

Bureau of Justice Assistance (BJA)
Residential Substance Abuse Treatment (RSAT) Program for State Prisoners
Training and Technical Assistance Resource



Correctional Alcohol Use Disorder Treatment Programming Guide

MAY 2022



Correctional Alcohol Use Disorder Treatment Programming Guide

Advocates for Human Potential

May 2022

Note to readers: This manual consists of several sections designed for different specific audiences to increase its utility for RSAT practitioners, including: 1) policy makers and program administrators; 2) program treatment staff; and 3) prison and jail clinicians. Although these separate audiences will be involved in alcohol use disorder treatment programming in different ways, it may be of use that all share a common understanding of treating persons with this disorder provided by this guide.

This project was supported by grant No. 2019-J2-BX-K001 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Office of Justice Programs which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the SMART Office, and the Office for Victims of Crime. Point of view or opinions in this document are those of the author and do not represent the official position or policies of the United States Department of Justice.

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I. Introduction

According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), alcohol-related problems—which result from drinking too much, too fast, or too often—are among “the most significant public health issues in the United States.” As many people die each year due to alcoholism as from drug overdoses, although most alcohol-related deaths are not typically as sudden and dramatic.

The Centers for Disease Control and Prevention (CDC) reports that excessive alcohol use is responsible for more than 95,000 deaths in the United States each year, or 261 deaths per day, shortening lives on average by 29 years. Most of these deaths are due to the health effects from drinking too much over time, including various types of cancer, liver disease, and heart disease.

According to NIAAA, treatment for alcohol use disorder (AUD) remains quite challenging. Only about one-third of people who are treated for alcohol problems have no more symptoms one year later, although others substantially reduce their drinking and report fewer alcohol-related problems.¹

Alcohol Use Disorder Defined

There has been much debate over the years on what AUD is. Is it a disease, given some individuals’ physical addiction and its impact on the brain as well as its physical symptoms, such as ulcers and cirrhosis of the liver? Is it a behavioral problem that reflects an individual’s choice, which may be influenced by their environment or ethnic culture? Or is it primarily a social problem that causes family dysfunction, or endangers the public most often through drunk driving? If it doesn’t cause a person or the community pain, is excessive drinking even a problem at all?

Dr. George Vaillant presented one of the landmark studies on AUD, which he included in his book *The Natural History of Alcoholism Revisited* (Harvard University Press, 1995). Vaillant looked at the lives of 600 American men over several decades, focusing on their lifelong drinking behaviors. He also looked at 100 persons who were detoxed, following them for many years. The samples allowed him to refute much of what was commonly believed about AUD because, before his effort, most studies of AUD were retrospective and consequently distorted by the disease being studied.

¹ National Institute on Alcohol Abuse and Alcoholism, n.d., *Treatment for Alcohol Problems: Finding and Getting Help*, retrieved December 29, 2021 from <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/treatment-alcohol-problems-finding-and-getting-help>.

The first issue Vaillant tackled was the definition of what was then called “alcoholism.” What, he asked, are we actually talking about? How much do you have to drink to be considered “an alcoholic”? Is there a minimum amount needed, or is there any amount that causes a person’s problems? Vaillant compiled indicators of AUD from a variety of sources, both medical and sociological. Possible criteria, he found, included: (1) frequency of intoxication; (2) binge drinking; (3) complaints from spouses, friends, bosses, or police; (4) accidents and legal problems such as drunk driving or arrests for public intoxication; (5) attempts at “going on the wagon” (excluding pregnancy); (6) clinical diagnosis; (7) self-admission; (8) need for an “eye opener” to avoid morning shakes; and (9) health problems. He then applied these criteria to his study sample of persons considered to have AUD. He explored which indicators, if any, best indicated AUD. He found all were of roughly equal importance. The medical, sociological, and behavioral criteria were all equally valid. No particular indicator, nor cluster of indicators, predominated—only the number and frequency of problems best defined AUD. Therefore, Vaillant concluded, it was equally valid to call “alcoholism” a medical or a behavioral disorder.

In other words, no matter how we define it, we are talking about the same thing.

Second, Vaillant found there was no such thing as an “alcoholic personality” that could predict AUD. An unhappy childhood, for example, predicted mental illness, not AUD—unless the family’s unhappiness was due to AUD. Importantly, he documented that AUD was generally the cause, not the result of co-occurring depression, anxiety, and sociopathic behavior. Besides AUD in relatives, some of the major predictors of adult AUD were simply early drinking, the ability to drink others under the table at any early age and being a “life-of-the-party” extrovert.

Third, Vaillant looked at the characteristics of those who had developed AUD and later achieved sobriety. He found the following common conditions contributed to achieving sobriety: (1) substitution of a less harmful dependency; (2) a new relationship; (3) finding a source of inspiration and hope; and (4) experiencing the negative consequences of alcohol. While Vaillant found that medical treatment provided only temporary relief, he found Alcoholics Anonymous (AA) to have been effective for many of those sampled because, he theorized, AA addressed all four of the above conditions. Regular meetings could provide a substitute dependency, a new set of positive peer relationships, demonstrations of hope for success, as well as constant reminders through meeting “drunkalogues” of the negative effects of continued drinking. There were, of course, means other than AA to achieve these conditions. Because his study included the World War II generation, for example, he also found that serving in the military, as well as marriage, were common ingredients for those who achieved sobriety.

NIAAA defines AUD as a medical condition characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences. It encompasses the conditions often referred to as “alcohol abuse,” “alcohol dependence,” “alcohol addiction,” and the colloquial term “alcoholism.” Considered a brain disorder, AUD can be mild, moderate, or severe. Lasting changes in the brain caused by alcohol misuse perpetuate AUD and make individuals vulnerable to relapse.

Alcohol Use Disorder Among the Incarcerated

Although the opioid epidemic has drawn attention away from AUD, it has not diminished it.

Like other substance use disorders, AUD is widespread in prison and jail populations. Alcohol is implicated in the incarceration of more than half of all inmates.² The Bureau of Justice Statistics has found that 47 percent of jail inmates were dependent upon or abused alcohol, with more than two-thirds being dependent upon or abusing alcohol or drugs.³ According to the latest report from the Bureau of Justice Statistics, 31 percent of people incarcerated in state prisons reported drinking alcohol at the time of the offense.⁴

Many persons use both drugs and alcohol. According to the CDC, for example, alcohol was involved in 22 percent of deaths caused by prescription opioids and 18 percent of emergency department visits related to misuse of prescription opioids in the United States in 2010.⁵

Confronted with such a large proportion of detainees and persons sentenced to incarceration with AUD, prisons and jails can, and should, play a significant role in initiating and continuing AUD treatment, potentially putting millions of individuals safely on the road to recovery every year. Not only will treatment help save lives, but it will also contribute to significant reductions in recidivism and increased public safety on our highways and in our homes. According to a report by the National Center on Addiction and Substance Abuse, if all individuals in prisoner with substance and alcohol use problems received treatment during incarceration and aftercare upon their release, the United States would break even on costs even if just over 10 percent were successful at achieving sobriety and employment and avoiding crime.⁶

² National Center on Addiction and Substance Abuse at Columbia University, February 2010, *Behind Bars II: Substance Abuse and America's Prison Population*, retrieved December 29, 2021 from <https://drugfree.org/reports/behind-bars-ii-substance-abuse-and-americas-prison-population/>.

³ Karbert, Jennifer C., and Doris J. James, July 2005, Substance Dependence, Abuse, and Treatment of Jail Inmates, 2002, Bureau of Justice Statistics Special Report, Washington, DC: U.S. Department of Justice Office of Justice Programs, NCJ 209588, retrieved December 29, 2021 from <https://bjs.ojp.gov/content/pub/pdf/sdatji02.pdf>.

⁴ L. Maruschak & J. Bronson, Alcohol and drug use and treatment reported by prisoners: Survey of prison inmates, 2016 (2021). NCJ Number 252641, <https://bjs.ojp.gov/library/publications/alcohol-and-drug-use-and-treatment-reported-prisoners-survey-prison-inmate>

⁵ Jones CM, Paulozzi LJ, Mack KA. Alcohol involvement in opioid pain reliever and benzodiazepine drug abuse-related emergency department visits and drug-related deaths – United States, 2010. *MMWR Morb Mortal Wkly Rep*. 2014;63(40):881–885.

⁶ National Center on Addiction and Substance Abuse at Columbia University, February 2010, *Behind Bars II: Substance Abuse and America's Prison Population*, retrieved December 29, 2021 from <https://drugfree.org/reports/behind-bars-ii-substance-abuse-and-americas-prison-population/>.

II. AUD Treatment Programming

The intent of this guide is to identify and describe the primary components of a comprehensive program to respond to individuals with AUD, beginning with screening and assessing persons entering prison or jail, managing their safe detoxification from alcohol if intoxicated, providing for treatment, and ending with provisions for aftercare post-release. It is not the intent of this guide to provide specific clinical protocols for detoxification nor treatment, but the guide does include links to additional resources, references, and nonclinical sources of training and technical assistance to support implementation of the identified program components.

Alcohol Detoxification

When individuals enter correctional institutions, usually jails, under the influence of alcohol, the first issue correctional personnel must confront is detoxification, safely getting the alcohol out of the individuals' systems. Not everyone entering with alcohol on their breath requires clinical detoxification. However, if the person has an AUD and arrives under the influence, the chances are that person will begin to exhibit alcohol withdrawal symptoms within hours of admission. If the detainee's admission has been delayed because they were first booked at a police lockup or elsewhere, they may already be experiencing withdrawal symptoms.

Symptoms of withdrawal may include anxiety, tremors, nausea, insomnia, and—in severe cases—seizures and delirium tremens, commonly referred to as “DTs.” Although up to half of individuals with AUD present with some withdrawal symptoms after stopping drinking, only a small percentage require medical treatment for detoxification.⁷ However, those who do are disproportionately likely to be found entering jails after an arrest. Many have histories of prior withdrawal episodes. As the Federal Bureau of Prisons (BOP) advises: “Alcohol withdrawal syndrome can develop in any individual who has a history of regular, heavy use of alcohol; has a known dependence on alcohol; or has clinical signs of intoxication.”⁸

Symptoms may begin within a few hours of discontinued drinking and peak within 24 to 36 hours. Symptoms may increase over time, with withdrawal seizures occurring at various times during withdrawal, beginning within 48 hours of the last drink. Withdrawal delirium can begin within 48 to 72 hours.⁹ This requires persons to be continued to be monitored even if they are asymptomatic immediately upon entering jail.

⁷ K. Witkiewitz, R. Litten, & L. Leggio (2019). Advances in the science and treatment of alcohol use disorder, *Science Advances* 5 (9).

⁸ Federal Bureau of Prisons, February 2020, *Medically Supervised Withdrawal for Inmates with Substance Use Disorders: Federal Bureau of Prisons Clinical Guidance*, retrieved December 29, 2021 from https://www.bop.gov/resources/pdfs/medically_supervised_withdrawal_cg.pdf.

⁹ Federal Bureau of Prisons, Detoxification of chemically dependent inmates, clinical guidance, February 2014, reformatted January 2018, <https://www.bop.gov/resources/pdfs/detoxification.pdf>.

“If allowed to progress,” BOP warns, “delirium can result in changes in consciousness, marked autonomic instability, electrolyte imbalances, hallucinations, and death.” However, as the BOP also advises, “With appropriate intensive treatment, mortality from delirium tremens is markedly reduced (to 1% or less).”

As the editor of *Jail Medicine* warns, “Alcohol withdrawal is serious business. People can and do die from alcohol withdrawal. In fact, in my experience in my own jails and reviewing cases elsewhere in the country, alcohol withdrawal is a common cause of death in jail. In fact, it may be the second most common cause of preventable deaths in jail, behind only suicide.”¹⁰ Sadly, it is not uncommon to see reports of alcohol withdrawal deaths in the nation’s jails.

