changes to MSDE's annual survey; and 2) coordinate/Host a technical assistance session on billing for SBHC Administrators.

- **Systems Integration Objective –** to promote the inclusion of School-Based Health Centers into networks of managed care organizations, commercial health insurance carriers, school health services, and other patient-centered models of care. The Systems workgroup will 1) identify key stakeholders to partner with and convene 1-2 meetings to discuss concerns of the Council and/or better ways to collaborate; and 2) provide technical input on scope of work, particularly around qualitative formative research to assess the value of SBHCs; the challenges and service gaps associated with SBHCs; and the role they are filling in Maryland communities.

**11:45 am** **Discussion of Workgroup Priorities and Opportunities for Engagement with Members' Organizations**

The Maryland Association of Boards of Education offered their perspective – the most important factors for them are ensuring that students are in class and able to participate. The idea of seat time is really important. While it can be difficult to make a direct correlation between

achievement and good health, we can infer a lot of that as long as there are good teachers in the classroom.

**12:00 pm** **Discussion of Project Concept: Compiling Resources and Research to Demonstrate the Value of SBHCs**

Chair Connor described the purpose of this project, which is to generate a white paper to show what SBHCs do for students, the health system, and public health – and therefore make the case for the value of SBHCs. She invited the Council and guests to generate a list of ideas about what resources are currently available and what are needed to complete this project. The following comments and suggestions were made:

- Information is available about chronic absenteeism. MASBHC and the School-Based Health Alliance can help with information about seat time.

- It can be challenging to draw a fair comparison between schools with SBHCs and schools without, since schools with SBHCs are often located in places of high need (and are different in many baseline characteristics).

- It's important to engage the parental point of view. We can often tell a compelling story by putting a face on it and making it personal. Pediatricians in Maryland have been doing this to make the case for CHIP funding.

- The Office of Population Health Improvement at MDH may have some data that can demonstrate how SBHCs are strategically placed to address population health and health equity issues. MDH offered staff to help look into this.

- One area where the Council will really need some help is cost-benefit analysis and resource mapping, around population health and health equity, chronic absenteeism and seat time, and cost of care.

Chair Connor summarized the discussion: the Council is most in need of a person that can act as a quarterback to help organize parts of the project, to be conducts by a diverse group of Council members and stakeholders. Areas to explore include chronic absenteeism, population health and health equity, hospitals/promising partnerships, and community benefit reports.

**12:15 pm** **Closing Remarks**

Chair Connor made closing remarks and asked the Council to watch for a revised version of the Data Workgroup Recommendations, to provide comment by Monday, February 12. The meeting was adjourned at 12:25pm.

MARYLAND Department of Health

MCHRC
Maryland Community Health Resources Commission

**Council on Advancement of School-Based Health Centers**
**Meeting Minutes: Monday, April 16, 2018, 9:30 am to 12:30 pm**

**Location:** Maryland Department of Transportation
7201 Corporate Center Drive, Hanover, MD 21076
Call-In: (641) 715-3814, Participant Code: 313674#

**9:30 am** **Greetings and Opening Remarks**

Kate Connor, Chair of the Council, opened the meeting at 9:30 am with thanks and welcome. All members of the Council and public attendees introduced themselves. Chair Connor reviewed the agenda and minutes of the previous meeting in February. The Council approved the February minutes.

Attendees: Council: Patryce Toye, Barbara Masiulis, Kate Connor, Uma Ahluwalia, Jean-Marie Kelly, Judy Lichty-Hess, Jennifer Dahl, Diana Fertch, Cheryl DePinto, Mary Gable, Brigida Krzysztofik (for Delegate Bonnie Cullison), Andy Ratner (for Michele Eberle), Mark Luckner, and Allison Taylor.

Public: Lynne Muller, Mike Shaw, Ben Wolff, Robyn Elliott, Joan Glick, J.D. Merrill, Pam Kasemeyer, Sharon Hobson, Rachael Faulkner, and Maya Fiellen.

Chair Connor provided information to Council members about submitting financial disclosures. Financial disclosures are due to the State Ethics Commission by April 30 each year.

**9:45 am** **Update on March 1 meeting with SBHC Administrators**

Barbara Masiulis, the Council's Vice Chair and Chair of the Data Collection and Reporting Workgroup, provided an update on the March 1 meeting of the School-Based Health Center Administrators. At that meeting, the Vice Chair gave a presentation about the Council's recommended changes to the MSDE survey of School-Based Health Centers and solicited feedback. Primarly, she wanted to hear whether the recommended data points would be feasible for SBHCs to collect.

Seven jurisdictions (out of 12) provided written feedback on the recommendations, which was compiled into the attached document. The most surprising finding was that one of the jurisdictions is not doing any billing, and some are making calculations by hand. The Council is hoping that with better utilization of EMRs, SBHCs will be able to extract data easily.

The Vice Chair summarized the feedback she received from the Administrators:

- The Council had recommended that SBHCs report whether students had a primary care doctor. Many of the SBHC Administrators indicated that this would be difficult to report because parents may not complete their child's consent form completely (which contains a question about the child's primary care doctor), or the parents may not know who that person is.

- The Administrators discussed the definition of "behavioral health providers," and how to best define what information should be captured. The Data Collection and Reporting Workgroup will work on refining the definition.

- Chair Connor noted that the Systems Integration and Funding Workgroup has been interested in financial information from SBHCs, and the Council's recommendations include questions to that effect. She noted that sometimes this is information that the sponsoring organization would have, rather than the SBHC. So, certain questions have been removed from the recommendations because the information can be more thoroughly gathered elsewhere.

The Vice Chair opened the floor for feedback from Council Members. Key points of discussion include:

- Cheryl DePinto indicated that MDH had previously done a survey of SBHC billing practices. She is offering to share that information with the Council in case it's helpful in formulating recommendations.

- Chair Connor noted, for historical information, that return-on-investment for billing has not been great, and that this has been an ongoing issue for the past 15-20 years. There used to be more jurisdictions that weren't billing, so the fact that only one jurisdiction is not billing represents a big improvement. Legislative and regulatory changes over the past 10 years have helped improve the billing environment for SBHCs.

- The Systems Integration and Funding Workgroup will provide a technical assistance session on billing to SHBC Administrators at their next meeting in May.

- Council Members were interested in whether it would be helpful to include survey questions about social determinants of health, and whether it would be helpful to solicit specific information from rural jurisdictions, since that has been a priority for MDH in recent years.

As a next step, the Data Collection and Reporting will refine some questions in the survey based on feedback from this meeting.

MSDE presented a tenative timeline for completion of the new annual survey, as follows:

- Spring 2018: the Council will finalize recommendations to MSDE on a new data collection system (annual SBHC report). The Data Collection and Reporting Workgroup will work MSDE to mock up the new annual report. MSDE will begin conversations with their IT team to present the draft annual report and to investigate what is technically possible.

- Fall 2018: the Data Collection and Reporting Workgroup will support and provide feedback to MSDE on the new draft report.

- Spring 2019: a pilot of the new annual report will be done with a few volunteered SBHC jurisdictions.

- School year 2019-20: the new annual report will be released to SBHC administrators so they can prepare their data collection for the new report due September 1, 2020.

**11:00 am Workgroup Breakout Sessions**

Each of the three Workgroups – Data Collection and Reporting, Systems Integration and Funding, and Quality and Best Practices – met in breakout sessions for an hour. There was not enough time at the end of the meeting for the Workgroup chairs to report back to the full council about progress toward their stated objectives, so Chair Connor announced that she would schedule a call with the chairs in the near future to make sure goals were aligned and that the Workgroups are not duplicating efforts.

**12:15 pm Discussion of Project Concept: Compiling Resources and Research to Demonstrate the Value of SBHCs**

Chair Connor provided an update on the Council's "Project Concept" for a white paper that demonstrates the value proposition of School-Based Health Centers in Maryland. The Council was asked to provide feedback on the specific deliverables (listed below). One Council member suggested a revision to the first bullet, which is included below in italics.

- A review of the SBHC literature and existing data, *including Maryland-specific history, literature, and data*;

- A cost-benefit analysis from the perspective of the education system, healthcare system, public health system, and society at large;

- Identification of important outcomes, including chronic absenteeism, population health goals, and health equity; and

- Recommendations about a comprehensive data reporting system to demonstrate the value proposition of SHBCs moving forward.

A motion was offered and seconded, and the Council voted to approve the project concept as revised. As a next step, Council staff will develop a solicitation, which will be brought before the Community Health Resources Commission (who will be funding the project) at a future meeting. Pending approval, the solicitation is expected to be released later this year.

**12:15 pm Closing Remarks**

Chair Connor made closing remarks and thanked Council members and the Workgroups for their hard work. A doodle poll will be sent around to facilitate scheduling for the next meeting.

MARYLAND Department of Health

MCHRC
MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

**Council on Advancement of School-Based Health Centers**
Monday, October 1, 2018, 9:30 am to 12:30 pm

Location: Maryland House of Delegates, HGO Committee Room
6 Bladen Street, Room 240, Annapolis, MD 21401
Conference Number: (641) 715-3814; Code: 313674#

**9:30 am Greetings and Opening Remarks**

Barbara Masiulis, Vice Chair of the Council, opened the meeting at 9:56 am with thanks and welcome. The Vice Chair informed the group that the Chair, Kate Connor, would be unable to join because of a work emergency. She also indicated that there might be some changes to the agenda because of low attendance at the meeting. Vice Chair Masiulis invited Council members and guests to introduce themselves. The Council approved the April minutes.

Attendees: Council: Barbara Masiulis, Allison Taylor, Joy Twesige (for Patryce Toye), Bonnie Cullison, Cathy Allen, Sharon Morgan, Jean-Marie Kelly, Arethusa Kirk, Diana Fertsch, Andy Ratner, Jonathan Brice, and Lynne Muller.

Public: Rachael Faulkner, Tanya Schwartz, and Mike Shaw.

**9:40 am Introduction of new Council members**

Vice Chair Masiulis introduced Jonathan Brice, who will representing the Association of Public School Superintendents Association of Maryland.

**9:45 am Update on White Paper Demonstrating the Value of SBHCs**
**Introduction of Harbage Consulting**

The Vice Chair introduced Tanya Schwartz, Director of Medicaid Policy for Harbage Consulting. Harbage Consulting was the contractor selected to complete the white paper demonstrating the value of SBHCs in Maryland. Tanya introduced herself and gave some background on Harbage's experience working on school-based health care in other contexts. She explained that they have been meeting with stakeholders, reading materials, reviewing the survey

changes. Tanya indicated that the interviews with stakeholders have been really valuable. Since data is important for showing the value of SBHCs, Harbage will be making recommendations about performance management and a data system.

Delegate Cullison asked whether Tanya thinks that there are any states that do SBHCs really well. Tanya indicated that Oregon is considered the gold standard; it has worked hard to really integrate SBHCs into their delivery model. California also has a strong program and has put forth some performance measures. The group noted that in Oregon, the SBHC program is run through the Health Department. Cathy Allen asked whether Tanya had looked through the MSDE website to get all the information that's there. Tanya and her team at Harbage have done this. Mike Shaw asked about how funding is structured in Oregon. Tanya hasn't dug into that yet but is planning to look into that.

**10:15 am Discussion of 2018 Annual Report**

Allison Taylor described the process for the developing the Annual Report. Council members will have a week to review and provide comment, and the Council will vote on the final report at the November meeting.

The group reviewed the planning grid and recommended updates based on completed work. Allison will revise the planning grid and include it as an appendix in the annual report.

The Council discussed how to access SBHC data that is collected by MSDE. Lynne Muller advised Council member that if they would like to request data, they should make a formal request because it takes a long time for MSDE to approve such requests. Barb asks about whether a legislative change could make the data more available. Cathy Allen mentions that we'd need to be cognizant of making sure that there is no identifiable information.

Uma Ahluwalia suggested that the Council come up with 5-6 data points that are important to track. Lynne Muller advised the more specific we can be, the better. Cathy Allen suggested that the Council choose items that are keeping kids from going to class, such as immunizations, asthma, and diabetes.

**11:00 am Update on Kirwan Commission work**

Public Policy Partners received a request from DLS about behavioral health and health services in schools. MASBHC presented before Kirwan in June. Following that there were some draft recommendations. One of them had language about behavioral health, health care, and "community schools" — if a school hit a certain threshold of poverty (to be determined), it would get a fixed amount of money to become a community school. This would give them a

health services coordinator. MASBHC said that schools who have SBHCs, they could move fast; the money didn't need to be tied to community schools.

The Kirwan workgroups will finalize their work in the next week. Then the full commission will take up leftover issues. The report for Kirwan will come out by the end of the year. Rachael Faulkner said that she has gotten a lot of questions about funding of SBHCs, and that is a very difficult question to answer.

**11:15am Update on Tours of School–Based Health Centers**

During the last week of September, Delegate Cullison toured a couple of School–Based Health Centers in Baltimore City and Baltimore County. A few things stand out –

- High quality of service.
- Services are provided by people who are grossly underpaid, understaffed, under-resourced.
- She saw a difference between KIPP and other programs. KIPP is very well resourced, but the worry about KIPP is that the grant runs out in a year.
- Commitment of the folks was tremendous. Spoke a lot about resources.
- The idiosyncratic needs of individual communities is really important.

She was renewed in her commitment to SBHCs. She is willing to do whatever is needed to make sure these services are in Maryland communities.

**11:30 am Workgroup Reports**

**Data Collection and Reporting:** Vice Chair Masiulis provided the update for the Data Collection and Reporting workgroup. The workgroup continues to refine the work on the annual SBHC survey. They are going to add some more ICD-10 codes and are working on a plan for dissemination of information. They want more members on the workgroup. They have representation from MSDE and an Administrator.

**Systems Integration and Funding:** Mark Luckner provided the update for the Systems Integration and Funding workgroup. They have been following the Kirwan Commission's work. A lot of Systems' work is being moved forward by the Harbage project.

Quality and Best Practices: Jean-Marie Kelly, chair of the workgroup, provided the update for Systems Integration and Funding. She mentioned that this workgroup has been tasked with supporting updates to the SBHC standards. The document is lengthy and has not been updated since 2006 or so. The group met with the SBHC Administrators to discuss what those updates would look like. The last meeting was on September 17. There are plans to go through all the sections with the SBHC Administrators. This was done in breakout sessions.

The plan is to do this for the next several meetings.

Highlights –

- SBHC standards are important because they define what a SBHC is and is not; they are a high level guide for scope of practice.

- The standards should include definitions, new employees, levels of service.

- The standards should also cover scope of services, e.g., how to account for telehealth, toolbox, sponsorships, what a medical director needs to do.

Mark asked about the timeline for wrapping up this project. Jean-Marie indicated that she hopes they will have a "concrete draft" by the November meeting. Lynne will set a meeting for the SBHC Administrators before that time. Lynne hopes that it will be done by the beginning of next school year. Jean-Marie wants to make sure that the Administrators are driving this work.

**12:25 pm Closing Remarks**

Vice Chair Masiulis provided closing remarks. Next meeting is November 19, at the Howard County Health Department, Barton conference room.

MARYLAND Department of Health

MCHRC
MARYLAND COMMUNITY HEALTH RESOURCES COMMISSION

**Council on Advancement of School-Based Health Centers**
Monday, November 19, 2018, 9:30 am to 12:30 pm

Location: Howard County Health Department
8930 Stanford Blvd., Columbia, MD 21045
Conference Number: (605) 475-4000; Code: 142685#

**9:30 am Greetings and Opening Remarks**

Dr. Katherine Connor, Chair of the Council, opened the meeting with thanks and welcome, and went through the morning's agenda. All members of the Council and public attendees introduced themselves. Chair Connor reviewed the agenda and minutes of the previous meeting in October. The Council approved the October minutes.

Attendees: Council: Kate Connor, Barbara Masiulis, Patryce Toye, Uma Ahluwalia, Jonathan Brice, Cathy Allen, Sharon Morgan, Maura Rossman, Arethusa Kirk, Diana Fertsch, Bonnie Cullison, Cheryl De Pinto, Mary Gable, Mark Luckner, Allison Taylor

Public: Rachael Faulkner, Lynne Muller, Jennifer Barnhart, Joan Glick, Sharon Hobson

Delegate Bonnie Cullison thanked Council members for coming to a meeting on the Monday before Thanksgiving. She is happy where things stand for School–Based Health Centers; particularly with regard to the Council's recent presentation to the Kirwan Commission. She thinks Commission understands the value of SBHCs and they are on the map.

**9:45 am Update on SBHC White Paper by Harbage Consulting**

Chair Connor introduced Tanya Schwartz, Director of Medicaid Policy for Harbage Consulting, and provided a recap of the white paper solicitation and project.

Tanya Schwartz introduced herself and her colleague Megan Thomas, who was on the phone. Tanya provided an outline of the white paper, to explain the topics that they are going to cover. She wants to make sure that this document can be a roadmap for the future. The outline is included as an appendix to these minutes.

Tanya explained that she had met with a number of stakeholders to provide input into the report. She noted that this report will reflect the experience of the sample they spoke to and recognized that experiences are different in different places.

Council members asked a number of questions about the outline, including –

- Will the report discuss barriers and challenges to data collection? – Yes, but the focus will be on providing recommendations for an improved data collection system.

- In terms of infrastructure and capacity, will the report look at current funding? – Yes, in a broad sense. Harbage is comparing funding in Maryland to other states. Funding in Maryland hasn't grown (and may have even gone down), but number of SBHCs has increased in recent years.

- Can the report be titled as both 1) demonstrating the value and 2) expanding/improving the value of SBHCs. – Yes, but the main focus is on demonstrating the value of SBHCs, since that was requested through the project solicitation.

- What is the definition of "value"? – For purposes of this report, we are thinking of value in terms of outcomes and cost savings.

- Would there be an opportunity to align SBHCs with the all–payer methodology? – This will be mentioned in the long–term recommendations section.

- The report will recommend some performance measures – will any of these align with the national SBHCs measures? – Yes, although some may be Maryland–specific as well. The goal is to choose measures that help with benchmarking at the state and national levels.

