TRUST

Treatment *for Individuals who* **U**se **St**imulants

A Protocol Using Empirically-Supported Behavioral Treatments for People with Psychoactive Stimulant Use Disorders

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Introduction

Over the past 30 years there has been extensive research done on the development of treatments for individuals with Psychoactive Stimulant Use Disorder (PSUD). There has been considerable evidence compiled about what "works" and what does not. Currently there are no medications approved by the FDA for PSUD treatment. However, there are several behavioral strategies that do have evidence of efficacy in assisting individuals to reduce and/or discontinue their stimulant use. These approaches include contingency management, cognitive behavioral therapy, community reinforcement approach, motivational interviewing and physical exercise.

The extent to which these strategies with supportive evidence are currently being used in real world treatment programs varies greatly from state to state, from program to program. This is unfortunate as there is clear evidence that use of stimulants (cocaine and methamphetamine) is increasing and becoming more deadly. To provide individuals with the best chance of effectively addressing their stimulant problem, the use of approaches supported by research is highly recommended.

Purpose of this Manual

The authors of this manual have been involved in research, treatment, and training efforts on psychoactive stimulant use disorder for over 30 years. Over this period, the research on psychoactive stimulant use disorder and its treatment has vastly increased and there is a great interest to better understand PSUD and provide effective treatment for people who use cocaine and methamphetamine. However, as we have conducted consultation and training throughout the US, it is our overwhelming impression that use of treatment approaches supported with research is sporadic at best, and in many parts of the US is minimal.

We have produced this manual to promote the use of research-supported strategies for PSUD treatment. The manual attempts to combine a number of strategies into a framework that is appropriate for use by clinicians in settings where people with PSUD receive treatment. This manual does not intend to be a cookbook and the materials used and the framework for their use are not intended to be an inflexible, one-size-fits-all prescription. At the end of the manual we list a variety of

treatment materials (see appendix) that can be added or substituted for the ones we are recommending. We provide the contents of this manual and the framework for combining these treatment materials as one example for how research supported strategies can be combined into a structured treatment experience.

The audience for the manual includes healthcare professionals who provide treatment services for individuals with PSUD. One category of these professionals who we particularly hope will benefit are counselors and other behavioral health clinicians who work in substance use disorder specialty care treatment programs. The manual has been written with this group in mind.

The manual intends to:

1. Provide new information about the use and effects of cocaine and methamphetamine.
2. Present some the key clinical challenges that clinicians face when treating this population.
3. Review the evidence-based treatment strategies for PSUD treatment.
4. Discuss how motivational interviewing (MI) is central to the effective engagement of individuals in treatment and to assisting them with behavior change during treatment.
5. Present how elements of community reinforcement approach (CRA) and cognitive behavioral therapy (CBT) can be used to assist individuals with PSUD to reduce/discontinue their drug use and prevent relapse.
6. Describe a procedure for using positive incentives to promote retention in treatment.
7. Provide information and guidance for how physical exercise can benefit individuals who are attempting to reduce/discontinue their use of methamphetamine and cocaine.
8. Describe a plan for providing continuing care to assist individuals to sustain the progress they have made in a structured treatment program.
9. List an array of manuals and training resources for other research supported addiction treatment approaches.

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Person-first Language

Throughout this document we make a concerted effort to use person-first and gender-neutral language. Person-first language refers to individuals who use drugs/alcohol and/or are in treatment for substance use disorder (eg. “Individuals who use cocaine or methamphetamine”), rather than using more stigmatizing terms (eg. “addict” or “cocaine/methamphetamine users”).

We also make an effort to use inclusive, gender-neutral language and choose to use “they” instead of he or she as a singular pronoun.

Because old habits are difficult to change, we may have inadvertently used the older and more stigmatizing terminology at some points in the document. We apologize for these oversights and encourage those using this manual to join us in the effort to use person-first and gender-neutral adaptations to their language as well.

Chapter 1 Background

Introduction

The group of drugs classified as psychomotor stimulants: methamphetamine, cocaine and prescription stimulants, including methylphenidate (Ritalin, Concerta), amphetamines (Adderall, Vyvance) are widely used in the US with considerable geographic variation in which of the stimulant drugs is used in which part of the US. Methamphetamine and cocaine are currently the most widely available stimulants and are the focus of this manual. However, there are reports about increasing misuse of prescription stimulants in some geographical areas. The content of this document may be useful in addressing the needs of individuals who are misusing prescription stimulants.

The increase in stimulant use and dependence beginning in the middle of the 2010-2020 decade and continuing, is being referred to by some federal officials as "the 4th wave" of the opioid epidemic. The connection to the opioid epidemic is very real and very deadly. Increasing amounts of the cocaine and methamphetamine produced by Mexican cartels and transported into the US, now contain varying amounts of the very potent opioid, fentanyl. Price for these drugs has gone down and availability has gone up in much of the US, to the point where in many (most?) parts of the US, some form of psychomotor stimulant is widely available and much of the stimulant product sold on the street includes fentanyl. In large part, the addition of fentanyl to cocaine and methamphetamine supplies has resulted in dramatically increased rates of overdose and overdose deaths associated with cocaine and methamphetamine use.

