



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

August 2021

## GRANT STATEMENT

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## Disclaimer

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## Executive Summary

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According to data from the 2018 National Survey on Drug Use and Health (NSDUH), the prevalence of serious mental illness (SMI) is slightly higher for rural adults ages 18 and over than for adults living in urban areas, with 5.8 percent of rural adults experiencing a serious mental illness (SMI) (e.g., major depression, bipolar disorder, schizophrenia) in the past year compared to 4.1 percent of urban adults (SAMHSA, 20 August 2019). This elevated rate of SMI for rural adults is greatly impacted by various barriers affecting rural and remote areas that limit the **availability**, **accessibility**, and **acceptability** of behavioral health services. The purpose of this report is to provide a resource for providers and policymakers working in rural and remote areas to improve the **availability**, **accessibility**, and **acceptability** of behavioral health care for individuals with SMI. The major barriers and opportunities related to these three elements are discussed throughout the report and summarized below. It is important to note that this document focuses on rural and remote populations. For the purpose of this report, the term *remote* includes both frontier and remote, defined by the [Federal Register](#) as areas characterized by a mix of low population size and high demographic remoteness. However, the authors are sensitive to indigenous perspectives on the use of frontier, as it has negative connotations of victimization from colonial settlement. In addition, the report does not aim to address the unique issues faced by indigenous populations being covered by various other projects underway at the Substance Abuse and Mental Health Services Administration (SAMHSA) and through the Indian Health Service that are designed to address these unique populations.

### **Barriers to the Availability of Mental Health Services for Individuals with SMI in Rural and Remote Areas**

Rural and remote areas have greater shortages of specialty behavioral health workforce than urban and suburban areas. This chronic workforce shortage, particularly psychiatrists, in rural areas affects the ability of adults with SMI in rural areas to obtain timely, evidence-based, and high-quality mental health services. Due to the shortage of behavioral health specialists, primary care providers in rural areas often play a large role in the delivery of behavioral health services, but they may not have the knowledge, competency, or comfort to assess, treat, and manage SMI. In addition, individuals with SMI living in rural areas are more likely than urban/suburban individuals to rely on public financing (e.g., Medicaid, Medicare, and state-funded services) of mental health services. However, not all behavioral health providers participate in these public health insurance programs, and public and private health insurance plans frequently do not reimburse for the substantial travel time clinicians and peer specialists spend driving to provide mental health services to individuals living in rural and remote areas. The resulting lack of participation by these providers limits the availability and accessibility of services.

### **Barriers to the Accessibility of Mental Health Services for Individuals with SMI in Rural and Remote Areas**

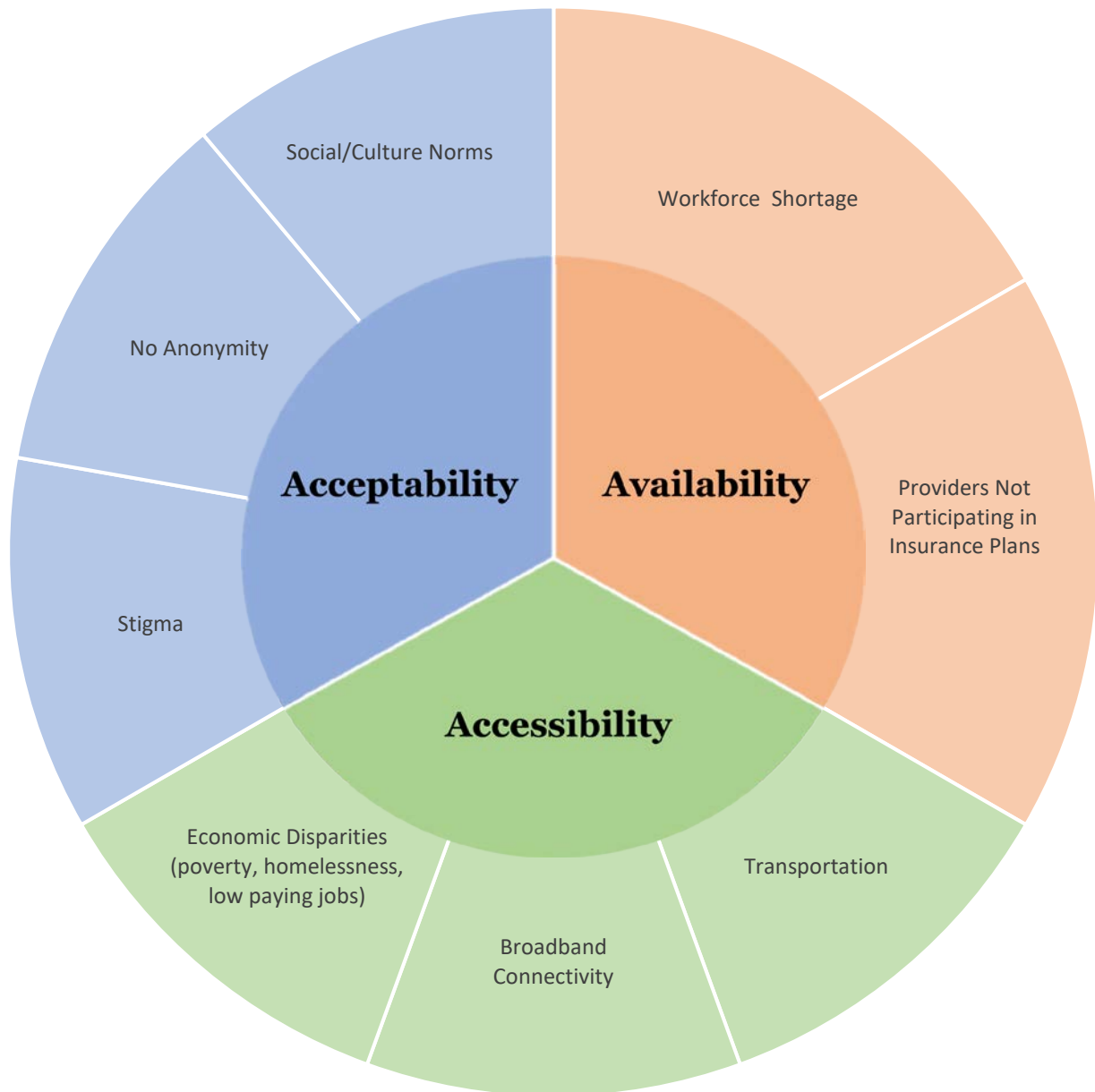
Individuals with SMI living in geographically dispersed areas have limited access to mental health services due to a wide array of transportation barriers. Transportation barriers in rural and remote areas may include the inability to secure reliable and cost-effective transportation, limited public transit, cost of gas for travel, wear on an individual's vehicle, geographic and inclement weather obstacles, and the extensive travel time to and from appointments that may necessitate taking time off from work. Taking time off may result in unpaid leave and/or difficulty and costs in arranging for child and family-care services. Minority rural populations may also face greater barriers accessing behavioral health services that are sensitive to race, ethnicity, culture, sexual orientation, and gender identity, due to a mostly homogenous behavioral health workforce that may not understand their unique needs. Further, limited or absent broadband connectivity, except in publicly available Wi-Fi locations, and the high cost to secure broadband connection, can hinder access to online mental health services. Finally, rural economic inequalities, including higher poverty rates among minority populations, low-earning wages, and homelessness, may impact mental health care access.

### **Barriers to the Acceptability of Mental Health Services for Individuals with SMI in Rural and Remote Areas**

The effects of social stigma, as well as a local community's strong social norms and deeply rooted cultural values, may contribute to an individual's viewpoints and perception surrounding mental illness. For example, some rural residents may feel a strong need for self-sufficiency with the prescribed societal norm to "pull yourself up by your bootstraps." Further, rural and remote

areas are commonly described as tight-knit communities. The social stigma surrounding mental illness and the lack of anonymity experienced in small communities can be barriers to the acceptability of mental health services.

### Barriers to Mental Health Services in Rural and Remote Areas



To overcome these barriers, federal agencies, states, localities, and organizations are working together to expand the **availability, accessibility, and acceptability** of behavioral health services for rural adults with SMI. Some of the key strategies highlighted below are examples of how rural and remote communities have mitigated some of the challenges of bringing equitable access to behavioral health services while also factoring in social determinants of health.

### **Strategies to Improve the Availability of Mental Health Services for Individuals with SMI in Rural and Remote Areas:**

To address the chronic behavioral health workforce shortage, rural communities are bridging the mental health service delivery gap by working with other licensed and certified professionals (e.g., primary care physicians, nurse practitioners, and peer support specialists) and community providers (e.g., law enforcement, emergency medical services (EMS) technicians, and community health workers). Efforts include increasing these providers' knowledge and competency in recognizing and addressing the mental health needs of rural residents by:

- Expanding the knowledge and comfort level of rural primary care providers, enabling them to screen, evaluate, and treat mental health conditions in their patients through a tele-mentoring education model known as [Project ECHO](#) (Extension for Community Healthcare Outcomes);
- Training primary care providers to implement collaborative care and consultation with specialty mental health providers (e.g., psychiatrists) through three standard integrations of behavioral health and physical health frameworks—coordinated/collaborative care, co-located, and full integrated care—allowing primary care providers to manage the health of rural individuals while also providing an expansion in the mental health referral network;
- Offering psychiatric residents training and educational opportunities on clozapine and long-acting injectables to increase competency in these treatment modalities;
- Expanding the use of peer support specialists to enhance the rural behavioral health workforce and to normalize the need for mental health care and reduce stigma associated with SMI;
- Training EMS technicians, law enforcement, and community health workers to assess and screen for suicide risk; and
- Training, and then relying on, community members to provide crisis intervention and other behavioral health services.

The availability of evidence-based practices (EBPs) needs to be considered, but often basic needs are so acute and resources are so diminished that rural and remote communities build modified practices that work within their constraints. More research is needed on adaptations to EBPs in rural settings to demonstrate whether desired outcomes are achievable with modification, and whether programs (e.g., Individual Placement and Support and Assertive Community Treatment) should be monitored to measure the same outcomes (e.g., employment retention; days without hospitalization) to see if the tailored version results in similar outcomes in rural environments.

States can assist with evaluations and establish policies that will make more resources available for modified approaches and increase the availability of essential evidence-based services and supports, using the flexibility of Medicaid and State General Funds to assure appropriate rates are set to support evidence-based services.

For instance, clozapine is considered the “gold standard” evidence-based treatment for refractory schizophrenia and other similar conditions. Increasing access to clozapine can be achieved by psychiatrists collaborating via telepsychiatry with rural primary care providers to administer regularly scheduled blood draws and to mitigate some of the common side effects associated with clozapine. This collaboration ensures that individuals with refractory schizophrenia and other complex mental health conditions receive the best evidence-based treatment, with support from their primary care providers to co-manage their treatment.

### **Strategies to Improve the Accessibility of Mental Health Services for Individuals with SMI in Rural and Remote Areas**

Efforts to bring mental health services and treatment opportunities directly to individuals increases an individual's convenient access to routine mental health services while also reducing barriers common in small communities (e.g., transportation barriers, limited Wi-Fi access). State agencies, local communities, and healthcare agencies are coming together to mobilize



mental health services in rural and remote regions in order to bring care to the patient, rather than the patient traveling to the service center.

The use of telehealth, including audio-only telemedicine, and tele-mental health services, has a range of benefits for individuals with SMI in rural and remote areas, including improving timely access to care that is otherwise not available in an individual's community. It provides anonymity, as well as convenience for individuals (by reducing extensive travel time to and from office visits and minimizing the need for time off from work and/or arranging for child/family-care services for appointments). Broadband infrastructure support is critical to ensuring that access to behavioral health services in rural and remote areas is comparable to that provided on a face-to-face basis in other settings.

Technology is also a valuable tool in rural and remote areas for connecting an individual with SMI in crisis to services, as well as for the first responders who are often the only people available to respond in a timely manner to a crisis. In addition to technology increasing access to crisis services, states and local communities are making efforts to provide timely access to crisis and suicide prevention services through centralized crisis hotlines, warmlines (including peer-run lines), mobile crisis response teams, and crisis receiving/stabilization centers. Access to crisis hotlines and peer-run lines that provide free and confidential services is an important resource for rural populations where mental health services are often limited, under-resourced, or often viewed as stigmatizing. Many states offer a peer warmline, given the wealth of research supporting the efficacy of warmlines in enhancing the recovery process beyond the clinical scope.

### **Strategies to Increase the Acceptability of Mental Health Services for Individuals with SMI in Rural and Remote Areas**

Educating, training, and investing in mental health literacy, prevention, and early intervention in school-based initiatives have been shown to increase awareness about mental health symptoms, decrease the social stigma commonly associated with mental illness and substance use issues, and increase help-seeking behaviors in youth and young adults who have engaged in school-based mental health literacy programs. Youth-based mental health literacy initiatives are shifting the culture, reducing the social stigma commonly associated with mental illness, and promoting help-seeking behaviors.

The understanding and familiarity of cultural and social characteristics common in rural areas are important considerations when educating, promoting, and encouraging emotional and mental well-being to reduce mental health stigma and when inspiring help-seeking behaviors for mental health treatment. Working with community champions and familiar community leaders—including teachers, coaches, clergy members, business leaders, and primary care providers—to model positive mental health messaging, destigmatize mental illness, and openly talk about mental health and rural stress can increase the acceptability of mental health care.

Faith-based organizations are natural community support systems for bridging the mental health service gap in rural communities. Spiritual leaders are increasing their knowledge and capacity to serve the members of their congregation facing mental health challenges, enabling them to recognize when to connect individuals with a mental illness and/or their family members with a mental health professional.

Marketing suicide awareness campaigns where people are most at risk (e.g., gun shops, ranges) and where people can be reached discretely (e.g., posting suicide awareness flyers on the back of bathroom stalls) can serve to encourage people to reach out for help in times of need, and reduce the high rates of suicide found in rural and remote areas of the U.S.

In partnership with SMI Adviser, a national initiative funded by the Substance Abuse and Mental Health Service Administration (SAMHSA; Grant# SM080818) and administered by the American Psychiatric Association, this report was developed by the National Association of State Mental Health Program Directors (NASMHPD) and the NASMHPD Research Institute (NRI) based on guidance from convening expert panel meetings, interviewing subject matter experts, and conducting a literature review. Given the diverse populations living in rural and remote communities, it was decided that indigenous populations would not be a focus subpopulation in this report because of specific federal initiatives that are being developed contemporaneously by SMI Adviser in partnership with SAMHSA's Office of Tribal Affairs. This guide is designed to offer strategies and key lessons for

developing, implementing, financing, and sustaining behavioral health services for individuals with SMI living in rural and remote communities.

## Strategies to Expand Mental Health Services in Rural and Remote Areas

### Availability

- Training other licensed and certified professionals and community providers (e.g., primary care, clergy, community health workers, peer support specialists, first responders) to bridge the mental health service delivery gap.
- Expanding the use of peer support specialists to support an individual's treatment and recovery.
- Integrating behavioral health and physical health to provide whole health care.
- Increasing the availability of EBPs (adapted for rural/remote areas) by establishing financing mechanisms through Medicaid and State General Funds to assure appropriate rates are set to fully support evidence-based services.
- Offering psychiatry residency training at local and state universities in the benefits and prescribing of clozapine and long-acting injectables to increase competency in these treatment modalities.
- Ensuring clozapine utilization via telepsychiatry, using rural providers to administer blood draws & monitor for common side effects.

### Accessibility

- Bringing mental health care directly to the client through mobile mental health treatment services.
- Using telehealth (including audio-only modalities), telemedicine (telepsychiatry), and tele-mentoring services (ex. collaborating with psychiatrists).
- Equipping individuals with SMI and first responders (law enforcement, EMS, paramedics) with internet-connected tablets (e.g., iPads) to connect individuals in crisis with a behavioral health specialist in a timely manner.
- Providing technology (tablets, Wi-Fi) to individuals with SMI to virtually connect with a mental health specialist.
- Certifying and training members of the local community to become crisis responders and secure transport drivers.
- Addressing economic inequalities (e.g., poverty rates, homelessness, low wages) by providing housing and other supports and embedding housing services with other support services.
- Increasing response to timely crisis and suicide prevention services through centralized hotlines, warmlines, and mobile crisis response teams, and training first responders to assess for suicide risk.

### Acceptability

- Increasing mental health literacy through school-based initiatives to increase awareness, reduce social stigma, and promote help-seeking behaviors.
- Working with community champions and trusted community organizations (e.g., teachers, coaches, clergy, business leaders) who understand the local cultures and social norms to foster positive mental health messaging, destigmatize mental illness, and inspire help-seeking behavior for mental health services.
- Marketing suicide awareness campaigns at sites where people are most at risk (e.g., gun shops and gun ranges) and can be reached discreetly.

## Introduction

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Sixty million individuals, or 20 percent of the U.S. population, reside in rural and remote areas (Census, 2010). Research shows that individuals in rural and remote areas have an equal, or perhaps greater need for mental health services but are less likely to receive any mental health service when compared to individuals residing in urban and suburban settings (Kirby, et al., 2019). Nearly 19 percent of adults ages 18 and older who were living in completely rural areas have reported experiencing a mental illness in the past year, compared to 18.6 percent of adults in urban areas. At the same time, 2.5 percent of adults living in completely rural areas have reported experiencing a co-occurring substance use disorder and mental illness during the past year, compared to 3.7 percent of adults in large metro areas (SAMHSA, 2019).

Although rates of mental illness and substance use are comparable between the two settings, the rates of serious mental illness (SMI) reported in the past year are higher in rural areas, with 5.8 percent of adults experiencing an SMI in the past year, compared to 4.1 percent of adults ages 18 and older in urban areas (SAMHSA, 20 August 2019). Additionally, while suicide rates across the U.S. among all adults have risen since 2007, the Centers for Disease Control and Prevention (CDC) indicates that the rates of suicide among individuals in rural counties increased 6.1 times faster than among individuals in urban counties between 2007 and 2015 (CDC, 2018). Studies also show that youth in rural areas have nearly double the risk for suicide as their urban counterparts (Florez, et al., 2019). The divergence between suicide rates in rural and urban areas may be partially attributable to the prevalence of firearms in rural states, which accounted for half of all suicides during the same period (CDC, 2018). Additionally, the availability of behavioral health services in rural and remote areas is significantly limited when compared to urban areas. Multiple studies show a chronic shortage of behavioral health professionals in rural areas, with a tendency for providers to practice in urban and suburban settings. Notably, rural adults typically only have behavioral health care access through their primary care provider. These factors underscore the need for improved policies, increased funding, and service-delivery strategies to improve the **availability**, **accessibility**, and **acceptability** of high-quality behavioral health services in geographically dispersed areas of the U.S.

The purpose of this document is to provide a resource for rural and remote health and behavioral health providers and policymakers to better understand the challenges facing the delivery of behavioral health services to individuals with SMI in rural and remote areas, as well as strategies and examples of how these challenges have been mitigated, so that rural behavioral health stakeholders might learn from their peers and identify ways to make improvements in their own communities. Specific topics discussed in this guide include the following:

- » Social determinants of health in rural and remote communities
- » Financing behavioral health services in rural and remote areas
- » Addressing rural and remote behavioral health workforce shortages
- » Increasing the availability of evidence-based practices in rural and remote communities
- » Achieving an appropriate mix of mental health and law enforcement in rural and remote areas
- » Increasing access to crisis services
- » Addressing suicide risk factors and improving suicide response

Each section briefly discusses the specific challenges related to the delivery of behavioral health services in rural and remote areas and, when they are available, spotlights strategies used to overcome these challenges. Each section also contains a set of key lessons that can provide providers and policymakers with a starting point for making improvements in their own communities.

This document was developed by the National Association of State Mental Health Program Directors (NASMHPD), the NASMHPD Research Institute (NRI), and SMI Adviser, a national initiative funded by the Substance Abuse and Mental Health Service Administration (SAMHSA; Grant# SM080818) and administered by the American Psychiatric Association. An Expert Panel on rural behavioral health and related fields informed the development of this document through a series of four virtual work group meetings, and individual interviews between October 2020 and February 2021 (Appendix B). Although SMI Adviser's primary focus is on three diagnoses of SMI, (schizophrenia, bipolar disorder, and major depressive disorder), and this document was written with those diagnoses in mind, the lessons shared in this document are applicable to behavioral health services across the diagnostic array.

For any questions, or more information about the development of this guide, please contact Christy Malik (Christy.Malik@nasmhpd.org) or Kristin Neylon (Kristin.Neylon@nri-inc.org).

## 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."***

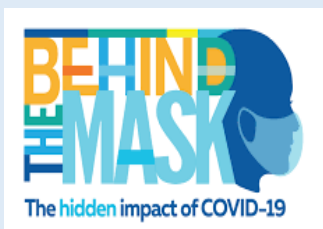
Roxanne Dudley, PMHNP-BC, RN, LPC  
Psychiatric Nurse Practitioner

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 YMHA 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), SMIs (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.

*"Bridge patients' behavioral health needs  
through collaboration with primary care."*

Andy McLean, M.D., M.P.H.  
Chair, Department of Psychiatry & Behavioral Science  
University of North Dakota School of Medicine & Health Sciences

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 full integration 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 professionals 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



care. 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 subspecialty 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 (Slatton-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).

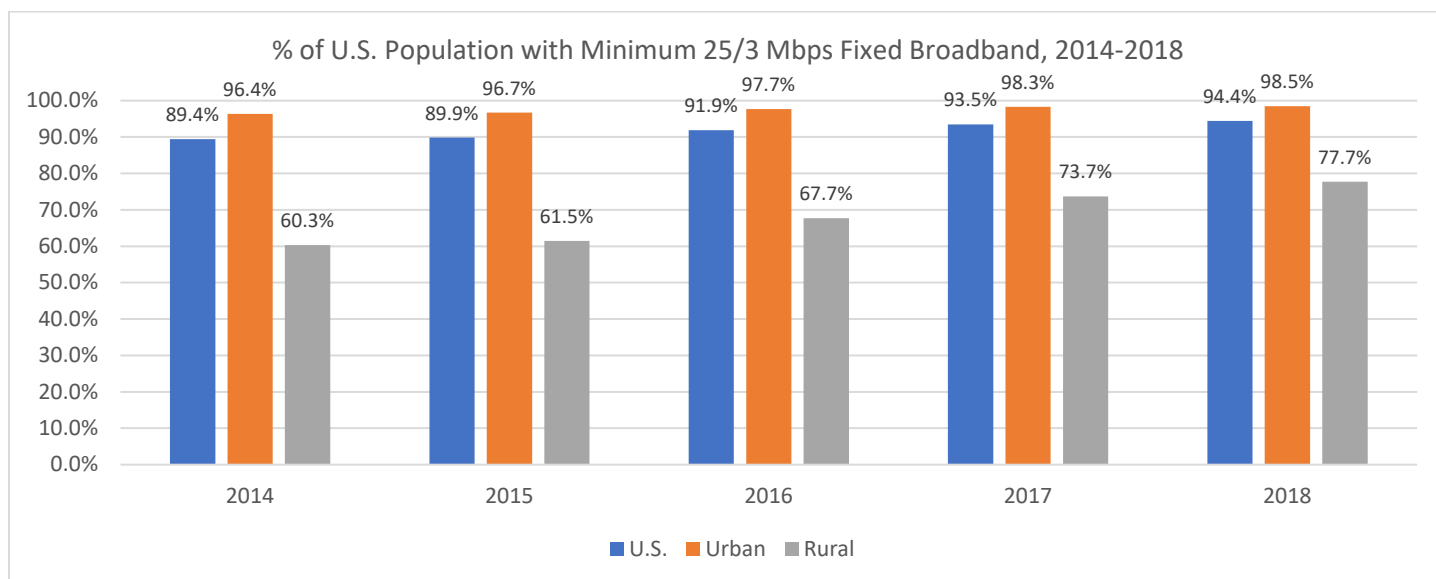


### Spotlight on the Billings Clinic's Eastern Montana Telemedicine Network

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.