- Are any SBHCs using CRISP? – Council members will follow up about this with Harbage.

- Did Harbage consult with both rural and urban SBHCs? – Yes.

Chair Connor said that if Council members who haven't already talked to Harbage would like that opportunity, please reach out to her, Barbara Masiulis, or Mark Luckner, and they will facilitate getting comments to Harbage.

**10:15 am Update on the Work of the Kirwan Commission**

Delegate Cullison explained the context for the Kirwan Commission: it was created 3 years ago to figure out how the State can enhance its educational programming in a comprehensive way. This is a follow–up to the work of the Thornton Commission in the late 1990s, and much of the work will focus on education financing. The Commission is looking at four aspects of education; one of them is health and wellbeing of students. In that context, SBHCs came onto the Commission's radar. Originally the Commission was looking at them as one tool in the toolbox that they could use to improve school health. The Commission got a lot of pushback when they wanted to tie funding to community schools.

Delegate Cullison thanked Vicki Gruber, Executive Director of the Department of Legislative Services, for inviting the Council to address the Kirwan Commission and provide information about SBHCs. The Commission took feedback from the Council and the Maryland Assembly on School–Based Health Care. The Commission will recommend an increase in funding for SBHCs among its health and wellbeing recommendations. The recommendation calls for $6M that was supposed to be included before with an inflationary increase of $3M in FY 21 (i.e., 9M in FY 21). There will also be a recommendation for a needs assessment of school-based health centers, with a focus on behavioral health services.

Council members provided a number of questions and comments about the Kirwan Commission's work –

- Chair Connor noted that MASBHC has been a driving force to make sure that SBHCs were on the Kirwan Commission's radar, and thanked Rachael Faulkner for her hard work.

- The next Kirwan meeting will be held on November 29 and include a discussion of a threshold level of poverty that schools would have to meet to be eligible for funding to hire a health care practitioner. This meeting will also provide time for public comments. Interested individuals and organizations can find more info on the Kirwan website.

- A recent estimate puts the total cost of all Kirwan recommendations at $4B in state dollars, which is most likely beyond what the state can absorb. (This include full–day pre–K for everyone plus a 25% increase in staff pay, which accounts for a large portion of the funding.)

**10:45 am Workgroup Breakout Sessions and Reports**

Chair Connor noted that the Kirwan Commission provides a good backdrop for the workgroups to plan their 2019 priorities. The Council broke out into its three workgroups to create a recap of its work in 2018 and to plan for 2019. After the breakout session, the workgroup chairs reported back to the full Council. A summary of workgroup activities and recommendations is included as an appendix to these minutes.

**12:00 pm Discussion of 2018 Annual Report**

Allison Taylor, staff to the Council, presented an overview of the Council's annual report and opened the floor for feedback. Most of the feedback centered around how to best present the data. The Council voted to adopt the draft report with minor amendments. Allison will make the approved changes and prepare the report for submission to the General Assembly.

**12:15 pm Closing Remarks**

Chair Connor made closing remarks and thanked Council members and the workgroups for their hard work. A doodle poll will be sent around to facilitate scheduling for the next meeting.

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**Appendix 4.**

**Data Collection and Reporting Workgroup**
**Activities and Recommendations 2018**
**Council for the Advancement of School Based Health Centers**

## 1. Improved data collection

**Completed activities:** Refined data collection report to identify outcomes versus descriptive information.

**Recommendations:** Additional recommendations will be made based on the Harbage report. Consider adding additional educational outcomes, for example adding seat time measures. MSDE should continue to follow the proposed timeline for releasing and implementing the new data collection report.

## 2. Improved SBHC data sharing and analysis

**Completed activities:** Discussions occurred within the Data Work Group and the Council regarding the priority of sharing the enhanced SBHC data with key stakeholders.

**Recommendations:** With improved data collection, mechanisms should be developed to annually share the data with key stakeholders. Infrastructure support will be needed to ensure data sharing and analysis. Strategies should be shared with SBHC administrators on best practices for utilizing the data collected to enhance SBHC programming and development. These strategies should include analysis of the MSDE SBHC annual data and state and local population health data. Also, recommendations on needs assessment tools should be provided to SBHC administrators. If additional SBHC funding is available, a dedicated program administrator is needed at the state level to move forward the improved data collection system, dissemination, and analysis of SBHC data to support and advance SBHCs in Maryland.

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## Appendix 5.

# Council on Advancement of School-Based Health Centers
# Systems Integration and Funding Workgroup
# Activities and Recommendations 2018

**Objective 1: Funding** – to facilitate the long-term sustainability and growth of School-Based Health Centers

**Financial data collection**

- Completed activities: SIF provided recommendations to the Data work group on questions for the annual report focusing on: operating expenses, revenue sources, billing payer mix.
- Recommendations: *Additional recommendations will be made, in collaboration with the Data work group, after careful review of the Harbage work.*

**Billing technical assistance for SBHCs**

- Completed activities: SIF facilitated a discussion about billing at the spring 2018 SBHC Administrators meeting. Topics discussed included: contracting, mechanics of billing, updates to the SBHC billing manual, population health and panel management initiatives, data sharing.
- Recommendations: *Maryland Medicaid and MCO representatives should attend all regular SBHC administrator meetings convened by MSDE.* This will allow for updates about billing policies and practices, real time troubleshooting, and collaboration regarding population health and panel management for SBHCs. In some instances, additional expertise may be needed, and *MSDE should consider identifying appropriate partners or contractors.*

**Grant funds for SBHC operations and start-up**

- Completed activities: SIF is monitoring the Kirwan Commission's work closely - particularly discussions about increasing available funds for SBHC start-up and operations to support students in concentrated areas of poverty.
- Recommendations: Administration of the SBHC grant and support of the SBHC program requires investment in infrastructure, data systems, and support staff. *If additional funds are made available for SBHCs, some funds should be dedicated to the aforementioned program administration and monitoring requirements as well as start-up and operation of SBHCs.*

**Objective 2: Systems Integration** – to promote the inclusion of School-Based Health Centers into networks of managed care organizations, commercial health insurance carriers, school health services, and other patient-centered models of care.

**Identify key stakeholders for systems integration discussions**

- Completed activities: Recommendations were provided to Harbage regarding key stakeholders to contact for data collection**.**
- Recommendations: Recommendations re: collaboration and ongoing dialogue with key stakeholders to enhance integration of SBHCs will be considered in the coming year, with special attention to Harbage's findings.

**Define and demonstrate the role and value proposition of SBHCs in Maryland**

- Completed activities: The Community Health Resources Commission (CHRC) funded a small procurement contract to develop a value proposition of SBHCs in Maryland. SIF provided technical input on the scope of work. After a competitive bidding process, Harbage Consulting was selected for this contract. The SIF Work Group provided ongoing feedback to Harbage.
- Recommendations: Careful review of Harbage's findings will help guide SIF work-group priorities for 2019.

**Technical support for systems level integration**

- Completed activities: SIF facilitated a discussion about data sharing to support integration at the spring 2018 SBHC Administrators meeting.
- Recommendations: The SBHC program should support electronic health record (EHR) interoperability, use of CRISP (regional health information system), and Immunet. Representatives from these programs should be included in regular SBHC administrator meetings to facilitate this dialogue and provide technical assistance.

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**Appendix 6.**

**Quality and Best Practices Workgroup**
**Activities and Recommendations 2018**
**Council on the Advancement of School-Based Health Centers**

The Quality and Best Practices Workgroup (Q&BP) charged itself in 2018 with reviewing the School Based Heath Center Standards (the Standards). This document was last updated in 2006.

The Standards cover a wide range of topics including:

- Level and scope of services
- Facility and laboratory requirements
- Sponsoring agencies
- Medical records, confidentiality, enrollment, and consent
- Data collection, reporting, and evaluation
- Quality assurance
- Financial management

Primary review indicated that the document was outdated with regards to the practice of Nurse Practitioners licensed in Maryland. The Maryland State Department of Education (MSDE) added language to the Standards in March 2018 describing the expanded scope of practice for Nurse Practitioners, but more work is needed to fully address the expansion of this role, as well as the Medicaid regulation of the responsibilities of Nurse Practitioners in School-Based health Centers in Maryland.

Secondary review by the Q&BP brought to light many additional updates and opportunities to improve and maintain the document, as well as develop the expertise needed to keep the document timely. The Q&BP is currently engaged in the process of seeking input from the SBHC Administrators group on changes that they believe are necessary to improve and update the Standards in a systematic way. This work should be completed in early 2019. Additional recommendations are possible in the future.

Designated and funded support staff will be required to implement the recommendations outlined below. A dedicated program administrator should be among the staff. The Q&BP encourages CASBHC to request that the legislature allocate those necessary resources to MSDE and other agencies as needed.

Recommendations of the Q&BP are:

- Create processes to review the Standards every 3 years or sooner if there are material changes to core areas
    - The process to review the Standards should include:
        1) Surveillance of legal and regulatory changes at the State and Federal level for Privacy, HIPAA, FERPA and others
        2) Changes in Maryland professional licensing law and regulations
        3) Changes in billing and coding
        4) Changes in licensing and regulations for School Health

5) Changes in clinical practice for the care of children and adolescents
6) Statewide public health initiatives impacting children and adolescents
7) Monitoring the rapidly changing healthcare landscape for innovations and paradigm shifts, like the current trend toward population health

- Annual review of internal SBHC policies and procedures at each center
- Review/update the clinical care policies and guidelines biannually, or sooner, especially if there are material changes to EPSDT, CDC, COMAR, AAP, AAFP, SAMSA or similar clinical practice guidelines or standards
- Develop and maintain a mechanism for communication of updates and changes to keep all SBHCs abreast of the newest information. Routine meetings of the School Based Health Centers Administrators should be held quarterly or more frequently, if needed, to ensure information is disseminated.
- Form a multidisciplinary advisory group charged by area of expertise to maintain the Standards
    - Advisory group members should include appropriate representation from:
        1) MSDE
        2) MDH and Medicaid (Med Rec, CLIA, HIPAA)
        3) Legal Department (Assistant Attorney General MSDE and MDH)
        4) Maryland Medicaid
        5) Compliance and Privacy
        6) SBHC Administrator(s)
        7) Clinician(s)
        8) IT and Reporting
        9) School Facilities

# Appendix G

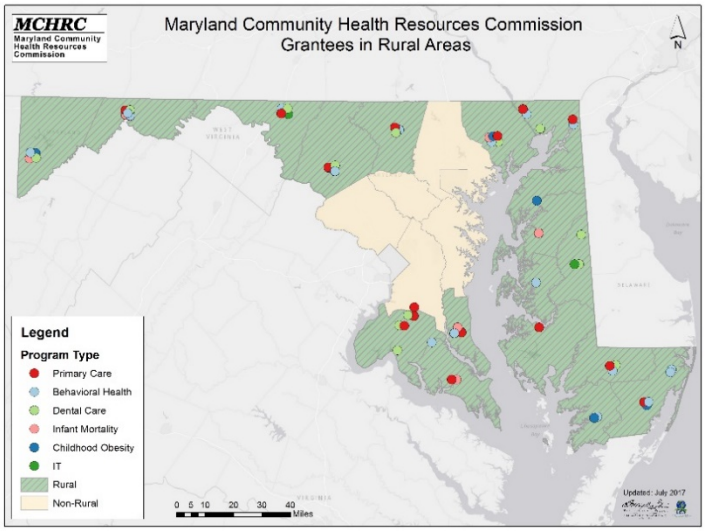
STATE OF MARYLAND
Community Health Resources Commission
45 Calvert Street, Room 336 • Annapolis, Maryland 21401

Larry Hogan, Governor - Boyd Rutherford, Lt. Governor
Allan Anderson, M.D., Chair – Mark Luckner, Executive Director

**February 4, 2019**

# Community Health Resources Commission: Grants Supporting Projects in Rural Communities

The CHRC has awarded 210 grants totaling $64.1 million. Of this total, more than half (107 of 210) have supported programs in rural areas. CHRC rural health grants, totaling approximately $28 million, have provided 85,963 patients access to primary care, behavioral health care, dental, women's health, and childhood obesity prevention services in 18 rural jurisdictions of the state. CHRC grants have provided the start-up funding to enable safety net providers to increase their capacity and have supported innovative and replicable projects to address social determinants of health and serve vulnerable populations.




## Grants Recently Awarded (9 projects about to be implemented)

**Choptank Community Health System** (18-001). This project will address dental workforce challenges in a rural area of the state by expanding access to pediatric dental services through a new dental practice in Denton. The project involves a partnership with the University of Maryland School of Dentistry to recruit a dental fellow to provide pediatric dental services in their existing clinics in Federalsburg, Goldsboro, and Cambridge. This project is innovative, could offer a replicable model in other rural communities facing dental care shortages, and is financially sustainable.

**Talbot County Health Department** (18-002). This project will establish a Rural Health Collaborative working across five counties (Queen Anne's, Kent, Talbot, Caroline, and Dorchester) to improve the integration of clinical, social, and preventative health systems. The Collaborative will focus on improving health care for low-income residents and would develop models for integration that can be duplicated in other rural areas.

**Wicomico County Health Department/EMS** (18-006). This project will reduce preventable 911 calls through a team consisting of an emergency medical technician and a registered nurse who will identify frequent callers to 911 for non-emergent conditions and will conduct welfare checks, case management, safety planning, and refer patients to primary care physicians, medical specialists, and, if necessary, in-home care providers.

**Wells House** (18-010). This project will add somatic care services at two addiction treatment facilities in Western Maryland. Many of the patients at Wells House have complex medical needs, and providing integrated behavioral and somatic care could lead to a reduction in avoidable hospital utilization for this vulnerable population. The project will utilize a nurse practitioner and medical assistant to perform health assessments, provide necessary health education, and address other somatic health issues. This program is replicable at other addiction facilities in the state and would help improve health outcomes for individuals needing substance use treatment services.

**Atlantic General Hospital** (18-011). This project will develop a new interdisciplinary chronic pain management center that would provide access to somatic health, behavioral health, and therapy services to help patients relieve chronic pain without the use of opioid medications. For those with Substance Use Disorders, the intervention offers a concentrated outpatient program using a multi-disciplinary approach to reduce or discontinue the use of opioids for pain management. This program is innovative and could be replicable in other areas of the state.

**Upper Bay Counseling and Support Services** (18-012). This project will provide integration of behavioral health and somatic care in Cecil County by placing psychotherapists in the offices of Union Primary Care, the largest primary care provider in Cecil County. The project implements the Screenings, Brief Interventions, and Referrals to Treatment (SBIRT Model), and the target population would be those who have substance use issues. This project will expand access to integrated behavioral health services in a rural and underserved area of the state.

**Western Maryland Area Health Education Center** (18-016). This project will expand an existing successful dental program that currently serves two jurisdictions (Allegany and Garrett Counties) into a third jurisdiction (Washington County). The program will provide access to reduced price dentures for low-income residents of Washington County who face a number of barriers accessing health and dental care. A Community Health Worker will work with vulnerable residents to overcome the social determinants of health which stand in the way of accessing care. Participants will also be screened for somatic health and social support needs.

**Worcester County Health Department** (18-019). This project involves the enhancement of an existing Medication Assisted Therapy program through the addition of Naltrexone. The target population to be served includes: (1) Individuals released from inpatient addictions treatment programs; (2) inmates leaving Worcester County Detention Center with opioid addiction; and (3) individuals involved in Drug Court.

**Frederick Memorial Hospital** (18-020). This project would implement the evidence-based "5-2-1-0 Campaign," which is a nationally recognized childhood obesity prevention program. The project involves multiple intervention strategies to fight obesity would engage the Frederick County Public School System.

## Grants Under Current Implementation (20 projects)

**Calvert County Health Department** (17-008). This grant will support an innovative re-entry program that addresses the social determinants of health impacting formerly incarcerated individuals and looks to develop concrete measurable outcomes to track and demonstrate the performance of re-entry programs at the local level. The program is designed to be replicable in other rural jurisdictions and is also supported financially by the Governor's Office of Crime Control and Prevention.

**Pressley Ridge** (17-020). This grant will support use of the evidence-based HOMEBUILDERS® model to increase family engagement in substance use treatment with a goal of family preservation by increasing access to behavioral health and wraparound services. HOMEBUILDERS® provides intensive, in-home crisis intervention, counseling, and life-skills education for families who have children at imminent risk of placement in state-funded care. The Center will work closely with the Allegany County Department of Social Services to provide services for children who are removed from their parents due to substance use.

**Health Partners** (17-002). This grant supports access to primary care services in two sites in Charles County, an existing site in Waldorf and a new site in Nanjemoy.

**Way Station** (17-004). This grant supports the use of "Care-at-Hand" technology by a network of community behavioral health providers (multiple jurisdictions) who serve individuals with Serious Mental Illness. The project has an emphasis on clients who are high utilizers of hospital resources and is designed to help improve the quality of client care.

**Worcester Youth & Family Counseling** (17-005). This grant supports increasing access to behavioral health services in the community by expanding the capacity of the organization to hire additional clinical staff. The organization currently has a three-month waiting list for clients seeking services.

**Cornerstone Montgomery** (17-007). This grant supports the creation of a data warehouse developed by the Community Behavioral Health Association and will assist community behavioral health providers across the state to collect patient clinical outcome data.

**Somerset County Health Department** (17-011). This grant supports a multi-disciplinary approach to combat child and family obesity and promote food security. The grant supports: nutritional home visiting program; nutrition education in the schools; garden fresh produce distribution; and transformation of abandoned asphalt slabs into "Fitness Towns."

**West Cecil Health Center** (17-013). This grant supports an expanded dental program in Cecil County through a partnership with the University of Maryland Dental School. Under a cooperative agreement, West Cecil has agreed to take over operations of the Dental School's clinic, and maintain its status as a clinical teaching site.

**Allegany County Health Department** (17-015). This grant supports the expansion of the capacity of the organization to provide dental services for adults and children and is designed to help reduce preventable dental-related visits to the hospital emergency department.

**Health Partners** (17-016). This grant supports the expansion of access to dental services in Charles County, a dentally underserved area of the state, by supporting Health Partners' expansion of dental services at a new site in Nanjemoy.