Jail Alcohol Withdrawal Deaths

Wayne County, Michigan

The medical examiner, reviewing the death of Priscilla Slater in a Detroit jail, concluded “the most likely diagnosis that one can propose . . . is she died from alcohol withdrawal.” He continued, “If she was not monitored in the cell, that is a big problem.” The jail video showed she had a seizure in her cell at 5:10 a.m. Officers did not discover her body until 12:30 p.m.¹¹

Cibola County, New Mexico

Ruben Toledo was arrested for drunk driving, possession of alcohol in a vehicle, and possession of a controlled substance. Yet, his family charges that the Cibola County Detention Center in New Mexico failed to provide any treatment for his difficult alcohol withdrawal. When correctional officers found him, he had dried blood on his forehead, they carried him to the shower because he was not able to speak or walk. When he became unresponsive, they performed CPR to no avail. The family charged that he had collapsed from an alcohol-withdrawal-induced seizure in his cell, causing a head wound from which he never regained consciousness.¹²

Hamblen County, Tennessee

Tyler Little, 23, admitted after being stopped for drunk driving that he drank until 4 a.m. and he had taken his prescription medication, Suboxone (buprenorphine/naloxone). Police took him to the hospital to draw blood but then transported him to the Hamblen County, Tennessee Jail. He was placed in a crowded cell with a mat on the floor. He was not checked for two hours, although jailers “tossed a sandwich onto his back.” He vomited and stopped breathing. His name had not yet been entered into the intake/booking system before he died.¹³

¹⁰ Jeffrey Keller, 2014, “Do Not Use Hydroxyzine for Alcohol Withdrawal,” *Jail Medicine*, retrieved December 29, 2021 from <https://www.jailmedicine.com/do-not-use-hydroxyzine-for-alcohol-withdrawal/>

¹¹ Nancy Kaffer, 2020, “Wayne County to seek autopsy review in jail death of Priscilla Slater,” *Detroit Free Press*.

¹² Wheeler Cowperthwaite, 2020, “Autopsy: Chronic alcohol abuse killed man in Cibola jail,” *NM Homicide*, retrieved December 29, 2021 from <https://nmhomicide.com/2020/11/19/autopsy-chronic-alcohol-abuse-killed-man-in-cibola-county-jail-detention-center-ruben-toledo/#:~:text=GRANTS%2C%20N.M.%20%E2%80%94%20An%20Albuquerque%20man%20who%20died,chronic%20alcohol%20abuse%2C%20according%20to%20an%20autopsy%20report.>

¹³ WBIR Staff, 2021, “‘Dirty Jail Floor’: Parents Target Morristown Police, Hamblen County in 2020 OD Death of Son,” *WBIR*, retrieved December 29, 2021 from [https://www.wbir.com/article/news/local/dirty-jail-floor-parents-target-morristown-police-hamblen-county-jail-in-2020-od-death-of-son/51-22e224fd-0cdf-4a22-b3bb-f521d56de6ec.](https://www.wbir.com/article/news/local/dirty-jail-floor-parents-target-morristown-police-hamblen-county-jail-in-2020-od-death-of-son/51-22e224fd-0cdf-4a22-b3bb-f521d56de6ec)

As the BOP warns, “The severity of an individual’s alcohol withdrawal syndrome is difficult to predict. A history of problems with withdrawal makes it likely that a similarly severe withdrawal syndrome will occur again. Individuals with a high blood alcohol level (>100 mg/dL) and concurrent signs of withdrawal are at particularly high risk for a severe withdrawal syndrome.”¹⁴

For a more in depth discussion on liability and legal issues involved in jail withdrawal management, see the Bureau of Justice Assistance, *Managing Substance Withdrawal in Jails: A Legal Brief* (2022), available at https://www.rsat-tta.com/Files/BJA-Brief_managing-substance-withdrawal-in-jails.

Measuring Withdrawal Symptoms

To determine their level of severity, scales have been created to measure withdrawal symptoms. The BOP and many other prisons and jails use the validated assessment instrument CIWA-Ar, a shortened, improved version of the Clinical Institute Withdrawal Assessment for Alcohol validated in 1994.¹⁵ The CIWA-Ar can be downloaded at <https://www.mdcalc.com/ciwa-ar-alcohol-withdrawal>. The 10-item scale scores levels of nausea and vomiting, tremors, anxiety, normal activities, itching, hallucinations, disorientation, and other symptoms. If the individual scores less than 10, the level of withdrawal is considered “none to very mild;” 10-15 is “mild;” 16–20 is “moderate;” and over 20 “severe.” According to BOP, medication is indicated for “moderate” and “severe” levels. If an individual’s symptoms score as “severe,” the BOP advises hospitalization, “as they are at increased risk for serious complications.”

For mild withdrawal symptoms, simple monitoring may suffice, typically accompanied by supportive care for hydration and electrolytes and thiamine supplementation. For mild withdrawal, the BOP provides gabapentin as a substitute for benzodiazepines. Although gabapentin does not prevent or reduce withdrawal seizures or delirium tremens, it alleviates milder withdrawal symptoms. Gabapentin calms down the brain, counteracting the hyper-aroused state of a newly sober person with AUD. This is believed to result in a reduction in anxiety and improved sleep, both of which are associated with reduced cravings for alcohol. The use of this medication is evidence-based.¹⁶

For those in need of more intense pharmacological treatment, benzodiazepines are the most commonly used medications to treat alcohol withdrawal syndrome. Benzodiazepines represent the gold standard treatment, as they are the only class of medications that not only reduce the severity of the alcohol withdrawal syndrome, but also reduce the risk of withdrawal seizures and/or delirium tremens. Other medications may be added as adjunct treatments to benzodiazepines to control neuro-autonomic manifestations of alcohol withdrawal not fully controlled by benzodiazepine administration. As the BOP

¹⁴ Federal Bureau of Prisons, 2020, Medically Supervised Withdrawal for Inmates with Substance Use Disorders: Federal Bureau of Prisons Clinical Guidance, retrieved December 29, 2021 from https://www.bop.gov/resources/pdfs/medically_supervised_withdrawal_cg.pdf.

¹⁵ Saitz M, Mayo-Smith MF, Redmond HA, Bernard DR, Calkins DR. Individualized treatment for alcohol withdrawal. A randomized double-blind controlled trial. *JAMA* 1994;272:519-23.

¹⁶ Mariani, John J., Richard N. Rosenthal, Susan Tross, Prameet Singh, and Om P. Anand, 2010, “A Randomized, Open-Label, Controlled Trial of Gabapentin and Phenobarbital in the Treatment of Alcohol Withdrawal,” *The American Journal on Addictions* 15(1): 76–84, retrieved December 29, 2021 from <https://doi.org/10.1080/10550490500419110>; Myrick, Hugh, Robert Malcolm, Patrick K. Randall, Elizabeth Boyle, Raymond F. Anton, Howard C. Becker, and Carrie L. Randall, 2009, “A Double-Blind Trial of Gabapentin Versus Lorazepam in the Treatment of Alcohol Withdrawal,” *Alcoholism, Clinical and Experimental Research*, 33(9): 1582–1588, retrieved December 29, 2021 from <https://doi.org/10.1111/j.1530-0277.2009.00986.x>.

instructs, “Supportive care is appropriate for all severity levels of alcohol withdrawal and may include nutritional supplementation, IV fluids, management of electrolyte abnormalities, and periodic clinical re-evaluations, as clinically indicated.”¹⁷ The BOP adheres to the “gold standard,” declaring “BENZODIAZEPINES (emphasis in original) are the mainstay of alcohol withdrawal treatment in the correctional setting.”

The BOP specifically uses **lorazepam** for its benzodiazepine treatment because liver disease—common in individuals with AUD—does not interfere with the absorption of lorazepam. The medicine comes in a tablet and injection form. As an intermediate-acting drug, it has a duration of roughly 11 to 20 hours. It’s commonly used in older patients and individuals with liver failure. The tablet form takes effect within 30 minutes, whereas the injectable form can take effect in as little as 15 minutes. The drug helps alleviate anxiety associated with alcohol withdrawal. Treatment providers may also prescribe it to reduce the risk of seizures.

The BOP alcohol withdrawal protocol provides a recommended schedule for the administration of lorazepam. Download the BOP protocol here: [https://www.bop.gov/resources/pdfs/medically supervised withdrawal cg.pdf](https://www.bop.gov/resources/pdfs/medically_supervised_withdrawal_cg.pdf).

According to Dr. Jeffrey Keller, too many correctional institutions may be wary of providing benzodiazepines to detainees because they can be drugs of abuse within the institution. He has reported that some jails substitute hydroxyzine as their primary medication, which he argues is a mistake. “Facing a potentially lethal problem,” he argues, “we should use the best therapeutic agent; not a second line, clearly inferior drug.” He contends that there is no theoretical or empirical basis for the use of hydroxyzine for alcohol withdrawal. He points out that no current medical textbooks or practice guidelines endorse its use. Although some jails and prisons continue to use hydroxyzine, it is not used outside of prisons and jails. Benzodiazepine use for alcohol withdrawal is temporary, a few days at most, so the risk of diversion can be controlled. In addition, persons detoxing from alcohol should be segregated from the general inmate population so they can be more readily observed, which should also limit diversion.

The latest research suggests that gabapentin may also be an effective medication for alcohol treatment. A 2020 study found that gabapentin is efficacious in promoting abstinence and reducing drinking in individuals with alcohol use disorder, especially in those with more alcohol withdrawal symptoms.¹⁸

The BOP also recommends clonidine for other mild withdrawal symptoms, such as increased sweating, heart rate and/or blood pressure.¹⁹ Clonidine is commonly used in the treatment of high blood pressure (hypertension). It works by reducing the heart rate and relaxing blood vessels. Clonidine also inhibits

¹⁷ Ibid.

¹⁸ Anton, Raymond F., Patricia Latham, Konstantin Voronin, Sarah Book, Michaela Hoffman, James Prisciandaro, and Emily Bristol, 2020, “Efficacy of Gabapentin for the Treatment of Alcohol Use Disorder in Patients with Alcohol Withdrawal Symptoms: A Randomized Clinical Trial,” *JAMA Internal Medicine*, 180(5): 728–736, retrieved December 29, 2021 from <https://doi.org/10.1001/jamainternmed.2020.0249>.

¹⁹ Ibid.

postganglionic nerve fibers, which in turn alter the functioning of the sympathetic nervous system. It comes in tablet form.

BJA Guidelines for Substance Withdrawal Management

BJA in partnership with the National Institute of Corrections and in conjunction with the National Commission on Correctional Health Care (NCCHC), the American Society of Addiction Medicine (ASAM), and AHP are developing guidelines to help jail administrators in the detection and proper management of acute substance withdrawal among individuals in custody. These guidelines will be available on the RSAT TA website, www.rsat-tta.com, as soon released.

While jails and prisons may be able to routinely manage those with mild to moderate alcohol withdrawal symptoms, managing alcohol withdrawal with severe symptoms requires clinical care administered by on-site trained medical professionals. If a correctional facility does not have adequate medical resources, individuals should be immediately transported to medical facilities outside the facility that do.

Alcohol Use Disorder Assessment

Screening for alcohol withdrawal management based on withdrawal symptoms is separate and apart from assessing persons entering correctional facilities for AUD treatment. If persons entering are screened and found to be in need of withdrawal management, their need for AUD treatment is evident. However, others may still be in need of treatment for AUD who were not intoxicated when they entered the facility. To identify persons in need of AUD treatment, assessments must be completed. Given the prevalence of persons entering prison and jail with alcohol and substance use disorders, all should be screened and assessed for both.