Acute and Chronic Health Effects of Stimulant Use and Dependence

The acute effects of stimulant use include euphoria, increased talkativeness, hyperactivity, erratic changes in mood, increased blood pressure, elevated body temperature, and rapid heart and breathing rates. Other acute symptoms include reduced fatigue, reduced hunger, increased energy, increased sexual drive, and increased self-confidence. Heavy and long-term chronic stimulant use is

frequently associated with psychosis, paranoia, symptoms of anxiety and depression, social withdrawal, emotional volatility, and violence.

Medical Consequences of Stimulant Use

Cocaine and methamphetamine use is known to be associated with acute and chronic medical conditions affecting multiple organ systems. The most common symptoms among patients presenting in medical settings are acute stimulant intoxication, psychosis, stroke, agitation, suicidality, cardiovascular abnormalities, and non-responsiveness due to tonic-clonic seizure activity. Acute stimulant toxicity has also been associated with fatalities resulting from drug-induced seizures, hypoxic stress, and cardiovascular complications. In the 2020-time frame with much/most of the illicit stimulants containing unknown amounts of fentanyl, mixed stimulant/opioid reactions now are commonly presented.

Overdose risk

As discussed above, a large amount of the methamphetamine and cocaine that is trafficked into the United States and sold on the streets in 2020 contains unpredictable levels of fentanyl. The use of these combination stimulant-fentanyl products creates a very high risk for overdose/overdose death, since fentanyl is a very potent opioid that suppresses respiration, and the individual has no way of knowing how much fentanyl is in the street drug product sold as methamphetamine or cocaine. Many individuals who use cocaine and methamphetamine do not have high tolerance for opioids, and they may not be aware of the overdose risk posed by fentanyl.

During initial contacts with treatment-seeking individuals who use stimulants, it is important to assess their awareness of the dangers from fentanyl and educate them about these risks. Individuals who use by injection are at greatest risk for overdose and overdose death. Individuals who are using by injection and have experienced overdose are good candidates to be given naloxone (Narcan) overdose reversal tools and instructions on their use. Having staff who are knowledgeable and conversant in the dangers of meth/fentanyl overdose and able to fully inform patients about risks and use of naloxone for overdose is critical.

Cardiovascular Effects

Cardiopulmonary consequences are common among individuals who use stimulants. Chest pain, hypertension, shortness of breath, and tachycardia are common in ER cases. Also seen in ERs is acute coronary syndrome (ACS), which has been documented in 25% of cases in individuals who misuse methamphetamine admitted for chest pain, resulting from myocardial ischemia (reduced blood flow to the heart), with increased risk of arrhythmias and cardiogenic shock (inability of the heart to pump sufficient blood, usually after a severe heart attack). Cardiomyopathy related to stimulant use may be reversible with cessation of drug use. Pulmonary edema (fluid in the lungs) was found in over 70% of methamphetamine-related deaths, as well as pulmonary hypertension.

Effects on Teeth and Skin

Dental disease ("meth mouth") and other oral complications are common among individuals who use methamphetamine chronically. Oral health problems most often seen include rampant cavities, tooth fracture, and periodontal disease (e.g., gingivitis, periodontitis). In addition to cavities and gingivitis, individuals who use methamphetamine often present with tooth wear and temporomandibular joint (TMJ) syndrome related to bruxism (teeth grinding), which may be a reaction to anxiety and restlessness, especially during early abstinence. Skin excoriations (sores caused from picking) or cutaneous ulcers are common among individuals who use stimulants, arising in response to reported sensation of bugs crawling below the skin. In addition, cellulitis and abscesses resulting from injection of stimulants are also frequently reported.

Pulmonary problems

Many individuals who use cocaine and meth "smoke" their drugs (commonly referred to as "crack" or "ice/crystal" for cocaine and methamphetamine, respectively) and consequently their use has profound impact on their lungs. Problems include pulmonary edema, dyspnea (difficult or painful breathing), bronchitis, pulmonary hypertension, hemoptysis (coughing up blood), chest pain, asthma exacerbation, and pulmonary granuloma (inflammation or nodules form due to infections). High concentrations of methamphetamine in the lungs has been found, with 30% greater concentrations in African American than in white

individuals who use methamphetamine. Tuberculosis is common among individuals who use methamphetamine.

Neurologic/Psychiatric problems

Neurologic problems include strokes, seizures, chronic headache, cerebral swelling and hemorrhage, involuntary movements, and tics. All routes of administration have been associated with strokes and seizures, producing long-term neuronal damage. Many individuals who use stimulants suffer from neurocognitive impairments and psychiatric co-morbidity, including severe psychosis, depression, and suicidal ideation.

Acute Clinical Presentation and Management of Psychoactive Stimulant Use Disorder

Intoxication and overdose

Ingestion of cocaine and methamphetamine causes a surge in catecholamines in the central nervous system. A potent release of dopamine and norepinephrine leads to euphoria, hyperexcitability, hypersexuality, increased locomotor activity, agitation, and psychotic symptoms, including paranoia and hallucinations. Acute agitation from cocaine/methamphetamine intoxication is most often the condition that leads individuals who use stimulants to seek medical attention. "Talking down" the patient in a calm environment is the first course of action. Toxicity from injection or smoked routes of administration may necessitate the use of charcoal and medications such as ammonium chloride to hasten clearance from the gastrointestinal tract and the circulatory system.

Those individuals who exhibit severe symptoms of intoxication may require medication, including short-term benzodiazepine use. Benzodiazepines may be effective in acute management of agitation and distress and may reduce seizure potential in patients, particularly with cocaine toxicity. Due to cocaine's shorter duration of action, cocaine intoxication generally resolves more rapidly (2–4 hours) than methamphetamine intoxication, which can last up to 12 hours or longer.

