January 2020

Office of the Assistant Secretary for Planning and Evaluation
U.S. Department of Health and Human Services

OFFICE OF HUMAN SERVICES POLICY

Challenges in Providing Substance Use Disorder Treatment to Child Welfare Clients in Rural Communities

Authors: Elizabeth Clary, Christina Ribar, and Elizabeth Weigensberg
Project Officers: Laura Radel and Emily Madden

KEY FINDINGS

- Rural communities often lack the resources to provide services to parents struggling with substance use issues. Rural economics, transportation and technological limitations exacerbate these challenges.
- Child welfare agencies and substance use disorder treatment providers face particular challenges to collaboration with one another in rural communities. Stigma, lack of anonymity and misinformation compound these issues.
- Strategies specifically tailored to rural communities are needed to improve service access, develop workforce capacity and improve collaboration.

Background

Parental substance use is a risk factor for involvement with the child welfare system (Belanger et al. 2007). In 2018, parental drug use was a factor in 36 percent of cases that led to removing children from the home and parental alcohol use was a factor in five percent of such cases (Children's Bureau 2019). Illicit substance use[1] is associated with child maltreatment, and child welfare cases involving substance use tend to be complex, the maltreatment tends to be more severe, and foster care placements are more likely than they are in non-using populations (Radel et al. 2018b).

Rural communities have been particularly hard-hit by substance use. Their per capita opioid overdose rate is 45 percent higher than the rate in urban areas (Weintraub et al. 2018). But opioids are not the only concern; while some rural communities have high rates of opioid use, others have high rates of methamphetamine use (Admon et al. 2019; Dombrowski et al. 2016; MacMaster 2013). Polysubstance use—using more than one illicit substance,

[1] Throughout this brief, substance use refers exclusively to illicit substances, including non-medical use of prescriptions, such as opioids or stimulants.

Mathematica
Progress Together

or using a substance in combination with alcohol—is also common, complicating the treatment of substance use disorders everywhere, particularly in rural communities where adequate treatment capacity is a challenge (Radel et al. 2018b).

Poverty is widespread and severe in many rural areas, which also may suffer from high unemployment rates. Unemployment and poverty are positively correlated with indicators of substance use (Ghertner and Groves 2018), and are also risk factors for child maltreatment. In fact, in families where parents are unemployed, the child maltreatment rate is two to three times greater than that of families with employed parents (Children's Bureau 2018), which, along with substance use, could partially explain the higher rates of maltreatment in rural areas (Sedlak et al. 2010).

The rates of substance use issues in rural areas, and their association with child welfare involvement, have become a federal priority. In response to this urgent problem, the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE) contracted with Mathematica to identify key issues rural communities face in addressing parental substance use and its effect on children, and to recommend possible solutions.

This brief summarizes the challenges involved in serving rural child welfare-involved families with substance use issues. We highlight differences between rural and non-rural areas and discuss strategies that could help alleviate difficulties in addressing child welfare cases in rural communities. In a future brief, we will describe promising models for rural communities that could address the needs of parents who use substances and are involved with the child welfare system.

For this project, Mathematica conducted a targeted literature search and interviewed subject matter experts from relevant fields (as described in Box 1). The literature reviewed represented a range of definitions of the term "rural," which were not always consistent. For this brief, we used a broad definition of "rural" that encompasses all non-urban and non-suburban areas. However, each rural community is unique and not every rural community faces the same challenges. Additionally, while we are confident that our literature review and environmental scan encompassed the range of available literature, by focusing on published literature, our findings may not fully reflect current practice in rural areas which have not yet been studied. Recent federal investments have targeted treatment options in rural areas and the impact of these investments may not be fully reflected in this brief. For example, the Health Resources and Service Administration (HRSA) recently invested over $111 million to enhance rural substance use disorder treatment options. Research does indicate that in some respects, the availability of opioid use disorder (OUD) treatment options in rural areas has improved relative to non-rural areas (Ghertner 2019).

Box 1. Literature review methods

The literature review began with searching a variety of databases containing relevant peer-reviewed articles. Databases included in the search were: Academic Search Premier, which covers education, family support, labor, medical science, and ethnic studies; CINAHL, a database covering nursing, biomedicine, health sciences, alternative/complementary medicine, and consumer health; MEDLINE, which covers medicine, preclinical sciences, health care, health information science, and allied health sciences; PsycINFO, the American Psychological Association's comprehensive database of psychology; Scopus, which covers disability, health, nutrition, and statistics; SocIndex, which covers sociology, early childhood, sociological theory, demography, political and urban and rural sociology, social development, social psychology, substance abuse and other addictions, and more; and Education Research Complete and ERIC, both of which cover educational fields and related subjects. The project team also conducted a Google custom search to identify relevant grey literature—non peer reviewed reports and other materials produced by research institutes and government contractors. Search topics and key words for both searches included "rural areas," "child welfare," "human services delivery" and "substance use," for example. The study's broad definition of "rural" encompassed all non-urban areas. The team also reviewed articles recommended by subject matter experts and ASPE staff. To augment information from the literature review, the team interviewed four subject matter experts in child welfare and substance treatment fields using a semi-structured protocol. Mathematica, in consultation with ASPE, selected these experts based on their substantive expertise in substance use and child welfare in rural communities. Input from these experts is credited in the citations, however we do not identify individual experts.

CHALLENGES SERVING RURAL PARENTS WITH SUBSTANCE USE ISSUES

The low population density and long travel distances in rural areas, along with social and cultural factors, create unique challenges that exacerbate universal problems with service provision. Many rural communities lack sufficient resources to adequately serve parents struggling with substance use. Also, limited access to health insurance is a financial barrier for many parents seeking substance use disorder treatment in rural areas.

Rural communities often lack the resources to provide services to parents struggling with substance use issues.

Parents with substance use issues often need a comprehensive set of services to address their substance use and basic health needs. However, these services are limited in rural communities, which means parents might not be able to access the right services quickly enough to improve their chances of recovery, ability to safely care for their children, or reunification with their children, if they are in foster care.