**Allegany Health Right, Inc.** (16-001). This grant supports the expansion of the organization's existing Dental Access Program that serves low-income seniors and disabled adults. The program continues Allegany Health Right's model of community outreach and engaging private dentists to provide dental services at a discounted rate of 50% - 80%.

**Carroll County Health Department** (16-003). This grant supports the expansion of access to pediatric dental services in Carroll County by modernizing the outdated equipment of Carroll's existing dental program and enabling the grantee to upgrade the practice management system.

**Mountain Laurel** (16-004). This grant supports a project to provide dental screenings and referrals to discounted dental care for patients of Mt. Laurel with chronic diseases such as diabetes, hypertension, and cardiovascular disease.

**Garrett County Health Department** (16-005). This grant supports the use of telehealth technology to increase access to Medication Assisted Therapy (MAT) and responds to the recommendations of the Governor's Heroin and Opioid Emergency Task Force. The program involves a collaboration between the Garrett County Health Department and the University of Maryland School of Medicine's Department of Psychiatry.

**Wicomico County Health Department** (16-009). This grant supports the opening of a new school-based health center (SBHC) in Salisbury. The SBHC is open to students and adult staff members of the school and will provide a new access point for both primary and behavioral health services.

**Charles County Health Department** (16-013). This grant supports an innovative public health-EMS-hospital partnership that addresses overutilization of EMS and ED services by assisting frequent ED/EMS users to manage their chronic conditions in a primary care setting or at home. The program is a collaboration among the Health Department, Charles EMS, and Charles Regional Hospital.

**Frederick Memorial Hospital** (15-003). This grant supports a partnership between Frederick Memorial Hospital and the University of Maryland Dental School (UMD) and seeks to reduce dental-related ED visits. UMD uses a clinic at the Frederick Memorial Hospital as a rotational practicum site to provide care to vulnerable patients.

**Health Partners** (15-005). This grant expands the organization's existing Dental Access Program to serve adults covered by Medicaid. The grant built on a past CHRC award to assist the clinic in transitioning from a grant-based revenue model to billing third-party payers for primary care services provided.

**Calvert County Health Department** (15-007). This grant supports an acceleration of ongoing behavioral health integration efforts in Calvert County through the "Project Phoenix" program, which expands access to behavioral health and medication assisted addiction treatment to those suffering from Substance Use Disorder.

**Harford County Health Department** (15-008). This grant supports a partnership between Harford Health Department and Upper Chesapeake Health to identify high-risk, high-cost individuals and provide them care coordination and disease management services as a means of reducing avoidable hospital utilization.

## Completed Grants (78 projects)

**Youth Ranch** (17-018). This planning grant will enable the organization to develop a business plan that identifies a model of care for substance use treatment programs that reflects clinical best practices and is financially sustainable. The planning grant is also designed to assist the grantee in leveraging additional capacity-building grants from local private foundations in Frederick.

**Queen Anne's County** (17-019). This planning grant will enable the organization to develop a dental care access program for vulnerable populations that is financially sustainable.

**Lower Shore Clinic** (16-012). This two-year grant supports implementation of the "CareLink" program that targets individuals with behavioral health needs who visit Peninsula Regional Medical Center in high volumes and provides intensive case management services for these individuals post-hospital discharge.

**Allegany Health Right, Inc**. (15-002). This grant supported the expansion of the organization's existing Dental Access Program to serve Medicaid-covered adults. The program continued Allegany Health Right's model of community outreach and engaging private dentists to provide dental services at a discounted rate of 50% - 80%.

**Calvert County Health Department** (14-004). This grant supported a project to reduce infant mortality rates by creating a "one-stop shop" of integrated behavioral health and social services for substance-using women and expectant mothers.

**Allegany Health Right, Inc.** (14-005). This grant supported the expansion of the organization's existing Dental Access Program to serve disabled adults. The program continued Allegany Health Right's model of community outreach and engaging private dentists to provide dental services at a discounted rate of 50% - 80%.

**Charles County Health Department** (14-006). This grant supported a school-based dental program that screened children in the Charles County public school system and provided access to fluoride, dental sealants, and clinical services in an area lacking in an oral health safety net infrastructure.

**Frederick Community Action Agency** (14-007). This grant supported the provision of oral health care services to disadvantaged and low-income children and adults in Frederick County. The program also provided oral health education to participants.

**West Cecil Community Health Center** (14-008). This grant supported the opening of a new Federally Qualified Health Center (FQHC) site in Harford County. The new FQHC site offers primary care services in West Cecil in a Medically Underserved Area (MUA) between Aberdeen and Havre de Grace.

**Mental Health Association of Frederick County** (14-012). This grant supported the expansion of access to behavioral health services and reduction of behavioral-health related hospital emergency department visits at Frederick Memorial Hospital. The grantee expanded the hours of a new behavioral health urgent care/walk-in service, which is available to residents regardless of ability to pay.

**Worcester County Health Department** (14-014). This grant supported a program to improve access to somatic/primary care services for adults who have Serious Mental Illness and/or addictions illness.

**Access Carroll** (14-015). This grant supported the long-term financial sustainability of the grantee as the organization transitioned from a grant-based billing model to billing both Medicaid and private payers. The grantee, in downtown Westminster, provides access to primary care, behavioral health, and dental services for low-income individuals, all in one location. The organization was visited earlier this spring by Senior Staff of the Administration and Health Department.

**Health Partners** (14-016). This grant assists this free clinic as it transitions from a grant-based billing model to billing both Medicaid and private payers.

**Allegany County Health Department** (14-017). This grant supported the provision of dental services to disabled adults in Allegany County. The grantee serves as a referral and coordinating agency for underserved and uninsured adults in Allegany County.

**Somerset Health Department** (14-020). This grant supported a public outreach campaign to reduce rates of childhood obesity in Somerset County by: 1) creating after-school opportunities for physical activity; 2) expanding access to affordable healthy food; and 3) providing home visitation and health coaching for youth deemed at highest risk of obesity.

**Dorchester County Health Department** (HEZ-003). This grant supported a program which targeted primary care and behavioral health issues by employing health care services teams that included peer recovery support specialists, community health outreach workers, mobile health care crisis teams, and school-based wellness programs.

**MedStar St. Mary's Hospital** (HEZ-005). This supported a program to expand access to primary and behavioral health services in an effort to reduce emergency department and hospital admissions for behavioral health conditions and for key chronic conditions such as hypertension, pulmonary disease, heart failure, and diabetes.

**Allegany County Health Department** (LHIC13-001). This grant supported the use of community health workers to link patients to community resources, create a community resource guide, support cultural competency provider training, and provide access to subsidized transportation services.

**Tri-County/Lower Shore** (LHIC13-003). This grant supported a program which targeted diabetes-related hospital ED visits through a comprehensive care coordination model to link frequent ED users with access to primary care services in the community.

**Cecil County Health Department** (LHIC13-004). This grant supported the Cecil County Community Health Advisory Committee program aimed at the reduction of behavioral health-related ED visits.

**Charles County Health Department** (LHIC13-005). This grant supported expanding access to primary care services through the establishment of a Patient Centered Medical Home in Nanjemoy (Western County Family Medical Center).

**Harford County Health Department** (LHIC13-007). This grant supported a comprehensive coordinated care and preventative mental health program to improve overall health outcomes for high-risk residents in an effort to decrease ED utilization and to expand the grantee's Comprehensive Women's Health Project care coordination model.

**Kent County Health Department/Mid-Shore** (LHIC12-001). This grant supported a program to address obesity among African American adults and children residing in the mid-shore region through a nutritional intervention targeting African American churches.

**Tri-County/Lower Shore** (LHIC12-002). This grant supported a program aimed at the prevention and management of diabetes in Somerset, Wicomico, and Worcester Counties. The program used the National Diabetes Prevention Program (NDPP) that promotes healthy eating, physical activity, and weight loss to prevent and delay diabetes.

**Allegany County Health Department** (LHIC12-003). This grant supported a program to reduce tobacco use and address alcohol and substance use in Allegany County.

**Calvert Memorial Hospital** (LHIC12-006). This grant supported a program to reduce ED utilization for diabetes related conditions in Calvert County through patient education.

**Carroll County Health Department** (LHIC12-007). This grant supported a program to increase the urgent care capacity of an existing Outpatient Mental Health Center to provide an alternative to the use of the Emergency Department for individuals seeking care for a behavioral health condition.

**Cecil County Health Department** (LHIC12-008). This grant supported the implementation of a needs assessment and evaluation of Cecil County's substance use continuum in order to provide the county's local health improvement coalition with a blueprint to guide its work.

**Charles County Health Department** (LHIC12-009). This grant supported the Partnerships for a Healthier Charles County's Chronic Disease Prevention Team efforts to implement chronic disease and obesity prevention projects identified in the Charles County Health Improvement Plan.

**Frederick County Health Department** (LHIC12-010). This grant supported programs to address six priorities identified by the Frederick County Health Care Coalition's Local Health Improvement Plan: 1) mental health, 2) affordable dental care, 3) access to care, 4) wellness and prevention, 5) health inequities, and 6) early childhood growth and development.

**Garrett County Health Department** (LHIC12-011). This grant supported a program to increase access to healthy foods and reduce obesity in adults and teens.

**Harford County Health Department** (LHIC12-012). This grant supported the development and implementation of a marketing campaign to promote healthy eating, active living, and tobacco cessation with specific attention to reaching minority populations.

**St. Mary's County Health Department** (LHIC12-016). This grant supported the implementation of a smoking cessation social marketing campaign in the low-income population of St. Mary's County and to recruit and assist local employers with the adoption of tobacco-free workplace policies.

**Washington County Health Department** (LHIC12-017). This grant supported the implementation of a county health needs assessment to identify issues for which changes in the health care system can improve both patient care and preventive services.

**Harford County Health Department** (12-001). This grant supported the addition of comprehensive care coordination and community outreach to existing family planning/reproductive health services. The comprehensive program targeted low-income, minority women and health services and interventions to reduce infant mortality rates.

**Tri-State Community Health Center** (12-002). This grant supported a collaborative program to provide OB/GYN and postnatal care services through Tri-State providers and home visiting services through the Allegany County Health Department staff.

**Walnut Street Community Health Center** (12-004). This grant supported the expansion of the Healthy Smiles in Motion, a mobile dental van program, in Hagerstown.

**Bel Alton** (12-005). This grant supported a program which provided comprehensive dental screenings and oral health education to children in eight elementary schools in Charles, St. Mary's, and Calvert Counties.

**Lower Shore Clinic** (12-007). This grant supported a program to add primary care services to an existing behavioral health care clinic. The program provided regular physicals, preventative services, and chronic disease management for individuals with existing mental health or substance use disorders.

**Walden Sierra, Inc.** (12-013). This grant enabled Walden Sierra to co-locate behavioral health services with primary care providers and serve low-income and uninsured individuals with behavioral health disorders. Walden partnered with Greater Baden Medical Services and Medstar St. Mary's Hospital to provide primary care and clinical space for Walden Sierra outpatient services.

**St. Mary's County Health Department** (11-001). This grant supported a program which provided individual and group reproductive health and family planning counseling and multi-vitamins with folic acid to women of child-bearing age, as well as pregnancy tests and up to three months of birth control.

**Allegany County Health Department** (11-003). This grant supported a program that provided post-partum case management services to women who use substances during pregnancy. Services included drug/alcohol rehabilitation and instruction for providing care to substance affected newborns.

**Choptank Community Health System** (11-004). This grant supported a partnership between CCHS and the Chester River Hospital Center to provide pediatric dental surgery services in Kent County, a Medically and Dentally Underserved Area (MUA).

**Health Partners** (11-005). This grant supported a dental program and transportable dental unit to serve the uninsured and underinsured residents of Charles County.

**Access Carroll** (11-006). This grant supported a new full-time family dental clinic as part of the Access Carroll integrated care model.

**West Cecil Community Health Center** (11-007). This grant supported the addition of behavioral health services at the FQHC's site in Conowingo.

**Greater Baden Medical Services** (11-012). This grant supported the opening of a new FQHC site in Waldorf that provided access to primary care services for low-income individuals.

**Calvert Healthcare Solutions** (11-014). This grant expanded the grantee's capacity to provide primary health care services and linkage to service supports in Calvert County. The grant supported an increase in service hours for primary care and mental health services, the creation of a formal referral consortium with community agencies, and an increase in access to prescription assistance programs.

**Garrett County Health Department** (10-004). This grant supported the expansion of the health department's Nurse-Family home visiting program, which provided services throughout pregnancy and through the first two years of the child's life.

**Dorchester County Health Department** (09-005). This grant supported the operations of a SBHC in Dorchester County.

**Frederick County Health Department** (09-006). This grant supported the opening of a new SBHC at Hillcrest Elementary. This grant supported primary care services, links for students and families to medical homes, oral health screenings, and dental fluoride varnishes.

**Harford County Health Department** (09-007). This grant supported a SBHC program at four elementary schools in the county. The CHRC's grant supported expansion of primary care and mental health services at the SBHCs for students and their families, particularly those lacking access to care.

**Washington County Health Department** (09-009). This grant supported the expansion of mental health services at the health department's three SBHCs. The grant also helped to support the evaluation and implementation of a software system to improve student/patient tracking and improve billing and collections for services.

**Carroll County Health Department** (09-011). This grant funded the Best Beginnings Program, an interagency prenatal care program that targets women who are low-income, uninsured, and underserved residents of Carroll County.

**Mid-Shore Health System** (09-014). This supported a telemedicine initiative for youth enrolled in the 60-day inpatient substance use treatment at the Jackson Unit in Allegany County. This program enabled families to participate in treatment, who otherwise may not have due to transportation barriers.

**Somerset County Health Department** (09-017). This grant provided support for a program providing assessment and counseling services to individuals who have addictions and mental health related issues. The program involved a collaboration between Eastern Shore Psychological, Maple Shade, and Lower Counties Community Services.

**Upper Chesapeake Healthlink** (09-018). This grant supported the integration of on-site mental health services and medication management in a primary care setting.

**Allegany County Health Department** (08-001). This grant supported increasing the existing dental program's capacity to serve children with Medical Assistance and to expand access to preventative health services and oral health education for children and their families.

**Carroll County Health Department** (08-003). This grant funded a program that supported two pediatric dental projects. The first project expanded access to pediatric dental care by extending the dental clinic hours. The second project piloted an off-site Fluoride Varnish Program for children enrolled in the county Head Start program.

**Choptank Community Health System** (08-004). This grant provided support to expand Choptank's dental program. Funds were used to enhance a new seven-chair dental facility in Goldsboro.

**Garrett County Health Department** (08-005). This grant supported the Project Smiles program, which provided dental care to low-income and uninsured adults at community-based dentists who provided/donated care at the health department dental clinic or pro bono care.

**Harford County Health Department** (08-006). This grant supported Harford’s efforts to provide dental services to low-income and underinsured/uninsured children.

**Wicomico County Health Department** (08-007). This grant supported the relocation and expansion of the WCHD Village Dental clinic to improve access and increase its capacity to serve county residents.

**Allegany County Health Department** (08-008). This grant enabled the Allegany County Health Department to purchase and implement a system which helped to improve the efficiency of the department's patient records and administration while maintaining compliance to HIPAA standards.

**Choptank Community Health System** (08-010). This grant supported Choptank's electronic health record system deployment to all the health center sites and locations, including final planning, testing and infrastructure building. Grant funds were utilized to provide software and staff IT training.

**Walnut Street Community Health Center** (08-012). This grant supported the planning and implementation of an integrated practice management, electronic dental records, and electronic medical records system.

**Junction, Inc**. (08-014). This grant supported psychiatric services for adolescents and young adults with co-occurring mental health and substance use disorders. Services provided included psychiatric mental health and medication management services.

**Harford County Health Department** (08-015). This grant supported the Hope Program, a re-entry program which provided free drug treatment, counseling, medical, and mental health care to those incarcerated at the Harford County Detention Center and continued those services after release.

**Way Station** (08-016). This grant supported the implementation of Integrated Dual Disorders Treatment (IDDT) and the development of Dual-Diagnosis Capability to better serve individuals with co-occurring substance addictions.

**Allegany Health Right, Inc.** (08-017). This grant supported a program to provide dental services for low-income residents with an urgent or developing dental problem.

**Atlantic General Hospital** (08-021). This grant enabled Atlantic General Hospital to open a behavioral health center to deliver services in an ambulatory care setting, targeting individuals using the hospital's emergency department for behavioral health issues.

**Upper Chesapeake Health** (08-024). This grant supported the development of a comprehensive ED diversion program to redirect uninsured patients away from using emergency rooms for non-emergent visits towards a medical home for primary and preventative care, as well as linking them to a comprehensive community-based continuum of care.

**Queen Anne's Health Department** (08-027). This grant supported a program to provide the resources for prenatal care for uninsured and undocumented foreign-born women and provide transportation to and from medical appointments, as well as linkages to other resources in the community.

**Access Carroll** (07-001). This grant supported an expansion of care coordination to ensure timely referrals for specialty care services and improve the organization's overall efficiency.

**Calvert Memorial Hospital** (07-004). This grant supported improving access to health care services for low-income and uninsured residents of Calvert County by increasing the capacity of the Twin Beaches Community Health Center, increasing access to the case management, and providing supplemental payments to specialists and an area pharmacy to cover the gap between patients' sliding fee scale payments and actual costs.

**Frederick Community Action Agency** (07-006). This grant supported the Access to Care Program, which provided primary health care services to low-income, uninsured adults and children in Frederick County.

**Health Partners** (07-007). This grant supported expanding the grantee's capacity to serve low-income un/underinsured residents in Charles County.

**Tri-State Community Health Center** (07-010). This grant supported a collaborative program between the grantee, Allegany Health Right, and Western Maryland Health System to integrate community-based mental health and substance use services with somatic services for uninsured adults.

**Walnut Street Community Health Center** (07-012). This grant supported the Improving Patient Care Program at WSCHC health facility. The program incorporated behavioral health services within the Center's established family practice.

