Engaging Critical Access Hospitals in Addressing Rural Substance Use

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KEY FINDINGS

Critical Access Hospitals (CAHs) have implemented diverse strategies to address substance use (SU), including inpatient, outpatient, and ambulatory services and community benefit programs.

- This brief provides a two-part framework for CAHs to identify and address local SU needs.
    - Part 1 provides a foundation to identify SU needs, coordinate resources, and build local capacity through needs assessments, community engagement, and SU screening activities.
    - Part 2 identifies strategies to minimize the onset of SU and related harms (prevention); provide counseling, inpatient, outpatient, and other services to those with SU disorders (treatment); and help individuals reclaim their lives (recovery).
- State Flex Programs can play an important role to encourage CAHs to address SU issues.

INTRODUCTION

Substance use (SU) is a significant public health issue in rural communities. Despite this fact, SU treatment services are limited in rural areas and residents suffer from significant barriers to care. Critical Access Hospitals (CAHs), frequently the hubs of local systems of care, can play an important role in addressing SU disorders (SUDs). This brief makes the case for why CAHs should address SU, provides a framework to support CAHs in doing so, describes examples of SU activities to substantiate the framework, and identifies resources that can be used by State Flex Programs to support CAHs in addressing this important public and population health problem.

BACKGROUND

Rates of SUDs, which often co-occur with mental health (MH) conditions, differ by rural-urban residence.[1,2] Alcohol is the most commonly used substance. Rural young people (12-20 years old) use alcohol at higher rates than their urban peers and are more likely to engage in risky alcohol-related behaviors such as binge drinking or driving under the influence.[1-3] Many rural populations suffer disproportionately from growth in the use of opioids, heroin, prescription medications, and methamphetamines (meth).[4-7] Meth availability has been rising since 2013 and is at an all-time high.[7]

Rural areas suffer from chronic shortages of SU treatment services, with only 20 percent of SU facilities located in rural areas, and low numbers of inpatient and residential treatment beds (27.9 per 100,000 compared to 42.8 in urban areas).[8] As a result, rural residents have limited access to SU treatment, must travel farther to access care, and have less choice when selecting providers.[9] Reflecting these concerns, the American Hospital Association's (AHA's) Task Force on Ensuring Access in Vulnerable Communities identified psychiatric and SU treatment as essential services that should be maintained locally.[10]

Rural residents also suffer disproportionately from community, socioeconomic, and cultural factors linked to an increased risk for SU including high rates of poverty, unemployment, and community disorganization; community norms that encourage (or at least do not discourage) SU; and low academic achievement.[9,11] A lack of hope and opportunity for the future, low neighborhood attachment, and fewer opportunities for positive social involvement also contribute to an increased risk for SU.[9,11] This complexity calls for a three-pronged set of strategies focused on prevention, treatment, and recovery.[12] Prevention programs help to reduce the onset of SUDs, mitigate the exacerbation of existing conditions, and minimize related harms.[9] Prevention includes a subset of related interventions focused on harm reduction. These interventions acknowledge that many individuals are either unwilling or unable to completely stop their SU and provide tools and resources to reduce harms related to that use (e.g., needle exchanges, distribution of naloxone to prevent overdose deaths, safe injections sites, or managed alcohol programs). Treatment programs provide care for individuals with SUDs and may include parts or some combination of the following: medication assisted treatment (MAT); counseling; integrated SU and primary care services; and detoxification, inpatient, partial hospital, and outpatient services. Recovery programs offer education, peer recovery support, vocational training, social opportunities, and housing to intervene in the patterns of behavior that exacerbate SU and to offer individuals a chance to reclaim their lives.[13,14]

As noted by the AHA Task Force on Behavioral Health, every hospital treats patients with SU and MH issues regardless of whether it offers organized SU or MH services.[15] Community health needs assessments (CHNAs) conducted by tax-exempt (501(c)(3)) hospitals, including CAHs, have consistently identified SU as a priority issue.[10,16-19] CAHs can play a critical role in addressing SUDs by collaborating with community partners to improve and coordinate SU prevention, treatment, and recovery services as part of their inpatient, outpatient, and ambulatory service mixes and/or as programs provided under their community benefit obligations.[11,18,20-22]
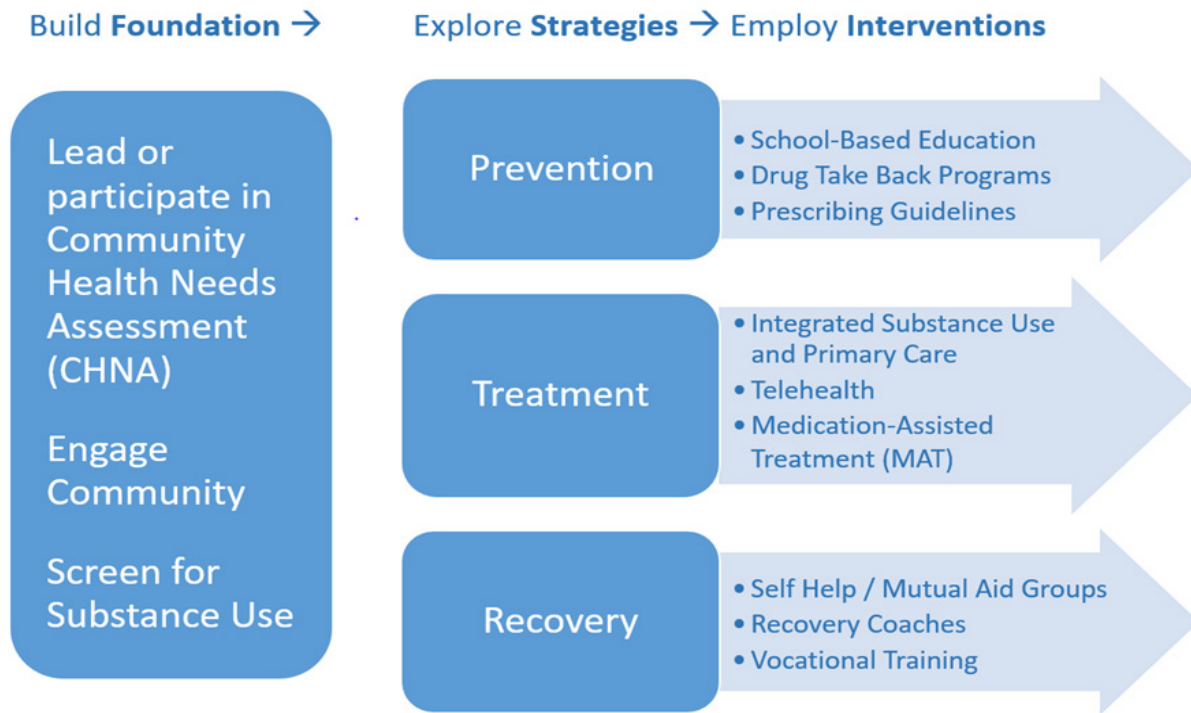
METHODOLOGY