Substance use disorder treatment services are limited in many rural communities. Parents often cannot get the treatment they need. Families can end up on waiting lists because options are limited, which prevents them from receiving services when they need them (Jackson and Shannon 2012; MacMaster 2013; Raphel 2012). Delays can be discouraging and deter people from pursuing treatment at all (Pullen and Oser 2014). Although both rural and urban communities have limited substance use disorder treatment options, options are most limited in rural communities (Children's Bureau 2018; Edmond et al. 2015). Treatment providers, their patients, and stakeholders all report a lack of inpatient

treatment options in rural communities (Brown et al. 2016; Sexton et al. 2008). Only 14 percent of behavioral health outpatient treatment facilities in the United States are in rural counties, which have about 20 percent of the population. The majority of them treat a range of mental health conditions, and less than half have a primary focus on substance use disorder treatment (Young et al. 2015; Belanger and Stone 2008). Buprenorphine providers are also more limited in rural counties than non-rural ones, and their patient capacity is smaller (Ghertner 2019; Edmond et al. 2015).

Additionally, lower population densities in rural communities limit the availability of peer-recovery support programs such as Alcoholics Anonymous and Narcotics Anonymous (Young et al. 2015). When programs do exist, their meeting times, substance-specific programming, and availability of sponsors can be limited (Young et al. 2015). In addition, evidence-based treatment is harder to come by. For example, access to medication-assisted treatment (MAT) is limited in rural areas (Weintraub et al. 2018). MAT is an evidence-based treatment that combines behavioral therapy and medication for substance use disorders (SUDs) (Medicaid and CHIP Payment and Access Commission [MACPAC] 2018). Licensing regulations contribute to MAT prescriber shortages (Andrilla et al. 2018). The two most common MAT drugs used to treat opioid use disorder are highly regulated: providers must have a waiver to prescribe buprenorphine and methadone can only be prescribed by a certified opioid treatment program (OTP) (Weintraub et al. 2018). Many rural areas do not have an OTP, and there are entire states that do not have a single OTP (Weintraub et al. 2018). In addition, the complex case management required to treat patients with opioid use disorder, stereotypes about people with substance use issues, and stigma surrounding the use of MAT can deter providers (Andrilla et al. 2018), particularly in rural areas where providers are more likely to be known in the community. General shortages of health care providers exacerbate these issues in rural communities (Belanger et al. 2007). Only 3 percent of physicians who have waivers operate in rural areas (Ghertner 2019). The few substance use disorder treatment centers that exist in rural communities are less likely than urban treatment centers to prescribe buprenorphine (Edmond et al. 2015).

Workforce shortages limit the capacity of rural providers. Treatment facilities that do locate in rural areas can find it hard to recruit and retain appropriately trained and accredited substance use counselors, in part because salaries are lower than in urban areas (Pullen and Oser 2014). Fewer staff in rural treatment centers have master's degrees or other high levels of education (Edmond et al. 2015). That programs employ less skilled staff may be related to a lack of innovative, diverse, and tailored programming in the rural centers (Edmond et al. 2015). Both urban and rural substance use disorder treatment providers face funding limitations, but rural counselors have fewer opportunities than their urban counterparts to receive training and continuing education (Pullen and Oser 2014). Limited opportunities for continuing education and training can make staff can feel ill equipped to handle the complexity of parental substance and opioid use cases (Pullen and Oser 2014).

Few family-centered options exist in rural communities (Radel et al. 2018b). Evidence shows that family-centered options and other strategies could help in delivering more effective services faster. Family-centered treatment can help parents by providing concurrent substance use disorder treatment and child welfare services. In turn, this can help families meet required child welfare timelines to retain custody or reunify with their children (Werner et al. 2007). Families are more likely to have long-term success after treatment if they receive services that focus on caretaking supports, such as conflict resolution and joint decision making skills (Werner et al. 2007). Failing to treat the family as a whole can be a missed opportunity for improving motivation, family relationships, and overall outcomes (Werner et al. 2007; subject matter expert, 2019).

Rural treatment providers are less likely than non-rural providers to offer wraparound services, including child care and parenting classes (Edmond et al. 2015; Zielewski and

Macomber 2008). Treatment that involves children can also help parents develop good relationships with their children and motivate recovery (Werner et al. 2007; subject matter expert, 2019). For example, parents might not have child care available to attend outpatient services consistently, or might be unable to enter residential-only treatment centers that do not permit children to stay with them (Zielewski and Macomber 2008; subject matter expert, 2019). This makes it difficult for families to pursue and succeed in treatment.

Rural communities also have provider shortages for physical health, behavioral health, and social services. Substance use issues often co-occur with mental health issues (Shaw et al. 2015). Per capita, rural communities have fewer mental health providers and other types of specialized providers, such as cognitive-behavioral specialists, than urban areas do (Moody et al. 2017). In rural counties, social workers, who often lack specific training in substance use disorder treatment, are often the only mental health professionals available (Young et al. 2015). Parents involved in the child welfare system often have untreated trauma (MacMaster 2013; Children's Bureau 2018), and need mental health care and trauma-informed care in conjunction with substance use disorder treatment (Children's Bureau 2018). Integrated services that take unmet or concurrent needs into account are less available in rural communities (Browne et al. 2016).

The child welfare system lacks flexibility to consider the unique conditions of rural parents struggling with substance use issues. Across rural and non-rural communities, child welfare staff must adhere to strict timelines for making decisions about removing children from the home or reunifying them with their parent; these timelines satisfy the requirements of the Adoption and Safe Families Act (Radel et al. 2018b; Zielewski and Macomber 2008). Parents in rural communities spend more time waiting for available treatment under the conditions described above. Delays receiving treatment and wraparound services can lead to delays in reunification, and make it hard to comply with the child welfare system's timelines for achieving permanency (Raphel 2012). The delay in treatment services for parents can increase the likelihood that children are removed from the home, lengthens time in foster care for children, and can potentially have negative effects on reunification timelines and outcomes (Sexton et al. 2008).

