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IN BRIEF

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Rural Behavioral Health: Telehealth Challenges and Opportunities

This *In Brief* looks at common acceptability, availability, and accessibility barriers to mental and substance use disorder (behavioral health) treatment and services in rural* communities and presents ways telehealth can help surmount some of these barriers. Challenges to implementing effective telehealth services in sparsely populated areas are also discussed. This information is designed to be useful to behavioral health practitioners and many other professionals—such as attorneys, behavioral health training program faculty, clergy, pharmacists, and primary care practitioners—who are concerned with behavioral health in their communities. These professionals may be local centers of influence to whom others turn for behavioral health information and help. For more information on the use of telehealth for behavioral health services, see Treatment Improvement Protocol (TIP) 60, *Using Technology-Based Therapeutic Tools in Behavioral Health Services*.[1]

The term *telehealth*† refers to using internet and communications technologies (ICTs), such as videoconferencing, chat, and text messaging, to provide health information and treatments in real time. Telehealth also includes exchanging information and delivering services asynchronously, such as through secure email, webinars, or "store-and-forward" practices, which include videotaping a client encounter and forwarding the video to a professional who is offsite, for analysis at a later time. As access to at least some types of ICTs increases across the United States, the potential for telehealth also increases. Increasing levels of access create opportunities for providers to address rural–urban disparities across the behavioral health continuum of care (see Exhibit 1).[2,3]

Exhibit 1. Telehealth Across the Behavioral Health Continuum of Care[2,3,4,5,6]

Service	Telehealth Example
Assessment	Online substance use questionnaire
Treatment	Cognitive–behavioral therapy through videoconferencing
Medication management/ monitoring	Text message reminders to take medications as directed
Continuing care	Group chats for relapse prevention
Education	Webinars for clients and providers
Collaboration	Interactive video for consultation

Nearly one in five U.S. residents lives in a rural area.[7] According to most estimates, individuals living in rural locations experience mental and substance use disorders at rates that are similar to (and sometimes higher than) those of their urban counterparts.[8,9,10,11,12,13] In a survey of rural health stakeholders, when participants were asked to identify the top 10 rural health priorities from a larger list of focus areas, they ranked mental health and mental disorders fourth and substance abuse fifth.[14]

Despite having a similar need for services, people in rural areas have less access to the behavioral health continuum of care than do people in urban areas.[15,16] Although funding cuts, workforce shortages, and other systemic issues

* There are many definitions of *rural,* even within the federal government.[17] This *In Brief* uses the word *rural* in a general sense to refer to areas of the United States that are sparsely populated.

† "Telehealth is different from telemedicine because it refers to a *broader scope of remote healthcare services* than telemedicine. While telemedicine refers specifically to remote clinical services, telehealth can refer to remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services."[18]

hinder access to timely and appropriate behavioral health treatment and services in urban and rural areas alike, people in rural areas face additional barriers, such as a lack of adequate internet infrastructure,[19,20] a need to travel long distances to see specialty providers, and a lack of anonymity about receiving treatment.[21]

The idea of using telehealth to expand access to care first surfaced in the 1960s.[22] Technology can facilitate the delivery of behavioral health services to people in rural areas in two main ways: (1) by linking clients to behavioral health practitioners located at a different site, and (2) by connecting nonspecialists in rural areas—commonly primary care practitioners—to networks of behavioral health specialists throughout the country for case consultation.[23]

Acceptability Barriers

Treatment acceptability refers to whether patients consider treatment to be relevant, beneficial, and worthwhile. There is evidence that some rural communities normalize substance use and certain types of mental illness, such as depression, making it difficult for residents to judge when their condition warrants treatment.[21,24,25,26] Numerous other factors influence whether individuals believe treatment is an acceptable response to their condition. For instance, a history of the U.S. agricultural population's behavioral health care cites a culture of self-reliance as one reason this population tends to "avoid seeking behavioral healthcare even when needed."[27] Two major acceptability barriers facing individuals living in rural locations are a lack of privacy about receiving treatment for behavioral health conditions and a lack of culturally appropriate care.[21,27]

