



Intervention, Treatment, and Prevention Strategies to Address Opioid Use Disorders in Rural Areas: A Primer On Opportunities For Medicaid-Safety Net Collaboration

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Introduction

The prevalence of substance use disorders in the United States has increased dramatically in the past 15 years with catastrophic consequences. According to a 2013 national survey, approximately 21.6 million people age 12 or older reported substance dependence or abuse during the prior year.¹ The dangers posed by opioid dependence have disproportionately affected vulnerable and low-income populations with limited access to care, especially in the nation's rural regions.

Through a cooperative agreement with the Health Resources and Services Administration (HRSA), the National Academy for State Health Policy (NASHP) has developed this primer for state Medicaid directors, healthcare leaders, and

providers working to reduce opioid addiction. It details the role HRSA-supported safety net providers play in improving emergency medical intervention and how healthcare providers and insurers can improve addiction treatment for rural Medicaid enrollees and low-income and vulnerable populations.

Informed by interviews with key state Medicaid and health safety net leaders, this primer explores how states are dismantling barriers to care and highlights effective strategies used to deploy emergency intervention and high-quality treatment services effectively in remote areas. This report also examines steps to building sustainable financing structures to support critical treatment services.

Background

In 2008, poisonings became the leading cause of unintentional injury death nationwide,² and nine out of 10 were caused by a drug overdose. In 2014, opioids (including prescription painkillers and heroin) were involved in 28,648 deaths. Since 2000, overdose deaths involving opioids have increased 200 percent.³

The issues and dangers posed by opioid dependence have disproportionately affected populations with limited access to care, especially in rural areas of the country. Twenty-five percent of the U.S. population resides in rural/non-metropolitan areas.⁴ Data shows reports of chronic pain and injury are more common in rural areas, and per capita sales show states with significant rural populations have higher

opioid prescribing rates.⁵ Deaths and injuries from non-medical use of opioids are also more prevalent in states with large rural populations, including Kentucky, West Virginia, Alaska, and Oklahoma.⁶ Overall, death from opioid overdose is 45 percent higher in rural regions than urban areas.⁷ Studies also find rural adolescents report greater lifetime non-medical prescription drug use than urban adolescents.⁸

Basic substance use disorder intervention, treatment, and prevention resources are available in many rural areas. The majority of rural treatment facilities provide intake assessments, referrals, and basic treatment for substance use disorders.⁹ Additionally, many rural regions use strategies such as co-locating and integrating behavioral health and primary care services to facilitate access to substance use disorder treatment and to reduce stigma. One study found that integrating behavioral health into primary care practices is more common in a frontier area than in metropolitan or urban areas.¹⁰

While these resources and access points exist, rural areas face an extreme paucity of facilities providing substance use disorder services, especially long-term, residential, in-patient, and day treatment. In 2004, studies found that the vast majority (91.1 percent) of facilities offering substance abuse treatment were located in either a metro or metro-adjacent county.¹¹

In many ways, barriers to substance use disorder services are exacerbated by underlying socioeconomic issues affecting rural areas. More than 25 percent of rural workers over age 25 earn less than the federal poverty rate,¹² and 23 percent of rural counties are identified as “persistent-poverty” counties.¹³ Geographic isolation and limited public and private transportation create tremendous barriers to health care for this population. Additionally, social stigma (particularly in regions with small populations) may discourage individuals living with substance use disorders from seeking treatment.¹⁴

In this landscape, the health safety net provides essential access points for vulnerable and low-income populations in need of treatment for opioid and other substance use disorders. Health centers are required to provide primary, preventive, and enabling health services. The statutory definition of required “primary health services” encompasses referrals for behavioral health services.¹⁵ Health centers can deliver behavioral health services in-house, via contract, or through a referral to another provider.¹⁶ These behavioral health services may also be provided as “additional services” within a health center’s scope of project. Health centers that receive federal grants to serve homeless populations are required to provide substance abuse services, which include “detoxification, risk reduction, outpatient treatment, residential treatment, and rehabilitation for substance abuse provided in settings other than hospitals.”¹⁷ The Federal Office of Rural Health Policy (FORHP) at HRSA has funded several Community Health Worker Programs in rural areas to provide support services (such as outpatient and ambulatory/emergency care) in diverse settings.¹⁸ Ultimately, collaboration between Medicaid agencies and safety net providers may offer opportunities to achieve shared goals around this population and issue area.

Emergency Intervention in Rural Areas

Opioid overdose prevention has been a major focus area for the health safety net, Medicaid, and other state and federal partners. High prevalence of opioid abuse and overdose is a driving factor; as noted earlier, the Centers for Disease Control and Prevention (CDC) reported that the rate of opioid overdose death in the United States tripled between 2000 and 2014.¹⁹ Additionally, studies have pointed to past misuse of prescription opioids as the greatest risk indicator for heroin use, and heroin overdose rates

have more than tripled between 2010 and 2014.²⁰ Many communities have observed that heroin is both cheaper and easier to obtain than prescription opioids.²¹ This widespread availability underscores the impossibility of addressing opioid use disorders through any solitary tactic, such as prescription opioid diversion control. While strategies designed to prevent prescription opioid misuse and over-prescribing—including prescription drug monitoring programs and prescribing limitations²² (see textbox)—are being employed and may have had assorted positive effects in preventing individuals from developing opioid use disorders.^{23, 24} However, policymakers and providers continue to develop new strategies to address the urgent need to protect individuals currently living with an opioid use disorder from overdose and death.

Use of Naloxone for Overdose Treatment

Naloxone is a U.S. Food and Drug Administration (FDA)-approved opioid antagonist that reverses the effects of opioid overdose by displacing opioids from the receptors in the brain to which they attach (see text box). By blocking the effects of opioids on the brain, naloxone reverses respiratory depression caused by opioid overdose, which reduces the likelihood of overdose injury or death, including complications created by non-fatal overdose such as brain and other organ damage. A number of leading agencies and organizations, including the Substance Abuse and Mental Health Services Administration (SAMHSA), CDC, the World Health Organization, the American Public Health Association, the American Medical Association, and the American Pharmacists Association recommend expanding access to naloxone as a key evidence-based strategy to reduce opioid overdose injury and death. In January 2016, the Center for Medicaid and CHIP Services (CMCS) also released an informational bulletin with information for states seeking to expand access to naloxone.²⁵

Expanding naloxone access is especially critical in rural areas, where individuals experiencing overdose may be far from medical facilities and face lengthy emergency medical response times compared to urban communities.²⁶ While policy debates about naloxone access have addressed fears that naloxone may deter individuals from seeking treatment, studies have not found that individuals with opioid use disorders to use naloxone as a “safety net” to continue or increase their opioid abuse.²⁷ Instead, studies show that people who have experienced acute withdrawal symptoms as a result of naloxone treatment consistently rebuff the idea that they would use heroin more frequently or in higher doses because of the availability and accessibility of naloxone.²⁸ Moreover, studies suggest that the training and education accompanying naloxone distribution programs have reduced opioid abuse and may even act as an impetus for individuals to seek treatment for their substance use disorder.²⁹ There is no possibility of abusing or misusing naloxone, as it does not contain any compounds that cause intoxication or dependence and will not affect individuals who are not using opioids.³⁰ However, it is critical to note that naloxone

Prescription Drug Monitoring Programs (PDMPs):

Currently, 49 states, the District of Columbia, and the U.S. territory of Guam have established Prescription Drug Monitoring Programs (though the District of Columbia’s PDMP is not yet operational). States use these electronic databases to collect data about the prescribing and dispensing of controlled prescription medications, such as opioids and pain medications more broadly. This data is monitored, analyzed, and shared with authorized entities such as providers and pharmacists who can use this information to identify high-risk patients.

Prescribing Limitations:

Several states and localities have implemented policies that limit the dosage or quantity of opioids that can be prescribed or dispensed at one time in an effort to prevent over-prescribing by providers.

