The Struggle for Accessible Healthcare in the Rural United States

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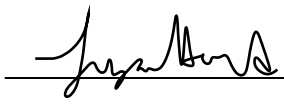
Signed: 

The Struggle for Accessible Healthcare in the Rural United States

The overall wellbeing of a population depends on healthcare access. Better health is associated with more frequent civic engagement (Stopka et al., 2022). In the U.S., medical care is not equally accessible to people of all backgrounds. Gentrification and urbanization can exacerbate the inequities that disadvantage low-income communities in the United States (Cole & Franzosa, 2022).

Life-saving care must be equitably distributed through improved healthcare access. Insured women who have consistent access to a preferred physician are more likely to get the mammography they need (Akinyemiju et al., 2012). Gender blindness, defined as the lack of consideration of gender in healthcare, lowers the quality of care for women-identifying populations (Connor et al., 2020).

In general, rural Americans have insufficient access to high-quality, affordable healthcare (Coughlin et al., 2019). Female, nonwhite and LGBTQ+ identifying people within the rural population face specific healthcare barriers exacerbated by the rural care disparity.

Advocates of medical equity tend to address one of two classes of inequities: those affecting rural populations or those that disadvantage some demographic groups. Health professionals who serve these populations often face excess stress and long hours. In response, medical schools offer training programs in rural health medicine.

Access to medical care is critical to improving the overall general health of the U.S. population, especially for groups impacted by systemic disparities. Healthcare advocates promote healthcare access in rural communities through public policy reforms that address their specific needs and by taking rural populations' distinct lived experiences into account. Insufficient funding, resources and technology in rural healthcare systems, and neglect of the

barriers that some rural populations face, lead to deficient healthcare access and pervasive inequity in the United States.

Review of Research

The inverse care law states that the "availability of good medical care tends to vary inversely with the need for it in the population served" (Tudor Hart, 1971). According to Coombs, Campbell and Caringi (2022), individual knowledge of healthcare needs and provider availability create healthcare access. Rural areas of the United States lack both facets, especially provider availability. Despite containing only 14 percent of the American population, rural areas make up 66 percent of primary care health professional shortage areas (Waldrop & Gee, 2022). Specifically, the striking lack of specialist physicians is a driving factor in preventable hospitalization and mortality rates, which are 40 percent and 23 percent higher in rural compared to urban populations, respectively (Johnston et al., 2019).

Multiple researchers have suggested telemedicine as a route to service rural areas with access to specialists for a variety of needs: diabetes care (Toledo et al., 2012), pediatric surgery (Kohler et al., 2019), mental health (McConnell et al., 2020) and general health information (Chen et al., 2019). Telemedicine provides a way to equip rural populations with greater health literacy and advice without large institutional shifts.

Telehealth has a number of associated discrepancies among demographic groups. Populations in the rural US face greater barriers to telehealth than their urban counterparts. 33 percent of rural Americans lack access to Internet access strong enough to support a video-based appointment (Hirko et al., 2020). Wootton, McCuistian, Legnitto, Gruber and Saberi (2020) recommend in a study that if patients do not have adequate access to WiFi or cell reception, the

physician should inform the patient to take telehealth calls from a location with higher Internet bandwidth. This suggestion fails to account for these rural areas, where a strong Internet connection is not possible. Familiarity with technology is also lower in rural populations, which can harm quality of care through telemedicine (Sizer et al., 2022). Further research and alternate recommendations for physicians need to be made in this case, while acknowledging that this is a major issue that will not be easy to address. Despite these challenges, telehealth can expand access to medical subspecialities in rural areas, provided Internet access and privacy extends to these communities (Nagata, 2021).

In another attempt to address the rural health disparity, medical schools such as the University of Minnesota have implemented rotational programs in rural areas. These long-term, community based learning experiences help increase the number of graduates that enter rural medicine (Halaas et al., 2008).

A 2022 retrospective study of patient medical records revealed that despite a higher disease burden in rural areas, there was lower healthcare utilization in the rural US. The study found that compared to urban patients, rural patients had 22 percent fewer interactions with healthcare. The authors also suggest that provider shortage could cause scheduling issues that prevent rural patients from more frequent visits (Nuako et al., 2022).

