

Sagebrush County SUD and Overdose Family Support and Education Program

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Statement of Problem, Target Population, and Setting

Sagebrush County experiences substance use issues due to a lack of continuation of care, limited ongoing treatment and recovery services, common utilization of the ER for acute care and referrals, irregular work schedules, and geographic isolation. Additionally, the isolated nature of the county creates longer travel distances, transportation limitations, and shortages of providers. These issues greatly contribute to residents outside of the city and tribal community members experiencing disparities in receiving care.

The target population for this program is working age adults (defined as aged 25–54) in Sagebrush County who experience substance use related emergencies or overdoses, and receive medical care through the emergency departments within the county. This population experiences disproportionate health issues due to higher rates of physically demanding professions (sometimes within seasonal industries), increased risk of injury and chronic pain, and barriers to consistent healthcare. Residents in rural, frontier, and tribal communities are impacted due to distance and limited treatment options. This population can be reached through places they already utilize such as emergency rooms, clinics, ambulances, and tribal health centers.

The program will take place in Sagebrush County. It will be anchored in Juniper City but will extend outwards to the rural and tribal communities. The organizational setting will be the Public Health Department. Sagebrush County Health Department will work with the local ERs, hospitals, EMS, clinics, behavioral health providers, and even tribal health organizations. These settings will be used due to the target population primarily accessing healthcare through these emergency systems. By utilizing the existing systems and services, the program can address the continuity of care issues while remaining within the \$200,000 budget.

Literature Utilized to Understand the Health Issue

Source # & Brief Narrative	Source 1: This study on SUD highlights the critical role of treatment access, particularly MAT, with buprenorphine, in improving outcomes for individuals with opioid use disorder. Corredor-Waldron and Currie (2022), found that increased access to MAT reduced overdose incidents, decreased future emergency room visits, and improved continuity of care, though geographic disparities in provider availability influenced treatment outcomes. Key risk factors identified in this study include limited treatment access, high ER utilization, and gaps in continuity of care. Some identified protective factors include ongoing engagement with treatment and availability of providers. Evidence-based interventions emerging from this research include implementing better referral protocols, using peer recovery coaches, expanding culturally responsive MAT, and utilizing telehealth for rural populations. Some gaps include the focus on a single state,
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	predominantly Medicaid populations, and limited generalizability to rural areas.
Study Title	Tackling the Substance Use Disorder Crisis: The Role of Access to Treatment Facilities
APA Citation	Corredor-Waldron, A., & Currie, J. (2022). "Tackling the Substance Use Disorder Crisis: The Role of Access to Treatment Facilities". <i>Journal of health economics</i> , 81, 102579. https://doi.org/10.1016/j.jhealeco.2021.102579
Study Purpose/Primary Research Question	1. The primary purpose was to look at whether increased access to SUD treatment, mainly medication-assisted treatment (MAT) with Buprenorphine, would reduce opioid-related overdoses, ER utilization, and death. 2. The primary question was whether policy or provider expansion of treatment access results in improvements in SUD outcomes.
Population Involved	1. Individuals with opioid use disorder 2. Working age adults 3. Many participants were on medicaid or New Jersey residents.
Settings/Context	1. Statewide healthcare system context and utilized administrative claims data. 2. The settings were hospitals, ER departments, outpatient addiction treatment providers, and community-based healthcare services.
Key Findings Relevant to the Final Project Topic	1. Increased access to MAT was associated with reduced overdose incidents 2. Patients who initiated buprenorphine were less likely to experience future ER visits 3. Treatment access improved the continuity of care 4. Geographic disparities in provider availability influenced treatment and outcomes
Relevance to Target Population	1. Focuses on working age adults 2. Examines individuals interacting with ER 3. Demonstrates the link between improved outcomes and ongoing treatment 4. Highlights the importance of provider availability

Relevance to Health Problem	1. Lack of continuation of care 2. High ER utilization 3. Limited treatment access 4. Geographic and provider shortages
Implications for Program Planning	1. Implement screening and immediate referral for treatment 2. Establish protocols for handing off patients from ER to outpatient providers 3. Utilize peer recovery coaches to improve follow up 4. Partner with tribal health services to expand culturally responsive MAT access 5. Explore telehealth options for rural residents
Planned Use in Final Program Plan	1. Justifies the need for improved follow up treatment after overdoses 2. Provides empirical evidence for treatment reducing future harm 3. Supports the allocation of funds toward care coordination rather than only prevention education 4. Strengthen the evidence for MAT
Gaps or Limitations Noted in the Literature	1. Conducted in only one state and it was not generalizable to rural sagebrush county 2. Focused primarily on medicaid populations 3. May not account for geographical isolation 4. The data may not have info on all overdose events
Source #	Source 2: Button et al. (2023) found that having a cell phone and internet access was associated with higher participation in MOUD and SUD counseling, whereas lack of access corresponded with lower treatment engagement. Key risk factors include geographic isolation, limited healthcare infrastructure, and technology gaps. Some protective factors include reliable communication tools that enable telehealth and family support. The findings suggest assessing technology access during patient encounters, providing lower cost phones, offering hybrid services, and creating educational resources for families. Gaps include the study's focus on individuals rather than family involvement, limiting generalizability to

	current telehealth environments, and lack of analysis for tribal populations.
Study Title	Substance use disorder treatment and technology access among people who use drugs in rural areas of the United States: A cross-sectional survey.
APA Citation	Button, D., Levander, X. A., Cook, R. R., Miller, W. C., Salisbury-Afshar, E. M., Tsui, J. I., Ibragimov, U., Jenkins, W. D., Westergaard, R. P., & Korthuis, P. T. (2023). Substance use disorder treatment and technology access among people who use drugs in rural areas of the United States: A cross-sectional survey. <i>The Journal of rural health : official journal of the American Rural Health Association and the National Rural Health Care Association</i> , 39(4), 772–779. https://doi.org/10.1111/jrh.12737
Study Purpose/Primary Research Question	The purpose of the study was to evaluate how access to technology affects engagement in SUD treatment among people who use drugs in rural areas prior to COVID-19. The research question examined whether technology access was associated with greater participation in MAT and SUD counseling services.
Population Involved	1. The study included 3,026 individuals from rural areas. 2. Study was conducted across 10 U.S. states who reported injection drug or opioid use in the prior 30 days. 3. 71% of participants used heroin and 76% used methamphetamine
Settings/Context	The study was conducted through the Rural Opioid Initiative and focused specifically on rural communities across multiple states. They looked at limited treatment, geographic isolation, reduced healthcare infrastructure, transportation barriers, and variable access to technology.
Key Findings Relevant to the Final Project Topic	1. Having a cell phone and internet access was associated with more MOUD use and higher likelihood of SUD counseling. 2. Lack of cellphone was associated with fewer MOUD use and lower likelihood of counseling.

	3. 35% had no cell phone access and 10% had no internet access
Relevance to Target Population	1. Families often help coordinate appointments and transportation. 2. Families may be the primary support system for telehealth engagement. 3. Lack of technology access affects not only treatment participation but also communication between providers and families. 4. Family members in rural and tribal communities may also lack reliable internet or phone access, limiting their ability to receive education, support, or crisis guidance.
Relevance to Health Problem	This study highlights a barrier, technology access, that directly affects continuity of care. Even if telehealth services exist, families and individuals cannot engage without cell phone and internet access. This is especially critical for rural and tribal households.
Implications for Program Planning	1. Assessing technology access during ER encounters or follow-up contact. 2. Providing low-cost cell phones or prepaid minutes for high-risk families. 3. Offering hybrid models to reduce exclusion. 4. Partnering with tribal health organizations to expand mobile network access. 5. Creating printed educational materials for families who lack internet access. 6. Establishing phone-based family support lines rather than internet-only programs.
Planned Use in Final Program Plan	1. Justify inclusion of technology access screening in the intervention. 2. Support funding allocation toward communication infrastructure 3. Strengthen the rationale for offering multiple engagement formats 4. Demonstrate that structural barriers also affect treatment continuity.
Gaps or Limitations Noted in the Literature	1. The study focused on individuals with SUD rather than family members. 2. It was cross-sectional, limiting causal interpretation.