Overdose from cocaine and methamphetamine can be fatal. The primary dangers are heart attack, stroke and very high body temperatures (105 and above). For high temperatures, it is imperative to reduce the temperature rapidly with ice packs and ice blankets. No medications are available to reverse methamphetamine overdose. However, as discussed above, patients exhibiting opioid overdose symptoms from fentanyl (or heroin) mixed with methamphetamine or cocaine, should be monitored closely for problems with breathing. Emergency services should be called if an overdose is suspected (either stimulant or opioid or both).

Acute Stimulant-induced Psychosis

Cocaine and methamphetamine-induced psychoses are similar; although more common among individuals who use methamphetamine and the severity and duration is often greater with methamphetamine use. With individuals who use stimulants chronically, psychosis can be triggered with even small doses of cocaine or methamphetamine. The psychotic symptoms frequently include auditory hallucinations (most common) and visual phenomena (flashing lights, seeing threatening strangers/police). In addition, powerful paranoia and persecutory delusions are extremely common. Individuals in a stimulant-induced psychotic condition have an increased potential for violence, and caution should be used in interacting with these patients.

Stimulant-induced psychosis is generally transient, and management of patients with psychosis, may require use of either a benzodiazepine or an antipsychotic, both of which should be discontinued when acute symptoms have resolved. Agents such as risperidone and olanzapine are less likely to cause extrapyramidal symptoms compared to first generation agents, and their sedative properties may ameliorate psychomotor agitation. It is, however, important to monitor for hyperthermia and dehydration when antipsychotics are used in patients with acute stimulant intoxication.

Chronic Stimulant-induced Psychosis

Persistent symptoms of psychosis are rarely reported among individuals who use cocaine, in the absence of other co-morbid psychiatric disorders. However,

symptoms of persistent or chronic methamphetamine psychosis are often so similar to those of schizophrenia that some clinicians may regard them as clinically equivalent conditions, although it has been argued that methamphetamine *produces* a persistent psychosis that resembles schizophrenia. Regardless of the causal direction or association, the symptoms of schizophrenia and of persistent methamphetamine psychosis are not readily distinguishable, and the treatment for these conditions is basically the same.

Stimulant Withdrawal

Stimulant withdrawal symptoms consist of severe fatigue, cognitive impairment, feelings of depression and anxiety, anergia, confusion, and paranoia. For most patients experiencing acute withdrawal/early-phase abstinence, most symptoms resolve within 2 to 10 days. Rest, mild/moderate exercise, and a healthy diet may be the best management approach for most people in withdrawal. Those with heightened agitation and sleep disturbance may respond to benzodiazepines for a brief period, but acute depression and anhedonia associated with early abstinence generally resolve without intervention. Again, clinicians should be aware of possible dehydration and hyperthermia.

Challenges in Treating Individuals with Psychoactive Stimulant Use Disorder

Psychoactive stimulant use disorder, like other substance use disorders is marked by loss of control over stimulant use despite consequences caused by use. Per the *DSM-5* (American Psychiatric Association, 2013), substance use disorders are diagnosed using 11 criteria including:

1) difficulty cutting down or stopping use,

2) excess time spent obtaining, using, or recovering from use,

3) use in excess of what was intended,

4) cravings,

5) tolerance,

6) withdrawal,

7) failed role obligations,

8) recurrent use in physically hazardous situations,

9) activities given up because of use,

10) use despite social or interpersonal problems, and

11) use despite psychological or medical consequences

The severity of use disorder is characterized by the number of criteria met over the previous 12 months: mild (2–3), moderate (4–5), or severe (6 or more).

Common clinical challenges when treating individuals who use stimulants.

Anhedonia.

Anhedonia (the inability to feel pleasure) has been recognized as a component of the withdrawal syndrome for many drugs/alcohol. However, this symptom is particularly robust and clinically challenging for many individuals as they attempt to reduce or abstain from stimulant use. For many individuals who use stimulants in their early months of abstinence from cocaine/methamphetamine, anhedonia, together with symptoms of anxiety and depression are important factors in relapse. There is some evidence that exercise may reduce some of the severity of these symptoms.

Pavlovian Cues and Craving.

Although not unique to stimulants, individuals who use cocaine and methamphetamine develop a powerful Pavlovian craving response that is "triggered" when they come into contact with cues previously associated with stimulant use (cue-induced craving). These cues or "triggers" can include objects (e.g., cash), people (e.g., friends who use drugs), other substances (e.g., alcohol), places (e.g., areas where stimulants are sold or used), time periods (e.g., weekends, after work) and emotional states (e.g., depression, boredom). This powerful craving response frequently plays a key role in relapse. It is important to educate individuals in treatment about the powerful impact of cue-induced craving and

strategies for avoiding situations in which "triggers" are experienced, and to develop skills to manage cravings when triggered.

Stimulants and Violence.

There is a dose related relationship between the amount of methamphetamine used and incidents of violence. While those individuals who became psychotic had higher rates of violence, even without psychosis, those who use higher doses of meth had more involvement with violence during the period of their meth use. Co-occurring alcohol use also increased the association between meth use and violence. Clinicians working with individuals who use methamphetamine need to be aware of the relationship between meth use and violence and be cognizant of the consequences of violence on individuals who use methamphetamine and their families.