Sources:

Centers for Disease Control and Prevention (CDC), “Prescription Drug Monitoring Programs (PDMPs)”, accessed April 2016, <http://www.cdc.gov/drugoverdose/pdmp/>
 PDMP Training and Technical Assistance Center, “Prescription Drug Monitoring Frequently Asked Questions (FAQ)”, accessed April 2016, <http://www.pdmpassist.org/content/prescription-drug-monitoring-frequently-asked-questions-faq>
 Office for State, Tribal, Local, and Territorial Support, Centers for Disease Control and Prevention (CDC), “Prescription Drug Time and Dosage Limit Laws”, accessed May 2016

administered outside of a medical setting should ideally be followed by medical attention; an individual experiencing an overdose may require further administration of naloxone as well as monitoring for other complications.

Expanding First Responders' Use of Naloxone

The National Highway Traffic Safety Administration (NHTSA) sets standards, provides guidance, and acts as the federal lead for the emergency medical services (EMS) community. The NHTSA recognizes four EMS provider certification levels:

- Emergency Medical Responder (EMR)
- Emergency Medical Technician (EMT)
- Advanced Emergency Medical Technician (AEMT), and
- Paramedic.

The NHTSA National EMS Scope of Practice Model requires AEMTs and paramedics, as higher-level providers, to possess the skills for administration of naloxone. While EMTs and EMRs are not required to have this skill according to these national standards, many states have begun to train and authorize EMS providers at these levels to administer naloxone.³¹ Nationally, as of September 2014:

- 50 states authorize paramedics to administer naloxone.
- 49 states authorize AEMTs (or the state's equivalent intermediate-level EMS provider) to administer naloxone.
- 24 states authorize EMTs to administer naloxone, and
- 13 states authorize EMRs to administer naloxone.³²

States have rapidly adopted this change in scope of practice: approximately one year earlier, only 12 states permitted EMTs to administer the drug and only three states authorized EMRs to administer naloxone to overdosing individuals.^{33, 34} According to experts tracking the burgeoning policy changes in this area, it is likely additional states have expanded EMS naloxone scope of practice since September 2014.³⁵

First-responder workforce and scope of practice policies can affect access to care in rural regions. The proportion of EMTs to AEMTs and paramedics is approximately 3:1 nationally, and EMRs vastly outnumber these provider groups. Rural areas are served primarily by EMTs and EMRs.³⁶ Even in areas with greater access to higher-level first responders, EMTs and EMRs are often the first on-site in an emergency.³⁷ Implementing policies that train and authorize these first responders to administer naloxone is expected to reduce the time between the onset of overdose to naloxone administration, which reduces the risk of mortality or permanent harm.³⁸ One pilot program in New York, which trained 2,035 EMTs to administer naloxone, resulted in 223 opioid overdose reversals.³⁹ After the Massachusetts

Naloxone Hydrochloride

Brand names: Narcan and Evzio

Intramuscular injection: Naloxone can be administered via intramuscular injection into the muscles of the arm, thigh, or buttocks. In April 2014, the FDA approved Evzio, a hand-held auto-injector to administer naloxone for easier use by laypersons.

Intranasal spray: In November 2015, the FDA approved Narcan nasal spray after granting the drug a fast-track designation and priority approval due to the urgent unmet medical need. Before intranasal naloxone had FDA approval, it was administered as an "off-label" delivery method that could be legally prescribed by physicians or approved pharmacists and other prescribers.

Sources:

Food and Drug Administration (FDA), "FDA approves new hand-held auto-injector to reverse opioid overdose", accessed April 2016, <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm391465.htm>

Food and Drug Administration (FDA), "FDA moves quickly to approve easy-to-use nasal spray to treat opioid overdose", accessed April 2016, <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm473505.htm>

Department of Health's Office of Emergency Medical Services changed policies to allow EMTs and EMT-Intermediate responders to administer intranasal naloxone in 2012, EMTs administered naloxone in nearly 40 percent (458 out of 1,207) of overdose emergencies in the greater Boston area.^{40, 41}

Expanding Layperson/Bystander Access to Naloxone

While uniformed first responders of varying certification levels have been increasingly trained and authorized to administer naloxone, challenges persist. In rural areas, the rate of opioid overdose death is 45 percent higher than in urban areas; however, naloxone use by rural EMS staff is only 22.5 percent higher than the use by urban EMS staff.⁴² One opportunity to accelerate administration of naloxone is to expand access to laypersons or bystanders who may be present when an individual experiences an overdose. Evidence suggests that training bystanders to administer naloxone can increase the likelihood that an overdose will be recognized and treated, increasing an individual's chance of survival.⁴³ In one study, the CDC found organizations that provided naloxone kits to 152,283 laypersons received 26,463 reports of overdose reversals between 1994 and 2014 (**Note:** about half of the organizations surveyed began operating in or after 2013).⁴⁴ Forty-two of the surveyed organizations collected information about the substances involved in the reversed overdoses and found heroin was involved in 81.6 percent of cases and prescription opioids in 14.1 percent.⁴⁵

As of June 2016, 47 states and the District of Columbia have passed laws expanding access to naloxone for laypersons.⁴⁶ State legislation in this area varies considerably, including laws that explicitly authorize the prescription of naloxone to third-party "laypersons" (such as family and friends) as well as laws that merely give immunity to prescribers who give laypersons access to naloxone. However, these laws all have the common goal of increasing the immediate availability of naloxone during an overdose. Many of these laws facilitate the acquisition of naloxone from a pharmacy without a direct, individual prescription from a medical provider. Approximately 12 states have passed legislation allowing non-medical entities (such as syringe access or exchange programs, homeless shelters, and schools) to dispense naloxone or have the drug onsite.⁴⁷ Good Samaritan laws (which reduce or remove criminal liability for the good-faith administration of naloxone by a layperson) bolster legislation that expands access to naloxone and will be addressed later in this section.

Forty-two states have modified laws to allow naloxone to be prescribed to individuals who have not been examined by a medical provider. Within this group, many states have expanded access through laws and regulations that enhance pharmacists' ability to prescribe or dispense naloxone. While these laws are often reported in ways that suggest naloxone can be sold over-the-counter (OTC), all of these pathways for dispensing naloxone technically require a prescription, as the FDA has not conferred OTC status on naloxone.⁴⁸ Strategies used by states to enable pharmacists to prescribe and dispense naloxone include:

- **Broadening pharmacist prescribing powers:** Three states (Connecticut, Idaho, and North Dakota) have laws that explicitly authorize pharmacists to prescribe naloxone to an individual at risk of experiencing an opioid overdose or to a layperson who would administer naloxone to an at-risk individual. New Mexico allows pharmacists to prescribe naloxone, but only to individuals directly at risk of overdose. That individual must identify a "designated rescue person or caregiver" who is encouraged to attend training on administration of naloxone with the individual for whom the prescription is written.

- **Standing orders:** Standing orders allow a prescriber to write an order authorizing administration of a medication to a patient who may be unknown to the prescriber at the time of the purchase. At least 34 states now allow naloxone to be dispensed by pharmacists via standing orders, which essentially enable the dispensing of the medication in lieu of a prescription. Criteria for these standing orders vary by state.⁴⁹ In some states, professional licensing boards have set protocols that essentially serve as statewide standing orders allowing pharmacists to dispense the drug without requiring a person to first obtain a prescription. In these states, individuals can communicate to a pharmacist that they need naloxone and pharmacists can dispense the drug without having to consult a physician for a prescription written specifically for that individual.
- **Collaborative practice agreements:** At least 12 states use collaborative practice agreements with physicians in order to allow pharmacists to prescribe and dispense naloxone.^{50, 51} These agreements often require the pharmacist to receive training, and/or require pharmacists to screen individuals for risk identifiers, such as voluntary requests for naloxone, concurrent prescriptions for opioids and benzodiazepines/antidepressants, etc., before prescribing naloxone.⁵²

Good Samaritan laws are designed to encourage individuals to seek medical assistance during an overdose by reducing or eliminating criminal liability for individuals or bystanders who administer naloxone and/or contact emergency responders in good faith. At least 41 states have Good Samaritan protection laws in some form.⁵³ These laws vary from state to state, but generally operate in the following ways:

- They protect laypersons from criminal liability when administering naloxone to a person in an overdose emergency.
- They provide immunity for certain actions (e.g. possession of a controlled substance) if evidence of the specific violation was gained solely as a result of the person seeking medical assistance.
- They grant leniency under specific circumstances. For example, they, “allow a court to take into account the fact that the defendant made an effort to obtain or provide medical assistance for an individual experiencing a drug-related overdose in a criminal prosecution or sentencing for a drug or alcohol-related offense for which a person has not been found to be immune.”⁵⁴

Medicaid Reimbursement for Emergency Naloxone Dispensing and Administration

If a state Medicaid agency reimburses for Screening, Brief Intervention, and Referral to Treatment (SBIRT) codes, clinicians may be able to use those SBIRT codes to bill state Medicaid programs when counseling patients on identifying the signs of an opioid overdose and administering naloxone.^{55, 56} However, Medicaid reimbursement for take-home naloxone is complex and varies by state.