There are a number of validated instruments that can be used to screen for alcohol use problems. Here are a few of those commonly used in drunk driving courts, corrections and elsewhere. All may be downloaded for free.

(1) Alcohol Use Disorders Identification Test (AUDIT)

AUDIT is a 10-item screening tool developed by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviors, and alcohol-related problems. A score of 8 or more is considered to indicate hazardous or harmful alcohol use. The AUDIT has been validated across genders and among a wide range of racial and ethnic groups and is considered well suited for use in primary care settings. The WHO has published detailed guidelines about use of the AUDIT, and these are available online: http://whqlibdoc.who.int/hq/2001/who_msd_msb_01.6a.pdf

A copy of the 10 questions is available here:

<https://www.drugabuse.gov/sites/default/files/audit.pdf>.

(2) CAGE: (Cut down, Annoyed, Guilty, Eye-opener)

This is a simple four-item, non-confrontational questionnaire for detecting alcohol problems. Questions are usually phrased as “have you ever” but may also focus of present alcohol problems. Two positive responses are considered clinically significant, although an affirmative answer to the need for an “eye-opener” drink is considered dispositive.

https://www.hopkinsmedicine.org/johns_hopkins_healthcare/downloads/all_plans/CAGE%20Substance%20Screening%20Tool.pdf

(3) Michigan Alcohol Screening Test (MAST)

MAST is a 25-item instrument providing a general measure of lifetime alcohol problem severity, typically used for choosing treatment intensity and guiding inquiry into alcohol-related problems. There is also a shorter, 13-item version (SMAST). A copy of the original version can be found here:

https://adai.uw.edu/instruments/pdf/Michigan_Alcoholism_Screening_Test_156.pdf

The short (SMAST) version can be found at <https://hopequestgroup.org/wp-content/uploads/2011/09/SMAST-Short-Michigan-Alcohol-Screening-Test.pdf>.

(4) NIAAA Drinker Inventory of Consequences (DrinC)

Unlike other instruments, the DrinC was designed to measure the adverse negative consequences of drinking. The instrument was developed in support of Project MATCH (Matching Alcoholism Treatment to Client Heterogeneity), the multisite investigation of how different subtypes of people with AUD respond to alternative interventions. It can be found at:

<https://pubs.niaaa.nih.gov/publications/ProjectMatch/match04.pdf>.

For those that screen positive for SUD, a more detailed assessment should be conducted to inform treatment planning. The American Society of Addiction Medicine (ASAM) has a no cost “Criteria Assessment Interview Guide” for adults. It can be downloaded at https://sitefinitystorage.blob.core.windows.net/sitefinity-production-blobs/docs/default-source/quality-science/021122-asam-paper-criteria.pdf?sfvrsn=12032b4a_3. It also covers “acute intoxication or withdrawal potential,” as well as “biomedical conditions and complications,” “emotional, behavioral, or cognitive conditions and complications,” “readiness to change,” and “relapse, continued use, or continued problem potential.” Assessments such as this will provide the information for counselors to fashion treatment and case management planning.

Other Factors to be Considered in AUD Treatment Assessments

Once sobriety has been achieved, individuals become more accustomed to it, and have successfully begun AUD treatment, additional assessments for co-occurring disorders may be required. These include assessments for co-occurring mental health and post-traumatic stress disorders. Many people suffering from AUD have co-occurring mental health challenges. Depression and anxiety often go hand in hand with heavy drinking. Studies show that people with AUD are two to three times more likely than others to suffer from major depression or anxiety over their lifetimes. When addressing AUD, it is therefore essential to diagnose and address mental health disorders as well. Prisons and jails offer ideal environments for this because the more easily enforced abstinence they provide makes it easier to ascertain whether sobriety alleviates mental health disorder symptoms, or whether the individual also requires mental health treatment. Individuals may drink as a form of self-medication to deal with trauma, depression, and other mental health disorders and needs. Or the drinking itself may cause mental health problems. Some symptoms may go away with sobriety, but others may not.

Once sober, all persons receiving treatment for AUD, should be referred to mental health providers or therapists for a mental health assessment. If it is determined the person has co-occurring alcohol and mental health disorders, the gold standard for treatment is integrated treatment, addressing both conditions concurrently. For detailed guidance on Integrated substance abuse treatment for clients with co-occurring mental health disorders, see <https://www.rsat-tta.com/Files/RSAT-Co-Occurring-Final-Revised-Manual-NM-2019>.

Post-traumatic stress disorder (PTSD) is also one of the most common psychiatric comorbidities of alcohol use disorder, especially among veterans, battered women, and persons who suffered multiple adverse events in childhood. Women who suffer from PTSD at some point in their lives are 2.5 times more likely to also have AUD than women who never have PTSD. Men are 2.0 times more likely to have alcohol problems if they have PTSD compared to men who never suffered PTSD. The symptoms of PTSD interact with those of alcohol use disorder in a self-exacerbating cycle.²⁰

²⁰ U.S. Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder, n.d., *PTSD and Problems with Alcohol Use*, retrieved December 30, 2021 from https://www.ptsd.va.gov/understand/related/problem_alcohol_use.asp

Studies show that the relationship between PTSD and alcohol use problems can start with either issue. For example, people with PTSD have more problems with alcohol than other people, both before and after they develop PTSD. Having PTSD increases the risk that individuals will develop drinking problems. Also, drinking problems put people at risk for traumatic events that could lead to PTSD. As the National Center for PTSD advises, “Treatment for PTSD and alcohol use problems should be planned in a way that gets at both problems together. You may have to go to separate meetings for each issue or see providers who work mostly with PTSD or mostly with alcohol problems. In general, though, PTSD issues should be included in alcohol treatment, and alcohol use issues should be included in PTSD treatment.”

As the Center also states: “Once you become sober (stop drinking entirely), you must learn to cope with your PTSD symptoms to prevent relapse (return to drinking). This is important because sometimes the PTSD symptoms seem to get worse, or you notice them more, right after you stop drinking. Remember that after you have stopped drinking, you have a better chance of making progress in your PTSD treatment. In the long run, you are more likely to have success with both problems.”²¹

²¹ U.S. Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder, op. cit.

III. Alcohol Use Disorder Treatment

Once a person is detoxed and/or identified as suffering from AUD—but not in need of detoxification—the next challenge facing prisons and jails is treatment. The first issue to be considered is the goal of treatment.

Should the goal of treatment be abstinence, or controlled or reduced drinking?

Although research reveals the infrequency of achieving abstinence during and following treatment, many treatment programs, as well as Alcoholics Anonymous (AA), consider abstinence the **only** acceptable treatment goal.²² Yet others advocate a choice in treatment goals,²³ including a non-abstinent, low-risk drinking goal.²⁴ For example, the U.S. Food and Drug Administration (FDA) defines low-risk drinking (defined as no heavy drinking days) as a primary endpoint for its Phase III pharmaceutical trials on medication for alcoholism.²⁵ In addition, in its Project MATCH study, NIAAA measured treatment effectiveness by reduction in frequency and intensity of drinking. Notwithstanding this, research reveals that low-risk drinking is also the lowest-probability outcome following treatment.²⁶

²² Rosenberg, H., and L. A. Davis, 1994, "Acceptance of moderate drinking by alcohol treatment services in the United States," *Journal of Studies on Alcohol*, 55(2): 167–172, retrieved December 29, 2021 from <https://doi.org/10.15288/jsa.1994.55.167>.

²³ Sobell, Mark B., Linda C. Sobell, Joanne Bogardis, Gloria I. Leo, and Wayne Skinner, 1992, "Problem drinkers' perceptions of whether treatment goals should be self-selected or therapist-selected," *Behavior Therapy*, 23(1): 43–52, retrieved December 29, 2021 from [https://doi.org/10.1016/S0005-7894\(05\)80307-7](https://doi.org/10.1016/S0005-7894(05)80307-7).

²⁴ Heather, Nick, Simon J. Adamson, Duncan Raistrick, and Gary P. Slegg, 2010, "Initial Preference for Drinking Goal in the Treatment of Alcohol Problems: I. Baseline Differences Between Abstinence and Non-Abstinence Groups," *Alcohol and Alcoholism*, 45(2): 128–135, retrieved December 29, 2021 from <https://doi.org/10.1093/alcalc/agg096>.

²⁵ Falk, Daniel, Xin Qun Wang, Lei Liu, Joanne Fertig, Margaret Mattson, Megan Ryan, Bankole Johnson, Robert Stout, and Raye Z. Litten, 2010, "Percentage of Subjects With No Heavy Drinking Days: Evaluation as an Efficacy Endpoint for Alcohol Clinical Trials," *Alcoholism: Clinical and Experimental Research*, 34(12): 2022–2034, retrieved December 29, 2021 from <https://doi.org/10.1111/j.1530-0277.2010.01290.x>.

²⁶ Ilgen, M. A., Paula L. Wilbourne, Bernice S. Moos, and Rudolf H. Moos, 2008, "Problem-Free Drinking over 16 Years Among Individuals with Alcohol Use Disorders," *Drug and Alcohol Dependence*, 92(1–3): 116–122, retrieved December 29, 2021 from <https://doi.org/10.1016/j.drugalcdep.2007.07.006>; Kline-Simon, A. H., Daniel E. Falk, Raye Z. Litten, Jennifer R. Mertens, Joanne Fertig, Megan Ryan, and Constance M. Weisner, 2012, "Posttreatment Low-Risk Drinking as a Predictor of Future Drinking and Problem Outcomes Among Individuals with Alcohol Use Disorders," *Alcoholism: Clinical and Experimental Research*, 37(1): E373–E380, retrieved December 29, 2021 from <https://doi.org/10.1111/j.1530-0277.2012.01908.x>; Maisto, Stephen A., Patrick R. Clifford, Robert L. Stout, and Christine M. Davis, 2007, "Moderate Drinking in the First Year After Treatment as a Predictor of Three-Year Outcomes," *Journal of Studies on Alcohol and Drugs*, 68(3): 419–427, retrieved December 29, 2021 from <https://doi.org/10.15288/jsad.2007.68.419>.

Only Small Subset Achieve Positive Functioning with Heavy Drinking²⁷

Researchers analyzed data from 694 people 3 years after they were treated for AUD. Using statistical analysis, researchers organized participants into four profile types to explore associations between continued alcohol use and various outcomes relating to health and functioning. Most people in recovery, (70 percent) functioned well for at least three years after treatment. Most abstained from alcohol or drank infrequently. However, 20 percent achieved stable recovery while drinking frequently and occasionally heavily (more than three drinks for women and more than four drinks for men). Still, this group reported above-average health and low unemployment, despite alcohol consumption that exceeded moderate use guidelines. At the later follow-up, these “high functioning heavy drinkers” reported good health and relatively few hospitalizations. In contrast, 16 percent either abstained or drank infrequently yet reported poor outcomes, which may be related to environmental disadvantages. According to the researchers, these study findings provide further evidence that long-term recovery from AUD, including well-being and positive psychosocial functioning, can be achievable in a **small** percentage who continue drinking heavily.

In short, it appears that only a small proportion of individuals who receive alcohol treatment seem to sustain low-risk drinking. **For this reason, programs might consider aiming primarily for abstinence in treatment and hope at least for reduced, low-risk drinking if abstinence is not achieved.**

The next question is the type of AUD treatment provided. There are many types of evidence-based AUD treatment and interventions: (1) behavioral; (2) mutual support groups; and (3) pharmacological.

