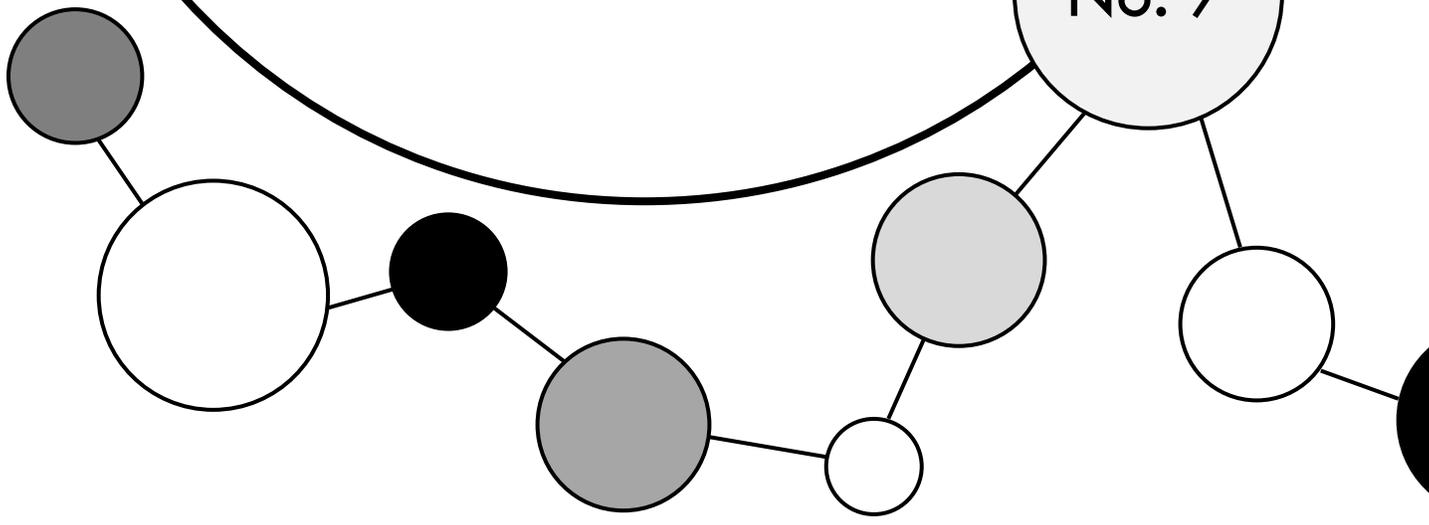


# Mental Health System Development in Rural and Remote Areas during COVID-19



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# Mental Health System Development in Rural and Remote Areas during COVID-19

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### **Abstract:**

Mental health service barriers in rural and remote areas, including unmet need, lack of access to services, and insufficient workforce capacity have been exacerbated by the COVID-19 pandemic. These factors also impact tribal governments and American Indian and Alaska Native (AI/AN) populations living in rural and remote areas, which face additional obstacles in mental health service delivery, but also have unique cultural and programmatic assets. An existing body of work explores problems and solutions faced in the delivery of mental health services in rural, remote, and tribal areas. This paper summarizes some of this work and explores the context of COVID-19. In addition to a review of the literature, the paper draws on national survey data and interviews with experts. The paper examines rural and remote mental health systems during the pandemic within the “Beyond Beds” framework, assuming a goal of creating a robust, interconnected, and evidence-based system of care. Rural and remote populations have experienced increased prevalence of mental illness a result of COVID-19, but the complete impact of the pandemic on mental health and social wellbeing remains unknown. Rural and remote mental health systems experienced disruptions to service delivery and rapid adoption of tele-behavioral health during the pandemic. While this natural experiment demonstrated the value of increased tele-behavioral health care, additional work remains to understand the optimal role of telehealth in rural and remote mental health systems.

### **Highlights:**

- Rates of mental disorders are generally similar across rural and non-rural areas and the substantial negative impacts of COVID-19 on mental health seem also to be similar
- Overall rates of mental health care receipt are not largely different across rural areas and other areas, but access to specialty and intensive care is lower in rural areas.
- Rural areas continue to face mental health workforce shortages, which may be addressed using a range of approaches.
- More work remains to develop and adapt mental health care models for rural and remote areas, including models that are effective for AI/AN communities.
- COVID-19 led to a massive natural experiment in the rapid and widespread implementation of tele-behavioral health care.

### **Recommendations for the Post-COVID-19 Future:**

1. Policymakers should try to learn from experiences during the pandemic to develop systems that encourage the appropriate role for telehealth, without reflexively reverting to the pre-pandemic status quo.
2. Developing the rural mental health workforce should be a continued priority. Efforts to train and recruit mental health professionals in rural and remote areas should be combined with service adaptations and supports like remote consultation to fully leverage existing workforce capacity.
3. There should be a more concerted effort to examine behavioral health surveillance, facility, and claims data by urbanicity, including stratification of data from more remote areas, to understand the impact of COVID-19 on systems and people in rural and remote areas.
4. There is a need for service model innovation and adaptation in rural and remote areas, especially to meet the needs of people with intensive and complex mental health needs. This work should be attentive to different population groups, including AI/AN populations.

**N**early one in five Americans lives in a rural or remote<sup>a</sup> area.<sup>1</sup> People in these areas experience mental disorders at similar rates to people in urban and suburban areas but face barriers to accessing needed care.<sup>2</sup> The COVID-19 pandemic has exacerbated challenges in access and delivery of mental health services in rural and remote areas, including transportation, high poverty rates, and insufficient workforce capacity. Tribal mental health systems and American Indian and Alaska Native (AI/AN) populations living in rural and remote areas, who face greater behavioral health challenges than other population groups,<sup>3</sup> have unique programmatic and cultural assets that can be learned from to address challenges associated with mental health care access in rural or remote areas.

This review, *Mental Health System Development in Rural and Remote Areas During COVID-19*, explores problems and solutions faced in the delivery of mental health services in rural, remote, and tribal areas in the context of COVID-19. People living in rural and remote areas, including AI/AN individuals and communities, are best served by a robust, interconnected, and evidence-based system of mental health care, such as that presented in the *Beyond Beds* framework.<sup>4</sup> With this as the goal, this paper attempts to examine the current state of mental health care in rural and remote areas and propose strategies for building a better system for the future.