# Appendix H

# Social Determinants of Health and Vulnerable Populations in Rural Maryland

## Introduction

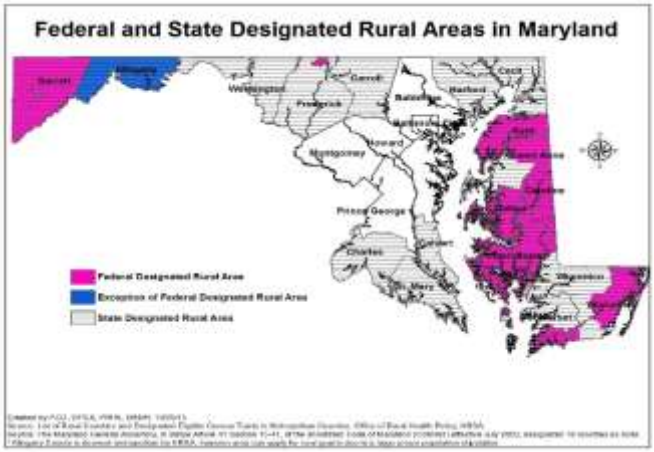
The Maryland Rural Health Association (MRHA) and Maryland Community Health Resources Commission (CHRC) are partnering to produce three white papers. MRHA is a non-profit organization whose mission is to educate and advocate for the optimal health of rural communities and their residents. The CHRC was created by the Maryland General Assembly through the Community Health Care Access and Safety Net Act of 2005 to expand access to health care for low-income Marylanders and underserved communities in the state and to bolster the capacity of Maryland's health care safety net infrastructure to deliver affordable, high-quality health services. The CHRC has awarded 169 grants totaling $55.8 million. Of this total, almost half (79 of 169) have supported programs in rural areas.

This white paper, "Social Determinants of Health and Vulnerable Populations in Rural Maryland," is the first of the series. The objectives of this white paper are to provide an overview of some of the key social determinants of health impacting vulnerable populations in Maryland's rural communities and to offer several examples of initiatives that are underway to address these issues directly and expand access in underserved areas.

## Background

Of Maryland's 24 counties, 18 are designated as rural by the state and, with a population of over 1.6 million, they differ greatly from the urban areas in the state. Common challenges that set rural jurisdictions apart from their suburban and urban counterparts include geographic isolation, lack of transportation, and lack of access to and availability of health care services. Despite continued efforts, these 18 counties in Maryland continue to rank among the lowest in state-wide health indicators. Many rural counties, however, are making great strides in addressing these gaps.

The map below shows the federal and state rural designations by county in Maryland:




### *Social Determinants of Health*

In isolated rural communities, residents often face living conditions that can adversely affect their health. These conditions are referred to as Social Determinants of Health (SDOH) and are defined by the U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion in Healthy People 2020 (www.healthypeople.gov) as the conditions in the environment in which people are born, live, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

SDOH include transportation; housing or place of residence; access and availability of services; educational attainment; employment; access to material goods, such as home ownership; diet; discrimination by social grouping (e.g., race, gender, and class); and social and environmental stressors. Poorer and lower educated communities are at the highest risk of being uninsured, of not having a usual source of health care, and of experiencing delays in seeking diagnosis or treatment. Understanding SDOH is essential to identifying the challenges faced by rural Maryland's vulnerable populations.

### *Vulnerable Populations*

The Robert Wood Johnson Foundation (www.rwjf.org) defines vulnerable populations as individuals who face significant barriers to better health and whose circumstances have made them susceptible to poor health. Not surprisingly, health is significantly affected by housing, employment status, educational opportunities, and other SDOH.

The National Rural Heath Association (www.ruralhealthweb.org) has identified "medical deserts" across the country, which leaves America's most vulnerable populations without timely access to care. The nation's most vulnerable populations often reside in rural communities and are older, sicker, and poorer than their urban counterparts. Maryland is no exception.

Residents in rural communities are more likely to have chronic diseases that require monitoring and follow-up care. This makes convenient, local access to care even more imperative to ensure that patients comply with prescribed treatment regimens to reduce the overall cost of the care, improve patient outcomes, and optimize overall quality of life.

## Potential Strategies

There is no "one-size-fits-all" answer. Each rural community must find the best solutions that meet the unique needs of its own region. Outlined below are four MRHA members that have received CHRC grant funding in recent years to address some of these very real issues. Two programs target individuals with substance use disorders, and two target at-risk patients who have been identified as high-utilizers of Maryland's hospitals. All four programs highlighted below have developed creative ways to address the SDOH that impact the vulnerable populations in their rural Maryland community.

### *Addressing Substance Use Disorders*

Based on the Healthy People 2020 definition, substance use disorders have many compounding SDOH. In addition to poor health outcomes, substance use disorders often cause a cascade of issues (poverty, incarceration, co-occurring illnesses, lack of stable housing, etc.) that not only impact the individual, but also contribute to a lack of consistent parenting and unstable living arrangements. This results in a generational cycle of poverty and poor health. Substance use disorder issues are present in all parts of Maryland and the country, and while persons living in Maryland can expect to receive quality care, whatever their race/ethnicity or income level, the one factor that limits quality and availability is place of residence. Simply stated, persons with a substance use disorder are more vulnerable if they live in a rural community due to the lack of treatment options.

Example #1: Calvert County

The Calvert County Health Department's Healthy Beginnings Program has been active since 2013 and provides services to pregnant and postpartum women with substance use disorders. Healthy Beginnings aims to build a stronger foundation for this vulnerable population to achieve a drug-free life for themselves and a healthier and more stable environment for their children. Many of the women who participate have compounding SDOH, including limited family support, lack of economic independence, and a tenuous housing status and are disproportionately involved in abusive relationships.

Women in the program receive intensive case management to address their direct health needs and the multiple SDOH that contribute to illicit drug use and relapse rates. Wrap around services for the program include medication-assisted treatment; coordinated mental health services; early and consistent prenatal care; smoking cessation assistance and support; social services; supplemental transportation for health-related appointments; parenting skills training; domestic violence services; partnership with Calvert County Drug Court; and links with continuing education at the College of Southern Maryland.

In the first two years of the program, 90% of pregnant participants delivered babies free from drug withdrawal and with significantly lower rates of low-birth weight babies compared to national statistics for this population. In addition, these patients have kept an average of 11 prenatal appointments during their pregnancies. The Calvert County Health Department has also worked with labor and delivery staff to provide more optimal care during hospitalization and with local pediatricians and obstetricians to screen for signs of drug use and postpartum depression at follow-up visits.

As an adjunct component, outreach is performed at regional residential substance use treatment programs to provide reproductive health counseling,

sexually transmitted infection screening and counseling, and contraception services. The program estimates that over 100 unintended pregnancies have been prevented in this high-risk, vulnerable population due to outreach efforts. Coupled with the decrease in neonatal intensive care unit stays that result from newborn drug withdrawal, involvement in the Healthy Beginnings program is saving Maryland Medicaid several million dollars each year.

Example #2: Garrett County

The Garrett County Health Department's Medication-Assisted Treatment Expansion Program aims to address the growing opioid addiction crisis in rural Western Maryland. As is the case in all of Appalachia, Garrett County has an emerging opiate and methamphetamine epidemic. Yet despite this growing threat, there are no residential treatment programs, half-way houses, recovery net providers, or care coordination services located in Garrett County. Persons seeking treatment for substance use disorders in Garrett County have very limited access to services that may be readily available in other parts of the state. This situation is further compounded by the need to travel long distances for services, extreme weather conditions, and geographical isolation.

The Garrett program is a CHRC grant-funded demonstration project designed to address two critical SDOH: transportation and lack of providers. The program uses state-of-the-art telehealth technology to increase access to medication-assisted treatment for persons who have had limited access to treatment options due to a shortage of providers in Maryland's most rural county. Prior to the launch of the program, residents of Garrett County had to drive 100 miles round trip to Cumberland to access treatment services.

Garrett County's Center for Behavioral Health collaborates with the University of Maryland's School of Medicine's Department of Psychiatry to make buprenorphine available through telehealth technology for patients who are enrolled and active in outpatient treatment. The project also focuses on recruiting, training, and deploying local physicians into the publicly funded behavioral health treatment and recovery services operated by Garrett County. Mechanisms are in place to assure that patients receive a full array of treatment services (physician buprenorphine services along with American Society of Addiction Medicine outpatient levels of service) that are superior to those provided by physicians who do not coordinate medication management with treatment services. The project focuses on improving and assuring medication-assisted treatment compliance and leads to better recovery rates. The overall purpose of this program, which began treating patients in November 2016, is to reduce overdose deaths and overdose admissions to local emergency rooms.

***Providing Care Coordination for High-Utilizers***

High-utilizers are individuals whose complex medical and social needs are not met through Maryland's medical system. These individuals have very high health care costs from avoidable utilization of inpatient care and emergency room services. In many cases, these costs can be reduced through improved care coordination and community health services. Frequent ER visits and hospitalizations are not only a drain on health and financial resources, they are also not the best and most efficient way to monitor and treat chronic diseases. The CHRC has funded a number of programs that directly address the needs of high-utilizers in rural communities.

Example #3: Worcester County

The Tri-County Local Health Planning Coalition (LHIC) of the Lower Shore, led by the Worcester County Health Department, engaged in a partnership to reduce the diabetes related ER visit rates and the racial disparities in those rates in Worcester, Somerset, and Wicomico Counties. The Tri-County LHIC team instituted a Community- and Home-Based Diabetes Care Management (DCM) program, an evidence-based model of chronic disease case management modeled from a similar program called Guided Care. The interventions were delivered by a team of a nurse (RN) and social worker (LCSW) who provided transitional care upon discharge from a diabetes related ER visit. Enrolled clients received an array of resources to help address issues that compound many SDOH, including: home visits; medication reconciliation and coordination with primary providers; personalized diabetes education, (either by a Certified Diabetes Educator or in-home by an RN); financial medication assistance; help with transportation to and from appointments; and assistance in signing up for the Maryland Energy

Assistance Program to help cover home heating expenses.

The primary outcome measure of this project was to reduce the Maryland Department of Health and Mental Hygiene's State Health Improvement Plan (SHIP) metric of diabetes related ER visit rates, which were significantly higher for the three lower shore counties. During the period of implementation of this program, there was an 85% reduction in total diabetes related ER visits. At baseline, there were 56 diabetes related ER visits in the 12 months prior to enrollment in the DCM program. Within 12 months of enrollment, this population had only 8 diabetes related ER visits. This represents approximately 45 ER visits prevented in the total enrolled population. Additionally, there was an 89% reduction in ER visits for the highest ER users, defined as those with 3 or more ER visits in one year. In this group of 8 people, there were 38 ER visits in 12 months prior to DCM, and only 4 visits in this group since being managed in the program. Approximately 34 ER visits were prevented in the highest users. 68% of the total ER visits were accounted for by the 8 highest users, and 75% of the prevented ER visits were in these 8 patients.

Example #4: Wicomico County

The Lower Shore Clinic is a behavioral health care provider located in Wicomico County. Its CareWrap Team initiative is supported through a CHRC grant and a partnership with Peninsula Regional Medical Center (PRMC). The CareWrap Team started serving clients in May, 2016 to reduce 30-day readmissions for at-risk patients.

The clients being referred for the CareWrap initiative experience a multitude of SDOH, including homelessness as well as limited social or family support. Patients in the program may be connected to primary care providers, but lack transportation and health literacy to remain hospital free. The CareWrap team is working to address these barriers with clients by connecting patients with appropriate resources and providing health education that is patient centered.

The Lower Shore Clinic started off with a small caseload and is striving to develop a successful relationship with the transitions team at PRMC. CareWrap referrals are filtered through the Transitions Team at PRMC, creating a small group contact for both parties to ensure acceptable referrals. LSC employs a full-time RN Team Leader and two full-time medical assistants.

The CareWrap Team has received 51 referrals from inception, and 39 of them were accepted into the program. The average length of stay in the program is 102 days. CareWrap strives for an average length of stay of 90 days, but the acuity of clients has been greater than originally anticipated. The program has had three people readmitted within 30 days from hospital discharge, meaning 76.9% did not readmit within 30 days of hospital discharge. In addition, LSC staff has assisted 67% of clients to not readmit to the hospital.

CareWrap clients' stories describe how program staff assist them in reconnecting to their providers, learning how to properly take their medications, and teaching them how to maintain wellness in the community. One of program's success stories is a female patient who, prior to entrance into the program, had visited PRMC over 8 times in 2015 and accumulated $600,000 in medical debt. Since involvement with the CareWrap program, she has been to the emergency room twice for necessary urgent treatment and has not been hospitalized. This scenario is significant, as it not only costs the patient, but the health care system as well.

The Lower Shore Clinic is in ongoing conversations with PRMC to explore post-grant sustainability of the initiative.

## Conclusion

The Maryland Rural Health Association and Community Health Resources Commission hope that this White Paper demonstrates how rural communities in Maryland are working to address health disparities and offers potential strategies to address the SDOH and expand access for vulnerable populations. All four programs highlighted in this paper have developed creative approaches to reduce the SDOH that negatively impact these rural communities.

There are many more examples of efforts across the state to address the needs of vulnerable populations in rural Maryland. To learn more about MRHA and CHRC and how these organizations partner with rural organizations across the state, please visit their websites, listed below:

*www.mdruralhealth.org*

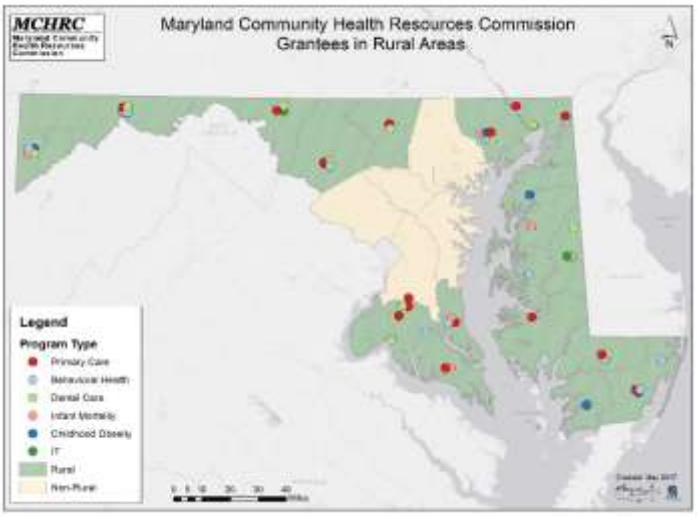
*http://dhmh.maryland.gov/mchrc/pages/Home.aspx*

Published December, 2016

# Bringing Care Where it is Needed: A Rural Maryland Perspective

## Introduction

The Maryland Rural Health Association (MRHA) and Maryland Community Health Resources Commission (CHRC) are partnering to produce a series of white papers. MRHA is a non-profit organization whose mission is to educate and advocate for the optimal health of rural communities and their residents. The CHRC was created by the Maryland General Assembly through the Community Health Care Access and Safety Net Act of 2005 to expand access to health care for low-income Marylanders and underserved communities in the state and to bolster the capacity of Maryland's health care safety net infrastructure to deliver affordable, high-quality health services. The CHRC has awarded 188 grants totaling $59.8 million. Of this, more than half (98 of 188) have supported programs in rural areas – see map below.




This second white paper provides an overview of the difficulties in accessing health care in isolated rural communities and how health services can be provided in non-traditional settings, outside of a clinician's office. The first white paper in the series, "*Social Determinants of Health and Vulnerable Populations in Rural Maryland*," was published in December, 2016 and can be found on the MRHA website:

http:/www.mdruralhealth.org/about-us/current-publications-educational-documents/

## Background

Of Maryland's 24 jurisdictions, 18 are designated as rural by the state. Rural jurisdictions in Maryland have a population of over 1.6 million and differ in demographics, environment, and geography from the urban areas in the state. Rural jurisdictions share common challenges, as they are often poor, geographically isolated, and lack the services and employment opportunities found in urban and suburban communities. Rural communities often lack sufficient numbers of health care professionals, hospitals, and medical clinics. Therefore, many rural residents need to travel greater distances to access a health care provider than their urban counterparts. Public transportation is often not available or limited in rural areas. Health care facilities are frequently small and may provide limited services.

Higher rates of chronic illness and poor overall health are found in rural communities when compared to urban populations. In addition, rural residents are less likely to have employer-provided health insurance coverage and are more likely to be uninsured. Several studies have shown that rural residents are older, less affluent, and have fewer physicians to care for them (www.ruralhealthinfo.org/topics/healthcare-access).

The CHRC supports community-based programs in rural communities that bring needed health care services to where patients live and learn in an effort to overcome the lack of access to primary and specialty care.

## Potential Strategies

Each rural community in Maryland faces unique challenges to providing access to health care for their residents. A variety of strategies are therefore needed to address these challenges and ensure that individuals have an opportunity to receive necessary medical care. MRHA members have received CHRC grant funds to implement a diverse array of programs which deliver health care services where they are needed in rural communities across the state.

This white paper describes three CHRC-funded approaches in rural communities that provide health care services to those who are unable to receive care in traditional health care settings. The CHRC programs support delivering care in the home though Community Health Workers; in the school through School-based Health Centers; and in the community through an innovative Mobile Integrated Health Care program.

***Community Health Workers***

Community Health Workers are frontline health personnel who typically come from the communities they serve. As such, they have the life experiences to bridge cultural and linguistic barriers needed to expand access to coverage and care and improve health outcomes. The use of Community Health Workers is an excellent mechanism for improving outcomes in underserved rural populations experiencing chronic disease conditions. In a clinical context, Community Health Workers can be utilized for: health promotion and disease prevention, injury prevention, maternal and child health, cancer screening, oral health, and chronic disease management. Community Health Workers play a vital role in increasing access to the rural health care workforce and are recognized as integral members of primary health care teams. Central to a team-based approach, Community Health Workers can provide follow-up services and home visits that are critical to patient-centered care, but are outside the current scope of the work of private practitioners.