(1) Behavioral Treatments

Behavioral treatments are aimed at changing drinking behavior through counseling. They are generally led by health professionals. Most Residential Substance Abuse Treatment (RSAT) behavioral programs for substance use disorders (SUDs) are also compatible for the treatment of AUD. Behavioral treatments may be further broken down to include the following treatment modalities.

Cognitive Behavioral Therapy: Delivered either one-on-one with a therapist or in small groups, this form of therapy is focused on identifying the feelings and situations (called “cues”) that lead to heavy drinking, and on managing stress that can lead to relapse. The goal is to change the thought processes that lead to alcohol misuse and to develop the skills necessary to cope with everyday situations that might trigger problem drinking.

²⁷ Witkiewitz, Katie, Matthew R. Pearson, Adam D. Wilson, Elena R. Stein, Victoria R. Votaw, Kevin A. Hallgren, Stephen A. Maisto, Julia E. Swan, Frank J. Schwebel, Arnie Aldridge, Gary A. Zarkin, and Jalie A. Tucker, 2020, “Can Alcohol Use Disorder Recovery Include Some Heavy Drinking? A Replication and Extension up to 9 Years Following Treatment,” *Alcoholism: Clinical and Experimental Research*, 44(9): 1862–1874, retrieved December 29, 2021 from <https://onlinelibrary.wiley.com/doi/full/10.1111/acer.14413>.

Contingency Management and Community Reinforcement: These are designed to enhance the material and social reinforcement obtained through an alternative, non-alcohol source of reinforcement, especially from participation in activities deemed to be incompatible with drinking. Treatments developed within an operant framework are designed to reorganize the user's environment to systematically increase the rate of reinforcement obtained while abstinent from alcohol and reduce or eliminate the rate of reinforcement obtained through drinking and associated activities.

Motivational Enhancement Therapy: Usually conducted over a short period of time, this therapy is designed to build and strengthen motivation to change drinking behavior. The therapy focuses on identifying the pros and cons of seeking treatment, forming a plan for making changes in one's drinking, building confidence, and developing the skills needed to stick to the plan.

Marital and Family Counseling: This incorporates spouses and other family members in the treatment process and can also play an important role in repairing and improving family relationships. Studies show that strong family support through family therapy increases the chances of maintaining abstinence (stopping drinking), compared with patients undergoing individual counseling.²⁸ The ability to involve family members in prison and jail programming is extremely limited; however, expanded use of video calls in prisons and jails may make this more feasible.

Brief Interventions: These can be provided through both one-on-one and small-group counseling sessions that are time limited. The counselor provides information about the individual's drinking pattern and potential risks. After receiving personalized feedback, the counselor works with the client to set goals and provide ideas for helping to make a change. In the context of providing AUD treatment for pretrial detainees, programs may have to be brief because the average pretrial detention may be no more than two or three weeks.

(2) Mutual Support Groups

Mutual support groups can assist persons to achieve sobriety. These groups include AA and other 12-step programs. They provide peer support for people quitting or cutting back on their drinking. These groups can be combined with treatment by health professionals and/or pharmacological treatments. Many jails and prisons allow AA groups to come into their facilities to stage meetings. Upon release, inmates should be given information about groups that meet in their communities. The AA website provides listing of local programs across the country at https://www.aa.org/pages/en_US/find-aa-resources.

There are also support groups recommended for family members and children of people with AUD (Al-Anon Family Groups, www.al-anon.alateen.org; Adult Children of Alcoholics, www.adultchildren.org). If the RSAT participant is going to return to his or her family, the family's involvement in these groups may help it understand what family members can and cannot do to assist in that individual's recovery.

²⁸ See, e.g. B. McCrady & J. Flanagan (2021). The role of family in alcohol use disorder recovery for adults, *Alcohol Research*, 41 (1): 06.

(3) Pharmacological Treatments

Pharmacological treatments can also promote sobriety. Three medications are currently approved by the FDA to help people stop or reduce their drinking and prevent relapse. They are prescribed by a primary care physician or other health professional and may be used alone or in combination with counseling and/or mutual support groups.

Naltrexone reduces craving and blocks the euphoric effects of alcohol as well as opioids.

Acamprosate makes it easier to maintain abstinence.

Disulfiram blocks the breakdown (metabolism) of alcohol by the body, causing unpleasant symptoms such as nausea and flushing of the skin. These unpleasant effects can help some people avoid drinking while taking disulfiram.

These treatment approaches and specific modalities are not mutually exclusive. See Appendix A for a list of resources for each of the treatment modalities described above.

Combined Behavioral Intervention: This intervention integrates aspects of cognitive behavioral therapy, 12-step facilitation, motivational interviewing, and support system involvement. A motivational interviewing style is used throughout. NIAAA employed it in its COMBINE study.

Combined Behavioral Intervention (CBI)²⁹

CBI was designed to be a state-of-the-art individual outpatient psychotherapy for alcohol dependence. It merges a variety of well-supported treatment methods into an integrated approach. A manual-guided therapy, CBI nevertheless allows for normal clinical flexibility and individualization of treatment. CBI builds upon features in the manualized therapies of NIAAA's Project MATCH and provides skills training and support-system involvement modeled on a community reinforcement approach to treatment.³⁰

In its COMBINE study, NIAAA permitted a maximum of 20 sessions, with the treatment course organized in four phases: Phase 1 emphasizes building motivation for change. It begins with a single session of motivational interviewing, which is the general clinical style used throughout CBI. This is followed by client assessment feedback in the style of motivational enhancement therapy. Phase 2 includes a functional analysis of the client's drinking, a review of the client's psychosocial functioning, and a survey of the client's strengths and resources, the results of which will be used in developing an individual plan for treatment and change. The therapist emphasizes the merits of an abstinence goal, and each client is encouraged to become involved in a 12-step or other mutual-help group. Whenever possible, a supportive significant other is identified to participate in the client's treatment

²⁹ R. Kadden (1995). Cognitive-behavioral approaches to alcoholism treatment, *Alcohol Health & Research World*, 18 (4), 279-286; R. Brown, et. al. (1997) Cognitive-behavioral treatment for depression in alcoholism, *Journal of Consulting and Clinical Psychology*, 65 (5), 715-726.

³⁰ Nowinski, J., Baker, S., Carroll, K. M. (1995). Twelve Step Facilitation Therapy Manual. NIH Pub. No. 94-3722. Rockville, MD: U. S. Department of Health and Human Services, National Institute on Alcohol Abuse and Alcoholism, 1995

Azrin et al. 1982; Meyers and Smith 1995.

sessions as frequently as seems appropriate, ranging from a few to all sessions. The supportive significant other's role is to facilitate the client's compliance and abstinence and to reinforce as many of the CBI modules as the nature of the relationship appears to warrant. Phase 3 draws upon a menu of nine cognitive-behavioral skill-training modules chosen on the basis of the client's needs identified during Phase 2 (cf. Kadden et al. 1995). The modules include (1) assertiveness skills, (2) communication skills, (3) coping with craving and urges, (4) drink refusal and social pressure, (5) job finding, (6) mood management, (7) mutual-help group facilitation, (8) social and recreational counseling, and (9) social support for sobriety. All modules involve specific behavioral coaching and skill practice. Phase 4 involves maintenance checkups in which the therapist and client review progress to date, renew motivation for change, and reaffirm commitment to an original or revised change plan.

CBI also includes a set of eight optional "pull-out" procedures that can be used at any appropriate point during treatment: (1) sobriety sampling, (2) raising therapist's concerns, (3) implementing case management, (4) handling resumed drinking, (5) supporting medication adherence, (6) responding to a missed appointment, (7) telephone consultation, and (8) crisis intervention.

The number, frequency, and duration of CBI treatment sessions are negotiated between the therapist and client within the bounds of 20 sessions and 16 weeks. Weekly 50-minute outpatient visits are typical but not absolute. All therapy sessions are audiotaped, and random samples are reviewed and rated for quality control purposes.³¹

Which AUD treatment is best?

All of these treatment modalities and approaches are evidence-based (see Appendix B). This raises the question, if all these treatment modalities—as well as mutual support groups and medications—have been proven to work, how is a program to choose, given that it must typically serve a diverse and ever-changing collection of incarcerated persons with AUD? **The best strategy may be to avoid limiting AUD programs to just one form of treatment or approach. Programs should consider offering multiple treatment modalities and interventions, either concurrently or sequentially, in the realization that what may work for one individual may not for another.** As a doctor will advise a person healing from a broken leg, two crutches are better than one! Participants should be offered appropriate medication, exposure to mutual self-help groups, as well as various behavior treatments delivered individually and through groups, as resources permit. **It is important to note, however, that AUD medication is now considered a fundamental element of standard of care for AUD according to NIAAA and the Substance Abuse and Mental Health Services Administration.**³²

³¹ Arciniega et al., 2002, *Project COMBINE Combined Behavioral Intervention (CBI) Therapist Manual*, Editor: William R. Miller, retrieved December 29, 2021 from <https://web.3rdmil.com/assets/guides/research/Miller%20-%20Combined%20Behavioral%20Intervention%20Therapist%20Manual.pdf>.

³² Substance Abuse and Mental Health Services Administration (SAMHSA) and National Institute on Alcohol Abuse and Alcoholism (NIAAA). Report of the SAMHSA–NIAAA Consensus Panel on New and Emerging Pharmacotherapies for Alcohol Use Disorders and Related Comorbidities. Rockville, MD: Substance Abuse and Mental Health Services Administration; July 2012.

SAMHSA guidelines, for example, advise: “Medications should be prescribed as part of a comprehensive treatment approach that includes counseling and other psychosocial therapies (through referral to a psychiatrist, psychologist, or professional counselor) and social supports (through participation in Alcoholics Anonymous and other mutual-help programs).”³³

The American Psychiatric Association (APA) concurs, recommending that patients with alcohol use disorder have a documented comprehensive and person-centered treatment plan that includes evidence-based nonpharmacological **and** (not or!) pharmacological treatments.³⁴ “Rigorous, evidence-based findings have,” researchers continue, “two important implications:

(1) Medications are not “stand-alone” treatments for AUD, but rather an element in a comprehensive treatment plan that includes behavioral therapy.

(2) Drinking outcomes are significantly better when behavioral interventions are combined with AUD medication than when they are given without AUD medication.

Medications can help restore normal brain functioning, reduce relapse risk, and decrease symptoms of protracted withdrawal (e.g., craving, mood, sleep disturbance), thereby facilitating better engagement in behavioral treatment. Behavioral therapies, in turn, enhance pharmacotherapy response by modifying attitudes and behaviors related to alcohol, increasing healthy life skills, and helping people to stay engaged in recovery.”³⁵

It constitutes both medical malpractice as well as endangers the public for jails and prisons to fail to provide access to AUD medication for those who need it.

Alcohol Use Disorder Medications

While the determination of a specific medication and dose is a clinical decision, RSAT nonmedical treatment staff should be familiar with AUD medications so that they can educate participants on the medications and what each requires. If participants indicate a desire for AUD medications, the facility’s clinical staff should then advise them on the pros and cons of each medication and any medical contraindications based on participants’ medical condition.

The Mayo Clinic issued a review of AUD medications in 2020. Examining the research on all three medications, the authors concluded that “well-supported scientific evidence shows that medications can be effective in treating serious alcohol use disorders . . .” The reviewers added that “(e)fficiencies of these medications are compelling . . .” and are comparable to standard medications for other common

³³ Center for Substance Abuse Treatment. Incorporating Alcohol Pharmacotherapies Into Medical Practice. Treatment Improvement Protocol 49. (HHS Publication No. [SMA] 12-4389.) Rockville, MD: Substance Abuse and Mental Health Services Administration; 2009; SAMHA, medication for the treatment of alcohol use disorder: A brief guide, 2015, <https://store.samhsa.gov/sites/default/files/d7/priv/sma15-4907.pdf>, downloaded April 14, 2022.