Limited access to private and public health insurance poses additional challenges for parents seeking substance use disorder treatment in rural areas.

Rural communities have slightly higher rates of uninsured individuals and lower rates of private insurance than non-rural areas (Foutz et al. 2017). Most families without private insurance or the ability to pay out of pocket rely on Medicaid for their health care coverage, or other safety net providers for healthcare services. The federal government provides regular safety net funding for SUD treatment services through Single State Agencies for Substance Abuse Services, including recent appropriations through State Targeted Response and State Opioid Response grants. Additionally, safety net healthcare providers are increasingly providing SUD treatment services (e.g. HHS 2019). While these sources provide critical SUD treatment services to low income families and individuals, Medicaid is the single largest payer of behavioral health services (MACPAC 2018). However, not all families qualify for Medicaid, and Medicaid eligibility does not guarantee access to the continuum of care for substance use disorder treatment. Many providers do not accept Medicaid, and for those who do, the low reimbursement rates means providers may be less likely to serve people with Medicaid (MACPAC, 2018). Although insurance coverage issues are not unique to rural communities, their implications for accessing care are compounded for families in rural communities.

Medicaid is a key funding source for people seeking treatment for substance use disorders. This is particularly true for families involved in child welfare systems, who tend to utilize Medicaid to cover substance treatment services. Higher rates of unemployment and fewer jobs that offer employer-sponsored insurance contribute to higher rates of uninsured individuals in rural communities (MacMaster 2013; Foutz et al. 2017). For low-income families Medicaid eligibility and enrollment is an important path to health care access. All state Medicaid programs provide some form of SUD treatment. Through Medicaid managed care and designated state demonstration waivers (known as Section 1115 waivers), states can develop innovative models of substance use disorder treatment to serve their unique populations (MACPAC 2018). Managed care organizations can use Medicaid funds to cover up to 15 days of residential treatment. To date, twenty-three states have sought federal approval to provide substance use disorder treatment in residential facilities through Section 1115 demonstrations (MACPAC 2018). Centers for Medicare & Medicaid Services Section 1115 demonstration guidance was updated in 2017 to require states to cover critical levels of care including outpatient, intensive outpatient, MAT, residential, inpatient, and medically supervised withdrawal management.

Medicaid coverage does not necessarily guarantee access to substance use disorder treatment (MACPAC 2018). Federal Medicaid policy does not mandate coverage of the full continuum of clinical services for substance use disorder treatment. We note that as of April 2018, only 12 states covered a full continuum of care (MACPAC 2018). Lack of sufficient treatment facilities and low provider participation in Medicaid can limit access. State Medicaid programs may also not cover supporting services needed in order for individuals to access available treatment, such as transportation for substance use disorder treatment services (Zielwekski and Macomber 2008).

In addition, Medicaid's reimbursement rates may not fully cover the costs of treatment. A study of physicians with buprenorphine waivers practicing in rural areas revealed that most of them believed the Medicaid reimbursement for MAT provision was too low given the treatment's time demands (Andrilla et al. 2018). Some treatment providers opt to only accept privately insured or self-pay patients, or receive payment on a sliding scale instead of accepting Medicaid (Andrilla et al. 2018). Some providers may feel they must financially subsidize treatment costs in order to provide services to Medicaid recipients (Andrilla et al. 2018). Although this is not unique to rural areas, patients in rural communities are less likely to have access to alternative providers in these cases due to overall provider shortages.

Rural economics, transportation, and technological limitations exacerbate service challenges in rural communities.

Families can also face significant personal and community-level barriers that are heightened in or unique to rural areas. Poverty and other challenges, such as limited transportation and technology, can prevent parents from accessing or prioritizing treatment. The distance people may need to travel to visit treatment providers in rural areas intensifies the burden of trying to access services, and child welfare workers face the same distance barriers in their day-to-day tasks. This limits the ability of parents to access services, decreases visitation frequency for separated families, and could result in more relapses and fewer reunifications.

Families in many rural communities face economic and housing challenges. Rural communities have higher rates of poverty, and poverty there is more severe than it is in non-rural areas (Economic Research Service [ERS] 2018; Belanger et al. 2007). There are fewer employment opportunities in rural communities, and employment growth since the recession has been slower in rural communities than urban ones (ERS 2018). Unemployment and limited economic opportunity can be a source of hopelessness, and people can use

substances as a coping mechanism (subject matter expert, 2019). For people in substance use disorder treatment, employment offers stability and routine helpful to recovery (subject matter expert, 2019).

Housing instability is another challenge for individuals struggling with substance use issues (Veysey et al. 2010). For example, parents in recovery, particularly mothers, need safe, stable, drug-free housing (Werner et al. 2007). Yet some rural areas have few housing assistance options for families (Zielewski and Macomber 2008). Available housing options, such as halfway homes, might not allow children or have strict age limitations for them (subject matter expert, 2019). When people have unmet needs as basic as housing, it can be hard for them to prioritize substance use disorder treatment (Pullen et al. 2014).

Families in rural communities may struggle to find reliable transportation. Families often must travel to other counties or urban centers for treatment. Even treatment centers in the same county or the next county can be many miles away from someone who needs them (Sexton et al. 2008). The public transportation or bus tokens that help urban families cover travel costs are generally not a helpful option for families in rural communities (Zielewski and Macomber 2008). Families usually have to drive themselves or get a ride. Keeping regular appointments for treatment requires access to a reliable automobile and enough money for the gas necessary to travel long distances (Young et al. 2015; Pullen et al. 2014). Finding a ride is not easy because a family's social network is likely to be made up of people facing the same barriers to travel that they do—namely child care, having a reliable car, and being able to afford gas. Furthermore, relying on social networks can be counterproductive to treatment and recovery if the people in the network also use substances (Zielewski and Macomber 2008; Pullen et al. 2014).