*Mental Health System Development in Rural and Remote Areas during COVID-19* will address the following areas related to rural mental health systems as it is and areas of needed development.

- The impact of COVID-19
- Prevalence of mental illness and related problems
- Access to treatment and specialty care
- Workforce challenges in rural and remote areas
- The unique needs of AI/AN communities
- Telehealth services
- Building the array of effective practices in rural and remote settings
- Developing rural crisis systems

Although this paper will discuss rural and remote areas generally, rural and remote areas across the United States are varied in terms of their populations, geography, and the mental health systems that serve them. Rural areas span all regions across the continental United States as well as Alaska and Hawaii. There are also rural areas in U.S. territories like Puerto Rico. Rural demographics also vary considerably. In many rural areas, there are significant American Indian, Alaska Native, or Pacific Islander populations. Some rural areas have sizable populations of migrant workers and Latino populations, others have large black or African American populations, such as rural areas in the south, whereas others are predominately white.

As with the rest of the country, rural areas are also varied in terms of the mental health and substance use disorder systems that serve them. Different states provide different health, behavioral health, and human service arrays through Medicaid and their public systems. Some states have county and regionally driven systems which means that there can be significant variability in mental health and

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<sup>a</sup> In this paper we have decided to use the term remote instead of frontier. Frontier comes with the connotation that these areas are left to be explored and even exploited. We use the term remote to avoid this connotation and to recognize that people have lived in these areas for millennia.

substance use disorder systems within states. States also vary in terms of the groups that are eligible for Medicaid and other state provided supports, which can lead to differences in access to care.

## **The Impact of COVID-19**

The COVID-19 pandemic has had dramatic impacts across the United States, disrupting work, school, social interaction, and economic activity. Not surprisingly, these disruptions have had wide ranging impacts on mental health at the same time as disrupting mental health service delivery.<sup>5</sup> Initially, death rates from COVID-19 were higher in urban areas, but by Summer 2020, rural rates of COVID-19 deaths had surpassed urban areas.<sup>6</sup> Now, urban populations are being vaccinated at higher rates than rural populations,<sup>7</sup> which may result in higher levels of spread in impact in rural areas going forward compared with urban areas.

There has been a marked increase in mental health problems in the United States due to COVID-19. According to a June 2020, Center for Disease Control and Prevention (CDC) survey:<sup>8</sup>

- 31% of respondents reported symptoms of anxiety or depression, an increase from 11.0 percent in January through June of 2019.
- 13% of people reported that they had started or increased substance use to cope with pandemic related stress or emotions.
- 11% of respondents reported serious consideration of suicide in the previous 30 days, compared with 4.3% in a similar 2018 survey.

There were not statistically significant differences in outcomes reported between urban and rural respondents, though at the time of the survey, people in rural areas reported fairing slightly better on average compared to urban counterparts across the items being measured.<sup>9</sup> Later in the pandemic, the CDC reported national data collected between August 2020 and February 2021 which indicated that the percentage of adults experiencing symptoms of anxiety or depression increased from 36% to 42% without breaking out data for rural areas.<sup>10</sup> A survey of rural adults in December 2020 echoed these findings: 56% of rural adults said that they were personally experiencing more mental health challenges than a year ago. 53% of the respondents said that that COVID-19 had impacted their individual mental health “some” or “a lot,” and 61% said the same about the mental health impact in their communities.<sup>11</sup> In general mental health across the country seemed to decline as the pandemic continued. Current data does not seem to indicate large differences in impact in mental health across rural and non-rural areas, but a more detailed understanding may be possible as more data becomes available.

In addition to impacting the mental health of people in the United States, COVID-19 has also disrupted access to mental health services. Comparing the period from March to October 2020 with the same period in 2019, there were approximately one-third fewer Medicaid or Children’s Health Insurance Program claims for mental health services for children and one-fifth fewer mental health claims for adults.<sup>12</sup> Given that mental health needs increased during the pandemic, this means that many people did not receive needed care. In 2019, 11% of children 12 years and older who accessed mental health services did so through schools.<sup>13</sup> School closures potentially disrupted these supports in both rural and non-rural areas, which may have further reduced access to care for young people.

The COVID-19 pandemic has presented additional challenges to providers trying to deliver mental health services in rural areas. Rural behavioral health systems were already stressed by the alarming growth of opioid use and overdose deaths over the past two decades, and early evidence suggests that the COVID-

19 pandemic has exacerbated the opioid crisis.<sup>14</sup> Rural and remote areas already faced mental health service staffing challenges, and like other areas, were impacted by lack of personal protective equipment (PPE) and child care as schools halted in-person learning. Provider organizations had to manage the shift to delivering services virtually where possible and work to develop feasible business models in the COVID-19 context. The in-person service delivery that was central to most providers' operations prior to the pandemic was no longer feasible and they were forced to adapt in order to continue generating needed revenue and delivering services. As Dennis Mohatt, Vice President for Behavioral Health and Co-Director of the Mental Health Technology Transfer Center at the Western Interstate Commission for Higher Education put it, "Delivering treatment, prevention, and support in rural and remote places is a difficult thing on a good day, and it hasn't been a great day for a while."<sup>15</sup>

### *Prevalence of mental illness and related problems*

Before the pandemic, overall rates of mental illness and treatment receipt were similar across large metropolitan counties, small metropolitan counties and non-metropolitan counties. According to data from the Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on Drug Use and Health, in 2019, among people 18 years and older in non-metropolitan counties, 21.2% met criteria for having any mental illness (AMI), 5.9 percent met criteria for having a serious mental illness (SMI), 7.0 percent met criteria for having a substance use disorder (SUD) and 3.6 percent met criteria for having a mental illness and a co-occurring SUD. This is similar to national rates for AMI (20.6 percent), SMI (5.2 percent), SUD (7.7 percent) and co-occurring AMI and SUD (3.8 percent).<sup>16</sup>

Large metropolitan counties: contain cities with a population larger than 1 million people.