Hypersexuality and Sexual Dysfunction.

A related aspect of this Pavlovian response concerns the relationship between stimulant use and sexual behavior. Previous research has demonstrated that individuals who use cocaine and methamphetamine frequently combine their drug use with sexual activity. During treatment, hypersexuality may continue and can be associated with relapse and for some, in the early months of reduced use/abstinence, sexual functioning may be impaired, causing psychological distress. Educating patients about the possibility of changes in sexual function during early recovery can help reduce their anxiety if these symptoms are experienced.

Cognitive Deficits.

There has been extensive research on the impact of stimulants (especially methamphetamine) on cognition. A variety of cognitive deficits, including attention and memory problems, have been documented during early weeks and months of abstinence and can be severe enough to interfere with functioning. These cognitive difficulties can make treatment approaches that involve learning and remembering new information somewhat challenging. Clinical efforts should inform individuals in treatment about these cognitive deficits and in delivering

treatment, use strategies that provide some repetition of information and do not depend on optimal memory.

Poor Retention in Treatment.

Poor engagement and retention of individuals who use stimulants in treatment is a frequent challenge. This retention problem is a major challenge to a positive treatment outcome as there is a well-established relationship between retention in treatment with individuals who use stimulants and positive outcomes. Selecting treatment strategies that promote retention in treatment is essential to have positive impact from stimulant treatment efforts

Methamphetamine Populations with Unique Clinical Concerns

Several groups present some unique challenges in treatment settings

People Who Inject.

Injecting stimulants appears to lead to a more difficult clinical disorder. Individuals who inject stimulants tend to report far more severe craving during their recovery and higher rates of depression and other psychological symptoms before, during, and after treatment. Individuals who inject stimulants also have higher dropout rates and exhibit higher rates of stimulant use during treatment. In a sample of individuals who are dependent on methamphetamine who entered treatment in the Midwest, Hawaii, or California, the rate of hepatitis C infection was 15%. Of the individuals who inject methamphetamine, over 45% were positive for hepatitis C. Clearly, preventive efforts that address behaviors that expose individuals to hepatitis C infection (blood-to-blood transfers or sharing drug paraphernalia) should be incorporated into treatment protocols.

Men who have sex with men (MSM).

Use of stimulants (particularly methamphetamine) by MSM is a significant public health problem. Elevated rates of methamphetamine use and associated high-risk sexual behavior have been reported in many MSM communities throughout the United States. Rates of HIV seroprevalence have been reported to be threefold

higher among MSM who use methamphetamine- than among MSMs who do not use methamphetamine. A report by the U.S. Centers for Disease Control and Prevention on the connection between methamphetamine use, high-risk sexual behavior, and HIV transmission in MSM communities suggests that this combination of factors poses a major threat of high rates of HIV infection among MSM.

Women.

Women use stimulants at rates approaching those of men. Women are more likely than men to be attracted to methamphetamine for weight loss and to control symptoms of depression. Over 70% of methamphetamine-dependent women report histories of physical and sexual abuse, and women are more likely than men to present for treatment with greater psychological distress. Many women with children do not seek treatment or they drop out early for fear of losing custody of their children, if reported to authorities for child abuse or neglect.

Children and perinatal issues.

The effects of stimulant use by pregnant women include growth retardation, premature birth and, possibly, neurological disorders among their children. Children of methamphetamine-using parents also are at high risk of negligence and abuse because of the parents' drug preoccupation, erratic behavior, and psychiatric instability.

Adolescents.

In communities where stimulant-use levels are high, adolescents who use methamphetamine have been seen in treatment centers in significant numbers. Of note is the extremely high rate of methamphetamine use among teen girls admitted for substance abuse treatment. One study found that 63.7% of adolescent females seeking treatment reported methamphetamine as their primary drug of choice. Methamphetamine use among adolescents has been shown to be associated with higher levels of emotional, psychiatric, and delinquency problems, compared with adolescents with other drug abuse diagnoses.

Treatment Approaches for Individuals with Psychoactive Stimulant Use Disorder

Medication treatments

After 30 years of intensive effort, there are no FDA approved medications for treating individuals with psychoactive stimulant use disorders. The use of any pharmacotherapy to target psychoactive stimulant use disorders is considered off-label at this time. Limitations of many of the existing clinical trials include limited power, methodological deficiencies, poor medication compliance, and high attrition rates. Some evidence does exist for topiramate, bupropion, modafinil, sustained release mixed amphetamine salts, disulfiram, and naltrexone/buprenorphine for targeting cocaine use. Mirtazapine, bupropion, naltrexone, topiramate and sustained release methylphenidate may be indicated for targeting methamphetamine use disorder, but additional research is needed.

Behavioral Approaches

Behavioral interventions are the mainstay of psychoactive stimulant use disorder treatment. Several studies have examined the same research trials, clinical applications, protocols, and measures with individuals who use cocaine and methamphetamine. In all these studies, treatment response of individuals who use cocaine and methamphetamine has been comparable. For this reason, unlike the previous review of medications, we will review the evidence for the following behavioral strategies with the assumption that results from individuals who use cocaine will generalize to the population of individuals who use methamphetamine and vice versa. The approaches with the most substantial evidence will be reviewed in some detail, followed by those with less, but some supportive evidence.

Behavioral approaches with robust empirical support

Contingency Management (CM).