Traveling long distances for treatment can be prohibitive for employed parents who struggle to get time off or who do not have reliable child care. Although some urban treatment centers offer onsite child care, rural treatment centers are less likely to provide it (Zielewski and Macomber 2008). It can be particularly challenging for parents who are on daily forms of MAT, such as methadone, to maintain their treatment regimen if they do not have the time and transportation to get to a remote treatment center (Radel et al. 2018a).

The distances in rural areas also place a strain on child welfare workers. Child welfare caseworkers also have to travel to work with rural families if, for example, they have to facilitate family visitations with parents in non-local inpatient treatment (Belanger et al. 2007). A shortage of foster placement options exists in rural and non-rural communities alike (Belanger and Stone 2008). In rural communities, this can cause children to be placed in foster homes outside their home county, which adds to the burden of travel for caseworkers, makes visitations more difficult to arrange, and could have negative implications for reunification outcomes (Belanger and Stone 2008; Raphel 2012).

When people have to rely on treatment far from home, their chances of successful recovery decrease. The burden of travel makes family involvement in treatment less likely (Murphy et al. 2017; Young et al. 2015). When parents do not have the same socio-cultural background as a provider, which may be the case when parents rely on providers in distant locations, they can have trouble trusting and forming a bond with the provider, and that kind of trust is an important facilitator of recovery (Oser and Harp 2014). Counselors who are far away from a client might not be familiar with the resources available in a client's home community, and their own caseloads and Medicaid's managed care restrictions might not reimburse them for time spent investigating resources and making referrals (Oser and Harp 2014). Compared with people who get treatment locally, people who receive inpatient treatment outside their communities have a higher risk of relapse and are less likely to participate in Narcotics Anonymous and Alcoholics Anonymous meetings once they return to their home community (Oser and Harp 2014).

People in rural communities have less access to high-speed Internet than those in. non-rural areas. Thirty-nine percent of rural residents have no access to high-speed Internet, compared with four percent of residents in urban areas (Federal Communications Commission 2016), making technological solutions like telemedicine, which can fill service gaps and alleviate the strain on resources, more difficult to implement (Children's Bureau 2018). Moreover, some research shows that telemedicine for treating substance use and opioid disorders are not utilized in rural communities as often as they are in non-rural ones (Huskamp et al. 2018). Information sharing within and across child welfare and substance use disorder treatment agencies can also be constrained by the lack of technological resources (Radel et al. 2018b). Rural agencies might not have the high-speed Internet or other technology they need to securely transmit information in compliance federal requirements (i.e. 42 CFR Part 2 and Health Insurance Portability and Accountability Act of 1996), share data electronically, or engage in videoconferencing (Browne et al. 2016).

Child welfare agencies and substance use disorder treatment providers can have a hard time collaborating in rural communities.

Numerous studies have documented persistent barriers to cross-systems collaboration to address parental substance use in families who are involved with the child welfare system (Radel et al. 2018b; U.S. Department of Health and Human Services 1999). For example, the child welfare agency usually has to decide where to place children before the parents have had a substance use assessment and started treatment. Furthermore, substance use disorder treatment can take years, and setbacks are a common part of recovery. As a result, the goals and timelines of child welfare and substance use disorder treatment agencies often do not align. As important as cross-system collaboration is, it is more difficult in rural settings due to the lack of formalized processes around data sharing and collaboration, as well as the technological limitations discussed above.

There are less formalized processes in place to support coordinated case management across agencies in rural areas. Urban areas are more likely to have formalized processes in place for cross-agency coordination, but in rural areas, child welfare workers, substance use disorder treatment providers, and the courts often rely more on informal networks. The close-knit nature of some rural communities can facilitate these organic relationships, but these informal networks are not always available (Zielewski and Macomber 2008). Lacking formal coordination, information sharing may be used inconsistently, or not at all.

Difficulties sharing information further impede collaboration in rural and urban areas alike. Federal and state regulations on patient privacy limit access to information about parents' treatment progress, which is often needed to report on progress for court hearings in child welfare cases (MACPAC 2018). Some substance use disorder treatment counselors might hesitate to share this information with child welfare agencies and the courts, because maintaining parents' trust and keeping them engaged in treatment is the priority (Radel et al. 2018b). A lack of understanding among agencies about each other's systems and goals can further limit cooperation (Radel et al. 2018b). Although training on collaboration and data sharing is available through technical assistance providers such as the National Center on Substance Abuse and Child Welfare and the Substance Abuse and Mental Health Services Administration (SAMHSA) Center of Excellence for Protected Health Information, local agencies might not be aware of this or have time to take advantage of it.

Substance use disorder treatment providers have expressed frustration about working with families in the child welfare system because they consider its reporting requirements laborious (Radel et al. 2018b). Complying with the requirements can be difficult because providers cannot bill for the time they spend on atypical services, such as meeting with child

welfare workers and regularly updating child welfare agencies and the courts (Pullen et al. 2014).

Stigma, lack of anonymity, and misinformation compound problems in rural communities.

Stigmas are commonly attached to involvement with child welfare and substance use in both urban and rural communities. In rural communities, however, it is harder for parents to obtain services or attend peer recovery groups anonymously (Veysey et al. 2010). Substance use disorder treatment providers or child welfare workers could be parents' neighbors, or could see parents regularly in public places like the grocery store or church (subject matter expert, 2019). People also run the risk of running into someone they know at a support group like Alcoholics Anonymous or Narcotics Anonymous, because a less populated area will have fewer groups available.

Specifically for parents with OUD, misperceptions of MAT as a replacement drug, not a treatment, limit support for its use. All four subject matter experts discussed the pervasiveness of this view in rural communities—both among court and child welfare staff. The history of pill mill operations in rural areas has amplified distrust of MAT and MAT prescribers because some physicians have been perceived to be a contributing factor to the creation of pill mills (subject matter expert, 2019). Staff in courts or child welfare agencies might require parents in treatment to reduce or end MAT completely to regain custody of their children (subject matter expert, 2019; Radel et al. 2018b). This can hurt parents' chances of recovery because evidence shows that the longer a person is on MAT, the lower the risk of relapse (Substance Abuse and Mental Health Services Administration 2018).