Special considerations are necessary for certain demographic groups facing specific healthcare barriers. Rural zip codes in the U.S. with higher Black or American Indian populations consistently travel further to receive healthcare than predominantly White zip codes (Eberth et al., 2022). Black women are three times as likely to die during childbirth as white women (CDC, 2022), and maternal mortality rates are twice as high in rural America compared to urban areas (Harrington et al., 2023). Lower rates of pap smear and contraceptive use is

observed in rural populations due to stigma associated with reproductive care and the need to travel far for these services (Chuang et al., 2012).

Public policy impacts healthcare access in rural areas. A 2019 report by the Movement Advancement Project (MAP), a think tank focused specifically on legislation for LGBTQ+ populations, shows that "LGBT people are less likely to be represented by LGBT elected officials" in rural areas, and exposes difficulty for LGBTQ+ people to find "knowledgeable and affirming" healthcare (MAP, 2019).

Subgroups of the rural population in America experience specific challenges due to pervasive healthcare inequity

Nonwhite residents of rural areas focus on an agenda of self-protection. According to Brandon, Isaac and LaVeist (2005), historical mistreatment of specific populations in cases like the Tuskegee syphilis study lead to lower levels of trust in the medical system. Minnie Lee, a Black American forcibly sterilized by the state of Alabama, says "it may have happened a long time ago, it still brings back memories" (Villarosa, 2022). A doctor treating Black American Nea Justice ignored her report of extreme symptoms following gallbladder removal surgery, and Nea did not feel she was in a "position to really advocate" for herself due to race-based aggression from the surgical team (Alcindor et al., 2021). A shocking 15 percent of Native Americans "avoided seeking healthcare" due to fear of discrimination (Findling et al., 2019). For rural communities, medical mistrust is even more dangerous due to diminished access to healthcare centers. The historical mistreatment of minorities in medicine and resultant impeded trust in the healthcare field is a specific barrier to medical access for nonwhite rural Americans.

Doctors in rural areas often feel isolated and overworked. Ed Garner, the solo practicing doctor in Van Horn, Texas, operates “in denial,” often working 24 hour shifts at the hospital. Still, Ed has to tell patients in need of a specialist to transfer healthcare centers, because “out here, it’s just me” (Saslow, 2019). Rural communities may have one or two physicians, but in medical deserts such as Van Horn, patients may need to travel 100, or more, miles for focused care. Dr. Jennifer McKenney of Fredonia, Kansas, who has overall enjoyed her 12 year experience as a rural physician, mentions in an interview that the “ideal situation” is that “we would have more doctors here, we’d have more nurses here, we’d have more dentists, we’d have more behavioral health people” (Saadi, 2022). A significant lack of medication and equipment supply also takes a toll on the job of rural physicians, who are “on the phone constantly with the insurance company” explaining how they “don’t have a lot of resources” (Seervai, 2019). In addition to hurting patient access, lack of resources and investment in rural health systems impacts the mental health of rural physicians.

Women are another subgroup that face life-threatening barriers to care. Risk of death during or right after pregnancy is significantly higher in rural maternity care deserts, defined as locations without access to maternal care services (Wallace et al., 2021). Bryna, an obstetrics patient in Georgia, frequently drives 110 miles round trip for appointments, feeling like she is “always in the car” (VICE, 2020). Preventative reproductive care such as mammograms, screenings for sexually transmitted infections, uterine or cervical cancer are “nonexistent”, remarks Maxine Redstar, chairwoman of the rural Fort McDermitt Paiute-Shoshone Tribe Reservation in Nevada (Hassanein, 2022). The lack of preventative care for Native Americans and other rural women may change the prognosis for these patients. Rural life exacerbates systemic challenges facing specific care for female patients.

Cultural incompetency of physicians impacts healthcare quality of LGBTQ+ populations

In LGBTQ+ populations, isolation from accepting providers causes fear of stigma. Claire Bowels mentions the difficulty of finding health professionals who are "understanding of the LGBTQ community" in her rural town of Powell, Wyoming (Toliver, 2016). Similarly, Lea Mollon often has to provide "repetitive and awkward explanations" to providers (Mollon, 2012). One national survey found just 30-40 percent of transgender respondents engaged in medical care regularly (Feldman & Bockting, 2003). The extremely low engagement of the transgender community quantifies the fear felt by rural members of the LGBTQ+ community around seeking healthcare.

