**Questions for the Record from Senator Sheldon Whitehouse**

**U.S. Senate Caucus on International Narcotics Control**

**“The Federal Response to the Drug Overdose Epidemic”**

**Submitted on July 27, 2021**

**1. My legislation, the *Comprehensive Addiction and Recovery Act* (CARA), took significant steps to strengthen the nation’s recovery infrastructure. During the hearing, I asked you what we have learned from CARA’s investments and what needs to be done going forward.**

** Building on your response, please provide specific examples of how recovery programs have improved since 2016 and the key outcomes they have achieved.**

SAMHSA uses six National Outcome Measures (NOMs) to monitor programming and determine success: Abstinence, Crime/Criminal Justice, Employment/Education, Health/Behavioral/Social Consequences, Social Connectedness and Stability in Housing. The following are some specific examples of how recovery programs have improved since 2016 and the key outcomes they have achieved.

From fiscal year (FY) 2016 – 2021 Building Communities of Recovery (BCOR) grantees conducted 267,256 intakes into their programs. The grants demonstrated a positive rate of change from intake to 6-month follow-up in all of the NOMs (see Table 1 below). Positive outcomes were also achieved in reducing mental health issues, risky behavior and drug use.

**Intakes**

|  |  |  |  |
| --- | --- | --- | --- |
| **NOMs** | **Intake** | **Follow-Up** | **Rate of Change** |
| Abstinence: did not use alcohol or illegal drugs | 52.3% | 68.5% | 31.0% |
| Crime and Criminal Justice: has no past 30-day arrests | 95.7% | 98.1% | 2.5% |
| Employment/Education were currently employed or attending school | 35.8% | 49.7% | 38.9% |
| Health/Behavioral/Social Consequences: experienced no alcohol or drug related health, behavioral, or social consequences | 71.0% | 85.7% | 20.6% |
| Social Connectedness: were socially connected | 80.2% | 86.5% | 7.8% |
| Stability in Housing had a permanent place to live in the community | 46.7% | 54.4% | 16.5% |

The Missouri Coalition of Recovery Support Providers reported positive outcomes in the Access to Recovery Program from FY 2016 to FY 2021. Based on a 6-month follow-up assessment: 98 percent of clients had not had any new arrests, 94 percent had had no additional consequences from drug and alcohol use, 91 percent demonstrated greater pro-social connectivity, 90 percent were in stable housing, 88 percent were abstinent from alcohol and illicit drugs, and 63 percent were employed.

A Medication Assisted Treatment – Prescription Drug and Opioid Addiction program grantee, Opioid Peer Emergency Navigation to Accessing Comprehensive Care and Engaging Specialized Services (OPEN ACCESS) at Rutgers University, reported since the initiation of the Peer/Navigators Specialists program, there has been a significant increase in the use of buprenorphine to treat patients with opioid use disorder (OUD). During the Pandemic, the grant recipient noticed a sudden decrease in administration of buprenorphine, possibly due to patient fear of contracting COVID-19 by coming to the emergency department; however, Peer Specialists helped to allay fears. Positive outcomes include 109 percent increase in abstinence, 5.1 percent decrease in crime/criminal justice activity and 88.9 percent decrease in alcohol or illegal drug related health, behavioral, and social consequences.

The Collegiate Recovery Programs (CRP)/Collegiate Recovery Communities (CRC) are another example of a successful approach to recovery support services. It provides a supportive environment within an institution of higher education. In addition, it reinforces the decision to pursue a life in recovery from substance use disorder (SUD); and values peer-recovery support services.

A MAT-PDOA grantee, Rutgers University, Opioid Peer Emergency Navigation to Accessing Comprehensive Care and Engaging Specialized Services (OPEN ACCESS) reported since the initiation of the Peer/Navigators Specialists program, there has been a significant increase in the use buprenorphine to treat patients with OUD. During the Pandemic, the grant recipient noticed a sudden decrease in administration of buprenorphine, possibly due to patient fear of contracting COVID-19 by coming to the ED; however, Peer Specialists helped to allay fears. Positive outcomes include 109 percent increase in abstinence, 5.1 percent decrease in crime/criminal justice activity and 88.9 percent decrease in alcohol or illegal drug related health, behavioral, social consequences.