<u>Community Health Workers</u>
<u>in Caroline and Dorchester Counties</u>

In 2013, the state designated five Health Enterprise Zones (HEZ) with a goal to implement health care access programs in underserved areas of the state. Health Enterprise Zones have been 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. The Caroline-Dorchester Health Enterprise Zone was designed to improve health care access and health status for individuals living in Dorchester or Caroline Counties using health care service teams which included primary care, peer recovery, community health, and behavioral health. The Health Enterprise Zone employed Community Health Workers in these teams to help residents overcome barriers to good health.

As a key partner in the Health Enterprise Zone, Associated Black Charities of Dorchester County established a Community Health Worker team that provided services including: free blood pressure screenings in private and semi-private community-based group settings at 16 sites; Chronic Disease and Diabetes Self-Management Training; direct one-on-one intervention and education as a way of breaking down, understanding, and improving social determinants of health; bridging gaps to needed resources and services, such as health insurance, food, transportation, and housing; and providing assistance with general care services that will enable healthier lifestyle and behavioral choices.

To date, approximately 87% of Community Health Worker program participants have shown an improvement in their baseline blood pressures after a six-month period of Community Health Worker intervention services. Sixty-one% of participants with diabetes have been removed from at least one medication since enrollment, and 78% of enrollees previously on multiple medications for multi-morbidity issues (hypertension, obesity, diabetes, etc.), have been removed from at least one medication. The majority of participants (78%) reported an improved ability to advocate for their health needs during primary care visits after working with Community Health Workers, and almost all participants (98%) have modified their behavior in some way to improve their health outcomes.

The Community Health Worker program has become an essential part of a coordinated community-based system for improving health outcomes in underserved populations in Dorchester and Caroline Counties. The Community Health Workers have helped their clients advocate for their own health care needs in an effort to access improved care. They help community members overcome barriers that exist due to the social determinants of health that stand in the way of optimal health outcomes. Community Health Workers have proven themselves to be integral to the health care team.

***School-based Health Centers***

School-based Health Centers, also known as School-based Wellness Centers, offer both students and their families a range of age-appropriate health care services. They can include: primary health care;

behavioral health care and substance use disorder treatment; dental and oral health care; health education and promotion; case management; and nutrition education. Offering these preventative health care and wellness services in schools can improve access to primary care in communities with an insufficient number of physicians or that lack an adequate public transportation system to make health care accessible.

School-based Health Centers are frequently implemented as partnerships between the school and a community health center, hospital, or local health department. The specific services are determined through collaborations between the community, the school district, and local health care providers. There are currently 2,315 School-based Health Centers operated nationwide, per the most recent National Assembly on School-Based Health Care census (www.sbh4all.org). A report issued by the Council on the Advancement of School-Based Health Centers stated that there are 86 SBHCs in Maryland. This report can be viewed on the CHRC's website: http://dhmh.maryland.gov/mchrc/Documents/V4%20Clean%20Version_SBHC%20Council%20Annual%20Report_v4_11282016.pdf

School Based Wellness Centers
in Wicomico County

The Wicomico County Health Department established its first School-based Wellness Center in 2001 at Wicomico Middle School. The center provides both primary health and behavioral health care services to enrolled students. The center is an asset to the community and continues to provide health care services 16 years after its opening.

In 2016, the Wicomico Health Department received funding from the CHRC to support the opening of another center at the Wicomico High School. Consistent with CHRC's strategy of building capacity, expanding access, promoting health equity, and improving population health, the Wicomico School-based Wellness Center provides access to primary and preventative care and behavioral health services. In addition to CHRC funds, the Wicomico County Board of Education received additional funding from the Donnie Williams Foundation for the construction of a permanent facility on school grounds.

The high school serves students living in Salisbury, many of whom reside in neighborhoods with negative social determinants of health such as elevated crime rates, drug and gang traffic, sub-standard housing, and poverty. The School-based Wellness Centers operate much like a physician's office, providing enrolled students with primary health care including: treatment of acute illnesses and injuries, management of chronic illnesses, immunizations, physical exams, adolescent risk assessments, vision screenings, and preventative health services. Behavioral health services include individual and family counseling, addiction counseling and referrals, as well as mental health counseling.

The establishment of the School-based Wellness Centers builds capacity by providing increased access to integrated health and behavioral health care and provides equitable access to health care services. They reduce disparities and improve health outcomes for racial and ethnic minorities and underserved students and their families. Furthermore, access to the School-based Wellness Centers reduces avoidable adolescent hospital utilization related to asthma, behavioral health, and acute infections.

***Mobile Integrated Health Care***

In 2014, the National Association of Emergency Medical Technicians, the National Association of State EMS Officials, the National Association of EMS Physicians, and the American College of Emergency Physicians lent support to a unified definition of mobile integrated health care: "Mobile integrated health care is the provision of health care using patient-centered, mobile resources in the out-of-hospital environment. It may include, but is not limited to, services such as providing telephone advice to 911 callers instead of resource dispatch; providing community paramedicine care, chronic disease management, preventative care or post-discharge follow-up visits; or transport or referral to a broad spectrum of appropriate care, not limited to hospital emergency departments."

The fundamental components to any Mobile Integrated Health Care program is the integration of existing health care services in the community, breaking down the barriers to health information, and coordination of care to ensure patient management across the system.

Mobile Integrated Health Care
in Charles County

The CHRC awarded the Charles County Health Department a grant in 2016 to support a Mobile Integrated Health Care team consisting of a registered nurse, an Emergency Medical Services technician, and

a Community Health Worker. The collaboration between the Health Department, the University of Maryland Charles Regional Medical Center (Charles Regional), and the Charles County Department of Emergency Services establishes a new Mobile Integrated Health Care program to address the health and social determinants that result in repeated use of Emergency Medical Services for non-emergent conditions.

The Mobile Integrated Health Care model is designed to address the needs of patients who do not qualify for home health assistance, yet require transitional oversight between discharge from a health care facility and resuming self-maintenance. The patients are those deemed high risk for readmission based on their discharge diagnosis or those who are currently high utilizers of the Emergency Department and/or Emergency Medical Services.

Patients have a post-discharge Mobile Integrated Health Care visit scheduled prior to leaving the hospital, and the Mobile Integrated Health Care team will conduct this visit within 24-48 hours of discharge. During this initial visit, the team assesses the patient's vitals, reviews discharge paperwork, evaluates compliance with discharge instructions, completes a medication evaluation, conducts an environmental scan of the home for safety issues, and provides health education and chronic disease self-management information when appropriate. After the initial visit, the Community Health Worker works to keep the patients engaged and out of the ED.

To date, the Charles County Health Department has enrolled 20 individuals into the Mobile Integrated Health Care program, each of whom had made at least 20 visits or more to the hospital Emergency Department in 2015. They accounted for a total of 643 visits; an average of 32 visits per patient. Visit counts ranged from 20 visits to 124 visits per patient in the 11-month time frame. Most patients had either Medicaid (55%) or Medicare (35%) as their primary health insurance. The Health Department suggested that managing their conditions in the primary care and home setting could lead to a reduction in hospital visits and a reduction in the 30-day hospital readmission rate. Most of these high utilizers were discharged directly to their homes for self-care after they had been treated in the acute hospital setting. It was deemed that these patients would greatly benefit from community resources to help them self-manage their illness and learn how changes to the home could improve their health. The program aims to give individuals the tools to manage disease processes. When warranted, the program will also make at least one referral per participant to a health, community, or social service.

The program will continue to expand these services to other individuals deemed high risk for readmission and those frequenting the Emergency Department more than 6 times in a 3-month period with an inclusion criteria of 5 or more 911 calls in a 6-month interval, having chronic conditions which could be better managed with health education, and who need service referrals. Due to the level of interaction and time needed for each case, the goal is to recruit 20 individuals each year for 3 years.

The program aims to increase the number of participants who visit their primary care providers twice a year for routine care; increase health literacy by educating participants on prevention and management of their disease processes; decrease the number of ED visits and 911 calls among participants by 25% in Year 1; decrease the average number of ED visits among high utilizers from 32 to 24 visits per patient; and work with Charles Regional's finance department to determine cost savings related to decreased hospital and ED usage among participants.

The long-term goals for this project include a reduction in Charles Regional's all-payer readmission rate of 10.39% as well as a 10% reduction in the Charles County Department of Emergency Services overall transport rate due to reduced usage among high utilizers for non-emergent transport.

## Conclusion

The MRHA and CHRC hope this white paper has helped to demonstrate how rural communities in Maryland are working to address health inequities and offer several strategies to Maryland's most vulnerable populations. All three programs highlighted in this paper have developed creative approaches to bringing care where it is in need in rural Maryland.

There are many more examples of MRHA members and CHRC-funded programs across the state addressing the needs of rural Maryland. To learn more about MRHA and CHRC and how these organizations partner with rural organizations across the state, please visit their websites, listed below:

*www.mdruralhealth.org*
*http://dhmh.maryland.gov/mchrc/pages/Home.aspx*

Published May, 2017

# Dental Access in Rural Maryland: Innovative Approaches to Care

## Introduction

The Maryland Rural Health Association (MRHA) and Maryland Community Health Resources Commission (CHRC) are partnering to produce a series of white papers. MRHA is a non-profit organization whose mission is to educate and advocate for the optimal health of rural communities and their residents. The CHRC was created by the Maryland General Assembly through the Community Health Care Access and Safety Net Act of 2005 to expand access to health care for low-income Marylanders and underserved communities in the state and to bolster the capacity of Maryland's health care safety net infrastructure to deliver affordable, high-quality health services. The CHRC has awarded 190 grants totaling $60.3 million. Of this, more than half (99 of 190) have supported programs in rural areas.

The first white paper in this series, "*Social Determinants of Health and Vulnerable Populations in Rural Maryland*," published in December 2016, and the second white paper, "*Bringing Care Where It Is Needed: A Rural Maryland Perspective,*" published May 2017, can be found on the MRHA website:

http:/www.mdruralhealth.org/about-us/current-publications-educational-documents/

This third white paper provides an overview of the difficulties in accessing dental care in isolated rural communities, how health services can be provided in non-traditional settings, and how new partnerships can be formed to meet the community needs.

## Background

Of Maryland's 24 counties, 18 are designated as rural by the state. Rural jurisdictions in Maryland have a population of over 1.6 million and differ in demographics, environment, and geography from the urban areas in the state. Rural communities share common challenges, as they are often poor, geographically isolated, and lack the services and employment opportunities found in urban and suburban communities. Moreover, rural communities often lack sufficient numbers of dental care professionals to adequately treat the rural population.

In 2000, the Surgeon General declared oral disease a "silent epidemic," a statement which remains true today. According to the DentaQuest Institute's April 2017 Report: "Executive Summary: Narrowing the Rural Interprofessional Oral Health Care Gap," poor oral health affects overall physical health and significantly contributes to the expanding cost of the US health care system. The report details that "adults in rural communities are more likely to have all natural teeth missing than their non-rural peers…and children living in rural areas are more likely to have unmet dental needs, less likely to have visited a dentist in the past year, and less likely to see a dental care team for ongoing preventive care."

The CHRC has supported 24 community-based oral health programs in rural communities for a total of more than $4.1 million that have brought needed dental services to more than 27,000 residents. These programs have helped individuals overcome the lack of access to adequate and necessary dental care.

## Strategies

Each rural community faces unique challenges to providing access to dental care for their residents. A variety of strategies are therefore needed to address these challenges and ensure that individuals have an opportunity to receive necessary care.

Five MRHA organizational members have received CHRC grant funds to deliver dental care services in rural jurisdictions through a number of community-based strategies. These strategies have included: (1) supporting new or expanding existing dental clinics in the community; (2) subsidizing dental care provided by community dentists for those unable to bear the cost of treatment; and (3) partnering with the University of Maryland School of

Dentistry to provide dental care while also providing clinical training to senior students. Examples of each of these strategies are detailed in this white paper.

***Supporting Dental Clinics in the Community***

In rural communities, the need for dental services is often greater than available resources. There are fewer dental health professionals per capita in rural areas, resulting in having to travel farther to obtain oral health care services. Without adequate public transportation systems in much of rural Maryland, rural residents may face barriers in accessing care, which can lead to a reliance on the closest Emergency Department for dental care. Since 2015, the CHRC has supported new and existing dental clinics in Charles County that have served residents without other access to affordable dental care.

Health Partners

The Health Partners dental clinic has been serving Charles County since 2009 and received the first of two CHRC grants in 2015 to help address the growing need for access to dental care in their community.

Health Partners' efforts focus on addressing the needs of low-income residents who lack access to dental health care. Over the last two years, the Health Partners dental clinic has provided dental services to 1,720 individuals, more than 1,300 of whom were on Medicaid. In that time, the clinic has provided more than 11,981 dental services for their patients. The CHRC grant has allowed Health Partners the opportunity to add a dentist, a dental assistant, and an additional administrative clerk to their staff and has expanded their capacity to bill Medicaid for services provided. This allows the organization to work towards achieving a model of sustainability.

Partnerships are essential in developing successful safety net programs, and Health Partners has used partnerships to maintain access to Charles County residents in need of dental services. Health Partners has built relationships with the University of Maryland Charles Regional Medical Center, the Charles County Department of Health's dental clinic, LifeStyles, Inc., and Southern Maryland Mission of Mercy, all of whom have played a role in successful patient recruitment.

Health Partners continues to expand their reach in the community and build a patient base that will make their dental clinic sustainable. With two part-time dentists treating patients two-and-a-half days a week in the Waldorf location and the opening of a second location in Nanjemoy, Health Partners has become a dental home for the uninsured in Southern Maryland, as well as Medicaid and Medicare recipients.

***Subsidizing Dental Care from Community Dentists***

Dental care is expensive and may be out of reach for those who lack dental insurance. In Western Maryland, CHRC funding has been utilized to subsidize the provision of dental care by existing dentists in the community. A number of CHRC-funded organizations have cultivated relationships with local dentists, which have resulted in a decrease in the number of individuals using the Emergency Department for dental care. Two MRHA members, Allegany Health Right and Mountain Laurel Medical Center, are utilizing this strategy to improve the oral health of residents of Allegany and Garrett Counties, respectively.

Allegany Health Right

Since 2014, Allegany Health Right has implemented three oral health grants funded by the CHRC. These grants have connected residents to subsidized dental care and provided needed access to oral health education for vulnerable, low-income, uninsured, and underinsured adults, including those covered by Medicare and Medicaid. The Western Maryland Health System also supports Allegany Health Right's dental program. CHRC funds allowed Allegany Health Right to expand its ongoing Dental Access Program in Allegany County and to deploy an oral health focused Community Health Worker to educate residents on oral hygiene and encourage people to adopt better oral health habits.

Through the efforts of these programs, more than 1,000 low-income adults have received urgent dental treatment, and more than 1,000 benefited from oral health education. By leveraging donated and discounted treatment offered by local dental providers, the programs were able to secure approximately $250,000 worth of dental care. Over 400 people worked one-on-one with the Community Health Worker to work on improving their oral health, and the majority of these individuals reported improved self-rated oral health and the adoption of better oral health practices.

Allegany Health Right programs have been successful in reducing the number of Medicaid-

covered adults who use the Western Maryland Health System's Emergency Department for dental care, a population which generally accounts for over half of the patients who present at the Emergency Department for dental conditions. Over the course of a two-year CHRC grant-funded program aimed at providing care for this population, the hospital reported that the percentage of dental patients covered by Medicaid presenting to the Emergency Department for dental conditions decreased from 62% of total visits to 39%. This success was achieved by giving people an appropriate alternative to receive their dental care in community-based settings.

Mountain Laurel Medical Center

In 2016, Mountain Laurel Medical Center received CHRC funds to implement the "Improving Chronic Conditions by Integrating Oral Health in the Primary Care Setting" program, which aimed to identify existing patients without adequate dental care. A special focus was placed on patients with chronic diseases such as diabetes and hypertension and built upon an existing collaboration with a local dental group and the local health department's dental clinic to provide subsidized dental services. Dental care was provided for patients on a sliding scale based on income and at significantly reduced out-of-pocket costs as compared to the cost of accessing these services in the community.

In the first year, 136 patients received dental care, 90 of whom required advanced dental treatments, 62 individuals were provided with preventative dental care, and 93 patients received periodontal screenings. The patients were identified by Mountain Laurel clinical staff and referred to care. All patients enrolled in the program either completed or are still actively engaged in their treatment plan. All patients served would not have been able to access dental care without the program. A total of 24 patients presented to the Emergency Department for dental-related complaints during this time, and Mountain Laurel is working to reduce this number by ensuring that more individuals are able to access same day acute dental visits to area providers when necessary.

***Partnering with the University of Maryland School of Dentistry***

The University of Maryland School of Dentistry has partnered with different health care organizations in the state to provide low-cost, quality dental care to the communities lacking adequate oral care providers. The University partners with community non-profit dental organizations to provide needed dental services while allowing dental students to gain required clinical experience. These partnerships also provide the community organization with a revenue-generating service with minimal expenses. The CHRC has supported two MRHA members taking advantage of innovative university-community dental partnerships, which have served residents of Carroll, Cecil, and Harford Counties.

Access Carroll

Founded in 2005, Access Carroll is a private, nonprofit health care organization that began its mission by providing free primary health services to a targeted 18,000 uninsured residents of Carroll County. Beyond primary health care, the organization faced high demands for coordinated care, chronic health services, and specialty care, of which dental and oral health services were among the highest. In 2013, Access Carroll opened the first-ever family dental clinic in Carroll County to provide accessible and affordable comprehensive dental services for any county resident on a sliding fee scale.

The success of the Access Carroll Family Dental Clinic is largely attributed to the pioneering support of the CHRC, which awarded operational funding of dental services in 2010. Comprehensive dental services are provided in a person-centered and integrated setting that includes prevention and hygiene, state-of-the-art digital diagnostics, restorative, and emergency care. Prosthetics, including bridges, crowns, and dentures, have been the greatest sought service beyond emergency care. Since 2014, more than 700 prosthetic services are provided annually. Access Carroll utilizes a hybrid staffing model including a core paid team, professional volunteers, and a partnership with the University of Maryland School of Dentistry. Access Carroll began working with fourth-year dental students and faculty in 2015, and the partnership has now grown into a formalized externship program for both third- and fourth-year dental students to gain direct patient care experience in the community health setting. The relationship has yielded tremendous and exciting outcomes, while expanding the model and value of integrated care to newly graduating dental professionals.

