Determining the Feasibility

of

Establishing a Medical Excellence Zone Program

Prepared by

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Executive Summary

The 2020 Acts of Assembly (SB757/HB1701) requires the Department of Health to determine the feasibility of the establishment of a Medical Excellence Zone Program. It further requires the Department of Health Professions to pursue reciprocal agreements with states contiguous with the Commonwealth for licensure for certain primary care practitioners under the Board of Medicine. A Medical Excellence Zone would allow citizens of the Commonwealth living in rural underserved areas to receive medical treatment via telemedicine services as defined in § 38.2-3418.16 of the Code of Virginia. The Department of Health is to set out criteria for the designation to include that any locality or group of localities in the Commonwealth must demonstrate economic disadvantage to qualify for eligibility. The Board of Medicine and the Department of Health Professions are submitting their own reports to the General Assembly on the reciprocal agreements with contiguous states and their recommendations.

The Virginia Department of Health, Office of Health Equity (VDH-OHE) determined it is feasible to establish a Medical Excellence Zone Program using criteria based on methods the office applies to establish Health Professional Shortage Areas (HPSAs). The suggested criteria recommend data sets used by federal and state governments to identify an area as rural and/or underserved and economically disadvantaged. Stakeholders drafting the state telehealth plan reviewed the proposed criteria in a discussion facilitated by the VDH-OHE and William Harp, MD from the Virginia Board of Medicine. The majority of the questions were about the reciprocal agreements and not the zone criteria.

Introduction

This report explains how the VDH-OHE, Division of Social Epidemiology (DSE) could use nationally accepted data sets as criteria to establish a Medical Excellence Zone Program (MEZP). An MEZP will allow for citizens in rural Virginia to receive medical treatment via telemedicine. This report outlines suggested eligibility criteria that would be required of a locality or a group of localities.

Background

The VDH-OHE serves as both the Primary Care Office (PCO) and the State Office of Rural Health (SORH). The purpose of the PCO is to assure the availability of quality health care to low income, uninsured, isolated, vulnerable, and special needs populations, and to meet their unique health care needs. The Virginia PCO works with stakeholders to identify communities with the greatest unmet health care needs, disparities, and health workforce shortages. The PCO in each state is responsible for designating HPSAs. HPSAs identify the need for primary care physicians, dentists, and mental health providers, and a HPSA designation allows the healthcare organization to qualify for incentives that aid in recruiting and retaining providers. The PCO reviews designations using a variety of data and updates them as required by the US Department of Health and Human Services, Health Resources and Services Agency.

The Virginia SORH works to support efforts to improve recruitment and retention of health professionals in rural areas. Rural residents have less access to health care than those in urban and suburban areas. This is due to a number of factors including geography, types of employment available, cost of medical care, and the distance to care. In an article for *Health Affairs,* (2019) Probst, Eberth, and Crouch call this the *rural disadvantage* where age-adjusted

death rates are higher for rural than urban adults of working age. Virginia is one of three states with the greatest disparity of mortality between rural and urban. According to Gong, et al, (2019) rural mortality in Virginia is as much as 30% higher than in urban areas for all causes of death.

The National Rural Health Association (NRHA) in 2015, stated 25% of the US population live in rural areas with only 10% of the physicians practicing in rural America. Virginia's Primary Care Needs Assessment (2016) identified a similar gap for Virginia with 13% of the population living in rural areas and fewer than 10% of the physicians, nurse practitioners, and physician assistants, practicing there. For decades, experts have warned about the looming physician shortage and other experts have declared a maldistribution of the physician workforce. Regardless, both conclusions leave rural Virginians lacking access to healthcare. The Robert Graham Center (2019) estimates that to maintain status quo of primary care physicians (PCP) to patient ratio, Virginia will need an additional 1622 PCPs by 2030 or a 29% increase since 2010. This is speaking to all of Virginia and not only the rural areas. Virginia's Healthcare Workforce Data Center (2019) in their annual physician survey found that 7% of Virginia's physician workforce work in non-metro counties of the state. Additionally, they conclude that 31% of all Virginia physicians work in northern Virginia and nearly one quarter of all physicians work in central Virginia.

There is a severe shortage of primary care physicians in rural areas of the US and the reasons why are numerous and well documented. A rural background is associated with rural practice and Shipman et al, (2017) report that students from a rural background are an increasingly underrepresented group in medical school. The Virginia Healthcare Workforce Data Center (2019) identifies that only 13% of physicians with a rural background practice in rural Virginia. This identifies a need, and telemedicine may be part of the solution.