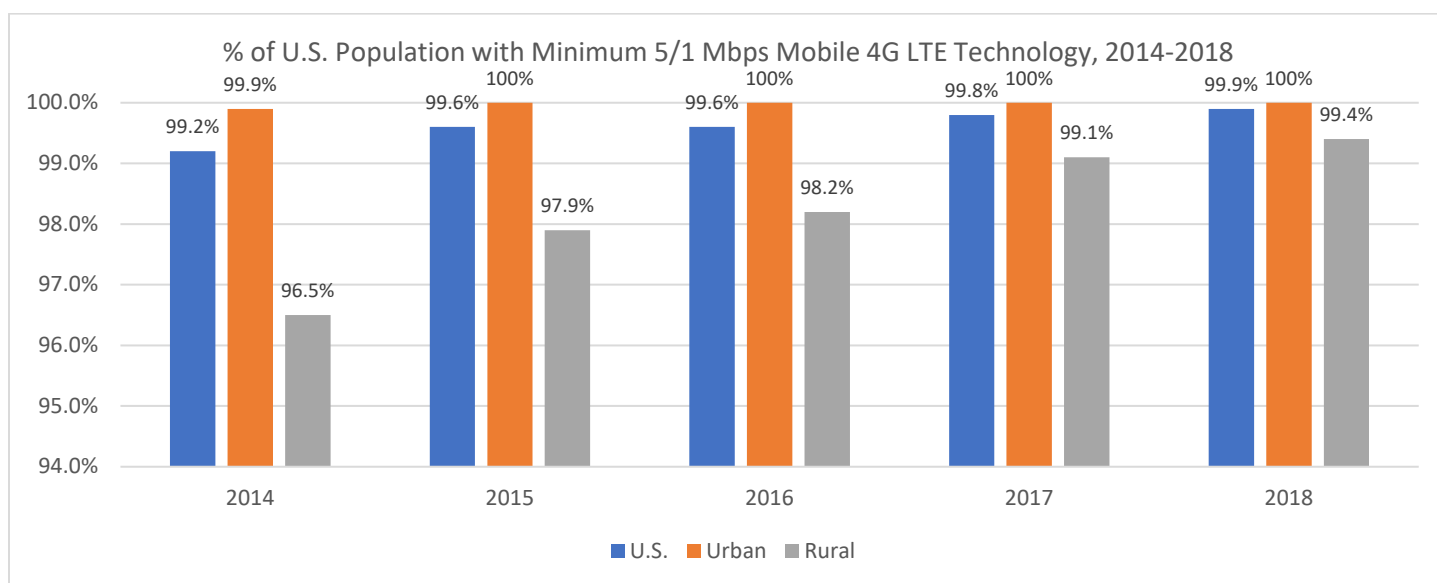
### Broadband Technology in Rural and Remote Areas of the U.S.

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).



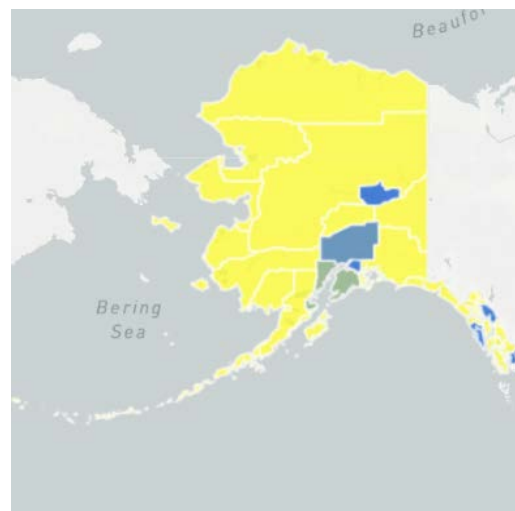
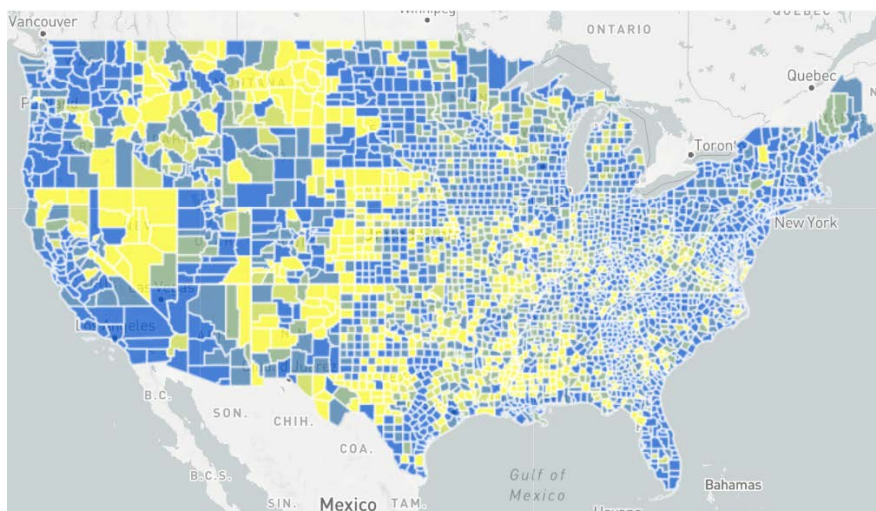
In addition to calculating rates of fixed broadband availability across the U.S., the FCC also monitors the availability of cellular technology. The minimum performance benchmark for mobile services is 4G LTE, within minimum speeds of 5 Mbps download, and 1 Mbps upload (FCC, 2020). This level of mobile 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.

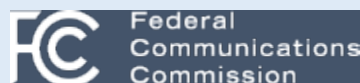


### ***Spotlight on the USDA's ReConnect Loan and Grant Program***

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.

***“Four or five years ago, [prior to our secure transport program,] individuals would have been shackled, handcuffed, and thrown in the back of a [police] cruiser.”***

Jennifer Silva, L.C.S.W.  
Chief Clinical Officer/Corporate Compliance  
San Luis Valley Behavioral Health Group

- » 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/JWTRI3\\_1Mgg?list=PLYFjmfJHyPrBf0v\\_IR\\_7goXc2gWg\\_UVKj](https://www.youtube.com/embed/JWTRI3_1Mgg?list=PLYFjmfJHyPrBf0v_IR_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, 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.



### ***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

domestic farm laborers, older adults, and disabled individuals. The program offers subsidized rent, rental loans for existing rural rental housing, and off-farm labor housing projects that need rehabilitation.

### 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.

*“Communities of all faiths can be integral in incorporating spirituality, fostering increased acceptance, and building a sense of community to move understanding of mental health forward.”*

Roxanne D. Dudley, P.M.H.N.P.-B.C., R.N., L.P.C  
Psychiatric Nurse Practitioner  
Austin Travis County Integral Care

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 congregant 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> 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:**

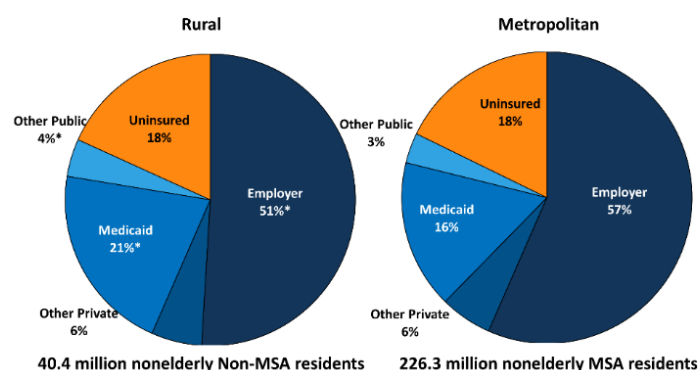
- » The understanding of, and familiarity with, cultural and social characteristics common in rural areas is important when educating and promoting emotional and mental well-being to reduce mental health stigma and inspire help-seeking behaviors for mental health services.
- » Faith-based organizations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

## Financing Behavioral Health Services in Rural and Remote Areas

Adults living in rural areas with mental health needs receive fewer mental health services than their counterparts living in urban and suburban areas. A 2019 analysis of a nationally representative sample of adults with mental health needs found that adults in rural areas had fewer visits to ambulatory providers, fewer visits to specialty providers, and fewer mental health prescriptions (Kirby, et al., 2019). The study was unable to determine if the reduced provision of mental health services in rural areas was due to the lack of insurance coverage and inability of rural residents to pay for mental health services, an overall lack of mental health providers, or other issues such as stigma that could potentially lead to a reduced willingness of individuals in rural areas to try and access mental health services. However, the documentation that persons with mental health needs in rural areas receive fewer mental health services than their counterparts in urban and suburban areas suggests that state and provider efforts aimed at assuring that a broad array of high-quality services are available is important to reducing rural behavioral health disparities.

The availability of high-quality behavioral health services in rural areas is challenged by the need to adequately pay for these services. Individuals living in rural and remote areas are less likely to have health insurance than those living in urban areas. About 12.3 percent of people in completely rural counties lacked health insurance compared with 11.3 percent for mostly rural counties and 10.1 percent for mostly urban counties (Census, 2021). The Kaiser Family Foundation found similar levels in rural and non-rural areas of individuals having no health insurance, but among individuals with insurance coverage, persons living in rural areas were more likely to rely on public insurance programs (Medicaid or Medicare) than have employer-sponsored private insurance (see figure to the right) (Newkirk & Damico, 2014). The higher levels of reliance on public insurance in rural and remote areas mean government agencies can play a large role in developing behavioral healthcare financing systems that fund the necessary comprehensive array of behavioral health services and supports described elsewhere in this document (Newkirk & Damico, 2014).

### Rural residents were more likely to have public coverage and less likely to have ESI than metropolitan residents



### Brief Lessons for Policymakers:

- » Individuals with mental illnesses in rural areas receive fewer behavioral health services than those in urban and suburban settings. Rural clients are also more likely to rely on Medicaid, Medicare, and state-funded services.
- » States can use the flexibility of Medicaid and State General Funds to assure appropriate rates are set to support evidence-based services and an adequate behavioral health workforce (including peers).
- » SMHAs and rural advocates can work together with their state insurance commissioners to ensure that the [federal Mental Health Parity and Addiction Equity Act](#) (MHPEA). Pub. L. 110-343, and regulations adopted under that Act are enforced and that private insurance plans provide equitable reimbursement rates for behavioral health services.

Although SAMHSA's Mental Health Block Grant (MHBG) data do not allow identification of clients by rural areas, MHBG data demonstrate that clients of state mental health systems rely heavily on Medicaid and other public funding to pay for behavioral health services. Because of the high levels of disability associated with SMIs, many adults with SMI may lack commercial health insurance and instead rely on a mixture of Medicaid, Medicare, and state and local government-supported services. SAMHSA data show that only about 21 percent of adults served by state mental health systems are competitively employed, and the employment rate for persons with schizophrenia disorders served by the SMHA system is even lower at nine percent. Thus, most adults with SMI will not have a job that can provide private health insurance (SAMHSA, 22 May 2020). Medicaid is the most common insurance program for adults with SMI. In 2019, 73 percent of clients served by SMHA systems had Medicaid paying for at least some of their mental health services (SAMHSA, 22 May 2020).

[SAMHSA's National Spending Estimates](#) report approximates that total expenditures for mental health services were \$156 billion in 2015, and that 58 percent of this funding came from public sources, while 42 percent was private spending. By contrast, for overall health care in America, public and private sources were both at 50 percent. Medicaid was the largest public payer for mental health services, followed by Medicare and state and local government sources (SAMHSA, 22 May 2020). Unfortunately, the SAMHSA report was unable to analyze mental health spending by geographic region (rural/urban areas).

## The Importance of Public Funding to Assure Evidence-Based Mental Health Services in Rural Areas

States have used combinations of state and local government funding, SAMHSA funding (such as the MHBG, CCBHC funding, and other grants), and Medicaid to prioritize support for evidence-based services in rural areas. The reliance on public funding sources (e.g., Medicaid, state, and local government funding) needed to support mental health services for rural clients provides an opportunity for state and local governments to actively design the funding structures for those supports, making full use of the flexibilities of those various funding sources.

### Medicaid Funding

Medicaid provides health coverage to more than 77 million individuals each year and is a joint state-federal program where every state has wide discretion under Medicaid rules to design benefits that can help provide access to needed mental health services and supports to adults with SMI. However, since every state's Medicaid program is unique, the benefits available in one state may not be available in other states.

Medicaid often covers a broader array of behavioral health services and supports than private insurance, which typically uses more limited "medical necessity" criteria in determining what benefits it will pay for. A recent report, [Medicaid Forward: Behavioral Health 2021](#), by the National Association of Medicaid Directors (NAMD), while not specifically addressing rural behavioral health disparities, emphasizes the ability of states to use Medicaid to support important services to (Browning, et al., 2021):

- » Advance prevention and promotion of mental health and well-being, including providing opportunities for linkages to other social services and supports, and paying to screen members for social risk factors;
- » Streamline eligibility for services by eliminating administrative barriers that prevent people from accessing needed behavioral health treatment;
- » Continue to promote integration of physical and behavioral health services;
- » Build a comprehensive approach to addiction treatment that begins with prevention and addresses all addiction; and
- » Strengthen and broaden crisis response systems (NAMD, 2021).

The Affordable Care Act of 2010, Section 2703 ([Section 1945 of the Social Security Act](#)) created an optional Medicaid State Plan benefit for states to establish Health Homes to coordinate care for people with Medicaid who have chronic conditions (e.g., mental health, substance use, asthma, diabetes, heart disease, and overweight) (<https://www.medicaid.gov/medicaid/long-term-services-supports/health-homes/index.html>). Health Homes are for people with Medicaid who 1) have two or more chronic conditions, or 2) one chronic condition and are at risk for a second, or 3) have one serious and persistent mental health condition. Many states have used Section 2703 to create Behavioral Health Homes to integrate primary care providers with behavioral health providers, and thus address both the behavioral health and other health conditions of adults with serious mental illnesses. This model can be used in rural areas to integrate care and help treat the whole person. [Michigan](#) and [Minnesota](#) have leveraged Medicaid to fund Behavioral Health Homes to provide integrated care to individuals with behavioral health needs throughout their states.

While Medicaid is the major funder of mental health services in rural areas and provides states with great flexibility in benefit design, our Expert Panelists identified several challenges to using Medicaid in rural and remote areas, including that Medicaid frequently will not pay for the substantial time clinician or peer specialists spend driving in rural areas to provide services to clients in their homes, school, or workplace. In addition, not all behavioral health providers participate in Medicaid—which can be particularly limiting in access for clients relying on Medicaid in rural areas that have shortages of behavioral health providers. For example, many psychiatrists do not participate in Medicaid (or private insurance). According to research published in JAMA Psychiatry, “the percentage of psychiatrists taking Medicaid fell from nearly 48 percent in 2010-2011, to 25 percent in 2014-2015,” meaning that individuals with mental health needs have a more limited pool of providers if they need services (Carroll, 2019).

The Expert Panel guiding the development of this document identified ways they have worked with their state Medicaid agencies to cover services important to rural areas with limited behavioral health workforces. Many state Medicaid programs reimburse for behavioral health peer specialists. In New Mexico, Medicaid will pay for services provided by traditional (Native American) healers.

In response to the COVID-19 pandemic, the declaration of a national Public Health Emergency included new flexibility for Medicaid reimbursement of telehealth services. Experts from rural states described these new flexibilities in reimbursement for telehealth as being very positive for increasing access. By allowing expanded use of telehealth—including audio only (telephone) telehealth in areas with limited Internet broadband—rural states have been able to expand access and maintain services during the pandemic.

## State and Local Government Funding

In 2019, state and local government funds paid for over \$19 billion in mental health services and supports (SAMHSA, 22 May 2020). These government funding sources are often critical to providing robust behavioral health services in rural areas, as they can cover services and supports for clients without any insurance and can also be used to pay for services that Medicaid and private insurance will not reimburse, such as housing and employment supports and the transportation of providers or clients to receive home-based services.

While state and local government funds provide SMHAs with maximum flexibility in how they use these resources to support adults with SMI, there are limitations to their use. First, many states have experienced substantial state tax revenue decreases during the COVID pandemic and as a result must reduce spending to balance their state budgets. Additionally, the use of state and local tax funds by SMHAs must be approved by legislatures and governors, and in some instances those entities may direct the use of tax funds to their preferred regions or providers.

Our Expert Panel discussed the importance of state and local funding to support the continuum of crisis services for adults with SMI in rural areas. Supporting the necessary crisis system infrastructure (24/7 call centers, mobile crisis teams, crisis respite centers) is difficult to support through public and private insurance systems that only reimburse for services provided to eligible members. The Expert Panel noted that in order to have the crisis system ready to respond to an adult with SMI in crisis, the crisis system infrastructure needs to be staffed and open 24/7 ready for an individual in crisis, regardless of an



individual's insurance status. While Medicaid and some private insurance plans will reimburse for crisis services provided to their eligible members, supporting the infrastructure to be ready to provide these services relies almost entirely on state and local government funding.

State and local government funds can be very useful in helping behavioral health providers prepare to implement evidence-based practices. For example, South Dakota used state funds to pay for training and the upfront costs for providers to become certified in the Family Functional Therapy service model. Once trained, the providers were then able to bill Medicaid for services (Discussion with expert panelists, October 21, 2021).

### **Private Health Insurance**

No estimates were found to be readily available regarding the number or percent of adults with SMI in rural areas who are covered by private health insurance, but overall data for insurance status in rural areas suggest that many adults with SMI can be expected to have private health insurance—either through their workplace, through a spouse's employment, or through their parent's insurance for young adults up to age 26. MHPEA requires private health insurers that provide behavioral health benefits to provide those benefits without any additional barriers to access or co-payments above what are required for other covered medical conditions. However, panelists expressed a concern that while private insurance is important for supporting mental health services, private health insurance does not routinely pay for the intensive team-based services developed to meet the needs of adults with SMI that are routinely supported through Medicaid and state funds, such as ACT, First Episode Psychosis Coordinated Specialty Care, or innovative services using paraprofessionals such as certified peer specialists. Private insurance was found to focus on a more traditional "Medical Model" using medical necessity criteria; supportive housing administrative costs, supported employment, peers, and other supports provided through Medicaid and state funds were often not reimbursed by private insurance.

### **Grant Funding**

Expert panelists identified grant funding as an important source for initiating innovative services for adults with mental illness in rural areas. Panelists described using grants from SAMHSA, including the CCBHC initiative, the MHBG, funds from HRSA, and funds from national and local foundations to support services. Grant funding was identified as a critical resource to test and expand service models and to fund training of providers to be ready to provide evidence-based services. However, a limitation of grant funding is that it is typically time-limited, requiring the grant-funded program to eventually transition to sustainable funding sources, such as Medicaid and other funding sources.

### **Special Financing Considerations for Financing Evidence-Based Practices and Peer Specialists**

During the Expert Panel discussions, a representative from New Mexico noted that his state had an opportunity to incentivize implementation of ACT with a 20 percent bonus payment for providers to implement group therapy, but that providers proved under-resourced to accomplish this. Enrollment into ACT teams can take months, and providers could still not afford the start-up costs to create the ACT teams (Discussion with expert panelists, October 21, 2021).

Paying for mental health peer specialists was identified by many Expert Panelists as an important way to enhance appropriate mental health services in rural areas with a limited behavioral health workforce. However, panelists identified a number of existing barriers in Medicaid that can make it difficult to use peer specialists optimally, including that Medicaid reimbursement is often limited to approved settings, such as hospitals and EDs; in states with restrictive Medicaid policies, peers can only receive Medicaid reimbursement if they work in these settings.

### **Financing Key Lessons:**

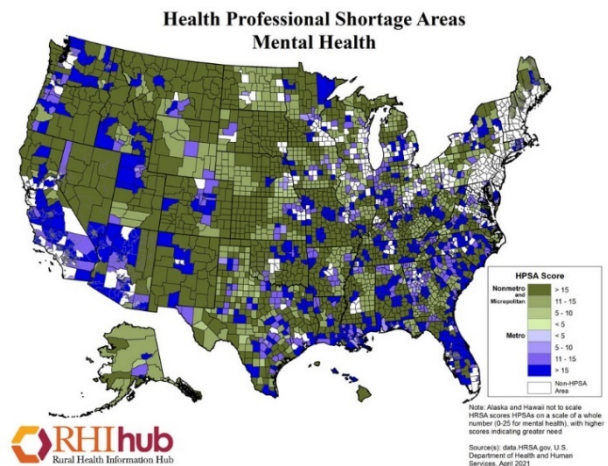
- » Research on financing behavioral health services demonstrates that individuals with mental illnesses in rural areas receive fewer services when compared to individuals living in urban and suburban settings. Research also shows that clients in rural areas are more likely to rely on public insurance (e.g., Medicaid, Medicare, and state-funded services) to pay for care.



- » Because individuals with SMI in rural areas are more likely than individuals in urban/suburban areas to rely on public healthcare financing, state and local governments are afforded an opportunity to establish policies that will impact the availability of essential services and supports. States can use the flexibility of Medicaid and State General Funds to assure appropriate rates are set to support evidence-based services, and to support the behavioral health workforce. For example, states can use Medicaid and State General Funds to set reimbursement rates for peer specialists that provide them a living wage and career path.
- » SMHAs and rural advocates can work with their state insurance commissioners to ensure that the MHPAEA is invoked to ensure that private insurance plans provide adequate reimbursement rates and participate in provider networks that include behavioral health providers in rural areas.