³⁴ American Psychiatric Association, 2018, *Clinical Practice Guidelines*, retrieved August 10, 2021 from <https://www.psychiatry.org/psychiatrists/practice/clinical-practice-guidelines>.

³⁵ Mason, Barbara J., and Charles J. Heyser, 2021, “Alcohol Use Disorder: The Role of Medication in Recovery,” *Alcohol Research*, 41(1): 07.

medical conditions. They pointed out that although it would be considered a deviation from standard of care not to offer or prescribe for other common medical conditions, fewer than 10 percent of those with AUD receive medications.

AUD Medications

(1) Disulfiram (Antabuse): The FDA first approved the acetaldehyde dehydrogenase inhibitor disulfiram in 1951. The most common pathway in alcohol metabolism is the oxidation of alcohol via alcohol dehydrogenase, which metabolizes alcohol to acetaldehyde and aldehyde dehydrogenase, which converts acetaldehyde into acetate. Disulfiram leads to an irreversible inhibition of aldehyde dehydrogenase and accumulation of acetaldehyde, a highly toxic substance. Although additional mechanisms (e.g., inhibition of dopamine β -hydroxylase) may also play a role in disulfiram's actions, the blockade of aldehyde dehydrogenase activity represents its main mechanism of action. Therefore, alcohol ingestion in the presence of disulfiram leads to the accumulation of acetaldehyde, resulting in numerous related unpleasant symptoms, including tachycardia, headache, nausea, and vomiting. In this way, disulfiram administration paired with alcohol causes the aversive reaction. Open-label studies of disulfiram do provide support for its efficacy, as compared to controls, with a medium effect size. The efficacy of disulfiram largely depends on patient motivation to take the medication and/or supervised administration, given that the medication is primarily effective by the potential threat of an aversive reaction when paired with alcohol. Dosing: 500 mg daily, weeks one and two, 250 mg daily thereafter.³⁶

(2) Acamprosate (Campral): This medication was approved as a treatment for alcohol dependence in Europe in 1989 and in the U.S. in 2004. There is evidence that it targets the glutamate system by modulating hyperactive glutamatergic states, possibly acting as an *N*-methyl-D-aspartate receptor agonist. Overall, there is evidence that acamprosate may be more effective in promoting abstinence and preventing relapse in already detoxified patients than in helping individuals reduce drinking, suggesting its use as an important pharmacological aid in treatment of abstinent patients with alcohol use disorder. The most common side effect with acamprosate is diarrhea. Other less common side effects may include nausea, vomiting, stomachache, headache, and dizziness, although the causal role of acamprosate in giving these side effects is unclear. It must be taken three times daily. Dosing: Two 333 mg tablets, 3 x daily.³⁷

(3) Naltrexone (Revia—oral; Vivitrol—injection): Naltrexone is also an opioid receptor antagonist. The FDA approved this medication for the treatment of alcohol dependence in 1994. In 2006, the FDA approved a monthly extended-release injectable formulation of naltrexone (Vivitrol), developed with the goal of improving patient adherence. Naltrexone reduces craving for alcohol and has been found to be most effective in reducing heavy drinking. The efficacy of naltrexone in reducing relapse to heavy drinking, in comparison to placebo, has been supported in numerous meta-analyses. Common side

³⁶ B. Mason and C. Heyser, op. cit.

³⁷ Ibid.

effects of naltrexone may include nausea, headache, dizziness, and sleep problems. Naltrexone should be used with caution in patients with active liver disease and should not be used in patients with acute hepatitis or liver failure. A benefit of naltrexone is that it works for both AUD and Opioid Use Disorder, commonly co-occurring disorders. The injectable naltrexone lasts for 28 days, so patients are not able to skip daily pills for a day in order to resume abusing alcohol. About 500 jails in the United States and most state prison systems offer at least limited naltrexone, usually extended-release injectable naltrexone (Vivitrol) for opioid use disorder. In these facilities, it should not be difficult to add individuals with AUD to the medicine or injection lines. Dosing: Oral—one 50 mg tablet daily; injected—one 380 mg injection monthly.³⁸

There are additional medications approved for AUD in Europe but not in the United States, as well as medications that are commonly used in the United States to safely treat people withdrawing from or being treated for AUD. However, as these have not been certified by the FDA for the treatment of AUD, their use must be determined by a treating physicians based on individual patient assessments.

The APA specifically recommends, for example, both FDA-approved and non-approved medications for AUD. It recommends naltrexone or acamprosate be offered to patients with moderate to severe AUD who have a goal of reducing alcohol consumption or achieving abstinence, prefer pharmacotherapy or have not responded to nonpharmacological treatments alone, and have no contraindications to the use of these medications. It includes disulfiram for those who prefer it and who are capable of understanding the risks of drinking while on it. In addition, the APA recommends topiramate or gabapentin be offered to patients with moderate to severe alcohol use disorder who have a goal of reducing alcohol consumption or achieving abstinence, prefer topiramate or gabapentin or are intolerant to or have not responded to naltrexone and acamprosate, and have no contraindications to the use of these medications.

Also important, the APA recommends **against** antidepressant medication unless there is evidence of a co-occurring disorder that warrants it. It recommends against benzodiazepines except for withdrawal or unless there are co-occurring mental disorders that warrant them. Pregnant or breastfeeding women should not be recommended these medications unless co-occurring disorders warrant them, and persons with renal impairment should not be recommended acamprosate. Persons with acute hepatitis or hepatic failure should not be recommended naltrexone, nor people who use opioids.³⁹

³⁸ Ibid.

³⁹ American Psychiatric Association, 2018, op. cit.

Research indicates AUD medications work best to reduce relapse risk when initiated immediately after a 4- to 7-day detoxification period.⁴⁰ On the other hand, there is little scientific evidence on the optimal duration of AUD medication treatment. Decisions about duration must be made by medical professional based on each individual's relapse history, the severity of AUD before treatment, and how the individual does in treatment and with the medication.⁴¹

Medical Management

No matter how effective, medications do not work if patients fail to take them as prescribed or fail to take them for as long as needed, which may vary depending upon the patient and their environment. NIAAA developed a "Medical Management Program (MM)" for its COMBINE research study. The goal of MM is to promote the patient's recovery from alcohol dependence. It advises that programs can help patients meet this goal in the following four ways:

- Provide patients with strategies for taking their medications and staying in treatment.
- Provide educational materials about alcohol dependence and pharmacotherapy.
- Support patients' efforts to change drinking habits.
- Make direct recommendations for changing drinking behaviors.

NIAAA has developed MM Training and Session Adherence Checklists.

<https://pubs.niaaa.nih.gov/publications/combine/introduction.htm>. It also published *Medical Management Treatment Manual: A Clinical Guide for Researchers and Clinicians Providing Pharmacotherapy for Alcohol Dependence* (Generic Version; 2010 edition) by Helen M. Pettinati and Margaret E. Mattson. Download this manual from: <https://pubs.niaaa.nih.gov/publications/MedicalManual/MMManual.pdf>

The NIAAA manual is an adaptation of the manual used for the COMBINE clinical study. As the manual explains: "Nonadherence with medication regimens is a common problem both in clinical practice and in research, regardless of the disorder being treated. One focus of MM treatment is to assist medical clinicians in providing education, support, and strategies that help to ensure that alcohol dependent patients are medication-adherent, i.e., take medications as prescribed." The manual provides a step-to-step guide on how the medical provider proceeds with their patients who are prescribed AUD medication. It begins with six sequential topics for the clinician to discuss.

⁴⁰ Maisel, Natalya C., Janet C. Blodgett, Paula L. Wilbourne, Keith Humphreys, and John W. Finney, 2013, "Meta-Analysis of Naltrexone and Acamprosate for Treating Alcohol Use Disorders: When Are These Medications Most Helpful?" *Addiction*, 108(2): 275–293, retrieved December 30, 2021 from <https://doi.org/10.1111/j.1360-0443.2012.04054.x>; Garbutt James C., Henry R. Kranzler, Stephanie S. O'Malley, David R. Gastfriend, Helen M. Pettinati, Bernard L. Silverman, John W. Loewy, and Elliot W. Ehrich, 2005, "Efficacy and Tolerability of Long-Acting Injectable Naltrexone for Alcohol Dependence: A Randomized Controlled Trial," *JAMA*, 293(13): 1617–1625, retrieved December 30, 2021 from <https://doi.org/10.1001/jama.293.13.1617>.

⁴¹ B. Mason & C. Heyser (2021). Alcohol use disorder: the role of medication in recovery. *Alcohol Research*, 41 (1): 07.

Guidelines for Medical Management Initial Session Topics

Topic 1: Review intake evaluation results.

Topic 2: Present diagnostic information and set treatment goals.

Topic 3: Provide medication information.

Topic 4: Develop Medication Adherence Plan.

Topic 5: Discuss mutual-support group participation.

Topic 6: Summarize Initial Session and address patient's concerns.

After addressing these guidelines, clinicians conduct follow-up sessions to check for medication adherence and develop strategies to address nonadherence.

Research has also found that patients do better with injectable naltrexone, which lasts for 28 days, than with oral naltrexone, which must be taken daily. A retroactive electronic chart review of patients with AUD who were treated with oral or injected naltrexone found the median time to relapse was longer for the latter, 150.5 days versus 50.5 days. Researchers concluded that the results suggest that injected naltrexone should be considered “a first-line option” for patients.⁴²

Treatment Is An Ongoing Process: Reentry/Reintegration Post-Release

Overcoming an AUD is an ongoing process, one that usually includes setbacks. Treatment and effective intervention require persistence. It is the exception, not the rule, that someone enters treatment and never drinks again. Most often, people experience relapses, hopefully learn from them, and then try again to maintain sobriety. This means that continued follow-up and support are critical, especially for incarcerated persons when they leave prison or jail and reenter the community. People with drinking problems are most likely to relapse during periods of stress or when exposed to people or places associated with past drinking. Both await released individuals in abundance.

As the NIAAA recognizes, “Relapse is part of the process . . . Relapse is common among people who overcome alcohol problems . . . Just as some people with diabetes or asthma may have flare-ups of their disease, a relapse to drinking can be seen as a temporary setback to full recovery and not a complete failure.”⁴³

⁴² Leighty, Anne E., and Elayne D. Ansara, 2019, “Treatment Outcomes of Long-Acting Injectable Naltrexone Versus Oral Naltrexone in Alcohol Use Disorder in Veterans,” *Mental Health Clinician*, 9(6): 392–396, retrieved December 30, 2021 from <https://doi.org/10.9740/mhc.2019.11.392>.

⁴³ NIAAA, n.d., *Treatment for Alcohol Problems: Finding and Getting Help*, retrieved August 11, 2021 from <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/treatment-alcohol-problems-finding-and-getting-help#pub-toc1>.

For this reason, encouraging medication to assist persons transitioning to the community may prove particularly essential. Providing an injection of naltrexone, for example, immediately before patients leave prison or jail will help reduce cravings, as well as block the effects of drinking to prevent relapse for at least the first crucial several weeks in the community. (Daily medication will do the same—if individuals take it.) By providing extended-release naltrexone, individuals have 28 days to enroll in treatment, find convenient AA meetings, and stabilize in the community, even if they are not committed to continued injections.

Retrospective Study of Veterans Health Administration Data Showed an Association Between VIVITROL® Treatment and Reduced Emergency Department Visits and Inpatient Hospital Stays.