During the past decade there have been a number of systematic reviews of treatments for psychoactive stimulant use disorders, including two Cochrane Reviews, a review by the World Health Organization (WHO) for their Mental Health Guidelines document (MH-GAP, WHO), a meta-analysis by De Crescenzo et al. (2018) and two systematic reviews (Farrell et al., 2019; AshRani et al., 2020). In all these analyses, contingency management is recognized as having the strongest evidence of support. For example, in the Knapp et al. (2007) review, the following conclusion is reached from the analysis: "The comparisons between different types of behavioral interventions showed results in favor of treatments with some form of contingency management in respect to both reducing dropouts and lowering cocaine use." Further, the 2018 meta-analysis also concludes that contingency management (together with the community reinforcement approach) produces the best evidence of effectiveness for generating a variety of positive outcomes.

Contingency management (also known as motivational incentives) applies the principles of positive reinforcement for performance of desired behaviors consistent with abstinence from cocaine or methamphetamine. CM involves the contingent delivery of an incentive for behaviors such as attendance at treatment sessions, a drug-negative urine specimen, or documented completion of a homework assignment. Incentives include privileges or desired items, such as vouchers. There are a variety of ways to structure and individualize CM, and a variable schedule of reinforcement can be applied, using the "fishbowl approach," which uses low-cost incentives. This relatively simple, positive reinforcement procedure has been shown to produce and sustain substantial and clinically meaningful reductions in stimulant use.

Some of the specific research findings supporting contingency management for PSUD treatment include the landmark paper by Higgins et al. (1991) that documented highly significant reductions in cocaine use and very large and significant increases in extended periods of cocaine abstinence using CM. Roll et al., 2006, extended these findings to individuals who use methamphetamine and reported that CM produced significantly greater retention in treatment and

significantly more methamphetamine-negative urine samples. Rawson et al. (2002) found that with individuals in methadone treatment who also used cocaine, CM produced significantly more cocaine-free UAs when compared to no treatment (other than methadone) or cognitive behavioral therapy (CBT). Further, the addition of CBT did not produce additional benefits over and above CM alone.

Despite the strong empirical support for CM, its application in real world treatment settings has been limited, even though NIDA and SAMHSA have joined to produce a set of "Blending" manuals and materials to support the use of CM (https://www.drugabuse.gov/blending-initiative/motivational-incentives-package). Roll et al. (2009) described some of the obstacles that interfere with broad scale application of CM in community treatments. One effort that has shown promise is a large implementation trial promoting the use of CM as a routine treatment approach within United States Department of Veterans Affairs (VA). The effectiveness of this implementation project has been documented by DePhilippis et al., 2018, who reported that CM is being successfully implemented across a large number of VA sites and that patient outcomes were significantly improved by the addition of CM within these treatment settings.

Community Reinforcement Approach (CRA).

The Community Reinforcement Approach (CRA) is a combination of behavioral strategies that address the role of environmental contingencies in encouraging or discouraging drug use and attempts to rearrange these contingencies so that a non-drug using lifestyle is more rewarding than a using one. CRA components include behavioral skills training, social and recreational counseling, marital therapy, motivational enhancement, job counseling, and relapse prevention. In a number of CRA trials for cocaine use disorder, a voucher-based CM reinforcement program was added. Higgins et al. (1991) established the efficacy of CRA and vouchers (CM) for cocaine dependence treatment. To isolate the effects of CRA, Higgins et al. (2003) replicated this study, comparing CRA with vouchers versus vouchers only. Study results demonstrated that while both conditions produced significant reductions in cocaine use, participants in the CRA-plus-vouchers condition were better retained in treatment and had fewer days of cocaine or alcohol use. Further, those treated with CRA plus vouchers had more employed days, fewer hospital admissions and legal problems, and reduced symptoms of depression. A systematic review of CRA concludes that CRA has evidence of support for reducing cocaine use, and CRA together with CM produced higher rates of

abstinence than CRA alone. To promote the dissemination of CRA plus CM, NIDA has produced a manual describing the approach in detail.

Cognitive Behavioral Therapy (CBT).

Cognitive behavior therapy (CBT) is a form of "talk therapy" based on principles of social learning theory that is used to teach, encourage, and support individuals in reducing or stopping their harmful drug use.[26] CBT provides training and practice in skills that are valuable in assisting people to gain initial abstinence from drugs (or in reducing their drug use) and provides skills to help people sustain abstinence. CBT addresses negative thought patterns and teaches individuals how to cope with distress to prevent relapse. A systematic review highlighting randomized control trials using CBT as an intervention for individuals who use methamphetamine reported that CBT was associated with reduced stimulant use and facilitated improvements in mood and other areas of functioning (ref) , and a review of CBT for a variety of substance use disorders concludes that it is an effective approach (ref). Carroll and colleagues have conducted studies establishing the efficacy of cognitive behavioral therapy (CBT) for cocaine use disorder treatment. These studies demonstrated that the use of their CBT manual reduced cocaine use over a 1-year period. In fact, their report suggests that CBT produces especially efficacious results at follow-up points. In a meta-analysis of behavioral treatments for cocaine and methamphetamine use disorders, studies evaluating efficacy of CBT consistently reflect positive findings. However, data in this meta-analysis indicated that in numerous comparative trials in which CBT is compared to CM, CM strategies consistently result in greater reductions in stimulant use.