## Rural & Remote Behavioral Health Workforce

As of September 2018, HRSA had designated 2,672 Mental Health Professional Shortage Areas (MHPSA) in rural areas (RHIfhub, 2021). The primary factor HRSA uses to designate MHPSAs is “the number of health professionals relative to the population with consideration of high need,” with a minimum of one provider to 30,000 residents (or 20,000 if there are higher than usual needs in a given community (RHIfhub, 2021). Just 1.6 percent of the nation’s psychiatrists practice in rural areas, which is, on average, nearly 47,000 residents per each rural psychiatrist (New American Economy, 2017). Nearly 60 percent of all counties in the U.S. do not have a single psychiatrist (Beck, et al., 2018). While the MHPSA figures produced by HRSA are dire, it is likely that these figures are not entirely representative of the deficit of mental health providers. HRSA calculates the number of licensed professionals, rather than practicing professionals. It is possible that many of the mental health professionals included in these figures maintain their license, but do not offer services. Compounding this issue in rural and remote areas is that many of the counties without a single psychiatrist are clustered together, making it even more difficult for individuals to access psychiatric care quickly in case of an emergency, and, as mentioned in the *Financing* section of this document, not all providers accept Medicaid, further reducing the number of available providers (Carroll, 2019). A lack of behavioral health clinicians in rural areas leads to greater caseloads for those who are available, which can lead to burnout and a reduction in the types of services (e.g., EBPs) providers are able to offer. Multiple strategies and opportunities are available to help reduce the workforce shortage in rural and remote areas of the U.S., including reducing barriers to entry and retention (scholarships, loan forgiveness/repayment, assistance with supervision, modifying continuing education courses), and providing opportunities for residents to train in rural and remote areas. In addition, increasing the availability of telehealth, and reducing the barriers for providers to use telehealth, enables providers in all areas of a state to offer services to individuals residing in rural and remote areas, expanding the availability of high-quality services to underserved populations.



### Brief Lessons for Policymakers:

- » Develop policies and financial support for state and regional colleges and universities to offer behavioral health training programs specific to rural and remote areas.
- » Evaluate state policies related to the certification and supervision processes for peer specialists, keeping in mind that: peers are their own profession and prefer to be supervised by other peers; and that supervision hours should not be overly burdensome, especially when compared to supervision requirements for other clinical professions.
- » Expand the scope of practice of the current workforce to allow for greater prescribing authority for other licensed practitioners such as Nurse Practitioners and Physician Assistants, in order to reduce the burden on psychiatrists.

### Brief Lessons for Providers:

- » Develop a career track for peer specialists that encourages job growth and reflects the value provided by peer specialists.
- » Involve peers in the process of supervision.
- » Hire peers directly to ensure they are paid a living wage and receive necessary benefits.

## Reducing Barriers to Entry and Strategies for Retention

The high cost of a professional degree in behavioral health sciences is often a barrier for individuals in rural communities pursuing advanced training and education. However, a handful of federal educational loan repayment and forgiveness programs exist to help recruit health professionals—including behavioral health specialists who serve individuals with mental illness and co-occurring disorders in underserved areas—pay off their student loans. One such federal program is the [National Health Service Corps \(NHSC\) Rural Community Loan Repayment Program developed to help rural areas address the opioid misuse epidemic](#). This program covers up to \$100,000 in loan repayments for full- and part-time substance use disorder counselors, pharmacists, registered nurses, and certified registered nurse anesthetists who work to combat the opioid epidemic in rural communities across the U.S. Recipients of these awards are committed to three years of service. Similar programs to expand the behavioral health workforce trained to address the needs of individuals with SMI could help address workforce shortages in rural areas.



Most states also offer their own loan forgiveness and financial assistance programs to attract healthcare professionals to serve in rural and other underserved areas of the state. States use a combination of federal (e.g., [HRSA's State Loan Repayment Program](#)) funds and state funds to support these programs and set their own qualification criteria. A comprehensive list of state programs for loan repayment and forgiveness is available [online](#); links for each state are provided, along with the criteria for participation and receiving a loan repayment (e.g., length of service commitment minimums and health specialty fields).

In addition to loan repayment and forgiveness programs, HRSA also offers scholarships for nursing students who agree to serve two years, full time, at an eligible Critical Shortage Facility in a mental health or primary care provider in a Health Professional Shortage Area (HPSA). The [Nurse Corps Scholarship Program](#) covers tuition, fees, and other educational costs for qualified applicants. To attract qualified behavioral health workforce candidates, state policymakers and providers can advertise the availability of these programs and help healthcare employees apply for funds from these programs.

In addition to providing and supporting scholarships and loan forgiveness and repayment programs, states and providers can also reduce barriers to entry by making it easier for behavioral health professionals to receive pay for supervision. A sentiment that was echoed by many members of the Expert Panel is that the costs associated with supervision can be prohibitive and

***"A large number of individuals have finished graduate school, but do not have independent licenses because they have not been able to get on-site supervision to qualify for licensing. Allowing telehealth supervision can reduce this burden, especially for rural providers."***

Wayne Lindstrom, Ph.D.  
Vice President, Western Region

finding someone to supervise behavioral health clinicians for state licensure is a challenge, especially in rural areas. An online review of supervision costs for behavioral health professionals shows a range of \$50 per hour to more than \$150 per hour for supervision, which can be prohibitive to new professionals just out of graduate school. An Expert Panelist suggested that paying supervisors an incentive for providing supervision would help retain people (Ivey, J., personal communication, November 19, 2021).

The State of New Mexico's Social Worker's Board allowed telehealth supervision and covered the cost of this supervision to facilitate the supervision process.

Additionally, while the number of supervision hours and fees required to complete supervision vary by state, on average, states require: between 1,000 and 2,000 hours of supervision for mental health clinicians; 2,000 hours after a Ph.D. for psychologists; around 3,000 hours for licensed clinical social workers, and up to 6,000 for peer support supervisors (Pritchard, J., personal communication, November 19, 2021). This disparity of required supervision hours between professional practices can lead to

resentment of colleagues. Jason Pritchard noted that, “there is an unfairness when folks who do not have lived experience get certified easier” (Pritchard, J., personal communication, November 19, 2021).

Another issue identified by the Expert Panel is that continuing education unit (CEU) requirements can be burdensome and even unhelpful, especially when providers have to travel long distances to attend the education and when the courses are geared toward more urban audiences. The Expert Panel noted that some of these requirements were relaxed during the COVID-19 pandemic and indicated that it would be helpful for these flexibilities to continue. Allowing providers, especially those in rural areas, to attend CEUs virtually can help alleviate the travel burden. Virtual courses can be designed to be interactive and skills-based, providing as much value as in-person learning.

When CEU courses are geared toward urban providers they can often feel out of touch for rural providers, especially when they are not tailored to their communities’ needs. One example is the annual ethics course most providers are required to attend. While it is important for providers to follow ethics guidelines, some guidelines, such as those prohibiting treatment of individuals with whom the provider has a personal relationship may not be possible in rural settings. It is likely that many rural providers know just about everyone in their own communities on a personal and social level, making the distinction between the provider-client relationship and community resident a bit blurry. Continuing education requirements, and classes should be tailored with these contextual issues in mind.

*“Finding continuing education courses that are relevant to their [rural providers’] practice is difficult. Rural providers who don’t have a personal relationship with their clients would never be able to serve anyone. Trainings should bring something different and make it more relevant to the rural context. Sometimes, trainings can be irrelevant if not tailored to the region, which takes more time and resources.”*

Xiomara Owens, Ph.D.  
Director of Behavioral Health Aide Training  
Alaska Native Tribal Health Consortium

#### **Reducing Barriers to Entry and Promoting Strategies for Retention Key Lessons:**

- Promote the availability of scholarships and educational repayment and forgiveness programs. This can help reduce barriers to entry, allowing for more rural providers to enter the field.
- Encourage clinicians to work in rural and remote areas. States and providers can offer incentives to practice associates to provide clinical supervision for recent graduates. States may also try to find funds to cover the often prohibitive costs of supervision.
- Policy changes at the state level that allow for continuing education requirements to be achieved through virtual courses will help to reduce the burden and expense of transportation for rural providers and allow rural providers to take courses at times that are more convenient to their busy schedules.
- Tailor some continuing education courses to better reflect rural service delivery. Many courses are developed with urban providers in mind and may not be applicable or particularly useful to rural providers.

## **Internships, Residencies, and Rural Training Programs**

A variety of academic partnerships and programs exist that help train residents and future behavioral health providers on service delivery in rural areas. By introducing students and residents to rural practices, the chances of them staying on to work in rural areas after graduation increase significantly. A study in Texas found that 75 percent of primary care residents trained in rural parts of the state stayed there to start their professional careers (Levin, 2016). Linkages between states, providers, and academic

institutions can facilitate these opportunities, thereby increasing the available rural behavioral health workforce. A handful of opportunities are spotlighted below.

Although this has shown to be an effective model, states with large rural areas often have a shortage of other health professionals (primary care physicians and other medical practitioners), and rural states may have competing priorities, allowing only one field to receive attention from the state. One representative from a rural state noted during the Expert Panel that “partnerships are hard to create because of competing priorities. Working with schools of medicine is something the SMHA Commissioner prioritizes but is not something she has had time to do. Our state struggles to get primary care physicians and basic healthcare and focuses on training providers so that they have some level of comfort prescribing medications for mental illness rather than always referring patients to psychiatrists.”

To overcome some of these challenges, in 2015, the 84<sup>th</sup> Texas Legislature directed \$8 million for the University of Texas Health to develop mental health workforce training programs for rural and underserved areas. These funds allowed the University to double the size of its clinical psychology internship program, and place more psychiatric residents in rural areas of the state.



Western Interstate Commission for Higher Education

### ***Spotlight on WICHE’s Psychology Internship Consortia***

The Western Interstate Commission for Higher Education’s (WICHE) Behavioral Health Program’s [Psychology Internship Consortia](#) supports the development of the behavioral health workforce in seven rural states – [Alaska](#), [Hawaii](#), [Idaho](#), [Nevada](#), [Oregon](#), [Utah](#), and [New Mexico](#). WICHE contracts with agencies in each of these states to develop and support an internship program for students at local universities to pursue training in psychology, thereby enhancing the behavioral health workforce in each of these states. WICHE helps to ensure that the internship programs meet accreditation standards set forth by the American Psychological Association and helps universities with the accreditation process. Annual award amounts for each of the states participating in the consortium range from \$25,000 to just over \$637,000 as of 2019 (WICHE, 2020).

### ***Spotlight on Area Health Education Centers***

The Area Health Education Centers (AHEC) program was established in 1971 by Congress with the goal to “recruit, train, and retain a health professions workforce committed to” serving underserved populations. AHEC accomplishes these goals through community-academic partnerships that “focus on exposure, education, and training” the current and upcoming health care workforce. AHEC works to develop partnerships between academic institutions, community health settings (including community health centers), behavioral health practices, and other community organizations. Across the U.S., there are more than 300 AHEC centers, serving 85 percent of U.S. counties (AHEC, 2021a).



AHEC places students training to become health professionals in real-world settings, including rural community health clinics and health departments. This exposure allows students to “develop an awareness of the economic and cultural barriers” that are unique to rural settings, providing them with a better understanding of the “complex needs of rural and underserved communities.” These placements help students build relationships within the rural communities they serve, leading the way for future engagement and networking, increasing the chances that students will return to their clinical practice regions, and thereby bolstering the rural workforce (AHEC, 2021b).

In addition to its scholarship program, AHEC provides accredited continuing education programs for health care professionals, including those in rural and underserved areas, and offers programs focused on recruitment, clinical placement, and retention to address workforce needs in underserved areas.



### ***Spotlight on the National Center for Rural Health Professions' Rural Health Experience***

The University of Illinois at Chicago is home to the National Center for Rural Health Professions, which affords students enrolled in any health-related degree program the opportunity to participate in the Rural Health Experience. As part of the Rural Health Experience, upper-level students (juniors and seniors) can observe and shadow rural healthcare providers, including social workers and other behavioral health professionals. This one-to-two-week program provides basic housing and meals to students and offers the opportunity for students to explore the local communities. During their time in the rural communities, Rural Health Experience students have the opportunity to: “learn about the social and health characteristics, needs, and resources of a specific rural Illinois community; understand the roles and responsibilities of different healthcare providers in a rural community; and reflect on a future career as a healthcare provider in a rural community and [establish] potential interest in [the] rural community” as a potential future career location (The National Center for Rural Health Professions, 2021). Students from rural communities in Illinois are given preferential consideration for this program.



### ***Spotlight on the University of North Dakota's Residency Program***

The North Dakota SMHA is involved with Project ECHO in training providers on mental health issues. The state is aware that, given its population and size, it likely will never be able to develop enough of its own psychiatrists. The state is using Project ECHO to train primary care providers who are willing to treat individuals with mental health needs in the more common, easier to treat mental health challenges that may present themselves more frequently in the primary care setting, thus avoiding having to wait to engage a psychiatrist, which would mean a long wait for services. This strategy enables the few psychiatrists in the state to more quickly address the needs of those with more complex challenges, including those with schizophrenia, bipolar, and major depression. North Dakota offers Project ECHO courses to its primary care physicians on mental health and prescribing, and on the use of behavioral health screening tools.

The North Dakota legislature recognized a need to increase access to mental health services. This led to an initiative to increase and bolster the psychiatric residency program at the University of North Dakota. The program doubled in size, from three residents to six residents per year. The current program director established outreach training for residency. Prior to COVID-19, the program consisted of one half-day per week of telepsychiatry training, and travel by the residents to 10 different rural sites across the state. All residents in their third and fourth years are trained in outreach for more rural communities, both in the private and public sectors, and there is some collaboration with tribes and reservations. North Dakota provides some scholarship funding for psychiatric residents, psychologists, and social workers who are willing to do integrated care in rural communities. The majority of psychiatrists in North Dakota working in the public sector are graduates of this residency program. Residents are being trained on clozapine, long acting injectables, collaborative care (to help primary care colleagues in rural areas), etc.

Setting residents up to work with primary care providers enhances access to behavioral health services and relieves the burden of having to know how to provide behavioral health services for primary care providers. Although the rurality of North Dakota presents some challenges, the small population of the state fosters a close-knit community and network in which behavioral health and physical health providers know someone they can call to discuss issues and identify service opportunities in all areas of the state.



### ***Internships, Residencies, and Rural Training Programs Key Lessons:***

- » Develop partnerships with state and regional institutions of higher education to encourage healthcare training in rural settings. As noted by the Texas example, individuals trained in rural settings tend to stay in rural settings when they enter the workforce.
- » Providers, colleges and universities, and other stakeholders can work with state legislatures to allocate funding for rural internships and workforce development initiatives at state and regional medical schools.
- » Work with national and regional organizations, such as AHEC and WICHE, to develop internship programs and place students in rural settings.

## **Peer Support Specialists**

One evidence-based strategy to increase the availability and accessibility of mental health services in rural and remote areas is to increase the use of peer support specialists. Peer support specialists are individuals with lived experience of mental illness and/or substance use disorder who receive professional training to “assist others in their recovery journeys” (Mental Health America, 2021). Peer support specialists help to “model recovery, teach skills, and offer supports to help people experiencing mental health challenges lead meaningful lives in the community” (MHA, 2021). The core of the peer service philosophy and practice is that people with psychiatric difficulties can and do recover and live meaningful lives, and peers can help one another with the recovery process in ways that professionals cannot (SAMHSA, 2019). The use of peer support services also helps normalize the need for mental health care, and reduces the stigma associated with mental illnesses in rural communities. Members of the Expert Panel indicated that peer services are necessary and described them as essential for an effective system, rather than a service that is “nice to have.”

***“I have seen better buy-in from peers when they’re being supervised by folks who also have lived experience.”***

Jason Pritchard  
Certified Peer Specialist, Virginia-Ballad Health

In addition to the value they provide to individuals working on recovery, peer support specialists provide rural providers an opportunity to bridge service gaps in rural and remote areas. By taking on tasks appropriate to them, including non-clinical tasks and connecting individuals in treatment to community supports, peer support specialists enable licensed professionals to work at the top of their scope of practice (Mead, 2019). Peer support specialists can also be tapped to serve as drivers to help transport individuals to services, and when necessary, court hearings or probation meetings. Gloriana Hunter, a peer support specialist in New Mexico, shared an anecdote of clients having to walk 40 miles from rural Camp Verde to meet their probation officers in urban Prescott because they [had] no other transportation options” (Mead, 2019). Another peer support specialist in Michigan who drives individuals to appointments indicates that the time spent traveling, which can range from 30 minutes to four hours, allows her to better connect with her clients, and “since they’re looking out a windshield instead of looking directly at her, they talk more freely” (Thinnes, A., personal communication, November 17, 2020).

***“When peers are not compensated appropriately for all they bring to the table, when they are paid less than the pay to flip hamburgers at Micky D’s, there is an inherent inequity.”***

Wayne Lindstrom, Ph.D.  
Vice President, Western Region

While peer support specialists offer a lot of opportunity for rural and remote providers to increase the quality and availability of behavioral health services, reduce behavioral health workforce shortages, and help individuals access care through stigma reduction and transportation, the low wages peers often receive, the training requirements for certification, and the lack of established career tracks can create barriers to their potential.

Each state has different requirements for peer support specialist certification (a list of certification requirements can be found [online](#)). However, achieving certification requirements can be challenging, especially for peer support specialists living and working in rural and remote areas of the U.S. As discussed in the Transportation section of this document, travel to and from larger cities for services--and in the case of peer certification, certification classes--can be overly burdensome and discourage individuals from pursuing peer support certification. A recommendation from the Expert Panel was to allow peers to attend at least some certification classes virtually. [Delaware](#), [Idaho](#), and [Kansas](#) offer at least some of their certification classes online.

As noted in the *Financing* section above, Medicaid reimbursement rates for peer support specialists are often very low. This can lead to high turnover. Jason Pritchard, a member of the Expert Panel and a certified peer support specialist, recognized that the Medicaid reimbursement for peer support specialists in his state is only \$26.75 per hour, a rate so low that by the time a peer support specialist is paid and the state processes the Medicaid bills, the state may lose money (Pritchard, J., personal communication, December 17, 2021). It was also noted that the Medicaid requirement that peer specialists need to be supervised by a licensed mental health professional or substance use disorder counselor creates a barrier preventing peer support specialists from entering the field, especially in rural areas, because it is difficult to find qualified supervisors for all peers. Also, a sentiment many members of the Expert Panel expressed was that peers prefer to be supervised by other peers, since peer support specialists bring a different set of skills to the recovery process than licensed mental health professionals.



### **Spotlight on Virginia-Ballad Health's PEERhelp Certified Recovery Helpline**

Ballad Health's [PEERhelp Certified Recovery Helpline](#) is available to individuals experiencing substance use issues, loneliness, anxiety, and depression, and other emotional or mental health challenges. The PEERhelp service will soon be available 24/7, but now offers peer support services via a warmline Monday through Friday, noon to 10:00 p.m. Eastern; and provides structured virtual meetings through its Living Free program that: "equips people with the tools to overcome obstacles in their lives" and offers personalized, flexible support to meet the needs of each unique individual. The program hosts Pathways to Recovery virtual meetings with peers that bring a group of people with mental health and substance use challenges together to discuss recovery-focused topics and experiences each week. Through this program, volunteer peer specialists have the opportunity to gain the 500 contact hours required for certification of recovery specialists in Virginia.

### **Spotlight on Texas's Peer Support Stakeholder Workgroup**

When defining a new Medicaid benefit for peer support, the Texas Health and Human Services Commission (HHSC) created a [Peer Support Stakeholder Workgroup](#) consisting of providers and individuals with lived experience from the peer support community. To certify peer workers, HHSC designated two entities to certify peers, peer supervisions, and peer/peer supervisor training entities" It created a qualified peer supervision track to allow peers to supervise other peers and provide ongoing certification. The state did this after realizing the risk of relying solely on licensed and certified non-peer professionals to supervise peers. Licensed and certified professionals have not been eager to supervise peers, and peers have not been eager to be supervised by licensed and certified professionals who might expect peer services to be more clinical. Peer support service offers the value of being a "warm" service that helps to make people feel more comfortable during the mental health service delivery process and provides someone to relate to during a vulnerable time.



National organizations, including Mental Health America and the National Association of Peer Specialists (NCPS) offer professional networking, educational, and training opportunities for peer specialists. Although not tailored for rural and remote peer specialists, these valuable programs provide opportunities for peer specialists to expand their knowledge and abilities, help them move up a career ladder, and find increased satisfaction in their roles. Mental Health America's [Center for Peer Support](#) features an advanced peer specialist certification program. It helps peers expand their networks of friends and colleagues and offers free webinars and other learning opportunities. Mental Health America also sponsors the [National Peer Specialist Certification](#) program that allows state-certified peer specialists to further their education and demonstrate their commitment to advanced training and expertise. The NCPS program also provides participants with access to a network of other NCPSs. This allows them to connect to and learn from others, gain leadership opportunities, stay up-to-date with policies related to mental health and peer support, and receive ongoing training from NCPS. The [National Association of Peer Specialists](#) offers three levels of membership: Professional, Ally, and Sustainer. Each level offers access to an array of educational and community-building resources to enhance understanding of peer support and connect members with peers around the U.S. and the world.

There are a variety of ways that peers can be integrated into a rural behavioral health provider system, including through the implementation of peer warmlines and face-to-face service delivery in clinical settings. Several strategies are included in the Spotlight section.

#### ***Peer Specialists Key Lessons:***

- » Develop a career track for peer specialists that encourages job growth and demonstrates appreciation for the value provided by peer specialists.
- » Have peers involved in the supervision process for certification. Many states require licensed professionals to provide oversight for peer certification, but peer specialists are their own position and career track. Because of this, it makes sense for peers to be involved in the supervision process.
- » Develop national standards for certification and supervision hours for certified peer support specialists. The supervision requirement for peers can be burdensome and turn potential peer support specialists away from the field. The [Medicare PEERS Act](#) supports a peer certification process that is consistent with the National Practice Guidelines for Peer Supporters and inclusive of SAMHA's Core Competencies for Peer Workers in Behavioral Health Settings, as established by the state in which the peers work, or through a national certification process determined appropriate by the Secretary of Health and Human Services.
- » Provide training to behavioral health providers to improve their understanding about the benefits of peer support specialists.
- » A few states have developed Certified Peer Recovery Specialist Training in an online platform, and this should be considered by more states. This can help states to certify more peer specialists in a shorter amount of time, and reduces the travel burden for peers traveling from rural and remote areas to attend training. Texas and Tennessee have found success moving peer training online.
- » To demonstrate appreciation and recognition of the value that peer support specialists provide, peers should be compensated fairly, and have employee benefits (e.g., health insurance, retirement funds) made available to them.
- » Train providers on using recovery-oriented language to build a culture of inclusivity that values the experience peer support specialists bring to the practice.