Small metropolitan counties: contain cities with populations between 50,000 and 1 million people.

Non-metropolitan counties: contain cities with populations no larger than 50,000 people. This is used to identify rural areas by many surveys and government systems.

In 2018, rural areas experienced a higher suicide rate in than urban areas with 19.1 deaths by suicide per 100,000 people compared with 13.4 per 100,000 in urban areas. The suicide rate in rural areas increased 48% from 2000 to 2018.<sup>17</sup> There are a number of factors that may contribute to higher suicide rates in rural areas including economic disparities, the larger presence of subpopulations that experience higher suicide rates, including AI/AN people and non-Hispanic white males, and higher rates of gun ownership, which are associated with increased risk of suicide.<sup>18</sup> While there is not a clear reason for increases in the suicide rate, one leading theory is that they have been driven up as a part of general increase in "deaths of despair" resulting from problems in labor markets, educational attainment, marriage and family outcomes, and physical health.<sup>19</sup>

### *Access to treatment and specialty care*

Before COVID-19, total rates of past year mental health service use were similar across rural and non-rural areas. According to 2019 National Survey on Drug Use and Health (NSDUH) data:

- 46.5% of people with AMI in non-metropolitan counties received mental health services in the past year compared with 43.6% in large metropolitan and 46.0% in small metropolitan counties.
- 65.7% of people with SMI in non-metropolitan counties received mental health services compared with 65.9% in large metro and 64.9% in small metropolitan areas.<sup>20</sup>

However, patterns of mental health treatment receipt across rural and urban counties differ by type of treatment received. Data from 2010 to 2019 prior to COVID-19 showed that people in non-metropolitan counties were significantly less likely to receive outpatient treatment than individuals in large or small metropolitan counties and significantly more likely than people in large metropolitan areas to receive prescription medication without other forms of treatment (see Table 1 for details).

Table 1: Past Year Mental Health Treatment Receipt by County Metropolitan Status (2010-2019)

County Metropolitan Status	Total	Any Mental Health Treatment	Any Inpatient Treatment*	Any Outpatient Treatment	Only Outpatient Treatment	Only Received Prescription Medication	Only Received Outpatient Treatment and Prescription Medication	Received Inpatient and Outpatient Treatment and Prescription Medication	
<b>Total</b>	<i>Number</i>	239,574,000	35,034,000	2,135,000	17,202,000	4,993,000	16,911,000	10,855,000	997,000
	<i>Percent</i>	100.00%	14.60%	0.90%	6.50%	2.10%	7.10%	4.50%	0.40%
	<i>95% CI</i>	N/A	(14.50% - 14.80%)	(0.80% - 0.90%)	(6.40% - 6.60%)	(2.00% - 2.10%)	(6.90% - 7.20%)	(4.40% - 4.60%)	(0.40% - 0.40%)
<b>Large Metro</b>	<i>Number</i>	129,695,000	18,031,000	1,111,000	9,436,000	3,022,000	8,098,000	5,721,000	502,000
	<i>Percent</i>	100.00%	13.90%	0.90%	6.60%	2.30%	6.20%	4.40%	0.40%
	<i>95% CI</i>	N/A	(13.70% - 14.10%)	(0.80% - 0.90%)	(6.40% - 6.70%)	(2.20% - 2.40%)	(6.10% - 6.40%)	(4.30% - 4.50%)	(0.40% - 0.40%)
<b>Small Metro</b>	<i>Number</i>	72,012,000	11,383,000	653,000	5,412,000	1,428,000	5,718,000	3,550,000	330,000
	<i>Percent</i>	100.00%	15.80%	0.90%	6.80%	2.00%	7.90%	4.90%	0.50%
	<i>95% CI</i>	N/A	(15.50% - 16.10%)	(0.80% - 1.00%)	(6.60% - 7.00%)	(1.90% - 2.10%)	(7.70% - 8.10%)	(4.80% - 5.10%)	(0.40% - 0.50%)
<b>Non-Metro</b>	<i>Number</i>	37,867,000	5,620,000	371,000	2,354,000	543,000	3,094,000	1,585,000	165,000
	<i>Percent</i>	100.00%	14.80%	1.00%	5.60%	1.40%	8.20%	4.20%	0.40%
	<i>95% CI</i>	N/A	(14.50% - 15.20%)**	(0.90% - 1.10%)	(5.40% - 5.80%)**	(1.30% - 1.50%)**	(7.90% - 8.50%)**	(4.00% - 4.40%)	(0.40% - 0.50%)

Table populated using National Survey on Drug Use and Health: 10-Year Substate Restricted-use Data Analysis System (2010 to 2019) – using the following variables (COUTYP2, AMHSVTY, AUOPTYR, AMHTXRC3, AMHTXRC3, AUINPYR)  
 \* AUINPYR is not restricted to adults, youth 12-17 were excluded using CATAG18 as a control variable.  
 \*\* Non- Metropolitan Area result is statistically different from Large Metropolitan Area and Small Metropolitan Area results at the .05 level  
 \*\*\* Non- Metropolitan Area result is statistically different from Large Metropolitan Area results at the .05 level.

While these numbers point to similar rates of treatment receipt across rural and urban areas, there are some important caveats. These data do not capture differences between people in more populous rural areas and people in remote areas. There may be more clear disparities in access to mental health services between metropolitan areas and more remote areas. These data also do not include information about the frequency of treatment receipt. It is possible that people in rural areas exhibit similar rates of treatment overall, but access treatment at lower frequency because of access barriers.