Our study team used a convenience sample of CAHs engaged in substance use initiatives to identify key informants for this study. Hospitals were identified through an extensive web search and conversations with staff from State Flex Programs and Offices of Rural Health. Respondents (Appendix A) were interviewed by telephone using semi-structured protocols. Where relevant, we also examined participating hospital websites, CHNAs, implementation plans, and published literature. We also interviewed staff from the Arizona Office of Rural Health about their work with five CAHs related to opioid use issues.

A FRAMEWORK FOR CRITICAL ACCESS HOSPITALS TO ADDRESS LOCAL SUBSTANCE USE

To develop a coordinated response to community SU issues, CAHs must identify and prioritize local needs, mobilize local resources and partnerships, build local capacity, and screen for SU among their patients. These activities provide a foundation upon which CAHs and their community partners can address identified local needs by selecting and implementing initiatives to minimize the onset of SU and related harms (prevention), treat SUDs, and help individuals reclaim their lives (recovery). State Flex Programs can use this framework (See Figure) and the resources provided in Appendix B to work with and support CAHs in developing strategies to identify and address SU issues in their communities.

Figure: CAH Substance Use Framework

Building a Foundation to Address Local Substance Use Needs

To support the development of community-focused prevention, treatment, and recovery strategies, CAHs can engage in three foundational activities: assessing and prioritizing community health needs; engaging the community; and regularly screening for SU among their patients.

Lead or Participate in Community Health Needs Assessments: Tax-exempt (501(c)(3)) CAHs are required to conduct triennial CHNAs and develop strategy plans to address identified needs. Although publicly-owned hospitals are not subject to these requirements, many choose to engage in some level of assessment as part of their responsibilities to their communities. It is not necessary for either tax-exempt or publicly owned hospitals to engage in CHNAs solely on their own. Rather, they can lead, participate in, or otherwise contribute to collaborative CHNAs depending on their own resources and partnerships as well as local community resources. Many of these collaborative assessments engage a range of stakeholders from public health, local government, faith-based groups, business, and other community stakeholders. SU is a commonly identified problem in hospital CHNAs as well as those conducted by multi-stakeholder groups.[15,17-19,23] In a study examining CHNAs conducted by 50 tax-exempt CAHs, 62 percent identified SU as a priority local issue.[18] Thirty-eight percent of the 50 chose to address SU in their strategy plans.

In its 2018 CHNA, Mount Ascutney Hospital and Health Center (Mt. Ascutney) in Windsor, Vermont identified the prevention of SU and addiction as well as access to SU treatment and recovery services as priority issues.[24] Half of key stakeholders reported that individuals in need

of SU treatment were not being appropriately served by local health services. Community respondents and key stakeholders reported strong or very strong support for town policies to protect youth from substance misuse related to "adult only" products such as alcohol, tobacco, e-cigarettes, and marijuana. Alcohol use is a key local health concern with 16 percent of adults and 15 percent of youth reporting binge drinking.

In its 2019 Community Health Improvement Plan, Mt. Ascutney focused on collaborative education and community engagement initiatives to address identified needs and develop an "Accountable Community for Health."[25] This work is supported through dedicated staff from Mt. Ascutney as well as state and federal grants. Specific activities included:

- Creating community protocols to connect opioid users with treatment, support, and harm reduction services;
- Promoting legislative and policy solutions to address opioid use disorders;
- Working with towns and the Regional Planning Commission to reduce access to adult only products;
- Placing recovery coaches in the emergency department (ED);
- Connecting MAT patients with local recovery centers;
- Implementing SU and MH screening in their clinic and ED;
- Supporting tobacco cessation workshops;
- Participating in a drug take back program;
- Providing marijuana education in partnership with a marijuana prevention workgroup;
- Supporting school-based programs;
- Utilizing Vermont's prescription drug monitoring program (PDMP); and
- Facilitating the Regional Prevention Partnership to implement programs in two local counties.