Beyond reimbursing providers, pharmacists, and first responders for different forms of naloxone, state Medicaid programs may or may not cover the mucosal atomizer necessary to administer the intranasal version of the drug (see text box). Reimbursement may only be available in fee-for-service delivery systems, may be reimbursable in managed care plans but as a “carve-out” claim to be billed directly to the fee-for-service system, or may be covered in both delivery systems.

Providers in some states may not be reimbursed for time spent assessing a patient who may be at high risk of an overdose, or for time spent training laypersons on how to administer naloxone. However, some

Medicaid agencies have partnered with health safety net entities, the state's public health department, or other community stakeholders to distribute naloxone and develop reimbursement strategies to support those partnerships. The experiences and strategies of various states may be helpful to those considering reimbursement for take-home naloxone.

State Strategies for Reimbursing Naloxone in Medicaid

This section explores three unique strategies states have used to reimburse for naloxone in Medicaid and details the different forms of naloxone delivery systems covered. The three states' naloxone reimbursement rules are summarized in **Table 1**.

Washington State's Medicaid program, Washington Apple Health, covers take-home naloxone (injectable and intranasal) for both fee-for-service and managed care enrollees. However, the program does not cover the cost of the mucosal atomizer needed to administer the intranasal version of the drug. The state uses a collaborative practice model that allows Medicaid to reimburse for the drug when it is prescribed by a pharmacist or a physician.⁵⁷

California's Medicaid program, Medi-Cal, covers take-home naloxone in both forms. Medi-Cal covers naloxone for enrollees of both fee-for-service and managed care plans as a carve-out benefit. In both plans, the claim must be submitted directly to Medi-Cal for reimbursement. The mucosal atomizer necessary to administer the intranasal version can be reimbursed under Medi-Cal, but only if pharmacists complete a Treatment Authorization Request form, which may require up to 24 hours of wait time for approval by Medi-Cal. Through California's collaborative model, enrollees can also obtain the mucosal atomizer from community partners. In this scenario, public health or private funds cover the cost of the atomizer and reimburse the cost of the naloxone.^{58, 59}

In **New Mexico**, both Medicaid fee-for-service and managed care organizations reimburse pharmacies for naloxone rescue kits that include 2mg/ml prefilled syringes, two mucosal atomizers, and overdose prevention education materials. New Mexico Medicaid also covers the time pharmacists spend training rescue kit recipients. Medicaid claims are submitted under a code that authorizes an additional dispensing fee to cover the cost of atomizer, educational materials, and training time. Under New Mexico's collaborative model, if a community-based distribution program dispenses naloxone to a Medicaid enrollee, this information is provided to the New Mexico Department of Health to facilitate Medicaid reimbursement for the drug.⁶⁰

Reimbursement for Naloxone Mucosal Atomizers

Currently, the major obstacle preventing reimbursement for the mucosal atomizer (which typically costs between \$3 and \$7) is its lack of a National Drug Code or UPN. The FDA approved the nasal formula for naloxone in November 2015, so states may still be adjusting their relevant policies and regulations. States experiencing issues relating to mucosal atomizer coverage may consider covering the atomizer as a durable medical equipment benefit, as Colorado and Minnesota currently do. Maryland provides coverage under level 2 Healthcare Common Procedure Coding System (HCPCS) codes. Other states, including Massachusetts and New Mexico, provide "enhanced reimbursement" that takes into account the cost of the mucosal atomizer to pharmacies.

Advocates, state officials, and safety net providers may wish to address this issue by assigning one of these product identifiers to the atomizer.

Taking another approach, California and North developed collaborative programs where Medicaid covers the cost of the drug, but the mucosal atomizer "can be purchased with public health or private funds and distributed by community partners." The health safety net may be able to play a key role in these collaborative strategies.

Sources:
Center for Evidence-based Policy Medicaid Evidence-based Decisions Project (MED), "Best Practices in Naloxone Treatment Programs for Opioid Overdose," accessed April 2016, https://www.ohsu.edu/xd/research/centers-institutes/evidence-based-policy-center/evidence/med/upload/MED_best_practices_naloxone_report_final.pdf

Additionally, New Mexico operates four co-prescription pilot projects where providers are trained to identify patients at risk of opioid overdose. If appropriate, providers may refer patients for opioid overdose education and can provide them with a naloxone rescue kit from a partner clinic or community pharmacy when prescribing an opioid. The state also has a pilot program in municipal police departments in two counties that expands naloxone access through law enforcement, as well as a community distribution pilot project funded by the manufacturer of a naloxone auto-injector.

According to the New Mexico Department of Health Hepatitis and Harm Reduction Program, 13,000 naloxone doses were distributed between 2011 and 2014, and the overdose mortality rate decreased 16 percent (from 25 per 100,000 in 2008 to 21 per 100,000 in 2013). New Mexico Department of Health officials reported that Medicaid coverage and consolidated reimbursement for naloxone and opioid overdose education were crucial to their state's success in reducing mortality through this program. They also discovered that Medicaid reimbursement allowed them to spend additional public health and private funds to reach other at-risk groups of patients who were not eligible for Medicaid but were frequent utilizers of the health safety net.⁶¹

Table 1 - Overview of Selected State Medicaid Naloxone Policies

State	Form of naloxone		Mucosal atomizer for intranasal spray	Collaborative model	Delivery system	
	Intramuscular injection	Intranasal spray			Fee for service	Managed care
WA	Covered by Medicaid	Covered by Medicaid	Not covered	Medicaid can reimburse traditional providers as well as pharmacists for the drug	✓	✓
CA*	Covered by Medicaid	Covered by Medicaid	Covered by Medicaid only if pharmacist completes a Treatment Authorization Request form**	Medicaid is responsible for reimbursement of the drug, but the mucosal atomizer can be purchased with public health or private funds and distributed by community partners	✓	Naloxone is covered as a carve-out; claims must be submitted directly to Medi-Cal
NM	Covered by Medicaid	Covered by Medicaid	Covered by Medicaid	Community-based distribution programs are connected to the NM Department of Health to facilitate Medicaid reimbursement for the drug	✓	✓

* Additional information related to California:

- Needles for the intramuscular injection formula of naloxone are covered without any restriction, through traditional reimbursement pathways.
- The 0.4 mg/ml and 2 mg/2 ml intramuscular injection formulas are reimbursable through Medicaid; however, the commercial intramuscular auto-injector and commercial nasal spray are not.⁶²

** For fee-for-service Medi-Cal enrollees, the atomizer must be manually billed; for managed care Medi-Cal enrollees, the atomizer as a medical device is not carved out and is billed to the health plan. Individual health plans may have unique methods for adjudicating these claims.⁶³

“Experience, Data, and Compassion”: A Case Study of a Comprehensive, Community Response

Project Lazarus, a pilot program that distributes take-home naloxone rescue kits and reimburses providers and pharmacists for naloxone,⁶⁴ began as a pilot program in Wilkes County, NC in 2008. After receiving funding from the Kate B. Reynolds Trust and the North Carolina Office of Rural Health, the project expanded across the entire state under the supervision of Community Care of North Carolina (CCNC), the state’s Medicaid primary care case management program. Project Lazarus features five key components, including overdose prevention and use of overdose-reversal drugs by community members.⁶⁵ As a result, individuals can obtain naloxone during routine medical visits. The three other components include community activation, data surveillance and monitoring, and evaluation in order to create a comprehensive, field-tested response for overdose prevention.⁶⁶

Project Lazarus offers community trainings on unintentional poisonings, chronic pain, and other relevant issues. Additionally, physicians, dentists and other healthcare providers receive clinical training to guide assessments and treatment for chronic pain issues and opioid use. Based on a list of overdose risk factors, trained providers can identify “naloxone priority patients.” These risk factors can include:

- Recent medical treatment for opioid poisoning/intoxication/overdose;
- Recent release from incarceration;
- Having any opioid prescription combined with known or suspected respiratory system disease, and;
- Of particular importance for rural populations, remoteness from or difficulty accessing medical care.