Sanchez, N., Sanchez, J., and Danoff (2009) attribute the problem to the lack of physicians competent in LGBTQ+ health principles. Currently, most medical schools do not actively work to address the inefficient education. The median time spent on "LGBTQ+ related content" in undergraduate medical school education is 5 hours (Obedin-Maliver et al., 2011). Provider accuracy in answering questions on LGBTQ+ healthcare was 51 percent, showing a lack of specific knowledge for this population (Nowaskie & Sowinski, 2019). Insensitivity to differing cultural values clearly impacts interactions with members of the LGBTQ+ community. One patient recounts that "the doctors have more questions for us than questions that we have for doctors" (Hostetter et al., 2022). The lack of inclusive training for medical students threatens the quality of care and amplifies the challenge of dealing with insensitive, untrained physicians unique to the LGBTQ+ community.

Institutional and legislative approaches work to address the shortage of rural physicians

Medical schools advance agendas focused on expanding medical reach by offering rotational programs in rural communities. The University of Wisconsin implemented a training program for young physicians committed to working with rural communities. This program trains the skills "most vital to the needs of rural communities." (WARM, n.d.). The University of Virginia offers a "Rural Community Practice" for second and third year medical students in nearby Orange County, VA. The clinic models a "remarkably diverse patient population" (University of Virginia School of Medicine, n.d.). Tracks like this are found at both public and private institutions. Tulane University provides the Rural Outreach Initiative to improve the "alarming dearth of physicians" and "poor health indicators found in rural Louisiana" (Tulane University School of Medicine, n.d.). The work of these institutions is essential to improving the supply of quality physicians to rural areas. Associations like the Rural Training Track Collaborative (RTTC), who invest "in producing health professionals to rural practice," can facilitate involvement in these programs (RTTC, 2023).

These educational programs have a profound and lasting impact on student doctors. A trainee in the University of Minnesota's Rural Physician Associate Program (RPAP) asserts the program allows students "get a better understanding of the role the physician has in the community" (RPAP, 2018). The main strategy of rural training tracks is the inclusion of a rotational aspect that gets young doctors into rural communities, working "with people who have really dedicated themselves to the rural practice" (RTTC, 2014). After completion of the Longitudinal Integrated Curriculum, a joint program between the Tufts University School of Medicine and the Maine Medical Center, one student said the track helped her "realize this is the type of medicine" she wants to go into (University of Minnesota, 2012). Medical schools can aid in the rural physician shortage by encouraging participation in rural training track programs.

Challenges that impact rural physicians don't stop after graduation. Even after completion of a rural training program, young doctors express financial worry. Rising costs of medical education lead to greater debts for graduating professionals (Mareck, 2011). Currently, a number of federal and state supported programs aid physicians with loan debt. The National Health Service Corps (NHSC), a subsection of the Health Resources & Services Administration (HRSA), offers loan repayment programs for physicians who choose to work in "health professional shortage areas" (NHSC, n.d.). 46 U.S. states also offer similar repayment programs (HRSA, n.d.). Efforts like this have tangible impacts on decisions by doctors to practice in rural areas. One doctor stated "if they offer loan repayment, I will go back to a rural area!" (Roseamelia et al., 2014). Another rural physician cited loan repayment programs for impacting where she "wound up after med school" (Hustedde et al., 2018). Financial support for rural physicians in the form of loan repayment is a successful example of meeting the needs of rural communities.

Telehealth is an emerging technological approach to improve medical access in rural areas

Advocates for telehealth using policy based approaches on the national level and grassroots approaches on the state level to assert telehealth can decrease the gap between rural and urban access to healthcare. The American Physical Therapy Association (APTA), a national group, publicly supports legislation to "provide services via telehealth" (APTA, n.d.). Following the COVID-19 pandemic, there was a rise of smaller telehealth advocacies, including Patient & Provider Advocates for Telehealth (PPATH). PPATH works to support "connectivity in rural and underserved areas" (PPATH, n.d.). PPATH uses videos, papers, blogs, graphics to convey benefits to telehealth, as well as provide resources to those looking to use telehealth. The

Movement Advancement Project (MAP) asserts telehealth may be a way to "support all people, including LGBT people, living in rural communities" (MAP, 2019). The combination of a top-down, policy based approach by larger associations like the APTA and a grassroots, educational approach by smaller groups like PPATH work to bring telehealth access to rural areas.