## Training Local Citizens and Expanding Responsibilities of Existing Workforce

States with large rural and remote areas may not have a medical school or university offering advanced degrees in behavioral health fields readily available to help boost the size of the behavioral health workforce. One option for these states is to train existing and interested citizens in how to: respond during times of need; triage individuals in crisis; and provide basic services while under the remote supervision of a licensed professional. In addition, states can implement policies that expand prescriptive authorities for nurse practitioners and physician assistants to reduce the burden on psychiatrists.

Psychiatric mental health nurse practitioners (PMHNP) were given prescriptive authority in the 1980s. Currently all states have expanded their scope of practice laws to permit PMHNPs to prescribe medications and provide clinical care. Research supports that broadening prescriptive authority for nurse practitioners improves mental health and decreases mental health-related mortality, particularly in regions underserved by physicians (Alexander & Schnell, 2019).

Following the success of the implementation of PMHNP prescriptive authority, New Mexico, Louisiana, Illinois, Iowa, and Idaho passed laws permitting licensed psychologists to have the authority to prescribe psychotropic medications to treat mental health conditions. These specially trained psychologists are often referred to as prescribing or medical psychologists, abbreviated as “RxP”. It is important to note that most states require RxP psychologists and PMHNPs to obtain adequate levels of training and certifications in pharmacology to prescribe medications.

States that have implemented unique and innovative approaches to training citizens in behavioral health service delivery, and that have expanded the responsibilities of the existing behavioral health workforce—an initiative that other states with large rural and remote areas may want to consider implementing—are highlighted in the Spotlights below.



### ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

#### ***Spotlight on the Alaska Native Tribal Health Consortium’s (ANTHC) Behavioral Health Aide Program***

In the late 1960s, the ANTHC initiated the Community Health Aide Program to respond to the tuberculosis (TB) epidemic and the increase in infant mortality rates in tribal villages across the state. This program trained citizens with little to no experience in health care to provide basic health services and respond to the needs of individuals in rural and tribal areas. The program was so successful that it was used as a model to implement the Behavioral Health Aide Program in 2008. It is a multi-level provider model that trains citizens on how to provide therapeutic services, respond to behavioral health crises, and support the general mental health and well-being of individuals in rural and tribal communities (Owens, X., personal communication, July 7, 2020). Support for the program was garnered through newspaper articles and publications that recognized the significant mental health and substance use challenges in rural communities. They noted that local villages, and the state overall, did not have adequate resources to respond to the need. Behavioral Health Aides (BHAs) are employed by their regional tribal health organizations. Citizens interested in becoming a BHA need to be 18 years of age or older and have a high school diploma or equivalent. There are four levels of BHA certification, including BHA-I, II, III, and Behavioral Health Practitioners. Potential BHAs receive training from the ANTHC, which operates the only BHA Training Center in Alaska and works closely with the Community Health Aide Program Certification Board. Most trainings offered through the BHA Training Center are typically facilitated using a blend of distance-delivered technology, making the transition between courses that are usually held in person relatively seamless in response to COVID-19. Once certified, BHAs are qualified to provide and bill for various Medicaid services based on their level of certification, including: SBIRT (Screening, Brief Intervention, and Referral to Treatment); tobacco cessation; and individual, group, and family psychotherapy. All BHAs are supervised by licensed clinicians who can assist BHAs in connecting individuals to higher levels of care as needed.

## ***Spotlight on the Colorado Office of Behavioral Health's Crisis Services Program***



Colorado's Office of Behavioral Health (OBH) is considering a model similar to, but less formal than, Alaska's BHA program. OBH has heard from communities in rural areas that there are providers and peers who would like to do more to help individuals in crisis. The state is exploring training bachelor's-level providers and peer support specialists to provide virtual mobile crisis response. The providers and peers would be equipped with a tablet (e.g., an iPad) that they would use immediately to connect individuals in crisis to a skilled or licensed professional via telehealth services. This would help reduce the time people in crisis spend waiting for a mobile crisis team to respond, would help reduce the burden on rural law enforcement who are often the first to respond to a crisis, and provide a more humane experience to individuals in crisis. Peer support specialists could also use their experience of being in recovery to relate to individuals in crisis and build rapport with clients to increase the likelihood that individuals will return for follow-up appointments post-crisis. While the plans for this program remain, the COVID-19 pandemic has unfortunately delayed the development of the program, and future budgetary decisions may determine whether these programs will be established.



## ***Spotlight on Nevada***

During the 2013 legislative session, Nevada lawmakers granted nurse practitioners full practice autonomy as healthcare professionals to address the physician and mental health provider shortage gap in rural regions. Since legislative passage, the Nevada State Board of Nursing has seen an expansion in psychiatric mental health nurse practitioners. This workforce increase improved access to care for many rural communities. In 2015, Nevada legislators passed a parity law requiring telehealth to be covered and reimbursed under private insurance, Medicaid, and worker's compensation plans to further improve health care access. The expansion of reimbursement for telehealth services allows psychiatric mental health nurse practitioners to expand into rural regions that would otherwise have limited access to mental health specialists.

## ***Training Local Citizens and Expanding Responsibilities of Existing Workforce Key Lessons:***

- » Develop a local workforce to address the challenges of provider and peer shortages by training residents without prior experience in behavioral health to provide mental health and substance use services to fellow community members. This strategy both expands the behavioral health workforce and ensures culturally appropriate care. While the ANTHC developed the Behavioral Health Aide program for tribes in Alaska, lessons and educational materials from the BHA program are applicable to many other rural communities. Materials from the BHA program are available to be adapted by other tribes and communities in the U.S. Find more information on how to develop a program at [www.anthc.org](http://www.anthc.org).
- » Expand the scope of practice of the workforce by implementing policies that expand prescriptive authorities for other licensed practitioners, such as nurse practitioners and physician assistants, to reduce the burden on psychiatrists and other licensed practitioners.



# Increasing the Availability of Evidence-Based Practices in Rural and Remote Communities for Individuals with SMI

The term “evidence-based practice (EBP)” refers to a behavioral health service or intervention that integrates the best research evidence with clinical expertise, cultural competence, and person-centered care in order to produce positive outcomes for individuals experiencing mental illness. However, EBPs are often developed within an urban context and do not fully capture the unique needs of rural communities inherent in their geography, resources, and culture. Given the discrepancies between urban and rural environments when implementing EBPs, best practices in rural and remote communities are often created through modifications to account for sparser geographic regions, a limited workforce, funding constraints, and cultural needs. Many rural states develop creative adaptations to best utilize their available resources to provide the most effective care possible.

## Adapting EBPs for Rural and Remote Communities

As policymakers look to craft legislation and develop standards that ensure the highest quality of services in rural communities for adults with SMI, and providers look to implement programs of high quality that achieve maximal outcomes, they must creatively tailor evidence-based practices (EBPs) for delivery in a rural context. When EBPs are tailored to fit rural needs, it may be more important for funders and providers to measure the outcomes of services than rely on the monitoring of fidelity using instruments that were developed and tested in urban and suburban settings.

Rural mental health experts on our Expert Panel expressed a need for more research on implementing adaptations of EBPs for addressing SMI in rural communities and the associated challenges. Implementation efforts are most effective when addressing the specific needs and interests of providers ([Systematic Review of EBPs for SMI in Rural America](#)), and to this end, policymakers should carefully listen to and consider the unique barriers for rural providers, as well as the distinctive beneficial elements that rural communities provide. For example, rural experts commented that individuals in rural areas may have extended family, religious, and other cultural support systems that may not be as strong in more urban environments.



### **Key Lessons for Policymakers:**

- » Conduct effectiveness research across states and rural providers to understand and test the adaptations that are made to EBPs to accommodate for rural challenges.
- » Work with CMS to develop reimbursement rates for modified EBPs that allow the services to be sustainable in rural and remote areas.
- » Incorporate education and training opportunities on the use and benefits of clozapine and long-acting injectable medications into psychiatry residency training programs, as illustrated with the University of North Dakota’s residency program’s clozapine clinic, to increase prescribers’ comfort level with these medications, including how providers working in rural areas can use these important medications in treating adults with complex cases of SMI.

### **Key Lessons for Providers:**

- » Collaborate with primary care providers and other community organizations to provide support services and adapt EBPs to the needs of rural and remote communities.
- » To increase clozapine utilization, psychiatrists can collaborate with rural community centers (e.g., CMHCs, FQHCs, RHCs, and primary care) to administer regularly scheduled blood draws and ensure safe monitoring.

While many providers report consistently applying practice-relevant scientific evidence in treatment, fewer report regularly adhering to multistep and team-based EBPs due to organizational barriers, such as insufficient resources and staffing, time, and supports (Lee, 2015). Rural providers have also reported a sense of isolation from colleagues, limiting the ability to discuss research – a challenge to effectively supporting an exchange of information supporting tailored delivery of EBPs.

In analyzing EBPs for SMI in rural areas, findings show that adaptations occur but often are not documented. This limits the ability for other providers to replicate modifications and achieve the same results as the original EBP (Weaver, et al., 2015). Partnerships between researchers and rural practitioners can lead to developing locally relevant and user-friendly resources for those practitioners to improve their ability to provide evidence-based services. Rural considerations should be included when conducting research and creating policies on effective mental health interventions, as rural communities offering culturally relevant care can increase use of services (Trawver et al., 2020). In addition, if practices are adapted without careful tracking of outcomes, it cannot be known or shown whether the changes resulted in outcomes similar to those demonstrated using the EBP in non-rural areas. States can invest in data infrastructure to support rural providers in tailoring EBPs and measuring the impact of these modified practices in their communities.

Individual Placement and Support (IPS) is an EBP of supported employment that has been successfully implemented in rural settings. While there are significant barriers to implementing this practice in rural communities, results from 15 states demonstrate effective strategies for tailoring implementation of IPS for rural communities. Challenges in implementing the EBP have included limited public transportation, stigma related to mental health, internet connectivity, and employment opportunities. Strategies have differed by location, but common elements have been using natural supports for transportation, providing computer access for job applicants, developing relationships with local employers, and hiring IPS workers with local knowledge and cultural competence. In a region with no buses, a creative transportation solution involved a client who wanted to be an Uber driver providing transportation for other clients. The Expert Panel noted that the lack of anonymity in rural areas poses challenges of bias against clients, but helps to strengthen relationships. While there are benefits of close-knit communities and regional knowledge, IPS providers must address the barriers of stigma and an unwillingness to relocate to work. While implementing IPS in rural communities has unique challenges, this EBP has been successfully tailored to effectively provide supported employment in rural areas (Al-Abdulmunem, et al., 2021).



ACT is an EBP for adults with SMI that utilizes well-developed fidelity measures that have been demonstrated in multiple settings to enhance client recovery and minimize psychiatric hospitalizations. In 2008, SAMHSA published an ACT EBP toolkit that provides information for policymakers, providers, and families on implementing ACT programs. The ACT toolkit includes information about ACT team composition and roles and recommends a standardized fidelity measure (SAMHSA, 2008). According to SAMHSA's Northwest MHTTC, ACT is a "trans-disciplinary team approach providing intensive outreach-oriented services to individuals with severe and persistent mental illnesses and co-occurring disorders. Utilizing a client-centered approach, team members are responsible for addressing the needs of consumers and carry low caseloads to allow for individualized care and frequent contacts (1:10 staffing ratio). Ideally, services are available 24/7 and are directed to consumer needs with most treatment services delivered in the community" (Northwest, MHTTC, 2021).

While ACT has been widely implemented by states across the country, Expert Panel members highlighted ACT as an example of an EBP that is very difficult to provide with exact fidelity in many rural areas. Specifically, because of the relatively low population density in rural areas, in order to serve clients with the required 1 to 10 staffing ratio in rural areas, ACT teams might need to cover an area of hundreds of miles. In addition, states have found it hard to recruit the full multidisciplinary workforce needed to staff an ACT team 24/7 in rural areas. In the preliminary responses to NRI's 2020 State Profiles survey, 9 of 14 states discussed modifying ACT when discussing their SMHA's support and implementation of EBPs to better serve their rural communities. Adjustments to staff-to-client ratio requirements were highlighted by three states (Alabama, Mississippi, and Utah). Program flexibility and utilization of other community resources were indicated by four states (South Dakota, Texas, Virginia, and

Wisconsin). Kentucky reported that it uses more flexible billing processes to fund ACT, and West Virginia said it adjusts age requirements to increase access.



### ***Spotlight on Mississippi's Intensive Community Outreach and Recovery Teams***

Mississippi developed Intensive Community Outreach and Recovery (ICORT) teams to address the workforce challenges associated with complying with ACT standards in rural regions, while still providing comprehensive services for individuals with SMI in need of intensive support. ICORT has fewer staffing requirements and higher staff-to-client ratios than ACT, and it has its own fidelity scale and review process tailored to ICORT to ensure desired outcomes. ICORT has standards for operation that the Department of Mental Health monitors, and the state reports that teams have seen very successful outcomes since their inception. Outcome measures for ICORT are modeled after ACT measures, including number of admissions and discharges, number of individuals admitted to ICORT on outpatient commitment, and others. In addition, ICORT tracks the length of stay at hospitals and crisis centers for individuals served by the ICORT team (Hutchins, J., personal communication, December 3, 2020).

Training and technical assistance are particularly important to successfully achieve fidelity for the ICORT program and advocate for its expansion. Mississippi has been measuring the outcomes of the ICORT program and has demonstrated it is an effective alternative to ACT in rural areas. The Department of Mental Health's data on ICORT outcomes has been important in demonstrating to legislators that ICORT teams are caring for individuals in their districts who were previously not being served, a showing that has increased support for the program. On March 30, 2021, Mississippi's Medicaid authority released [guidance](#) stating that ICORT is an ACT team, and should be billed to Medicaid as such, effective April 1, 2021.



### ***Spotlight on South Carolina's Intensive Community Teams***

Similar to Mississippi, South Carolina has implemented Intensive Community Teams (ICT) as an alternative to ACT. This was done to overcome the barriers associated with maintaining fidelity to the ACT

model, including meeting the staff-to-client ratio requirements. For ICTs, the ideal staff-to-client ratio is 1 to 25, with a maximum ratio of 1 to 35. This modification allows the program to maintain its fidelity in rural contexts. ICTs service every county across the state, and clients can move fluidly across levels of care, allowing the services to be customizable to each individual. In addition to ICT, clients can receive services at each of South Carolina's mental health centers and clinics. Since services are sometimes not as developed in all centers, such as where all types of providers on site may not be on-site every day, there are modifications that can be made for rural areas. For example, psychiatrists can utilize telehealth to service a smaller, rural center.

Like Mississippi and South Carolina, North Dakota adapted the ACT model to work within the resources the state had available, and those states are now formally able to provide ACT. Psychiatrists are part of the team, addressing a workforce barrier the states had once faced with challenges finding a psychologist and licensed addiction counselors (McLean, A., personal communication, January 12, 2021). In rural East Texas, ACT was also not a possibility due to personnel shortages. However, they have increased the availability of intensive case management services for individuals with higher acuity, which requires fewer staff resources but still an effective intervention (Dudley, R. personal communication, January 22, 2021). However, New Mexico had an opportunity to incentivize implementation of ACT with a 20% bonus payment, but providers were too under-resourced to afford the start-up costs to create the ACT teams (Lindstrom, W., personal communication, October 21, 2021). This challenge demonstrates that even with financial support, EBPs like ACT often need to be modified to make them available in rural settings.

More research is needed on adaptations to EBPs in rural settings to demonstrate whether desired outcomes are achievable with modifications, and programs should be monitored to measure the same outcomes to see if the tailored version results in similar outcomes in rural environments (McLean, A., personal communication, January 12, 2021). It is a top priority for rural and remote communities to have access to evidence-based treatment, as currently there is a lack of access to affordable, high-quality care in rural communities (Dudley, R., personal communication, January 22, 2021).

It is a recurring theme among rural providers that their priority must be assuring the provision of basic mental health services, including counseling and access to medication, rather than a strict adherence to EBPs (Expert Panel, personal communication, October 21, 2020). EBPs are important to consider, but often needs are so acute and resources are so diminished that rural and remote communities build their practices so that they work within their constraints (Expert Panel, October 21, 2021). While providing EBPs with fidelity is seen as the ultimate goal, most EBPs have been developed in an urban or suburban context, and adhering to fidelity is often not possible within a rural context, so that outcomes from EBPs tailored to rural situations are viewed as more relevant measurements. In addition, our Expert Panel members suggested that EBPs are often best achieved in co-located care sites, particularly in a consultative context in which mental health professionals consult with primary care providers, police, and first responders to provide services (Expert Panel, October 21, 2021).

Even within rural communities, there is wide variation in the level of services available. In South Dakota, implementing fidelity monitoring was extremely difficult, as the largest city in South Dakota has 250,000 residents, which is the lowest population considered metropolitan under federal guidelines. Though it is clear EBPs often need to be tailored for rural communities, providers still must determine what types of adaptations are needed for a specific community. For example, South Dakota is paying for training and the up-front costs for providers to become certified in the Functional Family Therapy (FFT) model, but an in-person team with full fidelity is likely not possible. The state uses quality monitoring of its own design in collaboration with the FFT model to support adherence but adaptability in a rural environment (Wolfgang, T., personal communication, October 21, 2021). Similarly, in Alaska, there are different levels of rurality even within the state, with most communities averaging 5,000 to 7,000 residents. Since Alaska struggles to have enough staff available to each community to meet the needs of residents, the provision of many EBPs with full fidelity to the model is not a realistic goal (McLaughlin, J., personal communication, October 21, 2021).

While there are cases in which EBPs can be applied with fidelity in rural areas, there are many situations where they cannot, and adaptations are needed to the EBP itself or to its implementation. For example, Wellness Recovery Action Plan (WRAP) is an example of an EBP which has worked in rural settings. However, there are times that fidelity is broken to provide services virtually, which are modifications that providers are willing to make to ensure that people receive the support they need.

### ***Adapting EBPs and their implementation for Rural and Remote Communities Key Lessons:***

- » Allow for flexibility, permitting rural providers to use their knowledge of their community to modify EBPs or their implementation to better assure coverage of the population.
- » Conduct research across states and rural providers to understand and document the adaptations that are made to EBPs or their implementation to accommodate rural challenges. This research will allow other providers to replicate the modifications, and for scientific studies on outcomes and effectiveness to be conducted. Rural communities should collect data in order to assess adaptations and outcomes, but national efforts to study adaptations will help improve the research-base and understanding of which EBP modifications are effective, and can help to develop educational and training materials to further the field.

## Clozapine & Long-Acting Injectables

First- and second-generation atypical antipsychotics, such as clozapine and long-acting injectables (LAIs), are increasingly being used in the United States for individuals with SMI who are not responding to or adherent to oral antipsychotic medications. The U.S. Food and Drug Administration (FDA) approved clozapine for domestic use in 1990 for treatment-resistant schizophrenia. Since the FDA's approval, a growing body of evidence-based literature supports clozapine as being the “gold standard” treatment for refractory schizophrenia and other similar conditions, showing superiority to other antipsychotics, higher patient-level satisfaction and treatment adherence, and lower mortality rates as suicidal behaviors decrease. Although there is a strong body of literature supporting clozapine's efficacy, the antipsychotic is often underutilized in the United States when compared to other countries. According to the [Treatment Advocacy Center](#), the utilization rates for clozapine in the United States and Malaysia tie at 4 percent. That compares to rates in Australia and China, which are 35 percent and 30 percent, respectively.

One barrier potentially causing clozapine's underutilization in the U.S. is the risk of rare but serious and life-threatening conditions, including myocarditis, cardiomyopathy, seizures, and severe neutropenia (a reduction in a specific type of white blood cell that can lead to serious infections). Studies show that the risk of severe neutropenia occurs in less than 1 percent of the clozapine population and typically occurs within the first 18 weeks of a patient starting clozapine. Given the risk of severe clozapine-related neutropenia, the FDA mandates regular blood count monitoring for all patients prescribed clozapine to reduce the risk of an absolute neutrophil count (ANC) of less than 500/ $\mu$ L.

The FDA monitors clozapine treatment and ANC through a centralized “shared-system” called the [Clozapine Risk Evaluation and Mitigation Strategy \(REMS\) Program](#). This point of access system requires: 1) prescribers and pharmacies to certify before prescribing or dispensing clozapine; and 2) patients to be registered and monitored for severe neutropenia. Prescribers, pharmacists, and patients must all be enrolled in the REMS program before clozapine treatment can be initiated. Weekly ANC monitoring is required for the first six months of treatment. Patients transition to biweekly ANC monitoring after six months, and then monthly after the first year if the ANC threshold is maintained throughout the first year.

Despite the travel time for bloodwork monitoring, the Treatment Advocacy Center reports that statewide clozapine utilization rate is similar for urban and rural settings. Several states that are majority rural, such as Colorado, Maine, North Dakota, South Dakota, Vermont, and Washington, had some of the highest clozapine utilization rates in America, with South Dakota having the highest utilization rate of 15.6 percent among Medicaid recipients (Torrey, 2016).

Although a few rural states have shown success in clozapine utilization, some rural adults with treatment-resistant schizophrenia still face barriers to accessing clozapine. The main barrier cited by numerous studies is adherence to weekly blood monitoring for the first six months of treatment. Factors interplaying with the weekly blood draw adherence include: coordinating with healthcare facilitators, clinics, and laboratories; transportation to and from the site administering the blood draws; and relying on the patient to adhere to the weekly blood work schedule. Some of these barriers can be eliminated by coordinating with CMHCs, FQHCs, RHCs, and primary care to administer the blood draws and to monitor for severe side effects, according to Robert O. Cotes, MD, Associate Professor at Emory University School of Medicine and a national clinical expert on clozapine (Cotes, R., personal communication, November 6, 2020). Dr. Cotes says those care settings have the capacity to co-manage patients, along with telepsychiatry services, to mitigate some of the common side effects associated with clozapine, such as constipation, fatigue, low libido, sedation, sialorrhea, and weight gain.