Individuals participating in Project Lazarus view a 20-minute informational video in the physician’s office about pain management, symptoms of opioid overdose, overdose-reversal responses, and available substance abuse treatment options. Participants can also receive naloxone kits from designated community pharmacies for free at no cost.⁶⁷ The naloxone kits contain a Project Lazarus Overdose Prevention DVD, a booklet with step-by-step instructions on reversing an overdose, a portable naloxone rescue kit location card (to help locate the kit in case of an emergency), information about North Carolina’s Good Samaritan Law, and two nasal atomizers. The naloxone itself must be dispensed by a pharmacy or provider and is reimbursed by Medicaid (or by some commercial insurers with a copay).^{68, 69}

Project Lazarus was developed through a strategic partnership between the regional CCNC Networks, the Wilkes Health Carolinians Substance Abuse Taskforce, and the North Carolina Division of Medical Assistance (DMA, North Carolina’s Medicaid agency). Working closely with the Office of Rural Health, DMA supports the public-private partnerships central to the functionality of Project Lazarus.⁷⁰

While statewide coordination was critical to the success of the Lazarus program, strong leadership at the county level also played a significant role.⁷¹ Counties where the local health department led an Overdose Prevention Coalition as part of the community activation component of the Lazarus Project had significantly lower rates (26 percent) of emergency department visits for substance abuse when compared to other counties.⁷² Overall, between 2009 and 2011, unintentional overdose deaths in Wilkes County decreased by 69 percent.⁷³ Additionally, Project Lazarus also works with the North Carolina Harm Reduction Coalition (NCHRC) to expand access to naloxone. As of July 2016, NCHRC reported at least 3,544 successful overdose reversals by layperson naloxone administration.⁷⁴

HRSA Opioid Overdose Reversal Grant Program Awardees

HRSA has made expanding community access to naloxone a key priority in recent health center grant awards, highlighting the importance of safety net infrastructure as well as the financial and staff capacity needed to provide opioid use treatment to vulnerable and low-income populations. Through the Rural Access to Emergency Devices – Opioid Overdose Reversal Grant Program,⁷⁵ the Federal Office of Rural Health Policy (FORHP) within HRSA funded 18 community partnerships. Each grantee received a \$100,000, one-year grant to expand emergency naloxone administration in rural areas. The grantees operate in 13 states (Colorado, Illinois, Kentucky, Massachusetts, Maine, North Carolina, Nevada, Ohio, Oklahoma, Pennsylvania, Tennessee, and West Virginia) and include counties, tribes, and treatment centers.

One program grantee, Project VIBRANT (Vance Initiates Bringing Resources and Naloxone Training) in Granville and Vance Counties, NC, leverages existing local- and state-level relationships and programs to expand access to naloxone. Led by the Granville-Vance District Health Department, Project VIBRANT's community partners include the Northern Piedmont Community Care (the local CCNC network administered by the Duke Division of Community Health), Project Lazarus, the NC Harm Reduction Coalition, local pharmacies, drug treatment centers, police and sheriff departments, and other community organizations. Like Project Lazarus, Project VIBRANT uses a "hub-and-spoke" model to structure the interworking components of the program. Distinct from Project Lazarus is Project VIBRANT's explicit focus on naloxone deployment throughout the various "hub" core components and "spoke" activities. In addition to making nasal naloxone kits available in the community through pharmacies, emergency responders, and law enforcement, Project VIBRANT:

- Provides naloxone education to providers;
- Promotes appropriate screenings and referrals;
- Supports policies to support naloxone access;
- Lessens the presence of unused drugs in the community, and;
- Works with patients and caregivers to make sure they have access to chronic pain management resources as well as addiction treatment.

Additionally, the project coordinates care for individuals through many different entities including Cardinal Innovations Healthcare (the country's largest specialty health plan), various recovery treatment centers, and transitional living facilities. Project VIBRANT supports the coordination of these agencies to improve and streamline care services to Vance County residents with opioid use disorders.⁷⁶

Since the project's implementation on September 1, 2015, Project VIBRANT's outreach coordinators have reported that 95 opioid overdose reversals have taken place (as of July 18, 2016).⁷⁷ As of June 2016, North Carolina has also established a standing order for pharmacies to prescribe and dispense naloxone to further expand access.⁷⁸

Referral to Evidence-Based Care, including Detoxification, Rehabilitation, and Recovery Treatment

Addiction services cover multiple stages of treatment, including detoxification, rehabilitation, and recovery:

- **Detoxification** refers to medical interventions that manage acute intoxication and withdrawal with the objective of minimizing physical harm. This process is sometimes broken into three stages: patient evaluation and assessment, physical and psychosocial stabilization, and facilitating entry into treatment.
- **Rehabilitation** (also referred to as treatment) combines ongoing primary medical and behavioral health care with continuous assessments of the individual's physical and psychosocial status as well as environmental risk factors.
- **Recovery** (also referred to as maintenance) continues the behavioral health support present in the rehabilitation component of care, and also involves refining and fortifying strategies to promote ongoing prevention against relapse.⁷⁹

Substance Use Disorder Treatment Services

The American Society of Addiction Medicine (ASAM) has published comprehensive treatment criteria as a resource for providers and patients working to create individualized plans of care for individuals receiving treatment for opioid addiction. As of 2005, 29 states required state-funded providers to use the ASAM criteria.⁸⁰ ASAM uses a holistic, multi-dimensional assessment to guide the selection of services from a care continuum that is defined by intensity of services rendered:

- 0.5 – Early intervention
- 1 – Outpatient services
- 2 – Intensive outpatient/partial hospitalization services
- 3 – Residential/inpatient service
- 4 – Medically-managed intensive inpatient services

The dimensions of patient assessment include:

1. Acute intoxication and/or withdrawal potential
2. Biomedical conditions and complications
3. Emotional, behavioral, or cognitive conditions and complications
4. Readiness to change
5. Relapse, continued use, or continued problem potential, and
6. Recovery/living environment.

Detoxification, rehabilitation, and maintenance services can vary widely, even within each ASAM intensity category. For example, intensive outpatient programs encompass a diversity of services, including group and individual counseling and therapy, case management, family involvement and counseling, vocational and employment training programs, pharmacotherapy and medication management, and more. It is critical to note that the selection of care services is contingent on the patient's individual needs, risk levels, resources, and access to support structures. This aligns with SAMHSA's treatment improvement protocol guidance, which also underscores the importance of providing individualized care in the least restrictive and most cost-effective settings.⁸¹

Case Study: Cherokee Health Systems' Complex Care Team Model

Cherokee Health Systems (CHS) operates 45 clinics serving 13 counties across eastern Tennessee, a predominately rural region with two large cities (Knoxville and Chattanooga), and three clinics in inner-city Memphis in western Tennessee. Founded in 1960, CHS is both a federally qualified health center and community mental health center and has adopted an integrated care model that offers a full continuum of primary care and behavioral health services. In 2016, CHS received a \$325,000 HRSA grant to expand substance abuse services, which CHS is using to implement a multidisciplinary Complex Care Team.