Recently, CBT has become more accessible through computerized delivery. In a randomized trial for cocaine-using individuals in methadone maintenance treatment, results showed that participants receiving computer-based training for cognitive-behavioral training ("CBT4CBT") were significantly more likely to have 3 or more consecutive weeks of abstinence from cocaine compared to controls.

Behavioral approaches with supportive evidence

The following behavioral strategies have been the subject of at least one randomized clinical trial demonstrating superior outcomes when compared to control procedures.

Exercise Therapy.

Exercise is a simple and effective intervention for substance use disorders. By increasing endogenous opioid release, exercise helps potentiate dopamine efflux, improves mood and cognition, and can help prevent relapse. A recent 8-week trial (ref) showed that participants who use methamphetamine randomized to a supervised, progressive endurance and resistance training three times per week demonstrated improved dopamine receptor binding compared to individuals receiving health education only. In addition, the participants who received the exercise intervention had lower anxiety and depression scores over the study period, and individuals with lower severity methamphetamine use at baseline had significantly lower relapse rates after discharge from residential care. A large randomized control trial funded by the National Institute on Drug Abuse also explored the relationship between stimulant use and exercise in residential programs. This study found a modestly significant higher percentage of days abstinent for participants receiving exercise who were adherent to their regimens, compared to those only receiving health education.

Mindfulness.

Mindfulness is a practice derived from Buddhist teachings that centers on a conscious presence in the here and now with focused attention and nonjudgmental monitoring. Positive effects with regard to stress and cue reactivity in individuals with alcohol and/or cocaine use disorders receiving mindfulness compared to CBT have been reported. A systematic review of the literature (ref) recently concluded that mindfulness behavioral interventions could reduce consumption of cocaine and amphetamines to a greater extent than controls. Recently, a small pilot trial of a 10-week mindfulness therapy found that abstinence rates in participants who use cocaine who received mindfulness were greater than those of historical comparison groups.

Transcranial Magnetic Stimulation (TMS).

Transcranial magnetic stimulation is FDA approved for treatment resistant depression and has demonstrated preliminary evidence of potential efficacy for

psychoactive stimulant use disorder. A pilot trial that randomized participants with cocaine use disorder to receive repetitive TMS (rTMS) on the left dorsolateral prefrontal cortex (DLPFC) found a significant reduction in craving and cocaine positive urine tests in the rTMS group compared to the control. Similarly, it was shown that five sessions of rTMS on the left DLPFC significantly reduced cravings in patients with methamphetamine use disorder, while improving cognitive function. A subsequent study confirmed that cue-induced cravings for methamphetamine were diminished by rTMS of the dorsolateral prefrontal cortex, irrespective of side or frequency. This non-invasive treatment modality has limited side effects and may represent a unique way to target disordered stimulant use going forward.

Matrix Model.

The Matrix Model of Intensive Outpatient Treatment is a combination of therapeutic strategies, including CBT, motivational interviewing, family involvement, and psychoeducation combined in a manner to produce an integrated outpatient treatment experience. In a large, multisite randomized trial comparing the Matrix Model to treatment as usual, individuals who use methamphetamine were retained in treatment longer, provided more methamphetamine negative urines, and had longer periods of abstinence than controls . The Matrix manual is available at: https://store.samhsa.gov/product/Matrix-Intensive-Outpatient-Treatment-for-People-With-Stimulant-Use-Disorders-Counselor-s-Treatment-Manual/SMA13-4152. [46]

Motivational Interviewing (MI).

Motivational interviewing is a technique that aims to help individuals resolve their ambivalence about affecting positive change. In a recent randomized clinical trial, motivational interviewing demonstrated positive benefit with decreased methamphetamine use and lower cravings in participants receiving MI, regardless of intensity. Of note, intensive MI lasting 9 weeks was found to be especially impactful for women with methamphetamine use disorders and comorbid alcohol use. Another randomized trial examining MI for cocaine use found those individuals who used cocaine on 15 or more of the 30 days prior to baseline had a significantly higher mean reduction in days of cocaine use following MI.

Twelve-Step Facilitation.

Twelve-step facilitation is a therapy that is founded on the principles of Alcoholics Anonymous and traditionally comprises non-directed participation in meetings, fellowship, and attainment of a sponsor for guidance in recovery from substance use. A large multisite randomized trial sponsored by the National Institute on Drug Abuse demonstrated evidence that participation in 12-step therapy resulted in significant decreases in reported stimulant use and cravings and led to prosocial service engagement. Additionally, a secondary analysis suggested that having a sponsor was associated with a higher likelihood of sustained abstinence from stimulants at follow-up.

Chapter 2: Counselor Orientation

There have been a number of recent systematic reviews and meta-analyses of the evidence-based approaches for PSUD treatment (see references below). Although these reviews have some different emphasis, there is universal support for contingency management (CM) and good support for cognitive behavioral therapy (CBT), community reinforcement approach (CRA), motivational interviewing (MI) and physical exercise. As treatment organizations attempt to apply evidence-based practices (EBPs) to address the treatment needs of their patients with PSUD, it can be challenging to decide if one of these EBPs should be provided alone or together with other EBPs. This manual presents a framework and content for how these EBPs can be combined into a 12-week protocol, followed by an ongoing continuing care support program.

The manual is developed to give clinicians some suggestions for how these techniques can be integrated to address the needs of individuals with PSUD. There is an appendix at the end of the manual with a list of other manuals and materials with a varied amount of empirical support which may be of value in treating this patient population. For treatment organizations that use the TRUST protocol as a core for an intensive outpatient level of care (ASAM level 2.1 and above), we recommend that materials from the appendix be considered as additional treatment materials.