Emerging technologies, such as Point-of Care (POC) testing devices, are a promising solution to ease the burden of weekly blood draws. Currently, there is only one FDA-approved POC testing devices for clozapine monitoring, the [Athelas One](#), which monitors ANC and white blood count (WBC). A finger prick blood sample is put on a test strip, the test strip is inserted into the Athelas device, and the test results are transferred within minutes to a patient's smartphone. The Athelas device is also integrated with the clozapine REMS centralized platform allowing the transmission of real-time ANC and WBC analysis to the patient's psychiatrist and pharmacist. Another device, the MyCare Insight device, manufactured by [Saladax Biomedical](#), measures clozapine levels in an individual's blood, but has not yet received FDA approval. Saladax also manufactures the [MyCare](#)



[Psychiatry Clozapine Assay Kit](#) which measures clozapine levels in an individual's blood, but does not measure ANC's, which is required for clozapine prescribing.

The second most-cited barrier to clozapine is prescribers' lack of knowledge and experience prescribing and monitoring clozapine. To address this barrier, residency programs are incorporating clozapine education opportunities to increase residents' comfort level in prescribing and managing clozapine. To illustrate this point, the University of North Dakota (UND) School of Medicine started a clozapine clinic within their psychiatry residency program. According to Andrew McLean, M.D., M.P.H., Chair of the University's, Department of Psychiatry and Behavioral Science, UND leaders were interested in developing a clozapine education program by "growing their own" clozapine clinic (McLean, A., personal communication, January 12, 2021). Medical residents are provided the real-world clinical experience of prescribing clozapine, including monitoring titration rates, and monitoring medical complications commonly associated with clozapine. Dr. McLean further added that UND's clozapine clinic accepts in-person and telehealth referrals from community providers across the state, offering initial consultation, treatment, and ongoing monitoring to support patients on clozapine. In addition, clozapine clinic medical residents review medical records as part of their case vignette training to determine prospective candidates who may benefit from clozapine but have yet to be referred to the clinic for potential consultation. These training efforts ensure that UMD graduating psychiatrists have a foundational training in clozapine while also optimizing treatment options for North Dakotans with refractory schizophrenia.

First- and second-generation Long-Acting Injectable (LAIs) antipsychotics has been shown to be an effective treatment option for patients with schizophrenia and schizoaffective disorders who are nonadherent to medication regimens, patients experiencing a first episode psychosis, and as a first-line treatment for severely ill patients. Since being introduced in the late 1960s, emerging research reports significant benefits related to LAIs, including a reduction in psychiatric rehospitalization and disease progression, prevention of relapse, improvements in psychiatric symptoms, and adherence to treatment (Brissos, et al., 2014). A limited number of studies demonstrate LAIs' effectiveness in rural communities (Camacho, et al., 2008).

LAIs are underutilized by prescribers due to lack of familiarity, concerns over medical safety, and challenges with patients accessing injections. Prescribers may be unfamiliar or hesitant due to lack of training or knowledge. For example, there are various FDA-approved LAI formulations that differ in dosing intervals (e.g., biweekly, monthly, every six to eight weeks, quarterly, biannually) requiring slow dose titration, refrigeration, or a three-hour observation time post-injection. In addition, some LAIs are gradually initiated in conjunction with oral antipsychotics. Safety issues include the inability to withdraw the medication after administration due to its long half-life and delayed release; monitoring for rare adverse side effects such as post-injection syndrome (occurs less than 1 percent of the time), and extrapyramidal symptoms including acute dystonic reactions, Parkinsonism, and akathisia. Promising research by Misawa and colleagues (2016) found that LAIs had adverse effects similar to those of oral antipsychotics; LAIs are just as safe as oral antipsychotics (Misawa, et al., 2016).

Barriers to accessing LAIs include the burden of traveling to and from the injection clinic, pain or skin irritation at the injection site, and the negative perception and stigma of being perceived as nonadherent to oral antipsychotics. Another barrier unique to rural and remote communities is that many rural pharmacies are reluctant to carry several doses of LAIs due to the cost, according to Leon Ravin, M.D., Psychiatric Medical Director, Division of Public and Behavioral Health, State of Nevada. Dr. Ravin shares that some LAIs can cost upward to \$1,500 per injection, hindering rural pharmacies from keeping these expensive medications in stock. The current practice for rural pharmacies is to order LAIs from an urban pharmacy that has the medication in stock. In contrast, most rural hospitals have the financial capacity to absorb the expensive cost of LAIs. Moreover, pharmaceutical companies sometimes provide a few complimentary injectable samples a year to hospitals as a marketing strategy. One approach Dr. Ravin recommends for increasing patient access to LAIs is providing financial assistance to rural pharmacies to ensure adequate stockage of LAIs (Ravin, L., personal communication, November 19, 2021).

The administration of LAIs will continue to evolve with future psychopharmacology and technical advancements. For example, scientific advancements may include injectable formulations having longer extended-release time; nasal formulations and transdermal patches providing prolonged-release dosing, particularly benefiting patients adverse to needles; and long-acting

pump or implant devices administering antipsychotics analogous to insulin pumps currently available for diabetes management. At this time, [asenapine](#) is the only FDA-approved transdermal patch for schizophrenia that is applied daily.

The research findings illustrate clozapine's and LAIs' effectiveness in treating adults with complex cases of SMI. To ensure rural adults with SMI have access to these treatment options, community providers, patients, and families must work together in becoming familiar with these medications to understand the benefits and risks as well as ensure safety monitoring. To further encourage and support clinical utilization of clozapine and LAIs, the SAMHSA-funded initiative, [SMI Adviser](#), has launched a [Long-Acting Injectable Center of Excellence](#) and a [Clozapine Center of Excellence](#). The Centers of Excellence offer technical assistance to support prescribers, virtual learning collaboratives and forums to engage with colleagues, CEU trainings, on-demand consultation with national experts, and vetted clinical resources.

***Clozapine and Long-Acting Injectables Key Lessons:***

- » Clozapine and Long-Acting Injectable (LAI) medications are evidence-based treatment options for refractory schizophrenia and other similar complex mental health conditions. However, clozapine and LAIs are often underutilized by prescribers due to lack of residency training in prescribing and monitoring for medical complications. Incorporating clozapine and LAI educational opportunities within psychiatry residency programs will increase competency in these treatment modalities.
- » Higher clozapine utilization can be achieved by psychiatrists collaborating with rural community providers located at CMHCs, FQHCs, RHCs, and primary care practices to administer the regularly scheduled blood draws and ensure safety monitoring—thereby enabling rural residents with SMI to receive high-quality mental health care.

## Mental Health & Law Enforcement in Rural and Remote Areas

The U.S. jail census has nearly quadrupled since 1970, with admissions reaching 11 million annually. According to research from the Vera Institute of Justice, much of this growth is driven by admissions in small and mid-sized counties, “which now make up more than 75% of the U.S. jail population” (Peckover, 2014). Of the 11 million admitted annually, an estimated 2 million of those individuals have an SMI, with nearly 75% having a co-occurring substance use disorder. “Once incarcerated, these individuals tend to stay longer in jail, and upon release are at a higher risk” of recidivism than those without a mental illness and co-occurring disorder (Peckover, 2014).

Individuals with mental illnesses often end up in jails and prisons because law enforcement and the courts, especially those in rural and remote areas, are not equipped with the knowledge and resources to divert individuals to more appropriate care.

While it is ideal for officers to not respond to mental health crises, it is not always feasible, especially in rural and remote areas where there are few mobile crisis response teams. However, best practices have been established to reduce reliance on law enforcement, and trainings exist to educate law enforcement, first responders, and the court system on how to divert individuals away from jails and into more appropriate levels of care.

The Stepping Up Initiative is “a national effort led by American counties to change the way we respond to individuals with mental illnesses and substance use disorders in a more humane and cost-effective manner. It involves all levels of county government, from elected county officials (e.g., county commissioners, sheriffs’ departments, and prosecutors) to county behavioral health providers and county staff” (Walsh, 2019). Law enforcement officers encounter a large number of individuals with mental illness, and are “often tasked with providing front-line mental health services and making decisions about the future care of the individual” (Bureau of Justice Statistics, 2019). Law enforcement officers are not experts in mental health; it is inappropriate for them to be making these decisions, and it reduces their ability to tend to other public safety concerns.



### **Key Lessons for Policymakers:**

- » Encourage collaboration between law enforcement, elected officials, providers, and other stakeholders. This will help divert individuals from the criminal justice system to appropriate care and reduce the stigma associated with behavioral health needs in rural and remote areas.
- » Support the expansion of community-based services to ensure that appropriate services are available, and that jails and emergency rooms are not the default place for law enforcement to bring someone experiencing a crisis.
- » Suspend, rather than terminate, Medicaid benefits during incarceration.

### **Key Lessons for Providers:**

- » Work with law enforcement and other stakeholders (including elected officials and advocacy organizations) to collaborate and better understand the needs of each group. This will help divert individuals in behavioral health crisis to appropriate care and lessen the stigma associated with behavioral health needs in rural and remote areas.
- » Train first responders to assess for suicide risk with the Columbia Suicide Severity Rating Scale (CSS-RS), which allows LEO to quickly assess for risk.
- » Work with local law enforcement to train officers and jail staff on [Mental Health First Aid](#).

One quarter of people killed by police each year are thought to have been experiencing a behavioral health crisis (Fuller, December 2015). Another initiative to improve law enforcement response is the implementation of Crisis Intervention Teams (CIT). The CIT approach was developed in Memphis, Tennessee, born out of a need to respond more effectively and safely to mental health crisis encounter. According to a March 2021 report released by the National Police Foundation, 30 percent of rural agencies have at least one officer certified in CIT, and approximately half of rural agencies report being part of a regional CIT partnership. These partnerships enable small, rural law enforcement agencies to access “highly skilled law enforcement and mental health staff” (Davis, et al., 2020).

Officers trained in CIT are equipped with skills to work as a team to calm individuals with mental illness who are in crisis and divert them to mental health services rather than incarceration. The objectives of CIT are to reduce injuries to the officers, reduce the risk of harm to individuals in crisis, promote decriminalizing individuals with a mental illness, and reduce stigma. Comprehensive CIT training consists of one week-long course that consists of 15 training modules, covering such topics as mental health clinical issues, psychotropic medications, substance use and co-occurring disorders, post-traumatic stress disorder, cultural awareness, suicide prevention, rights and civil commitment laws, family and consumer perspectives, traumatic brain injury, childhood developmental disorders, verbal techniques, borderline and other personality disorders, de-escalation techniques, and community resources (Jines, 2013).

Montana includes CIT training at its law enforcement academy and makes CIT training available to sheriffs’ departments through mobile training units. These efforts, offered throughout an officer’s career, help shift the culture in the state surrounding law enforcement’s response to mental illness (Rosston, K., personal communication, December 17, 2021). Our Expert Panel also encouraged a peer-to-peer training approach to improve the culture of responding to mental health crises, by having law enforcement personnel train other law enforcement personnel on how to address mental health issues (Dole, R., personal communication, December 17, 2021).

Another approach to reducing reliance on law enforcement and criminal justice systems for individuals with mental illness is the Sequential Intercept Model. [SAMHSA’s GAINS Center](#) developed the five-point Sequential Intercept Model, which identifies five opportunities along the criminal justice continuum to divert individuals with mental illness from the criminal justice system and prevent them from becoming further involved in the system. The original five “intercepts” include: 1) Law Enforcement (including calls to 911); 2) Initial Court Hearings/Initial Detention; 3) Jails and Courts; 4) Re-entry; and 5) Community-based criminal justice supervision with behavioral health supports (SAMHSA, 2021). Recently, a new intercept, Intercept Zero, has gained support, encouraging system alignment to connect individuals with care before a behavioral health crisis emerges (Fouts, n.d.). Intercept Zero includes community services, peer warm lines, and crisis lines.

The following Spotlights highlight innovative approaches to reducing law enforcement involvement in mental health events and improving law enforcement and court response when law enforcement and justice involvement is necessary.



### ***Spotlight on Texas's Clinician-Officer Remote Evaluation (CORE) Program***

In rural and remote areas, law enforcement officers are often first on the scene to reach a community resident experiencing a mental health crisis. To support law enforcement officers during these events, the Texas Health and Human Services Commission partnered with Local Mental Health Authorities (LMHAs) and law enforcement agencies to create a single point-of-contact coordinating system for triaging a mental health crisis. Law enforcement officers responding to a rural resident in mental health crisis are equipped with video technology that allows for real-time psychiatric assessments and screenings by a psychiatrist who is located off-site. This immediate access to psychiatric services ensures that residents are getting the appropriate level of care, which may include LMHAs following up with the resident or their family for further evaluation. Some law enforcement officers access broadband for telemedicine services through satellite internet, fixed wireless, or mobile hotspots to overcome sporadic broadband access.

### ***Spotlight on Johnson County, Iowa's Jail Alternatives Program***

Johnson County, Iowa implements the Sequential Intercept Model to reduce the number of people with mental illness in its jail and ensure that they are diverted to more appropriate settings for treatment. The Jail Alternatives Program began in 2005 in an effort to reduce overcrowding in the Johnson County jail, and community demand for treatment alternatives to incarceration (Peckover, 2014). The program connects participating individuals to behavioral health services, medication assistance, crisis intervention services, vocational rehabilitation, case management services, integrated home health services, residential care facilities, supportive community living services, and transitional housing. The County developed a jail screening process and hired two jail alternatives coordinators to refer individuals with mental illness to more appropriate settings and provide case management services to facilitate their behavioral healthcare needs. To be eligible for the jail alternatives program, individuals must: be 18 years or older; voluntarily agree to participate in the program; have a mental health or co-occurring disorder or traumatic brain injury; and be determined to be legally eligible for participation based on agreement between the county attorney, defense attorney, Jail Alternatives staff, and the presiding judge. (Gould, 2021).



The program has been successful in reducing the number of inmates and jail-bed days, and the associated costs. As of 2014, the Johnson County jail reported a decrease in the average daily population by 6.1 fewer inmates per day, and a potential savings of 27,126 jail-bed days, which is a potential cost savings of \$71 per day, for a total savings just under \$2 million. According to Johnson County, in addition to a reduced jail census and cost savings, other realized benefits include reduced "violations, victimizations, lawsuits, and psychiatric hospitalizations" as well as "increased employment and housing for individual participants, improved public health, improved community wellness, greater public safety," and an overall enhanced quality of life for the community (Peckover, 2014).

As discussed in the Financing section, more people in rural areas rely on public funding, like Medicaid and Medicare, for behavioral health care services. Once an individual is incarcerated, their Medicaid and Medicare benefits are either terminated or suspended. According to NACo, 34 states reinstate Medicaid and Medicare benefits after release from incarceration. However, the remaining 16 states (Delaware, Georgia, Hawaii, Idaho, Illinois, Kansas, Minnesota, Mississippi, Missouri, North Carolina, North Dakota, Oklahoma, Utah, Vermont, Wisconsin, and Wyoming) do not allow offenders to regain Medicaid benefits after release. These policies significantly affect individuals with behavioral health needs in rural and remote areas, as "individuals entering county jails have disproportionately high rates of chronic health conditions, infectious diseases, and behavioral health disorders that include substance addictions" (Bryant, 20 February 2019). Suspending, rather than terminating,



Medicaid coverage during incarceration helps ensure “a continuum of care for individuals leaving jails that boosts local economies, improves the health of communities, and reduces the risk of mortality and recidivism for this population” (Bryant, 20 February 2019).

***Mental Health and Law Enforcement in Rural and Remote Areas Key Lessons:***

- » Find ways to collaborate across stakeholder groups, including local elected officials, behavioral health providers, and law enforcement. This creates a relationship where each stakeholder can rely on another to ensure that available resources are utilized efficiently, and there is not one stakeholder group bearing the burden of care. Through these relationships, law enforcement can better understand where people can be diverted to care, while reducing the burden on their limited resources. In addition, these relationships and knowledge dissemination can help reduce the stigma certain stakeholder groups may have about people experiencing mental illness and substance use disorders.
- » Expand the accessibility of community services, and ensure officers have an available crisis center to which they can bring individuals experiencing a mental health emergency.
- » Train jail staff on the administration of the CSS-RS to assess for suicide risk, as well as Mental Health First Aid, which enables jail staff to converse with and decrease imminent threats for at-risk individuals.
- » Suspend, rather than terminate Medicaid benefits during incarceration. This helps to ensure that individuals, upon release, can re-engage with community mental health services. Currently, only 15 states offer this as an option (Washington, Oregon, California, Colorado, New Mexico, Texas, Minnesota, Iowa, Illinois, Florida, Ohio, North Carolina, Maryland, New York, and Massachusetts).

## Increasing Access to Crisis Services

SAMHSA's [National Guidelines for Behavioral Health Crisis Care—A Best Practice Toolkit](#) (National Guidelines) outlines the necessary services and best practices to deliver an effective crisis continuum of care, and recommends a comprehensive crisis service array that includes three essential services: 1) 24/7 crisis call centers that assess a caller's needs and dispatch support, 2) mobile crisis response teams dispatched as needed in the community, and 3) crisis-receiving and -stabilization facilities that are available to "anyone, anywhere, anytime" (SAMHSA, 24 February 2020). The majority of states (98%) offer at least one of these services: 82 percent of SMHAs offer 24-hour crisis hotline services, 86 percent offer mobile crisis response, and 90 percent offer some kind of crisis-receiving and -stabilization beds (for either less than or more than 24-hours) (NASMHPD Research Institute, 2015/2020).

While it is promising that the vast majority of states offer some level of crisis care to their citizens, little is known about how widely available these services are in rural and remote areas, and whether they adhere to the best practices prescribed in the National Guidelines. Ensuring all components are available to "anyone, anywhere, anytime" is an ambitious goal, and is especially challenging in rural and remote areas where a lack of awareness, workforce shortages, distance to travel and transportation issues, cultural differences and stigma, sustainability challenges, and availability of broadband access present additional barriers to the effective delivery of these services.

According to the National Guidelines toolkit, the recommendation for centralized crisis hotlines made in the National Guidelines may be more difficult to implement in rural areas due to the beliefs by some in rural communities that people in the city would have no way to relate to their problems (Neylon, 2020). A study by the Pew Research Center found that "many urban and rural residents feel misunderstood and looked down on by Americans living in other types of communities [and that] people in other types of communities do not understand the problems people face in their communities" (Parker, 2018). This belief can affect the use and efficacy of a centralized crisis hotline. [CrisisNow.com](#) offers a variety of tools and resources to help states and providers implement an effective crisis continuum that aligns with SAMHSA's National Guidelines.



### **Key Lessons for Policymakers:**

- » Use the national implementation of 988 as the national suicide prevention and mental health hotline number to assure that evidence-based and culturally appropriate call centers are available to individuals in rural areas.
- » Help local stakeholders (e.g., law enforcement, providers, EMS, others) collaborate to create a coordinated crisis response system that allows those closest to an individual in crisis to respond first and immediately connect individuals in crisis via technology to mobile crisis response teams and/or transport the individual to the nearest, most appropriate setting for their needs.

### **Key Lessons for Providers:**

- » Be creative with co-location. What is frequently missing for law enforcement in rural areas is a place to take someone other than jail when a person is in crisis. For example, in Texas, some mental health care providers share office space in law enforcement stations for screening and assessment to prevent someone from being booked.
- » Start a community conversation about medical clearance to maximize law enforcement's time. Frequently, law enforcement officers get tied up waiting in EDs for medical clearance. Some states implement an algorithm that allow law enforcement officers to directly admit to facilities and bypass EDs.

During a phone interview, Colorado's Office of Behavioral Health that this sentiment applied to both individuals in need of care, and law enforcement officers in more rural communities. These groups expressed reluctance to call into an anonymous state crisis hotline number, because of a sense of resentment that someone "in the big city would actually know about my life and my problems," and have the audacity to believe "they can fix this." This has led to more after-hour emergency calls to local community providers, who are often already overburdened.

Higher utilization of a centralized hotline can help relieve the pressure of rural providers who are already overburdened with other responsibilities. A former Alaska Native Tribal Health Consortium Behavioral Health Aide (ANTHC BHA) provider working in a remote village shared a story about being the only clinician available to answer crisis calls in the community during a six-month period. During this time, he had to be constantly available and in reach of his phone, even when trying to spend time with his family. While the actual number of crisis calls he received was low, he did experience many misdials, which were disruptive to his life and led to his burnout. Centralized 24/7 crisis call centers that are promoted and utilized across the state can help absorb some of these misdials and alleviate some of the pressure and burnout on rural providers.

To encourage local providers to direct crisis calls to the state's centralized hotline, New Mexico waived the state's unfunded requirement for local providers to operate their own emergency call capability. The state created a memorandum of understanding with the statewide call center.

At the national level, the current SAMHSA-supported National Suicide Prevention Lifeline (1-800-273-TALK) provides free and confidential counseling support to callers experiencing a suicidal or emotional crisis. In addition to telephonic support, Lifeline crisis counselors are available through online chat. The National Suicide Prevention Lifeline is composed of a national network of over 180 accredited crisis call centers located throughout the United States. Lifeline callers are linked to the closest crisis call center to ensure callers are connected to local community support and services.

In July 2020, the [Federal Communications Commission](#) (FCC) designated 988 as the new, easy-to-remember, dialing code for the current National Suicide Prevention Lifeline number (1-800-273-TALK). The FCC rule requires all telecommunication carriers to implement 988 by July 16, 2022. Shortly after the FCC ruling, the [National Suicide Hotline Designation Act](#) was signed into law on October 17, 2020. The Act specifies that all 988 calls will be answered by trained counselors of the Lifeline network who are competent in serving high-risk groups including LGBTQ youth, rural populations, and minorities. Rural communities were identified in the legislation as a high-risk population based on data indicating rural counties have higher suicide death rates than urban populations. According to Vibrant Emotional Health, administrator of the National Suicide Prevention Lifeline, 280 people seriously contemplate suicide for every suicide loss. The hope is that the new Lifeline number, 988, will reach more individuals, including rural populations, who are in a mental health or suicidal crisis.

In addition to crisis hotlines, rural individuals with SMI are supported by peer lines or warmlines that are operated by persons with lived experiences. As referenced in the Workforce section above, peer-run lines help a person in their recovery process with the goal of averting a mental health crisis. Access to this confidential service is an important resource for rural populations where mental health services are often limited, under-resourced, or viewed as stigmatizing. Because of the wealth of research supporting the efficacy of peer warmlines in enhancing the recovery process beyond the clinical scope, the majority of states offer that service. The [National Alliance on Mental Illness](#) (NAMI) provides an up-to-date online directory of peer-operated lines including service catchment area, operating hours, and any additional available communication modality, such as text and chat.

States and local communities have a long history of working together to address the unique mental health needs of rural residents, but strong evidence indicates a high prevalence of suicides among farming, ranching, and agricultural occupations in comparison to other occupations (Peterson, 2016). Farm life can be complicated by unpredictable weather, a decline in net farm income, farm debt, machinery breaking down, family dynamics, and the loneliness and social isolation surrounding farming. These extraordinary and sometimes uncontrolled sources of stress are contributing factors to the rising suicide rates in the farming, ranching, and agriculture communities.

