Improving Behavioral Health Services for Individuals with SMI in Rural and Remote Communities

Social Determinants of Health in Rural & Remote Communities

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Social Determinants of Health in Rural & Remote Communities

Social determinants of health (SDOH) influence both public health and behavioral health outcomes for individuals with SMI. The five domains of SDOH include healthcare access and quality, education access and quality, social and community context, economic stability, and neighborhood and built environment. Understanding the relationships between these social factors, and the influences behind them, can help to reduce inequalities in rural and remote communities, thereby improving health and behavioral health outcomes for individuals with SMI who live there. Although all five key domains affect health and behavioral health outcomes, this document focuses primarily on the three domains that have the greatest influence on the availability and accessibility of services for individuals with SMI in rural and remote areas: healthcare access and quality, economic stability, and social and community context.

According to the CDC, access to healthcare and quality refers to the connection between an individual’s ability to access health care services, including primary care, behavioral health services, and health insurance, as well as their level of literacy related to health and the healthcare system (CDC, 2021). Economic stability refers to “the connection between the financial resources people have – income, cost of living, and socioeconomic status – and their health,” and includes factors such as poverty, employment, food security, and housing stability. The CDC defines the third SDOH, social and community context, as “the connection between characteristics of the contexts within which people live, learn, work, and play, and their health and well-being” (CDC, 2021). Understanding the factors that contribute to SDOH in rural and remote areas is critical to providing high-quality behavioral health services and improving both health and behavioral health outcomes.

Brief Lessons for Policymakers:

» Invest in prevention and early intervention initiatives to increase awareness, reduce stigma, and promote help-seeking behaviors.

» Reliable broadband is critical to expanding behavioral health services in rural areas. Long-term investments should be prioritized over short-term efforts.

» Audio-only telehealth is a valuable tool for rural providers. Research on its usefulness and allowance beyond the duration of the COVID-19 pandemic is encouraged.

Brief Lessons for Providers:

» Integrated/Co-located care models are effective at increasing collaboration across multiple providers and improve SDOH in rural areas.

» Tele-mentoring programs like Project ECHO help increase the ability of primary care providers to identify and meet an individual’s behavioral health needs.

» Expanding telehealth services and meeting individuals in the community where they live are strategies that reduce the need for transportation, which is often a barrier to access to care in rural/remote areas.
Healthcare Access & Quality

Rural and remote communities have developed and implemented innovative strategies to ensure residents with SMI receive high-quality and timely access to behavioral health services through 1) behavioral health awareness and literacy, 2) integration of behavioral health and physical health services, 3) use of telehealth services, and 4) transportation services. The following sections explore each of these factors in more depth.

Behavioral Health Awareness and Literacy

A strong body of research demonstrates how early childhood adversities have lifelong consequences on adult behavioral health, producing higher rates of depression, substance use, suicidal behaviors, and worse treatment outcomes for individuals with SMI (Mwachofi, et al., 2020; Merrick, M.T., et al., 2017; & Shonkoff, J.P., et al., 2012). To counteract some of these adverse outcomes, many rural communities are focusing their efforts on increasing behavioral health literacy related to prevention and early intervention by educating their populations on how to identify the early stages of SMI and where individuals can go for help. Behavioral health literacy refers to recognizing the symptoms of SMI and understanding treatment options, maintaining positive emotional, mental, and behavioral health, decreasing negative attitudes and stigma associated with mental health, and increasing help-seeking behaviors.

One illustration of mental health literacy efforts taking place in rural communities is the integration of mental health awareness programs into existing social infrastructures, such as schools and community organizations. Washington State has three such initiatives aimed at increasing mental health literacy across the state. The first two initiatives are led by the State of Washington’s Office of the Superintendent of Public Instruction through SAMHSA’s Project AWARE Grant.

The first initiative funded by SAMHSA’s Project AWARE Grant trains educators on the use of the Mental Health and High School Curriculum Guide (USA Edition: Washington State), which is designed to increase a youth’s knowledge of mental illness, address attitudes and stigma, and promote competencies in self-care and help-seeking behaviors. Originally developed and extensively researched in Canada by Stan Kutcher, M.D., in collaboration with the Canadian Mental Health Association, the Guide is used to train teachers and educators in administering the two-week curriculum to ninth and tenth graders (ages 13 to 15). The authors focus on this age group because it is the timeframe when many young adults begin displaying symptoms of SMI, allowing both youth and educators to identify symptoms earlier.

The second Project AWARE Grant effort in Washington State convenes Youth Mental Health First Aid (YMHFA) trainings in local communities throughout the state, including trainings in schools. The goal of YMHFA is to increase mental health literacy in students and parents in order to identify, understand, and respond to signs of SMI and substance use disorders in youth.

Washington State’s third mental health awareness initiative is Sources of Strength, an evidence-based, classroom-based suicide prevention program that increases protective factors in order to reduce suicides in school settings. Established in 1998 in rural North Dakota to address teen suicides, this universal intervention program trains students to be peer leaders and connects them with school advisors. School advisors support peer leaders in promoting eight protective factors linked to positive well-being and reduced suicide risk. Protective factors include reducing the acceptability of suicide as a response to distress, increasing help-seeking behaviors, improving communication between students and staff, and developing positive coping strategies and attitudes among youth.

“Building mental health literacy with teachers and coaches through programs like MHFA [Mental Health First Aid] and embedding mental health services in schools is largely shifting the culture and stigma in rural communities.”

Roxanne Dudley, PMHNP-BC, RN, LPC
Psychiatric Nurse Practitioner
In her experience implementing YMHFA and Sources of Strength in Washington State, Debra Drandoff, M.Ed., Director of Prevention and Youth Services for Educational Service District 112, views schools as being a core part of the mental health bridge into the community (Drandoff, D., personal communication, February 9, 2021). Ms. Drandoff stresses the importance of finding a trusted leader in the community to be the champion in getting buy-in for implementing and sustaining new mental health programs, indicating that “local communities require a local approach” (Drandoff, D., personal communication, February 9, 2021). Schools are the primary employer and social connector of a community, especially in rural areas. For example, many school facilities are used for social and recreational events during the weekends. Finding a local and trusted champion connected to the community is a valuable resource in raising mental health awareness.

Early prevention and early intervention efforts in Montana and New Mexico are focused on early childhood development by implementing the PAX Good Behavior Game, which is an evidence-based behavioral health management program typically taught in early grades of elementary schools. The PAX Good Behavior Game is a universal prevention and intervention curriculum that aims to improve classroom behavior through role-play, teaching young children how to self-regulate their behaviors and be respectful students in the classroom. Research shows that this program has long-term behavioral health benefits among youth and young adults, including a decrease in suicidal behaviors, a reduction in substance misuse, and a reduction in psychiatric disorders (PAXIS Institute, 2020).

The Olweus Bullying Prevention Program (OBPP) is another universal prevention and early intervention program being implemented for school-aged children and young adolescents to reduce the risk factors associated with suicide and suicide-related behaviors. Developed in 1983 by Dan Olweus, Ph.D., with the University of Bergen in Norway, OBPP is a universal anti-bullying program designed to reduce the incidences of bullying, prevent the development of new bullying problems, improve student-level interaction, promote a healthy school environment, and build a sense of community. OBPP is the most researched anti-bullying program showing positive long-term outcomes including a reduction in suicidality, substance abuse, youth crime, and school-related anxiety (Komek, et al., 2015). The program has been implemented globally, including in U.S. school systems serving rural counties with great success (Lindstrom, W., personal communication, June 28, 2021).

Subject matter experts interviewed for this report share the perspective that the long-term outcomes of such preventive and early intervention efforts demonstrate that help-seeking behaviors are increasing among youth and young adults. Mississippi recently implemented a public health campaign to reduce stigma, increase behavioral health literacy, and address the mental well-being of its citizens during the COVID-19 pandemic.

**Spotlight on Mississippi’s Behind the Mask Campaign**

In December 2020, the Mississippi Department of Mental Health (DMH) announced a new awareness campaign, Behind the Mask, to promote mental health services for Mississippians during the COVID-19 pandemic. This campaign encourages individuals facing mental health problems to not hide “behind the mask,” but to seek help for their mental health problems, to understand that the pandemic has affected all people around the state, and to realize that these challenges are common. The campaign uses customized social media images, press releases, PowerPoint presentations, and informational cards and posters to encourage people to reach out for help. Service connections are facilitated through the Behind the Mask website, where users can complete and self-report a mental health screening, find nearby behavioral health services through an interactive map, learn coping strategies, and read testimonials from other Mississippians who have received services for behavioral health challenges that resulted from the COVID-19 pandemic. The campaign is funded through an Emergency Response to COVID-19 Grant from SAMHSA to address behavioral health needs that result from the COVID-19 public health crisis among the most vulnerable residents of Mississippi, including healthcare workers.
Behavioral Health Awareness and Literacy Key Lessons:

» The implementation of prevention and early intervention, school-based initiatives, including school-based programs such as YMHFA and the PAX Good Behavior Game, increase awareness about mental health symptoms and help to decrease stigma associated with mental illness and substance use issues, and increase help-seeking behaviors in youth and young adults who have engaged in these programs.

» To effectively implement and sustain these programs, state agencies and policymakers can seek out funding from federal sources (including SAMHSA), and can recruit and identify trusted community leaders to champion their implementation and adoption.

