

Ensuring Telemedicine Access in the Rural Eastern Shore, Virginia

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Purpose

Since the novel coronavirus-19 (COVID-19) pandemic, telemedicine has been an increasingly common national practice to expand healthcare accessibility. However, rural areas are disadvantaged in accessing telemedicine compared to their urban and suburban counterparts, mainly because of a lack of broadband internet. The purpose of this policy brief is to explore the barriers and opportunities to implementing telemedicine in Virginia's rural Eastern Shore region, and to offer recommendations and actions that will support telemedicine for rural Virginians.

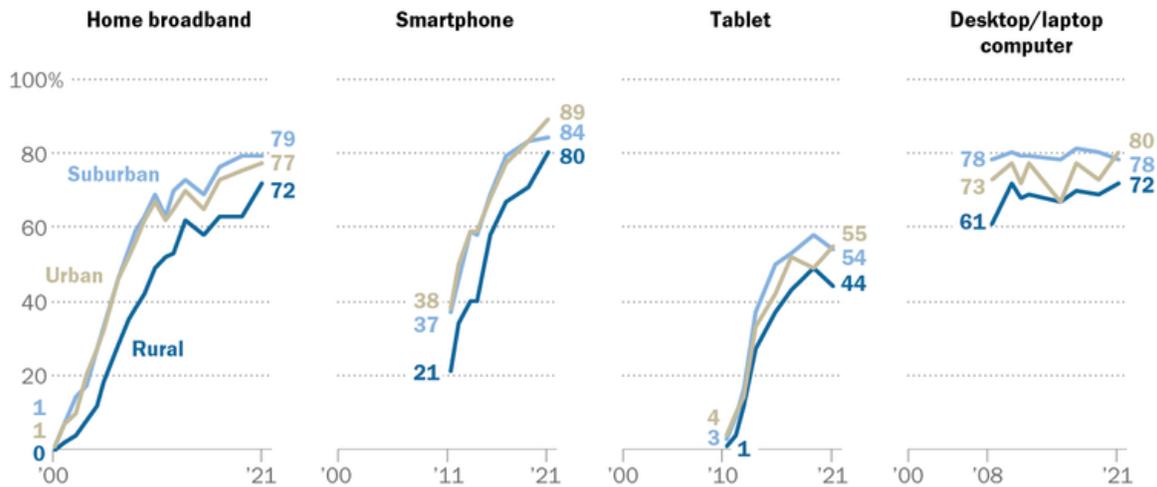
The Digital Divide

The digital divide refers to the gap between those who have ready access to computers and the internet and those who do not. Access to technology and sufficient internet connection translates into many facets of life, especially healthcare considering how the COVID-19 pandemic encouraged a shift to telehealth. Telehealth is defined by the United States Department of Health and Human Services (HHS) as "the use of electronic information and telecommunications technologies to support and promote long distance clinical health care, patient and professional health-related education, and public health and health administration." Within telehealth is *telemedicine*, where direct patient care is delivered virtually. A telemedicine visit requires a minimum of 25 megabits per second download and three megabits per second upload broadband internet speed (DeGuzman et al., 2020).

The need for a strong broadband internet connection and technology to utilize telemedicine often puts certain groups at a disadvantage, especially rural communities. In 2021, 71% of rural residents across the United States (US) had broadband internet at home, which is lower than suburban and urban residents. Not only that, but rural residents also have lower levels of technology ownership as shown in the figure below (Vogels, 2021). Rural residents tend to go online less frequently than their urban and suburban counterparts as well (Vogels, 2021), putting them at risk for lower technological literacy.

Despite growth, rural Americans have consistently lower levels of technology ownership than urbanites and lower broadband adoption than suburbanites

