Research Output Journal of Public Health and Medicine 3(2):18-21, 2024

ROJPHM

ISSN ONLINE: 1115-9715
ISSN PRINT: 1115-6147

https://rojournals.org/roj-public-health-and-medicine/

https://doi.org/10.59298/ROJPHM/2024/321821

The Role of Telehealth in Rural Healthcare Access

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ABSTRACT

This study investigates the effect of telehealth in reducing healthcare inequities in rural communities. Rural communities confront considerable challenges, including geographic isolation, provider shortages, and limited access to healthcare facilities, which exacerbate health inequities. Telehealth provides an innovative solution by allowing remote access to healthcare services, eliminating the need for travel, and improving healthcare results. This review looks at current telehealth adoption trends, successful case studies, and future potential to extend telehealth services in remote areas. Finally, telemedicine is a viable way to close the healthcare access gap in remote populations.

Keywords: Telehealth, rural healthcare, healthcare disparities, geographic barriers, provider shortages.

INTRODUCTION

Rural communities experience health disparities that are difficult to ameliorate since rural dwellers face economic hardships, which limit their access to health insurance and emergency healthcare. The objective of this essay is to dissect the role of using telehealth to address rural healthcare. The goal is to address the current and projected use of telehealth in rural healthcare. Additionally, this essay aims to address the need for increasing the utilization of telehealth to address rural healthcare. Improving the health status of rural and tribal populations warrants attention to evidence-based policies and technologies that utilize telehealth service approaches to reduce or close the gap of health disparities [1, 2]. The shortage of healthcare providers in rural areas can be addressed by utilizing telehealth technology. Patients have shown interest in using telehealth for mental health, caregiver consultations, and health coaching. Unlike other options, telehealth has seen smaller declines in utilization. Concerns about disparities and the desire to stay at home are driving the need for home-based and home health monitoring systems. These systems can prevent emergency department visits and hospitalizations and promote health and disease prevention. Expanding the use of telehealth can help connect citizens, patients, schools, and workplaces with quality providers, reducing disparities and improving community health [3, 4].

CHALLENGES IN RURAL HEALTHCARE ACCESS

Geographic barriers prevent many rural residents from accessing healthcare services. Rural patients may need to travel long distances to reach healthcare facilities, and many communities lack public transportation systems with easy access to larger care centers. These conditions are exacerbated by an aging rural population more likely to suffer from multiple chronic conditions and need more frequent medical care. Provider shortages also play a significant role in access disparities. Many rural American communities have severe shortages of healthcare providers, putting crucial, life-saving care out of reach for many. Although telehealth may also face some of these same workforce shortages limiting expansion, it can minimize the geographical barrier by reducing travel time and expenses. Rural areas generally have a greater number of uninsured, more seasonal, and transient residents, less access to technology, and a higher percentage of low-income residents compared to urban populations [5, 6].

Affluent rural areas are often targeted for lavish medical facilities and large, highly talented workforces that do not make them 'rural' in the true sense of the word when considering these disparities. In order to

achieve health equity, one must consider the unique concerns of rural culture, isolate the unique aspects, and work toward the discovery of those equitable solutions rather than just 'trimming the fat' from large urban theories. Rural healthcare delivery should not be a derivative of urban delivery. Subtle differences in rural healthcare characteristics will be a factor in choosing which telehealth route to pursue. The principles of delivery to be discussed in the following pages will hopefully form a foundation for the development of a conceptual telehealth delivery model to make clear healthcare possible [7, 8].

GEOGRAPHIC BARRIERS

LEPP 480/680 "The Prescription Drug Development Process and the Post-Market Environment" Spring 2014 Semester. Geographic barriers are some of the most often cited issues reducing the ability to provide healthcare in rural areas. One of the main reasons rural residents do not receive appropriate healthcare, specifically specialty care, is because of the scarcity of providers in rural areas; this translates to having to travel great distances for services and long wait times to be seen. Expanded regionalization and the integration of providers in urban hubs disperses provider services, but the distances required for travel for rural residents are the largest [9, 5]. Three-quarters of US counties are rural, with 71% of US land falling into these areas. Traveling long distances is common for rural residents due to physical barriers. Some counties are close to urban fringes, offering better access to services. However, many states have limited options, requiring over 100 miles of travel. Poor road conditions and limited public transportation worsen access problems. Telehealth has reduced the need for rural residents to travel, with benefits like remote consultations. Patient compliance and follow-up have improved with telepsychiatry in rural areas. Telehealth services have been favorable for patients with polio. Investing in telehealth infrastructure is crucial to increase adoption. Technical support is essential for ongoing success [10, 4].