Universal Internet access, data security, and technological literacy are challenges in introducing telehealth as a solution to rural health disparities. Online health appointments can introduce fear of confidentiality breaches absent during an in person visit. Washington et al. (2021) contend that protection of patient data from hackers or malware is a "critical concern" in adopting telehealth, especially for psychiatry. A national survey by the Bipartisan Policy Center (BPC) and Social Sciences Research Solutions (SSRS) showed that 45 percent of participating adults experienced "reported technical issues" in their telehealth experience (Panzirer, 2021). A physician in Massachusetts reports that patients who are not "technology literate and don't have someone to help them," often "older" or "non-English speaking" patients struggle the most (Breton et al., 2021). Advocates for telehealth need to consider these barriers to access in their strategies. Telehealth offers a promising solution to the urban-rural healthcare divide, but universal access to secure technology and broadband Internet is essential.

Advocates for rural health equity either focus on rural health in general or on specific sub-groups within the population

Organizations focusing on broader rural health employ similar strategies on the state and national levels. The National Rural Health Association (NRHA) advances an inclusive agenda ranging from "Addressing Rural Declining Life Expectancy and Rural Health Equity" to

“Reducing Rural Healthcare Workforce Shortages (NRHA, n.d.). The NRHA advances this agenda by providing easy-to-use guides towards grassroots advocacy. Branches of larger medical equity groups like the National Patient Advocate Foundation use their wider support base to “shine a light on these projects and the passion that drives them” (NPAF, n.d.). Advocates for medical equity also appear on a state-specific level. Georgians for a Healthy Future (GHF) work towards supporting “policy initiatives that can strengthen our rural health system and increase access to care” (GHF, 2022). Both larger advocacies and smaller advocacies opt to create educational resources to raise awareness and drive policy changes.

Advocacies working to support subgroups of the rural demographic more often focus on providing resources for these populations. PFLAG National is a large advocacy group “supporting, educating, and advocating” for LGBTQ+ communities (PFLAG, n.d.). One of their strategic priorities involves healthcare, and PFLAG offers resource guides and action plans for members and allies. This includes workshops on how “rural LGBTQ+ individuals are often overlooked in national conversations” (PFLAG, 2019). Pride of Rural Virginia, a subset of the Virginia Rural Health Association (VRHA), works to provide a “safe and affirming environment” for LGBTQ+ individuals through providing training for physicians and publishing certified medical centers for free on their website (VRHA, n.d.). The Movement Advancement Project (MAP) works to address “difficulties accessing health insurance, stigma and discrimination” for LGBTQ+ rural populations (MAP, 2019). To advance this agenda, MAP provides research reports to advocate for policy changes, and also creates “effective communications for the LGBT movement” to aid in helping others understand LGBTQ+ needs (MAP, n.d.). Groups such as PFLAG, VRHA and MAP can utilize outreach and education efforts to communicate on behalf of the LGTBQ+ community while also providing resources.

The strategies employed by these healthcare advocacies demonstrate the important intersection of medical care and politics. The New Georgia Project brings voting power to historically disenfranchised populations in Georgia, existing at the intersection between healthcare and public policy. Voices for a Healthy Georgia (VHG), a campaign within the New Georgia Project Action Fund, works on "justice-focused remedies to systemically unjust healthcare systems," to support equitable healthcare access in the sparsely populated southwestern Georgia (VHG, n.d.). Advocacies like the Louisiana Rural Health Association support agendas of "rural healthcare sustainability" by supporting and proposing relevant legislation in both state and federal governments (LRHA, n.d.). March of Dimes is committed to "advocating with policymakers across the political spectrum for moms and babies" (March of Dimes, n.d.-a). March of Dimes has led a number of successful advocacy days and worked to pass legislation on postpartum coverage, neonatal screening and Medicaid access (March of Dimes, n.d.-b). The strategies of these advocates for rural healthcare suggest the solution to the sociotechnical problem is multifaceted.

Conclusion

Advocates for rural healthcare do not adhere to any one method of agenda advancement, rather they employ intersectional strategies involving education, public policy and biomedical science. Efforts by advocates are mismatched by a lack of investment in rural community healthcare, but supported by medical schools making changes to curriculum to improve inclusivity and exposure to training in rural healthcare, as well as loan repayment programs to encourage rural physicians retention. High quality, quantitative research on strategies to improve access to broadband Internet and technological literacy in rural areas should be expanded to

make telehealth a feasible possibility to improve access to healthcare in rural America. A multifaceted strategy incorporating public health, public policy, and consideration of intersectional lived experiences is necessary to understand healthcare inequity and other pervasive inequalities in the United States.

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