There are several statewide and national initiatives focused on addressing the high-stress in the farming and ranching occupations, including Nebraska's [Rural Response Hotline](#) (800-464-0258), [NY FarmNet](#), and South Dakota's [Farm and Rural Stress Hotline](#) (800-691-4336). All three of these tailored hotlines are available 24/7 and provide free, confidential, telephonic support to farmers, ranchers, and rural callers. The Nebraska Rural Hotline was founded by the Interchurch Ministries of Nebraska in response to the 1980s farm crisis that led to widespread farm closures and farmer suicides. Currently operated by the Rural Response Council, the Nebraska Rural Response Hotline provides free mental health counseling, financial advice, debt collection assistance, and legal counseling provided by farm law interns. The NY FarmNet was founded in 1986 at Cornell University College of Agriculture & Life Sciences, growing out of the 1980s farm crisis. Services are provided by telephone, video conference, and walk-in appointments. South Dakota's Farm and Rural Stress Hotline is operated by Avera Health, a regional healthcare system that includes behavioral health services. The hotline was created by Karl Oehlke, an Avera physician assistant and farmer who wanted to share his personal struggles with farm life stressors in hopes of destigmatizing mental illness and providing a confidential resource that farmers would be comfortable calling for support.

The SAMHSA-supported [Mountain Plains MHTTC](#) is addressing rural mental health and farm stress by recognizing the unique challenges facing rural mental health related to accessibility, availability, and acceptability. The MHTTC operates the [Rural Mental Health and Farm Stress](#) site that offers tailored trainings, and provides technical assistance and products for mental health providers serving rural patients and their families. The MHTTC uses the term "farmers" as an all-encompassing category that includes ranchers, farmers, farm managers/owners, and agriculture workers. The resources are updated frequently and focus on practical strategies that mental health providers can use to address rural and agriculture mental health concerns.

Many cooperative extensions are offering farm stress management programs. For example, the University of Maryland Extension and University of Delaware Cooperative Extension has published [Farm and Farm Family Risk and Resilience: A Guide for Extension Educational Programming](#) (2020). The purpose of the guide is to provide tools and resources for health and finance professionals working with farmers to understand and address farming stress. The guide provides a multidisciplinary, integrated approach at the individual, family, community, and public policy level to promote farmers' and farm families' health, well-being, and resiliency.

Mobile crisis teams are the next critical component of an effective behavioral health crisis services continuum. However, their availability in rural and remote areas is often limited, and their ability to reach individuals quickly during a crisis is challenged by the need to travel great distances, challenges with terrain, and extreme weather events. Best practices put forth by SAMHSA in the [National Guidelines for Behavioral Health Crisis Care](#) (2020) indicate that Mobile Crisis Teams should incorporate peers, respond without law enforcement, and respond in a timely manner. Achieving these goals is often a challenge in rural and remote areas, where law enforcement may be the only entity available to respond in a timely manner, but states are taking unique approaches using technology and leveraging partnerships to provide Mobile Crisis Response to rural and remote individuals. Charleston County, South Carolina's approach is featured in the Spotlight below.



### ***Spotlight on Charleston County, South Carolina***

South Carolina offers mobile crisis response teams in all 46 of its counties, where Master's degree-trained clinicians are available to respond to crisis calls 24-hours a day, seven days a week. In Charleston County, a large county encompassing both large rural and densely populated areas, the mobile crisis response team only receives an average of five calls per month from local law enforcement and EMS. After discussions between the county and the EMS teams, it was revealed that EMS did not reach out to the mobile crisis response teams because it often took too long for the team to respond. It was easier and faster for EMS to transport individuals in crisis to an ED,

which is usually not the most appropriate setting unless the individual in crisis is also experiencing a medical emergency. To establish a better solution to crisis response, a partnership between the state and the EMS program was formed.

Now, when EMS is called to respond to a psychiatric emergency in Charleston County, EMS first evaluates whether the crisis is medical or psychiatric in nature. If medical, the ambulance transports the individual to the appropriate level of care, which may be the ED. If the crisis is psychiatric in nature, the EMS crew calls their supervisor to respond in an SUV. Once the supervisor responds, EMS conducts a handoff of the individual in crisis to the supervisor, and the ambulance is sent back out into service. The EMS supervisor then 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 for care. Service is immediate, allows for more appropriate use of EMS time and resources, and reduces the number of referrals to EDs in the county. Further, by reducing the need for mobile crisis teams to travel long distances, it allows the individual in crisis to receive services more 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 experiencing a psychiatric emergency. (Blalock, D., personal communication, July 7, 2020)

The third core element of a crisis delivery system is access to crisis receiving and stabilization centers. According to the [National Guidelines](#), these facilitating centers offer “a no-wrong-door access to mental health and substance use care; operating much like a hospital ED that accepts all walk-ins [and] ambulance, fire and police drop-offs.” Services are delivered within a 24-hour window and focused on the client's immediate behavioral health crisis. These services may include assessment, suicide prevention screening, treatment planning, prescribing and monitoring of medications, case management, and referral to community-based supports. Crisis care experts note that most patients in behavioral health crisis can be stabilized within 23 hours, thereby diverting from costly inpatient hospitalization. Patients also report a higher level of satisfaction and improved treatment outcomes than when admitted to an ED (Colman, et al., 2017).

An illustration of crisis stabilization centers operating effectively in rural communities is evident in southern Indiana, according to a case study conducted by Mukherjee and Saxon (2018). A community-based mental health organization coordinated with three hospital systems' EDs to set up a crisis stabilization unit (CSU) in a 17-county rural region of southern Indiana. The purpose of the CSU was to better serve ED patients with behavioral health emergencies through an integrated delivery model. The CSU was comprised of two units: (1) crisis intake and assessment; and (2) a crisis intervention and stabilization with a unit capacity to serve eight clients. CSU services included peer support, psychological evaluation through telepsychiatry conducted by nursing staff, counseling support, and medication management. A psychiatrist was available for telehealth consultation as needed. At the time of the study, the CSU had implemented the first service stage—ED clients given a clinical assessment and transferred to the CSU based on the assessment. Mukherjee and Saxon reported that patient's average length of stay in the ED decreased from 7.3 hours to 4.1 hours with an annual savings of \$1.1 million. In addition, CSU staff conducting the behavioral health screenings at the three EDs reported a cost-analysis savings of about \$4.1 million (Mukherjee & Saxon, 2018).



At the time of the study, there were plans to expand the CSU model to a second service stage that would accept first responders and law enforcement dropping off patients experiencing a behavioral health crisis, similar to the core functions outlined in the National Guidelines for crisis receiving and stabilization models.

***Crisis Services Key Lessons:***

- » Build on the implementation of the new 988 National Suicide Prevention and Mental Health Hotline to support evidence-based crisis call centers across the country. The 988 call centers, and any related warm lines or other call services, should be culturally competent for rural and remote needs and be adequately funded to support their operation. Marketing to rural and remote communities should emphasize a tailoring to the community's needs.
- » Collaborate with local first responders (e.g., law enforcement, EMS) to triage crisis calls and virtually connect individuals to mobile crisis response teams. This allows EMS and law enforcement to quickly return to responding to health and public safety needs and provides a quicker response time for individuals in crisis.

## Addressing Suicide Risk Factors and Improving Suicide Response

According to the Centers for Disease Control and Prevention (CDC), suicide rates among adults across the U.S. have risen since 2007. The rate of suicide among individuals in rural counties increased at a rate 6.1 times faster than the rate in urban counties between 2007 and 2015 (CDC, 2018). The alarming divergence between suicide rates in rural and urban areas may be partially attributable to the higher prevalence of firearms in rural areas, which accounted for half of all suicides during the same timeframe.

The risk of suicide associated with social determinants of health has strongly been linked to economic factors related to educational attainment, homelessness, and poverty. Emerging research shows that a higher educational level is a protective factor against suicide. Phillips and Hempstead (2017) found that males with a high school education level or equivalent were two times as likely to die by suicide as their college-educated counterparts (Phillips & Hempstead, 2017).

Another factor contributing to suicide rates may be the limited accessibility of behavioral health services in rural areas when compared to urban areas, especially those integrated with primary care. A population at particular high risk of death by suicide in rural and remote areas is veterans, who have a 41% (deployed) to 61% (non-deployed) increased risk of suicide when compared to the general U.S. population. Suicide among military veterans is nearly twice as high in the “western U.S. and rural areas” where veterans “must drive 70 miles or more to reach the nearest Veterans Affairs (VA) medical center” (Veterans Affairs, 2018; Yen, 2017).

In addition, a 2019 study found that U.S. veterans and nonveterans with a history of homelessness were more likely to attempt suicide (24.5 percent and 23.1 percent, respectively) (Tsai & Cao, 2019). County-level poverty rates were strongly associated with suicide rates for both genders and all age groups, according to Kerr and colleagues (2017).

Finally, research suggests there may also be a connection between suicide risk and altitude levels, which is a factor for states along the Continental Divide (Brenner, B., et al., 2011).



### **Key Lessons for Policymakers:**

- » Develop and support public awareness campaigns that normalize behavioral health and the need for treatment.

### **Key Lessons for Providers:**

- » Conduct outreach to community connectors—including faith-based leaders, gun shop owners, and firing range owners—to conduct trainings in how to identify the signs and risks of suicide.
- » Market suicide awareness campaigns where people are most at risk (e.g., gun shops and ranges), and where people can be reached discretely (e.g., posting flyers and suicide awareness information on the back of bathroom stalls).

As discussed earlier in this document, the majority of individuals who attempt suicide seek out care from their primary care physician before making a suicide attempt. According to a 2015 study, 38 percent of individuals visited a healthcare provider within one week of attempting suicide; 64 percent visited within one month; and 95 percent made a visit within one year of a suicide attempt (Wolters Kluwer Health, 2015). Training primary care physicians and nurses to recognize the signs and symptoms of suicidal ideation and behavior, and how to intervene when someone is identified as at risk, is critical, especially in rural and remote areas where specialty behavioral health providers are scarce. Models including [Zero Suicide](#) and [Suicide Safe Care for Patients](#) offer useful guidance for providers working with at-risk individuals.

*“Integrating physical and behavioral health saves lives. The extent to which primary care providers have the capacity for behavioral health is important because many individuals who die by suicide have seen a primary care provider within the past six months.”*

Jim McLaughlin, L.P.C.  
Alaska Division of Behavioral Health

It is important to reach people where they live and work and to provide resources where people can easily access them. New Hampshire’s Gun Shop Project is a relatively easily replicated approach to conducting outreach and suicidal awareness campaigns in the community where people are most at risk. In 2009, over the course of six days, three patrons of Ralph Demicco’s gun shop in New Hampshire took their own lives with firearms purchased in his store. At the time, nearly one in ten suicides in the state involved a firearm that was “purchased or rented within a week of the suicide, [but usually within hours]” (Frank & Demicco, 2021). These shocking events led to his partnership with Elaine Frank, the program director at the Dartmouth Injury Prevention Center and the development of the Gun Shop Project. The goals of the Gun Shop Project are to “provide gun shop owners and employees with guidelines on how to recognize people expressing potential suicide ideation to avoid or delay selling them guns, as well as to distribute brochures and posters to educate customers and increase awareness” (Bryan, 17 July 2018). Materials were developed by, and specifically for, firearm retailers and range owners. As of 2018, nearly half of all gun shops in the state had brochures from the Gun Shop Project displayed in their stores. Many of these materials are also available online for firearm retail stores and ranges to personalize for their own communities, including:

- [Gun Safety Rules: the 11 Commandments of Gun Safety](#): This brochure contains information on firearms safety, including contact information for gun safety experts, and how to safely store and use a firearm. The eleventh “Commandment” includes specific safety precautions for a family member who may be suicidal, stating that “when an emotional crisis (such as a breakup, job loss, or legal trouble) or a major change in someone’s behavior (depression, violence, or heavy drinking) causes concern, storing guns outside the home for a while may save a life. Friends, as well as some shooting clubs, police departments, or gun shops may be able to store them until the situation improves.”
- [Suicide Prevention Poster](#): This poster, which can be displayed prominently in gun shops and ranges, or discretely (e.g., on the back of bathroom stalls) alerts people who may be concerned about a friend or family member about what signs to look out for to help determine if the individual is suicidal. The poster also encourages the person to hold onto the potentially suicidal individual’s guns and provides the phone number for the National Suicide Prevention Lifeline.
- [The Lifeline Card](#) provides information on a compact card on how to contact the National Suicide Prevention Lifeline, as well as how to recognize signs of suicidal ideation. These cards are small, making them easy to distribute and for shop and range patrons to take with them to leave in their cars or wallets.
- The [Tip Sheet for Dealers](#) and the [Tip Sheet for Range Owners](#) help firearms dealers and range owners recognize potential signs of suicidality in patrons, provide a list of options for responding to a potentially suicidal buyer, and provide recommendations on other steps dealers can take to reduce the risk of suicidal buyers purchasing guns.
- The [FAQ Sheet](#) addresses common questions and misconceptions shop and range owners and dealers may have related to suicidal ideation and addresses legal concerns they may have related to declining a firearm sale.

- A five-minute video, Suicide Prevention: [A Role for Gun Shops and Ranges](#), portrays an interaction between a gun shop dealer and a range shop owner taking note of the Gun Shop Safety poster and discussing the tragedy of suicide and their role in preventing it in their communities.

States with large rural areas can formally or informally implement these programs. A handful of states, including Colorado and Delaware, have enacted legislation requiring firearms retailers to display outreach materials and train shop and range owners on suicide prevention. However, providers in the community can also conduct their own outreach to gun shops and ranges, encouraging them to market suicide prevention materials and provide training on recognizing suicidal ideation.

Another example of a robust suicide prevention program can be found in Montana's Strategic Suicide Prevention Plan. Karl Rosston, the Suicide Prevention Coordinator for Montana, spoke on the Expert Panel calls about Montana's efforts to reduce the rates of suicide in the state. Montana is consistently in the top five states for suicide rates in the country and is taking significant steps to reduce its rate. However, Mr. Rosston noted that addressing this trend is not something that can be achieved quickly, as suicide "is part of the culture" in Montana. Many legislators, when deciding to support or oppose new legislation to reduce suicides, are hopeful that significant change will occur during their terms. Mr. Rosston indicated that such quick change is unlikely and that it will take a cultural shift that occurs over the long term; this is why the state is starting to focus efforts on younger populations, including children, adolescents, and young adults. Montana hopes to implement the [PAX Good Behavior Game](#) statewide (discussed in more detail in the Mental Health Education and Literacy section).

The Montana Strategic Suicide Prevention Plan is a robust plan aimed at reducing the rates of suicide in the state and can be used as a model for other states to follow. Recently updated in 2021, the Plan contains five goals, with a series of supporting objectives and strategies (Montana, 2021). The goals outlined in the Plan include:

1. Implement a suicide prevention program at the DPHHS based upon the best available evidence. This includes: dedicating core staff positions to carry out essential functions of the suicide prevention efforts; implementing a one-year suicide prevention action plan; coordinating and integrating DPHHS's suicide prevention activities, encouraging cross-department collaboration and integration of programs across funding sources; and providing policy recommendations to DPHHS based on published data, best practices, and state-specific data analysis.
2. Develop a comprehensive communication plan. To do this, DPHHS will research effective suicide prevention public awareness messaging and explore resources to create and disseminate the messaging, and direct resources towards identifying and implementing evidence-based strategies to prevent the use of lethal means through messaging for target groups.
3. Identify and use available resources to guide state, tribal, county, and local efforts, including crisis response efforts. DPHHS will oversee an overall suicide prevention and intervention training plan for prevention and intervention trainings within communities. It is committed to strengthening the crisis response system infrastructure in Montana and embedding expectations for suicide prevention within relevant state-funded contracts.
4. Build a multi-faceted, lifespan approach to suicide prevention. DPHHS will support efforts to ensure a systematic approach to providing suicide safer care by: partnering with healthcare and behavioral health programs in Montana's university settings; building capacity within the public health system to prevent suicide in Montana; developing and supporting suicide prevention programs to address suicide prevention with at-risk groups; establishing policies, modeling practices, and developing resources in preparation for post-suicide response, including the event of a suicide cluster; and establishing a suicide prevention task force at the state level and receiving feedback on actions taken by the state and on the Suicide Prevention Strategic Plan.
5. Support high-quality, privacy-protected suicide morbidity and mortality data collection and analysis. DPHHS will increase the use of data to understand the problem of suicide and effectively target interventions, and will establish a system for using and communicating data.

## References

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- Acri, M. C., Bornheimer, L.A., Jessell, L., Chomancuzuk, A., Adler, J.G., Gopalan, G., & McKay, M.M. (2017). The intersection of extreme poverty and familial mental health in the United States. *Social Work in Mental Health*, 15(6), 677–689. <https://doi.org/10.1080/15332985.2017.1319893>
- AHEC. (2021a). *National AHEC Organization*. Area Health Education Centers. <https://www.nationalahec.org/>
- AHEC. (2021b). *What AHECs Do*. Area Health Education Centers. <https://www.nationalahec.org/page/WhatAHECsDo>
- Al-Abdulmunem, M., Drake, R.E., & Carpenter-Song, E. (18 March 2021). Evidence-based supported employment in the Rural United States: Challenges and adaptations. *Psychiatric Services*. <https://doi.org/10.1176/appi.ps.202000413>
- Alegría, M., NeMoyer, A., Falgàs Bagué, I., Wang, Y., & Alvarez, K. (17 September 2018). Social determinants of mental health: Where we are and where we need to go. *Current Psychiatry Reports*, 20(11), 95. <https://doi.org/10.1007/s11920-018-0969-9>
- Alexander, D., & Schnell, M. (July 2019). Just what the nurse practitioner ordered: Independent prescriptive authority and population mental health. *Journal of Health Economics*. Vol 66, 145-162. <https://doi.org/10.1016/j.jhealeco.2019.04.004>
- American Medical Association. (Updated 3 May 2020). *AMA Telehealth Quick Guide*. <https://www.ama-assn.org/practice-management/digital/ama-telehealth-quick-guide>
- Beck, A., Page, C., Buche, J., Rittman, D., & Gaiser, M. (1 December 2018). *Estimating the distribution of the U.S. psychiatric subspecialist workforce*. School of Public Health Behavioral Health Workforce Research Center at the University of Michigan. <https://www.healthworkforceta.org/research-alerts/estimating-the-distribution-of-the-us-psychiatrist-subspecialist-workforce/>
- Beck, A.J., Page, C., Buche, J., Rittman, D., & Gaiser, M. (October 2019). *Behavioral health service provision by primary care physicians*. University of Michigan School of Public Health Behavioral Health Workforce Research Center. [https://www.behavioralhealthworkforce.org/wp-content/uploads/2019/12/Y4-P10-BH-Capacityof-PC-Phys\\_Full.pdf](https://www.behavioralhealthworkforce.org/wp-content/uploads/2019/12/Y4-P10-BH-Capacityof-PC-Phys_Full.pdf)
- Billings Clinic. (2021). *Eastern Montana Telemedicine Network*. Billings Clinic. <https://www.billingsclinic.com/services-specialties/eastern-montana-telemedicine-network/>
- Brenner, B., Cheng, D., Clark, S., & Camargo, Jr., C.A. (April 2011). Positive association between altitude and suicide in 2,584 U.S. counties. *High Altitude Medicine and Biology*. 12(1):31-35. <https://doi.org/10.1089/ham.2010.1058>
- Brissos, S., Ruiz Veguilla, M., Taylor, D., & Balanzá-Martinez, V. (October 2014). The role of long-acting injectable antipsychotics in schizophrenia: a critical appraisal. *Therapeutic Advances in Psychopharmacology*, 4(5), 198–219. <https://doi.org/10.1177/2045125314540297>
- Browning, L., Hammer, G., & Minnes, K., (February 2021). Medicaid Forward: Behavioral Health. National Association of Medicaid Directors. [https://medicaiddirectors.org/wp-content/uploads/2021/02/NAMD\\_MedicaidForwardReport\\_FEB2021.pdf](https://medicaiddirectors.org/wp-content/uploads/2021/02/NAMD_MedicaidForwardReport_FEB2021.pdf)
- Bryan, Z. (17 July 2018). What gun shops can do to help prevent suicide. *High Country News*. <https://www.hcn.org/articles/the-montana-gap-gun-sellers-on-the-front-line-of-suicide-prevention>
- Bryan, Z. (25 July 2018). Counties lacking mental health providers turn to technology. *High Country News*. <https://www.hcn.org/articles/the-montana-gap-counties-lacking-mental-health-providers-turn-to-technology-telemedicine>



- Bryant, B. (20 February 2019). *Termination of Medicaid coverage during incarceration: set-up for failure?* County News. National Association of Counties. <https://www.naco.org/articles/termination-medicaid-coverage-during-incarceration-set-failure>
- Bureau of Justice Statistics. (2019). *Police mental health collaboration (PMHC) toolkit*. Bureau of Justice Statistics. <https://bja.ojp.gov/program/pmhc>
- Cain, D.N., Mirzayi, C., Rendina, H.J., Ventuneac, A., Grov, C., & Parsons, J.T. (1 October 2017). Mediating effects of social support and internalized homonegativity on the association between population density and mental health among gay and bisexual men. *LGBT Health* 4(5):352–9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5686449/>
- Camacho, A., Ng, B., Galangue, B., & Feifel, D. (June 2008). Use of risperidone long-acting injectable in a rural border community clinic in southern California. *Psychiatry* (Edgmont). 5(6), 43–9. <https://pubmed.ncbi.nlm.nih.gov/19727284/>
- Carroll, L. (7 June 2019). *Fewer psychiatrists take Medicaid patients even as the program has expanded*. Reuters Health. <https://www.reuters.com/article/us-health-psychiatry-medicaid-idUSKCN1T82AC>
- Centers for Disease Control and Prevention. (Updated 10 March 2021). *About social determinants of health (SDOH)*. <https://www.cdc.gov/socialdeterminants/about.html>
- Centers for Disease Control and Prevention. (Updated 12 January 2018). *Suicide in rural America*. <https://www.cdc.gov/ruralhealth/Suicide.html>
- Colman, M., & Mackey, K. (1 February 2017). Novel paramedic programs respond to behavioral health-related calls. *ED Management*. 29(2):13-18. <https://www.reliasmedia.com/articles/139885-novel-paramedic-programs-respond-to-behavioral-health-related-calls>
- Davis, R.C., Lebron, M., & Reuland, M. (January 2021). *How small law enforcement agencies respond to calls involving persons in crisis: Results from a national survey*. National Police Foundation. <https://www.policefoundation.org/publication/how-small-law-enforcement-agencies-respond-to-calls-involving-persons-in-crisis-results-from-a-national-survey/>
- Derr, A.S. (March 2016). Mental health service use among immigrants in the United States: A systematic review. *Psychiatric Services*. 67(3):265-74. <https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201500004>
- Deweese, S., & Marks B. (April 2017). *Research note: Twice invisible, understanding rural Native America*. First Nations Development Institute. <https://www.usetinc.org/wp-content/uploads/bvenuti/WWS/2017/May%202017/May%208/Twice%20Invisible%20-%20Research%20Note.pdf>
- Economic Research Service, U.S. Department of Agriculture. (2010). *Documentation: 2010 frontier and remote (FAR) area codes & 2020 Frontier and Remote Area Codes Maps*. USDA. <https://www.ers.usda.gov/data-products/frontier-and-remote-area-codes/documentation/>
- Farrigan, T. (Updated 17 June 2021). *Rural poverty and well-being*. USDA Economic Research Service. <https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/>
- Farrigan, T. (Updated 23 April 2021). *Rural Education*. United States Department of Agriculture Economic Research Service. <https://www.ers.usda.gov/topics/rural-economy-population/employment-education/rural-education/>
- Federal Communications Commission. (24 April 2020). *2020 Broadband Deployment Report*. FCC GN Docket No. 19-285. <https://docs.fcc.gov/public/attachments/FCC-20-50A1.pdf>
- Federal Communications Commission. (2020). *Rural Digital Opportunity Fund*. <https://rdof.com/rdof>