	3. Conducted pre-COVID, so telehealth expansion patterns may have changed. 4. Did not specifically examine tribal populations. 5. Did not assess family involvement in treatment engagement.
Source #	Source 3: D’Onofrio et al. (2023) shows an implementation facilitation (IF) approach increased ED-initiated buprenorphine and improved 30-day treatment engagement, while also expanding the number of X-waivered clinicians able to prescribe MAT. Key risk factors addressed include gaps in continuity of care after overdose, reliance on EDs as primary care, and social vulnerabilities such as unstable housing. Protective factors included early initiation of evidence-based treatment, structured clinician support, and coordinated referral pathways. Some of the study’s implications include integrating ED-initiated buprenorphine protocols, training local clinicians, establishing community and tribal partnerships, and addressing social determinants to enhance engagement. Some limitations involve the urban setting, small number of sites, and lack of inclusion of patients who declined receiving treatment.
Study Title	Implementation Facilitation to Promote Emergency Department-Initiated Buprenorphine for Opioid Use Disorder.
APA Citation	D’Onofrio, G., Edelman, E. J., Hawk, K. F., Chawarski, M. C., Pantaloni, M. V., Owens, P. H., Martel, S. H., Rothman, R., Saheed, M., Schwartz, R. P., Cowan, E., Richardson, L., Salsitz, E., Lyons, M. S., Freiermuth, C., Wilder, C., Whiteside, L., Tsui, J. I., Klein, J. W., Coupet, E., ... Fiellin, D. A. (2023). Implementation Facilitation to Promote Emergency Department-Initiated Buprenorphine for Opioid Use Disorder. <i>JAMA network open</i>, 6(4), e235439. https://doi.org/10.1001/jamanetworkopen.2023.5439
Study Purpose/Primary Research Question	To evaluate whether implementation facilitation (IF), a multicomponent educational and support strategy,

	increases adoption of emergency department (ED) initiated buprenorphine and engagement in opioid use disorder (OUD) treatment compared with traditional grand rounds lectures.
Population Involved	1. 756 patients with moderate to severe OUD (aged 18+) 2. Predominantly male 3. (71.4%) with diverse racial/ethnic backgrounds 4. Many experiencing unstable housing (57%) and using the ED as their primary source of care. 5. ED and community clinicians across 4 urban academic EDs also participated
Settings/Context	1. Four urban, academic emergency departments in the U.S.: Johns Hopkins Hospital (Baltimore, MD), Mount Sinai Beth Israel (New York, NY), University of Cincinnati Medical Center (Cincinnati, OH), and Harborview Medical Center (Seattle, WA). 2. The study compared pre-post baseline grand rounds versus a 6-month IF strategy, integrating ED protocols with community referral systems.
Key Findings Relevant to the Final Project Topic	1. IF increased ED-initiated buprenorphine from 0.5% to 14.6% of eligible patients. 2. Engagement in OUD treatment at 30 days increased from 10.2% to 16.3%. 3. ED clinicians with X-waivers increased from 11 to 196, showing expanded capacity for treatment. 4. Patients receiving ED-initiated buprenorphine were more likely to continue treatment at 30 days (35.8% vs 12.9%).
Relevance to Target Population	1. Highlights the effectiveness of initiating SUD treatment in EDs for adults (25–54) who rely on emergency care due to work schedules, rural location, or limited treatment access. 2. Strategies like IF can be adapted for Sagebrush County to improve post-overdose treatment continuity for working-age adults and their families.

Relevance to Health Problem	1. Addresses gaps in care continuity after overdose, a major factor contributing to SUD-related health disparities in rural and tribal communities. 2. Demonstrates that structured implementation strategies improve access and engagement in evidence-based treatment.
Implications for Program Planning	1. EDs and local clinics should integrate protocols for initiating buprenorphine and facilitate follow-up care. 2. Implementation facilitation can be used to train local clinicians, develop site-specific protocols, and establish partnerships with tribal and rural health providers. 3. Highlights need for addressing social determinants of health to maximize treatment engagement.
Planned Use in Final Program Plan	This study includes an ED-initiated treatment pathway in Sagebrush County's program plan, incorporating clinician training, referral systems, and family engagement strategies to ensure continuity of care after overdoses.
Gaps or Limitations Noted in the Literature	1. Conducted in urban, academic EDs, limiting generalizability to rural settings. 2. Observational cohorts did not include patients who refused buprenorphine, possibly underestimating uptake. 3. A small number of study sites may limit insights.

Source #	Source 4: Hogue et al. (2021) found in their study, that structured family engagement, through CRAFT, Strategic Structural Systems Engagement, family psychoeducation, and shared decision-making helps treatment initiation, retention, medication adherence, and long-term recovery outcomes. The main risk factors for this population include low treatment engagement, developmental challenges related to autonomy, and disparities in access to MOUD, while some protective factors include active family support and increased emotional, social, and financial
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	resources. Some implications moving forward involve integrating family-based behavioral treatments, providing telehealth options for family participation, addressing stigma and confidentiality, and including families in recovery planning and programs. Some limitations in the study include limited empirical research on family involvement in recovery support, few validated family screening tools, and lack of structured interventions targeting family self-care.
Study Title	Family Involvement in Treatment and Recovery for Substance Use Disorders Among Transition-Age Youth: Research Bedrocks and Opportunities
APA Citation	Hogue, A., Becker, S. J., Wenzel, K., Henderson, C. E., Bobek, M., Levy, S., & Fishman, M. (2021). Family involvement in treatment and recovery for substance use disorders among transition-age youth: Research bedrocks and opportunities. <i>Journal of substance abuse treatment</i> , 129, 108402. https://doi.org/10.1016/j.jsat.2021.108402
Study Purpose/Primary Research Question	To provide a narrative review and conceptual framework examining how family involvement can be integrated across the full continuum of substance use disorder (SUD) services for transition-age youth (ages 15–26).
Population Involved	Transition-age youth (15–26 years old) with substance use disorders, including opioid use disorder (OUD), and their families.
Settings/Context	1. Outpatient treatment 2. Residential/inpatient programs 3. Medication for opioid use disorder (MOUD) services 4. Recovery support services 5. Primary care and community-based systems
Key Findings Relevant to the Final Project Topic	1. Families are powerful but underutilized resources in youth SUD treatment. 2. Family-based treatments demonstrate stronger outcomes than many individual-only approaches. 3. Family involvement improves: Treatment engagement, retention, medication adherence,

	and long-term recovery outcomes 4. Evidence-based engagement models such as CRAFT and Strategic Structural Systems Engagement improve treatment entry. 5. Family psychoeducation and shared decision-making enhance MOUD adherence. 6. Family support increases “recovery capital,” including emotional, financial, and social resources. 7. There is limited research on structured family involvement in recovery support and family self-care.
Relevance to Target Population	1. Experience low treatment engagement rates 2. Face developmental challenges related to autonomy and independence 3. Require sustained support beyond initial treatment
Relevance to Health Problem	1. Low MOUD utilization rates among youth 2. High overdose risk 3. Disparities in access 4. The article supports family-centered strategies to increase: Early identification of OUD, treatment initiation, medication adherence, and long-term recovery stability
Implications for Program Planning	1. Incorporate structured family engagement strategies at intake. 2. Use family-based behavioral treatment models. 3. Provide family psychoeducation on OUD and MOUD. 4. Integrate shared decision making practices. 5. Develop family-inclusive recovery planning. 6. Offer telehealth options to increase family participation. 7. Address family stigma and confidentiality concerns.
Planned Use in Final Program Plan	1. Justification for including family engagement components in an ED-initiated MOUD linkage program 2. Development of family education sessions 3. Creation of a family navigator or peer support role

	4. Incorporation of telehealth-based family sessions 5. Recovery planning that includes family collaboration
Gaps or Limitations Noted in the Literature	1. Limited empirical research on family involvement in recovery support services. 2. Few validated tools for professional family screening. 3. Lack of structured family self-care interventions.

Source #	Source 5: Seaberg et al. (2024) found that incorporating Addiction Care Coordinators into an ED-based MOUD program improved instances of ongoing care, helped patients overcome transportation and financial barriers, and enhanced patient reported outcomes. Some of the risk factors include transportation instability, financial hardship, limited access to psychiatric care, and employment barriers. Some of the identified protective factors involve coordinated care, telehealth access, and peer support. Interventions in this study include care coordination, SDOH screening, transportation and financial assistance, telehealth services, and low-threshold treatment models. Initial gaps include the small, mostly White sample, single health system setting, and limited generalizability.
Study Title	Emergency Department-Based Medication for Opioid Use Disorder Program: Addressing Gaps in Linkages to Care.
APA Citation	Seaberg, D. C., McKinnon, J., Haselton, L., Reuter, Q., Kolb, J., Vellanki, S., & Jouriles, N. (2024). Emergency Department-Based Medication for Opioid Use Disorder Program: Addressing Gaps in Linkages to Care. <i>Cureus</i> , 16(6), e62927. https://doi.org/10.7759/cureus.62927
Study Purpose/Primary Research Question	To examine the social determinants of health affecting patients entering an emergency department (ED)-based medication for opioid use disorder (MOUD) program and to evaluate the effectiveness of Addiction Care Coordinators (ACCs) in improving

	linkage to ongoing care and addressing barriers to treatment retention.
Population Involved	1. 60 patients with opioid use disorder (OUD) initiated on MOUD 2. 19 participated in interviews/focus groups (16 completed full survey) 3. Mean age: 42 years 4. 94% White 5. 65–68% male 6. Conducted in Ohio
Settings/Context	1. Two hospital-based EDs 2. Two freestanding EDs 3. Summa Health “First Step” ED-based MOUD program 4. Included telemedicine expansion supported by an Ohio Department of Mental Health and Addiction Services grant 5. The program utilized the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model and Addiction Care Coordinators (ACCs).
Key Findings Relevant to the Final Project Topic	1. ACCs were highly valued: 93% found ACCs helpful in coordinating follow-up and overcoming barriers. ACCs improved engagement and linkage to community treatment. 2. Transportation and financial barriers were significant: Nearly 40% experienced transportation or financial challenges. These were the most prevalent barriers. 3. Telemedicine was well accepted: Over 90% were comfortable with telehealth services. All participants had access to cell phones. 4. Program improved patient-reported outcomes: Majority reported improved overall health. Many felt increased control over their lives and improved recovery support. 5. Linkage to care improved but gaps remain: Some participants still experienced difficulty scheduling follow-ups or securing transportation.

