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Rethinking Rural: Providers' Insights on the Dynamics of Rural Healthcare

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Introduction

In the context of healthcare, rural communities have been historically underserved in the United States. Common challenges that patients have in rural areas include poor access to care and unreliable transportation to hospital visits. Social and economic perspectives play a pivotal role in understanding why these patients also have a disproportionate prevalence of chronic diseases and worse health outcomes in general compared to those who reside in an urban setting (Cyr, 2019). Each of these challenges proves to be a test for rural health systems, as these systems are already facing unique issues of their own. These often include staffing shortages, lack of specialty services, and low population volumes (Nielson, 2017). As a result of these problems, many rural hospitals either close down or have to transfer patients to health systems that can better accommodate the patient. These problems strain an already stressed infrastructure and place the future of rural healthcare at risk.

Our research aims to seek insight into the experiences and opinions of rural healthcare providers. Interviews were focused on learning about how they provide care to a uniquely rural population, maximizing their available resources, and how their careers may differ from providers in urban areas. Asking rural providers about their experiences and concerns is important for formulating long-term and sustainable solutions to the most prominent problems affecting rural healthcare.

Lakewood Health System is a healthcare organization that has its main campus in Staples, Minnesota—a small town with a population of 2,998 people. By conducting interviews, we were able to find common themes and experiences across Lakewood staff regarding their expressed opinions on the nature of healthcare workers in a rural setting. The lived experiences of rural healthcare providers offer key insight into the social circumstances and parameters that

make supporting the health of rural populations so vastly different than the reality of medical care in an urban setting.

Methods

Jack Adamietz, the principal investigator reached out to Chief Medical Officer Christine Albrecht, MD, FAAFP at Lakewood Health Systems regarding a letter of support to conduct our study. Following approval from Dr. Albrecht, healthcare providers ranging in position and specialty were emailed a recruitment letter and asked to complete a Google form if they were interested in participating in our study. Ten providers indicated interest. Once the consent forms were signed by those interested, 15-to-30-minute interviews were conducted over Zoom. Eight baseline questions were asked during the interview. The questions inquired about providers' experience working in rural health care. The transcription program, Otter AI, was utilized to transcribe the entirety of each interview. The coding program, MAXQDA, was used to analyze transcribed interviews. Our most prevalent codes included "insurance," "resources," "relationships," "urban," "community," "staffing," "transportation," "technology," "education," and "patient care."

Research Findings: Limited Resources

When analyzing the interests and concerns of Lakewood providers, "resources" emerged as a strong point of discussion. The term "resources" can refer to healthcare technology, facilities, staffing, or availability of specialty care. These kinds of resources are highly valuable in rural healthcare settings and are sought after to expand hospital access to care. Resources are also used to improve the quality of care available to rural patients, as patients with specific concerns commonly have to travel long distances to hospitals with the resources they need.

As a subtopic of resources, one issue that was brought up in multiple interviews was staffing. Providers frequently listed staffing as one of their top concerns when looking at the growth and stability of rural healthcare. One physician stated, "There are still some specialty services that I would love to have to be able to do my job a little bit better." This provider noted the absence of radiology, pulmonology, and dermatology specialties, saying, "I'd love to have more." Staffing concerns also include not having enough nurses and phlebotomists as well as the limited availability of language translators. Some providers stated that because of the lower pay and lack of amenities within rural communities, many workers flock to more urban areas. Because of these shortages, hospital staff frequently have to increase their workload to accommodate patient demands. This culminates in additional stress, often resulting in high rates of burnout and the acute issue of staff turnover. Though burnout and turnover have been common trends throughout all hospitals and healthcare systems, ultimately it perpetuates an even more vicious cycle within rural healthcare due to their already small pool of staff and low recruitment. One provider shared,

> "One of the problems we have right now is that the larger facilities aren't able to take our critically ill patients because they don't have staff. It doesn't matter that I don't have staff, I still have to take them because they have nowhere else to go. And so, I think that brings up a huge safety concern in our states and it needs to be addressed but some of those inequities are, are found throughout where you just don't have those same resources. And nobody seems to care, and I want to provide better care for my patients and elsewhere. Not substandard care."

In addition to the concern of staff shortages, the lack of specialty care in rural healthcare creates problems for both the hospital and the patient. Patients in need of services such as

neurology, cardiac surgery, and higher emergency care are often sent to facilities outside of rural facilities. Because of this, patients frequently have to travel long distances by their own devices or by emergency vehicles. This forces the patient to be at higher risk of a worsened outcome in health and creates obstacles to treatment (Cyr, 2019). From a rural hospital's perspective, this also creates an issue of losing patients, and therefore revenue, for the hospital. Another issue that providers brought up in multiple interviews was trying to communicate with multiple facilities and staff throughout the day. Because patients often need to be transferred between facilities for testing, one provider noted, "I have to manage what's going on with them without them being in the same building as me. This makes my job more difficult." Along with insufficient staffing, the need to juggle communicating with patients in and out of the clinic introduces additional stress to the workplace.