PROVIDER SHORTAGES

Rural healthcare facilities lack physicians. Studies show fewer visits and consultations for rural patients compared to urban ones. In 2019, only 9% of primary care physicians and 4% of dentists practiced in rural areas where 20% of the population lived. Over 11,000 out of 12,000 Health Professional Shortage Areas are in rural locations. Factors causing provider shortages include urban career opportunities and negative associations with rural life. Rural primary care providers experience burnout, isolation, lack of support, and feeling overwhelmed [11]. Efforts to incentivize rural practice have been limited. Many providers move out of rural areas after their obligations are fulfilled. Rural facilities struggle economically and cannot compete with urban hospitals in terms of wages. Shortages result in overwhelmed facilities, longer wait times, and reliance on costly locum tenens providers. Telehealth can help by providing instant access to specialists and enabling consultations with specialists anywhere. Rural practices are investing in telehealth infrastructure and policymakers should support this by subsidizing broadband access [12].

BENEFITS OF TELEHEALTH IN RURAL AREAS

Telehealth is crucial in rural areas as it improves healthcare access. Traveling long distances for care results in missed work, difficulty finding childcare, and prioritizing health visits despite feeling unwell. This leads to decreased appointment scheduling and treatment compliance, increasing the rural population's illness burden. Telehealth enables patients to stay at home, even if it's far from healthcare providers. Removing healthcare barriers transforms healthcare delivery by increasing patient compliance. It also allows the community to reconnect with healthcare providers and shifts the focus from illness to overall health and well-being [3, 13]. Although many of the points above also relate to telehealth within non-rural areas, the simplicity of the technology has additional cost benefits from the rural perspective. Reducing the continuing increase of healthcare costs increases the population's overall welfare. The ability to communicate with one's healthcare provider through telehealth further ensures that difficult-to-access facilities can be used fully while deploying fewer urban-selected resources in larger facilities. This allows the use of rural personnel to treat a greater number of patients, where the patients in question in the case of rural health facility workers are friends, relatives, and neighbors. This is consistent with the revitalization of the role of the rural clinic as being fundamental to rural communities. There are also many individuals who suffer from chronic conditions, and identifying and managing these patients can further decrease overall population illness. In the rural areas where many residents are involved in farming and heavy labor, early treatment and management of preventable chronic conditions can also help in retaining productive employees [14].

CASE STUDIES OF SUCCESSFUL TELEHEALTH PROGRAMS

Watson and Tamirisa follow their commentary by documenting four case studies of successful telehealth programs, each in a different rural setting: a state with the lowest population density in the U.S., an isolated and socioeconomically challenged county in the South, a group of rural counties in the Great Plains in close proximity to a university medical center, and a small rural town with an aging population in the Midwest. All of these telehealth programs experience strong community support and are operating

in rural economies that struggle to offer adequate healthcare services to residents. These sites also happen to be using one of three specific telehealth programs. Several common approaches toward telehealth implementation may be seen in these cases to have contributed to their success [15, 16]. Telemedicine can expand beyond rural areas with improved technology and targeted marketing. Including rural providers in the design process is crucial for addressing their concerns. Local champions in the community are important for advocating the program. Partnerships with local healthcare providers have been formed in rural sites. The influence and trust of a local physician have been significant in promoting the program's benefits [5, 17].

FUTURE TRENDS AND OPPORTUNITIES

Over the past 10 years, telehealth has experienced significant growth that has been driven largely by advancements in information and communication technologies. As these technologies continue to grow, opportunities for use in the delivery of telehealth continue to emerge. Developers and vendors are currently working on delivering telehealth with the support of artificial intelligence for improved patient engagement and clinical decision-making. Furthermore, the use of mobile health applications in telehealth can be expected to increase among patients and providers. The use of mHealth apps can extend the reach of telehealth by allowing patients and providers to interact using smartphones, tablets, and other mobile devices [18, 19]. Growing telehealth use can improve healthcare access in rural areas. Collaboration between public and private sectors is needed to enhance telehealth infrastructure. Training providers in telehealth methods and technologies is essential. Changing patient expectations and the use of telehealth platforms will better meet the needs of rural communities. Telehealth can attract a new generation of clients and reverse the trend of falling accessibility in rural areas. Further research is needed to assess telehealth's potential and convince policymakers of its benefits. Steady investment in documentation will support telehealth practice [20, 21].

CONCLUSION

Telehealth plays an important role in addressing the healthcare challenges faced by rural populations. By reducing geographic and economic barriers, it offers rural residents access to a wider range of healthcare services, including consultations with specialists, mental health services, and chronic disease management. While telehealth cannot fully replace in-person care, it has proven to be an effective strategy to enhance healthcare access and improve health outcomes in underserved areas. With continued investment in technology infrastructure, provider training, and policy support, telehealth can bridge the healthcare gap for rural communities and promote greater health equity.