Lack of privacy

Individuals living in rural locations commonly identify a lack of privacy as a barrier to receiving treatment.[15,28,29,30] Associated with the lack of privacy is the desire to avoid being the subject of gossip or being marginalized.[21,30] In small communities, residents may recognize whose car is in a therapist's parking lot, for instance. Focus groups have revealed that certain cultural attitudes and beliefs may also contribute to a lack of privacy, exemplified by one study involving a faith community of rural African American individuals (see textbox at right).[21]

Lack of culturally appropriate treatment

Some rural communities harbor negative perceptions about treatment for mental disorders or about treatment and service professionals.[21,31,32] At the same time, skepticism may be warranted if treatment and service providers do not deliver culturally sensitive diagnoses or care, cannot offer a full complement of services, or cannot provide services for the length of time required to see positive outcomes. American Indians and Alaska Natives, for instance, have criticized mental health services as being culturally unsuitable.[31]

Culturally appropriate treatment accommodates clients' beliefs and practices, preferred languages, individual and family histories, differences in symptoms, and preferred approaches to treatment. A significant challenge to providing culturally appropriate treatment in rural areas is their racial, ethnic, and cultural diversity. Although between 79 and 82 percent of the residents of rural areas and small towns are non-Hispanic Whites,[9] rural areas have become more racially and ethnically diverse in the past decade. In fact, racial and ethnic minorities accounted for 83 percent of the population growth in rural areas from

Depression in a Rural African American Community[21]

Focus groups with rural African Americans in a faith community revealed individual and cultural barriers to seeking treatment for depression. Participants said that private information spreads easily through rumors in their small community, increasing the likelihood that individuals experiencing depression would be judged by others they see regularly. Fear of being labeled "crazy" prevented people with depression from seeking care. In addition, participants wanted to keep their "personal business" to themselves, and also did not want to pry into anyone else's business. These attitudes sometimes kept them from knowing that friends needed help, as one participant discovered when he happened to visit a friend who had just taken pills in an attempt to take his own life.

Another barrier was the belief that depression is a normal part of everyone's life. In a depressed environment, one participant said, individuals may not even recognize that they are depressed; the condition is viewed as a norm, not as an illness that requires treatment.

2000 to 2010.[33] However, as in urban areas, factors besides race and ethnicity contribute to the formation of distinct cultures. In a rural area, these factors include the economic base (e.g., farming, forestry, manufacturing, tourism); proximity to urban centers; and any major subpopulations, such as seniors or veterans. Medical and behavioral health researchers and practitioners working in rural areas have noted the dire need for behavioral health treatment and service practitioners who understand the needs of farmers and ranchers, veterans, and tribal communities and other ethnic and racial minorities.[27,31,34,35,36]

Addressing Acceptability Barriers

One of the most promising contributions of telehealth is its potential to provide confidential therapies, enabling individuals living in rural locations to access treatment and services without inadvertent disclosure to their communities. For instance, one prevention intervention used email to treat subthreshold depression before it became clinical. Participants who had been screened online were sent automated emails containing advice and self-help strategies.[37] However, commonly used programs and services such as Skype may not meet Health Insurance Portability and Accountability Act (HIPAA) requirements for the protection of private health information.[38,39]

Treatment relying on sophisticated telehealth equipment systems could be accessed from hospitals, clinics, educational institutions, professional offices, and other settings that offer privacy. For example, an individual may go to a primary care provider's office or a community clinic and obtain an assessment or treatment for a mental or substance use disorder via telehealth without other patients knowing the purpose of the visit.

Telehealth models can be used to educate healthcare professionals about behavioral health issues.[40,41] In addition, telehealth can be used to train behavioral health practitioners on the technical, ethical, cultural, and professional competencies they need to work effectively with rural clients.[4,42]

Burke, a community mental health services provider in rural eastern Texas, offers comprehensive emergency psychiatric services entirely by telepsychiatry, covering 400,000 people dispersed over 11,000 square miles. The center operates an 8-bed, 48-hour observation unit with capacity for involuntary patients; a 16-bed residential unit for voluntary patients; and a mobile crisis outreach team. The center is staffed by registered nurses, mental health technicians, licensed counselors, licensed vocational nurses, and a caseworker. Within 1 hour of arrival (no matter the time or day), patients are assessed and engaged via videoconference with a psychiatrist. (A psychiatrist is also available by phone within 5 minutes.) The center contracts with psychiatrists at a private behavioral health telemedicine practice in Houston. Burke is also equipped to offer detoxification services.[43,44]

Availability Barriers

Even when individuals living in rural locations want treatment, they may have few services and providers in their areas, and they may have less access than urban residents to evidence-based practices (EBPs).