Relevance to Target Population	1. Transportation instability 2. Financial hardship 3. Employment barriers 4. Limited access to psychiatric care
Relevance to Health Problem	1. Directly addresses gaps in linkage to care following ED-initiated MOUD, which is a critical weakness in the OUD treatment continuum. 2. Demonstrates that addressing SDOH improves treatment engagement and retention—key factors in reducing overdose morbidity and mortality.
Implications for Program Planning	1. Integration of Addiction Care Coordinators (ACCs) or case managers 2. Formal SDOH screening during ED visits 3. Transportation assistance programs 4. Financial navigation support 5. Telehealth continuation services 6. Peer recovery specialist integration 7. Low-threshold access models
Planned Use in Final Program Plan	1. Justify inclusion of care coordination roles 2. Support implementation of SDOH screening tools 3. Advocate for telehealth continuation services 4. Strengthen the linkage-to-care framework in the program design 5. Provide outcome data demonstrating patient satisfaction and perceived benefit
Gaps or Limitations Noted in the Literature	1. Small sample size 2. Single health system (limited generalizability) 3. Majority White population 4. Convenience sampling 5. Survey not independently validated by researchers 6. Short study timeframe
Source #	Source 6: Meyers et al. (2025) found through their study that telehealth implementation significantly increased MOUD access and improved treatment

	initiation and retention. Some risk factors addressed include rural provider shortages, transportation challenges, stigma, and geographic isolation, while some protective factors include flexible telehealth delivery and hybrid models that support ongoing engagement. Some of the study's implications include integrating telehealth into rural treatment programs, providing workforce training, implementing virtual drug screening, and advocating for sustainable reimbursement policies. Gaps in this study include reliance on self-reported program data and an observational study design.
Study Title	The opioid epidemic in rural communities: Can telehealth increase access to medications for opioid use disorder and offset barriers to care?
APA Citation	Meyers, K., Herman, S., Schuler, H., Mun, C., Bresani, E., & Payne, R. K. (2025). The opioid epidemic in rural communities: Can telehealth increase access to medications for opioid use disorder and offset barriers to care?. <i>Drug and alcohol dependence</i> , 271, 112628. https://doi.org/10.1016/j.drugalcdep.2025.112628
Study Purpose/Primary Research Question	To examine whether telehealth use in rural communities increases access to medications for opioid use disorder (MOUD), improves treatment retention, and offsets structural barriers to care. The study also evaluated sustainability challenges related to telehealth-delivered MOUD.
Population Involved	1. 92 project directors of rural opioid response consortia 2. Data representing rural service areas across the United States 3. Indirectly reflects rural individuals with OUD needing MOUD services
Settings/Context	1. Rural U.S. communities 2. Rural Communities Opioid Response Program (RCORP) consortia 3. Post-COVID-19 telehealth expansion environment
Key Findings Relevant to the Final Project Topic	1. Telehealth significantly expanded access: Reduced the number of rural counties without

	OUD treatment access by 49%. Telehealth use among consortia increased by 72% during the first year of COVID-19. 2. Improved MOUD provision and retention: Consortia using telehealth had significantly higher MOUD initiation rates. Higher rates of retention (≥ 3 months). 4.5 times greater odds of meeting the national prevalence benchmark for MOUD provision compared to non-telehealth programs. 3. Telehealth addressed key rural barriers: Transportation challenges, workforce shortages, stigma, and geographic isolation 4. Barriers to sustainability: Belief that in-person care is more effective, concern about concealed substance use, need for reimbursement assurance, and staff discomfort with telehealth delivery
Relevance to Target Population	1. Lack access to nearby MOUD providers 2. Experience transportation and geographic barriers 3. Face workforce shortages in addiction treatment 4. Encounter stigma in small communities
Relevance to Health Problem	1. Addresses rural disparities in OUD treatment access and retention. 2. Demonstrates that telehealth can substantially close the MOUD access gap in rural counties, which is critical in preventing overdose mortality.
Implications for Program Planning	1. Integration of telehealth-based MOUD delivery 2. Hybrid treatment models 3. Workforce training on telehealth effectiveness 4. Virtual drug screening protocols 5. Policy advocacy for sustainable reimbursement 6. Addressing provider misconceptions about telehealth efficacy
Planned Use in Final Program Plan	1. Justify inclusion of telehealth MOUD services 2. Support rural expansion strategies 3. Provide quantitative evidence of improved

	retention outcomes 4. Strengthen policy advocacy section related to reimbursement and telehealth regulation 5. Address sustainability considerations
Gaps or Limitations Noted in the Literature	1. Observational design 2. Self-reported program data

Needs Assessment

Description of the Health Problem

Substance use disorder (SUD) remains a critical public health issue within Sagebrush County. In Assignment 1, SUD and overdose were identified as significant and growing concerns within rural Sagebrush. However, beyond the health consequences for individuals with SUD and overdose, the broader impact on family members has received little to no attention. Families often serve as primary caregivers, emotional supporters, and first responders during overdose events; However, families frequently lack education, resources, and support. The CDC reported that rural communities across the United States have experienced disproportionately high overdose mortality rates compared to urban counterparts (Centers for Disease Control and Prevention [CDC], 2026). This is largely due to limited access to behavioral health services and in turn, worsened outcomes (CDC, 2026). Additionally, opioid related overdoses have increased nationally over the past decade, due to rural counties facing higher rates of treatment shortages and longer travel distances (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023). Due to these factors, families in Sagebrush often experience the effects and burdens of SUD. Despite these effects on families, the resources provided are typically created to treat those with SUD and overdose rather than their family systems. This system can lead to caregiver burnout, secondary trauma, stigma, and reduced support for individuals with SUD and their recovery.

Community and Population Data

Sagebrush is characterized by a mostly rural population with high rates of poverty and nontraditional employment. Sagebrush's economic instability, limited education, and reduced access to healthcare are factors associated with increased vulnerability to substance misuse (Rural Health Information Hub, 2023). Due to the community's small population and transportation barriers, Sagebrush experiences accessibility issues to behavioral health services. In rural communities, similar to Sagebrush, epidemiologic patterns indicate elevated rates of opioid prescribing, increasing methamphetamine use, and higher overdose mortality compared to urban areas (CDC, 2026). Additionally, emergency rooms frequently serve as the main points of healthcare for overdose incidents (SAMHSA, 2023). Additionally, the follow up services and recovery resources are often limited (SAMHSA, 2023). These patterns suggest that the families in Sagebrush are likely experiencing repeated overdoses, relapse, and chronic stress associated with caring for family members. Additionally, the stigma surrounding substance use in rural communities is often high; Stigma prompts families to feel shame and may cause them to avoid seeking help. Furthermore, many families lack formal education about addiction and SUD as a chronic condition, harm reduction, or overdose response protocols. This can create confusion about how to support, set boundaries, and deal with emotional stress. Structural barriers further

these challenges, due to the County's limited behavioral health providers, and few specialized treatment centers. Some services may exist for those with SUD, but there are little to no services for family members. From the available data, there are several indicators that family members of individuals with SUD in Sagebrush County are impacted. The health problem exists not only because of SUD itself, but also because of barriers to care, service shortages, stigma, and limited family/caregiver interventions.