Community Engagement: Mt. Ascutney's initiatives highlight the value of collaborative community engagement. Developing evidence supports the use of community engagement and coalition-building to address SU.[22,26-30] The goal is to engage diverse stakeholders in collaborative efforts to develop an infrastructure to implement prevention, treatment, and recovery initiatives; address social and economic SU risk factors; and reduce stigma that discourages individuals from seeking care. Effective coalitions are broad-based with representation from healthcare, social services, law enforcement, schools, local and tribal governments, faith-based organizations, businesses, and consumers.

Mt. Ascutney has been conducting primary prevention projects in the community for more than 20 years. As part of these efforts, it has worked with local providers and stakeholders through the Mount Ascutney Prevention Partnership (MAPP), a community-based SU prevention and health promotion initiative. Operated under the auspices of Mt. Ascutney, MAPP engages a range of partners including healthcare providers, social service agencies, local governments, community partnerships, regional planning commissions, law enforcement, and school departments. Mt. Ascutney provides leadership, staffing, and resource support to MAPP and

describes its role as a convener to build and maintain relationships among the partners. Mt. Ascutney also plays a leadership role in securing grants and funding and distributing these funds to its partners. Mt. Ascutney participates in the Windsor Health Service Area Coordinated Care Committee, Windsor Area Community Partnerships, PATCH Team and Blueprint for Health, Windsor Area Drug Task Force, and Windsor Connection Resource Center. Mt. Ascutney focuses on creating partnerships, building trust, and encouraging community ownership of programs.

Screening for Substance Use: SU is a commonly observed problem in primary care and ED settings.[31,32] The U.S. Preventive Services Task Force recommends screening adults for unhealthy alcohol and illicit drug use with brief counseling interventions.[32,33,34] Screening, brief intervention, and referral to treatment (SBIRT) is an evidence-based public health model designed to identify and deliver services to individuals at risk for SUDs, depression, and other MH conditions in primary care and ED settings.[31,34-37]

Moab Regional Hospital in Moab, Utah (Moab) implemented the Child Health and Development Interactive System (CHADIS), a web-based pre-screening behavioral health tool to identify children at risk for future SU and/or MH issues. CHADIS is being used by family practice providers in the Moab Regional Health Center. Weeks Medical Center in Lancaster, New Hampshire (Weeks) used external grant funding to implement SBIRT for adolescents and adults in its four Rural Health Clinics (RHCs). Patients complete the screening using a tablet and the information is uploaded to Weeks' medical record. Providers review the score during the visit and refer to a MH provider in one of the RHCs if an intervention is warranted. Mt. Ascutney has implemented SBIRT in its ED and primary care clinic. Staff noted that primary care providers are reluctant to discuss SU if they do not have the ability to refer patients for treatment, so the placement of a SU provider in its primary care clinic helps to encourage broad-based screening. They described SBIRT as a key component of primary prevention and explained that a trusted provider can influence patients' SU behaviors.

Strategies for Prevention, Treatment, and Recovery

Rural Prevention Strategies: Evidence-based prevention strategies have proven effective in preventing SU, reducing high-risk behaviors, and inhibiting negative health and social consequences for family and community members. They are cost effective with savings ranging from $2.00 to $19.64 in future SU-related health, social, and criminal costs for every dollar spent.[38-40] Prevention also positively impacts protective factors such as mental health resilience and academic attainment.[41] As these studies are not specific to rural prevention programs, further study is need to quantify the benefits of rural prevention programs. They do, however, suggest positive benefits for rural prevention programs, particularly given the fact that rural residents suffer disproportionately from community, socioeconomic, and cultural factors linked to an increased risk for SU.

Successful prevention strategies address modifiable risk and protective factors and are adapted to the unique characteristics of rural communities.[41,42] Under this framework, prevention includes educational and other initiatives to address attitudes towards SU and stigma; moderating socio-economic and cultural risk factors underlying SU; and reducing prescription drug supply through prescribing guidelines, use of state prescription drug monitoring programs, and drug take-back programs.

Mt. Ascutney's MAPP conducts primary prevention projects in collaboration with local, state, and federal partners who provide guidance, support, technical expertise, and funding. MAPP focuses on reducing alcohol, tobacco, marijuana, and other drug misuse using a comprehensive primary prevention model, as well as working with a regional planning commission to develop communication plans and ordinances that send positive messages and discourage tobacco use. Mt. Ascutney also convened a county-wide summit involving ED directors, police, emergency medical services, town officials, MH agencies, and recovery coaches to promote naloxone use and reduce opioid overdose deaths.

A number of study CAHs also reported prevention initiatives. CHI Lakewood Health Center in Baudette, Minnesota (Lakewood) is a participant in the Lake of the Woods County Prevention Coalition (LWCPC). Funded through grants, LWCPC focuses on programs to reduce underage alcohol, marijuana, and prescription drug use. It also offers beverage server training to local restaurants and bars, supports alcohol compliance checks in coordination with law enforcement, and provides certifications to help establishments serving alcohol comply with alcohol selling and serving liability laws (known as Dram Shop Act Laws). Recently, LWCPC has begun to examine opioid and prescription drug issues. According to LWCPC staff, Lakewood has been an important participant in uniting different sectors of the community including parents, youth, schools, law enforcement, and healthcare.