From its inception in 2012 through 2019, the Association of Recovery in Higher Education has grown to over 150 institutional members. While SAMHSA does not directly currently fund Collegiate Recovery Programs (CRP)/Collegiate Recovery Communities (CRC), our BCOR grants may support CRP projects in states. SAMHSA recognizes that CRP/CRC offer a promising approach to supporting recovery on higher education campuses. For example, one outcome to note is that CRPs have been shown to reduce the recovery and relapse cycle by 15 years and according to studies in 2013 and 2018, students involved in CRPs collectively had a higher average GPA than the general student body (Laudet, et al., 2013; Ashford, et al, 2018). Some best practices include: (1) Dedicated space; (2) Dedicated staff; (3) Programming supporting recovery, and (4) Peer support.

** Have there been scientific studies examining the effectiveness of recovery programs? If so, what have those studies found?**

While the research literature on recovery support services is growing, it remains relatively limited. Some scientific studies have examined the effectiveness of recovery programs, although few have compared the effectiveness of services and supports offered through recovery community centers and other peer-led entities to those offered through a part of clinical or medical provider.

One study comparing the difference between patients with OUD receiving buprenorphine treatment with peer recovery support services (PRSS) vs. a group without peer recovery support services found a significant difference in the number of medical appointments attended between each group. The individuals in the PRSS group, attended an average of 13.7 medical appointments vs. 9.8 for the average number of medical appointments attended by the non- PRSS group. Results showed that PRSS predicted more medical appointments attended while controlling for the length of time in treatment, which could mean that PRSS may increase treatment engagement. The authors concluded that it may be possible that PRSS specialists are able to encourage patients to remain in treatment and continue to attend medical appointments. The authors acknowledged the fact that there are participant differences and slight variations in defined PRSS roles, but the results mirror a study in 2011 by Tracy et al. showing the association of PRSS and treatment appointment adherence, and the importance of PRSS for treatment engagement. The authors encouraged future studies that would consider specific patient conditions where PRSS may be more or less effective which could include current and past severity of drug use, drug administration preference (e.g., IV, nasal, oral, etc.), and trauma. *Reference: Sara Mills Huffnagle, Grace Brennan, Keegan Wicks, Denise Holden & Sarah Kawasaki (2021): A comparison of patients with opioid use disorder receiving buprenorphine treatment with and without peer recovery support services, Journal of Substance Use, DOI: 10.1080/14659891.2021.1938265)*

Recovery housing is the most widely available form of recovery support services. It is estimated that there may be more than 17,500 recovery residences nationally. The scientific study of recovery residences is somewhat more advanced than associated with other forms of recovery support services. Research on Oxford Houses, homes jointly operated by residents who share lease and other costs, found that residents who stay for six months or more are less likely to return to substance use than those who remain a shorter period of time. A study of homes that have an operator and house manager found the residents achieved significant improvements in alcohol and drug use, employment, psychiatric symptoms, and criminal justice system involvement. Moreover, studies in which individuals with opioid use disorder were randomly assigned to usual care, abstinence-contingent recovery housing, or a combination of reinforcement-based treatment and recovery housing found that abstinence-contingent recovery housing was associated with higher rates of abstinence and that the addition of intensive reinforcement-based treatment (RBT) further improved outcomes. While abstinence-based treatment is not generally the indicated treatment for opioid use disorder, these two studies provide evidence of the value of recovery housing.

*References:*

* *Jason LA, Wiedbusch E, Bobak TJ, Taullahu D. Estimating the Number of Substance Use Disorder Recovery Homes in the United States. Alcoholism treatment quarterly. 2020;38(4):506-514.*
* *Jason LA, Davis MI, Ferrari JR. The need for substance abuse after-care: longitudinal analysis of Oxford House. Addict Behav. 2007;32(4):803-818.*
* *Polcin DL, Korcha RA, Bond J, Galloway G. Sober living houses for alcohol and drug dependence: 18-month outcomes. Journal of substance abuse treatment. 2010;38(4):356-365.*
* *Tuten M, DeFulio A, Jones HE, Stitzer M. Abstinence-contingent recovery housing and reinforcement-based treatment following opioid detoxification. Addiction. 2012;107(5):973-982.*
* *Tuten M, Shadur JM, Stitzer M, Jones HE. A Comparison of Reinforcement Based Treatment (RBT) versus RBT plus Recovery Housing (RBT(RH)). J Subst Abuse Treat. 2017;72:48-55.*

A promising new project is a study being undertaken called NSTARR, the National Study of Treatment and Addiction Recovery Residences.  NSTARR is the largest and most diverse study of recovery housing to date, laying the groundwork for observing this important component of the housing, treatment, and recovery support services landscape.  NSTARR will facilitate future research on recovery residences:  large-scale national studies of recovery residences; comparative effectiveness studies, and cost-effectiveness studies of different types of recovery residences; studies identifying which sort of recovery residence works best for whom; and studies of policies and organizational practices that increase recovery housing access and utilization.