Justification for Program Focus

Targeting families of individuals impacted by SUD and overdose is an appropriate public health program focus for several reasons. First, families play a central role in supporting recovery, encouraging treatment, and responding to overdose events. Strengthening their knowledge and emotional well-being helps support those with SUD and helps in recovery outcomes. Second, families represent an audience that is often more reachable and stable than individuals currently experiencing SUD/overdose; Families as this program's target population makes engagement more feasible. The Sagebrush County Health Department is an appropriate setting due to its established role with public health programs, community trust, and ability to create prevention initiatives. Doing the program within the health department allows the program to combine with existing services such as distributing naloxone, health referrals, and health education programs. A family focused program is realistic within a \$200,000, two-year budget; The budget could support a program coordinator, stipends for trained peer facilitators, educational materials, naloxone kits, and evaluation activities. Additionally, partnerships with existing community programs would make a larger impact while maintaining within budget. The information and findings in this assessment demonstrate the importance of incorporating trauma-informed approaches, peer support, overdose response education, and outcomes related to caregiver stress, knowledge, and self-efficacy. The future program objectives will focus on increasing family members' knowledge of SUD, improving coping skills, and enhancing preparedness to respond to overdose events. By addressing a clearly defined and underserved population, this public health program provides a focused, feasible, and supported response to the substance use crisis in Sagebrush County.

Identified Needs, Gaps, and Priorities

1. Education: Families need accurate information about addiction, recovery, relapse patterns, harm reduction, and overdose responses.
1. Mental Health Support: Caregivers need support for their stress, anxiety, and secondary trauma.
2. Opportunities for Connection: Opportunities to connect with those experiencing similar issues in their families.
3. General Assistance: Families may need help understanding and accessing treatment and recovery services.

Significant gaps in healthcare service exist in Sagebrush; There are no trauma-informed programs designed for family members of those with SUD. Existing services focus primarily on the individual with SUD rather than the family. Additionally, transportation barriers and community stigma reduce utilization of available services. Education on naloxone and overdose response may not be currently offered to family members, increasing risk during emergencies. Given the budget and program scope, the most realistic priority to address within a \$200,000 two-year time period, is the development of a Family Support and Education Program within the County Health Department. Rather than trying to reduce overall SUD prevalence directly, the

program would look to strengthen family resources, improve coping skills, and increase overdose response preparedness. This focus is achievable and aligned with community needs.

Mission Statement, Goals, and Objective

Mission Statement

The mission of the Sagebrush County program is to strengthen families affected by substance use disorder (SUD) and overdose by providing trauma informed education, peer support, coping skills, and overdose response training through the Sagebrush County Health Department over a two year period. This mission reflects the identified public health problem, SUD and overdose, the target population of family members of individuals impacted by SUD, and the selected setting within the County Health Department. The program focuses on strengthening families rather than targeting the individuals with SUD themselves.

Program Goals

Goal 1: Increase family members' knowledge of SUD, recovery processes, harm reduction strategies, and overdose response.

Goal 2: Improve coping skills, self-efficacy, and emotional wellbeing among family caregivers affected by SUD.

Goal 3: Enhance families' preparedness to respond to overdose events and ability to navigate treatment and recovery resources within the County.

These goals directly address the identified needs, lack of education, caregiver stress, secondary trauma, limited connection opportunities, and difficulty accessing services. The goals are realistic within the budget of a \$200,000 program within the County Health Department.

SMART Program Objectives

Goal 1: Increase Knowledge and Education

Objective 1.1:

By the end of Year 2, at least 80% of participating family members will demonstrate a minimum 25% increase in knowledge of SUD as a chronic condition, relapse patterns, harm reduction, and local treatment resources, as measured by assessments before and after program implementation.

Objective 1.2:

After 2 years, the program will have delivered at least 8 family education series a year, each consisting of multiple sessions, reaching a minimum of 120 family participants.

Goal 2: Improve Coping Skills and Emotional Well-Being

Objective 2.1:

By the end of each 8-week education and support series, at least 70% of participants will report improved confidence and reduced caregiver stress, as measured by a self-efficacy and stress scale administered assessments before and after implementing the program.

Objective 2.2:

By the twelfth month, the program will establish at least two ongoing peer-led family support groups facilitated by trained peer facilitators, with an attendance of at least 8 participants per session.

Goal 3: Enhance Overdose Preparedness and Service Navigation**Objective 3.1:**

By the end of the second year, at least 100 family members will complete overdose response training, and 90% of participants will demonstrate correct naloxone administration steps during a demonstration/examination.

Objective 3.2:

By the end of the full program, at least 75% of participating families will report increased confidence in accessing and navigating local treatment and recovery services, as measured through follow up surveys or assessments.

Alignment and Feasibility

These objectives are:

- **Specific:**
 - Clearly define family members as the target population
- **Measurable:**
 - Include percentages & participation numbers
- **Achievable:**
 - Reasonable participation targets within the setting
- **Relevant:**
 - Directly tied to identified education, stress, connection, and overdose preparedness needs
- **Time-bound:**
 - All objectives are set within the 2 year program period

The scope remains feasible within the \$200,000 budget by supporting:

- One program coordinator
- Stipends for trained peer facilitators
- Educational materials
- Naloxone kits and training supplies
- Evaluation tools
- Partnership development within the Health Department

Program Description

The Sagebrush County Family Support and Education Program is a two-year, county-based intervention designed to support families affected by substance use disorder (SUD) and overdose. The program is implemented through the Sagebrush County Health Department and targets adult family members and caregivers of individuals with SUD living in a rural, underserved community. The program addresses gaps in caregiver education, emotional support, coping skills, and overdose response preparedness.

Families in Sagebrush County experience high levels of caregiver burden, stigma, limited access to behavioral health services, and lack of structured support systems. The program is designed to reduce these burdens by providing structured education, peer support, and overdose response training while strengthening family functioning and resilience.

The program integrates trauma-informed education, peer-led support groups, and naloxone training to improve caregiver capacity and confidence in responding to substance use-related challenges.

Program Components

1. 8-Week Family Education Sessions

Each cohort participates in an 8-week structured curriculum delivered once per week for 60–75 minutes. Sessions are co-facilitated by the Program Coordinator and trained Peer Facilitators.

- Guided instruction on SUD as a chronic condition, relapse patterns, and recovery processes
- Interactive case discussions based on real-world caregiving scenarios
- Skills practice in communication strategies and boundary setting
- Harm reduction and overdose prevention education
- Resource navigation exercises (how to access local treatment services)
- Participants complete a pre-assessment during Week 1 and a post-assessment during Week 8.
- Attendance is tracked each session to monitor participation and program reach.

2. Peer-Led Support Groups

Weekly 90-minute peer support groups are facilitated by trained Peer Facilitators under supervision of the Program Coordinator.

- Structured check-in and emotional support circle
- Peer modeling of coping strategies and stress management
- Discussion of challenges related to caregiving and relapse events
- Reinforcement of skills learned in education sessions
- Referral support when crisis needs are identified
- Peer facilitators document attendance and key engagement themes after each session.

3. Overdose Response & Naloxone Training

Quarterly training sessions are conducted by the Program Coordinator with assistance from Peer Facilitators.

- Instruction on recognizing opioid overdose signs
- Step-by-step naloxone administration demonstration
- Hands-on participant practice using training kits
- Emergency response planning exercises
- Distribution of naloxone kits upon completion
- Participants must demonstrate correct naloxone administration to complete training.

4. *Recruitment & Delivery*

Participants are recruited through the health department, clinics, emergency departments, and community partners. Outreach includes social media, flyers in frequented areas, and referrals. Sessions are scheduled at times accessible to working caregivers, and transportation support is coordinated to reduce issues from geographic/rural barriers to care.

- Enrollment occurs on a rolling basis, with new participants entering at the start of each education cohort cycle.

Theoretical Framework

The Social Cognitive Theory (SCT) explains how individual experiences, the actions of others, and environmental factors interact to influence health behaviors (Rural Health Information Hub, 2025). The SCT is particularly useful for Sagebrush and its family-based program, because it demonstrates the importance of caregivers' self-efficacy, education through observation, and belief in capability. The Rural Health Information Hub (RHIB) defines 7 steps within the SCT, those being self-efficacy, behavioral capability, expectations, expectancies, self-regulation, observational learning, and reinforcements (RHIB, 2025). In the Sagebrush County Program, SCT provides a framework to enhance knowledge, skills, and confidence in supporting family members with SUD or overdose. SCT guides the program's design to promote social support, demonstrate adaptive behaviors, and reinforce skills for a higher likelihood of long-term behavior change for caregivers.

1. *Self-Efficacy*

Caregivers build confidence in their ability to support loved ones, respond to overdose situations, and manage caregiving stress through repeated skill practice and peer support.

2. *Behavioral Capability*

Participants gain knowledge and practical skills related to SUD, harm reduction, communication, and overdose response through structured education and hands-on training.

3. *Expectations & Expectancies*

Participants learn likely outcomes of engaging in supportive caregiving behaviors, including improved safety, reduced overdose risk, and improved family communication.

