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Opportunities to Advance Complex Care in Rural and Frontier Areas

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IN BRIEF

As the complex care field begins to coalesce around core guiding principles, it is important to balance opportunities to standardize programs with the need to tailor strategies for specific health care settings. This is particularly relevant for complex care programs serving rural populations. This brief explores obstacles faced by rural and frontier health care organizations in providing complex care, including: (1) workforce shortages; (2) unique "rural" social determinants of health; and (3) the self-sufficient character of many community members. In developing this brief, made possible by the Robert Wood Johnson Foundation, the Center for Health Care Strategies interviewed experts in rural complex care from across the country, including researchers, subject matter experts, health plan representatives, health care providers, and officials from community-based organizations. The brief includes examples of rural communities that are enhancing complex care delivery through workforce adaptations, technology innovations, tailored patient engagement tactics, and new payment models and funding streams.

Individuals with complex medical and social needs in rural and frontier areas encounter similar challenges to complex patients in urban areas, but the way these challenges play out can be very different. Issues such as poverty, food insecurity, homelessness, and lack of transportation are significant factors in both urban and rural areas, but the obstacles facing individuals living in rural areas are often compounded by lack of infrastructure. This includes little to no public transportation, limited access to primary care and specialty services, and a scarcity of social service and health care providers, particularly behavioral health clinicians. The geography of many rural areas further complicates patients' ability to access health and social services, as well as providers' ability to offer high-touch care coordination and management.

This brief, made possible through support from the Robert Wood Johnson Foundation, outlines challenges associated with providing complex care in rural and frontier communities, as well as opportunities and investments needed to ensure effective programs. Drawing from experts across the country, it summarizes opportunities to improve complex care delivery in rural areas and provides examples of successful approaches focused on:

- Tailoring programs to the unique social fabric of rural communities;
- Addressing the rural social determinants of health (SDOH);
- Implementing workforce innovations;
- Maximizing creative technology strategies; and
- Adapting payment models and funding streams.

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Recognizing the Social Fabric of Rural Communities

Rural communities are often tightly knit, with a strong sense of shared identity, and residents often rely on family, neighbors, and a trusted set of leaders for support. Organizations that leverage existing relationships, such as employing local residents as community health workers (CHWs) or engaging with civic or faith-based groups, can mobilize social capital to enhance complex care initiatives. Moreover, the providers who reside in these communities often know their patients personally, have a deep understanding of their day-to-day challenges, and can be personally invested in patients' wellbeing.

However, the same social capital that provides a built-in, informal safety net for complex patients may also at times create stigma and privacy concerns around receiving care. Members of these smaller, tightly knit communities frequently know each other and it can be difficult to maintain one's privacy. Particularly when needing behavioral health services, members of rural communities can be less likely to seek out those services since "everyone will know." Additionally, a prevailing philosophy of self-sufficiency and individualism can hinder the establishment of trusting patient-provider relationships, again, particularly with respect to behavioral health needs. Finally, it can be difficult to bring new programs into communities that may be skeptical of outsiders. These communities are often fearful that outside organizations will drop into their towns from big cities to run a program, then leave when they are done without having created anything sustainable.

Nothing About Us Without Us

Rural communities often stress that "rural" is not just "urban, but smaller." This is a key message that policymakers and health care organizations should heed when developing complex care programs in rural and frontier areas. Rural communities should be involved in identifying their own priorities and setting their own pace. Some notable community collaboration examples include:

- In **Spartanburg County, South Carolina**, a coalition of community organizations devoted to improving the health of the region met with local church leaders to engage the rural communities in a diabetes control program offered in the area. The conversation among the groups, however, led to the church leaders expressing interest in the Adverse Childhood Experiences study and opportunities to use a trauma-informed approach to care within their communities.[1] The pastors recognized how trauma impacted their parishioners' lives, and began working with the coalition to develop community-based training and educational sessions on the topic.
- Similarly, **Project Lazarus**, a public health model for prevention and treatment of overdoses and opioid poisoning based in North Carolina, is a grassroots approach developed by the state's rural communities rather than by major institutions in the state's "research triangle."[2] The model applies a hub-and-spoke structure to local coalitions established to address the opioid crisis, providing a framework to make resources more readily available and create a more comprehensive treatment system. The organization delivers training and technical assistance resources (toolkits, guides) to support the coalitions' efforts. Observers have credited the program's success to the fact that it is suited to the needs of rural North Carolina, and has been helping rural communities and individuals for over 10 years.