The Complex Care Team will consist of three physicians (a family medicine physician board-certified in addiction medicine, an OB-GYN, and a pediatrician) waived to prescribe buprenorphine (a medication used to treat opioid addiction) as well as licensed clinical psychologists, clinical social workers, a consulting psychiatrist, nurses, community health coordinators, and a care team coordinator. Members of the care team will complete collaborative patient assessments and develop specialized treatment plans that include regular medical care, behavioral interventions (e.g., individual and group therapy), case management, and medication-assisted treatment. The team will also ensure the patient receives necessary recovery support services, such as life coaching and financial and workplace skills training. CHS plans to use telehealth to expand the reach of its Complex Care Team to anyone in its service area.

Source: Interview with Dennis Freeman

Barriers to Rural Substance Use Disorder Treatment Services

In rural areas, barriers at various levels can limit access to the substance use disorder treatment services. While barriers such as workforce shortages, transportation limitations, and cultural issues such as stigma are not exclusive to rural areas, they often impact rural individuals in disproportionate or more pronounced ways.

Workforce shortages impact health care services broadly in remote regions, but these shortages become even more pronounced when examining specialized services.⁸² A study by the Muskie School of Public Service that compared the distribution of substance abuse treatment facilities in rural and urban areas found that areas with smaller populations and greater commuting distances had far fewer treatment facilities that offered a range of core services and multilevel outpatient treatment options. The study also found that opioid treatment programs were nearly absent in rural areas.⁸³ A more recent study confirmed that the prevalence of opioid treatment facilities remains disparate between urban and rural areas. Though the study found no significant difference in the number of buprenorphine-waivered physicians in rural versus urban areas, the study emphasized that access to care in rural areas was nonetheless stymied by other barriers and that additional support for waived physicians and treatment program remains critical.⁸⁴

Rural providers are also more limited in their ability to make referrals. If a particular treatment is not working or if an individual requires more specialized care, there may not be another local provider or facility that could accept a referral.⁸⁵ Furthermore, providers in states that have expanded Medicaid may still be working through issues related to increasing provider capacity to ensure access for newly-insured populations.

Difficulties recruiting and retaining providers in rural areas exacerbate workforce challenges and ultimately influence the scope of services that rural facilities are able to provide. In order to maintain economic viability, a facility may need to provide broader services instead of focusing on specialized addiction treatment.⁸⁶ Although this may ultimately facilitate the adoption of whole-person integrated care models in rural areas, it may exacerbate workforce shortages if the supply of providers exceeds demand for services.

As noted earlier, the distance between patients and treatment facilities, combined with insufficient access to public transportation (or prohibitively high material and time costs associated with traveling to treatment settings), is a major obstacle for rural residents seeking treatment. Research has shown that shorter travel distances to addiction treatment services are associated with increased program completion rates, suggesting that insufficient transportation may not only present severe consequences for access to care but also its effectiveness.⁸⁷ While the Centers for Medicare & Medicaid Services (CMS) has reinforced that there is no federal restriction preventing same-day billing within Medicaid for simultaneous delivery of primary care and behavioral health services, 30 percent of states do restrict same-day billing for physical and behavioral health services.⁸⁸ Providers in these states may ultimately provide both services to prevent an individual from having to travel a second day or secure overnight lodging, but they would not be fully reimbursed for services.⁸⁹

Stigma and other cultural factors can also discourage access to substance use treatment in rural areas. Fewer treatment facilities may increase the likelihood that an individual personally knows someone within group-based support meetings or a provider or staff member.⁹⁰ Under-served and special populations in rural areas may have limited options for culturally-competent or individually-tailored treatment programs.⁹¹ In addition to deterring individuals with substance use disorders from seeking or accessing treatment, stigma may also increase the workforce barriers discussed above. One study found that stigma and, “the subsequent lack of respect for the [substance use disorder treatment] profession,” was a major barrier to recruitment and retention of counselors in rural areas.⁹²

Using Technology to Overcome Treatment Barriers and Increase Sustainability

Expanding telehealth and teleconsultation have emerged as key strategies for states to expand access to substance use treatments in rural areas. As of January 2016, five state Medicaid agencies (New Mexico, Oklahoma, Virginia, West Virginia, and Wyoming) specify coverage for telemedicine when a substance abuse or addiction specialist renders services.⁹³

States are also using teleconsultation models, such as Project ECHO (Extension for Community Healthcare Outcomes), to increase provider training and build treatment capacity. Project ECHO, which is operated through the University of New Mexico’s School of Medicine, connects healthcare providers in rural areas with specialists located at a central hub (for example, an academic medical center) through teleconferencing technology to better support and manage care for patients with chronic conditions, including substance use disorders.^{94, 95} The Center for Medicare and Medicaid Innovation (CMMI) awarded Project ECHO an \$8.5 million grant, and New Mexico Medicaid has been a key partner in the development and funding of Project ECHO. All Medicaid managed care plans in the state cover the full cost of services delivered through ECHO.⁹⁶

Within Project ECHO, the Integrated Addiction & Psychiatry (IAP) TeleECHO Clinic works to support primary care practices in providing addiction treatment services. Weekly clinic sessions link providers in remote and rural areas with experts and addiction specialists and community clinicians can present de-identified cases to receive specific feedback and recommendations. Additionally, the IAP TeleECHO clinic has facilitated partnerships between trained community health workers and family nurse practitioners to better screen, identify, and treat individuals with substance use disorder at eight rural New Mexico community health centers. Finally, the IAP TeleECHO Clinic collaborates with community partners, including advocates to support the implementation of policy changes. For example, in addition to supporting the approval of the Pharmacist Prescriptive Authority of Naloxone Rescue Kit Protocol in New Mexico, Project ECHO provides education to pharmacists so they can utilize this authority, training them to effectively prescribe and dispense naloxone to individuals at risk of opioid misuse or overdose.⁹⁷ The model has spread to other states, including one multi-state collaborative that supports addiction treatment at federally qualified health centers.⁹⁸

Within the Federal Office of Rural Health Policy (FORHP) at HRSA, the Office for the Advancement of Telehealth (OAT) administers grant programs to support implementation of rural telehealth programs. For example, grants are available to fund infrastructure development to connect rural providers with emergency care specialists or build telehealth networks to expand access to services and improve provider training. Similarly, the Rural Veterans Health Access Program (RVHAP) provides funding to enhance the provision of mental health services for veterans of Operation Iraqi Freedom and Operation Enduring Freedom (in Afghanistan), with a specific focus on using telemedicine, among other approaches, to address veteran's behavioral health needs.⁹⁹ States may be in a position to support providers and local communities in securing these grant funds, either by providing matching funds or working with local foundations and payers to secure their financial participation.¹⁰⁰ Reimbursement for telehealth services can also increase sustainability of telehealth programs – of the 17 FY 2013-14 grantees, four grantees provided Medicaid and Medicare reimbursement and several reported commercial insurer participation.