Integration of Behavioral Health and Physical Health

As discussed throughout this document, rural residents with SMI face many barriers when trying to access behavioral health services. Federal and state policymakers and agencies, local communities, and healthcare systems are working together to address these barriers and facilitate timely access to behavioral health services among individuals in rural and remote areas. Nationwide shortages of specialty behavioral health providers create ever more pressing challenges in rural areas, particularly in underserved areas with low per-capita income. Rural regions have found benefit in the integration of behavioral health and physical health, particularly in primary care settings, to address an individual’s whole health and improve negative outcomes resulting from limited healthcare access and quality. In rural settings, primary care practitioners may not have a behavioral health specialist to refer individuals with SMI for care, and therefore need to take a larger role in screening, prescribing, and monitoring care for individuals with SMI. A survey of primary care physicians found that those practicing in rural regions have higher rates of diagnosing and treating patients with anxiety disorders, attention deficit/hyperactivity disorders (ADHD), SMI (including bipolar disorder and depression), and substance use disorders than do primary care physicians practicing in urban areas (Beck, et al., 2019). These survey findings affirm that rural primary care providers are critical to delivering behavioral health services to individuals with SMI living in rural areas.

At the federal level, SAMHSA and the Health Resources and Services Administration (HRSA) provide resources on primary care behavioral health integration through the SAMHSA-HRSA Center for Integrated Health Solutions, including information on three standard frameworks for integrated care: 1) coordinated/collaborative care, 2) co-located care, and 3) fully integrated care. The Coordinated/Collaborative Care Model (CoCM) is an evidence-based practice that involves a multidisciplinary team led by a primary care provider, a behavioral health case manager, a psychiatrist providing consultation, and other behavioral health providers focused on the whole health needs of patients with mental illness seen in primary care settings. The co-located care model involves offering services within the same physical site but in separate departments or different practice spaces. The fully integrated model involves a full-time behavioral health clinician providing care within the primary care practice. In this model, behavioral health clinicians are onsite conducting consultations, receiving and/or making warm handoffs in real time, conducting therapeutic sessions onsite, developing integrated care plans, and co-managing patients with the primary care provider.

The Agency for Healthcare Research and Quality (AHRQ) developed the Academy for Integrating Behavioral Health and Primary Care (referred to as “the Academy”) to provide national resources and a coordinating center for providers interested in health/behavioral health integration. To further support rural health issues, HRSA supports the Rural Health Information Hub (RHIhub), which provides mental health resources, including the Mental Health in Rural Communities Toolkit focusing on adult mental health, and outlines evidence-based and promising practices to help rural areas develop and sustain mental health.
programs. These resources provide general information on the benefits of increasing primary care competency in identifying and assessing patients with the most common behavioral health conditions.

Three additional federal initiatives designed to increase access to care include HRSA’s [Federally Qualified Health Centers](#) (FQHCs) and [Rural Health Clinics](#) (RHCs), and SAMHSA’s [Certified Community Behavioral Health Clinics](#) (CCBHCs). FQHCs, also known as Community Health Centers, receive HRSA grant funds to provide comprehensive safety-net health care services in communities that are underserved or experiencing a shortage of healthcare providers. The services provided, either on-site or arranged off-site with another provider, include primary care, dental, mental health, substance use, and specialty care, and transportation.

The SAMHSA-funded CCBHCs demonstration and expansion program, created by federal lawmakers in 2014 under the [Protecting Access to Medicare Act](#), is designed to provide comprehensive, community-based, mental health and addiction services, including 24/7 mobile crisis response, immediate screening and risk assessment, timely access to behavioral health care, and care coordination with local primary care and social service providers. For example, a rural FQHC provider may partner with or formally contract with a CCBHC provider for behavioral health services as part of their care coordination and collaborative care efforts.

In 1977, Congress established the Rural Health Clinic (RHC) Service Act to address the needs of medically underserved residents. RHC staffs are comprised of physicians, physician assistants, nurse practitioners, certified nurse midwives, clinical psychologists, and clinical social workers. RHCs receive an enhanced reimbursement rate for providing Medicare and Medicaid primary care and preventive health services. According to the [National Association of Rural Health Clinics](#), RHC practitioners can provide mental health and substance use disorder treatment through general case management services (e.g., chronic care management, general behavioral health integration, and psychiatric collaborative care models).

**The Role of Rural Primary Care Providers in Serving Individuals with SMI**

Although these federal initiatives have increased access to behavioral health care, primary care is still the main access point of behavioral health service delivery for rural residents with SMI. One strategy to increase access to behavioral health services for individuals with SMI is to expand rural primary care providers’ knowledge of, and comfort level with, screening, evaluating, and treating mental health conditions in their patients. As noted earlier, primary care physicians practicing in rural regions have higher rates of diagnosing and treating patients with mild to serious behavioral health needs (e.g., anxiety disorders, attention deficit/hyperactivity disorders (ADHD), SMI (including bipolar disorder and depression), and substance use disorders) than do primary care physicians practicing in urban areas (Beck, et al., 2019). Patients with mild behavioral health needs can typically receive adequate levels of behavioral health treatment and monitoring by their rural primary care provider. South Dakota, for instance, trains primary care providers in the delivery of behavioral health services for individuals with SMI, including screening, evaluating, and prescribing medications for psychiatric illnesses.

The Rural Strategies Expert Panel identified that rural primary care providers providing treatment for patients with more complex mental health needs can collaborate with specialty mental health providers (e.g., psychiatrists) through an innovative, distance-health education model known as [Project ECHO](#) (Extension for Community Healthcare Outcomes). Developed in 2003 by Sanjeev Arora, M.D., M.A.C.P., F.A.C.G. at the University of New Mexico Health Services Center, Project ECHO connects specialists to primary care clinicians in rural and underserved areas to improve accessibility to care and treatment outcomes. Project ECHO uses a tele-mentoring and case-based learning model to enhance primary care providers’ confidence in identifying and treating patients with complex health care needs, including Hepatitis-C, asthma, cardiovascular conditions, rheumatoid arthritis, HIV/AIDS, pediatric obesity, chronic pain, mental illness, and substance use disorders. The Project ECHO model is usually supported at an academic medical center, or through a combination of public and private partnerships, which are referred to as a “hub.” These hubs provide tele-mentoring to community-based primary care providers, referred to as the “spokes.” Project ECHO also provides an effective model for addressing the needs of racial and ethnic minority populations in rural areas.
Research indicates that racial/ethnic minority rural populations experience more adverse social determinants of health that contribute to poorer mental health outcomes, especially individuals with SMI. AI/AN populations account for 54 percent of the population living in rural counties (Deewese, et al., 2017). According to the U.S. Department of Health and Human Services’ (HHS) Office of Minority Health, American Indian and Alaska Native (AI/AN) populations have a shorter life expectancy, higher rates of poverty, and lower household incomes when compared to the general population (HHS Office of Minority Health, 2021). These SDOH have a consequential impact on mental health outcomes. To illustrate, recent national behavioral health data show that nearly 25 percent of AI/AN adults report they have had a mental illness within the past year, and an additional seven percent report having an SMI (HHS Office of Minority Health, 2021). Approximately six percent of AI/AN adults say they have had a co-occurring mental health and substance use disorder within the past year (Park-Lee, E., et al., 2018).

The success of Project ECHO has been replicated across the nation, with some programs having a rural behavioral health component, including those in Alaska, Hawaii, New Mexico, North Dakota, and Texas. New Mexico’s Project ECHO initiative for AI/AN populations is highlighted in the Spotlight section below. The University of New Mexico makes information available for providers and other stakeholders interested in joining or starting an ECHO.

**Spotlight on the University of New Mexico’s Mental Health and Resilience TeleECHO**

To better support the integration of health and mental health needs of the AI/AN population living in rural and remote areas, the Indian Health Service (IHS), a federal agency devoted to providing health services to AI/AN communities, and the University of New Mexico launched the Mental Health and Resilience TeleECHO program in 2020. The special-population-focused TeleECHO aims to create and build capacity to support both primary care and behavioral health providers (e.g., physicians, nurse practitioners, nurses, psychiatrists, psychologists, social workers, counselors, and community health workers) in treating mental health disorders in AI/AN populations. At the same time, it aims to build a national provider network to establish peer-to-peer sharing for those serving AI/AN communities. For example, the Mental Health and Resilience TeleECHO focuses on the value of cultural health practices, such as the use of traditional healing, to engage AI/AN patients in their treatment processes.

**Co-located service models** are another way that primary care and behavioral health care can be effectively integrated to reduce rural and remote health disparities and increase access to comprehensive services. Co-located sites can be a particularly useful tool for mental health professionals to consult with primary care providers, police, first responders, and other social service providers in delivering accessible and integrated services (Martone, K., personal communication, October 21, 2020). Examples of other services located at the site might include dental care, child welfare and family services, housing supports, prenatal care, and employment training services. Benefits of providers being co-located include greater interaction and communication among professionals, including providing patients a warm hand-off between providers, collaborating about referrals and treatment planning to ensure continuity of care, and sharing the same health information platform to access medical records. The co-located model also allows patients to have greater access to multiple providers in one location, reducing transportation barriers and eliminating exposure to stigma associated with receiving behavioral health services. The University of North Dakota developed a program for opioid use among geriatric patients and is considering the collaborative care model to train primary care providers on treating SMI. Through this potential program, there will be an opportunity to train paramedics to increase outreach, provide chronic care disease management, and receive mental health training (e.g., related to suicide prevention and Crisis Intervention Training) (McLean, A., personal communication, January 12, 2021).