The Components of the TRUST Protocol

The Incentive Program

Contingency management (also referred to as Motivational Incentives) is a technique that provides rewards ("incentives") to patients in SUD treatment for accomplishing tasks that support recovery. As reviewed in Chapter 1, contingency management (CM) is the technique with the greatest evidence of effectiveness for PSUD treatment. In the research trials that have shown CM to be effective, the amount of possible reinforcement that can be earned by study participants has been at least $200-$300 or more per month, in some cases up to $1200 over a 12- or 16-

week period. In addition, in CM research studies, the value of the reinforcer (incentive) increases as participants achieve sustained periods of abstinence. For example, in some studies, the first stimulant-free urine sample earns an incentive worth $2.50, and when three consecutive stimulant-free samples are given, the value of the 3rd sample would increase to $5. As consecutive negative samples increase, so does the value of the incentive. Once the higher values are achieved, if there is a relapse and a positive urine sample is given, the incentive value returns (resets) to the original value ($2.50). In this way, patients are rewarded for gaining longer stretches of continuous stimulant abstinence. This escalating schedule of incentive values with the reset is a component in all CM research.

This manual does not fully implement CM as a component of the TRUST protocol.

Currently (Nov, 2020) Medicaid regulations establish a limit of $75 per patient per year as the maximum amount of total incentives a patient who has Medicaid insurance can receive. Therefore, because of this modest available incentive amount, it is not feasible to structure the "value escalation and reset" aspects of a true CM protocol. But, we believe the use of positive reinforcement (incentives) for positive behavior change can still promote treatment goals and be a useful component of this manualized treatment protocol. For this reason, we will refer to the systematic delivery of rewards for target behaviors as the "Incentive Program" component of the protocol, (rather than contingency management).

Incentive Program

The incentive program recommended for use in the TRUST manual is developed to be simple and to be compliant with the current Medicaid regulations regarding limits on incentives. At the orientation session, patients should be given a $5 gift card. The specific incentive program should be designed to address the challenges of patients in each organization (eg. stimulant-free UAs, attendance at treatment sessions). Each patient can earn a total maximum of $75 over the course of their participation in the 12-week program. We strongly recommend that the incentive program be designed to deliver the $ 70 in incentives ($5 is automatically given at the orientation session) in the early weeks of treatment (first 4-6 weeks). For patients who successfully engage in target behaviors early in treatment, these behaviors are most important to reward.

In addition, upon completion of the initial 12-week period of the TRUST protocol, they will be compensated an additional $25 gift card upon completion of a program evaluation form. This $25 is not an incentive, it is compensation for completion of the evaluation form

Motivational Interviewing

As described in Chapter 3, a number of MI skills are particularly useful in promoting engagement with patients and helping to address some aspects of patient ambivalence and reluctance to make behavior change. The use of these specific MI skills is highly recommended.

To an even greater extent, we see the spirit of MI, especially compassion and acceptance, as fundamental to the success of treatment using the TRUST (or for any) approach for PSUD treatment. People with PSUD enter treatment confused, depressed, unable to understand their own behavior, ashamed and embarrassed. Frequently defensiveness is their only self-protective psychological mechanism. To view this state of mind as "denial" and to address this condition with criticism, confrontation, and sarcasm is inhumane, unprofessional, and clinically non-productive. We hope that an overarching message in the TRUST protocol is that individuals with PSUD must be treated with compassion and dignity throughout their treatment experience.

Cognitive Behavioral Therapy and Community Reinforcement Approach

CBT and CRA are both "talk therapies" that teach, encourage, and reinforce patients to have a better understanding of their own behavior and to develop some active techniques to make behavior change.

One of the major foci of the CBT exercises in this protocol is helping patients learn about the conditioned cues that often set off their craving for stimulants. These "triggers" established via Pavlovian conditioning are extremely powerful events that can often derail a patient's progress. It can be helpful for them to understand this "triggering" process, avoid triggers if possible, and cope with them when they occur. In addition, there is an emphasis on helping patients manage their time and find drug-free environments and people to help support their recovery efforts.

The major contribution of the CRA exercises is to educate and encourage patients to develop new non-drug related, reinforcing behaviors that help sustain progress in recovery. When a person has PSUD, methamphetamine and cocaine become the

dominant source of reward in their lives. When they attempt to reduce/stop their use of stimulants, their lives are often devoid of reinforcement and can seem joyless and empty. Part of the anhedonia that patients experience is often expressed in terms of "there is nothing positive in my life." CRA strategies educate and assist people in initiating and sustaining new behaviors that support recovery and provide new sources of enjoyment and reward in life.

Physical Exercise

There is a vast amount of research that supports the benefits of exercise on physical health (e.g., cardiovascular health). More recently a robust set of evidence has been collected to document the benefits that exercise has on mental health symptoms, particularly anxiety and depression. In the past decade, there is a newly developing collection of research that shows that physical exercise can be useful to individuals in recovery from PSUD.

Several NIDA-funded studies have reported that for individuals with PSUD, exercise can produce brain changes that help people address the commonly experienced anhedonia, anxiety, and depression in the early months of recovery. Further, relapse to methamphetamine use was reduced if a residential treatment program was augmented with a program of regular exercise. For this reason, exercise is integrated into the TRUST protocol.