Cody Regional Health in Cody, Wyoming (Cody) employs a prevention specialist to conduct education programs in local schools and to work with law enforcement to expand the use of naloxone to reduce opioid overdose deaths. Similarly, McDowell ARH Hospital in McDowell, Kentucky (McDowell) employs a Senior Care Therapist in its outpatient clinics and ED to conduct educational programs for local law enforcement officers, school staff, and providers in their clinics. The therapist also prepares resource packages focused on SU issues for schools, clinics, and the ED. Hopi Health Care Center in Polacca, Arizona (Hopi) coordinates monthly stakeholder meetings with community organizations supporting a local opioid reduction program and hosted the Red Ribbon Run for Substance Abuse Prevention to bring attention to SU issues.

Hopi and Mt. Ascutney have participated in drug "take back" programs to allow residents to safely dispose of unneeded prescription medications. Mt. Ascutney follows best practices from the Vermont Medical Society regarding opioids and encourages its prescribers to use the state's PDMP to monitor opioid prescriptions received by its patients. In addition to using the PDMP as part of its prescribing guidelines, Mt. Ascutney shares data from the PDMP with its prescribers on a quarterly basis as part of its quality improvement efforts. Its physicians use patient contracts, education, and monitoring to reduce prescription drug misuse with a particular focus on high dose opioid prescriptions. As a result of this attention to its prescribing practices, Mt. Ascutney reports that its staff have among the lowest prescribing rates in Vermont for opioids, stimulants, and benzodiazepines.

Rural Treatment Strategies: Key strategies to improve access to SU services include the development of local treatment services, the integration of specialty SU and primary/general medical care services, participation in hub and spoke models, the use of telehealth and other technologies to connect rural patients with specialty providers, or some combination of the above.[9]

Inpatient and residential services: Three facilities in this study provide inpatient/residential SU treatment services. Lake Chelan Community Hospital in Chelan, Washington operates a 14-bed on-site unit (called the Sanctuary by the Lake) serving patients with co-occurring SU, MH, and chronic physical health issues, primarily covered by the Medicare program. Their program offers inpatient services only and operates on an abstinence model, although its clinicians will prescribe buprenorphine on a limited short-term basis. Patients needing outpatient or ambulatory services are referred to community providers. In Wyoming, Cody operates a CAH and a separate 16-bed SU facility called the Cedar Mountain Center (Cedar Mountain) that provides inpatient SU services including chemical dependency treatment; alcohol education and awareness; medically supervised detox services; aftercare services; family treatment based upon the 12 step model; reality therapy; and access to medical services. Cedar Mountain offers a traditional 30-day program for patients with alcohol problems and a 60-day program for patients with opioid and meth use disorders that require a longer program. New Ulm Medical Center in New Ulm, Minnesota offers short and long-term residential care. New Ulm is extensively involved with local drug courts that offer individuals the opportunity to enter long-term drug treatment under court supervision rather than receiving a jail sentence. New Ulm's staff work with the drug courts to help participants maintain recovery, take on responsibilities, and work towards lifestyle changes.

Outpatient and ambulatory services: RiverView Health in Crookston, Minnesota (RiverView) operates the RiverView Recovery Center, which provides outpatient and ambulatory services in four locations. RiverView had previously offered inpatient and detoxification services but transitioned to outpatient/ambulatory services as inpatient services became financially unsustainable. RiverView provides comprehensive SU assessments; individual SU counseling/ sessions; structured outpatient services; relapse prevention; intensive outpatient services; driving with care programs for individuals arrested for driving under the influence; and alcohol and drug education classes for individuals who can benefit from education around SU issues but are not in need of more intensive treatment.

New Ulm provides extensive outpatient services on a six day per week basis including outpatient day treatment (partial hospitalization), intensive outpatient treatment, traditional outpatient services, and MAT. Cody's outpatient services are provided through its behavioral health center including an intensive outpatient program, traditional outpatient services, and MAT for individuals with SU and co-occurring disorders. McDowell's Senior Care Therapist conducts SU assessments for patients presenting in McDowell's ED and works to connect patients with needed services.

Weeks provides integrated ambulatory/outpatient services through its four RHCs in northern New Hampshire. SU and MH services are provided primarily through its Lancaster clinic, which is staffed by seven licensed professionals including two licensed clinical MH counselors (LCMHCs) who are also licensed alcohol and drug counselors (LADCs), one LADC, one licensed independent clinical social worker (LICSW), two psychiatric nurse practitioners, and one psychiatrist. As part of their responsibilities, staff also provide services at the North Country Serenity Center in Littleton and the Doorway, an SU treatment program at Androscoggin Valley Hospital in Berlin, New Hampshire. Staff are primarily based at the Lancaster clinic but also provide services at the Groveton and Whitefield clinics. The Whitefield clinic is also staffed

by a psychiatric nurse practitioner. Services at Weeks' RHCs include SU and MH counseling, medically driven recovery plans, and care coordination. MAT services are provided at the Lancaster and Whitefield sites.

Moab operates an addiction medicine clinic that was developed when the only physician prescribing buprenorphine in their region moved away. Moab's clinic operates one day per week with two local physicians who prescribe buprenorphine. The clinic opened in spring of 2017 and had 20 patients at the time of our interview. A part-time addiction social worker was added to the team in the fall of 2017 and a medical assistant provides staff support. SU specialists from the University of Utah neuropsychiatric program consult with Moab providers to develop best practices and enhance patient care. As the program was developed to address local needs and serve as a referral resource to its providers, the service is not heavily promoted outside of the Moab system to avoid overloading its capacity.