Poster Presented August 3, 2020

The study assessed treatment patterns and Healthcare Resource Use among 3,665 veterans diagnosed with alcohol dependence who were treated with VIVITROL® (naltrexone for extended-release injectable suspension [XR-NTX]). In the study, VIVITROL treatment for alcohol dependence was associated with decreases in inpatient care and increases in outpatient care during the one-year period following initiation of treatment with VIVITROL, compared to the one-year period before VIVITROL treatment initiation. Specifically, during the baseline period, defined as the one year before VIVITROL initiation, 61.5 percent of patients had at least one inpatient admission, and 39.8 percent of patients had an emergency department visit. During the follow up period, defined as one year after VIVITROL initiation, 37.8 percent of patients had at least one inpatient admission and 35.4 percent of patients had an emergency department visit. How generalizable these finds are to non-veteran populations are not determined.⁴⁴ Studies of the use of extended-release naltrexone in two Michigan and one Missouri drunk driving courts found that treatment with the medication was associated with relative risk reductions of missed meetings, reduction in monthly positive alcohol tests and significantly reduced rearrest rates, 26 percent without the medication and 8 percent with the medication.⁴⁵ These studies suggest the efficacy of setting up individuals with prescriptions for continued injectable naltrexone upon release.

AUD counselors or reentry coordinators should work with each participant to develop a plan for continuing care and support in the community, as well as continued access to any AUD medication the person may have been prescribed. Post-release care can range from inpatient treatment for those who lack both the internal and external supports required to remain abstinent to referrals to community AA meetings or other support groups for those who need more limited support and assistance. As with all

⁴⁴ Alkermes, 2021, "Alkermes Presented New Data Analysis on Healthcare Resource Use Among Veterans with Alcohol Dependence," *News Direct*, July 13, retrieved December 30, 2021 from <https://finance.yahoo.com/news/alkermes-presented-data-analysis-healthcare-161611369.html?guccounter=1>

⁴⁵ M. Finigan, et al., 2011, "Preliminary Evaluation of Extended-Release Naltrexone in Michigan and Missouri Drug Courts," *Journal of Substance Abuse Treatment*, 21(3): 2188–2193.

post-release referrals, participants are more likely to follow through if they are introduced to representatives of the referral providers before release allowing them to establish a personal connection. If participants are on medication, a plan for continued medical management should be developed to discourage premature discontinuation of the medication. This may require identification of a physician who can continue to prescribe the medication as well as the means to pay for it.

Counselors or reentry coordinators should assist participants before release to come up with a list of the resources and people they can identify in the community that will be available to assist and support them in recovery. Who is available they can socialize or recreate with where it will not involve drinking? What AUD treatment program is available to them if they find they need additional, structured treatment and assistance? If they do relapse, who can they turn to get them into a detoxification program or emergency department before they hurt themselves or others?

If the participants have co-occurring mental health or other challenges, these too should be included in the reentry planning and post-release planning.

IV. Other AUD Treatment Programming Best Practices

Guiding Principles for Women’s AUD Treatment

Research has found that women with AUD experience more barriers to treatment and are less likely to access it than men.⁴⁶ Barriers include low perception of need for treatment, guilt and shame, co-occurring disorders, economic and health insurance disparities, childcare responsibilities, and fear of child protective services. When women do access treatment, they present with more severe AUD and more complex psychological, social, and service needs than men. As researchers conclude: “. . . (O)utcomes for women are best when treatment is provided in women-only programs that include female-specific content. To date, research on treatments tailored to the individual needs of women is limited, but research on mechanisms of change has suggested the importance of targeting anxiety and depression, affiliative statements in treatment, abstinence self-efficacy, coping skills, autonomy, and social support for abstinence.”⁴⁷

The research findings underscore both the need and the unique opportunity prisons and jails have to provide needed AUD treatment to incarcerated women.

Recognizing the unique treatment needs of women with AUD and SUD, SAMHSA published a set of evidence-based principles to guide gender-responsive treatment for women.⁴⁸ These guidelines, which can be found at <https://store.samhsa.gov/system/files/sma15-4426.pdf>, offer several recommendations. These include developing cultural competence to frame women’s AUD symptoms and treatment in their socioeconomic contexts (e.g., employment, income, housing). They suggest that providers acknowledge the unique significance of women’s relationships and attend to the “caregiver roles that women often assume throughout the course of their lives.” Relatedly, the guidelines address stigma by noting the importance of “recognizing that ascribed roles and gender expectations across cultures affect societal attitudes toward women who abuse substances.” Other recommendations state that substance use disorder (SUD) treatments for women adopt a trauma-informed approach, which often emphasizes women’s strengths, and address “women’s unique health concerns” through “an integrated and multidisciplinary approach.” The SAMHSA guidelines conclude that clinical treatment

⁴⁶ McCrady, Barbara S., Elizabeth E. Epstein, and Kathryn F. Fokas, 2020, “Treatment Interventions for Women with Alcohol Use Disorder,” *Alcohol Research*, 40(2), retrieved December 30, 2021 from <https://dx.doi.org/10.35946%2Farcr.v40.2.08>.

⁴⁷ Ibid.

⁴⁸ Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Treatment, 2013, “Substance Abuse Treatment: Addressing the Specific Needs of Women,” *Treatment Improvement Protocol (TIP) Series, No. 51*, Rockville, MD: SAMHSA, HHS Publication No. (SMA) 13-4426, Retrieved January 27, 2020 from <https://store.samhsa.gov/system/files/sma15-4426.pdf>.

services (e.g., screening, mental health services), clinical support services (e.g., parenting education, job training), and community support services (e.g., childcare, transportation) should work collaboratively to facilitate comprehensive AUD treatment for women of diverse backgrounds.

Trauma-informed Treatment

Many people with AUD, especially those who are incarcerated, suffer from trauma. As with all RSAT programming, the AUD treatment should be trauma informed.

For more information on trauma and trauma informed treatment, the RSAT TTA website, www.rsat-tta.com, contains several manuals, including: Introduction to Trauma and Trauma Informed Approaches for RSAT Staff that specifically addresses implementing trauma-informed approaches in correctional settings.

Given the highly elevated rates of trauma among women with AUD/SUD, SAMHSA has suggested that treatment for this population may benefit from adopting principles of trauma-informed care. A trauma-informed approach recognizes the prevalence and impact of trauma in women with AUD and adjusts treatment accordingly, even if clients do not meet diagnostic criteria for PTSD. Trauma-informed AUD treatment does not need to target trauma explicitly, but rather may consider trauma in the assessment and planning phases of treatment.

For example, SAMHSA recommends that AUD treatment providers should assess women at intake for trauma histories and PTSD symptomatology and refer clients with severe symptomatology to providers who have experience working with traumatized populations (i.e., if they lack such experience themselves). Whether referrals are made or not, AUD programs must “avoid triggering trauma reactions or re-traumatizing women.” For example, violating a client’s trust or disregarding a client’s emotions or experiences may trigger trauma reactions. SAMHSA also recommends that programs should “adjust staff behavior” and modify the treatment environment “to support clients’ coping capacities and safety concerns.” Specific strategies may include ensuring that urine specimens are collected in a private setting and establishing consistency in the treatment program’s routines and enforcement of rules. In addition, AUD treatment providers should “allow survivors to manage their trauma symptoms” in a manner conducive to AUD treatment engagement and success. For example, allowing clients to express strong feelings without facing judgment and explicitly addressing trauma only when a client is ready are considered trauma-informed approaches. Finally, SAMHSA recommends that trauma-informed AUD treatment for women should “emphasize skills and strengths, interactive education, growth, and change beyond stabilization.” Specific skills to incorporate into treatment may include assertiveness training and relaxation techniques.

Evidence-based Trauma Treatment Programs for Women

Examples of programs for women with trauma include *Helping Women Recover* (also a book). It follows the principles of trauma-informed care, providing a “healing” (i.e., safe, empowering, relational) environment that emphasizes strengths and is sensitive to cultural and gender issues.⁴⁹ Treatment modules include topics hypothesized to be essential to women’s recovery: a focus on self and the integration of roles with feelings, thoughts, and attitudes; healthy interpersonal relationships; sexuality; and spirituality. The same individuals also created *Beyond Trauma: A Healing Journey for Women*, which teaches women how to identify trauma and other forms of abuse, helps them understand typical reactions to trauma and abuse, and fosters the development of coping skills.⁵⁰

In a randomized clinical trial with incarcerated women, 77 percent of whom were primary stimulant users, researchers integrated the Helping Women Recover and Beyond Trauma protocols into a gender-responsive treatment (GRT) program.⁵¹ GRT was compared to a standard prison-based therapeutic community (TC), which, like GRT, was single-gender and targeted SUD treatment, but unlike GRT did not focus on gender-specific issues or trauma histories. Both conditions improved women’s psychological well-being and alcohol use outcomes, but women in GRT also had more favorable outcomes for drug use, length of aftercare treatment engagement, and rate of reincarceration in the year following release from parole. A subsequent analysis showed that women with physical/sexual abuse histories had significantly better posttreatment depression and substance use outcomes following GRT than TC.⁵²

An extension of trauma-informed care is treatment for co-occurring AUD/SUD and PTSD. This integrated focus is particularly relevant to women who present to AUD/SUD treatment and often have elevated rates of trauma history and PTSD.⁵³ Integrated models of treatment for PTSD and SUD have been developed and tested, with mixed results. Seeking Safety (SS), for example, is a CBT-based treatment model that aims to reduce co-occurring PTSD and SUD by enhancing coping skills.⁵⁴ It emphasizes themes of establishing safety, taking back power, being honest, setting boundaries, practicing compassion, healing from anger, grounding, creating meaning, and increasing self-care.

⁴⁹ Stephanie S. Covington, 2008, *Helping Women Recover: A Program for Treating Addiction*, Hoboken, NJ: John Wiley & Sons.

⁵⁰ Stephanie S. Covington, 2003, *Beyond Trauma: A Healing Journey for Women*, Center City, MN: Hazelden Publishing.

⁵¹ Messina, Nena, Christine E. Grella, Jerry Cartier, and Stephanie Torres, 2010, “A Randomized Experimental Study of Gender-Responsive Substance Abuse Treatment for Women in Prison,” *Journal of Substance Abuse Treatment*, 38(2): 97–107. Retrieved December 30, 2021 from <https://doi.org/10.1016/j.jsat.2009.09.004>.

⁵² Saxena, Preeti, Nena P. Messina, Christine E. Grella, 2014, “Who Benefits from Gender-Responsive Treatment? Accounting for Abuse History on Longitudinal Outcomes for Women in Prison,” *Criminal Justice and Behavior*, 41(4): 417–432, retrieved December 30, 2021 from <https://doi.org/10.1177/0093854813514405>.

⁵³ Hien, Denise, Lisa Caren Litt, Lisa R. Cohen, Gloria M. Miele, and Aimee Campbell, 2009, *Trauma Services for Women in Substance Abuse Treatment: An Integrated Approach*. New York, NY: American Psychological Association. <https://www.apa.org/pubs/books/4317173>.

⁵⁴ Lisa Najavits, 2002, *Seeking Safety: A Treatment Manual for PTSD and Substance Abuse*. New York, NY: The Guilford Press.

Hien and colleagues tested the efficacy of SS and another active treatment condition Relapse Prevention against a treatment-as-usual control condition.⁵⁵ Women in SS and Relapse Prevention had comparable posttreatment reductions in both PTSD and SUD symptoms, and both treatments were superior to the control condition.

A study conducted through the National Institute on Drug Abuse Clinical Trials Network found no differences in PTSD or SUD outcomes between an abbreviated version of Seeking Safety and a health education control condition, both delivered as adjuncts to standard SUD treatment.⁵⁶ On the other hand, another integrated treatment approach for women with SUD found the integrated treatment was associated with lower substance use and improved general mental health, but not with reduced PTSD symptoms.⁵⁷ The researchers used a quasi-experimental design to examine a large cohort treated across nine sites. Participants were mostly of low socioeconomic status and had serious mental and/or physical health problems, as well as an interpersonal trauma history. This suggests that women with PTSD should be enrolled in AUD programs, even if they are not also designed to address PTSD. A referral should be made to an evidence-based PTSD program concurrent or subsequent to the AUD/SUD treatment.