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Expanding Medication-Assisted Treatment for Opioid Addiction

Medication-assisted treatment (MAT) involves the use of FDA-approved medications to help individuals overcome alcohol or opioid dependence. The FDA has approved three medications for the treatment of opioid dependence: methadone, buprenorphine, and naltrexone. The basic pharmacological difference between the three types of medications is the way in which they interact with opioid receptors in the brain:

- **Methadone** is an opioid *full agonist*. Methadone fully binds with opioid receptors in the brain and serves as a replacement therapy for heroin or prescription opioids. By inducing tolerance, methadone treats symptoms of drug withdrawal and blocks euphoria.
- **Buprenorphine** is an opioid *partial agonist*. Partial agonists produce similar effects as a full agonist, but the effects are weaker and includes a “ceiling effect” that primarily raises the safety profile of the medication while lowering the risk of misuse or dependency.
- **Naltrexone**, like naloxone, is an *opioid antagonist*. Opioid antagonists block opioid receptors in the brain, which means an individual using an opioid after taking naltrexone will not feel the opioid's effects.¹⁰²

As discussed in SAMHSA's Treatment Improvement Protocol, medication-assisted treatment may be appropriate during all phases of an individual's recovery treatment, including detoxification, rehabilitation, supportive-care, medical maintenance, and tapering.¹⁰³ The American Society of Addiction Medicine released national practice guidelines for use of MAT for addiction involving opioid use in July 2015.¹⁰⁴

Evidence supports the use of medication in treating opioid use disorder. A 2009 Cochrane review of 11 studies found methadone was more effective than non-pharmacological interventions alone in keeping individuals in treatment and reducing heroin use.¹⁰⁵ Similarly, Cochrane's 2014 review of 31 studies found buprenorphine was also more effective than placebos and was as effective as methadone in reducing illicit opioid use; however, methadone was more effective in keeping individuals in treatment.¹⁰⁶ A 2011 review did not find significant differences between the use of oral naltrexone and placebo or non-pharmacological treatment, due in large part to low treatment adherence. However, the authors concluded that more research was required. According to SAMHSA, MAT services are most effective when combined with other behavioral therapies such as counseling to address both the behavioral and physiological components of substance use disorders.¹⁰⁷ A systematic review found that psychosocial treatments were effective when paired with medication-assisted treatment during detoxification,¹⁰⁸ although evidence was not as strong for structured psychosocial interventions during the maintenance phase of treatment.¹⁰⁹ It should be noted, however, that the control interventions in the latter review often included counseling for individual receiving methadone.

Methadone

Methadone has been used to treat opioid dependence since 1972.¹¹⁰ Because methadone is a full agonist, it carries many of the same risks as other opioids. Improper use or abuse of methadone can result in serious injury, including overdose death. As such, methadone treatment for opioid use disorders is strictly regulated. Federal regulations prohibit entities other than certified opioid treatment programs (OTP) from dispensing methadone when treating opioid use disorders, and OTPs must also follow strict admission criteria and treatment standards set forth in the regulations. For example, when used to treat an opioid use disorder, federal regulations stipulate that methadone may only be dispensed in oral form and limits are set on the maximum allowable dose for individuals initiating treatment.¹¹¹ SAMHSA last updated their federal guidelines for OTPs in March 2015.¹¹² State laws and regulations further govern OTPs.¹¹³

Notably, restrictions on who can prescribe or dispense methadone do not apply when it is prescribed for pain.¹¹⁴ However, CMS has strongly encouraged providers to reduce use of methadone to treat pain due to a disproportionate share of overdose deaths when prescribed for pain relief compared to other opioid analgesics.¹¹⁵

Buprenorphine

The Drug Addiction Treatment Act of 2000 (DATA 2000) authorized office-based opioid treatment (OBOT), which expanded the settings in which individuals could access medication-assisted treatment for opioid use disorder. Under the law, physicians who complete an eight-hour training course may obtain a waiver from the U.S. Drug Enforcement Agency to prescribe Schedule III, IV or V medications to treat opioid use disorders. In 2002, the FDA approved buprenorphine—a Schedule III drug—as a medication for opioid dependence.

Buprenorphine is available in tablets and dissolvable films. When taken properly, the risks of overdose injury and death are lower for buprenorphine than methadone, but diversion and abuse can still be a concern. However, an international review found that diverted buprenorphine is often used for self-treatment rather than illicit use.¹¹⁶ Buprenorphine is commonly combined with naloxone to deter improper use and diversion, and ASAM Practice Guidelines now recommend the combination product buprenorphine-naloxone in nearly every case (the one exception being when treating pregnant women, for whom naloxone is not currently recommended).¹¹⁷

In May 2016, the FDA approved the first long-acting buprenorphine implant. Clinical trials found that patients given the implant version were more likely to be opioid-abstinent six months after the initiation of the study than patients given oral buprenorphine.¹¹⁸ While additional studies are required, an implant may provide potential solutions for issues related to diversion and improper use that may occur with oral formulations taken daily.

As mentioned above, evidence shows individuals are more likely to relapse while taking buprenorphine than methadone. Despite this trend, a Massachusetts study found that Medicaid beneficiaries receiving buprenorphine had a lower mean annual spending of \$1,330 compared to beneficiaries receiving methadone (including costs of relapse-associated services), with no significant difference in mortality rates.¹¹⁹

SAMHSA published clinical guidelines for buprenorphine in 2004.¹²⁰ Some states have also developed their own guidelines. For example, Vermont published buprenorphine guidelines in January 2010;¹²¹ a revised version was released in August 2015.¹²²

Naltrexone

The FDA approved naltrexone for the treatment of opioid dependence in 1984. Oral naltrexone, which requires daily use, has a much lower compliance rate for opioid use disorder treatment when compared to methadone and buprenorphine.¹²³ However, naltrexone appears to be successful for certain individuals. According to a SAMHSA treatment guide, naltrexone may be a good option when:

- An individual has not had success with methadone or buprenorphine
- An individual is highly motivated
- Or, an individual is not interested in using an opioid agonist for treatment.¹²⁴

In 2010, the FDA approved an injectable, extended-released formulation that is administered by a provider on a monthly basis. Early evidence suggests that long-acting naltrexone may improve medication adherence, but more research is required to make an evidence-based comparison between the two options.¹²⁵

Neonatal Abstinence Syndrome (NAS)	
<p>What is NAS?</p> <ul style="list-style-type: none"> NAS may occur when a pregnant individual has been using opioids during pregnancy. NAS is used to describe symptoms that occur when an infant experiences drug withdrawal, as birth discontinues the drug exposure that occurred during gestation. The symptoms and severity of NAS can vary, and are contingent on many factors including type of drug used and whether birth occurred prematurely. Some studies have shown that pregnant women in rural areas are less likely to have access to substance use disorder treatment and may be disproportionately impacted by factors such as smoking and intimate partner violence that may further influence the effects of prenatal opioid use. 	<p>NAS in the context of the opioid epidemic:</p> <ul style="list-style-type: none"> Incidence of NAS has increased dramatically. In 2000, 1.20 of every 1,000 births in U.S. hospitals were affected by NAS; by 2009, incidence had increased to 3.39 per every 1,000 births. Medicaid provides coverage for 60 percent of pregnant women who use opioids during pregnancy, and 78 percent of all infants diagnosed with NAS. Expenses for stabilizing an infant with NAS average at \$62,973. The average cost for birth of an infant not experiencing NAS is \$7,258. Medication-assisted treatment during pregnancy may make it easier to treat NAS.
<p>States have the opportunity to implement interventions that may result in health benefits for communities as well as cost-savings. Examples include:</p> <p>Ohio: The Ohio Governor’s Office of Health Transformation and the Ohio Departments of Health and Medicaid all support and operate the Maternal Opiate Medical Support (M.O.M.S.) Project to address NAS. This three-year, \$4.2 million program funds clinical services (such as MAT and counseling for pregnant individuals) and prenatal care to reduce NICU stays, and will fund services not covered under Medicaid (such as transportation to care appointments, housing vouchers, and child care services). The M.O.M.S. Project is anticipated to reduce infant hospital stays by 30 percent, generating notable cost savings.</p> <p>Massachusetts: The Massachusetts Neonatal Abstinence Syndrome Improvement Project involves more than 40 hospitals across the state in a quality improvement initiative to enhance care for pregnant individuals, parents, and infants with NAS. Through learning-intensive webinars, data audits, and meetings, this project supports localized performance improvement teams at each hospital. Since its inception in 2013, the project has seen significant increases in non-pharmacological treatment of NAS and decreases in lengths of hospital stays for NAS.</p> <p>Sources:</p> <p>March of Dimes, “Neonatal abstinence syndrome (NAS)”, accessed May 2016, http://www.marchofdimes.org/complications/neonatal-abstinence-syndrome-(nas).aspx</p> <p>Association of State and Territorial Health Officials (ASTHO), “Neonatal Abstinence Syndrome: How States Can Help Advance the Knowledge Base for Primary Prevention and Best Practices of Care”, accessed May 2016, http://www.astho.org/prevention/nas-neonatal-abstinence-report/</p> <p>U.S. National Library of Medicine, “Neonatal abstinence syndrome,” accessed May 2016, https://www.nlm.nih.gov/medlineplus/ency/article/007313.htm</p> <p>The American Congress of Obstetricians and Gynecologists, “Pregnant Women & Prescription Drug Abuse, Dependence and Addiction”, accessed May 2016, https://www.acog.org/-/media/Departments/Government-Relations-and-Outreach/NASToolkit.pdf</p> <p>Tennessee State Government, “Overview of the Prescription Drug Epidemic in Tennessee”, accessed May 2016, https://tn.gov/assets/entities/behavioral-health/sa/attachments/Prescription_For_Success_SECTION_1.pdf</p> <p>Jumah, Naana Afua, “Rural, Pregnant, and Opioid Dependent: A Systematic Review”, accessed May 2016, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4915786/</p> <p>Perinatal Quality Collaborative of North Carolina, “OPQC Ohio Perinatal Quality Collaborative”, accessed May 2016, http://www.pqcnc.org/resources/presentations</p> <p>Association of State and Territorial Health Officials (ASTHO), “How State Health Departments Can Use the Spectrum of Prevention to Address Neonatal Abstinence Syndrome”, accessed May 2016, http://www.astho.org/Prevention/Rx/NAS-Framework/</p>	