*Reference:* [*https://nstarr.arg.org*](https://nstarr.arg.org)*; Principal Investigator Amy Mericle, PhD; Dr. Mericle is a scientist at the Alcohol Research Group, a project of the Public Health Institute.*

Additional studies and literature reviews of note:

* *Andreas D, Ja DY, Wilson S. Peers Reach Out Supporting Peers to Embrace Recovery (PROSPER): A Center for Substance Abuse Treatment Recovery Community Services Program. Alcoholism Treatment Quarterly. 2010;28(3):326-338.*
* *Ashford, R. D., Brown, A., Canode, B., Sledd, A., Potter, J. S., & Bergman, B. G. (In Press). Peer-based Recovery Support Services Delivered at Recovery Community Organizations: Predictors of Improvements in Individual Recovery Capital. Journal of Addictive Behaviors.*
* *Ashford RD, Bergman BG, Kelly JF, Curtis B. Systematic review: Digital recovery support services used to support substance use disorder recovery. Hum Behav & Emerg Tech. 2020; 2:18–32.* [*https://doi.org/10.1002/hbe2.148*](https://doi.org/10.1002/hbe2.148)
* *Boisvert RA, Martin LM, Grosek M, Clarie AJ. Effectiveness of a peer-support community in addiction recovery: participation as intervention. Occupational therapy international. 2008;15(4):205-220.*
* *Brandon G. Bergman & John F. Kelly. Online digital recovery support services: An overview of the science and their potential to help individuals with substance use disorder during COVID-19 and beyond. Journal of Substance Abuse Treatment (2021)*
* *Deering KN, Kerr T, Tyndall MW, et al. A peer-led mobile outreach program and increased utilization of detoxification and residential drug treatment among female sex workers who use drugs in a Canadian setting. Drug Alcohol Depend. 2011;113(1):46-54.*
* *Kelly JF, Stout RL, Jason LA, Fallah-Sohy N, Hoffman LA, Hoeppner BB. One-Stop Shopping for Recovery: An Investigation of Participant Characteristics and Benefits Derived From U.S. Recovery Community Centers. Alcohol Clin Exp Res. 2020;44(3):711-721.*
* *Reif S, Braude L, Lyman DR, et al. Peer recovery support for individuals with substance use disorders: assessing the evidence. Psychiatric services (Washington, DC). 2014;65(7):853-861.*
* *Ryan JP, Victor BG, Moore A, Mowbray O, Perron, BE. Recovery coaches and the stability of reunification for substance abusing families in child welfare. Children and Youth Services Review. 2016;70:357-363.*
* *Sanders LM, Trinh C, Sherman BR, Banks SM. Assessment of client satisfaction in a peer counseling substance abuse treatment program for pregnant and postpartum women. Evaluation and Program Planning. 1998;21(3):287-296.*

** Is SAMHSA working with its federal and other partners to develop best practices for recovery programs?**

In February 2019, SAMHSA partnered with the Department of Agriculture to create addiction recovery transitional housing in rural communities. SAMHSA also collaborated with the University of Missouri-Kansas City (UMKC) to launch and support the Peer Recovery Center of Excellence in September 2020: [www.PeerRecoveryNow.org](http://www.PeerRecoveryNow.org). Authorized under Section 7152 of the SUPPORT Act, the Center of Excellence is a peer-led national center that provides training and technical assistance related to substance use disorder recovery. The Center is led by a steering committee comprised of national peer recovery leaders from across the nation. UMKC’s partners in the Center of Excellence are University of Texas Austin, University of Wisconsin, and the National Council for Behavioral Health. SAMHSA collaborates with Faces and Voices of Recovery (<https://facesandvoicesofrecovery.org/about/who-we-are/funders/>), the MARS Project (https://marsproject.org/), Connecticut Community for Addiction Recovery (CCAR - <https://ccar.us/>). Additionally, SAMHSA published the Recovery Housing: Best Practices and Suggested Guidelines (<https://www.samhsa.gov/resource/ebp/recovery-housing-best-practices-suggested-guidelines>), and completed an Evidence Based Resource Guide: Substance Use Disorders Recovery with a Focus on Employment and Education (https://www.samhsa.gov/resource/ebp/substance-use-disorders-recovery-focus-employment-education).