Technology was also a topic that was discussed heavily among providers. Medical equipment, electronic medical records, and laboratory tests/results are examples of technology. However, telehealth was particularly a strong topic among providers when discussing technology. Telehealth, or a virtual appointment with a provider, was a key tool in rural healthcare during the COVID-19 pandemic and in contacting specialty care for consultations. For example, one provider discussed how Telehealth is used in the ER for strokes by calling the Neurology department at St. Cloud Hospital for consulting. Telehealth was also helpful for patients who are unable to drive or have a consistent mode of transportation to appointments, which is one of the challenges for rural populations. This tool has been invaluable for the quality, speed, and efficiency of care in rural settings. The continuation of Telehealth was recommended by providers and should improve the gap between disparities within rural healthcare. However, as one provider stated,

> "An outsider might think that virtual visits would be so great for rural America, and telehealth definitely has its place. But a lot of those same people either don't prefer it or don't have the capabilities because where they live don't have good enough connectivity to do a Zoom meeting."

Telehealth still has gaps related to who has the technology or education to facilitate a virtual appointment. While Telehealth shows promise for increasing access to care, these gaps must be considered in tailoring Telehealth to meet the unique demands of rural communities.

Research Findings: Patient Barriers

Providers at the Lakewood Health System also spoke deeply on the patient barriers that accompany a rural health care system, with lack of transportation being a unanimous response as a major inhibitor of patients' access to care. Studies find that such obstacles result in inadequate management of care and delayed treatment (Syed *et al*., 2014). The absence of transportation is a multi-faceted issue with roots in access, ability, and social connections.

The pool of patients described by our interviewees are among a high poverty-stricken population. With poverty comes a restriction to accessibility, and our project demonstrates this in various formats. The ability to own a car is questionable for many, but ownership alone does not indicate access. Providers described patients as being co-owners of family vehicles (in which case, the family car may be needed by another to earn income) or as being unable to afford gas for anything outside of work. Sharing a car between family members can oftentimes mean owning an unreliable car as well, one that breaks down or has a hard time starting, especially in states with harsh weather like Minnesota. Patients often resort to the public transportation system, an accommodation that holds many faults in the face of a sparser population. Many of the providers at Lakewood communicated the inconsistency of their local transportation. One

physician acknowledged, "It's certainly not 24/7 and it's certainly not even every day." Providers further claimed "local transportation" consist of only one bus and one taxi.

Beyond the uncertain schedule, insurance companies require riders to meet certain qualifications for transportation coverage. The alternative is a private pay option which is unaffordable to many within this population. Patients are frequently left to rely on neighbors or family members who are willing to take off work to provide transport services. One provider noted, "A lot of people may live alone or have an unreliable significant other and very little family around in a rural setting." Many of our interviewed providers stated transportation as a common reason for missing appointments or follow-ups. The range of aforementioned factors discourages people from seeking consistent health care. Transportation is a pertinent example of how patient barriers manifest themselves in rural communities.

Research Findings: Insurance and Healthcare Policy

An often-overlooked aspect of providing care to a uniquely rural population is the task of navigating the complex policies and frameworks that dictate what treatments are available to patients, how provider time is valued, and the feasibility of running a health system in America's backcountry. These factors can be seen as the rules that compose the rural healthcare provider playbook and organize the patient care web that rural physicians must traverse daily.

A prime example is health insurance. For quite some time, demographic research has revealed staggering disparities in healthcare coverage amongst rural inhabitants. Research indicates that rural populations are substantially less likely to have health insurance than comparatively urban populations (Kilmer *et al*., 2010). One of the providers we interviewed explained this observation by citing the socioeconomic status of their patients, claiming that "we have a lot of low-income working families that just don't make Medicaid guidelines and must go

without insurance." Considering that a large portion of rural inhabitants make a living through agriculture and other low-paying blue-collar industries, many fall into an income bracket where they are too wealthy to receive government aid, but too poor to afford health insurance out of pocket. As a result, rural patients can lack medical coverage entirely, or those that can afford it will often avoid seeking care because of large deductibles. This means that rural providers not only struggle to get their patients into the clinic, but also have difficulty ensuring those they care for follow through with recommended procedures and treatments. Although, the difficulties posed by the intersection of money and medicine don't stop there. The current medical reimbursement system in the U.S. heavily favors the work done by surgical specialists. To be specific, procedure-based medical practitioners have been shown to earn 37.5% more income on average than traditional family medicine physicians (Langer *et al*., 2019). Considering that a majority of rural providers fill primary care roles, it makes sense why most rural healthcare systems struggle to make ends meet.