Telemedicine refers to the practice of medicine using technology to deliver the care over a distance and includes telehealth, which refers to non-clinical interactions. The *Annals of Internal Medicine* (2019) discusses the lack of broadband as a limitation to telemedicine. The article says that federal and state policymakers have enacted policies to expand telemedicine use; however, whether Americans with the poorest access to care have the necessary broadband internet capability to fully benefit from telemedicine is unknown. In December, 2019, the Robert Graham Center stated the prevalence of telemedicine is increasing but there are still obstacles to successful implementation. At that time, only 15% of family physicians used telehealth services but 68% agreed that telehealth expands access to care. The usage of telemedicine and telehealth changed dramatically in March, 2020, when the COVID-19 pandemic required virtual care in many cases.

When the COVID-19 pandemic occurred, the Centers for Medicare and Medicaid Services (CMS) broadened the access to telehealth services so patients could receive services without traveling to a healthcare facility. Waiver 1135 allowed for Medicare to pay for office, hospital, and other visits via telehealth services (CMS Fact Sheet). The waiver allows for a range of providers to offer and receive reimbursement for telehealth services. Prior to the waiver, Medicare limited payments and required the patient to be in a rural location and physically present in a clinic, hospital, or other medical facility. The waiver removed many obstacles including the need for an established relationship between the provider and patient; payment for telehealth visits at the same rate as in-person; and the provider or patient could be located anywhere to generate or receive services.

Telemedicine visits have increased exponentially since March, 2020. The University of Virginia Karen S. Rheuban Center for Telehealth saw a 9000% increase in telehealth visits

between March and July, and 25% of those visits were strictly over the phone. Similarly the Bay Rivers Telehealth Alliance saw an increase, and 36% of their patients are 60 years and older. Currently, the greatest obstacle to telemedicine in Virginia is connectivity. Many areas, especially rural areas, lack the broadband needed to interact with a provider. In an article published by the website Health IT Infrastructure, (2018), the need for telemedicine infrastructure is explained as an area needing adequate broadband to transmit high quality audio and video data as well as text and images. For example, clinicians using video conferencing to treat a patient may need to examine an abrasion or other physical symptom carefully. The broadband connection needs to be strong enough to support high quality video streaming, so the patient can be viewed clearly. Understanding the need for everyone to have broadband, Governor Ralph Northam in January, 2020, announced the Virginia Telecommunications Initiative (VATI) to expand broadband into rural areas.

The OHE-PCO DSE manages the data for the HPSAs in Virginia. The DSE uses several data sets to update information given to HRSA to designate HPSAs. The division created the Health Opportunity Index for VDH, which provides a composite measure of the social determinants of health the social, economic, educational, demographic, and environmental factors that relate to a community's well-being. In July, 2020, the OHE was asked to develop the criteria for Medical Excellence Zone Program (MEZP) in response to SB757/HB1701. Members of the PCO staff determined the data sets to use for establishing an MEZP. The recommended data sets are well known and accepted by PCOs and SORHs for identifying rural, underserved, and economically disadvantaged populations.

Proposed Criteria for Designating Medical Excellence Zones in Virginia

The Code of Virginia § 32.1-92.3 provides broad guidance for designating an area as a MEZP and directs the Virginia Department of Health to establish specific criteria. To be designated as a MEZP an area shall be:

- A locality or group of localities on the Commonwealth of Virginia
- Rural
- Underserved
- Economically disadvantaged.

While there are many ways to operationalize these criteria, the DSE has selected datasets and definitions commonly used for other health professional designations, including federal HPSA Health Professional Shortage Area Designations. The DSE recommends the following criteria for each be used:

1. A locality or group of localities:
    a. A locality shall be a Virginia County or Independent City
    b. A group of localities shall be:
        i. An independent city and one or more adjacent Virginia counties or independent cities.
        ii. A Local Health District as defined by the Virginia Department of Health.
2. Rural:
    a. A locality or group of localities shall be considered rural if all of its area is NOT located in a Metropolitan Statistical Area designated as such by the Federal Office

of Management and Budget. (Note, under this definition, localities or groups of localities in a Micropolitan Statistical Area are eligible.)