Lack of services

One report estimated that outpatient substance use treatment services are almost four times less likely to be available in rural hospitals than in urban hospitals (12.1 percent and 43.7 percent, respectively, with treatment services offered either directly or by arrangement).[45] Hospitals in large rural areas are about twice as likely to offer substance use treatment services (17.9 percent) compared with hospitals in small or isolated rural areas (8.2 percent and 8.5 percent, respectively). Rural facilities also provide fewer services along the continuum of care. Rural areas are particularly short on detoxification services.[46] Moreover, although individuals living in rural locations report higher rates of prescription opioid misuse than do urban residents,[12] only about 3 percent of all opioid treatment programs are situated in rural areas.[46]

Telemedicine Funding for Opioid Addiction Treatment in Appalachia

In June 2016, Secretary of Agriculture Tom Vilsack announced the awarding of Distance Learning and Telemedicine grants totaling almost $1.4 million for projects in rural central Appalachia (Kentucky, Tennessee, and Virginia) to address the growing opioid addiction crisis in this region of the United States.[47]

Lack of practitioners

Rural areas have few behavioral health practitioners, particularly ones who are qualified to provide specialty treatment[4,48,49,50] or EBPs.[48] More than 75 percent of all U.S. counties are mental health shortage areas,[51] and half of all U.S. counties have no mental health professionals at all.[52]

No national count of behavioral health workers exists, making it difficult to accurately assess shortages of substance use treatment and service practitioners. However, the Substance Abuse and Mental Health Services Administration has documented difficulties in recruiting and retaining staff to replace the country's aging behavioral health workforce.[50] The Health Resources and Services Administration estimates that more than 7,700 professionals are needed to fill existing behavioral health workforce gaps.[50]

Challenges to recruiting and retaining substance use treatment staff in rural areas include:[53]

- Low pay compared with peers in other settings.
- Professional isolation.
- Difficulty for spouses to find work.
- Few social outlets and educational opportunities.
- Difficulties adjusting to rural life.

Lower use of EBPs

Some research shows that behavioral health facilities in rural areas are more likely than their urban counterparts to be independently operated and less likely to collaborate with a university to train providers on EBPs.[48] At the same time, most studies that support EBPs are not conducted in rural areas or on rural populations.[48]

Addressing Availability Barriers

Telehealth has the potential to help bridge the rural–urban treatment gap by linking rural clients to high-quality behavioral health services and providers located in more populated areas. Among the various technologies currently in use, video telehealth seems to provide the intervention most similar to office-based treatment, and research shows that video telehealth users have satisfaction levels and outcomes similar to those of clients receiving in-person therapy.[35,54]

> The single area where improved patient care could be realized is in the significant expansion and active use of telehealth.[32]

Telehealth can also mitigate rural practitioner isolation and increase collaboration.[4,55,56] New Mexico's Project ECHO (Extension for Community Healthcare Outcomes) began when the University of New Mexico Health Sciences Center adopted teleconferencing to train rural primary care practitioners to effectively treat patients with hepatitis C. The ECHO model links specialist teams at an academic "hub" using multipoint videoconferencing to conduct virtual clinics with community providers. Primary care practitioners, the "spokes," become part of a learning community, where they receive mentoring and feedback from specialists. The model, now used in both urban and rural areas, has since expanded to include training on treating mental and substance use disorders, along with other illnesses and chronic conditions.[57]

When clinicians join Project ECHO, they receive 2 days of in-person orientation. Then they join disease-specific learning networks that engage in weekly videoconferences. Training is through case-based learning, including consultations with specialists. Project ECHO now operates more than 90 hubs—in the United States and in 16 other countries—that deal with more than 45 diseases and conditions.[58] The Project ECHO model has also been used within the healthcare systems of the U.S. Department of Defense.

Accessibility Barriers

Having to travel long distances to receive treatment is a common accessibility barrier for individuals living in rural locations who may not have a driver's license, a reliable car, or public transportation options. The percentage of rural families with access to a car between 2011 and 2013 was higher than the percentage of their urban counterparts with such access during this same period (96 and 90 percent, respectively).[59] However, in 2005, the U.S. Department of

Agriculture's Economic Research Service reported that more than 1.6 million families living in rural locations did not have cars.[60] Individuals living in rural locations who do have access to a car may not want to be away from their families or leave children with others for the many hours that a trip to a provider can take, and seniors may not feel safe driving after dark.