These data also do not capture access to more specialized forms of mental health treatment and services, which people in rural areas are less likely to have access to. Compared to urban areas, people in rural areas are much more likely to seek mental health care through primary care. According to data from 2012–2014 National Ambulatory Medical Care Survey, 29% of physician office visits related to mental health in non-metropolitan areas were made to psychiatrists and 54% were made to primary care physicians, compared to 55% and 32% nationally.<sup>21</sup> This lack of access to specialized services for rural areas extends to other service systems. Veterans who have received mental health services from

the Veterans Health Administration are much less likely to receive specialized care, including care for SMI, in rural areas.<sup>22</sup> An examination of one state system showed that evidence-based programs (EBPs), such as Assertive Community Treatment (ACT), Supported Employment, Supportive Housing, and Multisystemic Therapy, were less likely to be offered in rural areas and staff in rural areas were less likely to be trained in EBPs in rural areas compared with urban areas.<sup>23</sup>

If the goal is to develop a robust system of care of quality treatment and services in rural and remote areas before, during, and after acute episodes of mental illness in keeping with the *Beyond Beds framework*,<sup>24</sup> we must look beyond rates of treatment receipt to examine more specialized supports and services. This is particularly true for adults with SMI and Children with Serious Emotional Disturbances (SED) who are dependent on public systems and will need access to more specialized and intensive supports to facilitate their recovery.

Prior to COVID-19, there were minor differences in the reasons given for not getting treatment by people in rural areas compared with more urban areas, according to the NSDUH (Table 2). People in rural areas were more likely to report cost as a reason for not seeking treatment compared with people in large metropolitan areas. Conversely, people in rural areas were less likely to report that they did not know where to go for services or that they didn't feel that they needed services compared with people in large metropolitan areas. They were also less likely to report that they did not have time to access services compared with people in large or small metropolitan areas. Rural Americans were not significantly more concerned about negative opinions by friends and neighbors or impacts on their job than people in other areas but were more concerned about confidential information being shared by providers than people in large metropolitan areas. Interestingly, they were more likely to report that having no transportation, treatment being too far away, or the hours not being convenient as a reason for not seeking treatment compared to people in large urban areas, but not significantly more likely to report this as a reason for not seeking treatment than people in small metropolitan areas. Together, these results indicate that reasons for not getting treatment are similar across metropolitan and non-metropolitan areas. This seems to indicate that attitudinal barriers and even transportation are not driving large disparities in access in rural non-metropolitan areas in general.

Table 2: Reasons Given for Not Getting Treatment that Was Felt to Be Needed in Past Year by County Metropolitan Status (2010-2019)

Reason	Large Metro	Small Metro	Non-metro
Could not afford cost	41.40% (40.30% - 42.60%)	44.20% (42.80% - 45.60%)	44.90% (42.90% - 47.00%)*
Concerned about neighbors or community negative opinion	9.40% (8.70% - 10.00%)	9.80% (9.10% - 10.50%)	10.00% (9.00% - 11.10%)
Concerned about negative effect on job	8.60% (8.00% - 9.30%)	8.20% (7.50% - 8.90%)	8.90% (7.90% - 10.00%)
Health insurance does not cover any mental health treatment or counseling	6.90% (6.30% - 7.50%)	7.10% (6.50% - 7.80%)	6.10% (5.30% - 7.10%)
Health insurance does not pay enough for mental health treatment or counseling	13.90% (13.10% - 14.80%)	13.10% (12.10% - 14.10%)	10.90% (9.70% - 12.30%)*
Did not know where to go to get services	22.60% (21.60% - 23.50%)	20.10% (19.00% - 21.10%)	18.40% (17.00% - 19.80%)*
Concerned information given to counselors might not be kept confidential	7.90% (7.30% - 8.60%)	8.20% (7.60% - 8.90%)	10.00% (8.90% - 11.20%)*
Concerned that you might be committed to a psychiatric hospital or might have to take medicine	10.30% (9.70% - 11.00%)	11.00% (10.30% - 11.80%)	11.20% (10.10% - 12.40%)
Didn't think you needed treatment at the time	9.60% (9.00% - 10.30%)	9.40% (8.60% - 10.20%)	7.70% (6.80% - 8.60%)*

Thought you could handle the problem without treatment	26.50% (25.50% - 27.60%)	25.80% (24.60% - 27.00%)	24.10% (22.50% - 25.80%)
Didn't think treatment would help	10.30% (9.60% - 11.10%)	10.40% (9.60% - 11.20%)	9.30% (8.20% - 10.40%)
Didn't have time (because of job, childcare, or other commitments)	18.70% (17.80% - 19.60%)	17.80% (16.80% - 18.80%)	14.20% (13.00% - 15.50%)**
Didn't want others to find out that you needed treatment	6.70% (6.10% - 7.20%)	7.20% (6.60% - 7.80%)	6.90% (6.10% - 7.80%)
Had no transportation, or treatment was too far away, or the hours were not convenient	4.20% (3.80% - 4.60%)	4.50% (4.00% - 5.00%)	5.70% (4.80% - 6.70%)*
Table populated using National Survey on Drug Use and Health: 10-Year Substate Restricted-use Data Analysis System (2010 to 2019) – using the following variables (COUTYP2, MHRCOST2, MHRNBR2, MHRJOBS2, MHRNCOV2, MHRENUF2, MHRWHER2, MHRCFID2, MHRCMIT2, MHRNOND2, MHRHAND2, MHRNOHP2, MHRTIME2, MHRFOUT2, and MHRTRAN)			
* Non- Metropolitan Area result is statistically different from Large Metropolitan Area results at the .05 level.			
** Non- Metropolitan Area result is statistically different from Large Metropolitan Area and Small Metropolitan Area results at the .05 level			

## Workforce Challenges in Rural and Remote Areas

Rural and remote areas have widespread shortages of mental health professionals. More than 25 million people in rural areas, almost half the rural population, live in Health Resources and Services Administration (HRSA) designated mental health professional shortage areas.<sup>25</sup> Data from the National Plan and Provider Enumeration System shows that 65% of non-metropolitan counties do not have a psychiatrist and 47% do not have a psychologist.<sup>26</sup> Non-metropolitan areas on average have 5.8 psychiatrists and 13.7 psychologists per 100,000 people compared with 17.5 psychiatrists and 33.2 psychologists per 100,000 people in metropolitan areas. Behavioral health provider supply was even more limited in more remote non-metropolitan counties without any small cities or towns, 80 percent of these counties lacked a psychiatrist and 61 percent lacked a psychologist.<sup>27</sup> Specialized care is also less available in rural areas. People in urban areas have access, on a per capita basis, to 3.5 times as many child and adolescent psychiatrists, five times as many geriatric psychiatrists, and almost five times as many addiction psychiatrists.<sup>28</sup>

Building the rural mental health workforce will require a variety of strategies, such as providing financial incentives,<sup>29</sup> providing training and supervision necessary for licensure<sup>30</sup> and active recruiting and retention efforts.<sup>31</sup> Strategies for developing workforce capacity in rural areas includes adapting service delivery models because the most specialized and credentialed providers are less likely to be available in rural and remote areas. Mental health providers in rural and remote areas may have to adapt service models to rely more on providers with less credentials, including peer providers.