Federal Support for Medication-Assisted Treatment

The Obama administration has made increased access to MAT services a priority. In July 2014, five federal agencies¹²⁶ released an informational bulletin supporting the use of MAT for alcohol and opioid use disorders.¹²⁷ In March 2015, the U.S. Department of Health and Human Services (HHS) called for the expansion of MAT when it launched an initiative to reduce opioid-related dependence, overdose, and death. In July 2015, CMS released a State Medicaid Director letter outlining new service delivery opportunities for individuals with a substance use disorder that included an expectation that state reforms include comprehensive evidence-based benefit design and listed MAT within the list of evidence-based practices.¹²⁸

The FY 2016 budget included new funding opportunities to increase access to MAT. In December 2015, the Agency for Healthcare Research and Quality announced a three-year, \$12 million research demonstration project to increase access to MAT services in primary care practices in four rural areas.¹²⁹ In March 2016, HHS awarded \$94 million in a HRSA-administered grant program to expand MAT services at 271 health centers in 45 states, the District of Columbia, and Puerto Rico. The funding is expected to increase the treatment workforce by approximately 800 providers and serve an additional 124,000 individuals needing substance use treatment.¹³⁰ The President's FY 2017 budget proposal included \$920 million to support states in expanding treatment capacity and making MAT services more affordable.¹³¹

In July 2016, SAMHSA adopted a new rule that raised the limit of individuals a buprenorphine-waivered provider could treat. Effective August, 2016, waivered providers can treat up to 275 patients (up from 100) after a year of treating up to 30 individuals.¹³² Providers can qualify for the higher limit if they possess a subspecialty board certification in addiction medicine or addiction psychiatry or if they practice in a qualified practice setting. The regulation set the following requirements for qualified practices, which must:

1. Have after-hours coverage for medical emergencies;
2. Have access to case-management services;
3. Adopt health information technology systems, as required;
4. Participate in a prescription drug monitoring program, if available, and;
5. Accept third-party payment for health services.¹³³

Also in July 2016, President Obama signed the Comprehensive Addiction and Recovery Act of 2016, which expanded waiver authority to licensed nurse practitioners and physician assistants, pursuant to individual states' scope of practice laws.¹³⁴

Barriers to Medication-Assisted Treatment in Rural Regions

In addition to the barriers discussed in previous sections, rural workforce issues also create barriers for MAT services. Only 1.3 percent of buprenorphine-waivered physicians practice in rural areas, which means that those seeking outpatient buprenorphine treatment must often travel long distances to access care.¹³⁵ Capacity issues further limit access. In a 2015 survey of addiction specialists, ASAM found that 66 percent of buprenorphine-waivered physicians surveyed reported a demand for services that exceeded capacity, although less than half were carrying a full patient load.¹³⁶ Additionally, some physicians with

waivers to prescribe buprenorphine may choose not to offer MAT services. In a Washington State pilot, 120 primary care providers were trained by the Rural Opioid Addiction Management Project to use buprenorphine and obtained waivers – however, only 22 of the 78 providers analyzed (28 percent) reported prescribing the treatment, citing a lack of institutional support as the greatest barrier to providing the service.¹³⁷

State regulatory and purchasing policies may also create barriers. Medicaid agencies are faced with the difficult task of striking a balance between ensuring adequate access to care with limited resources and program integrity considerations. A 2013 report found that Medicaid agencies in every state and the District of Columbia covered buprenorphine, and at least 28 states covered all three medications.¹³⁸ However, while Medicaid agencies have increasingly covered methadone and buprenorphine for opioid treatment, many states have implemented policies that may restrict their availability.¹³⁹

States generally impose greater financial restrictions on buprenorphine than methadone or naltrexone. Between 2011 and 2013, at least 48 states required prior authorization for buprenorphine; at least 34 states imposed quantity limits on buprenorphine and at least 11 states imposed lifetime limits. Comparatively, only 13 states required prior authorization for methadone and 12 states required prior authorization for naltrexone. No state set a lifetime limit on either methadone or naltrexone.¹⁴⁰ Restricting access to legitimate buprenorphine treatment may increase illicit use; difficulty accessing buprenorphine treatment was found to be the most common risk factor associated with diversion.¹⁴¹ It is important to note that recent changes to federal parity requirements, which apply to Medicaid Managed Care, CHIP, and Alternative Benefit Plans effective May 31, 2016,¹⁴² could impact states' utilization management policies for substance abuse services (see text box).

Patient advocates and academics argue that state policies limiting the use MAT may do more harm than good, especially when accounting for the societal cost of untreated addiction.^{143, 144} Studies suggest states can strike a balance between rigid utilization management policies that make it more difficult to receive care and unfettered access. In 2008, the Massachusetts Medicaid Agency implemented a targeted prior authorization policy that required increasingly frequent prior authorization for prescribing higher doses of buprenorphine, ranging from no prior authorization requirement for doses of 16 mg/day or less up to monthly prior authorization for doses of 32 mg/day or more. As a result, the percentage of individuals receiving dosages beyond the FDA's recommended dose fell from 16.5 to 4.1 percent. Cost savings to the state were minimal, as decreased dosages may have increased the rate of relapse for individuals already receiving buprenorphine, but lowering the availability of higher doses did not negatively affect individuals beginning MAT and may have reduced diversion.¹⁴⁵

The Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA)

MHPAEA requires health plans to comparably administer mental health and substance use disorder benefits as they administer medical and surgical benefits. For example, health plans cannot impose greater restrictions on behavioral health benefits with regard to:

- Annual/lifetime dollar limits
- Financial requirements
- Treatment limitations

Effective May 31, 2016, CMS regulations clarified that MHPAEA requirements apply to Medicaid managed care, CHIP, and Medicaid alternative benefit plans. Parity protections for managed care enrollees apply to state plan services in the case of a behavioral health carve-out.

Sources:

The Center for Consumer Information & Insurance Oversight (CCIIO), "The Mental Health Parity and Addiction Equity Act", accessed June 2016, https://www.cms.gov/CCIIO/Programs-and-Initiatives/Other-Insurance-Protections/mhpaea_factsheet.html
42 CFR 438

Coverage and Payment Options to Support and Sustain Substance Use Disorder Services and Treatment

The sustainability of emergency intervention and treatment services for substance use disorders—specifically opioid addiction—is contingent, in many ways, on health insurance coverage and payment.