Poverty is another significant barrier to accessing behavioral health treatment and services.[36,61] Poor individuals living in rural locations may not be able to afford the cost of care and transportation to care.[62] Minorities in rural areas are more likely to be poor than are minorities in urban areas; for example, in 2014 the poverty rate for nonmetro Blacks was 36.9 percent, compared with 26.0 percent for metro Blacks.[63]

Despite the need for publicly funded treatment, only about 60 percent of U.S. counties have an outpatient substance use treatment facility that accepts Medicaid (the percentage is lower in certain Southern and Midwestern states).[64] Counties with a higher percentage of rural, Black, and/or uninsured residents are even less likely to have a Medicaid-funded treatment facility.[64]

Addressing Accessibility Barriers

Telehealth can offer clients and providers more convenient ways to access services, which may result in reduced travel time and expense, less time away from families, and fewer missed appointments.[35,65,66] Telehealth also saves institutions the expenses associated with their practitioners' travel to distant sites. It can facilitate approaches that otherwise would not be feasible.

The U.S. Department of Veterans Affairs piloted a substance use treatment program using an in-home messaging device (IHMD), a hand-held device that connected to a telephone outlet but did not interrupt phone service and did not require an internet connection. Clients used the IHMD every day to access a combined behavioral intervention (CBI) for substance use disorders. CBI is a blend of cognitive–behavioral therapy, 12-Step approaches, and motivational interviewing. The aim of the program was to reduce delays in connecting clients to care, thereby preventing emergencies.[67]

Every day for the length of the 27-day program, clients received text messages on the device to assess their condition on these measures: substance use in the past 24 hours, level of craving, withdrawal symptoms, level of commitment to remain abstinent, and thoughts of self-harm. Clients pushed buttons on the device to indicate their answers, and follow-up questions proceeded logically from the responses. Client responses were transmitted via secure server to computers monitored by care coordinators. The program triaged clients' responses, alerting care coordinators to any situation that required an immediate intervention. The care coordinator could then contact the affected client directly or refer the client to a primary care practitioner. The system also instructed the client to call 911 or take other action, as needed. A second component of the program conveyed steps clients might take daily to build coping and other skills to achieve abstinence.

A larger IHMD study (62 veterans) found that at 1-month follow-up, participants who received IHMDs had fewer drinking days and fewer binge drinking days compared with participants in a group-led (face-to-face) intervention with a therapist.[68] At 3-month follow-up, the differences between the two groups were not significant in terms of the total number of drinking days. However, the IHMD group still had fewer binge drinking days.

Challenges to Implementing Telehealth Services

Telehealth can meet some of the need for increased access to behavioral health care in rural areas, at least for some clients, but it has yet to reach scale. Internet access remains a challenge to rural telehealth. The federal government has invested billions of dollars to improve internet access for rural communities.[20] By mid-2015, 78 percent of rural households had internet access, compared with 85 percent of urban households.[69] However, 39 percent of of all people living in rural areas do not have access to advanced broadband internet, and 19 percent lack access to even basic broadband—a factor that limits the types of telehealth services available to them via a home internet connection.[19]

Another challenge to rural telehealth development has been the lack of insurance coverage for telehealth services. The number of states with parity laws for private insurance coverage of telemedicine has increased from 1 state in 1995 to more than 30 states in 2016, with

pending or proposed legislation in another 7 states (see Exhibit 2).[70] However, according to the Medicare Payment Advisory Commission, rural providers rarely use their current telehealth capability.[71] A survey by the National Association of State Alcohol and Drug Abuse Directors found that, out of 37 state respondents, 25 reported use of some form of telehealth to treat mental disorders.[72] However, only 18 reported use of telehealth to treat substance use disorders.