Addressing Racial Disparities in AUD Treatment

The first step in addressing racial disparities in AUD treatment is to create “treatment environments that are inclusive, culturally competent, and accessible to communities of color.”⁵⁸ Strategies to obtain these goals include: (1) hiring treatment providers of color who may be uniquely capable of identifying the needs of racially marginalized patients and determining effective treatment approaches; (2) offering a wide array of traditional and holistic treatment services; (3) incorporating diverse cultural values into treatment programs, such as considerations for spirituality, religion, and cultural identity; (4) addressing potential language barriers by employing bilingual staff members.

AUD treatment that does not recognize the realities of racism, sexism, and inequalities in society will have extreme difficulty in reaching participants forced to deal with these issues every day. Participants will not take counselors or others seriously if these treatment providers are in denial or refuse to recognize the realities of the world participants come from and will return to. For example, failing to deal with issues of child abuse and domestic and family violence in programs for incarcerated women, who overwhelmingly have been abused as children and intimate partners, risks them discounting anything

⁵⁵ Hien, Denise A., Lisa R. Cohen, Gloria M. Miele, Lisa Caren Litt, and Carrie Capstick, 2004, “Promising Treatments for Women with Comorbid PTSD and Substance Use Disorders,” *The American Journal of Psychiatry*, 161(8): 1426–1432, retrieved December 30, 2021 from <https://doi.org/10.1176/appi.ajp.161.8.1426>.

⁵⁶ Hien, Denise A., et al., 2009, “Multisite Randomized Trial of Behavioral Interventions for Women with Co-Occurring PTSD and Substance Use Disorders,” *Journal of Consulting and Clinical Psychology*, 77(4): 607–619, retrieved December 30, 2021 from <https://doi.org/10.1037/a0016227>.

⁵⁷ Morrissey, Joseph P., Alan R. Ellis, Margaret Gatz, Hortensia Amaro, Beth Glover Reed, Andrea Savage, Norma Finkelstein, Ruta Mazelis, Vivian Brown, Elizabeth W. Jackson, and Steven Banks, 2005, “Outcomes for Women with Co-Occurring Disorders and Trauma: Program and Person-Level Effects,” *Journal of Substance Abuse Treatment*, 28(2): 121–133, retrieved December 30, 2021 from <https://doi.org/10.1016/j.jsat.2004.08.012>

⁵⁸ Addiction Resource Editorial Staff, 2020, *Not Equal: Racial Disparities in Addiction/Substance Abuse Treatment*, <https://www.addictionresource.net/racial-disparities-addiction-treatment/>.

else counselors are trying to provide. The same for the failure to deal with issues of racism, brutality, bias, and discrimination in programs for racial and ethnic minorities.

Staffing RSAT AUD Treatment Programs

Many different health professionals, as well as peers, can provide AUD treatment. They include: (1) primary care providers, including physicians, nurse practitioners, and physician's assistants who can provide medications, brief behavioral treatment, and referrals to specialists; (2) psychiatrists who can also provide medication and behavioral treatment; (3) psychologists (Ph.D., Psy.D. or M.A.) who can provide behavioral treatment; (4) social workers (MSW, LCSW) who can provide behavioral treatment; and (5) alcohol counselors (certified in most states) who provide behavioral treatment. Peers—persons who have achieved long-term sobriety—may also provide behavioral treatment. In many states, inmates who complete training and provide supervised counseling and support to other inmates may be certified as peer recovery specialists while still incarcerated. Not only are they valuable assets for AUD programs behind the walls, but after release they can offer continued support to those transitioning back to the community. Many find paid employment as certified peer counselors after release because their services are eligible for third-party payments from private insurers and Medicaid in many states.

As mentioned, while many AUD treatment programs have proved to be successful, if they are not staffed by empathetic and competent staff, even the most evidence-based program can easily fail. However, once such a staff is assembled, it is important that its members be nurtured and supported. Working in correctional environments is not easy, and even the best treatment providers can burn out. Treatment staff, peers, and correctional officers assigned to RSAT pods or housing units themselves need time and resources for their own continued well-being.

According to the National Academy of Medicine, burnout for health care professionals is at a record high. The COVID-19 pandemic made everything worse, and its effect will remain after COVID-19 finally recedes. In its report, *Taking Action Against Clinician Burnout: A Systems Approach to Supporting Professional Well-Being*, the Academy found that burnout was prevalent across “all clinical disciplines and across care settings,” contributing to higher risks to patients, as well as increased risk of physical or mental issues for the clinicians themselves. In 2020, the World Health Organization (WHO) classified burnout “linked to chronic stress at work” as a clinical syndrome. WHO notes the following symptoms: (1) feelings of energy depletion or exhaustion; (2) increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and (3) reduced professional efficacy. The National Academy of Medicine linked causes of burnout to “unmanageable workloads, inadequate technology, and a lack of social support” as well as “inadequate staffing, interruptions, moral distress, and patient factors” as contributing to burnout.

Time should be set aside for the treatment and other correctional staff to identify their own burnout issues and come up with support and other measures to address them. Treatment staff should have someone they themselves can go to for assessment, advice, and assistance.

Appendix A — Resources for AUD Treatment

The following are links to additional references and information on AUD treatment.

AUD Information Resources

1) National Institute on Alcohol Abuse and Alcoholism

[https://www.niaaa.nih.gov/ 301-443-3860](https://www.niaaa.nih.gov/301-443-3860)

This includes a “NIAAA Alcohol Treatment Navigator” that will assist treatment staff in identifying referral programs where RSAT participants may be returning to after discharge.

<https://alcoholtreatment.niaaa.nih.gov/how-to-find-alcohol-treatment/step-1-search-trusted-sources-to-find-providers>

(2) Substance Abuse and Mental Health Services Administration

<https://www.samhsa.gov/>

This includes “Medication for the Treatment of Alcohol Use Disorder: A Brief Guide” and “Pocket Guide” as well as “Advisory: Prescribing Pharmacotherapies for Patients with Alcohol Use Disorder.”

3) Centers for Disease Control and Prevention

<https://www.cdc.gov/alcohol/index.htm>

Section on Alcohol and Public Health, also includes “Alcohol Screening and Brief intervention for People Who Consume Alcohol and Use Opioids.”

4) National Commission on Correctional Health Care

<https://www.ncchc.org/clinical-practice-guideline-on-alcohol-withdrawal-management>

Guidelines for alcohol withdrawal management.

5) American Society of Addiction Medicine

<http://eguideline.guidelinecentral.com/i/1254278-alcohol-withdrawal-management/0?>

A pocket guide on alcohol withdrawal management.

6) Alcoholics Anonymous

<https://www.aa.org/contact-gso>

Provides “The Big Book,” “12 Steps and 12 Traditions,” “AAGrapevine.org,” “Meeting Guide App” and more. The latter can help RSTA staff help participants determine where they find meetings when they are discharged.

7) National Institute on Drug Abuse

www.nida.nih.gov

301-443-1124

8) National Institute of Mental Health

www.nimh.nih.gov

1-866-615-6464

9) National Clearinghouse for Alcohol and Drug Information

www.samhsa.gov

1-800-729-6686

Appendix B — The Research on Evidence-Based AUD Treatment

Note to readers: This section is for audiences interested in the research on evidence-based treatment. The prior sections have asserted that the approaches and modalities described are evidence-based. This section provides the basis for these conclusions, briefly reviewing the research and major studies.

The good news is that all these interventions and treatments for AUD have been proven to work. The bad news is that none works for everyone, none works all the time, and none can promise success even most of the time.

A 2019 meta-analysis and systematic review has found that interventions, especially those based on the principles of motivational interviewing, are effective in the treatment of alcohol use disorder. These interventions can include self-monitoring of alcohol use, increasing awareness of high-risk situations, and training in cognitive and behavioral techniques to help clients cope with potential drinking situations, as well as life skills training, communication training, and coping skills training. The cognitive behavioral treatments can be delivered in individual or group settings.⁵⁹

Acceptance- and mindfulness-based interventions—increasingly used to target AUD—also show evidence of efficacy in a variety of settings and formats, including brief intervention formats.⁶⁰ Active ingredients include raising present moment awareness, developing a nonjudgmental approach to self and others, and increasing acceptance of present moment experiences. Acceptance- and mindfulness-based interventions are commonly delivered in group settings and can also be delivered in individual therapy contexts.

Computerized, web-based, and mobile interventions have also been developed, incorporating the principles of brief interventions; behavioral and cognitive behavioral approaches; as well as mindfulness and mutual support group engagement. Many of these approaches have also demonstrated efficacy in initial trials. For example, the NIAAA developed Take Control. This is a computerized intervention that includes aspects of motivational interviewing and coping skills training, designed to provide psychosocial support (particularly among those assigned to the placebo medication) as well as to increase adherence and retention among individuals enrolled in pharmacotherapy trials.⁶¹

⁵⁹ Witkiewitz, K., R.Z. Litten, and L. Leggio, 2019, “Advances in the Science and Treatment of Alcohol Use Disorder,” *Science Advances*, 5(9), retrieved December 29, 2021 from <https://doi.org/10.1126/sciadv.aax4043>.

⁶⁰ Ibid.

⁶¹ Devine, Eric G., Megan L. Ryan, Daniel E. Falk, Joanne B. Fertig, and Raye Z. Litten, 2016, “An Exploratory Evaluation of Take Control: A Novel Computer-Delivered Behavioral Platform for Placebo-Controlled Pharmacotherapy Trials for Alcohol Use Disorder,” *Contemporary Clinical Trials*, 50:178–185, retrieved December 29, 2021 from <https://doi.org/10.1016/j.cct.2016.08.006>.

Attendance and engagement with mutual support groups (e.g., AA and SMART) have been associated with recovery from alcohol use disorder, even in the absence of formal treatment. However, as the same meta-analysis points out, these support group programs are difficult to assess because usually only highly motivated people participate. But mutual support groups provide individuals with increased social network support for abstinence. Both motivation to change and having a social network that supports abstinence are factors associated with greater treatment effectiveness.

As it turns out, as the meta-analyses concluded, “most behavioral and psychological treatments are equally effective with small effect size differences [Cohen’s $d = 0.2$ to 0.3] among active treatments.” In addition, in a large, randomized trial, a 16-week cognitive behavioral intervention program was found to be statistically equivalent to naltrexone in reducing heavy drinking days.⁶²

One challenge of examining behavioral interventions in randomized trials is that placebo and blinded controls cannot be implemented in most contexts. Furthermore, it is impossible to control for crucial therapeutic factors common to most behavioral interventions, including therapist empathy and supportive therapeutic relationships in treatment. These have been found to be as powerful as the specific therapeutic targets or specific behavioral interventions in facilitating behavioral change.⁶³ In other words, who delivers the treatment may be more important than the treatment modality employed. This reinforces why hiring or contracting with the right treatment staff and assigning the right correctional officers to RSAT pods or units, is so crucial for program success.