% of U.S. adults who say they have or own the following

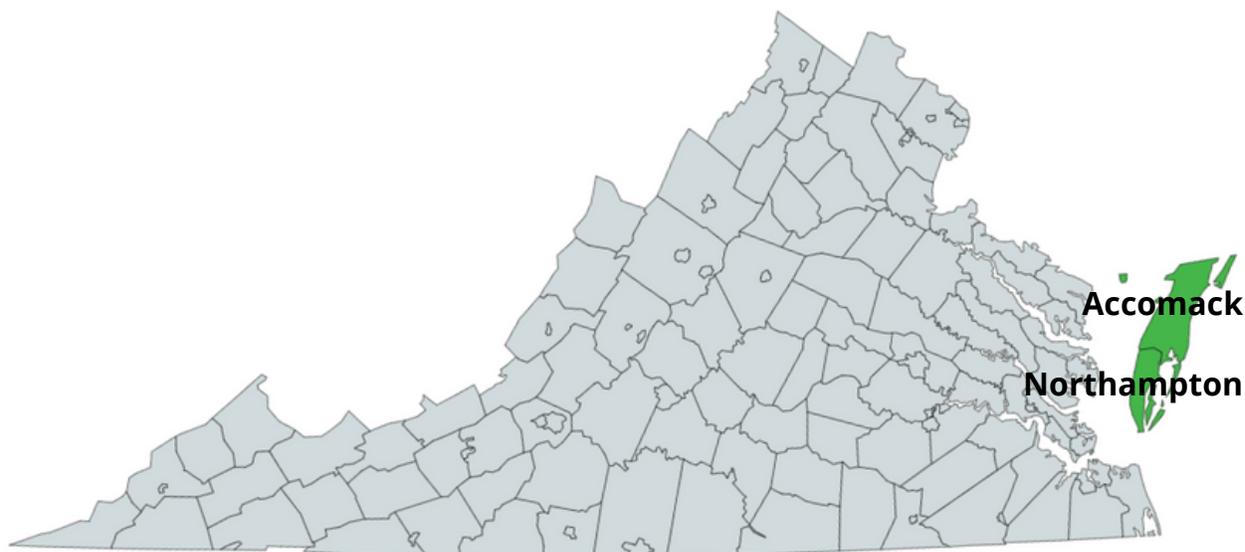


Source: Survey conducted Jan. 25-Feb. 8, 2021.

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The digital divide appears within the health space as the digital *health* divide: “the gap in health access between individuals who have the necessary equipment and skills to use technology to access and utilize health information, and those who do not” (DeGuzman et al., 2021). The digital health divide is especially detrimental post-COVID-19 since a wide array of services are quickly moving towards being virtual. Since the pandemic, disparate access to telemedicine has been a barrier to reducing health inequalities (Katzow et al., 2020; Ortega et al., 2020; Zhai, 2020), emphasizing the need for targeted interventions for the most under-resourced populations.

Telemedicine in the Eastern Shore



Virginia's Eastern Shore

Barriers

Virginia's (VA) Eastern Shore is a 70-mile-long stretch of shoreline at the southern end of the Delmarva Peninsula. It comprises two counties – Accomack and Northampton – and is bordered by the Chesapeake Bay to the West, the Atlantic Ocean to the East, and Maryland to the North. It is accessible to mainland VA by the 17.6-mile-long Chesapeake Bay Bridge-Tunnel. The Eastern Shore is defined as a rural region, and rural regions face many disproportionate barriers to accessing telehealth. The HHS Office of Inspector General report revealed that urban Medicare beneficiaries are considerably more likely to use telehealth (45%) than rural Medicare beneficiaries (33%). These statistics emphasize that people living in rural areas face a unique set of challenges when it comes to accessing telehealth, like less access to broadband connectivity or the necessary technology, on both the patient and provider side (HHS, 2022).

Thirty-five percent of the population in the region lack access to high-speed broadband (“Expanding Rural Broadband,” 2021). Meanwhile, a statewide survey of more than nine thousand licensed healthcare professionals revealed that 74.7% of practitioners reported implementing telemedicine in fall 2021, and nearly 60% plan to increase their use of remote services in the future. In the same survey, one respondent commented that broadband is an issue for both rural patients and providers that must be addressed (“Benchmarking Telehealth,” 2022). Broadband and connectivity issues are a significant barrier for implementing the shift to telemedicine, and broadband expansion is a critical need to mitigate the digital and technological divides that result in continued disparate access to healthcare services and overall health and well-being.