Working with primary care providers in a co-located environment is very helpful in increasing the number of individuals served. Personal connections are leveraged among staff to quickly connect clients with services for both physical and behavioral health...
This collaboration also prevents duplication of work to maximize available resources. Effective collaborative care is demonstrated by targeting primary health providers in instructing how to notice behavioral health needs and make referrals (Tupa, L., personal communication, October 21, 2020). Often, primary care providers do not have the knowledge of where to refer individuals or how to begin their mental health care. However, building behavioral health literacy within the provider community, as well as within other community organizations and members, allows for a shift in access to services and an expansion of a provider’s referral network. A program in East Texas has an established collaborative care program that is spotlighted below.

**Spotlight on South Carolina’s Highway to Hope (H2H) Project**

In 2009, the South Carolina Department of Mental Health received a private donation to launch a mobile mental health response program called Highway to Hope in Charleston and Dorchester Counties. Initially, the H2H program consisted of one repurposed recreational vehicle (RV), but the success of the program led SCDMH to secure additional funding to expand to nine RVs serving nine additional rural counties that are primarily agricultural and fishing communities. The H2H RVs park at different locations throughout these counties and provide a full range of mental health and primary care services, including crisis intervention, psychiatric assessment, case management, and basic healthcare services. The H2H team includes an advanced practice nurse (APRN) to provide primary care and medication, along with psychiatrists, mental health professionals, and peer support specialists. There is also a primary care location at some of the mental health centers in the region, with an APRN included to provide integrated care. Feedback shows that the primary care relationship has worked well, particularly given existing relationships with primary care in rural communities (Blalock, D., personal communication, December 16, 2020). H2H partners with primary care providers to receive referrals for clients in need of mental health services. H2H also partners with EMS to divert individuals without primary health issues to an RV’s services. The RV can then utilize telehealth to provide mobile crisis services and give recommendations for further care.

**Spotlight on an East Texas Provider’s Partnership with University of Texas at Tyler’s Nursing School**

At True North Clinic, a University of Texas at Tyler Special Health Resources practice partnership FQHC, is co-located in the same building as Anderson Cherokee Community Enrichment Services (ACCESS), the local Mental Health Association (MHA) for rural counties in East Texas. The University of Texas at Tyler graduate nursing students provide additional support and clinical services at the co-located clinic. This partnership has made a significant impact on individuals’ abilities to access mental health services. Through collaboration and co-location, primary care access has increased for mental health clients at the MHA, and referral from primary care to mental health services has increased. When a patient visits the clinic for primary care services, the stigma of, and aversion to, receiving mental health care are reduced when mental health services can be easily accessed during the same appointment in the same building. Roxanne Dudley, a nurse practitioner who formerly provided behavioral health services at this site noted that the co-location was particularly helpful in avoiding the challenges of stigma, especially in the African American and Hispanic communities (Dudley, R. personal communication, January 22, 2021).
Integration of Physical and Behavioral Health Key Lessons:

» Effective collaborative care is implemented by training primary care providers to identify and understand an individual’s behavioral health needs and make appropriate referrals. In rural areas, primary care providers play a large role in delivering behavioral health services to individuals with SMI, including prescribing/dispensing and monitoring medications like clozapine and long-acting injectables. Integrated, co-located, and collaborative care models are effective strategies to increase collaboration between primary care and behavioral health providers. Often, primary care providers and behavioral health providers do not know where to refer individuals to services beyond their scope of practice. Primary care providers need this knowledge to support individuals as they begin their mental health care journey. Access to behavioral health services in rural areas can be achieved by increasing knowledge, comfort level, and competency among rural primary care providers to serve individuals with SMI. Providing outreach between the provider community and other community organizations allows for a shift in access to services and an expansion in the referral networks.

» Tele-mentoring models, such as Project ECHO, support the integration of behavioral health services within primary care settings by improving accessibility of care and providing quality behavioral health treatment. This distance-health mentoring and case-based learning model provides support and guidance to rural practitioners working to bridge their competencies for treating patients with complex mental health conditions. That leads to increased access to quality behavioral health treatment.

Use of Telehealth and Availability of Broadband

The advancements made in telehealth and telemedicine have been the driving force in reducing rural behavioral health disparities by expanding access and quality of care for rural adults with SMI. However, where broadband access is limited or nonexistent in rural and remote areas, many of these services are unavailable. It is important that policymakers and providers take steps to improve the availability of telehealth services in rural and remote areas.

According to the American Medical Association, telehealth is defined as the broad use of electronic and telecommunications technologies to provide remote healthcare services. Examples of telehealth services include real-time video conferencing, audio-only access in situations where broadband access is limited, remote patient monitoring, store-and-forward (gathering patient data that are later sent to a HIPAA-secured platform), and patient or family education (American Medical Association, 2020). Telemedicine is the practice of medicine using technology to deliver care at a distance. Telepsychiatry is a subspecialty of telemedicine in which a psychiatrist delivers a range of mental health services through telecommunications to a patient who is located at a distant site. Telemental health is a subspeciality in which other members of the team, such as peer specialists, social workers, and psychologists, deliver care virtually.

Telehealth and telemedicine have a range of benefits for individuals with SMI in rural and remote areas, including reducing a patient’s transportation barriers (e.g., extensive travel time to and from office visits, geographic and inclement weather, and wear on an individual’s vehicle); minimizing the need for time off from work and/or arranging for child/family-care services for appointments; and improving timely access to care that is otherwise not available in an individual’s community. These services may involve psychiatric assessment, psychotherapy, medication management, and patient or family education. Telepsychiatry also supports primary care providers at a distant location for mental health consultation. As previously noted, rural adults typically only have behavioral health care access through their primary care provider. The incorporation of telehealth and telepsychiatry services in primary care settings allows for integration of care while also providing patient-centered care. Primary care providers can also collaborate virtually with psychiatrists to diagnose, treat, and manage the health of rural individuals with complex mental health symptoms.

To support this evidence-based practice, the APA has developed a Telepsychiatry Toolkit as a resource for psychiatrists who want to learn more about this type of practice. Topics covered in the toolkit include background information, clinical/practice
issues such as practicing in rural and remote settings, state licensure and reimbursement, legal issues, and technological considerations. The toolkit is updated periodically to reflect new and emerging practices and topics.

In part to adhere to social-distancing requirements during the COVID-19 pandemic, State Mental Health Authorities (SMHAs) and clinicians have increased their use of telehealth and voice-only telehealth services to deliver mental health services to individuals with SMI. After years of reluctance to incorporate telehealth services into their practices because of fears that relationships between individual and provider will be hindered, many SMHAs have found that providers and individuals alike enjoy using telehealth services. The provision of telehealth services has also been made easier by relaxed federal rules related to how telehealth services are delivered, and who can provide them. SMHAs have heard that the no-show rates are minimal, as people no longer need to overcome barriers (including transportation) to receive services. The increased use of telehealth has also led to more engagement with an individual’s familial supports since everyone is home to participate in telehealth appointments. South Carolina Department of Mental Health Deputy Director Deborah Blalock told the authors of this report that, “if there is a silver lining to this whole pandemic, it has been to force the hand of telehealth and move us into the next century” (Blalock, D., personal communication, December 16, 2020). Multiple states and providers are leveraging telehealth to better reach individuals in rural and remote areas. Examples from Oklahoma, South Carolina, and Montana are included in the Spotlights below.

**Spotlight on Oklahoma’s Grand Lake Mental Health Center Tablet Program**

The Grand Lake Mental Health Center (GLMHC), a CCBHC in northern Oklahoma, operates 22 behavioral health clinics in 12 counties, covering an area of 10,000 square miles. In 2016, Oklahoma’s SMHA incentivized providers to develop alternatives to inpatient care to reduce hospitalization rates across the state by allowing CMHCs to use funds that would normally support hospitalization for community-based services. GLMHC opted to reallocate these funds to enhance crisis services in its catchment area.

As part of their crisis services enhancement efforts, GLMHC began distributing internet-connected tablets at the time of discharge to all recipients of crisis services at their facilities. The tablets are set up to allow individuals to immediately connect to qualified staff, 24/7, at GLMHC’s centrally located Intensive Outpatient Center. GLMHC also has expanded the program to provide tablets to law enforcement in the region and to local emergency rooms. In its first year of operation, GLMHC distributed 496 tablets to consumers, local police and sheriffs’ departments, and local emergency rooms. Officers in GLMHC’s catchment area have tablets that allow them to immediately connect to mental health providers to help triage crisis situations in the field, reducing the need for officers to transport individuals in crisis. In 2015, prior to the launch of this program, more than 1,100 individuals were admitted to inpatient beds in the region, almost all of whom were brought in by police. After GLMHC opened new crisis facilities, allowing officers to utilize the tablets to facilitate quickly dropping off individuals, the number of patients admitted to an inpatient crisis bed in 2020 plummeted to one person (Cantwell, J., personal communication, April 14, 2021). In addition, the tablets offer an app for officers to immediately connect to behavioral health providers that specialize in providing crisis services to law enforcement. Now, law enforcement officers have a way to reach out for help if they need to speak with someone after witnessing a traumatic incident, and to deal with any personal or professional challenges that have an impact on their own mental health (Slatron-Hodges, C., personal communication, March 23, 2021). Reliable internet connectivity can be a challenge in rural Oklahoma and is often quite expensive. To overcome this barrier, GLMHC petitioned to have their crisis services be recognized as first responder services. This designation allows the tablets to connect to the internet via FirstNet, an independent authority within the U.S. Department of Commerce that operates a nationwide broadband network for first responders. More information on how FirstNet helps first responders is available online.
Spotlight on South Carolina's Use of Telehealth in Mobile Crisis Response and Emergency Rooms