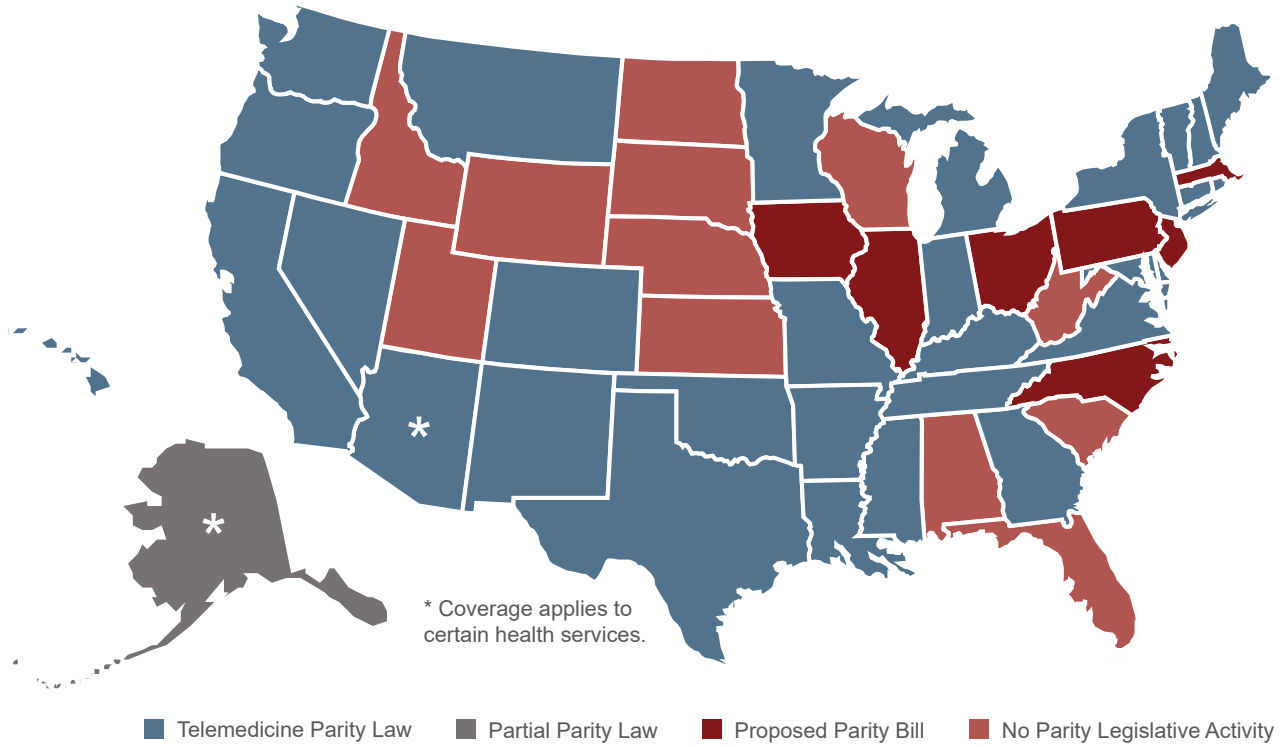
Challenges facing providers

Some researchers find that behavioral health treatment and service providers are reluctant to embrace telemedicine. This initial reluctance can stem from concerns about privacy, confidentiality, security, setup costs, and technical difficulties (e.g., transmission interruptions) that could lead to disruptions in treatment.[35] Significant differences in state laws are also a concern. For example, practitioners must be informed of licensing laws across states—that is, prior to providing telehealth services to a patient in a different state, the practitioner must learn whether there are specific licensing requirements for doing so.[1,73]

Providers may also face difficulty getting reimbursed for telehealth interventions. Until recently, billing for telebehavioral health services was limited. However, this is changing as insurance carriers recognize that telehealth is able to provide evidence-based care in a cost-effective way.[23,73]

The American Medical Association at its 2014 annual meeting approved a set of principles designed to ensure appropriate insurance coverage and payment for telemedicine services. The association's then president, Robert Wah, M.D., stated that the policy created a foundation for using telemedicine to maintain relationships with patients, to enhance follow-up care, and to facilitate better care and management of chronic health conditions.[74]

Exhibit 2. States With Parity Laws for Private Insurance Coverage of Telemedicine (2016)[70]



Adapted with permission from the American Telemedicine Association.