The Value of Convening

Despite the closely knit nature of rural communities, these localities can still experience the siloed services that often complicate complex care coordination in urban communities. This can be compounded by the often significant geographic distances separating patients, health care providers, and community resources. Although many of the people in small communities know each other, they may not be familiar with each other's work. Thus, organizations providing complex care in rural areas can find value in simply bringing people together.

- **OneCare Vermont**, a statewide multi-payer accountable care organization (ACO), developed a standard complex care approach and piloted it in four communities across the state, from urban Burlington to the rural eastern and southern regions of the state. It held in-person trainings in these regions to demonstrate the value of the complex care approach, and brought together relevant health care and social service providers in each of the communities. It found that many of the people at the trainings were not entirely familiar with the details of the others' programs, and bringing them together face-to-face helped connect the array of local safety net resources.
- **ThedaCare**, a large health system in Northeast Wisconsin, conducts "plunges" by its Community Health Action Team (CHAT), which bring together diverse stakeholders to consider an issue identified by the community and develop approaches to address it. These CHAT plunges have spurred a variety of new programs, including a behavioral health coalition to strengthen the provision of mental health services and the Shawano County Rural Health Initiative, which takes preventive health services and health education "to the farm" to provide home visits for farming families in the county.

Overcoming Geographic Barriers to Address Rural Social Determinants of Health

The factors that may affect the conditions in which people are born, grow, live, work, and age are the same in rural and urban communities – food insecurity, housing instability, unemployment, etc. But in rural and frontier communities, the way those factors impact individuals' lives is influenced by the unique geography and demographics of those areas. For example, in many cases transportation is impossible without a car, as few public transit options exist. Affordable housing may be too far from necessities such as grocery stores or may not exist at all. There is also generally an insufficient population to support the breadth of social service providers that typically exist in urban centers. Another important issue is food insecurity – including a lack of grocery stores and the fact that not all "rural" areas are able to support agriculture. In parts of Appalachia, for example, resources for agricultural production are quite limited.

Rural populations also tend to be older than their urban counterparts.[3] These demographics can make care provision challenging, since individuals' medical and social needs generally increase with age, and rural communities face limited access to medical and social service providers. Nevertheless these individuals tend to remain in their communities, sometimes out of a desire to remain in the place they have known their whole lives, and sometimes because there are few opportunities to leave. An additional challenge facing older adults in all geographic settings is social isolation. The lack

of transportation and options to socialize in rural and frontier areas make this challenge even more difficult to address.

Discover What Already Exists

Organizations implementing complex care programs in rural and frontier areas should determine what already exists within the communities they plan to serve in order to maximally leverage and support those resources. Rural communities are by nature spread out, and often lack centralized offices where individuals can be connected to those resources. However, there are often real elements of a social service safety net in rural areas, even if they are informal and diffuse.

- In **Pueblo, Colorado**, a group of community organizations that had originally convened to improve youth mentoring programs recognized that they were involved in a larger, shared endeavor. When they gathered, they found other places in the community where they could work together to improve the lives of individuals, including new collaborative developments for diversion programs, and supporting Medicaid coverage of alternative treatment and support strategies for children with significant behavioral health needs. The organizations involved discovered what was fully available from partners in the community and were able to share resources.

The Changing Role of the Rural Health Care System

As health care organizations begin to confront the challenges of addressing patients' SDOH, the role of the hospital and health system is changing as well. Health systems once focused on "filling beds" and delivering services have begun assuming the role of community organizers. Within this emerging framework, hospitals in rural areas serve as "anchor institutions" that manage resources to support a healthy community, in addition to treating the medical and behavioral health needs of patients.

- **Mountain-Pacific Quality Health** has supported the development of multidisciplinary ReSource Teams in Montana that go beyond clinic walls to provide care to complex patients through in-person visits and connect patients to providers virtually through tablet technology. The teams, which consist of complex care nurses and CHWs, provide care coordination services and connect rural and frontier complex care patients with social support services addressing SDOH such as housing security, utility access, financial independence, and food availability.
- **OneCare Vermont** leveraged its status as one of the state's largest health care payers to bring together stakeholders who rarely interacted with each other from across the state for trainings. As the neutral party bringing other organizations together to implement the complex care approach, the large ACO was able to strengthen the connections *between* the community partners, rather than just providing an external source of funding or resources.