Task sharing or shifting tasks from more trained to less trained or specialized individuals is one approach to increasing capacity in underserved areas. Task sharing can leverage consultation with specialists to support service provision, such as expanding the capability of primary care to provide behavioral health services through the Collaborative Care Model.<sup>32</sup> As noted earlier, people in rural areas are more likely to get behavioral health care from primary care providers. Although these providers may be comfortable treating more common mental disorders like anxiety and depression, they are less comfortable providing treatment for conditions like schizophrenia and bipolar disorder.<sup>33</sup> Primary care providers also are unlikely to have the capacity to coordinate care for individuals with SMI that are facing challenges with social determinants of health, such as housing or employment challenges. Task sharing may be used to free up mental health specialist resources so that they can serve people with more complex or

intensive needs. Telehealth is another strategy for improving access, which is discussed in more detail below.

COVID-19 has disrupted the business models and operations of mental health care providers leading to additional stressors for mental health care workers. For many mental health workers, shifting to telehealth platforms led to new forms of stress and compassion fatigue, while they concurrently struggled with disruptions to their personal lives that impacted everyone during the pandemic.<sup>34</sup> In the near term, mental health systems, including those in rural and remote areas, will need to manage the shift to telehealth, support employees through pandemic related stressors, and shift business models to adapt to new ways of delivering services.<sup>35</sup> The extent to which the shift to telehealth is a permanent change remains to be seen. The number of people who will seek care as public health measures relax, and the demand they will place on mental health systems is also unknown. Mental health systems will have to monitor and adapt, being mindful of the impact on their workforce.

### **Meeting the unique needs of AI/AN communities**

AI/AN people come from diverse backgrounds and live in urban, rural, and remote areas across the United States: 40% of AI/AN people live in non-metropolitan areas and 22% live on reservations or other trust lands.<sup>36</sup> AI/AN people also come from distinct tribal backgrounds. 574 sovereign tribal nations have a formal nation-to-nation relationship with the federal government and there are 334 reservations across 35 states.<sup>37</sup>

As of April 2021, AI/AN people in the United States experienced the highest death rate from COVID-19 compared with other racial and ethnic groups and were 2.4 times as likely to die from COVID-19 compared with whites.<sup>38</sup> Recognizing this tragic truth, the pandemic also demonstrated tribal public health capacity. Many tribes were able to institute innovative and forward leaning public health measures<sup>39</sup> and have also led in vaccine distribution, initially achieving higher rates of vaccination than other racial and ethnic groups.<sup>40</sup>

In 2019, among AI/AN people 18 and older, 23.6% met criteria for having AMI, 7.2% met criteria for having SMI, 8.9% of met criteria for SUD, and 4.7% met criteria for having AMI and a co-occurring SUD. For each of these conditions, AI/AN individuals experience higher rates than national averages across racial and ethnic groups. Nationally, AI/AN individuals 18 years and older were less likely to receive mental health services (13.9 %) compared with the national rate (16.1 percent).<sup>41</sup> AI/AN people also had the highest rate of suicide among racial and ethnic groups in 2019, at 22.5 per 100,000 compared with a national rate of 13.9 per 100,000.<sup>42</sup>

Mental health services for tribal communities often are provided by a mix of Indian Health Service (IHS), Tribal, county, state, and nonprofit organizations. In addition to the services and systems available to the general population, members of tribes living on or near reservations can receive services funded through the IHS. As of 2019, IHS served 2.6 million people across 37 states.<sup>43</sup> In rural areas, this care is delivered through IHS facilities or through tribally operated facilities. Tribes that receive care through IHS are referred to as *direct service tribes* and tribes that manage their own health systems are referred to as *self-governance tribes*. These programs provide primary care and community health services, including behavioral health care through 568 facilities, including hospitals, health centers, health stations, Alaska village clinics, school health centers, and youth regional treatment centers. The availability of services varies across service units and locations. Specialty services and types of care that

are not available at these facilities can be purchased from private providers through the IHS purchased/referred care program, but this funding is limited.<sup>44,45</sup>

Tribal communities in rural and remote areas often are built around distinct sovereign tribal nations with unique needs and cultures. As a result, it is necessary to develop solutions that are specific to the context of each tribal community, that respond to the needs identified by that community and use practices that are chosen by and acceptable to that community. A number of strategies hold promise in the development of tribal mental health systems, such as developing a culturally competent and responsive workforce; adopting culturally adapted treatment approaches; integrating traditional practices into behavioral health supports; and using the traditional strengths embodied in tribal communities as a part of support systems for people with mental or substance use disorders.<sup>46</sup> Given the shortage of culturally informed mental health workers in tribal communities, a natural solution is to recruit and train AI/AN individuals to become part of the behavioral health workforce. As with other rural and remote areas, task sharing with lower credentialed workers is another promising strategy,<sup>47</sup> exemplified by the Behavioral Health Aides who serve tribal communities in Alaska. These individuals are supervised by licensed clinicians and provide a variety of therapeutic supports, including connecting people to higher levels of care when needed.<sup>48</sup>

State and local mental health systems working with tribal communities need to respect the tribal independent status as they work collaboratively to ensure that the mental health needs of tribal community members are being met. As noted, IHS and tribal systems provide important mental health services including outpatient mental health counseling, access to dual diagnosis services, mental health crisis response and triage, case management, community-based prevention programming, and outreach and health education activities.<sup>49</sup> Yet, as with almost all local rural and remote behavioral health systems at the community level, tribal mental health systems are unlikely to provide all needed services, such as inpatient care, or intensive coordinated services for individuals with SMI. In fact, as of 2011, no IHS facilities provided inpatient psychiatric services.<sup>50</sup>