Mt. Ascutney provides MAT services under Vermont's Blueprint for Health hub and spoke model. Community-based providers, such as Mt. Ascutney and its clinical sites, serve as the "spokes" in this model to provide care coordination, patient education, and wraparound services for people with opioid use disorders with support from specialty SU providers that serve as the "hubs." For every 100 MAT patients, Mt. Ascutney (and other spoke sites) are funded under the Blueprint for Health to hire a full-time equivalent (FTE) nurse and an FTE counselor to work with patients in two specialty recovery and addiction practices.[i] Mt. Ascutney's clinical staff also provide MAT services in their primary care settings, including a pediatrician-run group for mothers receiving MAT. The program includes a counseling group for mothers and a therapeutic playgroup for their children during the counseling sessions. To provide an alternative to opioid use, Mt. Ascutney has developed a multifunctional recovery team to serve chronic pain patients. The team includes a podiatrist, a pain specialist, a physical therapist, massage and acupuncture providers, a recovery professional, a representative from the self-management work group, and the hospital's Director of Community Health. The team believes that chronic pain patients are at greater risk for opioid overdose deaths than MAT patients not suffering from chronic pain due to the complexity of their cases and the high doses of opioids they receive for their long-term chronic pain.

Rural Recovery Strategies: Recovery interventions offer individuals with SUDs a "second chance" to live healthy, productive, and fulfilling lives through education, peer support, vocational training, housing, and other services to break the cycles and patterns of behavior that exacerbate their conditions.[11] Recovery support can also be provided through self-help or mutual aid groups such as Alcoholics or Narcotics Anonymous, peer support/coaching programs, recovery support services, and recovery centers.[11,13,43-45] Cody's treatment program is highly supportive of the 12 step model and encourages patients to embrace the framework as part of their recovery. While in residence, patients participate in community 12 step meetings three times per week. For those who live in the area, this connects them to the local recovery community. Local residents in recovery are encouraged to volunteer at the Cedar Mountain Center as part of their own recovery work. The program also recognizes the importance of employment as a supportive element of recovery and partners with a vocational rehabilitation program to develop a job readiness

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[i] For providers serving 30 MAT patients, the Blueprint for Health provides funding to hire a half-time nurse and a half-time counselor.

component for its 60-day program. Similarly, Lake Chelan's program is strongly oriented to the 12 step model and tied to the local recovery community. As part of their program, patients participate in local Alcoholics and Narcotics Anonymous meetings. Mt. Ascutney is working to support recovery by creating a community protocol to connect opioid users to recovery and harm reduction programs, linking MAT patients with local Turning Point Centers (a statewide system of recovery programs), and incorporating recovery coaches into their ED.

CONCLUSIONS

This framework describes a wide range of opportunities for CAHs and other rural hospitals to undertake targeted prevention, treatment, and recovery programs to address SU issues in their communities. Appendix B provides links to tools and resources that can be used by State Flex Programs to assist CAHs in developing their SU strategies based on local needs. This list is not intended to be an exhaustive inventory or prescriptive list of potential SU activities for CAHs, nor is it an implementation guide to executing these strategies. Rather, it is designed to encourage CAHs to explore local SU needs and develop their own strategies to address this important public health problem by providing examples of SU strategies that have been successfully adopted by other CAHs.

REFERENCES

1. Lambert, D, Gale, JA, Hartley, D. Substance Abuse by Youth and Young Adults in Rural America. *J Rural Health*. 2008;24(3):221-228.

2. Substance Abuse and Mental Health Services Administration. *Results from the 2016 National Survey on Drug Use and Health: Detailed Tables*. [web page]. https://www.samhsa.gov/data/report/results-2016-national-survey-drug-use-and-health-detailed-tables. 2019. Accessed July 15, 2019.

3. Gale, J, Lenardson, JD, Lambert, D, Hartley, D. *Adolescent Alcohol Use: Do Risk and Protective Factors Explain Rural-Urban Differences?* Portland, ME: University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center; March 2012. Working Paper #48.

4. Keyes, KM, Cerdá, M, Brady, JE, Havens, JR, Galea, S. Understanding the Rural-Urban Differences in Nonmedical Prescription Opioid Use and Abuse in the United States. *Am J Public Health*. 2014;104(2):e52-e59.

5. Lenardson, JD, Hartley, D, Gale, J, Pearson, KB. Substance Use and Abuse in Rural America. In: Warren JC, Smiley KB, eds. *Rural Public Health: Best Practices and Preventive Models*. New York: Springer Publishing Company; 2014:95-114.

6. Monnat, SM, Rigg, KK. Examining Rural/Urban Differences in Prescription Opioid Misuse among US Adolescents. *J Rural Health*. 2016;32(2):204-218.

7. Morris, F. *Methamphetamine Roils Rural Towns Again across the U.S.* [web page]. https://www.npr.org/sections/health-shots/2018/10/25/656192849/methamphetamine-roils-rural-towns-again-across-the-u-s. October 25, 2018. Accessed July 15, 2019.

8. Lenardson, JD, Gale, JA. *Distribution of Substance Abuse Treatment Facilities across the Rural – Urban Continuum*. Portland, ME: Maine Rural Health Research Center;2007.

9. Gale, J, Janis, J, Coburn, A, Rochford, H. *Behavioral Health in Rural America: Challenges and Opportunities*. Iowa City, IA: Rural Policy Research Institute; December 2019.

10. American Hospital Association. *Task Force on Ensuring Access in Vulnerable Communities*. Chicago, IL: AHA; November 29 2016.

11. U.S. Department of Health and Human Services. *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Washington, DC: US DHHS, Office of the Surgeon General; November 2016.