**Questions for the Record from Senator Charles E. Grassley**

**U.S. Senate Caucus on International Narcotics Control**

**“The Federal Response to the Drug Overdose Epidemic”**

**Submitted on July 27, 2021**

**1. Polydrug use and trafficking also need to be central in the National Drug Control Strategy. Nowadays, an overdose isn’t due to only one drug. Rather, users are often addicted to multiple drugs, and traffickers adapt and sell any drug to earn a profit. This problem is exacerbated by the influx and constant threat of fentanyl analogues.**

** What treatment options are available to treat polydrug users?**

Individuals with polysubstance misuse involving alcohol, marijuana, opioids, and/or stimulants receive care in a variety of settings, and often require withdrawal management, psychological and FDA-approved pharmacological treatment, and monitoring as part of their care plan. Treatment planning to address polysubstance use can be challenging, as best practice treatment options to address one substance may limit patients’ eligibility to receive or enroll in treatment for the other. For example, use of FDA-approved pharmacotherapy for opioid use disorder may impact an individual’s participation in a residential alcohol treatment program.

SAMHSA makes available the following resources for individuals seeking substance use disorder care for themselves or others:

* The National Treatment Locator: <https://findtreatment.gov/>;
* The Buprenorphine Practitioner Locator: <https://www.samhsa.gov/medication-assisted-treatment/practitioner-program-data/treatment-practitioner-locator>; and,
* The Opioid Treatment Program Directory: <https://dpt2.samhsa.gov/treatment/>.

A focus on individual substances or sequential treatment of each substance would not be effective. Most substance use disorder treatment programs are designed and equipped to treat co-occurring substance use disorders, although there are effective substance-specific approaches, such as medications for opioid use disorder (MOUD), which can be offered at any level of care and can be combined with behavioral and psychosocial interventions, such as cognitive-behavioral therapy, motivational interventions and/or 12 step facilitation. For example, an individual with concurrent opioid, stimulant, and marijuana use disorder may receive psychological treatment (such as cognitive behavioral therapy). When a single provider is unable to provide the full range of services needed, the quality and effectiveness of care can decline—especially if the result is sequential, drug-specific care episodes rather than comprehensive, fully integrated care.

Through a literature review and consensus from technical experts, SAMHSA has identified three effective practices used to treat adult polysubstance misuse involving combinations of alcohol and cocaine (pharmacotherapy and counseling), and combinations of cocaine, alcohol and opioids (contingency management with pharmacotherapy and counseling, and twelve-step facilitation therapy with pharmacotherapy and counseling). These are (1) FDA-approved pharmacotherapy with counseling[[1]](#footnote-2),[[2]](#footnote-3),[[3]](#footnote-4); (2) Contingency management with FDA-approved pharmacotherapy and counseling[[4]](#footnote-5),[[5]](#footnote-6),[[6]](#footnote-7), and (3) Twelve-step facilitation (TSF) therapy with FDA-approved pharmacotherapy[[7]](#footnote-8),[[8]](#footnote-9). These treatments should be delivered in a patient-centered and integrated manner in order to achieve the best outcomes. Many facilities offer such treatments, and they demonstrate a high level of success. It is important to note that in practice our grantees have been implanting these principles. For example, evidence-based practices like contingency management are utilized for those using psychostimulants in addition to the treatment received for opioid use disorder and FDA approved medications for alcohol use disorder are often prescribed concurrently with medications for opioid use disorder in patients with dependence on both substances.

** What has been effective and where is there room to improve?**

While care coordination and integration of services has demonstrated success in treating polysubstance misuse, fragmented systems of care found in many areas of the nation represent a barrier to managing the inherent difficulties and complexities experienced by individuals with polysubstance use disorders. Effective treatment requires customized and coordinated care, which can often be challenging to access and have limited availability.