REFERENCES

1. Owen WF, Carmona R, Pomeroy C. Failing another national stress test on health disparities. Jama. 2020 May 19;323(19):1905-6.
2. Andraska EA, Alabi O, Dorsey C, Erben Y, Velazquez G, Franco-Mesa C, Sachdev U. Health care disparities during the COVID-19 pandemic. InSeminars in vascular surgery 2021 Sep 1 (Vol. 34, No. 3, pp. 82-88). WB Saunders. nih.gov
3. Cortelyou-Ward K, Atkins DN, Noblin A, Rotarius T, White P, Carey C. Navigating the digital divide: barriers to telehealth in rural areas. Journal of health care for the poor and underserved. 2020;31(4):1546-56. [HTML]
4. Kolluri S, Stead TS, Mangal RK, Coffee Jr RL, Littell J, Ganti L. Telehealth in response to the rural health disparity. Health psychology research. 2022;10(3). nih.gov
5. Levit LA, Byatt L, Lyss AP, Paskett ED, Levit K, Kirkwood K, Schenkel C, Schilsky RL. Closing the rural cancer care gap: three institutional approaches. JCO oncology practice. 2020 Jul;16(7):422-30. ascopubs.org
6. Baldwin-Medsker A, Jessie Holland MS. Access to Care. Clinical Journal of Oncology Nursing. 2020 Jun 1;24(3):16-23. [HTML]
7. Tong Y, Tan CH, Sia CL, Shi Y, Teo HH. RURAL-URBAN HEALTHCARE ACCESS INEQUALITY CHALLENGE: TRANSFORMATIVE ROLES OF INFORMATION TECHNOLOGY. MIS Quarterly. 2022 Dec 1;46(4).
8. Gao Q, Wang D. Hospital efficiency and equity in health care delivery: A study based in China. Socio-Economic Planning Sciences. 2021 Aug 1; 76:100964.
9. Zahnd WE, Bell N, Larson AE. Geographic, racial/ethnic, and socioeconomic inequities in broadband access. The Journal of Rural Health. 2022 Jun;38(3):519-26.
10. Mishori R, Antono B. Telehealth, rural America, and the digital divide. The Journal of Ambulatory Care Management. 2020 Oct 1;43(4):319-22. detroitseniorsolution.org
11. Shelton KD. Examining Healthcare Access in Rural and Urban Areas in Tennessee: Policy Implications. 2023. [HTML]

12. Muzammil S. Tele-Health: Is it only for the rural areas? A review on its wider use. Telehealth and Medicine Today. 2020 Jan 30;5(1).
13. Mahtta D, Daher M, Lee MT, Sayani S, Shishehbor M, Virani SS. Promise and perils of telehealth in the current era. Current cardiology reports. 2021 Sep; 23:1-6.
14. Iqbal MH. Telemedicine: An innovative twist to primary health care in rural Bangladesh. Journal of primary care & community health. 2020 Aug; 11:2150132720950519.
15. Tsou C, Robinson S, Boyd J, Jamieson A, Blakeman R, Yeung J, McDonnell J, Waters S, Bosich K, Hendrie D. Effectiveness of telehealth in rural and remote emergency departments: systematic review. Journal of Medical Internet Research. 2021 Nov 26;23(11): e30632. jmir.org
16. Karlin NJ, Weil J. Need and potential use of telemedicine in two rural areas. Activities, Adaptation & Aging. 2024 Jan 2;48(1):102-14.
17. World Health Organization. WHO guideline on health workforce development, attraction, recruitment and retention in rural and remote areas. World Health Organization; 2021 May 6.
18. Adeghe EP, Okolo CA, Ojeyinka OT. A review of emerging trends in telemedicine: Healthcare delivery transformations. International Journal of Life Science Research Archive. 2024;6(1):137-47.
19. Sageena G, Sharma M, Kapur A. Evolution of smart healthcare: Telemedicine during COVID-19 pandemic. Journal of The Institution of Engineers (India): Series B. 2021 Dec:1-6.
20. Lum HD, Nearing K, Pimentel CB, Levy CR, Hung WW. Anywhere to anywhere: use of telehealth to increase health care access for older, rural veterans. Public Policy & Aging Report. 2020 Jan 31;30(1):12-8. oup.com
21. Weinzimmer LG, Dalstrom MD, Klein CJ, Foulger R, de Ramirez SS. The relationship between access to mental health counseling and interest in rural telehealth. Journal of Rural Mental Health. 2021 Jul;45(3):219. [HTML]

CITATION: Mwende Wairimu G. (2024). The Role of Telehealth in Rural Healthcare Access. Research Output Journal of Public Health and Medicine 3(2):18-21. https://doi.org/10.59298/ROJPHM/2024/321821