South Carolina provides mobile crisis response teams in each of its 46 counties, where master’s-trained clinicians are available to respond to crises 24/7. In Charleston County, a highly populated and large county with many rural areas, the mobile crisis response team initially only received an average of five calls per month from local law enforcement or EMS. After discussions between the county and the EMS teams, it was revealed that EMS did not utilize the services of the mobile crisis response teams because it often took too long for the mobile crisis teams to respond. EMS teams found it was easier and faster to transport an individual in crisis to an emergency room at a nearby hospital. This happened, despite ERs being more costly and more likely to result in an inpatient admission, and not being the most appropriate setting unless the individual in crisis is also experiencing a medical emergency or needing more comprehensive assessment. The EMS team and the county discussed using technology to improve response times, and a partnership between the state and the EMS program in Charleston County was formed. The result of these discussions is a formalized process that begins when EMS is called to respond to a psychiatric emergency—they first evaluate whether the crisis is medical or truly psychiatric in nature. If medical, the ambulance will transport the individual to the appropriate level of care; if psychiatric, the EMS crew calls their supervisor to respond in an SUV. Once the supervisor responds, the ambulance is sent back out into service, and the supervisor connects the individual in crisis through the VIDYO telehealth app on their tablet to the mobile crisis response team. The mobile crisis response team is then able to evaluate and triage the crisis virtually and make recommendations on next steps. Service is immediate, allows for more appropriate use of EMS time and resources, and reduces the number of referrals to emergency departments (EDs) in the county. This approach also reduces the need for mobile crisis teams to travel long distances to reach individuals experiencing a crisis and allows individuals in crisis to receive services quickly. Since this program has been implemented, the county has experienced an increase in calls from EMS to mobile crisis from five times per year to nearly 85 per month, and the county has seen a 58 percent decrease in ED use for individuals in psychiatric emergencies (Bank, R., Blalock, D., personal communication, July 7, 2020). In addition to the mobile crisis response program, South Carolina is using telehealth to provide psychiatric services in EDs across the state.

Reaching people in crisis in the community means meeting them where the crisis is occurring. Often, people will seek out care in EDs at local hospitals. This can serve to overwhelm EDs, result in costly services, and prevent timely treatment for the individual in crisis. Recognizing this as an issue, and not the most appropriate use of EDs, South Carolina’s Department of Mental Health has supported the use of telepsychiatry in EDs since 2009. The state has contracts with 25 EDs across the state to provide telepsychiatry services to individuals experiencing psychiatric emergencies. These services are available from 7:00 am to midnight, 365 days per year. Rather than take resources away from serving medical emergencies in the ED or have the individual in a mental health crisis waiting in the ED, the ER doctors put psychiatric patients in a virtual line to receive telepsychiatry services from one of a group of 25 psychiatrists. Since its implementation, nearly 70,000 patients have received this service. Research on the program shows that patients who have participated in this program are twice as likely to attend their follow-up appointments at community mental health centers, and approximately half as likely to return to the ED or require psychiatric hospitalization when compared to those who receive traditional psychiatric services through the ED (Bank, R., Blalock, D., personal communication, July 7, 2020).
Spotlight on the Billings Clinic’s Eastern Montana Telemedicine Network

The Billings Clinic is Montana’s largest health care system. It has 14 regional partnerships, including management agreements throughout Montana, Wyoming, and North Dakota, including with 13 Critical Access Hospitals and one outpatient clinic. The Billings Clinic in Billings, Montana provides administrative and operational support to the Eastern Montana Telemedicine Network (EMTN), which is “a partnership of local, regional, and national healthcare organizations… that provide access to critically needed clinical services through state-of-the-art telemedicine technology” (Billings Clinic, 2021). The EMTN consists of 41 telemedicine sites in 31 cities across the three-state region.

Broadband Technology in Rural and Remote Areas of the U.S.

Innovations in technology and improvements in technological infrastructure offer an opportunity for individuals in rural and remote communities to better access needed behavioral health services. However, the availability of broadband technology in rural and remote areas of the U.S. remains limited, thereby reducing accessibility to telehealth services. According to the Federal Communications Commission (FCC), the minimum fixed-broadband requirement is 25 Mbps download speed, and 3 Mbps upload speed. Data from the FCC show that this minimum level of broadband access has significantly expanded across all areas of the U.S., including rural areas, since 2014. However, access in rural areas still significantly lags behind urban connectivity (Federal Communications Commission, 2020).

In addition to calculating rates of fixed broadband availability across the U.S., the FCC also monitors the availability of cellular technology. The minimum performance benchmark for mobile services is 4G LTE, within minimum speeds of 5 Mbps download, and 1 Mbps upload (FCC, 2020). This level of mobile access is more widely available across all areas of the U.S., including rural and remote areas, when compared to broadband services (FCC, 2020).
While broadband connectivity, both fixed and mobile, is improving and appears to be available throughout both rural and urban areas of the U.S., the actual availability of broadband in these areas may not align with the information available from the FCC. According to a 2018 Bloomberg report, the FCC’s connectivity map, which maps the availability of broadband access by address, is inaccurate because it relies on Census blocks to calculate connectivity at a given address. Within Census blocks, which tend to cover small areas in urban communities and large tracts of land in rural areas, the availability of broadband can vary significantly. As the report says, “just because your closest neighbors have broadband, it doesn’t guarantee you’ll have any” (Pegoraro, R., 2018).

The maps developed by the FCC provided below show how much of the U.S. is connected to fixed broadband, as of 2017 (Federal Communications Commission, 2017). Areas in yellow have no broadband connectivity; the maps indicate that much of the rural south, west, and Alaska have little to no broadband connectivity.

Opportunities exist for policymakers looking to enhance a state’s rural broadband connectivity. In March 2020, Congress signed into law the CARES (Coronavirus Aid, Relief, and Economic Security) Act, providing economic relief totaling more than $2 trillion to address the issues caused by the COVID-19 pandemic. Included in the CARES Act is the Coronavirus Relief Fund (CRF), which designates $150 billion to cover costs associated with the pandemic, including the enhanced need for broadband access,
especially in rural and underserved areas. Several states took advantage of the funding to enhance their state’s broadband connectivity. Idaho, Iowa, Missouri, Oregon, and Vermont allocated CRF funding for broadband grants to specifically address gaps in telehealth services. Vermont, a state with prior broadband grant funding, is using CARES Act funding to subsidize the cost of internet connectivity for qualifying households. It also reserved $9 million “for health management programs, including COVID-19 outreach and education” to expand access to telehealth services throughout the state (Pew Charitable Trusts, 16 November 2020). Missouri expended “$5.25 million to purchase 12,500 hotspots for FQHCs and CMHCs to support access telehealth services for vulnerable populations” (Pew Charitable Trusts, 16 November 2020). Additionally, states without prior broadband grant funding, including Delaware, Idaho, Kansas, Mississippi, New Hampshire, and South Carolina, are using CARES Act funding to expand their states’ residential broadband infrastructure, allowing more individuals with SMI access to reliable broadband services, which will in turn enable greater access to telehealth services. Funding opportunities beyond the CARES Act are provided in the Spotlight section below.

**Spotlight on the USDA’s ReConnect Loan and Grant Program**

State and local authorities can apply for funding through the U.S. Department of Agriculture’s (USDA) ReConnect Loan and Grant Program, which is designed to expand broadband infrastructure and deployment in rural areas with a maximum broadband connectivity of 10 Mbps/1 Mbps. In 2019, the USDA made available $400 million in funds for a variety of stakeholders, including cooperatives, non-profits, associations; for-profit corporations and limited liability companies; states, territories, local governments, and their subdivisions; and Native American Tribes. Funding is available through three award mechanisms: loans, grants, and a hybrid loan/grant program.

In the 2019 round of funding, 41 entities, including local municipalities and telecom companies received grant funding to invest in expanding broadband connectivity in rural areas. While the average amount of funding per grantee was nearly $6 million (with a maximum grant of $23,476,478), three grantees received less than $1 million (USDA, 2021a). Grantees plan to use the funds to make significant impacts in the availability of broadband in their local, rural communities (USDA, 2021a):

» Osage Municipal Utilities in Mitchell County, Iowa received a $397,749 grant from the USDA’s ReConnect Loan and Grant Program “to deploy Fiber-to-the-Premise and Hybrid-Fiber-Coax infrastructure to serve farms, residents, and businesses” in rural areas of the county. With this funding, Osage Municipal Utilities will expand broadband to 151 households over nearly 11 square miles.

» Monhegan Plantation, a rural municipality with a population of 54 on an island off the coast of Maine, received a $626,298 grant from the ReConnect Loan and Grant Program. The funds are being used to install a fiber network to 40 underserved households, an educational facility, and a critical community facility across the island.

» Another town in Maine, Roque Bluffs, received $893,170 in grant funding from the ReConnect Loan and Grant Program. Roque Bluffs is using the funds to provide broadband access to 166 households, covering nearly the entire population of the town, over an area of 9.5 miles.