12. United Nations Office on Drugs and Crime. *Prevention of Drug Use and Treatment of Drug Use Disorders in Rural Settings*. Vienna: UNODC;2017.

13. Substance Abuse and Mental Health Services Administration. *Recovery and Recovery Support*. [web page]. https://www.samhsa.gov/find-help/recovery. May 17, 2019. Accessed October 1, 2019.

14. White, WL. *Recovery Support Resources in Rural and Frontier Areas. A Call for Research and Action*. [web page]. https://facesandvoicesofrecovery.org/resource/recovery-support-resources-in-rural-and-frontier-areas-a-call-for-research-and-action/. 2011. Accessed July 15, 2019.

15. American Hospital Association. *Behavioral Health Challenges in the General Hospital: Practical Help for Hospital Leaders*. Recommendations. Chicago, IL: AHA; September 2007.

16. Association of State and Territorial Health Officials. *Successes and Challenges in Community Health Improvement: Stories from Early Collaboration*. Arlington, VA: ASTHO;2014.

17. Donahue, S, Trocchio, J. Catholic Hospitals Address Substance Abuse. *Health Prog*. 2016;97(2):70-72.

18. Gale, JA, Croll, Z, Zoll, L, Coburn, AF. *Critical Access Hospitals' Community Health Needs Assessments and Implementation Plans: How Do They Align?* Portland, ME: University of Southern Maine, Flex Monitoring Team; October 2018. Briefing Paper #39.

19. Gruber, JB, Wang, W, Quittner, A, Salyakina, D, McCafferty-Fernandez, J. Utilizing Community Health Needs Assessments (CHNAs) in Nonprofit Hospitals to Guide Population-Centered Outcomes Research for Pediatric Patients: New Recommendations for CHNA Reporting. *Popul Health Manag*. 2019;22(1):25-31.

20. Gale, J, Coburn, A, Pearson, K, Croll, Z, Shaler, G. *Population Health Strategies of Critical Access Hospitals*. Portland, ME: Flex Monitoring Team, Maine Rural Health Research Center; August 2016. Briefing Paper #36.

21. Gale, J. *The Role of Rural Hospitals in Addressing Opioid and Other Substance Use Problems*. Presented at Small Rural Hospital Transition HELP Webinar; January 10, 2018.

22. Gale, J, Hansen, AY, Elbaum Williamson, M. *Rural Opioid Prevention and Treatment Strategies: The Experience in Four States*. Portland, ME: University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center;2017. Working Paper #62.

23. Committee on the Judiciary, United States Senate *Hearing before the Committee on the Judiciary, United States Senate: Community Solutions to Breaking the Cycle of Heroin and Opioid Addiction*. S. Hrg. 113-687. United States Senate: First Session; March 17, 2014.

24. Mount Ascutney Hospital and Health Center. *Community Health Needs Assessment 2018*. [web page]. http://www.mtascutneyhospital.org/sites/default/files/content/documents/FY2018%20MTA%20Community%20Health%20Needs%20Assessment%2010.3.18.pdf. 2018. Accessed March 4, 2020.

25. Mount Ascutney Hospital and Health Center. *2019 Community Health Improvement Plan*. [web page]. http://www.mtascutneyhospital.org/sites/default/files/content/documents/2019_CommunityHealthImplementationPlan.pdf. 2019. Accessed March 4, 2020.

26. Alexandridis, AA, McCort, A, Ringwalt, CL, et al. A Statewide Evaluation of Seven Strategies to Reduce Opioid Overdose in North Carolina. *Inj Prev*. 2018;24(1):48-54.

27. Chilenski, SM, Frank, J, Summers, N, Lew, D. Public Health Benefits 16 Years after a Statewide Policy Change: Communities That Care in Pennsylvania. *Prev Sci*. 2019;20(6):947-958.

28. Cyril, S, Smith, BJ, Possamai-Inesedy, A, Renzaho, AM. Exploring the Role of Community Engagement in Improving the Health of Disadvantaged Populations: A Systematic Review. *Glob Health Action*. 2015;8:29842.

29. HealthyPeople.gov. *Tackling Substance Abuse through a Community-Wide Coalition*. [web page]. https://www.healthypeople.gov/2020/healthy-people-in-action/story/tackling-substance-abuse-through-community-wide-coalition. 2019. Accessed October 1, 2019.

30. National Community Anti-Drug Coalition of America (CADCA). *Handbook for Community Anti-Drug Coaltions*. Alexandria, VA: CADCA;2012.

31. Hawk, K, D'Onofrio, G. Correction To: Emergency Department Screening and Interventions for Substance Use Disorders. *Addict Sci Clin Pract*. 2019;14(1):26.

32. Shapiro, B, Coffa, D, McCance-Katz, EF. A Primary Care Approach to Substance Misuse. *Am Fam Physician*. 2013;88(2):113-121.

33. Jin, J. Screening and Counseling to Reduce Unhealthy Alcohol Use. *JAMA*. 2018;320(18):1948.

34. Devitt, M. *USPTF Recommends Screening Adults for Illicit Drug Use*. [web page]. https://www.aafp.org/news/health-of-the-public/20190827uspstfdrugscreening.html. August 27, 2019. Accessed March 4, 2020.

35. Babor, TF, McRee, BG, Kassebaum, PA, Grimaldi, PL, Ahmed, K, Bray, J. Screening, Brief Intervention, and Referral to Treatment (SBIRT): Toward a Public Health Approach to the Management of Substance Abuse. *Subst Abus*. 2007;28(3):7-30.