- Federal Communications Commission, Connect2Health Task Force. (2017). *Mapping Broadband Health in America*. Federal Communications Commission. [https://www.fcc.gov/reports-research/maps/connect2health/#ll=18.833518,-155.983887&z=6&t=broadband&bbm=fixed\\_access&dmf=none&zlt=county](https://www.fcc.gov/reports-research/maps/connect2health/#ll=18.833518,-155.983887&z=6&t=broadband&bbm=fixed_access&dmf=none&zlt=county)
- FiberRise. (2020). *Funding the way for rural America*. <https://rdof.com>
- Florez, I.A., Au, J., Morrisette, N., & Lamis, D.A. (17 December 2019). Risk factors for suicide attempts among rural youth with a history of suicidal ideation. *Journal of Death Studies*. <https://doi.org/10.1080/07481187.2019.1701147>
- Fouts, J.D. (20 February 2019.) *Intercept zero: traditional sequential intercept model*. Forensic Systems Solutions. [https://www.forensicsystemssolutions.org/documents/Intercept\\_Zeroshorter2.pdf#:~:text=INTERCEPT%20ZERO%20Traditional%20Sequential%20Intercept%20Model%20The%20traditional,becoming%20more%20enmeshed%20in%20the%20criminal%20justice%20system](https://www.forensicsystemssolutions.org/documents/Intercept_Zeroshorter2.pdf#:~:text=INTERCEPT%20ZERO%20Traditional%20Sequential%20Intercept%20Model%20The%20traditional,becoming%20more%20enmeshed%20in%20the%20criminal%20justice%20system)
- Frank, E., & Demicco, R. (2021). *Suicide prevention: A role for firearm dealers and ranges*. NH Firearm Safety Coalition. The Connect Program. <https://theconnectprogram.org/resources/nh-firearm-safety-coalition/>
- Fuller, D.A., Lamb, H.R., Biasotti, M., & Snook, J. (December 2015). *Overlooked in the undercounted: The role of mental illness in fatal law enforcement encounters*. Treatment Advocacy Center. <https://www.treatmentadvocacycenter.org/storage/documents/overlooked-in-the-undercounted.pdf>
- Gould, E. (2019). *Jail alternatives program*. Johnson County, Iowa. <https://www.johnsoncountyiowa.gov/departments-of-sheriff/jail-alternatives-program>
- Hall, S.A., & Gjesfjeld, C.D. (2013). Clergy: A partner in rural mental health? *Journal of Rural Mental Health*, 37(1), 50-57. <https://doi.org/10.1037/rmh0000006>
- Health Resources and Services Administration, HHS. (5 May 2014). Methodology for Designation of Frontier and Remote Areas. 79 *Federal Register* 25599-603. <https://www.federalregister.gov/documents/2014/05/05/2014-10193/methodology-for-designation-of-frontier-and-remote-areas>
- Jines, J.K. (8 January 2013). *Crisis intervention teams: Responding to mental illness crisis calls*. Federal Bureau of Investigation's Law Enforcement Bulletin. <https://leb.fbi.gov/articles/featured-articles/crisis-intervention-teams-responding-to-mental-illness-crisis-calls>
- Kerr, W.C., Kaplan, M.S., Huguet, N., Caetano, R., Giesbrecht, N., & McFarland, B.H. (13 November 2016). Economic recession, alcohol, and suicide rates: Comparative effects of poverty, foreclosure, and job loss. *American Journal of Preventive Medicine*. 52(4), 469-75. <https://doi.org/10.1016/j.amepre.2016.09.021>
- Kirby, J.B., Zuvekas, S.H., Borsky, A.E., & Ngo-Metzger, Q. (December 2019). Rural residents with mental health needs have fewer care visits than urban counterparts. *Health Affairs*. 38(12), 2057-2060. <https://doi.org/10.1377/hlthaff.2019.00369>
- Komek, A.B., Sourander, A., & Elonheimo, H. (1 October 2015). Bullying by peers in childhood and effects on psychopathology, suicidality, and criminality in adulthood. *The Lancet Psychiatry*, 2(10), 930-41. [https://doi.org/10.1016/S2215-0366\(15\)00223-0](https://doi.org/10.1016/S2215-0366(15)00223-0)
- Lee, M. (15 May 2015). Use of evidence-based practice and barriers to utilize research in rural social work practice. *Journal of Evidence-Informed Social Work*, 13(2), 142-54. <https://doi.org/10.1080/23761407.2015.1011296>
- Levin, J. (27 April 2016). *Mental health workforce development in rural northeast Texas*. University of Texas Health Science Center at Tyler. <https://capitol.texas.gov/tlodocs/84R/handouts/C3822016042710001/c475a652-fa66-4911-a58e-fbbe4028507c.PDF>

- Luciano, A., & Meara, E. (2014). The employment status of people with mental illness: National survey data from 2009 and 2010. *Psychiatric Services*. 2014; 65(10): 1201–09. <https://doi.org/10.1176/appi.ps.201300335>
- Mead, A. (6 February 2019). *Peer support specialists care for and connect rural behavioral health clients*. Rural Health Information Hub. <https://www.ruralhealthinfo.org/rural-monitor/peer-support-specialists/>
- Medicaid.gov. (2021). *Health homes*. Centers for Medicare and Medicaid Services. <https://www.medicaid.gov/medicaid/long-term-services-supports/health-homes/index.html>
- Merrick, M.T., Ports, K.A., Ford, D.C., Afifi, T.O., Gershoff, E.T., & Grogan-Kaylor, A. (July 2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*. 69(7), 10-19. <https://doi.org/10.1016/j.chiabu.2017.03.016>
- Mental Health America. (2021). *Peers: Their roles and the research*. <https://www.mhanational.org/peer-services#:~:text=Peer%20support%20programs%20provide%20an%20opportunity%20for%20consumers,health%20challenges%20lead%20meaningful%20lives%20in%20the%20community>
- Misawa, F., Kishimoto T., Hagi K., Kane, J.M., & Correll, C.U. (20 October 2016). Safety and tolerability of long-acting injectable versus oral antipsychotics: A meta-analysis of randomized controlled studies comparing the same antipsychotics. [*Schizophrenia Research*. 76(2-3):220-30. <https://doi.org/10.1016/j.schres.2016.07.018>
- Montana Department of Health and Human Services. (2021). *Suicide prevention strategic plan*. Montana Department of Health and Human Services. <https://dphhs.mt.gov/Portals/85/suicideprevention/MontanaStrategicSuicidePreventionPlan2021.pdf>
- Moyer, E. (1 February 2020). *FCC approves \$20B rural broadband fund, but not without disagreements*. c|net. <https://www.cnet.com/news/fcc-approves-20-4m-rural-broadband-fund-but-not-without-disagreements/#:~:text=The%20Federal%20Communications%20Commission%20voted%20this%20week%20to,the%20US%20have%20access%20to%20broadband%20internet%20connections>
- Mukherjee, D. & Saxon, V. (27 January 2018). Psychiatric boarding and community-based behavioral health crisis stabilization. *Community Mental Health Journal*. 55, 375-84. <https://doi.org/10.1007/s10597-018-0237-9>
- Mwachofi, A., Imai, S., & Bell, R.A. (15 April 2020). Adverse childhood experiences and mental health in adulthood: evidence from North Carolina. *Journal of Affective Disorders*. 267, 251-7. <https://doi.org/10.1016/j.jad.2020.02.021>
- NASMHPD Research Institute (2020). *2015 and 2020 State Profiles Data*. 2015 data available at <https://www.nri-inc.org/our-work/?searchtype=publication&focus=&service=Data+Analysis> ; 2020 data in development.
- National Center for Rural Health Professions. (2021). *Internships and experiences: Rural health experience (RHE)*. The National Center for Rural Health Professions. <https://ncrhp.uic.edu/programs/internships-experiences/rural-health-experience/>
- New American Economy. (23 October 2017). *The silent shortage: how immigration can help address the large and growing psychiatrist shortage in the United States*. [http://research.newamericaneconomy.org/wp-content/uploads/2017/10/NAE\\_PsychiatristShortage\\_V6-1.pdf](http://research.newamericaneconomy.org/wp-content/uploads/2017/10/NAE_PsychiatristShortage_V6-1.pdf)
- Newkirk, V., & Damico, A. (29 May 2014). *The Affordable Care Act and insurance coverage in rural areas*. Kaiser Family Foundation. <https://www.kff.org/uninsured/issue-brief/the-affordable-care-act-and-insurance-coverage-in-rural-areas/>

- Neylon, K. (August 2020). *Strategies for the delivery of behavioral health crisis services in rural and frontier areas of the U.S.* National Association of State Mental Health Program Directors. <https://www.nasmhpd.org/sites/default/files/2020paper10.pdf>
- Northwest Mental Health Technology Transfer Center Network. (2021). *Northwest MHTTC areas of focus*. Mental Health Technology Transfer Center Network <https://mhttcnetwork.org/centers/northwest-mhttc/areas-focus>
- Park-Lee, E., Lipari, R.N., Bose, J., Hughes, A., Greenway, K., Glasheen, C., Herman-Stahl, M., Penne, M., Pemberton, M., & Cajka, J. (July 2018). *Substance use and mental health issues among U.S.-born American Indians or Alaska Natives residing on and off Tribal lands*. CBHSQ Data Review. Center for Behavioral Health Statistics and Quality, SAMHSA. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/DRAIAN TribalAreas2018/DRAIAN TribalAreas2018.pdf>
- Parker, K., Menasce Horowitz, J., Brown, A., Fry, R., Cohn, D., & Igielnik, R. (22 May 2018). *What unites and divides urban, suburban and rural communities*. Pew Research Center. <https://www.pewresearch.org/social-trends/2018/05/22/what-unites-and-divides-urban-suburban-and-rural-communities/>
- PAXIS Institute. (2020). *PAX Good Behavior Game*. <http://paxgoodbehaviorgame.promoteprevent.org/what-pax-good-behavior-game>
- Peckover, J. (2014). *Alternatives to incarceration: a snapshot of mental health jail diversion in Johnson County, Iowa*. National Jail Exchange, National Institute of Corrections. <https://www.naco.org/resources/alternatives-incarceration-snapshot-mental-health-jail-diversion-johnson-county-iowa>
- Pegoraro, R. (28 Feb 2018). *The problem with America's new national broadband map*. Bloomberg CityLab. <https://www.bloomberg.com/news/articles/2018-02-28/the-problem-with-the-fcc-s-new-national-broadband-map>
- Peterson, C., Sussell, A., Li, J., Schumacher, P.K., Yeoman, K., & Stone, D.M. (24 January 2020). *Suicide rates by industry and occupation: National Violent Death Reporting System, 32 states, 2016s*. Centers for Disease Control and Prevention. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6903a1.htm>
- Pew Charitable Trusts. (16 November 2020). *States tap federal CARES Act to expand broadband*. Pew Trusts. <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2020/11/states-tap-federal-cares-act-to-expand-broadband>
- Pew Research Center. (November 2015). *2014 U.S. Religious landscape study: Adults in Tennessee*. Pew Research Center. <https://www.pewforum.org/religious-landscape-study/state/tennessee/#beliefs-and-practices>
- Phillips, J.A., & Hempstead, K. (1 October 2017). Differences in U.S. suicide rates by educational attainment, 2000-2014. *American Journal of Preventive Medicine*. 53(4): e123-e130. <https://doi.org/10.1016/j.amepre.2017.04.010>
- RHIhub. (2021). *Health professional shortage areas: mental health, by county, 2021*. <https://www.ruralhealthinfo.org/charts/7>
- Rosenboom, V., & Blagg, K. (3 February 2018). *Disconnected from higher education: How geography and internet speed limit access to higher education*. Urban Institute. <https://www.urban.org/research/publication/disconnected-higher-education>
- Rosston, K. (2015). *Suicide prevention in Montana: 2015 legislative update*. Montana Department of Public Health and Human Services. <https://www.leg.mt.gov/content/Publications/services/2014-agency-reports/DPHHS-Suicide-Prevention-in-Montana.pdf>

- Shonkoff, J.P., & Garner, A.S. (January 2012). *The lifelong effects of early childhood adversity and toxic stress*. *Pediatrics*. The Committee on Psychosocial Aspects of Child and Family Health, The Committee on Early Childhood Adoption and Dependent Care, and the Section on Developmental and Behavioral Pediatrics of the American Academy of Pediatrics. *Pediatrics*. 129(1) e232-6. <https://doi.org/10.1542/peds.2011-2663>
- Stefancic, A., Henwood, B.J., Melton, H., Shin, S., Lawrence-Gomez, R., & Tsemberis, S. (December 2013). Implementing Housing First in rural areas: Pathways Vermont; *American Journal of Public Health*. 103(Suppl 2): S206–9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3969120/>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2019). *Consumer-operated services*. SAMHSA. [https://mnprc.org/wp-content/uploads/2019/01/COSP\\_PowerPoint8.25.pdf](https://mnprc.org/wp-content/uploads/2019/01/COSP_PowerPoint8.25.pdf)
- Substance Abuse and Mental Health Services Administration (SAMHSA). (October 2008). *Assertive community treatment (ACT) evidence-based practices (EBP) kit*. SAMHSA. <https://store.samhsa.gov/product/Assertive-Community-Treatment-ACT-Evidence-Based-Practices-EBP-KIT/SMA08-4344>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (24 June 2021). *The sequential intercept model (SIM)*. SAMHSA. <https://www.samhsa.gov/criminal-juvenile-justice/sim-overview>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (September 2020). *2019 National Survey of Drug Use and Health (NSDUH) releases*. SAMHSA. <https://www.samhsa.gov/data/release/2019-national-survey-drug-use-and-health-nsduh-releases>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (22 May 2020). *2019 Uniform Reporting System (URS)*. SAMHSA. <https://www.samhsa.gov/data/report/2019-uniform-reporting-system-urs-output-tables>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (24 February 2020). *National guidelines for behavioral health crisis care best practice toolkit*. SAMHSA. <https://www.samhsa.gov/sites/default/files/national-guidelines-for-behavioral-health-crisis-care-02242020.pdf>
- Substance Abuse and Mental Health Services Administration (SAMHSA). (20 August 2019). *Results from the National Survey on Drug Use and Health: NSDUH detailed tables*. SAMHSA. <https://www.samhsa.gov/data/report/2018-nsduh-detailed-tables>
- Torrey, E. F. (23 March 2016). Why clozapine use varies by state. *Psychiatric Times*. Vol 33, Issue 3. <https://www.psychiatrytimes.com/view/why-clozapine-use-varies-state>
- Trawver, K.R., Brocius, H., & Aguiniga, D.M. (April 2020). Inclusion of rural populations in a sample of current mental health intervention research. *Journal of Rural Mental Health*. Vol 44(2), 129-42. <https://psycnet.apa.org/fulltext/2019-61760-001.pdf>
- Tsai, J., & Cao, X. (2 January 2019). Association between suicide attempts and homelessness in a population-based sample of U.S. veterans and non-veterans. *Journal of Epidemiology and Community Health*. 73(1):346-52. <http://doi:10.1136/jech-2018-211065>
- U.S. Census Bureau. (Updated 24 September 2019). *Health insurance in rural America*. <https://www.census.gov/library/stories/2019/04/health-insurance-rural-america.html>
- U.S. Census Bureau. (2010). *Rural America: A story map*. <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6>
- U.S. Census Bureau. (16 June 2021) *Urban and rural*. <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html>



- U.S. Department of Agriculture. (2021a). *ReConnect program FY 2019 funding opportunity announcement awardees*. USDA. <https://www.usda.gov/reconnect/round-one-awardees>
- U.S. Department of Agriculture. (2021b). *About rural development*. USDA Rural Development. <https://www.rd.usda.gov/about-rd>
- U.S. Department of Health and Human Services. (2021). *Telehealth licensing requirements and interstate compacts*. Telehealth HHS. <https://telehealth.hhs.gov/providers/policy-changes-during-the-covid-19-public-health-emergency/telehealth-licensing-requirements-and-interstate-compacts/>
- U.S. Department of Health and Human Services, Office of Minority Health. (Updated 21 May 2021). *Profile: American Indian/Alaska Native*. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=62>
- U.S. Department of Veterans Affairs. (24 July 2019). *Suicide risk and risk of death among recent veterans*. VA. <https://www.publichealth.va.gov/epidemiology/studies/suicide-risk-death-risk-recent-veterans.asp>
- Walsh, N. (2019). *The stepping up initiative: Reducing mental illness in rural jails*. National Association of Counties [https://www.naco.org/resources/reducing-mental-illness-rural-jails#\\_edn1](https://www.naco.org/resources/reducing-mental-illness-rural-jails#_edn1)
- Wang, P.S., Berglund, P.A., & Kessler R.C. (30 April 2003). Patterns and correlates of contacting clergy for mental disorders in the United States. *Health Services Research*, 38(2), 647-73. <http://doi.org/10.1111/1475-6773.00138>
- Warren, K. (13 July 2018). *Caring for the whole person: Body, mind and soul*. Mental Health First Aid Blog. <https://www.mentalhealthfirstaid.org/external/2018/07/caring-for-the-whole-person-body-mind-and-soul/>
- Weaver, A., Capobianco, J., & Ruffolo, M. (20 January 2015). Systematic review of EBPs for SMI in rural America. *Journal of Evidence-Informed Social Work*. 12(2), 155-65. <https://doi.org/10.1080/15433714.2013.765815>
- Western Interstate Commission for Higher Education (WICHE). (2020). *WICHE Behavioral Health Program annual report: Fiscal Year 2019*. WICHE. [https://www.wiche.edu/wp-content/uploads/2020/03/WICHE\\_Behav\\_Health\\_Report\\_2019\\_1-23-20\\_FINAL.pdf](https://www.wiche.edu/wp-content/uploads/2020/03/WICHE_Behav_Health_Report_2019_1-23-20_FINAL.pdf)
- Wolters Kluwer Health: Lippincott Williams and Wilkins. (15 April 2015). High rate of healthcare visits before suicide attempts. *Science Daily*. <https://www.sciencedaily.com/releases/2015/04/150415112427.htm>
- Wong, E.C., Fulton, B.R., & Derosé, K.P. (2018). Prevalence and predictors of mental health programming among U.S. religious congregations. *Psychiatric Services*, 69(2), 154-60. <https://doi.org/10.1176/appi.ps.201600457>
- Yen, H. (16 September 2017). Suicide rates among veterans highest in western US, rural areas. Associated Press/*Military Times*. <https://www.militarytimes.com/veterans/2017/09/16/suicide-rates-among-veterans-highest-in-western-us-ruralareas/#:~:text=%28Charles%20Dharapak%2FAP%29%20WASHINGTON%20%E2%80%94%20Suicide%20among%20military%20veterans,and%20access%20to%20health%20care%20may%20be%20fact%20ors>
- Yoshikawa, H., Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on the mental, emotional, and behavioral health of children and youth: implications for prevention. *The American psychologist*, 67(4), 272–284. <https://doi.org/10.1037/a0028015>

## Appendix A: Methodology

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This document was developed as part of SAMHSA's SMI Adviser initiative and is the result of a collaboration between the National Association of State Mental Health Program Directors (NASMHPD), the NASMHPD Research Institute (NRI), and the American Psychiatric Association (APA). The goal of this document is to provide a resource for providers and policymakers working in and with rural and remote communities to improve the delivery of behavioral health services to individuals with SMI. At the start of this project, the decision was made to exclude Native American Tribes as a focus of this Guide so as not to duplicate efforts with work already being done by SMI Adviser in partnership with SAMHSA's Office of Tribal Affairs.

NASMHPD, NRI, and the APA convened a panel of diverse experts to identify challenges and opportunities that rural and remote communities face in the delivery of high-quality mental health services to individuals with SMI. Expert panelists, identified in Appendix B, have broad knowledge about state systems and the delivery and financing of behavioral health services to rural areas. They represent state mental health and Medicaid authorities, rural providers, consumers, and medical institutions. The Expert Panel convened virtually four times during the fall of 2020 and the winter of 2021, and were given an opportunity to review and provide feedback on this document.

In addition to the Expert Panelists, staff from NASMHPD and NRI conducted individual interviews with experts in the field, also listed in Appendix B. Their input is cited when appropriate.

### *Defining Rural and Remote*

In order to provide context for our report, the authors looked for definitions of "rural" and "remote" used by federal agencies to help define the rural and remote environments in which access to services and resources may be hampered. However, there is no formal definition for "remote" provided by a federal government agency; therefore, the authors relied on the definition of "frontier" to understand remote environments. The authors are sensitive to Indigenous perspectives on the use of "frontier," as it has negative connotations of victimization from colonial settlement.

#### **Rural**

The federal government primarily uses two definitions of "rural," along with many variants. One definition is provided by the U.S. Census Bureau, and the other by the Office of Management and Budget (OMB). The Federal Office of Rural Health Policy at HRSA uses components of each definition when determining the classification for a geographic region.

The Census Bureau identifies two types of urban areas – Urbanized Areas (UAs) of 50,000 or more people, and Urban Clusters (UCs) of at least 2,500, but fewer than 50,000 people; whatever does not fall within the definition is considered rural. The term "rural" in this definition describes the population, housing, and territory not included within an urban area.