The initial goal of having a dental clinic for low-income residents was borne from high demands for adult emergency extractions. The majority of patients seen at Access Carroll had not received basic oral health services for many years and suffered from pervasive cavities, poor hygiene, and chronic infections. On opening day of the new Family Dental Clinic, more than 400 patients were on an emergency extraction waiting list. Beyond extraction services, the new clinic is a premier and state-of-the-art dental care home for residents of any age.

Access Carroll Family Dental Clinic has been a tremendous and valuable service for low-income and at-risk Carroll County residents, directly impacting the lives of 6,687 individuals with more than 12,000 professional visits, with services conservatively valued at $3.42 million dollars. As part of an integrated health care team, the dental staff are directly engaged in chronic disease management and addressing the devastating opioid epidemic plaguing the community. As best practices, dental staff screen every patient at every visit for blood pressure, chronic conditions, medication usage, and unsafe alcohol and opioid consumption. The dental clinic supports other community health initiatives of the Local Health Improvement Coalition and Population Health Committee, including Emergency Department diversion by responding quickly to emergency dental needs while preventing potential emergencies as a strategic partner of Carroll Hospital.

West Cecil Health Center

Since 2008, West Cecil Health Center has been providing quality health care services to residents of Cecil and Harford Counties. West Cecil is focused on ensuring open access to primary care, behavioral health, women's health, and dentistry services regardless of age, insurance status, or ability to pay. In 2014, the rising need for dental providers presented a large gap in dental services. With a state average ratio of 1,360:1 for dental providers to residents, Cecil County saw a devastating ratio of 2,560:1; nearly double the state average.

In 2015, West Cecil expanded its services to include a four-chair dental suite staffed by one full-time general dentist and one part-time dental hygienist. The result was an immediate and overwhelming demand, as there are no other dental providers in the area that will provide services to all patients on a sliding fee basis. Less than a year after opening the doors to its dental office, demand far exceeded capacity, creating wait times of six months or more for new appointments.

The only other organization in Cecil County offering similar services was a clinic located in Perryville and operated by the University of Maryland School of Dentistry. The University's clinic provided comprehensive care for children and elderly, but only served adult patients on an emergency basis. The dental clinic was set to close in December 2016, potentially leaving an even larger gap in dental services for area residents. In an effort to preserve and improve access to affordable dentistry services, West Cecil entered into a collaborative venture with the University of Maryland and Union Hospital to take over operation of the clinic and create a new dental home for area residents. Under the agreement, the clinic retains its status as a teaching site for the dental school.

This partnership, with funding and support from the CHRC, has helped fill this gap by providing the community with a 26-chair dental center with comprehensive, acute, and emergent services on a sliding fee scale to all patients. Through this collaborative effort, West Cecil has ensured the continuity of dental care to the Cecil and Harford communities that they serve.

## Conclusion

The MRHA and CHRC hope this white paper has helped to demonstrate how these five rural Maryland community organizations are working diligently and creatively to address dental health inequities for the most vulnerable Maryland populations. These integrative models of care have been woven into the fabric of community health to give individuals and families a reason to smile, manage acute and chronic health conditions, obtain employment and self-sufficiency, and gain greater ability to build a legacy of good health for generations to come.

There are more examples of MRHA members and CHRC-funded programs across the state addressing the needs of rural Maryland. To learn more about MRHA and CHRC and how these organizations partner with rural organizations across the state, please visit their websites, listed below:

*www.mdruralhealth.org*

*http://dhmh.maryland.gov/mchrc/pages/Home.aspx*

Published October 2017

# Health Care Innovation Across Rural Maryland: An Executive Summary

## Introduction

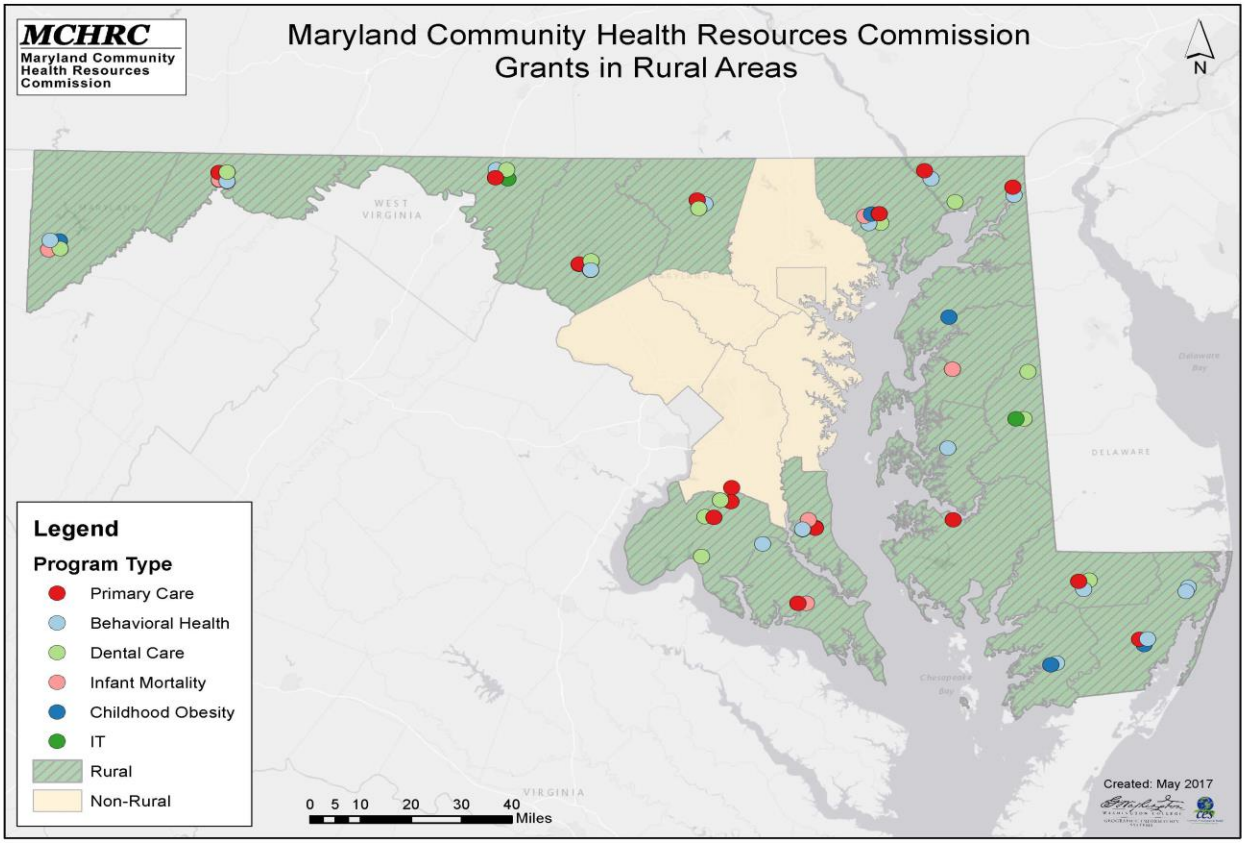
The Maryland Rural Health Association (MRHA) and Maryland Community Health Resources Commission (CHRC) have partnered to produce three white papers over the past year to describe the impact of CHRC grants serving rural communities. MRHA is a nonprofit organization whose mission is to educate and advocate for the optimal health of rural communities and their residents. The CHRC was created by the Maryland General Assembly in 2005 to expand access to health care for low-income Marylanders and underserved communities in the state and to bolster the capacity of Maryland's health care safety net infrastructure to deliver affordable, high-quality health services. This executive summary highlights the lasting impact of CHRC grants in rural communities.

The following three white papers can be found on the MRHA website:

1. *Social Determinants of Health and Vulnerable Populations in Rural Maryland* (Dec, 2016)
2. *Bringing Care Where It Is Needed: A Rural Maryland Perspective* (May, 2017)
3. *Dental Access in Rural Maryland: Innovative Approaches to Care* (Oct, 2017)

(http:/www.mdruralhealth.org/about-us/current-publications-educational-documents/)

The CHRC has awarded 190 grants totaling $60.3 million. Of this, more than half (99 of 190) have supported programs in rural Maryland. The map below shows the CHRC grants in rural areas.



## Overview of Three White Papers

Following is an overview of each white paper, including a description of one or two programs highlighted in each paper. The appendix on page 4 provides a brief synopsis of every program described in the white papers.

### *Social Determinants of Health and Vulnerable Populations in Rural Maryland*

The first white paper in the series identifies key Social Determinants of Health (SDOH) impacting rural health and offers several examples of initiatives underway that impact SDOH. Overall, residents in rural communities are more likely to have chronic medical conditions, which makes access to primary and preventative care even more vital. There is no one-size-fits-all solution and, therefore, customized solutions must be developed at the local level. The paper highlights several examples of CHRC-funded grants that support local innovation.

One program that exemplifies this model is the Calvert County Health Department's Healthy Beginnings Program, which addresses the pervasive issue of Substance Abuse Disorders in rural Maryland. This program provides wrap-around services to women of childbearing age. Ninety percent of pregnant program participants delivered babies without withdrawal from illicit opioid use. Just as importantly, the percentage of babies with low birth weight are equivalent to those born to women without a history of substance misuse. The program estimates that over 125 unintended pregnancies have been prevented in this high-risk vulnerable population due to family planning outreach efforts at regional residential substance use facilities. Coupled with the decrease in neonatal intensive care unit stays that result from newborn drug withdrawal, involvement in the Healthy Beginnings program is saving Maryland Medicaid nearly $3 million dollars each year.

Another program, the Lower Shore Clinic's (LSC) CareWrap Team initiative, was supported through a CHRC grant and a partnership with Peninsula Regional Medical Center. The CareWrap initiative provided care coordination to individuals in an effort to reduce avoidable hospital utilization. With the implementation of the CareWrap program, PRMC reported a 50% decrease in admissions and observations for their 30 program participants and projected $927,000 in cost savings.

These important community programs would not have been possible without the initial financial support from the CHRC.

### *Bringing Care Where It Is Needed: A Rural Maryland Perspective*

The second white paper provides examples of ways health services can be delivered in non-traditional settings in rural communities. These examples include the use of Community Health Workers, School-Based Health Centers, and Mobile Integrated Heath. CHRC funding provides the critical initial support to jump-start these innovative ways of tackling barriers in accessing health care that challenge rural communities.

The Charles County Mobile Integrated Health Care program (MIHealth) is a prime example of an innovative program and is a collaboration between the Health Department, the University of Maryland Charles Regional Medical Center (Charles Regional), and the Charles County Department of Emergency Services. This model is designed to address the needs of patients who do not qualify for home health assistance, yet require transitional oversight between discharge from a health care facility to resume self-maintenance. The patients are those deemed high risk for readmission based on their discharge diagnosis or those who are currently high utilizers of the Emergency Department (ED) and/or Emergency Medical Services (EMS).

The program tracks the number of ED visits and inpatient admissions by program participants, as a reduction in hospital use is a key outcome measure to document program impact. In its first three months, the program has enrolled 25 patients, who collectively had a total of 114 visits to the Charles Regional's ED three months prior to their joining the MIHealth program. After these patients joined MIHealth, their number of ED visits dropped by 74%, to a total of 30 ED visits. Their number of inpatient admissions dropped 84%, from a total of 31 inpatient admissions three months prior to 5 inpatient admissions, post-three months into the program. The number of 30-day readmissions among program participants dropped from 10 (three-months prior) to 1 (three-months post). Using the average costs for an inpatient admission and an emergency department visit, the MIH program has estimated savings of $191,800 in its first three months of implementation. By developing a program to bring care where it is needed, this program is working to

address health inequities in Maryland's rural communities and helping reduce avoidable EMS and hospital costs. Initial funding from the CHRC made this initiative possible.

### *Dental Access in Rural Maryland: Innovative Approaches to Care*

The third white paper in the series focuses on innovative initiatives to provide dental access to Maryland's most vulnerable communities. The CHRC has supported 24 community-based oral health programs in rural communities totaling $4.1 million. These programs have collectively served more than 27,000 residents.

Allegany Health Right (AHR) implemented three oral health grants funded by the CHRC. These programs help connect residents to subsidized dental care by private dental practices in the community and offer oral health education for vulnerable, low-income, uninsured, and underinsured adults, including those covered by Medicare and Medicaid. Allegany Health Right also receives financial support from the Western Maryland Health System (WMHS), and has expanded its ongoing program in Allegany County and deployed an oral health focused Community Health Worker to educate residents on oral hygiene and encourage better oral health habits. Since implementation of the AHR program, WMHS reports a decrease of patients presenting to the ED for dental conditions from 62% to 39%.

Another innovative dental program funded by the CHRC is Access Carroll's Family Dental Clinic, which was awarded funding in 2010. Comprehensive dental services are provided in a person-centered and integrated setting that includes prevention and hygiene, state-of-the-art digital diagnostics, restorative, and emergency care. Access Carroll continues to provide dental services to thousands of low-income residents each year, years after the CHRC grant funding ended.

Access Carroll utilizes a groundbreaking hybrid staffing model including a core paid team, professional volunteers, and a partnership with the University of Maryland School of Dentistry. Access Carroll's Family Dental Clinic is a valuable service for low-income and at-risk Carroll County residents, directly impacting the lives of 6,687 individuals with more than 12,000 professional visits, and services conservatively valued at $3.42 million dollars. As part of an integrated health care team, the dental staff are directly engaged in chronic disease management and addressing the devastating opioid epidemic.

Each rural community faces unique challenges to providing dental access for their residents, and a variety of strategies are therefore needed to address the challenges and ensure individuals have an opportunity to receive necessary care.

## Key Themes and Lessons Learned

Rural communities share common challenges, as they are often poor, geographically isolated, and lack the services and employment opportunities found in urban and suburban communities. The outcomes achieved in the grants highlighted in these white papers confirm that CHRC grant funding is making a lasting impact on rural health in Maryland.

Following are several key themes and lessons learned:

1. Rural communities are particularly impacted by a shortage of providers, and care coordination is an effective intervention strategy.
2. Lack of access to public transportation is a major barrier to care and bringing transportation assistance or health care to patients can be an effective tool in helping people access care.
3. Integrating dental care programs into the community is an effective strategy for managing chronic conditions; and
4. Promoting health literacy may be an effective tool in improving health outcomes.

MRHA and CHRC hope the three white papers as well as this executive summary communicate how rural Maryland community organizations are working diligently and creatively to address health inequities for the most vulnerable residents.

These integrative models of care have been woven into the fabric of community health to give individuals and families additional resources in order to manage acute and chronic health conditions, obtain self-sufficiency, and gain greater ability to build a legacy of good health for generations to come.

There are many more examples of MRHA members and CHRC-funded programs across the state addressing the needs of rural Maryland. To learn more about MRHA and CHRC and how these organizations partner with rural organizations across the state, please visit their websites, listed below:

*www.mdruralhealth.org*
*http://dhmh.maryland.gov/mchrc/pages/Home.aspx*

Published January 2018

## Appendix: Summary of Rural Health Grantees from White Paper Series

### WHITE PAPER #1
### *Social Determinants of Health and Vulnerable Populations in Rural Maryland*

**Calvert County Health Department**
This three-year grant supported the Healthy Beginnings Program to reduce infant mortality rates by creating a "one-stop shop" of integrated behavioral health and social services for substance-using women and expectant mothers.

**Garrett County Health Department**
This three-year grant supports the use of telehealth technology to increase access to Medication Assisted Therapy and responds to the recommendations of the Governor's Heroin and Opioid Emergency Task Force. The program involves a collaboration between the Garrett County Health Department and the University of Maryland School of Medicine's Department of Psychiatry.

**Worcester County Health Department's Tri-County Local Health Planning Coalition**
This one-year grant supported a program aimed at the prevention and management of diabetes in Somerset, Wicomico, and Worcester Counties. The program used the National Diabetes Prevention Program that promotes healthy eating, physical activity, and weight loss to prevent and delay diabetes.

**Lower Shore Clinic**
This two-year grant supports implementation of the "CareLink" program that targets individuals with behavioral health needs who visit Peninsula Regional Medical Center in high volumes and provides intensive case management services for these individuals post-hospital discharge.

### WHITE PAPER #2
### *Bringing Care Where it is Needed: A Rural Maryland Perspective*

**Caroline-Dorchester Health Enterprise Zone**
This four-year grant was designed to improve health care access and health status for individuals living in Dorchester or Caroline Counties using health care service teams which included primary care, peer recovery, community health, and behavioral health.

**Wicomico County Health Department**
This three-year grant supports the opening of a new school-based health center (SBHC) in Salisbury. The SBHC is open to students and adult staff members of the school and provides a new access point for both primary and behavioral health services.

**Charles County Health Department**
This three-year grant supports an innovative public health-EMS-hospital partnership that addresses overutilization of EMS and ED services by assisting frequent ED/EMS users to manage their chronic conditions in a primary care setting or at home. The program is a collaboration among the Charles County Health Department, Charles EMS, and Charles Regional Hospital.

### WHITE PAPER #3:
### *Dental Access in Rural Maryland: Innovative Approaches to Care*

**Health Partners in Charles County**
This two-year grant supports the expansion of access to dental services in Charles County, a dentally underserved area of the state, by supporting Health Partners' expansion of dental services at a new site in Nanjemoy.

**Allegany Health Right**
This two-year grant supports the expansion of the organization's existing Dental Access Program that serves low-income seniors and disabled adults. The program continues Allegany Health Right's model of community outreach and engaging private dentists to provide dental services at a discounted rate of 50% - 80%.

**Mountain Laurel Medical Center**
This two-year grant supports a project to provide dental screenings and referrals to discounted dental care for patients of Mt. Laurel with chronic diseases such as diabetes, hypertension, and cardiovascular disease.

**Access Carroll Dental Clinic**
This two-year grant supported a new full-time family dental clinic as part of the Access Carroll integrated care model.