Another meta-analysis validated AA. It looked at 35 studies involving the work of 145 scientists and the outcomes of 10,080 AA participants. Researchers found that AA is the most cost-effective path to abstinence. The authors also surmised that AA plus a medication to reduce craving, relapse, and return to heavy drinking may be among the best ways to treat patients with AUDs.⁶⁴

Finally, another meta-analysis study also found that telemedicine can be effective. The study evaluated the measures of effectiveness, efficiency, and quality that result from the utilization of telemedicine in the management of alcohol abuse, addiction, and rehabilitation. Telemedicine reduced alcohol consumption, along with other common outcomes including reduced depression (4/35, 11%); increased patient satisfaction (3/35, 9%); increased accessibility (3/35, 9%); increased quality of life (2/35, 6%); and decreased cost (1/35, 3%). Interventions included mobile health (11/22, 50%); electronic health (6/22, 27%); telephone (3/33, 14%); and two-way video (2/22, 9%). Studies were conducted in three regions: the United States (13/22, 59%); the European Union (8/22, 36%); and Australia (1/22, 5%).

⁶² Anton, Raymond F., et al., 2006, “Combined Pharmacotherapies and Behavioral Interventions for Alcohol Dependence: The COMBINE Study: A Randomized Controlled Trial,” *JAMA*, 295(17): 2003–2017, retrieved December 29, 2021 from <https://doi.org/10.1001/jama.295.17.2003>.

⁶³ Witkiewitz, K., R. Z. Litten, and L. Leggio, 2019, “Advances in the Science and Treatment of Alcohol Use Disorder,” *Science Advances*, 5(9), retrieved December 29, 2021 from <https://doi.org/10.1126/sciadv.aax4043>.

⁶⁴ Humphreys, Keith, Janet C. Blodgett, and Todd H. Wagner, 2014, “Estimating the Efficacy of Alcoholics Anonymous without Self-Selection Bias: An Instrumental Variables Re-Analysis of Randomized Clinical Trials,” *Alcoholism: Clinical and Experimental Research*, 38(11): 2688–2694, retrieved December 29, 2021 from <https://doi.org/10.1111/acer.12557>.

The study authors concluded that “although telemedicine shows promise as an effective way to manage alcohol-related disorders, it should be further investigated before implementation.”⁶⁵

NIAAA Project MATCH

Although a number of therapies have had varying degrees of success, no single treatment has been shown to be effective for all individuals diagnosed with AUD. In 1989, the NIAAA created an experiment, “Matching Alcoholism Treatments to Client Heterogeneity (MATCH),” an 8-year, multisite, \$27-million investigation designed to reveal which types of persons with AUD respond best to which forms of treatment administered by psychotherapists. Three types of treatment were compared: Cognitive Behavioral Coping Skills Therapy, Motivational Enhancement Therapy, and Twelve-Step Facilitation Therapy. The patients were followed for three years.⁶⁶

Cognitive-Behavioral Therapy. Based on the principles of social learning theory that views drinking behavior as functionally related to major problems in the person’s life, it posits that addressing this broad spectrum of problems will prove more effective than focusing on drinking alone. Emphasis is placed on overcoming skill deficits and increasing the person’s ability to cope with high-risk situations that commonly precipitate relapse, including both interpersonal difficulties and intrapersonal discomfort, such as anger or depression. The MATCH CBT program consisted of 12 sessions with the goal of training the individual to use active behavioral or cognitive coping methods to deal with problems rather than relying on alcohol as a maladaptive coping strategy. The skills also provided a means of obtaining social support critical to the maintenance of sobriety.

Motivational Enhancement Therapy (MET). Based on principles of motivational psychology, designed to produce rapid, internally motivated change, this treatment strategy did not attempt to guide and train the client, step by step, through recovery, but instead employed motivational strategies to mobilize the client’s own resources. The MATCH MET treatment program consisted of four carefully planned and individualized treatment sessions. The first two sessions focused on structured feedback from the initial assessment, future plans, and motivation for change. The final two sessions at the midpoint and end of treatment provided opportunities for the therapist to reinforce progress, encourage reassessment, and provide an objective perspective on the process of change.

Twelve-Step Facilitation Approach. Grounded in the concept of alcoholism as a spiritual and medical disease, the content of this intervention was consistent with the 12 Steps of Alcoholics Anonymous (AA), with primary emphasis given to Steps 1 through 5. In addition to abstinence from alcohol, a major goal of the treatment was to foster the patient’s commitment to participation in AA. During the course of the MATCH program’s 12 sessions, patients were actively encouraged to attend AA meetings and to

⁶⁵ Kruse, Clemens Scott, Kimberly Lee, Jeress B. Watson, Lorraine G. Lobo, Ashton G. Stoppelmoor, and Sabrina E. Oyibo, 2020, “Measures of Effectiveness, Efficiency, and Quality of Telemedicine in the Management of Alcohol Abuse, Addiction, and Rehabilitation: Systematic Review,” *Journal of Medical Internet Research*, 22(1): e13252, retrieved December 29, 2021 from <https://doi.org/10.2196/13252>.

⁶⁶ Project MATCH Research Group, 1997, “Matching Alcoholism Treatments to Client Heterogeneity: Project MATCH Posttreatment Drinking Outcomes,” *Journal of Studies on Alcohol and Drugs*, 58(1): 7–29. <https://doi.org/10.15288/jsa.1997.58.7;R>. Longabaugh & P. Wirtz (1998), Project MATCH Hypotheses: Results and Causal Chain Analyses, NIAAA Project MATCH Monograph Series (8).

maintain journals of their AA attendance and participation. Therapy sessions were highly structured, following a similar format each week that included symptoms inquiry, review and reinforcement for AA participation, introduction and explication of the week's theme, and setting goals for AA participation for the next week. Material introduced during treatment sessions was complemented by reading assignments from AA literature.

The study concluded that patient-treatment matching is not necessary for alcoholism treatment because the three techniques proved of equal effectiveness. Only one attribute, psychiatric severity, demonstrated a significant attribute by treatment interaction. In the study, clients low in psychiatric severity had more abstinent days after 12-step facilitation treatment than after cognitive behavioral therapy. However, neither treatment was clearly superior for clients with higher levels of psychiatric severity. Client attributes of motivational readiness, network support for drinking, alcohol involvement, gender, psychiatric severity, and sociopathy were prognostic of drinking outcomes over time. The findings suggest that psychiatric severity should be considered when assigning clients to outpatient therapies. The lack of other robust matching effects suggests that, aside from psychiatric severity, providers need not take these client characteristics into account when triaging clients to one or the other of these three individually delivered treatment approaches, despite their different treatment philosophies.⁶⁷

The MATCH study has been criticized because it lacked a control group, that is, a group with AUD but not assigned to treatment. Also, the measurement of success for each therapy was not abstinence, even for the AA facilitation therapy, despite abstinence being the goal of AA. Treatment effectiveness for all treatments was measured by reduction in frequency and intensity of drinking.

When other researchers reanalyzed the MATCH data to estimate effectiveness in relation to quantity of treatment, they found none of the treatment groups improved much over the individuals who were assigned treatment but never enrolled or who dropped out of treatment. Overall, they found that a median of only 3 percent of the drinking outcome at follow-up could be attributed to the treatments. Even this effect appeared to be present at week one, before most of the treatment had been delivered! While all who completed treatment showed great improvement, so did those who never attended treatment, achieving a mean of 72 percent days abstinent at follow-up. Effect size estimates showed that two-thirds to three-fourths of the improvement in the full treatment group was duplicated in the zero-treatment group. Nearly all the improvement in all groups occurred by week one. The full treatment group had improved in percentage of days abstinent (PDA) by 62 percent at week one, and the additional 11 therapy sessions added only another 4 percent improvement. The researchers concluded: "The results suggest that current psychosocial treatments for alcoholism are not particularly effective. Untreated alcoholics in clinical trials show significant improvement. Most of the improvement

⁶⁷ Project MATCH Research Group, 1997, "Matching Alcoholism Treatments to Client Heterogeneity: Project MATCH Posttreatment Drinking Outcomes," *Journal of Studies on Alcohol and Drugs*, 58(1): 7–29. <https://doi.org/10.15288/jsa.1997.58.7>.

which is interpreted as treatment effect is not due to treatment. Part of the remainder appears to be due to selection effects.”⁶⁸

On the other hand, those who never began MATCH treatment, or dropped out, may have realized that they didn’t need treatment to stop or reduce their drinking. What MATCH may have revealed is that if someone realizes that they have a drinking problem and desires to address it, the need for professional treatment is marginal.

The NIAAA provides its Project MATCH manuals (developed for the three treatment modalities) online. As NIAAA declares on its website, “Because of the continued interest in the Project MATCH series, NIAAA has repackaged all eight volumes and made them available online. It is NIAAA's hope that having this material available in electronic form will make the information even more useful and available to a wider audience.” View the Project MATCH manuals here: <https://pubs.niaaa.nih.gov/publications/ProjectMatch/matchIntro.htm>.) Included are manuals for the three modalities tested in Project MATCH. Also included is a new manual *The Drinker Inventory of Consequences (DrInC): An Instrument for Assessing Adverse Consequences of Alcohol Abuse: Test Manual*, adapted for online use. It also was evaluated as part of a web-based brief motivational intervention, www.drinkerscheckup.com. In addition, a new version of DrInC was developed that offers greater validity and usability. DrInC has been used to assess changes in drinking consequences during clinical trials, and as a clinical tool to evaluate patient status at the start of treatment.

NIAA COMBINE Evaluation

Since NIAAA completed Project MATCH, it sponsored another clinical trial it called COMBINE (Combined Pharmacotherapies and Behavioral Interventions)⁶⁹ to test the combination of behavioral therapies and pharmacological approaches. The COMBINE study was the largest pharmacotherapy trial conducted for AUD in the United States, recruiting 1,383 alcohol dependent patients, 31 percent women and 23 percent ethnic minorities, from 11 sites. This double-blind, randomized placebo-controlled trial evaluated the efficacy of naltrexone and acamprosate, both alone and in combination, in the context of medical management with and without Combined Behavioral Intervention (CBI). The CBI therapy integrated aspects of cognitive behavioral therapy, motivational interviewing, and 12-step facilitation. The duration of treatment was four months, with follow-ups for one year post treatment. There were nine groups including a CBI only group with no pills and no medical management.

The main positive finding was that individuals treated with naltrexone did significantly better than the placebo group on various drinking measures-but only when they received medical management. When they received CBI in addition to medical management, the difference between the placebo and naltrexone groups was no longer evident. Acamprosate, however, was no better than

⁶⁸ Cutler, Robert B., and David A. Fishbain, 2005, “Are Alcoholism Treatments Effective? The Project MATCH Data,” *BMC Public Health*, 5: 75, retrieved December 29, 2021 from <https://doi.org/10.1186/1471-2458-5-75>.

⁶⁹Raymond F. Anton, et al., 2006, “Combined Pharmacotherapies and Behavioral Interventions for Alcohol Dependence: The COMBINE Study: A Randomized Controlled Trial,” *JAMA*, 295(17): 2003–17, retrieved December 29, 2021 from <https://doi.org/10.1001/jama.295.17.2003>.

placebo—with or without CBI. Acamprosate added to naltrexone was not significantly better than naltrexone alone. CBI was less effective when given without active drug or placebo or medical management. After one year of follow-up, the effects observed during the treatment period were still observable, but for the most part no longer significant. This suggests that at least some individuals relapsed to heavier drinking once treatment had stopped. A cost-effectiveness analysis showed that the best combination of costs and effectiveness was observed in the naltrexone-treated group, which also received medical management. Three years later, the treatment provided during the study remained effective in reducing social costs (health care utilization, arrests, and motor vehicle accidents) in these alcohol-dependent individuals.⁷⁰

⁷⁰ Raymond F. Anton, 2011, “Combined Pharmacotherapies and Behavioral Interventions for Alcohol Dependence,” *Psychiatric Times* 28(6), retrieved December 30, 2021 from <https://www.psychiatrictimes.com/view/combined-pharmacotherapies-and-behavioral-interventions-alcohol-dependence>.