Building the capacity to serve members of tribes in a culturally responsive manner in collaboration with tribal mental health systems is the responsibility of non-tribal public mental health systems, just as it is for the services they provide to any individual in their service area. Providers and clinicians working within these systems should receive training in cultural humility and these principles and practices should be integrated into service delivery for AI/AN individuals. SAMHSA provides useful resources such as its Culture Card, designed to enhance cultural competence when serving AI/AN individuals, which specifically suggests that training be provided by a member of the particular AI/AN community being served.<sup>51</sup> SAMHSA's Tribal Training and Technical Assistance (TTA) Center, sponsored by the Office of Tribal Affairs and Policy (OTAP), is another good resource for culturally relevant training and technical assistance to support mental health in tribal communities (<https://www.samhsa.gov/tribal-ttac>). State and local mental health systems should consult and work with tribal behavioral health systems to provide an effective continuum of supports for AI/AN individuals, particularly people with more complex or intensive needs. As these individuals may move in and out of tribal systems to access inpatient care and other supports, coordination is especially important across systems to ensure that individuals do not become disconnected or have their care and support networks disrupted during transitions. Tribal systems will likely face some of the same challenges following COVID-19 as other rural and remote systems, determining the appropriate role for telehealth, and trying to address pent up demand for services from people who did not seek help during the COVID-19 pandemic. Tribal systems and their state and local partners will need to adapt to conditions as they unfold.

## Telehealth Services

The most pervasive change in mental health service delivery during the COVID-19 pandemic has been the shift to telehealth. The adoption of telehealth in mental health systems saw steady gains in the years before the pandemic in rural and non-rural areas.<sup>52, 53</sup> Responding to the need to provide socially-distanced services, health systems rapidly shifted to telehealth service provision following the spread of COVID-19. Adapting to this reality, the federal government and states took swift action. While the details differ somewhat across states and federal programs, temporary legal and regulatory flexibilities were enacted to enable the provision of telehealth services, including:

- reducing restrictions on out-of-state providers;
- allowing telehealth services to be provided by additional provider types;
- enabling initial provider visits to take place via telehealth;
- allowing reimbursement for telephone only visits;
- allowing reimbursement of telehealth visits in a wider variety of settings, including homes;
- allowing the provision of services through non-HIPAA compliant platforms; and
- eliminating payment disparities between telehealth services and in-person services.<sup>54,55</sup>

Because many of these changes designed to respond to the pandemic are temporary, mental health systems and providers face a lot of uncertainty and may have to adapt to a new regulatory and policy environment as COVID-19 rates decline.

A study that analyzed half of all private insurance claims in the United States from February of 2020 to April of 2020 found a 2900% increase in mental health telehealth claims.<sup>56</sup> The number of claims reduced somewhat in the following months, but remained at 2600% of pre-pandemic levels as of December 2020. Medicaid and CHIP also saw a large growth in the use of telehealth during this period.<sup>57</sup> Another study that examined a national sample of commercial and Medicare advantage claims from January to June 2020 found that telehealth accounted for 56.8% of total psychiatry visits, 50.8% of social work visits, and 49.1% of psychology visits during this period.<sup>58</sup>

While the ability to provide services via telehealth enabled access to mental health services during the pandemic, it is not a panacea. Telehealth may not be as effective for all interventions and conditions. While telehealth's efficacy for depression and anxiety is more established, there is less evidence for its use with conditions like schizophrenia.<sup>59</sup> Although initial reports for some providers have indicated success in using telehealth to serve individuals with SMI.<sup>60</sup> Some types of mental health services, such as medication visits, may be better suited to telehealth delivery. As a result, the shift to telehealth may also impact the types of services that individuals seek out or continue to access.

In many rural areas there are technological barriers to accessing telehealth. These include lack of access to broadband or limited bandwidth; poor cellular coverage; limitations in clients' phone plans that limit the number of minutes or amount of data that they can use; and lack of access to necessary technology. Household bandwidth can also be an issue. During the pandemic multiple members of households are often competing for bandwidth with children and youth logging in to school online, and adults working remotely when possible.<sup>61</sup> Some people do not have access to technology necessary to participate in telehealth, and with some groups experiencing less access than others, including older Americans, people with disabilities,<sup>62</sup> and people living in poverty.<sup>63</sup> It is important to note that these groups are all

overrepresented in rural areas and public mental health systems. Some systems and providers have attempted to address these concerns by providing devices to help people being served access telehealth services.<sup>64, 65, 66</sup> Telehealth is also not a solution when provider capacity within organizations is severely limited. There are still only so many slots available for a psychiatrist to see clients whether they are providing services via telehealth or in-person.

Providers face considerable uncertainty as it is not clear whether regulatory flexibilities enabling current telehealth practices will extend past the pandemic. As people return to more in-person services, providers and consumers will need to figure out what is the best use of telehealth, for which individuals it is most effective, and if there are interventions that are more effective in-person. Providers in rural areas may need to make trade-offs in some of these areas. For instance, it may be that group interventions are more effective in person, but this is outweighed by the convenience for providers and participants, who may have to drive for hours to participate in these sessions. Taking all of this into account, it is clear that telehealth has an important role in mental health systems moving forward. It provided safe access to services during the pandemic and created a sustainable business model for many providers through the pandemic. In general, and in rural areas specifically, it offers a more convenient way for people to access many mental health services. In addition to direct service delivery, telehealth may be used to support consultation with other providers, such as primary care providers or less specialized behavioral health care providers, so may be a way of bolstering the capacity of the existing workforce in rural and remote areas.

#### **Program Spotlight – Telehealth Expansion in a Remote Area**

***Lindsey McCarthy, MSW, Executive Director, Southern Plains Behavioral Health Services***

Southern Plains Behavioral Health Services (Southern Plains) serves Gregory, Todd, Tripp, and Mellette Counties in South Dakota. Their service area includes the Rosebud reservation and land trust, the home of the Rosebud Sioux Tribe, a branch of the Lakota people. The area of the state that they serve is extremely remote, with a population under 25,000 people across the four counties as of the 2010 census. Southern Plains provides services to over 700 people, a majority of whom have Medicaid coverage or receive services funded by the state.

