



Health Care Innovation Across Rural Maryland: An Executive Summary

Introduction

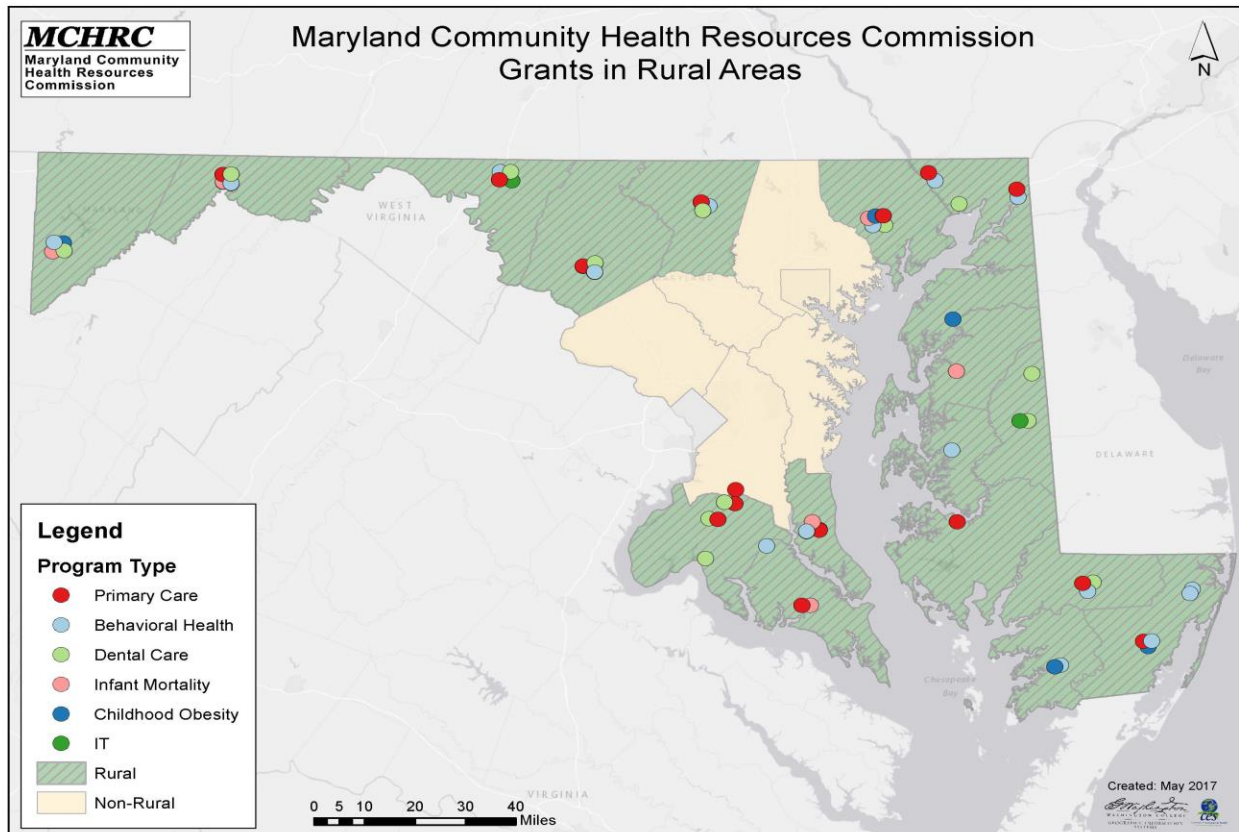
The Maryland Rural Health Association (MRHA) and Maryland Community Health Resources Commission (CHRC) have partnered to produce three white papers over the past year to describe the impact of CHRC grants serving rural communities. MRHA is a nonprofit organization whose mission is to educate and advocate 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 Health. 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>

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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.