4. *Self-Regulation*

Caregivers are taught to monitor emotional responses, practice coping strategies, and manage stress through reflection tools and peer accountability.

5. *Observational Learning*

Peer facilitators model effective coping strategies, communication techniques, and overdose response behaviors, allowing participants to learn through demonstration.

6. *Reinforcements*

Positive reinforcement occurs through peer encouragement, facilitator feedback, and observed success in applying skills in real-life situations.

7. *Reciprocal Determinism*

The program emphasizes the interaction between individuals, behaviors, and environment. For example, supportive peer groups (environment) increase caregiver confidence (personal factor), which leads to increased use of coping and overdose response skills (behavior), which in turn strengthens the support network (environment).

Program Implementation Plan

Phase 1: Planning & Development (Months 1–3)

- Hire Program Coordinator and recruit Peer Facilitators
- Train facilitators in trauma-informed care and overdose response education
- Develop standardized 8-week curriculum and training materials
- Establish referral partnerships with clinics and emergency departments
- Set up attendance tracking and evaluation systems

Phase 2: Partial Implementation (Months 4–6)

- Launch first education cohort (8-week cycle)
- Begin weekly peer support groups
- Conduct first overdose response training session
- Collect pre/post data and participant feedback
- Adjust curriculum based on pilot results

Phase 3: Full Implementation (Months 7–24)

- Run 4 education cohorts per year (rolling enrollment)
- Maintain weekly peer support groups
- Conduct quarterly overdose response trainings
- Provide ongoing participant follow-up and referrals
- Monitor participation, retention, and engagement trends
- Conduct continuous quality improvement based on evaluation findings

Staffing & Roles

- **Program Coordinator:** Oversees program delivery, evaluation, training, curriculum fidelity, and partnerships
- **Peer Facilitators:** Lead support groups, model coping strategies, and assist with education sessions
- **Community Partners:** Provide referrals, recruitment support, and linkage to treatment services

- **Health Department Administration:** Provides infrastructure, funding oversight, and facility support

Barriers & Facilitators

Common barriers include stigma, scheduling challenges, and transportation. These problems will be addressed through flexible programming and partners. Facilitators include existing community trust in public health services and the use of peer support, which has been shown to enhance engagement and reduce isolation (Gleason-Comstock et al., 2024).

Logic Model Table

Inputs	Activities	Outputs	Short-term outcomes	Intermediate outcomes	Long term outcomes
<i>Program coordinator</i>	8-week structured family education sessions	Number of education sessions delivered	Increased knowledge of SUD, harm reduction, and overdose response	Increased caregiver self-efficacy	Reduced overdose related harm in families and community
<i>Peer Facilitators</i>	Weekly peer-led support groups focused on coping, communication, and shared lived experience	Number of support group sessions held	Increased understanding of harm reduction strategies	Improved coping skills and emotional regulation	Improved family functioning and stability
<i>Health department facilities</i>	Quarterly naloxone training sessions with hands-on overdose response practice	Number of participants trained in naloxone administration	Increased awareness of overdose risk and prevention strategies	Increased overdose response preparedness and confidence	Improved family functioning and stability

<i>Community Partners</i>	Outreach and recruitment activities (referrals, flyers, community engagement)	Number of participants enrolled and retained	Increased engagement with harm reduction and recovery resources	Increased utilization of treatment and recovery services	Sustained recovery support systems in the community
Funding	Distribution of naloxone kits and harm reduction materials	Number of naloxone kits distributed	Increased knowledge of naloxone use	Increased willingness to intervene in overdose situations	Reduced overdose mortality risk
Educational materials	Resource navigation and referral support embedded within sessions	Number of referrals made to community services	Increased knowledge of available services	Improved access to care and support systems	Stronger community infrastructure

Budget and Program Resources

Program Resources

The Sagebrush County Family Support and Education Program will rely on a combination of human, material, and community resources to deliver effective education, peer support, and overdose response training over the 2 year period.

The program will be staffed by one full-time program coordinator responsible for overall logistics, curriculum oversight, and evaluation management. Two trained peer facilitators will assist with weekly support groups and mentor families, using lived experience to guide observational learning and build self-efficacy among participants.

Program materials will include curriculum packets for family education sessions, handouts for harm reduction strategies, stress management tools, and naloxone kits with accompanying administration instructions. Health department facilities will provide safe and accessible locations for group sessions, training, and meetings. Additionally, the program will leverage

existing community partnerships with clinics, social service organizations, and local outreach programs to support recruitment, referral, and resource navigation.

To ensure program evaluation and continuous improvement, evaluation tools such as pre- and post-session knowledge assessments, stress and self-efficacy surveys, and naloxone administration checks will be provided. These resources will allow the program team to track progress toward objectives, make iterative adjustments, and report outcomes to stakeholders.

Overall, these program resources are designed to maximize engagement, effectiveness, and sustainability of interventions while addressing identified barriers, such as caregiver stress, stigma, and geographic access challenges. By integrating human, material, and community assets, the program is positioned to strengthen families and improve preparedness in responding to substance use and overdose events.

Budget Narrative and Justification

The Sagebrush County program has a total budget of \$200,000 over two years, allocated strategically to support personnel, materials, participant incentives, training, travel, evaluation, and administrative costs.

Personnel costs include the salary and benefits for the full-time program coordinator and stipends for two peer facilitators. Investment in trained staff ensures program fidelity, consistent support for families, and oversight of evaluation processes.

Materials and supplies costs cover educational packets, naloxone kits, session handouts, and other resources necessary to conduct trauma-informed education sessions, peer support groups, and overdose response training. These materials directly facilitate program activities and reinforce behavioral capability and self-efficacy constructs from the Social Cognitive Theory framework. Participant incentives are included to encourage ongoing engagement and attendance, particularly for families navigating competing responsibilities and potential barriers such as transportation. Training and professional development funding ensures that peer facilitators receive adequate preparation for leading groups and responding to sensitive situations effectively. Travel and outreach costs support community engagement, recruitment, and delivery of training sessions, particularly given Sagebrush County's rural geography. Evaluation costs cover data collection tools, scoring, and analysis for knowledge assessments, stress/self-efficacy scales, and naloxone demonstrations. Indirect and administrative costs include overhead associated with the Health Department, facility use, and general program administration, ensuring a sustainable and accountable program structure.

Budget Table

Budget Category	Year 1 (\$)	Year 2 (\$)	Total (\$)
Personnel	70,000	72,000	142,000
Materials & Supplies	5,000	5,000	10,000

Participant Incentives	2,000	2,000	4,000
Training & Professional Development	3,000	3,000	6,000
Travel & Outreach	3,000	3,000	6,000
Evaluation	3,000	3,000	6,000
Indirect/Administrative	10,000	10,000	20,000
Totals	96,000	98,000	194,000

Key Budget Details

Personnel

The full-time program coordinator salary and two peer facilitator stipends cover all staffing needs for program planning, delivery, and evaluation.

Materials & Supplies

Includes educational packets, naloxone kits, and handouts for sessions and training events, ensuring that families have the resources needed to apply learned skills.

Participant Incentives

Small incentives encourage attendance and engagement in family education sessions and peer support groups, particularly for families facing transportation or scheduling challenges.

Training & Professional Development

Costs for training peer facilitators in trauma-informed care, group facilitation, and overdose response to ensure safe and effective delivery.

Travel & Outreach

Supports recruitment, transportation assistance for participants, and community outreach efforts to engage families in rural areas.

Evaluation Costs

Covers pre- and post-program assessments, data collection, and analysis to track progress toward program objectives and measure outcomes.

Indirect & Administrative Costs

Includes facility usage fees, administrative support, and overhead associated with operating the program within the Sagebrush County Health Department.

