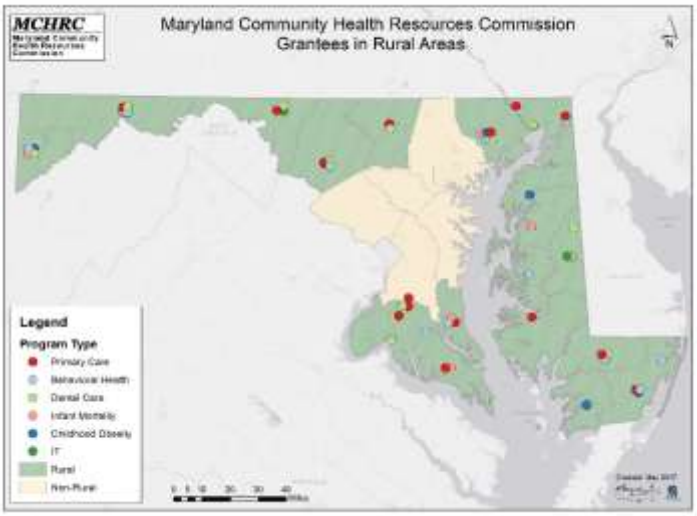
Bringing Care Where it is Needed: A Rural Maryland Perspective

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, almost half (92 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

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