POTENTIAL STRATEGIES TO OVERCOME CHALLENGES IN RURAL COMMUNITIES

Despite the substantial barriers to helping rural parents overcome substance use issues, policymakers, service providers, and social service workers have options for addressing these challenges.

Rural communities need more access to better services.

Parents in rural communities who need treatment for substance use also likely need services along the full spectrum of care. Substance use disorder treatment providers can offer more services and expand their hours to better support struggling parents. Moreover, both treatment providers and child welfare agencies can make targeted workforce investments to increase the range and quality of services provided.

Increasing the local service array within rural communities can help parents get the treatment they need to recover, thus improving their child welfare outcomes. Developing more family-centered treatment and in-patient treatment options in rural communities could help families in two ways: first, parents could receive the level of care they need more quickly to recover and eventually reunify with their children; and second, it could enable families to stay together through treatment if children could accompany their parents to treatment programs (subject matter expert, 2019). Under Title IV-E, child welfare agencies can pay room and board costs for children to stay with their parents in a residential substance use disorder treatment program when they might otherwise be placed in foster care (Radel et al. 2018a).

Another strategy is to educate providers so they are willing to offer additional treatment services locally. For example, targeted education about the evidence base of MAT can help

providers overcome the stigma attached to using MAT to treat substance use disorders (Andrilla et al. 2018). Mentoring and support services for providers who want to begin prescribing MAT can help them become comfortable with managing treatment (Andrilla et al. 2018). Additionally, care coordination models that rely on nurses for key tasks could be especially useful in areas where nurses are available but there are shortages of other medical providers.

In general, parents need ongoing support services to maintain their recovery after they finish treatment. These services are essential to maintaining sobriety (Oser and Harp 2014). Support services include Narcotics Anonymous and Alcoholics Anonymous, as well as peer mentors or recovery coaches that can help families overcome substance use issues and reunite (Young et al. 2015). Peer mentors also serve as examples to child welfare workers, who might not know many people who successfully recover from substance use issues and reunify with their children (subject matter expert, 2019). Working with peer mentors can give both parents and child welfare workers needed encouragement and hope for success.

Another way to expand families' access to services is to increase the flexibility in ways SUD treatment is offered. Agencies can offer extended and flexible hours for substance use disorder treatment. This would enable parents to access those services around their work schedules, or around other scheduling constraints, such as court dates and child care arrangements (Browne et al. 2016; Veysey et al. 2010). For parents in rural communities especially, expanded hours could mean they can find transportation to treatment that they might not otherwise have been able to access. Providers can also take advantage of telehealth practices, which are increasingly being implemented by behavioral health providers in rural areas. Telehealth can be used to facilitate a variate of provider-to-patient and provider-to-provider interactions, and have shown promise to increase access to MAT for individuals with OUD (RTI International, 2018).

Workforce investments can enhance the existing service array in rural communities. Rural behavioral and mental health care providers might offer only basic services such as counseling and general psychiatry. Targeted workforce investments, such as hiring or training staff who want to work in rural communities to provide counseling focused on substance use, can expand the available local services as long as salaries are high enough to retain the staff. Alternatively, the SUPPORT for Patients and Communities Act of 2018 encourages loan repayments for substance use disorder treatment providers in certain under-served and high-need areas. Child welfare agencies can also provide training on motivational interviewing, cognitive behavioral therapy, and trauma-informed care to better serve parents with specialized, evidence-based treatments that can help families recover and reunify (subject matter expert, 2019).

Colleges and universities can provide local professionals with training to increase the rural workforce pipeline. For example, Humboldt State University in California is located in Humboldt County, which has eight federally recognized tribes. The university's social work coursework emphasizes rural and tribal cultural competencies, and recruits students from the surrounding rural and tribal communities (Children's Bureau 2018).

Another strategy states can adopt to attract additional businesses and employees is to designate rural areas as Opportunity Zones. This creates financial incentives for investors and businesses to invest in these areas, and tax waivers and student loan repayments for college graduates to relocate to and work in these distressed communities. Kansas designated 77 counties as Rural Opportunity Zones and included student loan repayments up to $15,000, 5 years of income tax waivers, and recruiting and sign-on bonuses for employees of a child welfare contractor providing in-home and case management services (Children's Bureau 2018).

States can also adopt student loan forgiveness or tax credit programs for treatment providers and mental and behavioral health professionals working in rural communities and tailor the programs to their specific workforce needs. In North Carolina, for example, the State Loan Repayment Program offers up to $50,000 for mental health providers that commit to at least 2 years of service in a qualified "integrated care setting," which includes Federally Qualified Health Centers, State-Sponsored Rural Health Centers, Community Mental Health Facilities, and Alcohol and Drug Abuse Treatment Centers (NC Department of Health and Human Services 2019). Michigan uses a blend of federal funds from the National Health Service Corps and state funds appropriated by the state legislature to repay up to $200,000 of student loans over 8 years for mental healthcare providers that work in a Health Professional Shortage Area (Michigan Department of Health and Human Services 2019).

More collaboration between systems could improve outcomes for children and families.

Substance use disorder treatment providers and child welfare agencies can collaborate to serve struggling families. For example, co-locating child welfare and substance use disorder treatment staff, establishing more rural family drug treatment courts, and providing guidance to expand data sharing could improve collaboration. Educating child welfare and substance use disorder treatment staff about each other's work can also facilitate collaboration and lead to better outcomes for families.

Co-locating child welfare and substance use agency staff can help families get the services they need faster. Some child welfare agencies partner with substance use disorder treatment staff by sharing office space, which helps families access these services in one location. Co-location can also facilitate substance use disorder treatment referrals and assessments for parents (Radel et al. 2018b). This co-location naturally fosters communication between child welfare and substance use disorder treatment staff by increasing the number of interactions they have with each other. Sharing physical space can encourage information-sharing and informal reporting between providers as well, because staff rely less on the Internet to communicate. However, co-located services may raise confidentiality issues for families in small communities, so providers should find ways to maintain confidentiality (Sexton et al. 2018; Young et al. 2015).