Annotated Bibliography Interventions

Source #	Source 7
Study Title	Evaluation of post-discharge engagement for emergency department patients with opioid use history who received telehealth recovery coaching services
APA Citation	Watson, D.P., Phalen, P., Medcalf, S. <i>et al.</i> Evaluation of post-discharge engagement for emergency department patients with opioid use history who received telehealth recovery coaching services. <i>Subst Abuse Treat Prev Policy</i> 18, 9 (2023). https://doi.org/10.1186/s13011-023-00523-4
Study Purpose	The main purpose was to assess factors associated with successful post-discharge follow-up of patients with opioid use history who received peer recovery coach (PRC) services via telehealth in emergency departments (EDs).
Population involved	917 patients with a history of opioid use who engaged in telehealth PRC services across 13 EDs in Indiana.
Settings/Context	Emergency departments within a single health system, including both urban and rural hospitals, using telehealth PRC services from a central hub.
Key Findings	● Only 23% of patients had at least one successful PRC follow-up. ● Higher follow-up rates were associated with: employment at baseline, living in rural areas, and receiving at least one referral from PRC . ● Longer duration of the initial PRC telehealth interaction was associated with lower follow-up success. ● Post-COVID follow-up success rates were lower, but baseline call duration was the main predictor affected.
Relevance to Target Population	This study highlights engagement challenges and effective strategies (referrals, rural outreach) for individuals with opioid use disorder, directly aligning with the Sagebrush SUD program's focus on post-discharge support.
Relevance to Health Problem	Opioid use disorder treatment engagement is critical to reducing overdose risk and improving recovery

	outcomes. Telehealth PRC services can help address gaps in follow-up care.
Implications for Program Planning	• Incorporate structured follow-up protocols for patients after discharge. • Use telehealth PRCs with referral capabilities to increase engagement. • Focus on strategies that overcome barriers in both urban and rural settings. • Monitor baseline call duration to optimize engagement.
Planned Use in Final Program Plan	• Needs Assessment: Demonstrates the importance of structured post-discharge follow-up for opioid patients. • Program Description/Implementation: Justifies telehealth PRC strategy and referral integration. • Evaluation Plan: Provides metrics for measuring engagement success.
Gaps or Limitations	• Observational study, so causal inference is limited. • The majority of participants were white and male, limiting generalizability. • Only one health system in Indiana; results may not translate to other regions. • Telehealth modality may differ in effectiveness compared to in-person PRC services.

Source #	Source 8
Study Title	Implementation and engagement lessons from the Enhancing Permanency in Children and Families (EPIC) program for families affected by parental substance misuse
APA Citation	Shockley McCarthy, K., Price Wolf, J. & Dellor, E. Promoting permanency in families with parental substance misuse: lessons from a process evaluation of a multi-system program. <i>BMC Public Health</i> 22, 2261 (2022). https://doi.org/10.1186/s12889-022-14528-4

Study Purpose	To identify barriers, facilitators, and lessons learned in the implementation of and client engagement with the main components of the EPIC program, which targets families affected by parental substance misuse and involved in the child welfare system.
Population involved	Seventeen key EPIC program personnel (caseworkers, program administrators, and other staff) who provided perspectives on program implementation and family engagement.
Settings/Context	Community-based child welfare programs involving families affected by parental substance misuse. EPIC integrates multiple systems including courts, treatment services, and peer support.
Key Findings	• Peer Recovery Support (PRS): Strongest program component; provided experiential connection to families and critical informational support. Barriers included staff turnover and difficulty matching PRS to families. • Family Treatment Drug Court (FTDC): Effective in promoting accountability and support through judge-client relationships. Client attitudes toward court sometimes hindered engagement. • Medications for Opioid Use Disorder (MOUD): Facilitated stabilization and engagement but limited provider availability was a barrier. • Nurturing Parent Program (NPP): Relational skill-building had low perceived value and sometimes conflicted with sobriety-focused priorities. Tracking process outcomes is essential for program evaluation and increasing engagement.
Relevance to Target Population	Highlights multi-system strategies to support families impacted by parental substance misuse—a key focus for the Sagebrush SUD program when addressing household and intergenerational risks.
Relevance to Health Problem	Shows how substance use impacts family safety, child welfare outcomes, and long-term recovery, emphasizing the need for integrated interventions

	beyond individual treatment.
Implications for Program Planning	● Incorporate peer recovery support to strengthen engagement and information-sharing. ● Use family courts or coordinated oversight to balance accountability and support. ● Ensure access to MOUD for stabilization and ongoing recovery support. ● Track engagement and process outcomes to identify barriers early. ● Consider client perceptions and priorities when implementing skill-building or relational interventions
Planned Use in Final Program Plan	● Needs Assessment: Provides evidence of multi-level impacts of parental SUD on family and child welfare outcomes. ● Program Description/Implementation: Justifies multi-system approach including peer support, MOUD, and court-based interventions. ● Evaluation Plan: Highlights process metrics and engagement measures to monitor program effectiveness.
Gaps or Limitations	● Qualitative study with a small sample of program personnel; no direct client data. ● Findings may not generalize beyond the specific EPIC program or region. ● Relies on staff perspectives, which may introduce bias in evaluating engagement and barriers.

Source #	Source 9
Study Title	Adoption and Implementation of Family-Based Treatment in Substance Use Disorder Centers in the United States
APA Citation	Chou, J.L., Patton, R., Aletraris, L. <i>et al.</i> Examining Utilization of Family-Based Treatment in Substance Use Treatment Centers. <i>Contemp Fam Ther</i> 46, 267–279 (2024). https://doi.org/10.1007/s10591-024-09700-4
Study Purpose	To examine the prevalence of family-based treatment (FBT) in U.S. substance use disorder (SUD) treatment

	centers and to identify organizational characteristics associated with adoption of FBT.
Population involved	Data from 325 SUD treatment centers collected between 2009 and 2010, including information on center characteristics, treatment offerings, and client demographics.
Settings/Context	U.S.-based outpatient and residential SUD treatment facilities serving diverse populations, including adolescents and adults, with varying revenue sources and service models.
Key Findings	● FBT Adoption: 75% of centers offered FBT, but only 11% offered Brief Strategic Family Therapy (BSFT) and 14% offered Multisystemic Therapy (MST). ● Organizational Factors: Centers with higher individual therapy hours and greater adherence to 12-step programs were more likely to implement FBT. ● Client Characteristics: FBT adoption was lower in centers with higher proportions of unemployed or justice-involved clients. ● Revenue Sources: Private insurance revenue was positively associated with family participation; higher Medicaid revenue was associated with lower participation. ● Guidelines: Centers following ASAM criteria were more likely to offer FBT.
Relevance to Target Population	Demonstrates how organizational and client factors influence access to FBT, which is relevant when designing SUD programs that aim to engage families and improve treatment outcomes.
Relevance to Health Problem	Highlights the importance of including family in SUD treatment to improve engagement, outcomes, and cost-effectiveness, addressing intergenerational and relational aspects of substance misuse.
Implications for Program Planning	● Expand evidence-based family therapy options in SUD programs. ● Consider organizational factors (revenue, treatment hours, guideline adherence) when planning program implementation.

	● Target strategies to engage clients from underserved populations, including those involved with the justice system. ● Integrate both individual and family-focused interventions to optimize outcomes.
Planned Use in Final Program Plan	● Needs Assessment: Provides insight into gaps in FBT availability and barriers to family engagement. ● Program Description/Implementation: Supports inclusion of FBT as a core component of SUD treatment programs. ● Evaluation Plan: Suggests tracking family participation, adoption rates of evidence-based FBT, and client engagement metrics.
Gaps or Limitations	● Data are from 2009–2010, which may not reflect current practices. ● Cross-sectional analysis; causality cannot be inferred. ● Lacks direct client outcome data; relies on center-level reporting.

Source #	Source 10
Study Title	Telehealth Initiation of Buprenorphine for Opioid Use Disorder: Patient Characteristics and Outcomes
APA Citation	Nguyen, B., Zhao, C., Bailly, E., & Chi, W. (2024). Telehealth Initiation of Buprenorphine for Opioid Use Disorder: Patient Characteristics and Outcomes. <i>Journal of general internal medicine</i> , 39(1), 95–102. https://doi.org/10.1007/s11606-023-08383-1
Study Purpose	To examine patient characteristics associated with initiating buprenorphine treatment via telehealth and to evaluate how telehealth initiation impacts treatment access, quality, and health outcomes among adults with opioid use disorder (OUD).
Population involved	23,565 adult patients initiating buprenorphine treatment between March 1, 2020, and November 30, 2021, including 3,314 (14.1%) who used telehealth. Data were obtained from deidentified insurance claims.