Southern Plains has provided some telehealth services since 2006 but was working to expand their telehealth capacity before the COVID-19 pandemic. They had hosted on-site telehealth training for all of their staff in the year before the pandemic with the intention of expanding these services, but the pandemic greatly accelerated their schedule for telehealth adoption. In the second quarter of 2020, they found themselves moving almost all services to delivery through telehealth.

The shift to telehealth has been largely advantageous for Southern Plains, greatly reducing staff transportation time and improving access for clients. At the beginning of the pandemic, their psychiatric no shows decreased significantly. Some clients expressed interest in going back to in-person and stopped engaging after the first few months of remote services, but most clients have been happy with continued telehealth services. Southern Plains has been able to provide a variety of services remotely. For some clients, participation in groups required a two hour drive each way before the shift to telehealth, so remote groups have been a major improvement. In their work with clients who have more complex or serious conditions, the telehealth hasn't been a major barrier. In some cases it has enabled staff to have multiple shorter remote contacts with clients in a week

instead of one in-person visit. Southern plains moved to providing crisis assessments remotely using telehealth, offering the service remotely to local hospitals and the jail, which has worked well.

Internet access has been a barrier for many clients. Some clients also do not have the cell phone minutes or data available in their phone plans to consistently participate in telehealth. There are also issues of mobile network coverage and there are some areas across the four-county area where mobile phone service is spotty or unavailable.

Moving to telehealth has also resulted in organizational benefits for Southern Plains. Having clinicians on the road throughout the day made it difficult to schedule meetings and coordinate. With most people working remotely and providing services via telehealth, there are more regular meetings with more staff present. Remote work has also forced staff to use online systems, which has also improved coordination.

The Southern Plains experience with telehealth over the past year was captured in something Ms. McCarthy said as we wrapped up our interview, “We spend less in gas, our utility bills are lower, and we’re able to reach more people. We need to learn from COVID to make sure we are reaching as many people as we can.” After adapting to conditions under the pandemic, Southern Plains faces additional uncertainty as COVID-19 transmission rates decrease. Much of the telehealth expansion that has been possible has been a result of temporary regulatory flexibility in response to COVID-19, so the continuation of current expanded telehealth practices will depend on future state and federal policies.

## **Building the Array of Effective Practices in Rural and Remote Settings**

There is an array of evidence-based practices that have been shown to improve outcomes for people with mental disorders, but there are challenges in implementing these in rural or remote areas. Especially for individuals with more intensive or complex needs, these interventions, such as assertive community treatment (ACT), supported employment, permanent supportive housing, or high-fidelity wraparound, are not only focused on providing psychosocial interventions or psychotropic medication, but more broadly connecting people with a variety of community supports and addressing social determinants of health. As a result, these are practices that, while telehealth may support them or be incorporated into them,<sup>67, 68</sup> rely on face-to-face contact and services delivered in community settings. Many of these were developed in urban and suburban settings and are built on assumptions around service infrastructure, population density, and workforce that may not hold true in rural settings. There has been some work to systematically adapt and evaluate evidence-based practices in rural and remote settings, but it is limited.<sup>69</sup>

The challenges involved in implementing these evidence-based practices in rural areas varies by practice. For practices like ACT that rely on a robust interdisciplinary team and intensive community contact, staffing, transportation, and economies of scale may be challenging.<sup>70</sup> Some practice models face focus-specific challenges in rural and remote areas, such as the general lack of job opportunities, which may impact supported employment programs,<sup>71</sup> or the lack of available affordable rental housing, which may impact permanent supportive housing and other housing supports.<sup>72</sup>

Adaptation of evidence-based supports in order to successfully deliver them in rural and remote areas may mean adapting established models or identifying core components of EBPs, and finding effective

ways to deliver these components or achieve the same goals through staffing and service delivery models that are possible in rural and remote areas. EBPs must also be responsive to cultural issues and should be adapted to the culture of the individuals receiving them.<sup>73</sup> This should especially be a priority in the delivery of services to tribal populations.<sup>74</sup> Given the great variation in populations, capacity, and challenges in rural and remote areas, it is likely that there won't be a one-size-fits-all adaptation of EBPs that will enable their use across the United States, but that a range of approaches will need to be developed and deployed.

**Program Spotlight – Incorporating Telehealth into Program for Assertive Community Treatment (PACT) Team Operations**

***Dr. Charlie Swanson – Medical Director, Piedmont Community Services Board***

Piedmont Community Services Board (CSB) in southern Virginia was scheduled to undertake an independent fidelity review for their PACT team in March 2020 when the pandemic began. PACT, also known just as ACT in many places, is a multidisciplinary team approach with assertive outreach for people with SMI who require an intensive level of support to remain stable while living in a community setting. Instead of going through the fidelity review process, Piedmont CSB found itself in the position of adapting all of its operations, including the PACT team, to operate as safely as possible during the pandemic. The PACT team serves 84 people in Henry County and the city of Martinsville in southern Virginia. The team includes a psychiatrist, four nurses, a pharmacy technician, a peer, two counselors and several case managers.

In the operations of the ACT team, transportation challenges are a major consideration given the distances that need to be traveled to see clients. For several years the team has been using telehealth to facilitate visits with the psychiatrist, Dr. Charlie Swanson. This proved advantageous when the COVID-19 pandemic began because clients were already used to telehealth services. The team was able to shift some contact to telehealth, for instance, checking in with clients, but many ACT team functions still required in-person visits. Shortages of personal protective equipment (PPE) were a problem, especially in the early stages of the pandemic. Dr. Swanson reported purchasing ponchos for ACT team members providing in-person services from the Tractor Supply Company at one point because of shortages in PPE.

Dr. Swanson reported that clients did fairly well through the first few months of the pandemic, summoning internal resources to remain stable. Over time though, the stress of the pandemic has impacted the PACT clients. Clients showed great concern for the wellbeing and safety of ACT team members and many embraced social distancing measures to protect the staff. Despite shifting services to telephonic contact when possible and taking precautions, some members of the ACT team contracted COVID-19.