Rethinking a Rural Workforce

Small patient populations dispersed across large geographic areas make it difficult to sustain high-touch, team-based complex care. Individuals from rural communities who train to be health care providers frequently attend medical school in urban areas, and subsequently choose not to return home. For this and other reasons, few newly trained physicians opt to practice in rural areas, failing to replace physicians lost to attrition. Moreover, there is a nationwide shortage of behavioral health providers – a critical component of the complex care workforce – that is all the more keenly felt in rural and frontier areas.[5]

Educating Providers about the Role and Value of Community Health Workers

One of the key challenges for health systems in integrating new types of care team members has been creating demand in the system by educating providers and health care organizations about the value of these non-traditional community-based workers.[4] Although a CHW's role dovetails with the population health focus of many current reforms, many practices lack familiarity with non-traditional health workers, and the value they can provide for improving the health of vulnerable patients. Successful integration can be facilitated by training physician leaders of care teams on the importance of non-traditional workers, such as CHWs, and supporting case conferences where all members of the team share their experiences with complex patients.

Despite these challenges, there are opportunities to support a "non-traditional" complex care workforce in these communities that can augment other health care resources in important ways. Health systems, for example, can train members of the community, who are often peers, to increase care teams' ability to address SDOH and provide navigation support. Similarly, paramedics can be trained to extend the primary care team's reach into the community by scheduling appointments to review medications, conducting routine health screenings (e.g., glucose monitoring, blood pressure screening), and assessing SDOH from within a patient's home.

Institutions of higher education also play a role in expanding access to care in rural communities. Recognizing the challenge of rural workforce shortages, more medical and nursing schools have begun recruiting candidates from rural areas, and offering opportunities to be trained and work in rural and frontier areas.[6] As an added employment incentive, one interviewee indicated that some rural providers have begun providing educational supports to nurses to help them become more comfortable practicing in the absence of an overseeing physician.

Fill the Gaps with Community Members

Health systems in rural areas are increasingly addressing shortages in the traditional health care workforce by recruiting members of rural communities to serve in non-traditional roles, in many cases without formal training in health care. Many human resources already exist in rural communities and can be leveraged by health care organizations to improve services for patients with complex medical and social needs. CHWs, for example, have been a core element in the non-traditional health workforce for decades, often doing their work under different names (such as *promotores*, navigators, or community health aides). Their contributions to a care team can be invaluable, since they can draw on community and cultural knowledge to help their patients. These opportunities also provide a further benefit to the communities by employing local residents and contributing to the economy of the area. Such programs should include career ladders and professional development opportunities for workers, which will enhance recruitment and retention

and contribute to the development of the health care workforce in rural communities for years to come.

- **Native Alaskan villages** have experience using community health aides to coordinate care over vast distances, and some are now receiving certification as telehealth technicians. A formal program was established in the 1960s to help manage care in rural villages across Alaska, and community health aides now operate in over 170 communities.[7] The aides must be employed by tribal health organizations and attend a training session with a clinical skills element. Additionally, the training can serve as credits toward an associate's degree at the University of Alaska, Fairbanks.
- The **Hill Country Health and Wellness Center** in frontier Northern California has developed the role of behavioral health care coordinator to help its complex patients navigate the health and social service systems. The behavioral health care coordinators are recruited directly from the community and have a personal knowledge of what life is like in the region. Although they do not have degrees and cannot provide clinical services, their understanding of the community enables them to provide navigation services for Hill Country's patients.

Expanding Workers' Scope of Practice

The roles of health care and social service providers in rural and frontier areas require flexibility, given the lack of resources for their work and an abundance of need in their communities. Health systems in these regions are well positioned to explore opportunities to adapt the roles of currently employed individuals, including paramedics and pharmacists, to better meet the needs of rural complex care patients and address geographic barriers faced by patients. For example, in rural and frontier communities, pharmacists may be the only health care provider seen by patients with complex medical and social needs on a regular basis.