Settings/Context	U.S. outpatient and community treatment settings during the COVID-19 pandemic, using telehealth as a mechanism to improve access to OUD care.
Key Findings	• Demographics & Telehealth Use: Younger patients, females, residents of the South or Midwest, rural areas, and higher-income neighborhoods were more likely to initiate buprenorphine via telehealth. • Engagement & Treatment Quality: Telehealth patients were more likely to remain engaged in OUD treatment (54.5% vs. 48.4%; AOR 1.29) and more likely to refill buprenorphine during the study period (83.6% vs. 79.0%; AOR 1.37). • Health Outcomes: Telehealth initiation was associated with a 36% lower opioid overdose rate compared with in-person initiation (adjusted incidence rate ratio 0.64). No significant differences were observed in OUD-related emergency department visits or hospitalizations.
Relevance to Target Population	Supports strategies to increase access to OUD treatment for underserved populations, particularly those in rural areas or with barriers to in-person care. Demonstrates how telehealth can improve engagement and adherence to treatment plans.
Relevance to Health Problem	Highlights the effectiveness of telehealth in reducing opioid overdose risk and maintaining continuity of care during public health emergencies, underscoring its role in comprehensive OUD management.
Implications for Program Planning	• Expand telehealth options for initiating and maintaining buprenorphine treatment. • Target telehealth outreach to younger, rural, and higher-income populations while addressing barriers for other groups. • Track engagement metrics and refill adherence as key indicators of treatment quality. • Incorporate telehealth strategies to reduce overdose risk and improve access in emergency or high-barrier contexts.
Planned Use in Final Program Plan	• Needs Assessment: Demonstrates how telehealth can fill gaps in OUD treatment

	access. ● Program Description/Implementation: Justifies including telehealth-initiated buprenorphine as a core intervention. ● Evaluation Plan: Provides outcome measures such as engagement rates, refill adherence, and overdose reduction for program monitoring.
Gaps or Limitations	● Cross-sectional study; causality cannot be established. ● Limited to patients with insurance claims data, potentially excluding uninsured populations. ● Telehealth and in-person groups may have unmeasured differences despite propensity score matching.

Source #	Source 11
Study Title	Response to a peer telehealth intervention for emergency department patients presenting with opioid use disorder or unintentional overdose: a stratified interrupted time series analysis
APA Citation	Tillson, M., Xu, H., McGuire, A. <i>et al.</i> Response to a peer telehealth intervention for emergency department patients presenting with opioid use disorder or unintentional overdose: a stratified interrupted time series analysis. <i>Subst Abuse Treat Prev Policy</i> 20, 21 (2025). https://doi.org/10.1186/s13011-025-00650-0
Study Purpose	To evaluate the impact of implementing a peer recovery support specialist (PRSS) telehealth intervention in emergency departments (EDs) on 30-day all-cause ED revisits among patients presenting with opioid use disorder (OUD) or unintentional overdose.
Population involved	2,542 unique ED visits across 12 hospitals in a large Indiana-based hospital system over five years. Patients included adults presenting for unintentional opioid overdose or other opioid-related issues.
Settings/Context	Twelve emergency departments in a large Indiana

	hospital system; the intervention involved telehealth-based PRSS services to support patients and link them to treatment resources.
Key Findings	● Overall ED Revisits: No significant change in 30-day all-cause ED revisits pre- versus post-implementation. ● Sex-Stratified Outcomes: Female patients showed a significant decrease in 30-day ED revisits post-program (post-implementation slope OR = 0.911, $p = 0.031$; slope change OR = 0.874, $p = 0.017$). No significant effect was observed for male patients. ● Interpretation: Telehealth PRSS may have differential effectiveness by sex, potentially benefiting females more than males.
Relevance to Target Population	Demonstrates the potential utility of telehealth PRSS services for OUD patients in EDs, particularly for female patients, which may inform tailored intervention strategies.
Relevance to Health Problem	Highlights opportunities to reduce repeat ED visits among individuals with OUD through peer support delivered via telehealth, addressing both substance use and acute care utilization
Implications for Program Planning	● Consider implementing telehealth-based PRSS services in EDs to support patients with OUD. ● Explore sex-specific approaches to increase effectiveness for male patients. ● Use 30-day ED revisit rates as a key outcome metric for monitoring program impact. ● Further research is needed to understand mechanisms behind observed sex differences.
Planned Use in Final Program Plan	● Needs Assessment: Supports ED-based interventions for reducing acute care utilization among OUD patients. ● Program Description/Implementation: Justifies integrating telehealth PRSS services into emergency care settings. ● Evaluation Plan: Provides a framework for measuring ED revisits and stratified outcomes to monitor program effectiveness.
Gaps or Limitations	● No overall effect detected on ED revisits;

	benefits may be sex-specific. ● Limited to one hospital system in Indiana, reducing generalizability. ● Observational ITS design cannot establish causality.
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Source #	Source 12
Study Title	Brief Prescribing Support and Buprenorphine Adoption in Rural Primary Care: A Cluster Randomized Clinical Trial
APA Citation	Franz, B., Dhanani, L. Y., Brook, D., Hall, O. T., Go, V., Simon, J. E., Fenstemaker, C., & Miller, W. C. (2026). Brief Prescribing Support and Buprenorphine Adoption in Rural Primary Care: A Cluster Randomized Clinical Trial. <i>JAMA network open</i>, 9(3), e263050. https://doi.org/10.1001/jamanetworkopen.2026.3050
Study Purpose	To test the feasibility, acceptability, and preliminary effectiveness of a brief buprenorphine prescribing support program (BPSP) tailored for rural primary care providers (PCPs) to increase adoption of buprenorphine for opioid use disorder (OUD).
Population involved	63 PCPs (10 physicians, 50 nurse practitioners, 3 physician assistants) across 27 community health centers in Ohio, primarily practicing in rural areas (78%). Only 16% had ever prescribed buprenorphine prior to the intervention.
Settings/Context	Rural primary care centers in Ohio; intervention delivered via a brief, asynchronous online training with optional live booster session. Control group received only written prescribing guidelines.
Key Findings	● Feasibility, Acceptability, Appropriateness: High ratings for feasibility (median 4.25/5), acceptability (4.88/5), and appropriateness (5.00/5). ● Willingness to Treat OUD: 86% of rank comparisons improved post-intervention. ● Intention to Prescribe Buprenorphine: 98% of rank comparisons improved post-intervention.

	● Knowledge & Attitudes: Participants showed improved knowledge about buprenorphine, increased confidence in treating OUD, reduced stigma, and increased empathy toward patients with OUD.
Relevance to Target Population	Demonstrates a feasible and scalable approach to increasing buprenorphine prescribing in rural primary care, addressing a key gap in OUD treatment access.
Relevance to Health Problem	Supports interventions to expand access to evidence-based OUD treatment in underserved areas, potentially reducing overdose risk and improving long-term patient outcomes.
Implications for Program Planning	● Implement brief, structured buprenorphine training for rural PCPs to increase adoption of OUD treatment. ● Address knowledge gaps, stigma, and confidence as part of training. ● Include follow-up or booster sessions to reinforce skills. ● Evaluate effectiveness via intention to prescribe and actual prescribing behaviors in larger trials.
Planned Use in Final Program Plan	● Needs Assessment: Highlights barriers to buprenorphine access in rural primary care and informs strategies to overcome them. ● Program Description/Implementation: Justifies inclusion of brief prescribing support as a core intervention component. ● Evaluation Plan: Provides outcome measures for feasibility, acceptability, intention to prescribe, and knowledge/attitudes.
Gaps or Limitations	● Small pilot study; limited sample size in one state. ● Intentions measured, not actual prescribing behavior long-term. ● Cluster randomization and self-reported measures may introduce bias.

Evaluation Purpose

The purpose of this evaluation is to assess the implementation and effectiveness of the Sagebrush County Family Support and Education Program. The evaluation will determine whether the program is being delivered as intended and whether it improves caregiver knowledge of substance use disorder (SUD), overdose response preparedness, and caregiver self-efficacy. Findings will be used for accountability, program improvement, and decisions regarding program continuation and expansion.

Evaluation Questions

Process Evaluation Question

To what extent was the Sagebrush County Family Support and Education Program implemented as intended in terms of dose delivered, participation, and fidelity over the two-year implementation period?

Short-Term Outcome Evaluation Question

To what extent did participation in the program increase family members' knowledge of substance use disorder, harm reduction, and overdose response by the end of each 8-week education cycle?

Intermediate Outcome Evaluation Question

To what extent did participation in the program improve caregiver self-efficacy and naloxone overdose response skills within 12 months of enrollment?

Evaluation Plan

Process Evaluation Question

To what extent was the program implemented as intended in terms of reach, dose, fidelity, and participation?

Table Process Evaluation Components

Component	Response
<i>Indicator</i>	Dose delivered: % of planned sessions completed and attended Participation rate: % of enrolled caregivers attending $\geq 75\%$ of sessions
<i>Measure</i>	(Number of sessions delivered $\div$ number planned) $\times 100$ (Number of participants attending $\geq 75\%$ sessions $\div$ total enrolled) $\times 100$
<i>Data Source</i>	Attendance logs, session delivery checklist, facilitator fidelity checklist
<i>Method</i>	Program coordinator completes attendance logs; peer facilitators complete fidelity checklists after each session
<i>Timing</i>	Collected continuously across all sessions (Months 4–24)

Short-Term Outcome Evaluation Question

To what extent did participants increase knowledge of SUD, harm reduction, and overdose response after completing the education sessions?