Medicaid

Nearly 12 percent of adult Medicaid enrollees reportedly live with a substance use disorder.¹⁴⁶ This is significant in rural areas, because rural residents are significantly more likely to have Medicaid coverage.¹⁴⁷ Although overall spending for substance use disorder intervention and treatment services is high (\$24.3 billion dollars in 2009, 21 percent of which was paid for by Medicaid),¹⁴⁸ evidence suggests that these services may rapidly yield significant cost savings.¹⁴⁹ One study of Medicaid enrollees found that total medical costs fell by 30 percent in one year after they began treatment, and the savings did not result from cost shifting.¹⁵⁰

Every state Medicaid program covers mental health and substance use disorder rehabilitation for adult enrollees, although this benefit category encompasses a wide range of services that may vary by state. These services include outpatient assessments and counseling, partial hospitalization programs, peer support programs, community support services, and skill training.¹⁵¹

State approaches to covering substance use disorder services under Medicaid vary considerably.¹⁵² Some states have fully carved behavioral health services into their managed care benefit, while others maintain separate contracts for mental health and/or addiction services or reimburse such services on a fee-for-service basis (known as a ‘carve out’). Alternatively, some states may choose to use a “hybrid model” that combines these approaches. As of 2014, 14 states fully carved in their behavioral health services through contracts held with managed care organizations, and 16 states completely carved out behavioral health services from their managed care and fee-for-service benefits. Eleven states, alternatively, have most of their behavioral health services carved in through managed care but carve out at least one benefit category within behavioral health (of note, in some states, substance use disorder treatment may be an excluded category).¹⁵³

There are advantages and disadvantages of each service model. Some studies have shown that carve-out programs can successfully lower costs and improve access to specialized care.¹⁵⁴ However, carve-out programs can also increase provider burden and service fragmentation for individuals seeking care.¹⁵⁵ Carving out behavioral health care services may also make it more difficult for states or providers pursuing integration of primary and behavioral health care. Nevertheless, carving in a behavioral health benefit through managed care does not necessarily signify progress towards integration: in some cases, managed care organizations subcontract with Behavioral Health Organizations (BHOs), which can also bifurcate the delivery system. Carve-ins do, however, place accountability for primary and behavioral health service delivery on one single entity, which can incentivize whole-person care.¹⁵⁶

Federal parity requirements may apply to state Medicaid agencies’ behavioral health benefits. Under a fee-for-service delivery system, behavioral health services are not subject to the same parity requirements set forth in MHPAEA. However, as discussed in the earlier text box, Medicaid enrollees who receive medical and surgical benefits through managed care are afforded parity protections, even if behavioral health services are carved out.^{157, 158}

In July 2015, CMS issued guidance for states seeking to submit section 1115 Medicaid demonstration projects that would allow them to implement comprehensive substance use treatment benefits within an overall transformation of the state's substance use disorder treatment delivery system.¹⁵⁹ CMS also provides states with opportunities to receive technical assistance in the development, implementation, and advancement of treatment service delivery. For example, through the Medicaid Innovation Accelerator Program, CMS is providing program support to seven states (Kentucky, Louisiana, Michigan, Minnesota, Pennsylvania, Texas, and Washington) participating in a High Intensity Learning Collaborative (HILC). HILC states receive technical assistance to improve infrastructure and make policy changes to improve service delivery with an emphasis on data, payment, and performance metrics.¹⁶⁰

Qualified Health Plans

All plans in the state-based and federal Marketplace cover mental health and substance use disorder services as essential health benefits. However, the types of services provided, plan deductibles, and out-of-pocket expenses differ widely. Each state participating in the Marketplace selects a “benchmark” plan and uses this standard to mandate the minimum level that substance use disorder treatment benefit packages must meet. States may also have specific legislation requiring health plans to cover particular services.

Employee-Sponsored and Private Market Individual Insurance Coverage

In general, the Affordable Care Act requires all health insurance plans to meet minimum essential coverage requirements, including employee-sponsored health and individual market plans.¹⁶¹ Effective July 1, 2014, nearly all health plans must comply with MHPAEA (the Act does include limited exemptions, including small, self-insured private employers and non-Federal governmental plans with 50 or fewer employees).¹⁶² Some states have also passed legislation requiring commercial health plans to cover particular services—for example, Connecticut, Maryland, Minnesota, Oregon, and Vermont all have comprehensive parity legislation for mental health and substance use disorder services with which all private plans must comply.¹⁶³ The types of services covered, cost-sharing requirements, and coverage limitations (e.g., 20 visits per calendar year) may vary significantly across plans.

Using Federal Block Grants for Substance Use Disorder Treatment

States leverage federal block grants as a major source of funding for treatment and recovery services that Medicaid and private health insurance carriers do not cover. States also use block grant funds to cover the costs of behavioral health services for uninsured individuals. The most significant source of this funding is the SAMHSA-administered Substance Abuse Prevention and Treatment Block Grant (SABG), which accounted for nearly half of SAMHSA's FY2016 budget.^{164, 165} SABG provides funding for eligible entities to develop, implement, and assess programs for the prevention and treatment of substance use disorders.¹⁶⁶ Under the existing block grant structure, SABG funds can be spent on a wide range of activities including prevention (20 percent must fund prevention activities), treatment, recovery services, and services for populations that may have co-occurring chronic conditions along with substance use disorders. For example, 5 percent must be expended for early intervention services for people living with HIV.¹⁶⁷

State Health Coverage Enrollment Efforts for Populations with Substance Use Disorders

States may find it beneficial to focus health coverage enrollment efforts on individuals with substance use disorders. In addition to potentially improving the quality of life for people living with substance use disorders, studies show a positive return on investment for substance use disorder treatment.¹⁶⁸ As discussed, evidence suggests that total medical costs are lower when an individual's substance use disorder treatment needs are met, and treating addiction can also reduce spending in other areas of a state's budget (e.g., corrections).¹⁶⁹ Several states have used strategies to encourage, increase, and facilitate enrollment in Medicaid and qualified health plans through initiatives that specifically focus on reaching individuals with substance use disorders:

- **Ohio:** Through the Ohio Department of Medicaid and the Ohio Department of Rehabilitation and Correction's Medicaid Pre-Release Enrollment program, incarcerated individuals are screened for complex health needs called "critical risk indicators." Individuals with substance use disorder indicators have the opportunity to participate in a videoconference with a representative from a managed care plan selected by the individual prior to release. Together, they create a transition plan, schedule medical appointments, and organize transportation and communication.^{170, 171}
- **Minnesota:** MNsure, the state's health insurance market place, has partnered with the state's branch of the National Alliance on Mental Illness (NAMI Minnesota). Through a grant provided by MNsure in 2015, NAMI Minnesota has worked to educate individuals about the health insurance marketplace, how to use insurance, and the differences between primary care providers and emergency care. This program specifically provides outreach and assistance to people with substance use disorders and other behavioral health conditions and offers information about advantages of coverage that may benefit those individuals, including information about how coverage will impact their access to mental health and substance abuse treatment services. NAMI conducts information sessions and presentations and has developed outreach materials.¹⁷²
- **Multi-state:** The Enrollment Coalitions Initiative, administrated through a partnership between SAMHSA and 40 behavioral health organizations, works to develop training and resources to promote enrollment through assistance from community-based organizations. These behavioral health organizations cooperate with population-specific coalitions, including one specifically comprised of mental health and substance use disorder health care providers.¹⁷³

Conclusion

Substance use disorders—particularly opioid use disorders—significantly impact rural populations in many ways. Across the continuum, from emergency intervention to long-term treatment options, there are many opportunities for collaboration between Medicaid and the health safety net to improve the accessibility and sustainability of care delivery for rural populations.

Today, state policymakers are in a unique position to reduce legislative and regulatory barriers that currently prevent many rural residents from accessing emergency intervention and treatment for opioid addiction. States can:

- Facilitate emergency opioid treatment and reduce opioid overdose deaths by increasing access to naloxone through first responders, laypersons, and pharmacists;
- Establish or enhance telehealth infrastructure in order to improve treatment expertise in rural communities;

- Implement innovative insurance coverage strategies for substance use disorder treatment services;
- Reduce barriers to medication-assisted treatment, and;
- Focus Medicaid enrollment efforts on rural populations currently at risk for substance use disorders to enable linkage to treatment.

Ultimately, valuable lessons and effective strategies will continue to emerge from the nation's opioid crisis and evolve over time. Through this process, states will play an important role in identifying and refining best practices for rural populations and developing strategies to address future challenges.

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