Family drug treatment courts can promote collaboration between agencies and improve family outcomes. Family drug courts are collaborative, multidisciplinary alternatives to regular courts. They often mandate particular services, and can even give child welfare–involved families priority for treatment. Court staff determine how often parents are tested for substance use, and require test results to be presented at court hearings. These requirements and processes for submitting information at hearings fosters formal collaboration between child welfare and substance use disorder treatment agencies. Importantly, judges also determine whether to extend the reunification timeline for parents actively seeking treatment, and they can make their determination based on information from substance use disorder treatment providers and child welfare providers. Thus, family drug courts can increase collaboration between child welfare and substance use disorder treatment staff while promoting reunification (Radel et al. 2018a). However, more research is needed on how successful family drug courts are in rural areas. One quasi-experimental study found that a family drug court program in a rural North Carolina county resulted in lower child maltreatment recurrence but did not decrease the amount of time children spent in child welfare custody (Pollock and Green 2015). Additionally, family drug treatment courts can be challenging to implement, and local courts that incorporate the principles of family drug treatment courts may be just as successful.

Agencies should give their staff guidance on how to share information with each other. Frontline staff without collaboration protocols in place might need information on

obtaining consent to share patient information across agencies. Any consent forms and information sharing policies must comply with confidentiality requirements, including Substance Abuse Confidentiality Regulations (42 CFR Part 2), child welfare agencies' confidentiality rules, and Health Insurance Portability and Accountability Act (HIPAA) requirements for sharing information between agencies (subject matter expert, 2019). Using appropriate consent forms and having guidelines in place about what information to share and how, can help staff make informed decisions on families' cases. Without guidance on information sharing and appropriate consent protocols in place, child welfare workers might not be clear on how to share confidential information with one another, which could hinder their ability to serve these families effectively.

Agency directors could train staff to promote collaboration between child welfare and substance use disorder treatment providers. Given the widespread misconceptions about MAT in rural communities, education is warranted to overcome the stereotypes held by child welfare staff, court professionals, and families (subject matter expert, 2019; Radel et al. 2018a). Child welfare staff and court professionals could benefit from understanding the biological components of substance use disorders and addiction, which would help set appropriate expectations about the recovery trajectory. That understanding could prevent them from viewing relapse as evidence that a parent will never recover from substance use issues (subject matter expert, 2019). These professionals also need education about the evidence base of MAT to combat the associated stigma (subject matter expert, 2019). As more child welfare agencies and courts support using MAT to treat opioid use disorder, more parents might access MAT as part of their treatment plans.

State and federal entities could also help educate the field about substance use and recovery, in both rural and non-rural areas. For example, state and county agencies and courts could provide education about recovery processes and appropriate use of drug testing to ensure their staff understand recovery trajectories and how evidence-based treatment, such as MAT, can help parents struggling with substance use.

Substance use disorder treatment providers could also benefit from education on child welfare practices and policies, including the processes and timelines for reunification. If people who treat substance use issues do not understand the priorities of child welfare systems, such as ensuring child safety and well-being, and establishing permanency, they might view child welfare policies as arbitrary. Understanding the legislative requirements for child welfare and the cycles of recovery and relapse (Radel et al. 2018a) might help staff in both systems be better able to resolve these differing timelines. Educating substance use disorder treatment providers could enable them to reinforce messages coming from child welfare agencies, encourage prompt treatment entry and rapid re-engagement in the event of relapse, and help them create plans with parents that could support faster reunification.

Child welfare agencies can leverage flexible funding to help parents access treatment services.

States can leverage flexible funding sources to enable child welfare agencies to pay for treatment services that are not covered by insurance. This is particularly critical in rural areas facing shortages in treatment capacity – funding can be used to not only provide existing services, but also expand the availability of services. However, special purpose grants or single cash investments are rarely sustainable, and therefore unlikely to help families over the long term. Recent legislative changes, such as the Families First Prevention Services Act, may make it easier for child welfare agencies to access funding to support parents with substance use issues. However, funding that requires states to provide matching funds can be difficult for rural communities to secure (subject matter expert, 2019).

Child welfare programs can help supplement Medicaid with Title IV-E. Rural communities can pursue alternative ways to pay for substance use disorder treatment, thereby increasing both access to and availability of services. One option is for child welfare agencies to use Title IV-E funding to pay for MAT or other treatment if providers do not accept Medicaid, or if patients are uninsured (Belanger et al. 2007; Radel et al. 2018a). States can also leverage Medicaid managed care or Section 1115 demonstration waivers to pay for SUD treatment services. Early evaluations from Section 1115 demonstrations in California and Virginia suggest that implementing strategies to cover additional benefits and attract more providers can improve access to SUD treatment (MACPAC 2018).

The Families First Prevention Services Act gives states more options for using Title IV-E funding for substance use disorder treatment and prevention services, including allowing the use of Title IV-E funds to pay for room and board of children in residential family placements for parents using inpatient programs. This may be an important resource for rural and non-rural communities.

CONCLUSIONS

Families in rural communities have high rates of substance use and numerous risk factors for involvement with the child welfare system. Understanding the challenges rural communities face in helping parents who struggle with substance use and are engaged in the child welfare system is the first step toward solving them.

It is imperative to address family needs that promote recovery and family reunification, yet rural communities often have more barriers and fewer resources than urban and suburban areas. They can lack the full continuum of care for substance use disorder treatment and can also be missing the supportive wraparound services that can help parents struggling with substance use who are trying to reunify with their children.

Another key challenge in helping these families is that services to address their needs span different service systems and providers. This can be especially difficult to overcome in rural communities with limited services and limited collaboration between substance use disorder treatment and child welfare services.