The digital divide is especially apparent in the Eastern Shore, specifically low digital literacy. Certain populations, like the elderly, are not used to navigating the internet, a smartphone, or a computer, making it difficult for them to download the necessary

Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

(American Library Association, 2011)

software to connect with clinicians. A survey assessing rural Virginians experiences with telehealth showed that telehealth satisfaction was associated with regular access to the internet and higher health literacy, demonstrating the correlation between digital access and health literacy (Thomson et al., 2021).

Opportunities

The **Eastern Shore of Virginia Broadband Authority** was awarded \$12.3 million from the Virginia Department of Housing and Community Development to end the digital divide by expanding the broadband network to reach 80% of Eastern Shore residents. Specifically, the money will aid in building 269 miles of new fiber and connecting more than 11,000 additional homes and businesses to broadband networks (Vaughn, 2022).

The **Bay Rivers Telehealth Alliance (BRTA)**, who has been identified as a rural health champion by the Department of Health and Health and Human Services, was awarded \$900k in federal funds over three years for its development of the Eastern Shore Telehealth Consortium (ESTC). The ESTC is designed to build a telehealth delivery system infrastructure in the Eastern Shore that will promote increased resources, innovation, and coordination of health services (Palicia, 2021). BRTA has hosted a variety of telehealth training, such as education on telehealth etiquette and nurse practitioner training for telehealth diabetes management. They have also sent ten licensed clinicians through training to obtain board certification for tele-mental health. Through their work, the health infrastructure is becoming more equipped with the skills necessary to provide telehealth services.

The **Mid Atlantic Telehealth Resource Center (MATRC)** strives to advance telehealth practices to promote access to quality health care in rural and underserved communities by offering a wide range of resources, such as free technological training modules and toolkits.

Recommendations

- *Extension of COVID-era flexibilities, including telehealth waivers.* For the time that COVID-19 is declared a public health emergency, the Secretary of the Department of Health and Human Services using section 1135 of the Social Security Act can temporarily modify or waive certain Medicare, Medicaid, CHIP, or HIPAA requirements, called 1135 waivers. These waivers allow for Medicare to pay for office, hospital, and other visits delivered via telehealth across the country and including in the patient's place of residence. As of this writing, telehealth advocates are seeking bipartisan support to allow the Center for Medicare and Medicaid Services (CMS) to honor these flexibilities more permanently. Some of the flexibilities advocates are hoping will be extended post-COVID-19 include removing geographic requirements and expanding originating sites for telehealth services, expanding the list of telehealth eligible providers, including audio-only as a covered telehealth modality, and delaying in person visit requirements for telemental health services.
- *Open satellite telemedicine sites at schools or public libraries.* Using schools, public libraries, or other alternative origin sites (e.g., rescue squad stations) as a space to set up satellite clinics for the Eastern Shore residents would lessen the digital divide since the sites would provide the necessary equipment and broadband. A national study shows that public librarians in rural communities are highly supportive of implementing telemedicine within the library's services, although partnerships with nurses and health systems would be necessary to relieve the financial burden (DeGuzman et al., 2021).
- *Expand the Virginia Telemental Health Initiative (VTMHI) to the Eastern Shore.* The VTMHI is a pilot program that focuses on meeting the mental health needs of medically underserved Virginians. VTMHI and the Virginia Association of Free and Charitable Clinics (VAFCC) have provided VA's free and charitable clinics with the tools, technology, training, and staff necessary to strengthen telemental health services and provide free clinical referrals to care. Currently, six clinics throughout VA are participating in this program, though none of them are located in the Eastern Shore. Expanding this program to an Eastern Shore clinic would give those without access to technology or broadband a location to access telemental health services.

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Virginia State Office of Rural Health

“*The Virginia State Office of Rural Health (VA-SORH) was established in 1991 to create, fund, and support quality and sustainable rural healthcare infrastructure throughout the Commonwealth of Virginia. The VA-SORH is housed within the Virginia Department of Health, Office of Health Equity, and is the sole organization in Virginia that is federally designated to address and rectify health disparities affecting the state's rural residents. The mission of the office is to partner with rural communities to identify opportunities and long-term solutions that ensure the health and prosperity of all Virginians. The VA-SORH fulfills this mission through providing technical assistance, regulatory updates, resources, and opportunities for collaboration with communities.*”



For more information, visit us online at: <https://www.vdh.virginia.gov/health-equity/division-of-rural-health/> .

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