- **Community Care of North Carolina** found that community pharmacies often see complex patients who pick up their medications multiple times a month, offering an opportunity to coordinate care with other providers and provide enhanced medication management services. As a result, it developed the Community Pharmacy Enhanced Services Network, a clinically integrated network of community pharmacies that coordinates patient care with other providers to improve outcomes for people with complex needs. Community pharmacies in the program provide an array of enhanced services including medication home delivery, comprehensive medication reconciliation, immunizations, and medication synchronization.
- **ThedaCare** established a community paramedicine program in Northeast Wisconsin to extend the reach of its complex care clinic to individuals' homes. Two community paramedics (CPs) are available to visit patients who could benefit from care coordination, basic medication management, and disease management. The CPs know the community, and patients are comfortable with them entering their homes since that is the traditional role of a paramedic. The program has successfully engaged patients with whom it was difficult to maintain engagement at the in-person clinic near the hospital.

Maximizing Innovative Technology

Technology is a key facilitator of complex care teams, allowing team members to communicate and coordinate with patients, their often fragmented network of providers, and each other. Pioneering organizations in urban regions have maximized technology by using it to deploy care management solutions, improve patient and provider communication, reduce duplication of efforts, and better coordinate care for patients.[8] However, rural and frontier areas often lack access to broadband internet, and if they do have access, it is often of lower quality, making health technology difficult to adopt for local providers.[9] Additionally, practices in rural areas tend to have smaller patient panels, and often lack the resources to invest heavily in costly technology products or upgrades.

However, if accessible, technology holds tremendous potential benefits for rural and frontier providers. It can help overcome geographic challenges, and extend the reach of specialty care (such as psychiatry and dermatology) to patients living in remote areas. Additionally, health systems can use videoconferencing and telemedicine to extend the geographic reach of their complex care programs. Health care providers in rural areas can potentially benefit from partnering with other local institutions with information technology infrastructure in place. For example, offering mobile clinic visits at a local school by using the school's broadband connection.

Technology Strengthens Interpersonal Connection

Technology can bring people together and strengthen connections between providers, and providers and patients.

- **Project ECHO**, developed by the University of New Mexico to improve access to specialty care in that state's rural and frontier areas, allows primary care providers to connect virtually with specialists in large urban centers to learn how to address their patients' more complex needs.[10] The model goes beyond ordinary telehealth, building permanent treatment capacity in underserved communities while maintaining the personal relationship between the primary care provider and his or her patient. Additionally, the opportunities to build knowledge and forge professional relationships with other participating primary care and specialty providers have been shown to increase provider satisfaction, increasing the likelihood that participating providers will stay in their communities rather than be lured to more populous regions.
- **OneCare Vermont** implemented a software package called CareNavigator to link providers, community-based organizations, and patients, and to help coordinate complex care across its disparate communities, particularly in rural locations. The software brings together diverse social service and health care providers who are caring for a patient, including those in rural settings. The patient is an active participant in the care planning and has online access to the software, which connects the patient and his or her providers, and requires providers to communicate in a way that the patient can understand.

Adapting Payment Models and Funding Sources

Whereas the broader U.S. health care system is currently undergoing a major transition from fee-for-service to value-based payment arrangements, small patient populations and medical and social service provider shortages in rural areas make an already difficult financial setting even more challenging for the implementation of these emerging payment approaches. Rural and frontier areas have experienced an increase in hospital closures due to health system mergers, rising levels of uncompensated care (particularly within states that chose not to expand Medicaid), and a dwindling number of patients. This has resulted in longer patient travel and wait times, as well as care shortages. Moreover, complex care – which frequently involves team-based care management and high-touch interventions for patients with the most medical and social needs – is costly and difficult to fund in cash-strapped communities. Some other reforms have minimum population requirements that rural communities cannot meet, such as the Center for Medicare and Medicaid Innovation's Accountable Health Communities initiative, a promising program that brings together social service and medical providers to address members' SDOH, but one in which many rural communities were unable to participate.

Many payment models designed to establish sustainable investment in complex care interventions depend on savings achieved from successful risk management and efficiently addressing patients' needs. Complex care interventions, however, such as upstream prevention efforts that address unmet social needs and require frequent provider home visits, are more costly to deliver in rural and frontier areas. Extending beyond the walls of the clinic and into a patient's home is a different proposition when that home is located hours away from the clinic. Furthermore, these payment models often rely on having large enough pools of patients to properly manage medical risk; yet, rural and frontier areas typically do not have a sufficient number of patients. Additionally, many payment reforms are tied to quality measures that may be hard to achieve within a rural environment, such as a measure of comprehensive diabetes care, which require screening facilities not available in many rural locales.