To this end, interviewees reported a sense of uneasiness about the future of rural healthcare, citing the lack of medical graduates accepting rural positions and the tendency of government representatives to cater to the needs of urban communities over rural ones. Others mentioned feeling undervalued for their services, with some explaining how the additional responsibilities placed on them such as providing informal counseling (because of limited mental health resources in rural areas) are not reflected in their pay. Most apparent overall was the sentiment of rural providers claiming to be the "only option" for their communities. All ten of our interviewees admitted to patients having to drive unreasonably long distances if they wanted care outside of the Lakewood system. This eliminates the ability of patients to shop around for more affordable care and can force them into paying high deductibles for out-of-network visits if the one clinic available falls outside of their insurance plan's healthcare coverage.

Research Findings: Sense of Community

Despite the challenges of rural health, small communities offer unique opportunities to cultivate strong patient-provider relationships. Studies have shown that positive interactions with patients encourage providers to form more trustworthy connections with and invest more heavily in those they care for (Gu *et al.*, 2022). Additionally, it has been found that engaging with patients on a personal level improves providers' enthusiasm and passion for their work (Yan, 2012). In other words, positive patient-provider relationships are not only beneficial to patients' physical health and perception of care, but also to providers' job satisfaction.

Several interviewees commented on the nature of their relationships with patients, noting that serving a small community is a clear advantage of rural healthcare. Along with their personal attraction to a slower, rural town life, one physician discussed how a rural work environment provided an "opportunity to really embed [themselves] in the community and to know my patients on many levels." Likewise, another healthcare provider shared,

> "You know, I think the doctor-patient relationship is stronger. In the rural setting, a lot of us know the people we're taking care of. I mean, today I took care of a colleague's child, and that might not happen so frequently in an urban setting. Or I might be taking care of the local pharmacist or the local trash guy or whatever. I think for the patients and for us, that's a huge attractor—to know that you're taking care of your neighbors and you're taking care of your community. I think that's beneficial for the patients to have that personal connection with their provider."

Along with serving their colleagues and neighbors, the benefit of developing longitudinal relationships in a care setting was a common point made by providers. Several interviewees

commented that having the chance to treat a patient from birth to adulthood was a rewarding component of their work that they would be less likely to experience in an urban environment. One physician shared, "I get to be friends with some of my patients in a good way, not in a crossing-the-patient-physician relationship way. We see them in the community, and I don't know that my colleagues in an urban area would get to do that as much."

Aligning with research findings on the relationship between job satisfaction and patient-provider relationships, interviewees acknowledged that serving close-knit communities is a fulfilling component of their job. As beautifully summarized by a Lakewood provider, "I think if you're someone who likes to live in a smaller community it has a lot of pluses and it's a great career. You learn a lot of things about people and how resilient they are. You learn what everyone brings to the table, but it's also a lot of work." While there may be several challenges associated with caring for a rural population, fostering a strong sense of community is not one of them.

Conclusions

Rural healthcare fosters unique challenges for its patients and providers alike. Patient barriers like unreliable transportation, poor accessibility to diagnostic tests, and complex insurance policies make seeking healthcare more difficult for rural populations in comparison to their urban counterparts. Likewise, rural providers face similar challenges in their line of work. Poor staffing and outdated technology foster an environment where providers must navigate tasks outside of their scope of practice. The lived experiences of providers at Lakewood Health Systems offer insight into the benefits and drawbacks of serving a rural population.

Our research only brings attention to the challenges faced by a singular rural health system. Gathering research from multiple different rural communities, either within Minnesota

or across state lines, is a necessary approach to grasping a more comprehensive understanding of rural healthcare. It is important to recognize that no population exists in a vacuum. As emphasized by an interviewed provider, "Most of the issues in rural areas are just more magnified versions of those found in urban areas." While quantitative research is abundant on the differences in care and patient barriers in urban versus rural settings, ethnographic research is essential in synthesizing comprehensive solutions that benefit patients in all healthcare settings. A one-size-fits-all approach will not be enough to eliminate barriers and equitably improve patient care. Recognizing and learning from the unique experiences of rural healthcare providers is an obvious first step toward tailoring the future of healthcare to better support the needs of rural communities.

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