Challenges facing rural clients

Certain characteristics of rural populations—such as their treatment preferences, preferred languages, and comfort with technology—have been minimally studied; therefore, how to responsibly adapt telehealth to the diversity of rural populations is not well understood.[5,36] Cultural competency experts have noted that "we do not know whether and what types of adaptations and modifications of an evidence-based program are needed to ensure that its implementation does not create or exacerbate disparities across cultural groups."[75] Which rural clients would benefit most from which technologies is still unclear. Although videoconferencing is a commonly studied telehealth approach, a systematic literature review on videoconferencing for psychotherapy showed that more research is needed on a range of issues, including consent, telehealth contraindications, and the effect of gender, race, and ethnicity on outcomes.[54] However, a 2016 report found that there is sufficient research on telehealth effectiveness to support its use for remote monitoring, communication, and counseling of patients with chronic medical conditions, and for psychotherapy (for behavioral health).[76]

Challenges facing facilities

Telehealth for rural areas is a small part of the larger behavioral health treatment and service system and is subject to the same limitations, such as insecure funding for programs, low reimbursement rates for providers, and high rates of patient no-shows.[22] However, telehealth programs also present with their own particular challenges. They can have high upfront costs, and studies to date on implementation and operational costs of various telehealth programs, as well as cost effectiveness, are not generalizable.[5,77] To protect patient privacy, telehealth care systems require password-protected files, network firewalls, document encryption, and reliable technical support.[3] Data ownership and privacy standards remain to be settled.[5] Responsibility for being HIPAA compliant rests with the program or individual using any particular modality, because, as one study noted, "no accreditation system documents that a telemedicine system is in compliance. Prospective users must carefully evaluate whether or not the services meet the requirements of these regulations."[78]

Particular Challenges in Frontier Areas

Frontier areas in the United States have their own particular challenges. Frontier areas are very remote, isolated, and sparsely populated areas that require long trips not only to obtain health care, but also to do everyday things like going to school or the grocery store. Seasonal conditions can make travel especially difficult. Snow, ice, or floods may require closing of certain roads. Some residents of frontier islands must rely on travel by boat or by air to obtain health care, and the weather can cause problems for both emergency and nonemergency medical transport. For frontier families with low incomes, or with family members who are elderly or have disabilities, the isolation and long distances can be enormous obstacles to getting needed health care.

Telehealth

Telehealth has the potential to give frontier patients access to primary care providers and medical specialists, improving the quality of care and health outcomes. Telehealth may also reduce the costs of both obtaining and providing health care.[79]

One pilot project trained 12 therapists in telehealth, to deliver mental health services to veterans from 6 rural community clinics. However, 10 months later, only two clinicians were offering telehealth services. Unexpected hurdles included a lack of soundproof rooms for therapists, lost equipment, inadequate staffing, delayed therapist credentialing, staff turnover, and difficulty enlisting clients.[80]

Conclusion

Bridging the gap between rural and urban behavioral health services involves addressing many complex barriers and developing creative solutions to complex challenges that are often unique to rural areas. However, rural clients and professional service providers are not alone in tackling these issues. Professional journals such as the *Journal of Rural Mental Health* publish studies and innovations in rural behavioral health care, and professional organizations such as the National Association for Rural Mental Health support and promote the continuing development and replication of successful programs. Telehealth may be part of the solution to improving access to behavioral health services in rural areas and increasing the likelihood that

individuals living in rural locations will engage with the behavioral health system. In addition, telehealth presents an opportunity for tremendous growth—not only is technology continuing to advance at a rapid pace, but also changes in healthcare laws are extending coverage for telehealth services, making them available to an increasing number of individuals.

Next Steps

Behavioral health is not the exclusive purview of behavioral health professionals, especially in rural areas. This is especially true in frontier or rural areas where everyone depends on each other in a variety of ways. Behavioral health information and resources need to be promoted by all people of influence within the community. The following suggestions directly address those people of influence.

If your community does not already have a community resource group that meets on a regular basis, work together to create one. As a group, consider working through resources such as the *Rural Mental Health and Substance Abuse Toolkit* and other tools available through the Rural Health Information Hub (see Resources). Additional steps that individuals can take to promote telehealth in rural communities include the following:

If you are an attorney—

- Become familiar with the literature on and practice of therapeutic jurisprudence (see the web resources section of this document).
- Collaborate with other professionals to develop telebehavioral health resources in the community.
- Network with other attorneys who specialize in working with clients who have mental or substance use disorders; such networking can be done via the internet and electronic mailing lists (such as TJlist+subscribe@googlegroups.com).