Adapt Value-Based Purchasing Models for Rural and Frontier Areas

Value-based purchasing (VBP) holds promise for providing sustainable funding for complex care, particularly given that successful management of high-cost patients presents a key opportunity for generating savings under these arrangements. But approaches cannot be one-size-fits-all, given the differences between urban and rural health care organizations.

- In 2017, **Pennsylvania** established a rural health model that provides a global budget to its rural hospital systems as part of an § 1115 demonstration waiver with the Centers for Medicare & Medicaid Services.[11] The global budget provides rural hospitals with a fixed, prospective payment for all inpatient and outpatient hospital services, giving sometimes struggling rural hospitals a solid revenue stream. Rural hospitals are frequently smaller and more vulnerable to the financial risk of some VBP approaches. In response, along with the prospective payment, the program provides flexibility to rural hospitals to develop a rural hospital transformation plan (with the approval of the state and CMS) and invest in infrastructure to improve community health rather than simply pursuing additional fee-for-

service reimbursement. Providers in rural Pennsylvania are exploring community paramedicine and CHW models to provide community support for their complex populations.

- The **Accountable Care Organization Investment Model**, developed by the Center for Medicare and Medicaid Innovation,[12] allows participating ACOs to invest pre-paid shared savings to develop their infrastructure. Thirty-six of 45 program participants were substantially rural, and some crossed state lines. Through the program's investment opportunity, many rural ACOs were able to participate and were successful in the Medicare Shared Savings Program – the participants in a subgroup that targeted rural areas saved money, while potentially improving quality among beneficiaries.[13]

Involve Local Health and Conversion Foundations and Incentivize Community Investments

Although rural critical access hospitals or federally qualified health centers in rural areas can find it difficult to compete for national funding opportunities, smaller, local foundations may be well suited to fund complex care work in those areas. State or regional health foundations, such as the Montana Healthcare Foundation or the Empire Health Foundation in Washington, are often closer to the ground in rural states and understand the needs of their communities and how they can be supported. They can, along with other sources of more sustainable financing, explore opportunities to create incentives to invest in communities and help establish the types of approaches that can best provide care for those with complex medical and social needs.

Conclusion

Complex care provided within rural America shares many similarities with programs in urban and suburban areas, but the particular challenges that accompany the culture and geography require a different set of solutions. This brief draws from innovative providers, state officials, and experts across the nation to outline key considerations for health organizations, policymakers, and states seeking to enhance rural and frontier complex care. Finding the balance between viewing rural communities as "the other" and thinking that they are simply "urban, but smaller" is critical. Key factors in designing successful complex care approaches in rural areas include: (1) a tailored, community-focused approach that maximizes existing resources; (2) creative strategies to expand the non-traditional complex care workforce; (3) innovative use of technology to facilitate and coordinate provider, community organization, and patient linkages; and (4) sustainable financing strategies. This is an area ripe for further exploration, filled with opportunities to improve care for rural America's most vulnerable citizens.

Organizations Supporting Rural Health and Complex Care

- Rural Health Information Hub – This resource contains research, information, and funding opportunities to improve rural health care.
- Rural Policy Research Institute – This University of Iowa-based organization builds and collects knowledge to support rural communities, particularly with respect to health care reform.
- National Rural Health Association – This advocacy organization supports opportunities to enhance rural health across the country.

Organizations across the country are working to collect and organize information to help inform complex care approaches and strengthen the field. National resources include the Better Care Playbook for Complex Care,[14] an online compendium of resources to support improvements in complex care, and the *Blueprint for Complex Care*, a strategic plan to accelerate opportunities nationally to improve care for individuals with complex health and social needs.[15] However many on-the-ground providers in rural areas remain unaware of the resources available to them, and the resources available are often not focused on the specific needs of rural and frontier communities. While there are organizations working to provide information on rural health care, a center for rural complex care with guidance around appropriate quality measures and research on best practices employed around the country could be a valuable addition.

Participating Experts

In developing this brief, the Center for Health Care Strategies interviewed experts in rural complex care from across the country including researchers, subject matter experts, health plan representatives, health care providers, and officials from community-based organizations.

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ABOUT THE CENTER FOR HEALTH CARE STRATEGIES

The Center for Health Care Strategies (CHCS) is a nonprofit policy center dedicated to improving the health of low-income Americans. It works with state and federal agencies, health plans, providers, and community-based organizations to develop innovative programs that better serve people with complex and high-cost health care needs. For more information, visit **www.chcs.org**.

ENDNOTES

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