**Spotlight on the FCC’s Rural Digital Opportunity Fund**

In February 2020, the FCC voted to approve $20.4 billion in funding “designed to ensure that residents in rural areas of the U.S. have access to broadband internet connections” (Moyer, 2020). The Rural Digital Opportunity Funds (RDOF) will be made available over the next 10 years to broadband providers, including cable providers, wireless companies, and electric cooperatives, which have traditionally been excluded from government subsidies. These companies can work with their state and local policymakers and leaders to bring broadband to “rural areas across the
country where residents currently lack access to adequate broadband and would deploy high-speed broadband to millions of rural Americans in an efficient and effective manner” (FiberRise, 2020). Eligible areas include those without current access to the minimum broadband standards (25/3 Mbps) as determined by the FCC. The money for the RDOF will come through the Universal Service Funds, which is not dependent on legislative appropriations (FiberRise, 2020). The FCC will rely on a reverse auction process, where interested service providers “can participate in the auction and bid for a percentage of RDOF funds to serve one or more eligible areas” (FiberRise, 2020). More information about the RDOF program can be found online.

Use of Telehealth and the Availability of Broadband Key Lessons:

» Telehealth is an important tool to increase accessibility to services. Benefits include: reducing a patient’s transportation barriers; minimizing the need for time off from work or arranging for child/family-care services; improving timely access to care that is otherwise not available in a patient’s community; integrating behavioral health and primary care; enhancing the behavioral health workforce, since clinicians do not have to live or work in rural areas to provide consultation or direct services; and reducing the social stigma commonly associated with mental health care.

» To accommodate social distancing requirements due to COVID-19, voice-only and telehealth adaptations allowed services to continue during the pandemic. This flexibility demonstrated telehealth’s utility in responding to behavioral health needs during a crisis. Despite worries that telehealth would impede the client-provider relationship, many SMHAs found that individuals and providers alike appreciated this flexibility and saw improvements in attendance and engagement. During the pandemic, many states also waived licensing requirements for psychiatrists, psychologists, nurses, and social workers to permit provision of telehealth across state lines. The licensure waivers permitting practice across state lines was especially useful in rural areas where it expanded the available workforce. Many states have entered into multi-state compacts recognizing licenses across state borders (HHS, 2021). Panel members thought the ability to use voice-only telehealth was important in helping reach individuals with SMI in rural areas with limited broadband internet access. But panelists also cautioned that more research on the use of voice-only telehealth is needed to determine how much and when voice-only telehealth is appropriate for individuals with SMI.

» The COVID-19 pandemic highlighted the need for universal broadband connectivity as more people relied on the internet for work, school, and access to mental and behavioral health appointments. It is important to initiate strategic partnerships with public and private stakeholders to meet this need. Examples include the USDA’s ReConnect Loan and Grant Program, which provides opportunities for states to expand broadband infrastructure and deployment in rural areas, and the South Carolina Department of Mental Health’s collaboration with other state agencies, including the state Department of Education, to lobby its legislature for expanded broadband connectivity.

» Providers and individuals with SMI in rural areas often have limited access to broadband connectivity for telehealth services, due to the availability and/or the high cost of accessing broadband. Rural providers that offer behavioral health crisis services, like Grand Lake Mental Health Center, may petition their states to become designated as first responders, which allows them to access FirstNet, the nationwide broadband network that connects first responders through an LTE network designated for public safety communications. FirstNet is also making its services more ubiquitous in rural areas by providing high-powered cell towers with greater reach and satellite solutions. Being designated as a first responder will also allow providers to access special cellular plans through private companies, including Verizon (Frontline) and AT&T, that provide enhanced cost savings for providers that are designated as first responders.

» For states able to access funding and capital to improve their broadband capabilities, it is important that long-term solutions be prioritized over short-term efforts. The PEW Charitable Trust notes that many states “have directed
significant CRF resources toward providing temporary help, such as hotspots and public Wi-Fi access, for people who lack reliable home internet connectivity.” While these short-term investments are important and helpful in overcoming some connectivity challenges during the COVID-19 public health crisis, once the urgent need for these services lessens, individuals in rural and remote communities will still have a need to access reliable residential broadband. This is especially important for individuals with SMI who need to access telehealth services with a level of privacy that cannot be achieved when accessing public Wi-Fi services at the local library or coffee shop. PEW notes that successful broadband expansion programs undertake extensive pre-emptive planning and stakeholder engagement, conduct studies to assess feasibility, and track progress to ensure goals and community needs are being met.

» In response to the COVID-19 pandemic, and the state’s anticipated CRF allocations, Vermont developed an Emergency Broadband Action Plan (EBAP), which identifies the state’s short- and long-term needs so as to maximize the effectiveness of the CRF funding. Vermont’s objective is “to connect the unconnected to the internet in Vermont.” If the state is successful in meeting its goal, Vermont will have successfully deployed universal access to broadband at the speed of at least 25/3 Mbps, which is the minimum connectivity speed prescribed by the FCC. While the EBAP was created in response to a significant public health emergency, with the expectation of a large infusion of funds, PEW suggests that “states can use this same approach to deploy smaller amounts of money in non-emergency circumstances” (Pew Charitable Trusts, 16 November 2020).

» Significant expenditures are not necessary to make a big impact, as evidenced by the work of Osage Municipal Utilities, Monhegan Plantation, and Roque Bluffs. Solely through their ReConnect funds, they have made significant investments in their communities’ broadband infrastructure.

Transportation
Access to affordable and dependable transportation is an SDOH that impacts healthcare, economic, educational, and social/recreational opportunities in rural communities. Residents in rural and remote areas more often rely on personal vehicles for transportation needs than do residents of urban areas. However, many rural adults may not have the economic means to afford and maintain a vehicle, and public transportation may be difficult to access, time consuming, and less reliable when compared to more metropolitan and urban areas. Physical landscapes, such as canyons, mountains, waterways, and inclement weather also limit transportation options for rural and remote communities. These barriers can result in people avoiding routine mental health care, long wait times to receive emergency services, and an over-reliance on first responders to transport individuals experiencing a mental health crisis to necessary treatment.

Rural and remote areas, and many states, including Montana, rely on the use of telemedicine to offer mental health services to individuals with SMI, thereby eliminating the need for transportation to routine behavioral health appointments. As described in more detail in the Telehealth and Broadband section, the EMTN has found significant advantages to providing telehealth services to individuals in rural and remote areas of its state, and neighboring states (including North Dakota and Wyoming). According to EMTN, individuals in its service area “would have to travel 365 miles to get the same services at [the] Billings, Montana clinic;” and, according to the program’s 2017 annual report, “patients saved an estimated $1.2 million in out-of-pocket expenses that would be spent traveling for mental health services” (Bryan, 25 July 2018). When individuals do not have to travel significant distances, “they are more likely to show up for follow-up appointments and maintain continuity of care” (Bryan, 25 July 2018). Allowing providers to practice across state lines improves access for individuals in rural and remote areas. Additional
strategies include bringing services to people where they live, and developing transport services that offer safe, reliable, and relatively comfortable rides for individuals in need of behavioral health services, each of which are spotlighted below.

**Spotlight on Tennessee’s Project Rural Recovery**

The Tennessee Department of Mental Health and Substance Abuse Services launched the [Project Rural Recovery](#) program in December 2020. Funded through a five-year SAMHSA grant, Project Rural Recovery brings integrated behavioral and physical health mobile care services to 10 rural counties in two recreational vehicles (RVs). The RVs park at various sites in the communities, including in the parking lots of grocery stores, shopping centers, libraries, health departments, and near or in parks. The multidisciplinary mobile health team, comprised of a program director, nurse practitioners, behavioral health clinicians, integrated care community specialists/certified peer recovery specialists, and mobile office managers provides an array of services, including individual/group counseling, suicide risk screening, psychotropic medication dispensing, tobacco/nicotine cessation, primary health screenings, and access to nutrition and housing services, all at no cost to the patient. The mobile health team refers patients to community providers for specialty services that cannot be provided on the mobile bus. For an informative video on Project Rural Recovery, check out the video to the right.

Link: [https://www.youtube.com/embed/JWTRl3_1Mqg?list=PLYFjmfJHyPrBf0v_JR_7goXc2gWg_UVKJ](https://www.youtube.com/embed/JWTRl3_1Mqg?list=PLYFjmfJHyPrBf0v_JR_7goXc2gWg_UVKJ)

According to Jessica Ivey, L.M.S.W., Director of Strategic Initiatives at the Tennessee Department of Mental Health & Substance Abuse Services, “Project Rural Recovery affords us the opportunity to meet Tennesseans in the rural communities where they live and work, and where there is often a lack of services. In the first few months of implementation, we saw many individuals who had not been connected to care, both behavioral and physical health care, in some time because of various barriers, including transportation or accessibility. Thanks to Project Rural Recovery and the hard work of our partner providers, patients are able to get the care they need for free. Our mission at the Tennessee State Department of Mental Health and Substance Abuse Services is to create collaborative pathways to resiliency, recovery, and independence for Tennesseans living with mental illness and substance use disorders, and Project Rural Recovery is just one of the many projects that allows us to serve Tennesseans so that they can thrive. We are thankful to our funders and providers for this opportunity.” (Ivey, J., personal communication, October 21, 2021)

**Spotlight on Colorado’s Secure Transport Program at the San Luis Valley Behavioral Health Group**

In 2017, Colorado passed SB17-207, which, in part, funded two transportation pilot sites, one in the San Luis Valley and one on the Western Slope of Colorado. The pilots, through the Office of Behavioral Health, contributed funds to secure and enhance a fleet of vehicles to make them safe for specially trained drivers to transport individuals in crisis to care, or to work with a transportation agency to provide the necessary vehicles and drivers. The initial cost to start the San Luis Valley program was just under $225,000. (Lee, M., personal communication, October 21, 2021)
communication, March 10, 2021). Unfortunately, due to state budget cuts resulting from the COVID-19 public health crisis, the funding from the state agencies was stalled. However, Beacon Health Options, the Administrative Service Organization (ASO) contracted to administer the crisis program in the San Luis Valley, stepped up to fill the void to continue its support of the transportation program that covers six counties over 8,700 square miles. Additionally, in 2019, Colorado began work on a secure transportation bill for Colorado Department of Public Health and Environment (CDPHE) to create a new license type for secure transports, including equipping vehicles and training drivers, and this bill was passed in the 2021 legislative session.