If you are a behavioral health practitioner—

- Collaborate with other professionals to develop telebehavioral health resources in the community.
- Participate in committees or interest groups within your professional association that focus on rural behavioral health, such as the American Psychological Association Committee on Rural Health and the National Rural Social Work Caucus (see the web resources section).

If you are a faculty member of a behavioral health training program—

- Collaborate with other professionals to develop telebehavioral health resources in the community.
- Include the unique needs and challenges of frontier and rural communities as part of the curriculum on cultural diversity.[81]
- Work with colleagues and rural community contacts to develop clinical training experiences within frontier and rural communities.[81]

If you are a clergyperson—

- Collaborate with other professionals to develop telebehavioral health resources in the community.
- Ask gentle, yet probing questions in conversations with parishioners during informal counseling sessions.
- Identify mutual-help resources within the community and those that may be available online (such as Alcoholics Anonymous).
- Learn about emergency services and ongoing treatment services in or near your community.
- Provide education and information about behavioral health through classes, groups, and (when appropriate) sermons; include information that addresses misconceptions.

If you are a pharmacist—

- Collaborate with other professionals to develop telebehavioral health resources in the community.
- Identify mutual-help resources within the community and those that may be available online (such as Alcoholics Anonymous).

- Provide customers with education and information about behavioral health, especially information that addresses misconceptions.

If you are a primary care practitioner—

- Collaborate with other professionals to develop telebehavioral health resources in the community.
- Consider developing an integrated practice (a practice that includes treatment for both medical issues and mental and substance use disorders).
- Identify mutual-help resources within the community and those that may be available online (such as Alcoholics Anonymous).
- Consider continuing education opportunities that offer training and mentorship in telebehavioral health (see Resources).

These are all important next steps that community leaders and professionals of various disciplines can take—both individually and together—toward the common goal of making behavioral health services more acceptable, available, and accessible to citizens in rural areas.

Resources

Relevant publications from SAMHSA

(available through http://store.samhsa.gov)

Considerations for the Provision of e-Therapy

The TEDS Report: A Comparison of Rural and Urban Substance Abuse Treatment Admissions

Treatment Improvement Protocol (TIP) 59: *Improving Cultural Competence*

TIP 60: *Using Technology-Based Therapeutic Tools in Behavioral Health Services*

Other publications

The National Frontier and Rural ATTC
www.attcnetwork.org/find/news/attcnews/epubs/addmsg/april2013article.asp

American Telemedicine Association Practice Guidelines
http://thesource.americantelemed.org/resources/telemedicine-practice-guidelines

The Role of Telehealth in an Evolving Health Care Environment: Workshop Summary
www.nap.edu/read/13466/chapter/1

Telehealth Services (Rural Health Series)
www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf

Web resources

American Psychological Association Committee on Rural Health
www.apa.org/practice/programs/rural/committee

American Telemedicine Association
www.americantelemed.org

Contemporary Rural Social Work (online journal)
http://journal.und.edu/crsw

Federal Office of Rural Health Policy
www.hrsa.gov/ruralhealth

International Network on Therapeutic Jurisprudence
https://law2.arizona.edu/depts/upr-intj

Mid-Atlantic Telehealth Resource Center
www.matrc.org/telepsychiatry-telemental-health

National Association for Rural Mental Health
www.narmh.org

National Center for Frontier Communities
http://frontierus.org

National Center for Rural Health Works
www.ruralhealthworks.org

National Frontier and Rural Addiction Technology Transfer Center
www.attcnetwork.org/national-focus-areas/?rc=frontierrural

National Rural Health Association
www.ruralhealthweb.org

National Rural Social Work Caucus
www.ruralsocialwork.org

Rural Health Information Hub
www.ruralhealthinfo.org

Rural Health Research Gateway
www.ruralhealthresearch.org

Rural Health Value
http://cph.uiowa.edu/ruralhealthvalue

SAMHSA-HRSA Center for Integrated Health Solutions
www.integration.samhsa.gov/operations-administration/telebehavioral-health

U.S. Department of Veterans Affairs—VA Telehealth Services
www.telehealth.va.gov

Notes

[1] Substance Abuse and Mental Health Services Administration. (2015). *Using technology-based therapeutic tools in behavioral health services.* Treatment Improvement Protocol (TIP) Series 60. HHS Publication No. (SMA) 15-4924. Rockville, MD: Substance Abuse and Mental Health Services Administration.

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