36. Hargraves, D, White, C, Frederick, R, et al. Implementing SBIRT (Screening, Brief Intervention and Referral to Treatment) in Primary Care: Lessons Learned from a Multi-Practice Evaluation Portfolio. *Public Health Rev*. 2017;38:31.

37. Nunes, AP, Richmond, MK, Marzano, K, Swenson, CJ, Lockhart, J. Ten Years of Implementing Screening, Brief Intervention, and Referral to Treatment (SBIRT): Lessons Learned. *Subst Abus*. 2017;38(4):508-512.

38. Ettner, SL, Huang, D, Evans, E, et al. Benefit-Cost in the California Treatment Outcome Project: Does Substance Abuse Treatment "Pay for Itself"? *Health Serv Res*. 2006;41(1):192-213.

39. Miller, T, Hendrie, D. *Substance Abuse Prevention Dollars and Cents: A Cost-Benefit Analysis*. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration;2008.

40. Swisher, J, Scherer, J, Yin, R. Cost-Benefit Estimates in Prevention Research. *J Prim Prev*. 2004;25:137-148.

41. Brody, GH, Chen, YF, Kogan, SM, Murry, VM, Brown, AC. Long-Term Effects of the Strong African American Families Program on Youths' Alcohol Use. *J Consult Clin Psychol*. 2010;78(2):281-285.

42. Hawkins, JD, Catalano, RF, Arthur, MW. Promoting Science-Based Prevention in Communities. *Addict Behav*. 2002;27(6):951-976.

43. Council on Substance Abuse-NCADD. *Recovery Services and Peer Recovery Support*. [web page]. https://cosancadd.org/training/certified-recovery-support-specialist-training/. 2019. Accessed October 1, 2019.

44. Dunstan, D, Anderson, D. Applying Strengths Model Principles to Build a Rural Community-Based Mental Health Support Service and Achieve Recovery Outcomes. *Rural Remote Health*. 2018;18(1):3708.

45. Hall, MT, Huebner, RA, Sears, JS, Posze, L, Willauer, T, Oliver, J. Sobriety Treatment and Recovery Teams in Rural Appalachia: Implementation and Outcomes. *Child Welfare*. 2015;94(4):119-138.

Cedar Mountain Center, Cody Regional Health, Cody, WY
Hospital website: codyregionalhealth.org/services/chemical-dependency-treatment
Fred Snelson, LPC, LAT, MAC, Director of Cedar Mountain Center

Lake Chelan Community Hospital, Chelan, WA
Hospital website: lakechelancommunityhospital.com/sanctuary
Jane Jedwabny, Director at Sanctuary at the Lake

Lakewood Health Center, Baudette, MN
Hospital website: lakewoodhealthcenter.org
Prevention Coalition website: lwpcstory.org
Tammie Doebler, Drug Free Communities Grant Coordinator Lake of the Woods County
Prevention Coalition

McDowell ARH, McDowell, KY
Hospital website: arh.org/locations/mcdowell.aspx
Courtney Mullins, Social Services Director and Senior Care Therapist

Moab Regional Hospital, Moab, UT
Hospital website: mrhmoab.org
Jennifer Sadoff, CEO

Mount Ascutney Hospital and Health Center, Windsor, VT
Hospital website: mtascutneyhospital.org/
Jill Lord, RN, MS, Director of Community Health

New Ulm Medical Center, New Ulm, MN
Hospital website: allinahealth.org/new-ulm-medical-center
Marie Larsen, Addiction Services Manager

RiverView Health, Crookston, MN
Hospital website: riverviewhealth.org
Curtis Hamre, LADC, Director, RiverView Recovery Center

Weeks Medical Center, Lancaster NH
Hospital website: weeksmedical.org
Shawna Delworth, LCMHC, MLADC, Behavioral Therapists

Arizona Office of Rural Health/Arizona Center for Rural Health
Program website: crh.arizona.edu/programs/sorh
Joyce A. Hospodar, MBA, MPA, Senior Advisor, Rural Programs
Jill B. Bullock, Associate Director, Arizona Rural Hospital Flexibility Program
Jennifer Peters, Manager, State Office of Rural Health Program