The Census Bureau recognizes that "densely settled communities outside the boundaries of large, incorporated municipalities" are just as "urban" as the densely settled population inside those boundaries, so the agency's definition does not follow city or county boundaries. As a result, it is sometimes difficult to determine whether a particular area is considered urban or rural. Under this definition, approximately 21 percent of the U.S. population in 2000 was considered rural, but more than 95 percent of the land area was classified as rural. In the 2010 Census, 59.5 million people, or 19.3 percent of the population was rural, while more than 95 percent was still classified as rural.

OMB designates counties as Metropolitan, Micropolitan, or Neither. A Metropolitan area contains a core urban area with a population of 50,000, and a Micropolitan area contains an urban core with a population of at least 10,000, but fewer than 50,000. All counties that are not part of a Metropolitan Statistical Area (MSA) are considered rural. Micropolitan counties and all counties not classified as either Metro or Micro are considered non-Metropolitan or rural. Under this definition, about 17

percent of the population in 2000 was considered non-Metropolitan, while 74 percent of the land area was within non-Metropolitan counties. After the 2010 Census, the non-metropolitan counties contained 46.2 million people, about 15 percent of the total population, covering 72 percent of the country's land area.

As noted previously, the Census definition classifies quite a bit of suburban area as rural. The OMB definition includes rural areas in Metropolitan counties including, for example, the Grand Canyon, which is located in a Metropolitan county. While one could argue that the Census Bureau standard includes an overcount of the rural population, the OMB standard could be seen to represent an undercount.

The HRSA Office of Rural Health Policy recognizes all non-Metropolitan counties as rural and uses an additional method of determining rurality using Rural-Urban Commuting Area (RUCA) codes. Like the MSAs, these are based on Census Bureau data that are used to assign a code to each Census Tract. Tracts inside Metropolitan counties with the codes 4 through 10 are considered rural.

While use of the RUCA codes has allowed identification of rural Census Tracts in Metropolitan counties, among the more than 70,000 Tracts in the U.S., there are some that are extremely large. In these larger Tracts, use of the RUCA codes alone fails to account for distance to services and sparse populations. In response to these concerns, the Office of Rural Health Policy has designated 132 large-area Census Tracts with RUCA codes 2 or 3 as rural. These Tracts are at least 400 square miles in area, with a population density of no more than 35 people per square mile. Following the 2010 Census, the definition included approximately 57 million people, or 18 percent of the population, and 84 percent of the area of the USA.

HRSA's Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) identify geographic areas and populations with a lack of access to primary care services. State Primary Care Offices (PCOs) use the Shortage Designation Management System (SDMS) to submit MUA and MUP applications to HRSA for review. MUAs have a shortage of primary care health services for residents within a geographic area, such as a whole county, a group of neighboring counties, a group of Census Tracts, or a group of county or civil divisions.

MUPs are specific sub-groups of people (e.g., individuals experiencing homelessness, low-income individuals, Medicaid-eligible individuals, Native Americans, or migrant farmworkers) living in a defined geographic area with a shortage of primary care health services. Eligibility for MUP designation depends on the Index of Medical Underservice (IMU) calculated for the area or population proposed for designation. The IMU scale runs from zero to 100. Zero represents completely underserved, whereas 100 represents least underserved. HRSA calculates the IMU by assigning a weighted value to an area or population's performance on four demographic and health indicators. The weighted values are then added together. The four demographic and health indicators are:

- Ratio of providers per 1,000 population
- Percentage of population at 100 percent of the Federal Poverty Level (FPL)
- Percentage of population age 65 and over
- Infant mortality rate

HRSA defines Health Professional Shortage Areas (HPSAs) as areas where there are health care provider shortages in primary care, dental health, or mental health. These shortages may be geographic or population- or facility based. Geographic-area shortages are for the entire population within a defined geographic area. Population-based shortages are for a specific population group (or groups) within a defined geographic area (e.g., low income, migrant farmworkers, and other groups).

As part of HRSA's cooperative agreement with the State Primary Care Offices (PCOs), the PCOs conduct needs assessments in their states, determine which areas are eligible for designations, and submit designation applications to HRSA for review and approval.

The authors of this study have resisted adopting any of these formal definitions of rural in favor of a recognition that certain characteristics of rural areas are universal. Our informal definition of “rural” comes closest to the factors weighed by the Office of Rural Health Policy, in that it recognizes that rural areas:

- Are areas with low population density and limited social interaction among residents;
- Are non-Metropolitan health professional shortage areas, particularly with regard to mental health providers;
- Have medically underserved populations;
- Have limited public means of transportation to health care providers or facilities;
- Are generally low-income to the extent that the costs of behavioral health care services may be or seem to be financially burdensome;
- Lack, or have a very limited number of hospitals and other health care facilities compared to neighboring metropolitan areas;
- Lack, or have a very limited number of institutions of higher education with medical schools or programs of medical and/or behavioral health education compared to neighboring metropolitan areas;
- Have no access to broadband communication or have broadband access which is far more limited or less accessible than in neighboring metropolitan areas; and
- Are areas where having serious behavioral health illnesses or conditions entails significant community stigma.

### ***Remote***

In May 2014, the [Federal Register](#) published an updated methodology for designating frontier and remote areas in the U.S. These guidelines were developed through collaboration between HRSA’s Office of Rural Health Policy (OHRP), and the U.S. Department of Agriculture’s (USDA) Economic Research Service (ERS). The two organizations set out to “create a statistical delineation that will be useful in a wide variety of research and policy contexts and adjustable to the circumstances in which it is applied,” and “intended to create a definition of frontier based on easily explained concepts of remoteness and population sparseness” (Federal Register, 2014). The organizations developed the concept of Frontier and Remote Area (FAR) Codes, that are “defined in relation to the time it takes to travel by car to the edges of nearby Urban Areas,” which help express the degree of remoteness and ability to access commerce and services. The four FAR Levels are calculated as the travel times, one way, by the fastest paved route to the nearest Urban Area (Federal Register, 2014; USDA, 2010):

- Frontier Level 1: areas within 60 minutes or more from Census Bureau-defined Urban Areas of 50,000 or more population.
- Frontier Level 2: areas within 60 minutes or more from Urban Areas of 50,000 or more population, and 45 minutes or more from Urban Areas ranging from 25,000 to 49,999 population.
- Frontier Level 3: areas that are 60 minutes or more from Urban Areas of 50,000 or more population; 45 minutes or more from Urban Areas ranging from 25,000 to 49,999; and 30 minutes or more from Urban Areas of 10,000 to 24,999.
- Frontier Level 4: areas that are 60 minutes or more from Urban areas of 50,000 or more population, 45 minutes or more from Urban Areas ranging from 25,000 to 49,999 population; 30 minutes or more from Urban Areas of 10,000 to 24,999; and 15 minutes or more from Urban Areas with a population between 2,500 and 9,999.

To ensure relevance, FAR Codes are re-evaluated and updated with each new round of the U.S. Census, and are expected to be updated again based on the results of the 2020 U.S. Census.

For the purposes of this guide, the term *Remote* encapsulates any of the four FAR Codes above, relying on the minimum designation of frontier (FAR Code 1). However, it is worth noting that challenges related to the delivery of behavioral health services in rural and remote communities are compounded as the FAR Code number increases.

## Appendix B: Expert Panel Members, Interviewees, and Project Staff

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### Expert Panel Members

(\*indicates workgroup member also participated in individual interview)

**Neal Bowen, Ph.D.**

Director of Behavioral Health Services Division  
New Mexico Human Services Department

**Robert Dole, L.C.S.W.-S.**

Deputy Associate Commissioner of System Integration  
IDD-Behavioral Health Services  
Texas Health & Human Services

**Shellie Hall, M.Ed.**

Senior Director & Behavioral Health Provider  
McNabb Center of Blount, Sevier, and Cocke County  
Services, Tennessee

**Jessica Ivey, L.M.S.W.**

Director of Strategic Initiatives  
Tennessee Department of Mental Health & Substance Abuse  
Services

**Wayne Lindstrom, Ph.D.**

Vice President  
Western Region of RI International, Inc.

**Ron Manderscheid, Ph.D.\***

Executive Director  
National Association of County Behavioral Health and  
Developmental Disabilities Directors

**Kevin Martone, L.S.W.**

President Elect  
National Association for Rural Mental Health

**Jim McLaughlin, L.P.C.**

Behavioral Health Grant Program Manager  
Alaska Division of Behavioral Health

**Xiomara Owens, Ph.D.**

Director of Behavioral Health Aide Training  
Alaska Native Tribal Health Consortium

**Jessica Pollard, Ph.D.**

Director  
Maine Office of Substance Abuse & Mental Health Services

**Jason Pritchard, C.P.R.S.**

Peer Specialist  
Virginia-Ballad Health

**Leon Ravin, M.D.\***

Medical Director  
Nevada Department of Health & Human Services, Division of  
Public and Behavioral Health

**Karl Rosston, L.C.S.W.**

Suicide Prevention Coordinator  
Montana Department of Public Health & Human Services

**Angie Thinnies, C.R.S.S.**

Team Leader  
New Freedom Center, Thresholds

**John Torous, M.D.**

Director of Digital Psychiatry  
Beth Israel Deaconess Medical Center

**Liza Tupa, Ph.D., Workgroup Facilitator**

Director of Education and Research  
WICHE Behavioral Health Program

**Tiffany Wolfgang**

Director  
South Dakota Department of Social Services, Division of  
Behavioral Health Services



## Interviewees

### **Wendy Bailey**

Executive Director  
Mississippi Department of Mental Health

### **Deborah Shogry Blalock, M.Ed., L.P.C.S.**

Deputy Director  
SCDMH Community Mental Health Services

### **Kelly Bowman**

Director of Crisis Services, Wellness, & System Integration  
Health Colorado

### **Deborah Binion, J.D.**

Executive Director  
Jordon Binion Project

### **Robert Cotes, M.D.**

Co-Chair of Clozapine Clinical Expert Team, SMI Adviser  
Associate Professor, Department of Psychiatry and  
Behavioral Sciences  
Emory University School of Medicine

### **Debra Drandoff, M.Ed.**

Director  
Prevention & Youth Services for Educational Service District  
112

### **Betty Downs, Ph.D.**

Treat First Coordinator  
Behavioral Health Services Division, New Mexico  
Department of Human Services

### **Roxanne Dudley, P.M.H.N.P.-B.C., R.N., L.P.C.**

Psychiatric Nurse Practitioner  
Austin Travis County Integral Care

### **Jake Hutchins, M.S.W.**

Deputy Executive Director of Community Operations  
Bureau of Community Services  
Mississippi Department of Mental Health

### **Megan Lee, L.P.C.**

Crisis Program Manager  
Colorado Department of Human Services Office of  
Behavioral Health

### **Andrew McLean, M.D., M.P.H.**

Chair, Department of Psychiatry & Behavioral Science  
University of North Dakota School of Medicine & Health  
Sciences

### **Tammy Obie, M.A.**

Emergency Services Supervisor  
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### **Elizabeth Richards, M.S.W., L.C.S.W.**

Crisis Systems Program Director  
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### **Jennifer Silva, L.C.S.W.**

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**Zhuoyin Yang**

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American Psychiatric Association

## Appendix C: Defining Key Terms

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**Assertive Community Treatment (ACT):** ACT is a service-delivery model, not a case management program, that has the primary goal of recovery through community treatment and rehabilitation. ACT is characterized by a team approach that provides services to individuals in the community where they live and work. ACT teams strive for a 1 to 10 staff ratio, with the team as a whole being responsible for ensuring that individuals receive the services they need to live in the community and reach their personal goals. ACT services are available 24 hours a day, seven days a week, and are designed for individuals with the most challenging and persistent problems. (Source: [SAMHSA](#))

**Clozapine:** Clozapine is an atypical antipsychotic agent of the dibenzodiazepine class: the first of the antipsychotics to be used clinically and released into the U.S. market in 1990. Although regarded by some as the most effective of all antipsychotic drugs, clozapine has problematic side effects that have limited its use. Among others, these adverse effects may include weight gain, sedation, and – importantly – agranulocytosis, which may occur in 1% to 2% of patients treated with the drug. Use of clozapine therefore requires frequent monitoring of white blood cell counts in patients and is generally reserved for patients who have responded sub-optimally to other antipsychotic agents. The U.S. trade name is Clozaril (Source: [American Psychological Association](#))

**Coordinated Specialty Care (CSC):** CSC is a “team-based, multi-element approach to treating first episode psychosis” for individuals experiencing psychosis as a result of a mental illness. Standard components of CSC programs include assertive case management, individual or group psychotherapy, supported education and employment services, family education and support, and low doses of select antipsychotic medications. Increasingly, CSC programs are also including peer support services as a critical component of care. (Source: [NIMH](#))

**Crisis Services:** Crisis services are behavioral health services that are readily available to individuals with urgent behavioral health needs. According to SAMHSA’s 2020 *National Guidelines for Behavioral Health Crisis Care—A Best Practice Toolkit* (National Guidelines), a comprehensive crisis service array includes three essential types of services: 1) centralized crisis lines that assess a caller’s needs and dispatch support, 2) mobile crisis teams dispatched as needed in the community, and 3) crisis-receiving and -stabilization facilities that are available to “anyone, anywhere, anytime.” (Source: [SAMHSA](#))

**Evidence-Based Practice (EBP):** “Evidence-based practice” is “a way of providing health care that is guided by a thoughtful integration of the best available scientific knowledge with clinical expertise. This approach allows the practitioner to critically assess research data, clinical guidelines, and other information resources in order to correctly identify the clinical problem, apply the most high-quality intervention[s], and re-evaluate the outcome for future improvement.” (Source: [AHRQ](#))

**Federal Poverty Level (FPL)/Poverty Thresholds/Poverty Guidelines:** Poverty Thresholds are established each year for each state by the U.S. Census Bureau. These figures are primarily used for statistical purposes to develop estimates of the number of Americans experiencing poverty each year. Poverty Guidelines are simplified versions of the Poverty Thresholds used to help determine financial eligibility for certain federal programs, including Medicaid and the Children’s Health Insurance Program (CHIP). For 2021, the Poverty Guidelines for the 48 Contiguous States and the District of Columbia are:

- One person in family/household: \$12,880
- Two persons in family/household: \$17,420
- Three persons in family/household: \$21,960
- Four persons in family/household: \$26,500
- Five persons in family/household: \$31,040
- Six persons in family/household: \$35,580

- Seven persons in family/household: \$40,120
- Eight persons in family/household: \$44,660
- For families/households with more than eight persons, \$4,540 should be added for each additional person.

For Alaska, the 2021 Poverty Guidelines are:

- One person in family/household: \$16,090
- Two persons in family/household: \$21,770
- Three persons in family/household: \$27,450
- Four persons in family/household: \$33,130
- Five persons in family/household: \$38,810
- Six persons in family/household: \$44,490
- Seven persons in family/household: \$50,170
- Eight persons in family/household: \$55,850
- For families/households with more than eight persons, \$5,680 should be added for each additional person.

For Hawaii, the 2021 Poverty Guidelines are:

- One person in family/household: \$14,820
- Two persons in family/household: \$20,040
- Three persons in family/household: \$25,260
- Four persons in family/household: \$30,480
- Five persons in family/household: \$35,700
- Six persons in family/household: \$40,920
- Seven persons in family/household: \$46,140
- Eight persons in family/household: \$51,360
- For families/households with more than eight persons, \$5,220 should be added for each additional person.

Although often used, the Office of the Assistant Secretary for Planning and Evaluation recommends against use of the term “Federal Poverty Level,” as it is too ambiguous, especially in situations (e.g., legislative or administrative) where precision is important. (Source: [ASPE](#))

**First Episode Psychosis (FEP):** According to SMI Adviser, early or first-episode psychosis refers to when a person first shows signs of beginning to lose contact with reality. Psychosis temporarily interferes with the brain’s ability to make out reality and causes disruptions in thoughts and perceptions, but everyone’s experience is different. FEP is often frightening, confusing, and distressing for the person experiencing it and difficult for his or her family to understand. (Source: [SMI Adviser](#))

**Frontier and Remote (FAR):** For the purposes of this document (as described in the Methodology section), the authors rely on the minimum criteria for frontier and remote, as established by HRSA and the USDA. At minimum, *frontier and remote* refer to territory characterized by a mix of low population size and high geographic remoteness. For example, Frontier Level 1 is defined as communities that are at least 60 minutes travel distance from Census Bureau-defined Urban Areas of 50,000 or more population. (Source: [Federal Register](#))

**Health Professional Shortage Area (HPSA):** HRSA defines HPSAs as geographic or population areas that have a shortage of primary care health professionals, dental professionals, and behavioral health care providers. Geographic-area shortages apply for the entire population within a defined geographic area. Population-based shortages are for a specific population group (or groups) within a defined geographic area (e.g., low income, migrant farmworkers, and other groups). In order to be designated an HPSA, for mental health, the population/provider ratio must be at least 30,000:1. For primary care, the population/provider ratio must be at least 3,500:1. The Kaiser Family Foundation provides a [data dashboard](#) that shows the number of mental health HPSAs within each state, the population within the designated mental health HPSAs, and the number of practitioners needed to remove the HPSA designation. (Source: [Kaiser Family Foundation](#))

**Intensive Community Outreach Team (I-CORT): Intensive Community Outreach and Recovery (ICORT) Teams:** The Mississippi Department of Mental Health developed ICORT Teams to address the workforce challenges associated with complying with Assertive Community Treatment (ACT) standards in rural regions while still providing comprehensive services for individuals with SMI in need of intensive support. ICORT has fewer staffing requirements and higher staff-to-client ratios than ACT and has its own fidelity scale and review process tailored to ICORT to ensure desired outcomes. (Source: Interview with W. Bailey and J. Hutchins)

**Long-Acting Injectables (LAI):** NAMI describes LAIs as a tool used in treatments of psychosis (hallucinations or delusions) for individuals with SMI, namely schizophrenia and bipolar disorder. LAIs allow for the slow release of medicine into the blood and last from 2-12 weeks with just one dose, helping to control symptoms of mental illness. (Source: [NAMI](#))

**Medically Underserved Areas/Populations (MUA/P):** HRSA describes MUA as “areas that have too few primary care providers, high infant mortality, high poverty, or a high elderly population.” MUA are defined in terms of geographic regions and by population subsets within a geographic region. According to HHS, MUP may face economic, cultural, or linguistic barriers to health care and populations such as: low income; Medicaid ineligibility; being homeless; Native American origin; and status as a migrant farm worker. (Sources: [HRSA](#) and [HHS](#))

**Peer/Consumer-Operated Services:** According to SAMHSA, Consumer-Operated Services – known as also as Consumer-Operated Service Programs (COSPs), consumer-run organizations, peer support programs, peer services, and peer service agencies – are independently owned, controlled, and managed by mental health consumers (people who have received mental health services). All decisions and responsibility rest within the organization, its governance board is at least 51% mental health consumers, and its staff and management are peers. The core of peer service philosophy and practice is that people with behavioral health difficulties can and do recover and live meaningful lives, and peers can help one another with the recovery process in ways that professionals cannot. (Source: [SAMHSA](#))

**Rural:** For the purpose of this document (as described in the Methodology section), the authors created their own definition for rural, which comes closest to the factors weighed by the Office of Rural Health Policy. It recognizes that rural areas: are low in population density and limited in social interaction among residents; are non-metropolitan health professional shortage areas, particularly with regard to mental health providers; have medically underserved populations; have limited public means of transportation to health care facilities or providers; are generally low-income to the extent that the costs of behavioral health care services may be or may seem to be financially burdensome; lack, or have a very limited number of, hospitals and other care facilities compared to neighboring metropolitan areas; lack, or have a very limited number of, institutions of higher education with medical schools or programs of medical and/or behavioral health education compared to neighboring metropolitan areas; have limited or unreliable access to broadband technology when compared to neighboring metropolitan areas; and are areas where having serious behavioral health illnesses or conditions entail significant community stigma.



**Serious Mental Illness (SMI):** The National Institute of Mental Health (NIMH) defines SMI as a “mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities. The burden of mental illness is particularly concentrated among those who experience disability due to SMI.” The three diagnoses used to define SMI in this guide are schizophrenia, major depressive disorder, and bipolar disorder. (Source: [SMI Adviser](#))

**Social Determinants of Health (SDOH):** According to the CDC, “social determinants of health (SDOH) are conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of-life risks and outcomes.” The five key, widely recognized areas of SDOH are healthcare access and quality; social and community context; economic stability, which encompasses poverty, employment, food security, and housing stability; and an individual’s neighborhood and built environment. (Source: [CDC](#))

**Supported Education:** Supported education is an evidence-based practice that helps individuals pursue their own educational goals. Supported education programs “help consumers develop a sense of self-efficacy and independence,” and encourage individuals “to think about a plan for their future.” Supported education programs follow the “choose-get-keep” model, “which helps consumers make choices about paths for education and training, get appropriate education and training opportunities, and keep their student status until they achieve their goals.” (Source: [SAMHSA](#))

**Supported Employment:** Supported employment is an evidence-based practice that SAMHSA describes as “an approach to vocational rehabilitation for people with SMI [and substance use disorders] that emphasizes helping them obtain competitive work in the community and providing the supports necessary to ensure their success in the workplace.” Supported employment programs “help consumers find jobs that pay competitive wages in integrated settings (i.e., with other people who do not necessarily have disabilities) in the community.” Supported employment programs ascribe to the philosophy that “every person with SMI is capable of working competitively in the community if the right kind of job and work environment can be found.” (Source: [SAMHSA](#))

**Supportive Housing:** The United States Interagency Council of Homelessness describes supportive housing as “combining non-time-limited affordable housing assistance with wraparound supportive services for people experiencing homelessness, as well as other people with disabilities.” Supportive housing links decent, safe, affordable, community-based housing with flexible, voluntary support services designed to help the individual or family stay housed and live a more productive life in the community. There is no single model for supportive housing. Three approaches to providing supportive housing include: purpose-built or single-site housing; scattered-site housing; and unit set-asides. (Source: [US Interagency Council of Homelessness](#)).

**Telehealth and Telemental Health:** The HHS telehealth website describes it as the use of electronic information and telecommunication technologies to provide care when you and the doctor/ therapist are not in the same place at the same time. Some of the services telehealth is able to deliver are: talking to your care team live or on video chat; sending and receiving messages from your care team via email, secure messaging, and secure file exchange; and using remote patient monitoring so the care team can check on you at home. (Source: [HHS](#)).

The HRSA telehealth website contains a similar definition, describing it as “the use of electronic information and telecommunication technologies to support long-distance clinical health care, patient and professional health-related education, public health, and health administration. Technologies include video conferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications.” (Source: [HRSA](#)).



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