3. Underserved:
    a. A locality or group of localities shall be considered underserved if:
        i. All of its area falls within a federally designated Health Professional Shortage Area (HPSA), or
        ii. A Virginia Medically Underserved Area (VMUA) designated by the Governor of Virginia, or
        iii. either of the above, and
        iv. The number of full-time equivalency units supplied by providers obligated to serve in the area under federal or state recruitment and retention programs are insufficient to meet the target provider to population ratio for any HPSA used for qualification.
4. Economically disadvantaged:
    a. A locality or group of localities shall be considered economically disadvantaged if all included localities are listed as Very Low Opportunity in the latest version of the Virginia Health Opportunity Index maintained by the Office of Health Equity, Virginia Department of Health OR its combined measure for all of the five below criteria falls below or is worse than the same measure for the median locality in Virginia, or two of the four below criteria falls within the lowest or worst quartile for localities in Virginia.

b. The criteria are:

    i. Medicaid enrollment rate as measured by the Virginia Department of Medical Assistance Services
    ii. Annual unemployment rate as reported by the US Census Bureau
    iii. American Community Survey, 5-year average
    iv. The poverty rate as reported by the US Census Bureau, American Community Survey, 5-year average
    v. The child poverty rate as reported by the US Census Bureau, American Community Survey, 5-year average
    vi. Per capita avoidable hospitalizations, as defined by the Agency for Healthcare Research Quality, Prevention Quality Indicators

Conclusion

Telemedicine is not possible without proper connection for both provider and patient. During the COVID 19 pandemic, patients were accessing connections through hot spots and public areas such as libraries and school parking lots. Ideally, broadband connections need to be in place throughout Virginia so that all patients can access telemedicine services. The Governor's initiative is a positive step but it will take time to build the needed infrastructure. Even with the proper infrastructure in place, internet cost will continue to be a barrier for rural and economically disadvantaged residents to access adequate broadband connections for telemedicine.

Virginians living in rural areas continue to lack access to care for a variety of reasons. The DSE using the recommended criteria, could identify MEZPs and place the information on the

OHE website for interested providers and systems to access. The data for the zones could be updated annually. If an MEZP is established, VDH needs to make sure this program is not in conflict with other telemedicine programs, and indeed enhances the delivery of telemedicine to increase access to healthcare in rural communities. VDH- DSE has the knowledge and capability to establish criteria for an MEZP. The recommended data sets are readily available and this is an activity easily incorporated into the current DSE activities.

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Definitions

Connectivity: This describes adequate connection through broadband, cable, or cell phone. Basic business broadband connection should be sufficient at about 50-100 Mbps (Megabits/sec).

HPSA: Health Professional Shortage Area: HPSAs are designations made by the Health Resources & Services Administration, an agency of the U.S. Department of Health and Human Services, upon application by the State Primary Care Offices. HPSAs indicate health care provider shortages in primary care, dental health, or mental health. These shortages may be geographic, population-based, or facility-based. Geographic HPSAs reflect a shortage of providers for the entire population within a defined geographic area. Some examples of population-based HPSAs include those who are Medicaid eligible, low income, migrant farmworkers, American Indian/Alaskan Native, or homeless. Some examples of facility-based HPSAs include certain correctional facilities, Federally Qualified Health Centers (FQHCs), and Indian Health Facilities.

MUA-Medically Underserved Areas: An area is defined as medically underserved when there is a shortage of medical care services determined by the number of primary care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the federal poverty level, and percentage of the population 65 years or older. MUAs identify geographic areas with a lack of access to primary care services.

MUP-Medically Underserved Populations: MUPs are specific sub-groups of people living in a defined geographic area with a shortage of primary care health services. Examples include the homeless, low-income, Medicaid-eligible, Native American and migrant farmworkers.

PCO-Primary Care Office: PCOs are units of state or territorial governments that provide healthcare workforce and shortage designation analysis, technical assistances, and liaison, with federal, state and local partners. State PCOs use the Shortage Designation Management System (SDMS) to submit HPSA, MUA and MUP applications to HRSA for review.

Rural: A non-urban or metropolitan area with a population of less than 50,000 (US Census) and further than 10 miles from an urban/suburban center with medical care

SORH – State Office of Rural Health: State Offices of Rural Health Program creates a focal point for rural health issues within each state, linking communities with state, federal and non-profit resources and helping to find long-term solutions.

Telemedicine: is the practice of medicine using technology to deliver care at a distance. A physician in one location uses a telecommunication infrastructure to deliver care to a patient at a distant site.

Telehealth: refers broadly to electronic and telecommunications technologies and services used to provide care and services at a distance. (AAFP) This can include communication via email, and the provision of data such as blood pressure measurement to a provider portal to be viewed later. Telehealth is different from telemedicine in that it refers to a broader scope of remote health care services than telemedicine. Telemedicine refers specifically to remote clinical services, while telehealth can refer to remote non-clinical services.