**West Cecil Health Center**
This two-year grant supports an expanded dental program in Cecil County through a partnership with the University of Maryland Dental School. Under a cooperative agreement, West Cecil has agreed to take over operations of the Dental School's clinic and maintain its status as a clinical teaching site with five predoctoral students and four hygiene students.

# Appendix I

MCHRC
Maryland Community Health Resources Commission

# Building a Base for Integrated Care

**By Kimá Taylor, MD, MPH**

**June 21, 2017**

## Executive Summary

The Maryland Community Health Resources Commission (CHRC) has commissioned a series of white papers to describe how CHRC funding has increased access to needed behavioral health services for Maryland's vulnerable populations. This brief is the first of three papers and describes programs that provide evidence-based integrated behavioral health and somatic health services throughout the state. Other papers in the series will include a brief that will focus on programs that address Substance Use Disorder and the provision of Medication-Assisted Treatment and another brief that will describe programs that assist in the re-entry for justice involved individuals with behavioral health disorders.

The CHRC has been a leader in preserving and strengthening the health care safety net for those who are uninsured or underinsured and those whose health status is influenced by a myriad of social determinants of health. The Commission has a commitment to ensuring access to integrated, high-quality primary, behavioral, and specialty health care services for the most vulnerable in the State. Increased access to health resources helps Maryland achieve improved patient behavioral and physical health outcomes, lower costs, and increased patient satisfaction. CHRC funding supports the development of the infrastructure necessary for integration between behavioral health and somatic health care providers and other community resources dedicated to improving patient outcomes but lacking the necessary resources to make systemic changes.

CHRC grants have changed the landscape for the vulnerable population with behavioral health treatment needs by:

1. ***Providing the funding to support the clinical time and the development of the infrastructure necessary for behavioral and physical health care providers to expand into new services and build partnerships***. The funding enables providers to initiate programs and then leverage grant funds to obtain additional capital to sustain programs and services.

2. ***Increasing the capacity of providers dedicated to the population in ways that benefit the entire state***. The funding has supported behavioral health providers who are ready for the new world of payment reform despite not having been a part of somatic health systems in the past.

3. ***Providing seed funding for innovative processes and programs for the population that can be replicated statewide and providing technical assistance to organizations interested in implementing similar programs***. Lessons learned with these programs can also inform local and state policies, regulations, and legislation.

## Introduction

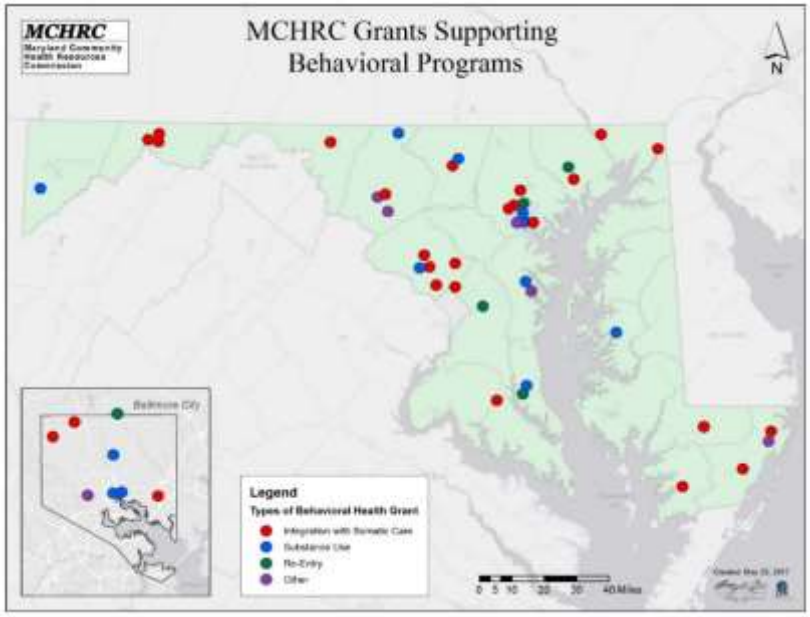
Behavioral health disorders and physical illnesses rarely occur in isolation. People living with a serious mental illness are at higher risk of chronic disease, while people living with poor physical health are more likely to have depression and anxiety than the general population. Mental health, substance use, and general health problems and illnesses are frequently intertwined, and coordination of all these types of health care is essential to improved health outcomes, especially for chronic illnesses. The stigma of mental illness has been a barrier to accessing integrated behavioral health and somatic care services, especially in poor communities and communities of color. Mental and behavioral health care have long been the purview of systems outside of the primary health care system, such as the criminal justice system, the substance use treatment system, and the social welfare system. Passage of the Affordable Care Act, which included a provision requiring coverage for mental health and substance use services, has led to efforts to bridge the gap between the behavioral and somatic health care systems in an effort to save money and improve patient outcomes. These changes increased the awareness of public officials and community members, who now recognize the need for integrated behavioral and somatic health care. In Maryland, the opioid epidemic challenged available resources and current policies and created a new sense of urgency as an adequate statewide system did not exist to respond to the increasing need for behavioral health programs. Currently, there are not enough high-quality, culturally effective behavioral health programs to care for all those who desire formal treatment or secondary prevention services for those who are not willing to enter formal treatment.

The integration of behavioral and somatic health care is complex, as the disciplines do not share similar infrastructure or culture. The two health systems have different payers and different models for evaluating outcomes and accountability, and they do not speak the same health care language. The charting, billing, and accountability systems in the behavioral health system are different than those used in somatic health care and have been siloed out of habit and by dent of federal and local regulations. Improving integration of behavioral and somatic health requires a commitment by both sides to overcome these barriers. Health systems have not held providers accountable for assessing or treating substance use disorders, but new care requirements are forcing providers to begin to think about providing integrated care. Even with these new requirements, few payers or grant programs have recognized the need for, or funded the planning, training, and infrastructure development needed for creating and sustaining high-quality integration models. The CHRC is helping community health providers implement programs that expand access to integrated behavioral health care for the most vulnerable Marylanders. In a quest to foster innovation, expand capacity, and sustain high-quality integrated care models, the CHRC has been willing to invest in the necessary infrastructure for integrated behavioral health care in fulfillment of its statutory requirement to expand access to primary, behavioral health, and dental services in medically underserved areas.

## Organizational Background

The Maryland General Assembly created the Maryland Community Health Resources Commission in 2005 to expand access to health care services in underserved communities in Maryland. The CHRC is an independent commission, operating within the Maryland Department of Health & Mental Hygiene (DHMH) and is led by 11 Commissioners who are appointed by the Governor. Since its inception, the CHRC has prioritized expanding access to behavioral health services for underserved communities

with a particular emphasis on the integration of behavioral health and primary care services. The CHRC has awarded 47 grants totaling $12.3 million to support behavioral health programs. The awardees have collectively served 66,504 residents, many of whom face complex medical and co-morbidities. The overall policy goals of CHRC grants have been to: (1) increase access to critical addiction and mental health services for at-risk residents and underserved communities; (2) support the functional integration of behavioral health services with primary care, community-based settings; and (3) work with many stakeholders at the state and local levels to address the heroin and opioid epidemic. The Commission looks to accomplish these goals in a way that leads to models of care that are replicable and sustainable. CHRC grants have supported a variety of programs focused on: (1) addition of behavioral health services in federally qualified health centers and other primary care providers; (2) addition of primary care services in Assertive Care Teams and outpatient mental health programs; (3) implementation of SBIRT (Screening, Brief Intervention, and Referral to Treatment); (4) promotion of re-entry programs which link individuals with primary care and behavioral health services; (5) promotion of community programs that reduce the number of individuals presenting at hospital EDs with behavioral health needs; and (6) increase access to Medication Assisted Therapy. This paper will focus on the work laying the foundation for the provision of integrated health services.




The CHRC issues a Call for Proposals (RFP) approximately once each year. The RFP prioritizes integration planning as part its selection criteria in an effort to grow the number of innovative, cost-effective, and sustainable integration models that would improve access to and provision of care for hard-to-reach populations. Within the focus area of behavioral health, the Commission prioritizes proposals in which primary care providers, behavioral health providers, hospitals, and social services providers agree to collaborate. Joint proposals allow diverse partners to identify shared goals and recognize that solutions require working outside of existing silos. The CHRC's population health focus requires systems to develop a sustainable safety net for the most vulnerable, while also building systems for all population groups. CHRC grants can be used for building capacity by increasing staffing levels, improving performance through staff training, increasing the depth and breadth of program services, and purchasing the materials necessary for program implementation. Funds have also been used to bring in representatives from successful integration programs from outside of Maryland to inform, train, and/or evaluate the work being done in state (the overall aim is to ensure that programs will ultimately become sustainable after grant funds have been expended). The RFP also aims to identify qualified programs from all areas of the state, which propose programs that are designed for their specific needs, local populations, and capacity.

## Strategies adopted by CHRC grantees

Grantees have used a variety of strategies to integrate behavioral and somatic health care. Each of these programs was able to provide integrated care successfully to members of their community and has proven that there is a continued need for these services.

- ***Co-locating services; either by adding primary care services to a behavioral health practice or providing behavioral health services to a primary care practice***. These programs developed the agreements and protocols necessary for comprehensive integrated treatment plans, allowing providers to execute successful client hand offs, share information, and measure outcomes. The new services were added either by hiring new expertise directly into the existing organization or by locating a new practice at an existing practice site.
- ***Incorporating behavioral health screening tools such as SBIRT into their primary care or ER sites***. This often led to partnerships with community-based behavioral health providers who accepted patient referrals when individuals were identified as needing and wanting more formal treatment.
- ***Expanding behavioral health services using telemedicine and/or increasing access to Medication Assisted Treatment***. This topic will be highlighted in the next white paper.

## Impact of CHRC-funded behavioral health programs

The CHRC has funded 18 programs for $5.6 million which have focused on providing integrated behavioral health services. These programs have served more than 58,000 individuals through more than 151,000 patient visits. Providers that embraced the integrated care model saw a culture change in their staff and an improvement of patient outcomes. The Commission monitors its grant-funded programs and tracks quantifiable metrics to determine program performance and assess impact. Specific metrics and overall outcomes include:

- The number of new patients receiving behavioral health and somatic care in an integrated manner either through co-location of services or through coordinated care management which links patients to nearby services.
- The increase in care capacity, either by adding new staff, adding new services such as screenings or treatments, or increasing access to services by increasing the hours of service availability.
- Improved IT interactions and infrastructure, allowing sites to collect and understand patient level data as well as allowing them to code and bill for services.
- The incorporation of evidence-based practices to programs where they did not previously exist.
- The increased ability to leverage other funding streams, including both public and private funds (i.e., Medicaid, government programs such as health homes and Health Enterprise Zone funding, reimbursement from private payers, or private foundation funding).

The following are two examples of how CHRC funding supported new infrastructure development and increased capacity through implementation of integrated care. A full list of grantees and an overview of these programs are available on the CHRC website, https://health.maryland.gov/mchrc/Pages/home.aspx.

**Way Station, Inc.**, a non-profit behavioral health organization with locations in Frederick, Howard, and Washington Counties, had already been monitoring national behavioral health care trends within the behavioral health field prior to receiving a grant from the CHRC. The organization's leadership recognized that the services being provided by their clinics were not adequately reducing the number of drug overdoses and other drug use sequelae. CHRC funds were used to implement a successful evidence-based program of integrated care of those with serious mental illnesses and co-occurring disorders. The program provided effective patient-centered mental health services, primary care services, substance use disorder treatment, and linkage to social service resources. Way Station replicated the Missouri Health Home Model with technical assistance from the individuals who developed the program. Adopting the Health Home Model not only provided a framework for quality integrated care, it provided increased federal Medicaid reimbursement of wrap-around services for the first two years of implementation, thus leveraging CHRC's initial investment. During the grant period, more than 180 unduplicated clients received primary care within the Way Station center, for a total of 2,207 visits managing diabetes, hypertension, and other chronic somatic diseases. The group has shared its findings, the IT platform used for data collection and evaluation, and lessons learned. The organization now chairs the Medicaid Advisory Committee for Health Homes in Maryland. The Commission's initial investment of $170,000 enabled the grantee to leverage an additional $1,000,000, and this initial funding allowed the organization to develop and implement the Behavioral Health Home Model program that was sustainable over the long term. There are currently 83 Health Homes in Maryland for which the Way Station program served as a pilot.

**Mosaic Community Services**, a behavioral health organization with locations throughout Maryland, found that most of their patients were receiving primary care services at local hospital emergency departments. Emergency departments were able to stabilize the patients' urgent care needs, but were not able to provide the care needed to treat many of the chronic conditions faced by these patients. Mosaic received an initial grant from the CHRC in 2011, which allowed the organization to hire a nurse practitioner to provide primary care services in-house. The program successfully increased primary care access and decreased ED admissions for this population. The grantee reported that clients enrolled in the program were responsible for 759 somatic and psychiatric ED visits in the year prior to participation, but only 35 ED visits in the year after enrollment. Unfortunately, the level of Maryland Medicaid reimbursements was not sufficient for program sustainability at the end of the grant in 2013, so the organization worked to establish partnerships with external primary care providers to establish a more sustainable model. In 2014, the CHRC awarded a second grant to Mosaic, supporting a partnership with a Federally Qualified Health Center in Baltimore City. Under this program, Mosaic provided behavioral health services to the FQHC's patients, and the FQHC provided somatic care services to Mosaic's clients. More than 34,000 FQHC patients were screened for behavioral health needs, and 9,500 Mosaic patients were screened for somatic health needs over the course of the two-year grant. Nurse care managers continue to provide care coordination and linking to somatic care for Mosaic patients with complex health needs.

## Critical Success Factors for Behavioral Health-Somatic Health Partnerships

Successful grantees shared a number of characteristics which serve as examples for providers looking to implement similar integration programs. Each of the programs that were deemed successful implemented models that saw improved somatic care and behavioral health care outcomes. The

leadership of these programs created a work environment that relied on external and internal expertise to inform the development, implementation, and evaluation of the programs. Leadership also prioritized training on how to provide culturally sensitive health services, how to link patients to partner health care organizations, how to link patients to health insurance, how to link patients to social supports, and how to bill for the services that they provide.

Partnerships played a large role in the success of integration efforts. Successful partnerships were those with clearly defined roles and responsibilities. These partners relied on evidence-based models and best practices that could be found locally and nationally to establish their relationships, and they focused on shared goals for their patient populations. Not all partnerships were successful, with some faltering due to a change in leadership or changes in organizational focus. This was not always fatal to a program, with remaining partners identifying alternate partnerships or restructuring programs to succeed with remaining program members.

Successful grantees also understood that data is essential to both measure implementation progress and final outcomes as well as to inform changes in a program when necessary. Finally, these programs prioritized the implementation of behavioral health and somatic health services not just as a trial, grant funded project, but as an essential way to care for the patients that they serve.

## Challenges

Even with an infusion of CHRC funds at start-up, these behavioral and somatic health care integration programs faced challenges.

*Hiring and retaining key staff*

Challenges fell into two major categories: staffing difficulties and difficulty securing sustainability. Behavioral health programs commonly face difficulties in recruiting and retaining staff, as there is a dearth of providers available for these programs. Substance use disorder program positions are especially difficult to staff, as the salary levels are low for these positions, there are too few training programs to bring new workers into the field, and those who have been trained are often unwilling to work in underserved communities. The shortage of a trained workforce, especially in rural areas, led to staffing difficulties for many of CHRC's rural grantees. Similar problems hampered primary care partners and hospitals in rural areas, who also experienced staffing difficulties of their own. Grantees addressed this capacity problem in a number of ways, including student loan repayment initiatives, tax credits, salary increases, and training. These challenges may suggest that policymakers' calls for network adequacy should be coupled with calls to build and sustain a behavioral health workforce willing to serve all, including the underserved.

*Sustaining programs after CHRC funds were expended*

Grantees were also challenged with making their programs sustainable after grant funds were expended. The rates for Medicaid reimbursement, even after the expansion of Medicaid, were often insufficient to cover the costs of providing the care management and social supports needed by this population with complex needs. The Health Home model normally provides for a more realistic level of reimbursement, but Maryland's model is less comprehensive than other states. The Maryland Health Home model includes only psychiatric rehabilitation programs, mobile programs, or methadone

programs and serves only people who have a diagnosis of serious persistent mental illness, opioid substance use disorders (determined to be at risk for a second chronic condition), or children with serious emotional disturbance. For those who are not part of a Health Home, providers find that each entity – hospital, FQHC, primary care office, somatic specialist, and behavioral health provider – have a different funding stream, contracting procedure, and types of payment accepted. Sites must contract separately with each Managed Care Organization (MCO) and learn each MCO's set of rules for reimbursement for services. While individual grantees may work out contracting plans with MCOs and partner providers, policymakers should work on funding models to promote integrated care for vulnerable populations as has been found to be successful in other states such as Virginia's Comprehensive Services Act for At Risk Youth and Families which pools funding to provide comprehensive services for at risk youth, including those with disabilities.[1] Another example is Minnesota's Hennepin County Medicaid ACO model for expanded Medicaid recipients.[2] Since it is known that cost savings are generated by increased access to behavioral health services, payment reforms and improvements in the ease of contracting can lead to lower costs of care for the State. CHRC funding remains an important support to behavioral health and somatic care integration in lieu of these larger policy solutions.

## Conclusion

The CHRC is playing a leading role in helping expand access to community-based integrated behavioral and primary care services and helping to build a growing safety net for people with substance use and mental health concerns. While the Commission's behavioral health grants provided services for more than 65,000 people, the success of these programs was greater than just the number of people touched and served. The success of CHRC's grants have shown that the innovative models of behavioral and somatic health care integration can lead to long-term community, family, and individual benefits, as well as tangible cost savings such as decreased ED utilization through improved access to somatic and behavioral health services. This work helps to highlight, and ultimately resolve, some challenges inherent in the work of bringing together disparate partners. Sites remain frustrated by challenges that require state level and national solutions including, changes to policy and regulatory barriers, increased access to data to help quantify savings and health improvements, and a larger and better trained workforce. CHRC grantees can provide the evidence to policymakers that will assist them in changing the laws and regulations needed to improve the quality of care for those suffering from behavioral health disorders.