To cover the cost of this program, Beacon Health Options reduced some of their own organization’s administrative fees. With the savings from the reduced fees, in addition to the start-up funds from the State, the San Luis Valley Behavioral Health Group continued its transportation program: a private security company that consists of former law enforcement officers to serve as drivers; each secure transport consists of two drivers for safety. In addition, the agency continued using the two Ford Explorers retrofitted with Plexiglas to create a secure area in the back for the individual in need of transport. Cameras were also added to the vehicles to ensure that events were recorded at all times to verify the safety of the drivers and the passenger. The contract San Luis Valley Behavioral Health Group has with Beacon Health Options requires that individuals who are accepted to a hospital must be on the road within 30 minutes to ensure the bed at the hospital remains available. Not only does this program provide safe, timely transport to and from inpatient facilities, the program is designed with recovery and comfort in mind.

All drivers are trained in CPR and Mental Health First Aid and are given additional training on how to build rapport with their clients. In addition to driver training, the transport service provides snacks and cold drinks for riders to consume, and blankets to use during their ride. Upon discharge from inpatient care, the secure transport program brings individuals back to the wellness center to re-engage individuals in community-based treatment. The San Luis Valley Behavioral Health Group also provides cellular phones, clothing, and food. This approach is much more comfortable and personal and helps to reduce the trauma and eliminate the stigma of transport to an inpatient facility.

This program has also helped to improve the agency’s relationship with local law enforcement, as law enforcement is no longer the first call to respond and transport to inpatient care an individual in crisis.

Transportation Key Lessons:

» Bringing mental health services and treatment opportunities directly to individuals reduces a client’s need for a private vehicle and eliminates transport time, making it more convenient for individuals to attend routine mental health services. State, local communities, and healthcare agencies are coming together to mobilize mental health services in rural and remote communities. South Carolina, Tennessee, Mississippi, and Texas have had success in implementing mobile treatment services in rural areas where services are brought directly to individuals at accessible locations their own communities.

» Allowing providers to practice across state lines increases the availability and accessibility of behavioral health services to individuals with SMI living in rural and remote areas.

» Certifying members of the local community to become secure transport drivers is a strategy for reducing transportation challenges. Investing in securing and accommodating a fleet of cars to transport people to mental health services, including crisis services, and training citizens to become transport drivers can expand the availability of transportation options for individuals needing mental health services in rural and remote communities. Colorado recently launched a pilot program in two rural communities to create a fleet of secure transport vehicles and train drivers.

» Collaboration across multiple state agencies can increase access to high-quality services in rural and remote areas. Opportunity may exist where it is least expected, and relationships across seemingly unconnected state agencies can be
leveraged to help create and improve programs to better the lives of individuals with mental illnesses in rural and remote areas. For instance, Colorado’s Medicaid authority partnered with the state’s Public Utilities Commission to create a recovery-focused, secure transport program for individuals who need transportation to inpatient services.

» Travel to and from behavioral health appointments can be burdensome for individuals and their families as it can be inconvenient (especially if no public transit options are available), require significant time away from work and create the need for additional (often costly) childcare, and it can be costly in terms of gas mileage and wear and tear on a vehicle. When possible and appropriate, technology can be used to address these issues.

Economic Stability
As an SDOH, economic instability can be detrimental to an individual’s health, intersecting with poverty rates, educational attainment, employment status, and housing insecurity. The relationship between poverty and adverse mental health outcomes across the lifespan is well-documented (Yoshikawa, et al., 2012; Acri, et al., 2017). In 2019, nearly 17 percent of adults with SMI reported incomes below the federal poverty level (SAMHSA, September 2020). Disparities in poverty rates are more profound among minority populations living in rural counties. African Americans and American Indians and Alaska Natives (AI/AN) living in rural counties have the highest poverty rates in comparison to other ethnic and racial populations (31.6 percent and 30.9 percent, respectively) (USDA, 2019). Further, economic inequalities in rural and remote areas are associated with lower socioeconomic status, affecting educational attainment and employment earnings. Rural adults living in lower-income communities, predominantly located in the South, tend to have lower educational attainment (less than a high school diploma or equivalent) and are primarily working in the lower-paying resource-based sectors (agriculture, forestry, mining) and manufacturing. In 2018, the median earnings among rural adults 25 and older with a high school diploma or equivalent was $30,368 and $23,865 for those with less than a high school diploma (Farrigan, June 2021).

Unemployment and underemployment impact an individual’s economic stability and determinants of health, and SMI is associated with lower employment rates and income, according to data from the 2009 and 2010 NSDUH. Luciano and Meara (2014) compared employment status and income levels by mental illness severity—no mental illness, mild, moderate, and serious—among working-age adults 18 to 64 (Luciano, et al., 2014). Adults with SMI were found to have an employment rate of 54.5 percent in contrast to a 75.9 percent employment rate for adults with no mental illness (Luciano, et al., 2014). The employment rate for mild and moderate mental illness was 68.8 percent and 62.7 percent, respectively. Nearly 40 percent of employed adults with serious mental illness had incomes of less than $10,000 in contrast to 23 percent for working adults with no mental illness (Luciano, et al., 2014). These research findings illustrate the economic hardships that many adults with SMI face. Securing a living wage for rural adults with mental illness is further complicated by the low-income employment sectors common in rural and remote areas.

Additional factors contributing to rural economic disparities that interplay with educational attainment include the first onset of a psychiatric disability during late youth or early adulthood. The timing of the first episode of psychosis may also impact educational performance where under-resourced school systems are unable to support the mental health needs of students, and limited access to higher education opportunities further hinders upward mobility in the employment market. The Urban Institute estimates that about 41 million adults live more than 25 miles away from the nearest post-secondary institution, a circumstance referred to as a “higher education desert” (Rosenboom, et al., 2018). Of the 41 million, 3 million lack adequate broadband access to engage in online higher education programs, which further exacerbates the “digital divide.” These educational disparities further lead to economic inequality (Rosenboom, et al., 2018).

Rural homelessness and substandard housing quality are two compounding social determinants of health. Seven percent of the homeless population live in rural areas, according to the National Alliance to End Homelessness, and 4.5 percent of adults with SMI served by SMHAs experienced homelessness in 2019 (SAMHSA, 22 May 2020). Homeless advocates and researchers caution that rural homelessness is often underreported because of the “hidden homelessness” that typically occurs in rural areas. Many
rural homeless individuals are living out of sight because they are sleeping in camping tents set up in the woods, vehicles, RVs, sheds, or abandoned buildings that are not intended for human habitation, which are commonly referred to as “encampments.” Another subset of the rural homeless population is identified as “transient,” referring to individuals who do not have their own place to sleep long-term. A transient person may be doubling up with friends and family in a mobile trailer or “couch surfing”, leading to severely overcrowded and substandard housing conditions.

Given the nature of homelessness and that it falls within the jurisdiction of many federal agencies, the U.S. Interagency Council on Homelessness (USICH) was formed in 1987 under the executive branch to advance a national response to prevent and end homelessness. USICH, comprised of 19 federal agencies, coordinates an interagency response in identifying and aligning efforts of ending homelessness. In 2018, the USICH developed a report, Strengthening Systems for Ending Rural Homelessness: Promising Practices and Considerations, outlining the unique challenges of rural homelessness and system-level recommendations for resolving rural homelessness. The report’s recommendations include: engaging with nontraditional systems, faith-based organizations, and other natural partners to address gaps in resources; tapping into the community’s strong sense of helping families and neighbors; designing regionalized systems to increase capacity; implementing a coordinated entry point that promotes access to housing services; and developing innovative approaches to expand housing support services.

Rural communities have several distinctive barriers that intensify homelessness and substandard housing quality, including inadequate income due to the prevalence of low-paying wages in the rural industry sectors of agriculture, manufacturing, meatpacking, mining, fishing, and forestry. Access to reliable transportation is another barrier affecting employment and educational opportunities. Lastly, limited access to social service supports, such as childcare, healthcare, and behavioral health, may hinder a rural resident from securing and retaining employment.

Despite these rural economic adversities, promising SDOH research has found that interventions such as educational and employment opportunities, housing stability, and food security are linked to positive mental health outcomes (Alegria, et al., 2018). The following Spotlights highlight efforts in rural communities in Vermont and Tennessee, and a program from the USDA that provide interventions in employment, housing stability, and food security in service of improving mental health outcomes.

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**Spotlight on Pathways Vermont**

Building on the strong body of permanent supportive housing research, clinical psychologist Sam Tsemberis, Ph.D., developed the Housing First Program Pathways to Housing, in 1992, to address New York City’s chronic homelessness. Housing First is founded on the principles that permanent housing is a basic human right, housing options and support services should be consumer driven, psychiatric rehabilitation should be recovery oriented, and housing options should be integrated in the community to promote a sense of community engagement. Although most of the Housing First programs have been launched in metropolitan areas, Vermont implements a modified version of the Housing First model for rural areas, referred to as Pathways Vermont.