While most services offered by Piedmont CSB shifted to telehealth, there were limitations with how many PACT functions could be done over the phone. Some PACT clients met with team members via Zoom but delivering services via telehealth had several limitations. Given the seriousness of the mental illnesses experienced by the people served by the PACT team, they were not always able to communicate their needs or receive support over the telephone. As Dr. Swanson put it, "Telephonic is helpful, but it's not like seeing folks face to face." Also, while mobile service was generally available in Henry County, many clients had a limited broadband access and a number of phone minutes or broadband access through their phone plans, so were limited in how much they could participate in telehealth. Delivering in-person services also enabled team members to provide other supports, such

as taking groceries to the people they worked with, which became more important given the disconnection and isolation that people experienced during the pandemic. Some services were particularly difficult to deliver during the pandemic, such as groups that focus on SUD, social support, and wellness, which didn't work over Zoom for people receiving ACT. Although Dr. Swanson felt that the use of telehealth in other Piedmont CSB services would continue past the pandemic, he anticipated that the PACT team would revert to more in-person contact for the majority of the team, as they had operated before the pandemic, but continuing to offer psychiatric visits remotely.

## Developing Rural Crisis Systems

The United States is currently undergoing an intensive period in the development of behavioral health crisis services. With the rollout of a national "988" crisis hotline, the creation of a crisis set aside within the Community Mental Health Services Block Grant, enhanced Medicaid coverage of mobile crisis services and a public dialogue of the appropriate role of law enforcement in the response to behavioral health crises,<sup>75</sup> attention within states to crisis services has never been greater.

Rural and remote communities confront several major challenges that impact the development and delivery of crisis systems and services. Large geographic areas to cover, combined with limited available resources, often leads to long wait times to access services when an individual experiences a behavioral health crisis in these communities. Long distances to travel to services that are located primarily in urban areas, such as inpatient care, and the availability of transportation itself to services may be difficult.<sup>76</sup> Workforce shortages and challenges related to recruitment and retention of qualified professional staff to ensure quality crisis services delivery also persist in rural and remote communities.<sup>77</sup>

Strategies recommended in *SAMHSA's National Guidelines for Crisis Care: A Best Practice Toolkit* to address these challenges largely center on leveraging partnerships with area first responders to strengthen crisis response abilities and incorporating technologies like telehealth to make the best use of available resources in developing and delivering crisis care.<sup>78</sup> Regional partnerships are sometimes formed to share resources and make services like mobile crisis available in rural and remote communities. However, relatively low demand for these services can still make funding and staffing teams for 24/7 availability a challenge.<sup>79</sup> Capitalizing on available human resources like volunteer or on-call clinicians can assist in making crisis services available when needed. Alaska, for example, trains citizens as Behavioral Health Aides (BHAs) employed by their regional tribal health organizations to provide on-call responses to individuals who are experiencing a behavioral health crisis.<sup>80</sup> Collaboration with area first responders like EMS may be leveraged to assist with transportation to care, which is also difficult to fund and provide.

Pre-COVID-19, some rural and remote communities were able to both offer access to limited licensed and/or credentialed clinicians and other professional staff (e.g., psychiatry), and equip existing first responders with resources to connect individuals in crisis with proper screening and next step crisis care by incorporating technology like telehealth. For example, in some rural Colorado communities, paramedics are trained to do an initial screening and then connect individuals via telehealth to a qualified mental health professional who can further guide needed follow-up care.<sup>81</sup> Colorado was also exploring training volunteers who are bachelor's-level providers or peers in rural communities pre-COVID to use tablets to virtually connect individuals in crisis to care using telehealth.<sup>82</sup>

The COVID-19 pandemic may have shifted priorities and/or resources away from the piloting of new crisis care strategies like these, and also necessitated decreasing some crisis services capacity due to social distancing requirements (e.g., in crisis stabilization units).<sup>83</sup> It also highlighted major challenges related to mental health and access to care during crises in rural and remote areas, while accelerating the use of new and emerging models of delivering crisis care. COVID-19 presented an opportunity to rapidly expand the use of virtual care using telehealth. This has been effective in addressing some services access issues in rural and remote communities by allowing for modified payment mechanisms and new provider types to bill for services delivered via telehealth. The increased availability of telehealth may have also helped to overcome some of the stigma associated with seeking mental health care in rural communities by offering alternatives to office-based treatment. However, the surge in the use of telehealth has also highlighted the ongoing challenges in rural and remote communities related to limited broadband connectivity, as well as limits on affordability of and access to devices like tablets in order for individuals in these communities to take advantage of virtual behavioral health services and supports, including crisis care.<sup>84</sup>

## **Conclusion**

It will be years before more complete data is available that shows the short- and long-term impacts of COVID-19 on the prevalence of mental disorders and service delivery in rural and remote areas. The United States mental health system embarked in an experiment, shifting overwhelmingly to telehealth delivery of mental health services during the COVID-19 pandemic. While this has broad implications for the mental health system, the impact is even larger for rural and remote mental health systems, where telehealth has long been seen as a possible solution to access problems. The field will need to do extensive work to understand where telehealth has worked and where it has not.

People in rural areas may access mental health services at similar rates to other areas of the United States, but they do not have equivalent access to intensive or specialty services. There is considerable work to be done to develop rural and remote mental health systems, building a workforce that draws on a wider variety of mental health professionals, leveraging advances in telehealth, identifying people in need of more intensive and specialized services, and adapting EBPs to ensure that people get the services they need. This is also true for tribal communities in rural and remote areas. As tribal mental health systems develop and adapt services to better meet the needs of AI/AN people, there is great potential meet the significant needs that exist in these communities.

As COVID-19 restrictions lift and more data becomes available, policymakers and practitioners will get a better sense of the extent to which people in rural and remote areas received the mental health services they needed during 2020 and 2021. Meeting the needs of people in rural and remote areas will require work at the federal, state and local levels. Federal and state policymakers must assess the proper role of telehealth, informed by clinical experience, and adjust laws and regulations accordingly. They must also work with providers, researchers, and the communities and populations being served to identify strategies that will contribute to a robust, interconnected, and evidence-based system of mental health care in rural and remote areas.

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