Possible solutions to improving substance use disorder treatment services for child welfare-involved families include increasing treatment options, promoting formal collaboration between substance use disorder treatment providers and child welfare systems, and leveraging flexible funding for substance use disorder treatment. However, when considering these strategies, it is important to also consider the local context and get the input of local stakeholders to help decide how to address the specific needs of each community. Information about promising strategies to address the needs of these families is needed to help inform communities about programs and other opportunities to improve conditions and help people recover and reunify with their families. A forthcoming brief will describe several promising models for addressing the needs of parents with substance use issues who are engaged in the child welfare system in rural communities.

REFERENCES

Admon, Lindsay K., Gavin Bart, Katy B. Kozhimannil, Caroline R. Richardson, Vanessa K. Dalton, and Tyler N. A. Winkelman. “Amphetamine- and Opioid-Affected Births: Incidence, Outcomes, and Costs, United States, 2004–2015.” *American Journal of Public Health,* vol. 109, no. 1, 2019, pp. 148–154. doi:10.2105/AJPH.2018.304771.

Andrilla, C. H. A., Tessa E. Moore, and Davis G. Patterson. “Overcoming Barriers to Prescribing Buprenorphine for the Treatment of Opioid Use Disorder: Recommendations from Rural

Physicians." *The Journal of Rural Health,* vol. 35, no. 1, 2018, pp. 113–121. doi:10.1111/jrh.12328.
Belanger, Kathleen, Becky Price-Mayo, and David Espinosa. "The Plight of Rural Child Welfare: Meeting Standards Without Services." *Journal of Public Child Welfare*, vol. 1, no. 4, 2007, pp. 1–19. doi:10.1080/15548730802118181.
Belanger, Kathleen and Warren Stone. "The Social Service Divide: Service Availability and Accessibility in Rural Versus Urban Counties and Impact on Child Welfare Outcomes." *Child Welfare*, vol. 87, no. 4, 2008, pp. 101–124.
Beur, Lesly-Marie, Carl G. Leukfield, and Jennifer R. Havens. "'I'm Stuck': Women's Navigations of Social Networks and Prescription Drug Misuse in Central Appalachia." *North American Dialogue : Newsletter of the Society for the Anthropology of North America*, vol. 19, no. 2, 2016, pp. 70–84. doi:10.1111/nad.12044.
Browne, Teri, Mary A. Priester, Stephanie Clone, Aidyn Iachini, Dana DeHart, and Robert Hock. "Barriers and Facilitators to Substance Use Treatment in the Rural South: A Qualitative Study." *Journal of Rural Health*, vol. 32, no. 1, 2016, pp. 92–101. doi:10.1111/jrh.12129.
Children's Bureau. "Rural Child Welfare Practice." Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, February 2018.
Children's Bureau. "The AFCAS Report 26." Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, 2019.
Dombrowski, Kirk, Devan Crawford, Bilal Khan, and Kimberly Tyler. "Current Rural Drug Use in the US Midwest." *Journal of Drug Abuse,* vol. 2, no. 3, 2016, pp. 1–14. Epub 2016 Aug 17. PMID: 27885362; PMCID: PMC5119476.
Economic Research Service (ERS). "Rural America At A Glance 2018 Edition." Economic Information Bulletin 200. Washington, DC: U.S. Department of Agriculture, ERS, November 2018. Available at https://www.ers.usda.gov/webdocs/publications/90556/eib-200.pdf?v=5899.2. Accessed August 8, 2019.
Edmond, Mary B., Lydia Aletraris, and Paul M. Roman. "Rural Substance Use Treatment Centers in the United States: An Assessment of Treatment Quality by Location." *American Journal of Drug & Alcohol Abuse*, vol. 41, no. 5, 2015, pp. 449–457. doi:10.3109/00952990.2015.1059842.
Federal Communications Commission. "2016 Broadband Progress Report." Washington, D.C. January 2016. Available at https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2016-broadband-progress-report. Accessed July 30, 2019.
Foutz, Julia, Samantha Artiga, and Rachel Garfield. "The Role of Medicaid in Rural America." Kaiser Family Foundation. June 2017. Available at https://www.kff.org/medicaid/issue-brief/the-role-of-medicaid-in-rural-america/. Accessed June 10, 2019.
Ghertner, Robin. "U.S. Trends in the Supply of Providers with a Waiver to Prescribe Buprenorphine of Opioid Use Disorder in 2016 and 2018." *Drug and Alcohol Dependence*, vol. 204, 2019.
Ghertner, Robin and Lincoln Groves. "The Opioid Crisis and Economic Opportunity: Geographic and Economic Trends." Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, September 2018.
Huskamp, Haiden, Alisa Busch, Jeffrey Souza, Lori Uscher-Pines, Sherri Rose, Andrew Wilcock, Burce Landon and Ateev Mehrotra. "How is Telemedicine Being Used in Opioid and Other Substance Use Disorder Treatment?" *Health Affairs*, vol. 37, no. 12, 2018, pp.1940–1946.
Jackson, Afton and Lisa Shannon. "Examining Barriers to and Motivations for Substance Abuse Treatment Among Pregnant Women: Does Urban-Rural Residence Matter?" *Women & Health*, vol. 52, no. 6, 2012, pp. 570–586. doi:10.1080/03630242.2012.699508.
MacMaster, Samuel A. "Perceptions of Need, Service Use, and Barriers to Service Access Among Female Methamphetamine Users in Rural Appalachia." *Social Work in Public Health*, vol. 28, no. 2, 2013, pp. 109–118. doi:10.1080/19371918.2011.560820.
Medicaid and CHIP Payment and Access Commission (MACPAC). "Access to Substance Use Disorder Treatment in Medicaid." In *Report to Congress on Medicaid and CHIP*, chapter 4. Washington DC: MACPAC, June 2018.
Michigan Department of Health and Human Services. "Michigan State Loan Repayment Program Overview." 2019. Available at https://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945_40012-135399--,00.html. Accessed August 22, 2019.

Moody, Lara N., Emily Satterwhite, and Warren K. Bickel. "Substance Use in Rural Central Appalachia: Current Status and Treatment Considerations." *Journal of Rural Mental Health*, vol. 41, no. 2, 2017, pp. 123–135. doi:10.1037/rmh0000064.