Table Short-Term Outcome Evaluation Components

Component	Response
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<i>Indicator</i>	Percentage of participants achieving $\geq 25\%$ increase in knowledge scores
<i>Measure</i>	$(\# \text{ of participants with } \geq 25\% \text{ increase in post-test vs pre-test knowledge score} \div \text{total participants completing both tests}) \times 100$
<i>Data Source</i>	Pre- and post-education knowledge assessments
<i>Method</i>	Program evaluator administers and scores surveys
<i>Timing</i>	Pre-test at Session 1; post-test at Session 8 (each cycle)

Intermediate Outcome Evaluation Question

To what extent did participation improve caregiver self-efficacy and overdose response preparedness within 12 months?

Table Intermediate Outcome Evaluation Components

Component	Response
<i>Indicator</i>	% of participants with $\geq 20\%$ increase in caregiver self-efficacy scores % of participants correctly demonstrating naloxone overdose response steps

<i>Measure</i>	(Participants meeting $\geq 20\%$ increase in self-efficacy $\div$ total completing baseline and follow-up) $\times 100$ (Participants correctly demonstrating naloxone steps $\div$ total assessed) $\times 100$
<i>Data Source</i>	Self-efficacy survey and naloxone skills checklist
<i>Method</i>	Program evaluator administers surveys and conducts naloxone demonstration assessment
<i>Timing</i>	Baseline at enrollment and 12-month follow-up

Data Analysis

Data will be analyzed using descriptive statistics, including frequencies, percentages, and mean score changes from pre- to post-intervention assessments. Changes in knowledge, self-efficacy, and overdose preparedness will be calculated by comparing baseline and follow-up scores. Attendance and participation data will be analyzed to assess program reach and dose delivered over time. Results will be summarized by program cycle and overall program period.

Interpretation of Findings

Short-Term Outcomes

Objective: Increase knowledge by at least 25%

- Successful: $\geq 80\%$ of participants meet target
- Partially Successful: 50–79% meet target

- Not Successful: <50% meet target

Intermediate Outcomes (Behavior Change)

Objective: Improve self-efficacy and overdose preparedness by $\geq 20\%$

- Successful: $\geq 75\%$ meet both outcomes
- Partially Successful: 50–74% meet outcomes
- Not Successful: <50% meet outcomes or no meaningful change

Explanation of Findings

These thresholds reflect realistic expectations for behavior change in rural communities experiencing transportation barriers, stigma, and varying levels of program engagement. Partial success categories allow for meaningful interpretation when implementation conditions are suboptimal. Interpretation will also consider fidelity, participation levels, and dosage effects.

Use of Findings

Program Decisions

- If successful: The program will be maintained and expanded to additional cohorts and partner sites.
 - If partially successful: Program components will be modified to improve engagement and outcomes.
 - If not successful: The program will undergo major redesign, particularly in recruitment and delivery strategies.
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Stakeholder Use

Stakeholders	Decision they will make	Data needed	Results sharing method
County Health Department Leaders	Funding and expansion decisions	Full process & outcome evaluation data	Formal report & presentation
Program Coordinator	Program modifications	Session-level data, fidelity, participation trends	Internal evaluation summary report and staff meetings

Peer Facilitators	Improve facilitation strategies	Session attendance, participant engagement levels, and qualitative feedback from participants	Regular supervision meetings and structured feedback sessions
Community Partners	Referral & outreach plans	Recruitment source data & reach metrics	Partner briefing report and community coordination meetings
Funders	Funding continuation decisions	Outcome evaluation results, program reach, cost-effectiveness summary, and overall impact indicators	Formal written evaluation report and executive summary brief

Feasibility and Ethics

Feasibility

The evaluation is feasible within the \$200,000 budget and two-year timeline because it uses existing program staff, simple pre/post surveys, and attendance tracking systems. Data collection is embedded into program activities, minimizing additional burden and cost.

Ethical Considerations

Participant confidentiality will be protected through de-identified data and secure storage systems. Participation in evaluation activities is voluntary and will not affect access to program services. Data collection tools will be brief to reduce participant burden and avoid unnecessary stress. All data will be reported in a way to prevent identification of participants.

Revises Goals, Objectives, and Logic Model

Revised Goals

1. Increase family knowledge of substance use disorder, harm reduction, and overdose response.
 2. Improve caregiver self-efficacy, coping skills, and emotional well-being through peer-supported learning.
 3. Increase overdose preparedness and ability to navigate treatment and recovery resources.
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Revised Objectives

Objective 1:

By 8 weeks, 80% of participants will demonstrate a $\geq 25\%$ increase in knowledge of SUD and overdose response.

Objective 2:

By 12 months, at least 75% of participants will demonstrate a $\geq 20\%$ increase in caregiver self-efficacy.

Objective 3:

By 12 months, 90% of trained participants will correctly demonstrate naloxone overdose response steps.

Explanation of Revisions

Objectives were revised to ensure clarity, measurability, and alignment with evaluation indicators. Non-measured concepts were removed, and all outcomes were rewritten in quantifiable terms with timeframes to improve evaluation feasibility and consistency.

Revised Logic Model

Inputs:

Program staff, peer facilitators, funding, naloxone kits, community partnerships, training space

Activities:

8-week education sessions, peer support groups, naloxone training, outreach and recruitment

Outputs:

Number of sessions delivered, attendance rates, number of participants trained, naloxone kits distributed

Short-Term Outcomes:

Increased knowledge of SUD, harm reduction, and overdose response

Intermediate Outcomes:

Increased caregiver self-efficacy and overdose response skills (naloxone administration)

Long-Term Outcomes:

Reduced overdose-related harm and improved caregiver overdose response capacity (measured through self-efficacy and naloxone skill demonstration outcomes)

Marketing Plan

Target Audiences

The primary target audience for the Sagebrush County Family Support and Education Program is family members and caregivers of individuals experiencing substance use disorder (SUD). This group is prioritized because they are directly impacted by overdose risk, caregiving stress, and barriers to accessing behavioral health resources. The program is designed specifically to increase their knowledge of overdose response, harm reduction, and coping strategies, making them the central focus of recruitment efforts.

Secondary target audiences include healthcare providers, community-based organizations, and county-level public health stakeholders. Healthcare providers such as primary care clinics, behavioral health clinics, and emergency departments are important referral sources because they regularly encounter individuals and families affected by SUD. Community organizations, including faith-based groups, food assistance programs, and recovery support organizations, are also key partners because they maintain trusted relationships with vulnerable populations. County public health staff support outreach coordination and help ensure consistent messaging across systems. These secondary audiences are essential for increasing program awareness, reducing stigma, and strengthening referral pathways.

Key Messages

Key messages for the primary audience emphasize accessibility, support, and practical skill-building. Families and caregivers will be informed that:

“Free support is available for families affected by substance use in Sagebrush County. This program provides education, peer support, and overdose response training, including naloxone administration, to help families respond to emergencies and improve overall well-being.”

These messages emphasize nonjudgmental support, practical overdose prevention skills, and emotional support through peer connection.

Key messages for secondary audiences emphasize collaboration and referral. Providers and community partners will be informed that:

“The Sagebrush County Family Support and Education Program offers free education and peer support for families affected by substance use. Please refer eligible families to improve overdose preparedness, increase caregiver confidence, and strengthen community response to substance use.”

These messages highlight the program’s relevance to public health outcomes and encourage active referral participation.

Communication Strategies and Channels

Multiple low-cost and high-access communication channels will be used to ensure broad reach within Sagebrush County.

Healthcare settings, including primary care clinics, behavioral health clinics, and emergency departments, will distribute flyers and referral cards. Providers will also receive direct outreach from program staff. These settings are selected because they are trusted sources of health information and frequently serve individuals affected by SUD.

Community-based organizations such as faith-based groups, food pantries, and recovery support organizations will also distribute program materials and share information during community meetings. These organizations are included because they maintain strong relationships with families who may not be actively engaged in healthcare services.

The county health department will support outreach through its website, newsletters, and public health communications. This channel is important because it serves as a central and credible source of information for residents.

In addition, word-of-mouth and peer referral will be an essential strategy. Participants and peer facilitators will be encouraged to share program information with other families. This approach is particularly effective in rural communities where trust and personal relationships strongly influence service utilization.

Timing and Coordination

Marketing activities will occur in three phases. During the pre-launch phase (Months 1–3), outreach will focus on distributing flyers, establishing referral partnerships with healthcare providers and community organizations, and promoting the upcoming program through county communication channels.

During the implementation phase (Months 4–24), marketing efforts will continue through ongoing referrals, peer facilitator outreach, and rolling enrollment aligned with each program cycle. This ensures continuous recruitment and sustained participation throughout the program period.

The program coordinator will be primarily responsible for overseeing all marketing activities, with support from peer facilitators and county health department partners. This structure ensures coordination between outreach efforts and program implementation while maintaining feasibility within available resources.

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