Pathways Vermont adapts a hybrid Assertive Community Treatment-Intensive Case Management Teams (ACT-ICM) and pilots telehealth services that augment in-person visits. This adapted model was incorporated due to the challenges of attaining the moderate to high fidelity ACT criteria (i.e., 1:10 staff to client ratio, a multidisciplinary team, shared caseloads) in geographically low populated areas. The adapted ACT-ICM model consists of service coordinators with a geographically based caseload with a 1:20 staff-to-client ratio and regional multidisciplinary specialists, including psychiatrists, nurses, employment specialists, digital literacy specialists, and peer support specialists. The service coordinators provide at least weekly in-person visits to offer supportive case management services, such as addressing housing issues, accessing community resources, and assisting with community integration. The regional multidisciplinary specialists provide services based on the client’s needs and interest. Employment specialists work with clients who express an interest in working.
The Pathways Vermont ACT-ICM model incorporates technology to reduce barriers (i.e., transportation, geographic challenges) to accessing behavioral health services. To bridge the “digital divide” clients are provided an in-home computer and internet access. A digital literacy specialist orients clients to video-conferencing platforms used for their telehealth/telepsychiatry appointments and provides ongoing technological support. Technology allows the Pathways specialists to reach more clients across a broader geographic area by minimizing travel time and maximizing time with clients. In addition, the staff use technology to convene care coordination meetings, promote team communication efficiency to ensure continuity of care, and support real-time crisis support. This innovative Housing First hybrid model achieved a housing retention rate of 85 percent over the course of a three-year study, which is consistent with research findings of Housing First models in urban settings (Stefancic, et al., 2013).

**Spotlight on Tennessee Homeless Solutions**

[Tennessee Homeless Solutions](THS), a rural, non-profit homeless assistance agency that serves 23 counties in the western, rural region of Tennessee, is a recipient of the U.S. Department of Housing and Urban Development’s (HUD) Continuum of Care (CoC) funding and Emergency Solutions Grants (ESG). The CoC funds are available to nonprofit providers, states, and local county governments to rehouse individuals and their families to minimize the burden and trauma of homelessness. The ESG formula grant program consists of an outreach program targeting unsheltered individuals experiencing homelessness, emergency shelter services, housing assistance and stabilization services, and rapid rehousing services. With this funding, in collaboration with the Tennessee Housing Department Agency, THS operates a 24/7 homeless hotline that assesses, triages, and refers callers to housing supports through maintenance of a housing and social services resource directory. The hotline serves as an entry point for accessing services to ensure a “no wrong door” approach. In addition, THS oversees several housing programs, including: the region’s CoC homeless strategic planning and development; a housing inventory; homeless assessment and data reporting; permanent supportive housing; and the Emergency Solutions Grants (ESG) program, which operates emergency sheltering and rapid rehousing programs in seven western counties. ESG caseworkers identify sheltered and unsheltered individuals who are at risk of homelessness to work on identifying stable housing options. The caseworkers provide clients with rental assistance, financial assistance, and housing support services. For example, a client may receive assistance with security deposits and utility payments acting as a “bridge” to sustain permanent housing.

**Spotlight on the USDA’s Rural Development Agency Single Family Housing Program**

Another federal initiative that supports housing infrastructure is USDA’s Rural Development. USDA’s Rural Development “offers loans, grants, and loan guarantees to help create jobs and support economic development and essential services, such as housing; health care; first responder services and equipment; and water, electric, and communications infrastructure” (USDA, 2021b). Rural Development also offers loan recipients and grantees technical assistance to help implement these economic development initiatives. As part of this effort, Rural Development offers a single-family housing program and multi-family housing programs.

The single-family housing program provides low-interest, fixed-rate loans and grants for rural residents with low-to-moderate income to rent, purchase, or build affordable homes, and to make health and safety repairs to their existing homes. In addition, the single-family housing program offers state-level competitive grants to public and private nonprofit organizations and federally recognized tribes for housing construction projects. The multi-family housing program provides affordable rental housing options through loans and grants for low-to-moderate income to rural residents, including
Economic Stability Key Lessons:

» Many adults with SMI who live in rural areas face consequential economic hardships impacting their physical, mental, and emotional well-being. Multiple pathways can be taken to target rural economic inequality, poverty, and homelessness to improve the trajectory of residents who are managing and recovering from SMI. These pathways include providing housing support services that reduce the risk of homelessness; embedding housing services with other support services such as case management and supported employment specialists; and securing employment that pays a livable wage.

Social and Community Context

As an SDOH, social and community context can be an influence as well as a barrier to behavioral health. Cultural and social characteristics shape and define local communities. Residents of rural and remote areas commonly describe their communities as having a strong sense of family connectedness and tight-knit communities. They describe a deep interconnection to their community and social organizations, such as churches, businesses, and schools, a sense of self-sufficiency with the prescribed social norm of “pull yourself up by your bootstraps” and deeply rooted local cultural values. For example, rural community members have a strong belief that neighbors should help neighbors in times of distress. These facets of rural living represent the strength and resiliency of many rural and remote communities.

However, as described throughout this document, rural life can also pose unique barriers, including: higher numbers of uninsured individuals, poverty, unemployment, and housing instability and homelessness; lower levels of educational attainment; limited educational and employment opportunities; decreased transportation options; barriers to broadband access; decreased anonymity; alcohol and opioid misuse; and insufficient access to healthcare, including behavioral health, and social services. These unique challenges are further compounded by the composition of rural populations. For example, one local community may welcome immigrants while another community may have less tolerance for immigrants.

Innovative partnerships that bridge behavioral health and the community to promote positive emotional, mental, and behavioral health are vital in the SDOH domain of social and community context. For example, our Expert Panel identified that faith-based and community-based organizations have a long-standing knowledge and familiarity with the local community. These organizations have established trusting relationships within the community and can serve as a connector to educate, promote, and encourage emotional, mental, and behavioral health to rural residents who may not otherwise seek out behavioral health services. Leveraging community champions, such as spiritual leaders, teachers, coaches, medical professionals, and business leaders, can decrease behavioral health disparities by role modeling positive mental health messaging to destigmatize mental illness and inspire help-seeking behavior. According to Hall and Gjesfield (2013), spiritual support is “an attractive solution to many of the barriers to rural mental health, such as lack of accessibility, availability, and anonymity associated with services in rural areas” (Hall, et al., 2013). This section will describe community-led efforts, including
supporting marginalized rural populations, used to overcome some of the unique challenges affecting the availability, accessibility, and acceptability of behavioral health services in rural and remote areas.

**Communities of Faith**

Faith-based communities have traditionally been the bedrock of rural and remote life. Research by Wang and colleagues (2003) found that 25 percent of people in the United States reached out to their religious congregation first for mental health support (Wang, et al., 2003). Data from the 2012 National Congregations Study reported that 31 percent of religious congregations provided some form of mental health programming to support people with mental illness. Congregations predominantly located in African American communities were twice as likely to provide mental health programming (Wong, et al., 2018). This research illustrates the utilization of faith-based leaders and congregations to potentially bridge the mental health service gap facing many rural communities. However, 71 percent of spiritual leaders reported lacking the training and skill set to recognize mental illness (Warren, 2018).

To overcome this competency gap, several resources have been developed to support spiritual leaders in becoming more comfortable discussing mental illness and recognizing when to connect with a mental health professional to support individuals with a mental illness and their family members. In 2018, the American Psychiatric Association published *Mental Health: A Guide for Faith Leaders*. This resource: provides an overview of mental illness and mental health treatment options, including therapy, peer support, and medication management; underscores the value of cultivating an inclusive place of worship that reduces stigmatization and alienation; provides tips for facilitating referral to a mental health professional; and offers a directory of helpful mental health resources. In addition, the National Association of State Mental Health Program Directors published *Early Serious Mental Illness Guide for Faith Communities*. The resource outlines signs and symptoms of early serious mental illness with a focus on first episode psychosis and provides guidance for spiritual leaders to help support congregate members and their families during the early stages of a mental illness. The resource recommends continuing to value individuals experiencing a mental illness as important members to “help minimize isolation” and “support more effective engagement in treatment.”

Both resources encourage faith communities to undertake mental health trainings, such as in Mental Health First Aid, to become familiar with mental illness and to develop strategies to appropriately respond. Visit [http://www.mentalhealthfirstaid.org](http://www.mentalhealthfirstaid.org) for more information on upcoming training opportunities.

Beginning in 2018, HHS launched the Center for Faith-based and Neighborhood Partnerships (referred to as the Partnership Center) initiative to better serve faith communities in supporting and caring for those with serious mental illness. In 2020, the Partnership Center released *Compassion in Action: A Guide for Faith Communities Serving People Experiencing Mental Illness and Their Caregivers* to help spiritual leaders and their congregation increase awareness, acceptance, and understanding of mental illness, provide a compassionate worshiping environment, build capacity to serve individuals facing mental health challenges, and support their families and caregivers during these challenging times. Compassion in Action identifies seven key actions that spiritual leaders can take to address mental illness in their faith community and small actionable steps to provide a source of understanding, compassion, encouragement, and support for people with mental illness as well as their families and caregivers.