Considering the breadth and complexity of challenges often associated with polysubstance use disorders, well-coordinated treatment encompassing social, behavioral health, and medical services in a single setting is advantageous. Co-location could lead to greater service utilization and positive outcomes by employing case managers to provide clients with a range of needed psychosocial services (e.g., transportation, employment assistance, legal assistance, childcare, food, and housing assistance). Once trust and rapport are established and their most pressing underlying needs are met, patients may be more likely to seek in-house medical and behavioral health care.

Although the body of research is growing, providers continue to face the challenge of limited evidence, particularly from randomized controlled trials, when selecting programs to treat polysubstance misuse in adults. Additionally, there are multiple treatment practices that have been studied for the treatment of a single substance use disorder, but have not been studied for polysubstance use disorders. The field would benefit from more research on treatment practices for different combinations of substances among diverse populations.

**2. At the hearing on June 20, Chairman Whitehouse mentioned during his opening remarks, “every dollar invested in evidence-based prevention can save up to twenty dollars.” This point is reiterated in the SAMHSA report, *Substance Abuse Prevention Dollar and Cents*, which concludes, “[t]he cost of substance abuse could be offset by a nationwide implementation of effective prevention policies and programs.”**

**SAMHSA’s Substance Abuse Prevention and Treatment Block Grant program requires that grantees spend no less than 20% of their allotment on substance abuse primary prevention strategies**.

** What are SAMHSA priorities for substance use prevention, and what more will SAMHSA do to prioritize it?**

SAMHSA administers the Substance Abuse Prevention and Treatment Block Grants (SABG) to 60 eligible states, territories and freely associated states, the District of Columbia, and the Red Lake Band of Chippewa Indians of Minnesota (referred to collectively as states) to plan, carry out, and evaluate substance use prevention, treatment, and recovery support services for individuals, families, and communities impacted by substance use and misuse. Under the 20 percent prevention set-aside, SAMHSA allows a broad array of interventions and strategies directed at individuals not identified to be in need of treatment.[[9]](#footnote-10) States use these funds to develop infrastructure and capacity, and to fund programs specific to primary substance misuse prevention.

States’ primary prevention programs must include, but are not limited to, six primary prevention strategies:

1. **Information Dissemination**provides knowledge and increases awareness of the nature and extent of alcohol and other drug use, abuse, and addiction, as well as their effects on individuals, families, and communities. It also provides knowledge and increases awareness of available prevention and treatment programs and services. It is characterized by one-way communication from the information source to the audience, with limited contact between the two.
2. **Education** builds skills through structured learning processes. Critical life and social skills include decision making, peer resistance, coping with stress, problem solving, interpersonal communication, and systematic and judgmental capabilities. There is more interaction between facilitators and participants than there is for information dissemination.
3. **Alternatives** provide opportunities for target populations to participate in activities that exclude alcohol and other drugs. The purpose is to discourage use of alcohol and other drugs by providing alternative, healthy activities.
4. **Problem Identification and Referral** aims to identify individuals who have indulged in illegal or age-inappropriate use of tobacco or alcohol and individuals who have indulged in the first use of illicit drugs. The goal is to assess if their behavior can be reversed through education. This strategy does *not* include any activity designed to determine if a person is in need of treatment.
5. **Community-based Process** provides ongoing networking activities and technical assistance to community groups or agencies. It encompasses neighborhood-based, grassroots empowerment models using action planning and collaborative systems planning.
6. **Environmental** establishes or changes written and unwritten community standards, codes, and attitudes. Its intent is to influence the general population's use of alcohol and other drugs.

Primary prevention for individuals not identified as needing treatment includes *universal programs* that are targeted to the general public or a whole population group that has not been identified on the basis of individual risk, *selective activities* that are targeted to individuals or a subgroup of the population whose risk of developing a disorder is significantly higher than average, and *indicated prevention activities* that are targeted to individuals who are screened or otherwise identified as having an increased vulnerability for a disorder, but who are currently asymptomatic.[[10]](#footnote-11)

States are encouraged to consider using SAMHSA funding for the following priority prevention activities: (1) Screening with evidence-based tools; (2) Operation of an “access line”, “crisis phone line” or “warm lines” by prevention providers; (3) Purchase of technical assistance; (4) The purchase of naloxone and the materials necessary to assemble overdose kits and the distribution of such kits not only to those who use opioids, but to people who use cocaine, methamphetamine, and benzodiazepines, given the frequent contamination of these substances and counterfeit pharmaceuticals with illicitly manufactured fentanyl and analogues, and (5) Risk messaging with evidence-informed strategies and accompanying evaluation to establish most effective strategies. Risk messaging should include: (A) Text and health messaging strategies targeted at adolescents and young adults’ substance misuse; (B) Scenario-based messaging programs for parents about opioid risks; and, (C) Web-based interventions targeted at the criminal justice system.