[1] http://www.doe.virginia.gov/support/comprehensive_services_act/

[2] http://www.commonwealthfund.org/publications/case-studies/2016/oct/~/media/files/publications/case-study/2016/oct/1905_Hostetter_hennepin_hlt_case_study_v2.pdf

# Inclusion of Medications in SUD Care: Paving the Way to Uncover Opportunities and Challenges

**By Kimá Taylor, MD, MPH**

**August 7, 2017**

## Executive Summary

The depth and breadth of the latest opioid epidemic has focused attention on and highlighted the gaps in accessing substance use treatment services. In light of this epidemic, the Community Health Resources Commission (CHRC) has prioritized support of innovative and sustainable projects that increase access and help remove the stigma associated with accessing substance use treatment services. The CHRC has provided $3.7 million to support Substance Use Disorder (SUD) projects, and these programs have collectively served more than 5,200 individuals in nine Maryland jurisdictions. CHRC grant funding helps behavioral health care providers to grow, innovate, and scale services to provide a wide range of treatment options for people with SUD. These options include psychiatric services, peer support recovery services, medication-assisted treatment, and wrap-around social services.

Medication-assisted treatment, an evidence-based service for the treatment of SUD, has been available since the 1970s, though many programs never used, insurers have not covered, and government has not required the use of these services. Now, in light of the current epidemic, policymakers and others finally wish to support access to medications. There are not, however, enough community providers with the capacity to deliver these services. Providers must build this capacity by hiring new staff that can prescribe these medications and/or obtaining a new federal status to provide methadone. There is little financial support for the administrative and cultural changes needed to support such capacity building. Fortunately, models exist that can help overcome some of the barriers. Some areas of the state had experienced high rates of opiate use before this epidemic and were already working to expand access to SUD services with medications. CHRC's long-standing support provided many sites with the capacity resources even before the current opioid epidemic and these, as well as other projects, can be used as models.

CHRC funding ultimately supported grantees in these ways:

- Providing leadership the time, planning assistance, and cultural adjustments needed to add or expand a lifesaving but stigmatized evidence-based service to their continuum
- Funding to support critical up-front costs until providers could develop service and reimbursement mechanisms
- Supporting grantees' work to destigmatize medications as they worked with other health care partners in both somatic and behavioral health systems of care

This white paper is the second of three white papers highlighting the efforts and successes of the Commission's behavioral health grant-funded programs. The first of these white papers, "Building a Base for Integrated Care," was published in 2017 and can be found on the CHRC website. This paper focuses on CHRC's efforts to increase access to medication-assisted treatment (MAT) in outpatient, short-term inpatient, and telehealth settings throughout Maryland.

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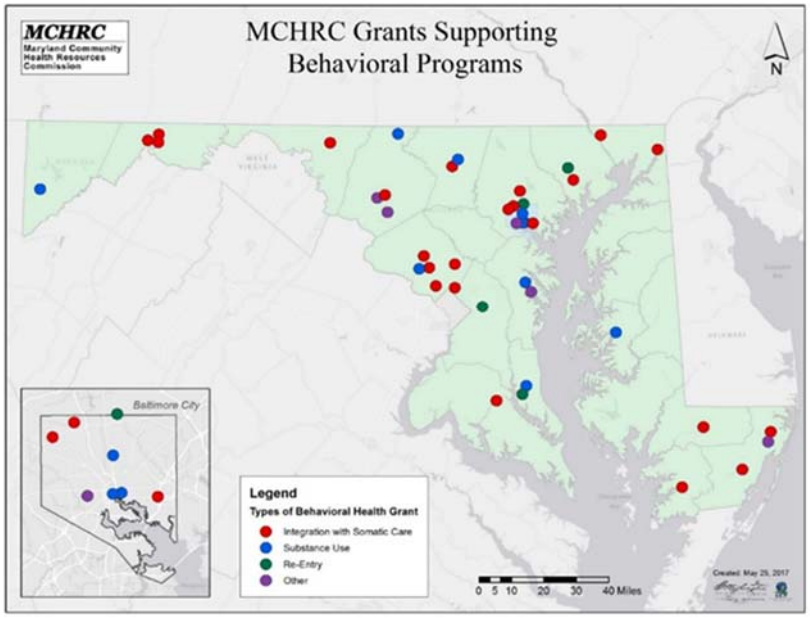
## Introduction

Behavioral and somatic health care providers, policymakers, and the public have traditionally viewed individuals with Substance Use Disorder, especially those in poor communities and communities of color, as the responsibility of the justice system. Addiction was thought to be a lifestyle choice, and those afflicted with addiction were thought undeserving of evidence-based or evidence-informed prevention, secondary prevention, formal treatment, relapse treatment, or recovery services. Only recently have state and federal policymakers started to recognize addiction as a disease and tried to develop policies that treat it as such with community-based evidence-informed services. While federal legislators passed mental health and substance use disorders parity legislation and the Affordable Care Act included comprehensive SUD services as an essential benefit, it is truly the severity of the current opioid overdose epidemic that has forced policymakers to rethink strategies. The epidemic is challenging available resources and policies and creating a new sense of urgency, as there are not enough high-quality, culturally effective behavioral health programs to care for all those afflicted with SUD. Furthermore, the previous views of SUD often mean that policymakers lack the knowledge and understanding of best practices in this arena.

Similar to other health conditions, there are a number of effective treatments for SUD, yet no single treatment works for all patients. Fitting treatment options to an individual patient's realities and needs makes improved health, and even long-term recovery, more likely. Patients and providers should know about, and have access to, all evidence-based services as part of a service continuum, and policymakers should develop systems that support access to these services. Medication-Assisted Treatment, an evidence-based approach to SUD, has been around since the 1960s, but has been stigmatized and criticized as "simply replacing one addiction with another." As the current opioid epidemic has become a public health emergency, medications have been recognized as an important tool for comprehensive opioid treatment services, and providers can prescribe MAT in different health care settings including community clinics, hospitals, urgent care centers, and via telehealth settings. The CHRC has recognized the importance of medication as a component of treatment since 2007, and its grantees could serve as models of systemic and service change as the state and local governments try to respond to the opioid epidemic.

## Organizational Background

The Maryland General Assembly created the Maryland Community Health Resources Commission in 2005 to expand access to health care services in underserved communities in Maryland. The CHRC is an independent commission, operating within the Maryland Department of Health, and is led by 11 Commissioners who are appointed by the Governor. Since its inception, the CHRC has prioritized expanding access to behavioral health services for underserved communities with a particular emphasis on the integration of behavioral health and primary care services. The CHRC has awarded 48 grants totaling $12.7 million to support behavioral health programs. The awardees have collectively served 67,810 residents, many of whom face complex medical issues and comorbidities. The overall goals of CHRC grants have been to: (1) increase access to critical addiction and mental health services for at-risk residents and underserved communities; (2) support the functional integration of behavioral health




services with primary care, community-based settings; and (3) work with many stakeholders at the state and local levels to address the heroin and opioid epidemic. The Commission looks to accomplish these goals in a way that leads to models of care that are replicable and sustainable. CHRC grants have supported a variety of programs focused on: (1) integration of behavioral health services into primary care programs in community health settings such as federally qualified health centers; (2) addition of primary care services in Assertive Care Teams and outpatient mental health programs; (3) implementation of SBIRT (Screening, Brief Intervention, and Referral to Treatment); (4) promotion of re-entry programs which link individuals with primary care and behavioral health services; (5) promotion of community programs that reduce the number of individuals presenting at hospital EDs with behavioral health needs; and (6) increasing access to Medication-Assisted Therapy. This paper will focus on the increasing access to Medication-Assisted Treatment.

The CHRC issues a Call for Proposals (RFP) approximately once each year. The RFP prioritizes integration planning as part of its selection criteria to grow the number of innovative, cost-effective, and sustainable integration models that would improve access to and provision of care for hard to reach populations. Within the focus area of behavioral health, the Commission prioritizes proposals in which primary care providers, behavioral health providers, hospitals, and social services providers agree to collaborate. Joint proposals allow diverse partners to identify shared goals and recognize that solutions require working outside of existing silos. The CHRC's population health focus requires systems to develop a sustainable safety net for the most vulnerable while also building systems for all population groups. CHRC grants can be used for building capacity by increasing staffing levels, improving performance through staff training, increasing the depth and breadth of program services, and purchasing the materials necessary for program implementation. Funds have also been used for bringing in representatives from successful integration programs outside of Maryland to inform, train, and/or evaluate the work being done in state (the overall aim is to ensure that programs will ultimately become sustainable after grant funds have been expended). The RFP also aims to identify qualified programs from all areas of the state which are designed for their community's specific needs, local populations, and capacity.

## Impact of CHRC-funded programs

CHRC grants have supported programs to increase access to SUD treatment, with $4.1 million of funding going towards addiction treatment across the state. Since 2007, these programs have worked to decrease the harm caused by drug use for both individuals and the communities in which they reside. CHRC funding has supported outpatient and short-term inpatient SUD treatment programs as well as telehealth programs which provide MAT in isolated communities. These grants have:

- Increased access to and awareness of MAT across the state within existing SUD service systems
- Helped decrease stigma against medications by using thoughtful integration processes
- Allowed sites to purchase medications until providers could establish a system of reimbursement
- Demonstrated different ways to provide these services depending on capacity and patient population
- Improved the program's ability to collect data and evaluate service provision, thereby allowing for changes as needed to improve outcomes
- Enabled conversations that begin to decrease the stigma of using medications for opioid use disorder patients

The following are two examples of how CHRC funding supported new infrastructure development and increased capacity through implementation of integrated care. A full list of grantees and an overview of these programs are available on the CHRC website, https://health.maryland.gov/mchrc/Pages/home.aspx.

## Strategies adopted by CHRC grantees to integrate medications into their service provision

The CHRC prioritized the treatment of substance use disorders in its first annual Call for Proposals, issued in 2007. The Commission realized that, as opposed to traditional mental health and SUD counseling, the treatment of SUD with MAT required additional training for providers and a dedication by clinic staff, integration partners, families, and the clients themselves, to overcome the stigma associated with using medications as part of the treatment plan. CHRC funding provided the opportunity to **explore partnerships, build capacity** and begin to **provide MAT**, even if clinics were unable or unwilling to offer a full spectrum of MAT options.

*Outpatient SUD treatment*

**Union Memorial Hospital** received funds from CHRC in 2007 to expand the capacity of its program to link inpatient clients with SUD to its existing outpatient buprenorphine program. CHRC funding supported staff salaries, data collection, patient medication costs, and training for case managers and social workers to improve their effectiveness working with patients receiving buprenorphine. Over the course of the grant, the clinic saw 902 individuals, with a total of 9,061 patient visits. The program addressed many of the unique challenges of their patients. In addition to heroin addiction, many patients were unemployed and had frequent hospitalizations and significant legal difficulties. The

program emphasized that medications were an adjunct to counseling, as treatment of the mental and emotional aspects of heroin addiction were as important as the treatment of the chemical dependence.

By 2015, opioid use became epidemic. The CHRC provided funding to the **Calvert County Health Department** for "Project Phoenix," which aimed to provide SUD treatment, including medications, and address social determinants of health facing individuals with substance use disorders. The program works with the drug court to provide services for those already involved with the criminal justice system and with the county school system to provide services to adolescents suffering from SUD. In the first year of the program, 446 individuals have received services offered by the program's psychiatrist and care coordinator on site at Project Phoenix, and the program has provided more than 9,000 behavioral health care visits for adolescents in the Calvert County Schools.

The **Calvert County Health Department** received another CHRC grant in 2014 to support "Healthy Beginnings," a program which provides a comprehensive range of health care, behavioral health, and social supports for pregnant and post-partum women with substance use disorders. The Calvert County Health Department has a MAT program in place that provides buprenorphine to this patient population (not supported by CHRC funds), and the Healthy Beginnings program provides a range of additional supports including intensive case management, prenatal care, family planning, insurance enrollment, and linkage to employment and educational opportunities. In the first year, the program demonstrated that 65% of women attended at least 7 prenatal visits, 87% delivered normal weight babies, and only 17% of infants required Neonatal Intensive Care Unit (NICU) services, with no neonatal deaths. The program has estimated that it has prevented 19-37 cases of neonatal abstinence syndrome and six low-birth weight babies that require NICU services, prevented over 100 unintended pregnancies in women with active substance use, and ultimately saved $4.6 million dollars. [1]

*Short-term inpatient treatment*

Unfortunately, SUD patients often lack the social supports necessary for full engagement in comprehensive treatment. In response, the **Potomac Healthcare Foundation** utilized CHRC funding in 2016 to establish a residential treatment center in West Baltimore to provide a structured, supportive short- to medium-term recovery environment and case management to facilitate SUD treatment. The center targets those who present to the emergency department because of overdose or other medical crises. Potomac Healthcare partners with an on-campus community treatment program to provide a full continuum of behavioral health treatment for opioid addiction and co-occurring disorders. These include: partial hospital program, ambulatory detox, intensive outpatient, buprenorphine treatment, extended release naltrexone treatment, and an outpatient mental health clinic delivering Integrated Dual Disorders Treatment (an evidence-based specialty program for integrated treatment of co-occurring SUDs and psychiatric disorders). This program served 331 patients in its first year, with two-thirds of patients completing the prescribed short-term residential stay.

[1] http://www.co.cal.md.us/DocumentCenter/View/13648

*Telehealth services*

In 2016, **Garrett County Health Department** received CHRC funding to increase access to MAT through telehealth services in a sparsely populated rural corner of the state. In partnership with the University of Maryland Medical School Department of Psychiatry, the program provides telehealth treatment for those who would otherwise have had no access to care, as the nearest MAT providers were located in Allegany County. The program also aims to increase the number of providers in the County who are licensed to prescribe buprenorphine to patients with SUD. This work is in its infancy, but other such telehealth programs have been successful and have been able to expand access to care in rural and urban areas.

## Critical Success Factors in Provision of Medication-Assisted Therapy

As with the CHRC grantees that are integrating somatic and behavioral health services (the focus of the first white paper in this series), the key factor for program success was visionary, committed leadership within the organization. Leadership often had to change the systems of their organizations and the belief patterns of their employees and needed added strength to withstand decades of bias against medications, often within their own health systems and communities.

Successful grantees sought to develop programs based on their patients' needs and realities. They were willing to withstand the stigma because they recognized that the patients needed access to lifesaving medications. Services were developed in ways to decrease barriers. Organizations used data to assess success and, if new barriers arose, they had to change course.

Finally, all the leaders praised the commitment and dedication of staff to work in new ways, but also to embrace the patient-centric caregiving perspective.

## Challenges

As with many attempts to improve systems of care, CHRC-funded programs aimed at increasing access to MAT have themselves faced challenges.

*Hiring and retaining key trained staff*

A dearth of qualified professionals has made hiring and retaining providers difficult and slowed the ability to launch MAT programs. This is especially true in rural areas, where organizations regularly face challenges in recruiting all categories of health care professionals. SUD patients can have complex needs that require staff who are culturally sensitive, non-judgmental, and do not convey disapproval for patients in need of SUD, including MAT services. These providers are in high demand as the need for opioid treatment services expands.

Federal regulations can also be burdensome for MAT prescribers, as they place special requirements and restrictions on those who seek to prescribe certain medications. For example, providers must receive specialized training and obtain a federal waiver to prescribe buprenorphine. Federal legislation limits the number of buprenorphine patients a provider can treat to 275 at a time, but the strain this puts on providers may be partially alleviated as new regulations allow for Nurse Practitioners and Physician Assistants to become licensed prescribers. Licensing requirements and training necessary to obtain a

license, however, could remain a hurdle for some. Organizations must pay for the cost of training as well as cover the costs of the provider's time away from seeing patients. Public and private payers could provide incentives for providers to not only become licensed, but be able to treat patients with SUD within their clinics.

*Offering a full range of MAT services*

There is no single medication that is a magic bullet for all patients with SUD. Different patients respond best to different medications (buprenorphine, methadone, or naltrexone), yet most providers offer only a single option. Buprenorphine is often the chosen MAT because providers can prescribe it within their clinical offices. Methadone treatment can only be provided in a strictly structured clinic, and few providers choose to set up facilities that meet these stringent requirements. Stigma and misconceptions about methadone make providers less likely to refer their patients to outside clinics to receive the medication. A number of providers have chosen to prescribe injectable naltrexone. Unfortunately, few clinics have the ability to offer all three medications. Therefore, patients with SUD may be not be able to access a treatment best suited for them.

There is a recognition that even after being informed of the options for and the effectiveness of MAT, some patients may choose a treatment regime that does not include medication. This option should be a free choice by patients in consultation with their provider and not driven by a lack of access to MAT treatment services.

*Sustaining MAT programs through reimbursement*

Another major stumbling block to providing SUD treatment services is the limitation in a provider's ability to provide non-reimbursable services. Working with individuals with SUD requires care coordination and case management to promote positive patient outcomes. Case managers often ensure that patients are linked to and engaged in health and social services. While the case manager is an essential team member, there is no guaranteed reimbursement for case management services. A lack of reimbursement for care coordination and case management services hinders a holistic approach to patient care. In the long term, reimbursement for case management and wrap-around services can save money by caring fully for patients with these complex needs.

## Conclusion

Results from CHRC-funded programs demonstrate that medication-assisted treatment can be successfully integrated with other behavioral and somatic care services, but integration requires initial investment in both financial and human resources. CHRC provides the funding to overcome challenges, build capacity, and ultimately bring evidence-based services to the SUD service continuum. CHRC grants provide time for training, planning, and cross-clinic and cross-partner education to help implement programs that produce positive health outcomes. Challenges remain, however, in finding trained staff, providing a full range of MAT services, filling post-grant funding gaps, and attaining post-grant sustainability. The results of the pilot programs funded by CHRC will provide the background necessary to implement the changes in state and local health care systems, leading to increased access to MAT, improved lives of those with SUD, and fewer overdose deaths.