Murphy, April, Whitney Harper, Austin Griffiths, and Christopher Joffrion. "Family Reunification: A Systematic Review of Interventions Designed to Address Co-Occurring Issues of Child Maltreatment and Substance Use." *Journal of Public Child Welfare,* vol. 11, nos. 4–5, 2017, pp. 413–432.

National Institute on Drug Abuse. "Understanding Drug Abuse and Addiction: What Science Says." February 2016. Retrieved from https://www.drugabuse.gov/understanding-drug-abuse-addiction-what-science-says on 2019, October 17.

NC Department of Health and Human Services. "State Loan Repayment Program (SLRP)." 2019. Available at https://www.ncdhhs.gov/divisions/orh/north-carolina-state-loan-repayment-program. Accessed August 22, 2019.

Oser, Carrie B. and Kathi Harp. "Treatment Outcomes for Prescription Drug Misusers: The Negative Effect of Geographic Discordance." *Journal of Substance Abuse Treatment,* vol. 48, no. 1, 2015, pp. 77–84. doi:10.1016/j.jsat.2014.08.002.

Pollock, McLean D. and Sherri L. Green. "Effects of a Rural Family Drug Treatment Court Collaborative on Child Welfare Outcomes: Comparison Using Propensity Score Analysis." *Child Welfare,* vol. 99, no. 4, 2015, pp. 139–159.

Pullen, Erin, and Carrie Oser. "Barriers to Substance Abuse Treatment in Rural and Urban Communities: Counselor Perspectives." *Substance Use & Misuse*, vol. 49, no. 7, 2014, pp. 891–901. doi:10.3109/10826084.2014.891615.

Radel, Laura, Melinda Baldwin, Gilbert Crouse, Robin Ghertner, and Annette Waters. "Medication-Assisted Treatment for Opioid Use Disorder in the Child Welfare Context: Challenges and Opportunities." Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, November 2018a.

Radel, Laura, Melinda Baldwin, Gilbert Crouse, Robin Ghertner, and Annette Waters. "Substance Use, the Opioid Epidemic, and the Child Welfare System: Key Findings from a Mixed Methods Study." Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, March 2018b.

Raphel, Sally. "Latest on Child Welfare Systems and Continued Call for White House Conference on Children." *Journal of Child and Adolescent Psychiatric Nursing*, vol. 25, no. 2, 2012, pp. 105–107. doi:10.1111/j.1744-6171.2012.00327.

RTI International. "Using Telehealth to Identify and Manage Health and Substance Use Disorder Conditions in Rural Areas". Report issued Sept 15, 2017. Available at https://aspe.hhs.gov/system/files/pdf/260286/RuralTele.pdf. Accessed December 6, 2019.

Sedlak, A.J., J. Mettenburg, M. Basena, I. Petta, K. McPherson, A. Greene, and S. Li. "Fourth National Incidence Study of Child Abuse and Neglect (NIS–4): Report to Congress, Executive Summary." Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, 2010.

Sexton, Rocky L., Robert G. Carlson, Carl G. Leukefeld, and Brenda M. Booth. "Barriers to Formal Drug Abuse Treatment in the Rural South: A Preliminary Ethnographic Assessment." *Journal of Psychoactive Drugs*, vol. 40, no. 2, 2008, pp. 121–129. doi:10.1080/02791072.2008.10400621

Shaw, Michele R., Therese Grant, Celestina Barbosa-Leiker, Susan E. Fleming, Sandy Henley, and J. Christopher Graham. "Intervention With Substance-Abusing Mothers: Are There Rural–Urban Differences?" *The American Journal on Addictions*, vol. 24, 2015, pp. 144–152.

Substance Abuse and Mental Health Services Administration (SAMHSA). "Medications for Opioid Use Disorder". Treatment Improvement Protocol (TIP) Series, No. 63. HHS Publication No. (SMA) 18-5063. Rockville, MD: U.S. Department of Health and Human Services, SAMHSA, 2018. Available at https://store.samhsa.gov/system/files/tip63_fulldoc_052919_508.pdf. Accessed July 31, 2019.

U.S. Department of Human Services. "Blending Perspectives and Building Common Ground. A Report to Congress on Substance Abuse and Child Protection." Washington, DC: U.S. Department of Health and Human Services, 1999.

U.S. Department of Human Services. "HHS Awards Nearly $400 Million to Combat the Opioid Crisis." Press Release. Washington, DC: U.S. Department of Health and Human Services, August 8, 2019.

Veysey, Bonita M., Jessica Grasmere, and Rene Andersen. “Supporting Peer Recovery in Rural New England: The RECOVER Project, Franklin County, MA.” *Alcoholism Treatment Quarterly*, vol. 28, no. 3, 2010, pp. 306–325. doi:10.1080/07347324.2010.488537

Weintraub, Eric, Aaron D. Greenblatt, Joy Chang, Seth Himelhoch, and Christopher J. Welsh. “Expanding Access to Buprenorphine Treatment in Rural Areas with the Use of Telemedicine.” *The American Journal on Addictions*, vol. 27, no. 8, 2018, pp. 612–617. doi:10.1111/ajad.12805.

Werner, D., N.K. Young, .K. Dennis, and S. Amatetti. “Family-Centered Treatment for Women with Substance Use Disorders – History, Key Elements and Challenges.” U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2007.

Young, Lance B., Kathleen M. Grant, and Kimberly A. Tyler. “Community-Level Barriers to Recovery for Substance-Dependent Rural Residents.” *Journal of Social Work Practice in the Addictions*, vol. 15, no. 3, 2015, pp. 307–326. doi:10.1080/1533256X.2015.1056058.

Zielewski, Erica H., and Jennifer E. Macomber. “Rural Families' Connections to Services in an Alternative Response System.” *Journal of Public Child Welfare*, vol. 1, no. 4, 2007, pp. 21–41. doi:10.1080/15548730802118215.