APPENDIX B: Substance Use Resources for CAHs and State Flex Programs

Source	Resource Description	Links
General Substance Use Resources		
Rural Health Information Hub (RHIhub)	*Substance Abuse in Rural Areas:* This RHIhub web page provides links to information, responses to frequently asked questions, toolkits, and studies on rural SU.	ruralhealthinfo.org/top-ics/substance-abuse
United Nations Office on Drugs and Crime	*Prevention of Drug Use and Treatment of Drug Use Disorders in Rural Settings* offers an in-depth look at rural drug use issues and assessment, prevention, treatment, and recovery tools.	unodc.org/docu-ments/17-01904_Rural_treatment_ebook.pdf
Substance Use and Mental Health Services Administration (SAMHSA)	*Publications and Digital Products:* This web page publication website provides resources and toolkits on a range of substance use and mental health prevention, treatment, and recovery topics.	store.samhsa.gov/treat-ment-prevention-recovery
Rural Communities Opioid Response Program (RCORP)	The *RCORP's* Technical Assistance website provides articles and publications; templates, samples, and forms; and training materials for grantees of the RCORP program as well as opioid treatment provid-ers. RCORP funding opportunities are available on the Health Resources and Services Administration's website.	rcorp-ta.org/index.php/resources hrsa.gov/rural-health/rcorp
FOUNDATIONAL STRATEGIES FOR ADDRESSING SUBSTANCE USE		
Community Assessment		
Office of the Assistant Secretary for Planning and Evaluation	*Needs Assessment Methodologies in Determining Treatment Capacity for Substance Use Disorders: Final Report*: This September 2019 report offers a primer on getting the most out of a community-wide SUD needs assessment.	aspe.hhs.gov/basic-re-port/needs-assess-ment-methodologies-de-termining-treatment-ca-pacity-substance-use-dis-orders-final-report
American Hospital Association	*How a CHNA Influenced a Hospital's Strategic Plan:* This video presentation shares an example of one hospital's use of its CHNA to meet local SU needs.	aha.org/how-chna-influ-enced-hospitals-strate-gic-plan
Centers for Disease Control and Prevention	*Community Health Assessments & Health Improvement Plans:* This website provides resources on how to conduct CHNAs and develop health improvement plans.	cdc.gov/publichealthgate-way/cha/plan.html
Community Engagement		
Project Lazarus	*Project Lazarus:* This website offers resources to support community engagement, education, and program development to reverse opioid overdose deaths.	projectlazarus.org/
Drug-Free Community Coalitions	*Drug Free Community Coalitions:* This website pro-vides resources to support SUD prevention in rural communities and change parent/youth perceptions about SU.	preventionsolutions.edc.org/services/resources/drug-free-community-co-alitions

Source	Resource Description	Links
Community Engagement		
Communities That Care	*Communities That Care PLUS:* This web page provides resources to guide communities through a change process to encourage healthy youth development and reduce problem behaviors.	communitiesthatcare.net/
Center for Rural Health, University of North Dakota	*Community Engagement Toolkit:* This 2015 document assists groups in engaging their communities to make a difference through a collaborative process.	ruralhealth.und.edu/assets/375-1008/community-engagement-toolkit.pdf
SU Screening		
SAMHSA	*SBIRT: Screening, Brief Intervention, and Referral to Treatment:* This web page offers resources on SBIRT and how to get started.	integration.samhsa.gov/clinical-practice/sbirt
STRATEGIES FOR IMPLEMENTING SUBSTANCE USE PROGRAMMING		
Prevention		
RHIhub	*Rural Prevention and Treatment of Substance Use Disorders Toolkit:* This web page provides models, best practices, and resources for prevention and treatment.	ruralhealthinfo.org/toolkits/substance-abuse
SAMHSA	*Prevention Resources for Building Healthy Communities:* This document provides relevant, practical, evidence-based approaches for preventing substance misuse.	samhsa.gov/sites/default/files/programs_campaigns/nation_prevention_week/npw-catalogue-prevention-resources-healthy-communities.pdf
Community Anti-Drug Coalitions of America	*Community Anti-Drug Coalitions of America's (CADCA's) Resources Section:* This web page provides a range of prevention resources and tools.	cadca.org/resource-types/toolkits
Treatment		
National Institute on Drug Abuse (NIDA)	*Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition):* This NIDA September 2018 document offers guidelines, interventions, and practical steps to develop inpatient or outpatient SUD treatment.	drugabuse.gov/node/pdf/675/principles-of-drug-addiction-treatment-a-research-based-guide-third-edition
Surgeon General's Report on Alcohol, Drugs, and Health	*Chapter 4. Early Intervention, Treatment, and Management of Substance Use Disorders of the Surgeon General's Report on Alcohol, Drugs, and Health:* This document lays out a continuum of treatment options, including behavioral therapies and medications as well as inpatient, residential, and outpatient services.	addiction.surgeongeneral.gov/sites/default/files/chapter-4-treatment.pdf
Center of Excellence for Integrated Health Solutions	*Center of Excellence for Integrated Health Solutions:* This website, jointly funded by the Health Resources and Services and SAMHSA, provides web-based resources, trainings, and tools to support providers in developing integrated SU, mental health, and primary care services.	thenationalcouncil.org/integrated-health-coe/

Source	Resource Description	Links
Treatment		
RHIhub	*Telebehavioral Health and Opioid Use Disorder*: This web page provides resources to support rural provider in using telehealth to expand access to SU treatment.	ruralhealthinfo.org/tool-kits/telehealth/2/specif-ic-populations/behavior-al-health/opioids
Recovery		
SAMHSA	*What Are Peer Recovery Support Services:* This paper reviews peer recovery and coaching pro-grams to fill the needs of people in or seeking recovery.	store.samhsa.gov/system/files/sma09-4454.pdf
Recovery-Oriented System of Care	*Recovery-Oriented System of Care (ROSC) Resource Guide:* This September 2010 publication provides resources to transform BH service systems to deliver person-centered services and support pathways to recovery.	samhsa.gov/sites/default/files/rosc_resource_guide_book.pdf
US Department of Veterans Affairs	*Self-Help Toolkit:* This web page provides resources to assist with developing 12 step/self-help programs.	mentalhealth.va.gov/providers/sud/selfhelp/meetings_12step.asp
NAADAC, the Association for Addiction Professionals	*Recovery Resources:* This NAADAC web page provides links to a range of recovery research, resources, and tools.	naadac.org/recovery-re-sources
The Fletcher Group Rural Center of Excellence (RCOE)	The *Fletcher Group RCOE* is a multi-state RCORP funded resource focused on building safe, sustain-able recovery housing and recovery ecosystems. Their website describes their evidence-based model and provides resources related to recovery housing.	https://www.fletcher-group.org/resources/