The National Alliance on Mental Illness (NAMI) sponsors *NAMI FaithNet*, an online information and exchange network composed of NAMI members, faith leaders, and religious congregations of all faiths. This resource offers a supportive and nurturing environment for individuals and their families affected by mental illness. NAMI FaithNet includes faith-based support groups that focus on the role of religion and spirituality in the recovery process, and mental health education, as well as outreach materials tailored for faith-based communities about mental illness. Faith initiatives developed by the State of Tennessee are spotlighted below.
Spotlight on Tennessee’s Recovery Congregations

In 2014, the Tennessee Department of Mental Health & Substance Abuse Services launched its state-level Faith-Based Initiatives. According to the Pew Research Center’s data from the 2014 U.S. Religious Landscape Study, 85 percent of Tennesseans report a religious affiliation (Pew Research Center, November 2015). Department leaders saw the value of engaging faith communities to help individuals with addiction and mental illness in their recovery process. To support these efforts, the Faith-Based Initiative: developed a faith-based recovery network of certified recovery congregations; released a faith-based organizational toolkit, Tennessee Recovery Congregations, to engage and equip faith-based organizations to build their capacity to serve individuals struggling with addiction and mental illness; developed the Lifeline Peer Project to reduce stigma and increase community supports targeting rural, distressed counties; and created Emotional Fitness Centers that are stationed at faith-based organizations to provide free mental health and substance abuse screening. At the time of this writing, the Faith-Based Initiative was planning to expand some of those services to hospitals and treatment programs.

Community Partnerships

Community-led initiatives are making significant contributions to residents living in rural and remote areas. These initiatives take the form of community coalitions, community foundations, town health committees, aging in place programs, meal delivery services, food pantries, ride service programs (referenced in the Transportation section), and recreational centers. Although not specifically focused on behavioral health, these initiatives focus on meeting the basic needs of the community, such as addressing food insecurities by setting up local food pantries or providing transportation to appointments. Moreover, trusted community leaders can facilitate open conversations at local gatherings to bring awareness and acceptance regarding mental illness.

Local and national organizations are collaborating to support the emotional and mental health needs of rural communities. An illustration of this collaborative effort is recognized in the creation of the Rural Resilience program, launched in partnership with the Farm Credit, the American Farm Bureau Federation, the National Farmers Union, Michigan State University Extension, and University of Illinois Extension. Rural Resilience offers free, confidential online trainings, materials, and resources tailored to help farmers, their families, and rural residents understand the sources of stress and coping skills to manage stress, identify the warning signs of suicide, and learn how to access mental health resources. In addition, two partnership initiatives focused on community connections to address rural disparities are highlighted in the Spotlight below.

Spotlight on the Hogg Foundation for Mental Health

The Hogg Foundation for Mental Health is a nonprofit organization working to reduce behavioral health disparities in Texas communities. The Hogg Foundation provides funding opportunities to communities in promoting mental health well-being. Past funding efforts include the award of $4.5 million for the Collaborative Approaches to Well-being in Rural Communities project in 2018. This three-year project funded six rural counties to address the community conditions that heavily influence mental health disparities. The six sites conducted an asset mapping project analyzing their community’s needs and assets and identifying strategies to improve community mental health outcomes. For example, one grant recipient organized community table talks and community forums with local leaders and community champions at familiar places to facilitate dialogue about mental illness with local residents. These open dialogues led to the creation of the Resilient Bastrop County Initiative that focuses
on building community trust to increase mental health service utilization. To view the Hogg Foundation’s funding opportunities, visit https://hogg.utexas.edu/funding-opportunities.

**Spotlight on the Sisters of St. Joseph of Concordia, Kansas’s Neighbor to Neighbor Program**

In 2010, nuns at the Sisters of St. Joseph created Neighbor to Neighbor, a center for women in rural Concordia, Kansas that provides support and resources to reduce social isolation. The Sisters have had deep ties with the community for over 130 years, allowing them to provide culturally informed support to residents, particularly those living below the poverty line. At the center, women build relationships with one another, learn skills, and have access to resources to meet their basic needs. Some programs are also tailored to children, and visitors of all ages are welcome. Classes are offered in baking and cooking, and the center also offers yoga, crafts, children’s play groups, and the “Reading with Friends” program for children. Services include free meals, showers, laundry, and the opportunity for women to participate with other community outreach programs, such as making quilts for veterans and sensory development toys for premature babies. On average, 24 women and children visit the center every day. The center has received extremely positive feedback; visitors value the program’s welcoming space, useful activities, and support systems. New mothers note the center’s utility in addressing depression or social isolation in ways that could not occur without the space.

In addition to providing a welcoming space, the center is a place where social agencies and local government officials meet, share ideas, and find ways to collaborate. The center offers a unique set of services to build social support that addresses the needs and mental health of the community while collaborating with other organizations to make and receive referrals for additional resources. Joint projects have included expanding the public bus system, launching a program to help families find ways out of poverty, and addressing domestic violence. Funding for Neighbor to Neighbor comes from the Sisters of St. Joseph, donations from many surrounding churches, and community member donations. The neighboring thrift shop provides funds for utilities each month, and the center receives food donations twice a week from a local restaurant and the Rotary Club to support their daily lunches. This program is an example of innovative partnering with rural providers and organizations to help meet the needs of residents, and effectively utilizing social capital to build community support and reduce isolation.

**Composition of Rural Populations**

Many diverse populations, including African Americans, American Indians and Alaska Natives (AI/AN), immigrants, and LGBTQ individuals, live in rural and remote areas that pose a greater risk of health and behavioral health disparities than in urban areas. As referenced in the SDOH Economic Stability section, African American and AI/AN populations have the highest poverty rates in rural counties among racial and ethnic minority populations; these disparities in poverty rates have adverse mental health outcomes.

To better support AI/AN communities, SAMHSA launched the National American Indian and Alaska Native Mental Health Technology Transfer Center (AI/AN MHTTC) to provide education, training, and technical assistance to mental health providers. Several organizations have stepped up to increase behavioral health access to African Americans. Black Mental Wellness was established by four female psychologists to improve mental health access for Black communities. Since the company’s launch in 2018, Black Mental Wellness has provided evidence-based, culturally appropriate, mental health services and resources and has addressed mental health stigma in the African American communities through its community ambassador program. Black Mental Wellness also provides training opportunities and internship programs to grow a stronger mental health provider
network that is trained in cultural and racial diversity. SAMHSA also hosts an African American Behavioral Health Center of Excellence that provides resources to help make behavioral health services more accessible, inclusive, welcoming, culturally appropriate, and safer for African Americans.

Many rural counties are experiencing a growth in immigrant population. According to the Pew Research Center, immigrants accounted for 37 percent of the rural population growth from 2000 to 2018. In many instances, immigrants are dealing with trauma experienced in their native country, but research indicates a lower utilization of mental health services (Derr, 2016). Contributing factors to the lower utilization include working in sectors dominated by low paying wages, such as the agriculture, manufacturing, and the meatpacking industries that are common employers in rural communities. These sectors often involve hazardous working conditions, and no health insurance benefits or paid leave. Moreover, immigrants may not access mental health services due to fear of immigration status, stigma surrounding mental illness, and limited availability to culturally and linguistically appropriate behavioral health services. To promote and increase access to culturally and linguistically appropriate mental health services among the immigrant community, the Mental Health Technology Transfer Center (MHTTC) offers a Racial Equity and Cultural Diversity website with several resources, including trainings, videos, and toolkits.

According to the Movement Advancement Project (MAP), between 2.9 to 3.8 million lesbian, gay, bisexual, transgender, and questioning (LGBTQ) people live in rural and remote areas, accounting for three to five percent of the total rural population. Emerging research shows that gay and bisexual men living in rural areas report more depressive symptoms than their urban counterparts. Lower population density appears to lower social support and increase levels of internalized homonegativity for gay and bisexual men (Cain, et al., 2017). Consequently, rural sexual minorities may experience more mental health disparities than their rural heterosexual counterparts. MAP has developed a three-part series, Where We Call Home (Part 1, Part 2, and Part 3), to elevate the unique challenges and discrimination vulnerabilities that LGBTQ people, LGBTQ people of color, and transgender people living in rural communities commonly encounter. Each report includes infographics, tailored resources such as the Trans Lifeline and the Trevor Project’s Trevor Lifeline which are operated by the peer community, and community flyers to improve support systems by community organizations, educators, employers, healthcare providers, and policymakers in addressing the different needs of LGBTQ people living in rural America. Another resource, No Longer Alone: A Resource Manual for Rural Sexual Minority Youth and the Adults Who Serve Them, is designed for providers and educators to create a safe environment for rural sexual-minority youth. Although not specifically tailored to rural providers, SAMHSA also provides resources through its LGBTQ Behavioral Health Equity Center of Excellence that providers and policymakers can refer to when engaging LGBTQ individuals.

Social and Community Context Key Lessons:

» The understanding of, and familiarity with, cultural and social characteristics common in rural areas is important when educating and promoting emotional and mental well-being to reduce mental health stigma and inspire help-seeking behaviors for mental health services.

» Faith-based organizations are natural community support systems for bridging the mental health services gap in rural communities. Spiritual leaders are increasing their capacity and ability to serve members of their congregation and their families struggling with mental health challenges.

» Diverse rural populations (racial, ethnic, and sexual minorities) can face greater barriers to accessing behavioral health services that are sensitive to race, ethnicity, culture, sexual orientation, and gender identity, as well as the social stigma surrounding mental illness among these populations. Developing support systems to better serve these diverse rural residents will improve mental health outcomes.
References

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