Through the SABG, $352 million was allocated to prevention activities in FY 2020 and a similar amount was allocated for this purpose in FY 2021. SABG block grant funding received a one-time $1.65 billion increase under the Coronavirus Response and Relief Supplement Appropriations Act [P.L. 116-260] to prioritize and address the unique substance use disorder (SUD) prevention, intervention, treatment, and recovery support needs and gaps in states’ service systems in response to the COVID-19 pandemic. Through this appropriation, $330 million was added to SABG prevention activities. The American Rescue Plan appropriated $1.5 billion to the SABG. COVID-19 expenditures related to substance misuse prevention include: COVID-19 awareness and education for persons with SUD, transportation related to accessing SUD prevention and COVID-19 vaccines. SAMHSA’s FY 2022 Budget Request includes $3.5 billion for the SABG program, an increase of $1.7 billion from the FY 2021 Enacted level. This increase in SABG overall funding would result in SAMHSA close to doubling its support to States for substance abuse prevention services in 2022.

** How did SAMHSA determine that 20% is an appropriate floor for spending on prevention strategies?**

SAMHSA and most of its programs and activities are authorized under the Public Health Service Act (PHSA). The set-aside requirement, including the percent of funding that falls under the set-aside, were determined by Congress under PHSA Title XIX Part B.

** How many grantees comply with the 20% minimum spending allotment on prevention? Can this percentage be improved?**

From FY 2019 to FY 2021, 93 percent of grantees complied with the minimum 20 percent set-aside.

This percentage can be improved. One strategy States could use is to allocate more than 20 percent to their subgrantees, allowing for a buffer if actual expenditures end up being less than originally budgeted.  States could also use this strategy for their own budget allocations.

** How many grantees spend more than 20% on prevention, and does SAMHSA have data on prevention efficacy in connection to these grantees as compared to those who do no spend more than 20% on prevention?**

From FY 2019 to FY 2021, 67 percent of grantees expended more than 20 percent on primary prevention.

From SAMHSA’s understanding, this type of comparison evaluation has not been conducted. Provided future availability of appropriate evaluation funds for this particular question regarding SABG prevention activities, SAMHSA could conduct such assessments in the future.

**Questions for the Record from Senator James Risch**

**U.S. Senate Caucus on International Narcotics Control**

**“The Federal Response to the Drug Overdose Epidemic”**

**Submitted on July 27, 2021**

**1. Since 2003, there has been an alarming increase in methamphetamine abuse in Idaho, especially in the more rural parts of the state. It’s estimated that in 2016, approximately one Idahoan died each week from methamphetamine and about 7,000 Idahoans 12 and older used meth that same year with 120,000 having used meth in their lifetimes.**

** What types of treatment options are available for individuals with methamphetamine addiction, particularly for youths with this type of addiction?**

Despite an increase in research into psychosocial treatments for people with stimulant use disorders, currently the only treatment with significant evidence of effectiveness is contingency management (CM). CM is a behavioral intervention grounded in operant conditioning theory, which asserts that individual behaviors can be shaped by external reinforcement schedules. Operant conditioning explains how people learn new behaviors and CM reinforces positive behaviors with prizes, privileges, or incentives (e.g., gift cards). Reinforcement is typically provided in the form of either contingent prize draws or contingent vouchers.

Other psychosocial treatments that have some support (especially if used in combination with CM) are cognitive–behavioral therapy/relapse prevention, community reinforcement, and motivational interviewing. These interventions demonstrate efficacy in treating stimulant use disorder across age ranges.

There currently are no FDA-approved medications for stimulant use disorders, making it even more important that behavioral health and healthcare service providers understand and offer (or offer referrals for) CM or other psychosocial treatments. Other nonpharmacologic treatment approaches and strategies may also be useful for supporting recovery and improving health and well-being, including physical exercise, the Matrix model of neurobehavioral treatment – a comprehensive, multi-format program that covers six key clinical areas (therapy, early recovery, relapse prevention, family education, social support and drugs testing), family or couples therapy, and mindfulness meditation. Numerous clinical management strategies have been developed to deal with several clinical issues common in people with stimulant use disorders, like cognitive problems, intoxication issues, and co-occurring mental disorders.

In treating stimulant use disorder, clinicians should also promote harm reduction (especially because of the high level of contamination of the drug supply with fentanyl and analogs) through educating about syringe services programs, offering naloxone, and encouraging the use of fentanyl test strips, as these strategies can help save lives.

** Are there any types of new treatments in the pipeline?**

The National Institute on Drug Abuse is funding multiple investigations in an effort to identify and determine effective new pharmaceutical interventions for methamphetamine and other stimulant use disorders. This important support allows researchers to investigate new interventions.

1. Schmitz, J. M., Stotts, A. L., Sayre, S. L., DeLaune, K. A., & Grabowski, J. (2004). Treatment of cocaine-alcohol dependence with naltrexone and relapse prevention therapy. American Journal of Addictions, 13(4), 333-341. https://doi. org/10.1080/10550490490480982 [↑](#footnote-ref-2)
2. Schmitz, J. M., Lindsay, J. A., Green, C. E., Herin, D. V., Stotts, A. L., & Moeller, F. G. (2009). High-dose naltrexone therapy for cocaine-alcohol dependence. American Journal of Addictions, 18(5), 356-362. https://dx.doi.org/10.3109%2F10550490903077929 [↑](#footnote-ref-3)
3. Pettinati, H. M., Kampman, K. M., Lynch, K. G., Xie, H., Dackis, C., Rabinowitz, A. R., & O’Brien, C. P. (2008). A double blind, placebo-controlled trial that combines disulfiram and naltrexone for treating co-occurring cocaine and alcohol dependence. Addictive Behaviors, 33(5), 651-667. https://dx.doi.org/10.1016%2Fj.addbeh.2007.11.011 [↑](#footnote-ref-4)
4. Schottenfeld, R. S., Chawarski, M. C., Pakes, J.R., Pantalon, M. V., Carroll, K. M., & Kosten, T.R. (2005). Methadone versus buprenorphine with contingency management or performance feedback for cocaine and opioid dependence. American Journal of Psychiatry, 162(2), 340-349. https://doi.org/10.1176/appi.ajp.162.2.340 [↑](#footnote-ref-5)
5. Epstein, D. H., Schmittner, J., Umbricht, A., Schroeder, J. R., Moolchan, E. T., & Preston, K.L. (2009). Promoting abstinence from cocaine and heroin with a methadone dose increase and a novel contingency. Drug and Alcohol Dependence, 101(1-2), 92-100. https://dx.doi.org/10.1016%2Fj.drugalcdep.2008.11.006 [↑](#footnote-ref-6)
6. Petry, N. M., Alessi, S. M., Hanson, T., & Sierra, S. (2007). Randomized trial of contingent prizes versus vouchers in cocaine-using methadone patients. Journal of Consulting and Clinical Psychology, 75(6), 983-991. https://doi.org/10.1037/0022-006X.75.6.983 [↑](#footnote-ref-7)
7. Carroll, K. M., Nich, C., Shi, J. M., Eagan, D., & Ball, S. A. (2012). Efficacy of disulfiram and twelve step facilitation in cocaine-dependent individuals maintained on methadone: A randomized placebo controlled trial. Drug and Alcohol Dependence, 126(1-2), 224-231. https://dx.doi.org/10.1016%2Fj.drugalcdep.2012.05.019 [↑](#footnote-ref-8)
8. Hayes, S. C., Wilson, K. G., Gifford, E. V., Bissett, R., Piasecki, M., Batten, S. V., Byrd, M., & Gregg, J. (2004). A preliminary trial of twelve-step facilitation and acceptance and commitment therapy with polysubstance-abusing methadone-maintained opiate addicts. Behavior Therapy, 35(4), 667-688. https://doi.org/10.1016/S0005-7894(04)80014-5 [↑](#footnote-ref-9)
9. Substance Abuse and Mental Health Services Administration (2015). *Substance Abuse Prevention and Treatment Block Grant.* Retrieved from <http://www.samhsa.gov/grants/block-grants/sabg> [↑](#footnote-ref-10)
10. National Research Council and Institute of Medicine. (2009). Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities. Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions. [↑](#footnote-ref-11)