Continuing Care

Obviously 12 weeks is merely the beginning of the process to reduce/discontinue cocaine and methamphetamine use. It is essential for individuals with PSUD to have a support system to help them progress and build their life in recovery. The continuing care component is a very modest framework to provide support. Clearly a successful sustained recovery requires long term behavioral change and development of many new activities and attitudes. Continued participation in exercise and other strategies to promote physical and mental benefits are very helpful to many individuals. 12-Step and other self-help activities can be valuable and available support systems. Additional participation in treatment activities and approaches listed in the appendix can be also be useful.

Retention in treatment-An overarching priority.

As we have come to recognize substance use disorders as chronic health problems, our treatments have necessarily become increasingly focused on retaining patients in treatment and recovery services for extended periods of time. As was recognized by the founders of Alcoholics Anonymous (AA) and supported by decades of research, the longer a person remains involved in treatment and/or recovery activities the less drugs/alcohol they use, the less they are involved in criminal justice activities, and the better they function within their families and communities. An even more direct measure of the importance of patient retention in treatment can be seen in overdose death statistics. People with SUD who currently are in treatment or recovery activities have far lower rates of overdose deaths than those with SUD who are not involved in treatment or recovery activities. In short, retaining patients in treatment reduces overdose death rates.

Retaining people with PSUD in treatment is a major challenge. There are no medications like buprenorphine or methadone that support retaining patients in treatment. With the tools currently available, two of the most powerful factors in promoting treatment retention are the use of incentives and a positive therapeutic relationship between the counselor and the patient. In this manual, we include an incentive component to promote retention, and we strongly recommend the use of motivational interviewing as a way of encouraging a strong positive relationship between patients and treatment staff. For many patients, the relationship with their counselor is the glue that holds patients in treatment. In the next chapter, we describe some of the essential MI skills that are of greatest importance in retaining people in treatment.

Beyond the therapeutic techniques, there are other factors that can reduce treatment drop out/promote treatment retention. First, it is important that patients have transportation to get to and from the treatment site. For those with transportation challenges, it may be possible to do some of the treatment activity over a telemedicine platform. It is also important that the treatment sessions are scheduled on days/times that are compatible with patient schedules (i.e., working patients may need evening treatment sessions). Childcare can be a challenge for some patients. In some treatment programs, childcare is provided on site, which

can be a major benefit to many patients who have childcare responsibilities. Finally, many patients in outpatient treatment live in unstable/active drug use situations. For these patients, consideration should be given, in line with ASAM Placement criteria, to include drug-free housing as part of their treatment plan.

Often patients miss treatment sessions, and when this occurs, it is important for staff to reach out by phone/text (following proper patient privacy/security protocols) to encourage patients to come for a replacement session and/or to attend their next scheduled session. Patients who have recently stopped methamphetamine or cocaine have very chaotic and disorganized lives and are cognitively impaired. Attending scheduled sessions on time can be a major challenge. Therefore, it is important for staff to maintain a positive and supportive attitude that recognizes the difficulty of treatment participation for patients. Attendance should be praised/reinforced, and those who have attendance problems should be given continuing support and encouragement to attend.

Treatment practices that promote retention

Positive, supportive, safe environment

Use a non-judgmental, MI interaction style with patients

Use positive incentives (whenever possible, contingency management)

When possible, make snacks and drinks available

Support with transportation

Childcare on-site

Flexible service hours (evenings, weekends)

Telephone/text outreach and encouragement when patients miss sessions

Coordinating care with primary care and mental health professionals (*or even better, fully integrations StUD care with primary and mental health care*)

Chapter 3 Motivational Interviewing

This chapter on Motivational Interviewing (MI) is not meant to be an exhaustive tutorial, but rather an overview of some basic MI skills that are of great importance in working with patients with PSUD. These skills help counselors work with the ambivalence of patients and promote positive attitude and behavior change. MI is a set of skills that must be learned and used in your treatment activities**.** Practice**,** practice, practice.

Motivational Interviewing developed by Miller and Rollnick (1991) is a way to interact with individuals to strengthen their personal motivation towards achieving a specific goal. Building on the humanistic concepts of Carl Rogers, MI recognizes and validates an individual's right to make her own choices. Additionally, research shows there is a protective factor, in the form of reducing burnout for the counselors consistently engaging in MI-adherent interactions.

There are a wide range of on-line training courses on MI. These include: Single and Multi-day courses.

https://attcnetwork.org/centers/northwest-attc/motivational-interviewing-mi.

The "Spirit" of Motivational Interviewing

The underlying **Spirit of MI** includes *Compassion*, *Partnership*, *Acceptance and Evocation.* Developing a helping relationship requires each of these components to be able to thrive. A patient must feel accepted and not judged, feel empathy and not pity, be a valued-equal team member, to be able to talk openly about their deepest darkest secrets which may not have ever been shared with another person. The shame, guilt and embarrassment that accompany behaviors that frequently occur to obtain drugs or while under-the-influence of drugs can overwhelm the desire to be open and honest. MI provides a set of skills that helps the counselor communicate to a patient that he/she is safe to share embarrassing/shameful information without being judged or criticized.

What would take it for you to be able to share your innermost thoughts and feelings with another person? What characteristics or qualities would that person need to have for you to let your guard down?

The spirit of MI is a requisite to set the tone for a productive relationship. This spirit and the skills to express empathy, compassion and acceptance are essential throughout all the activities in the TRUST protocol.

Principles of Motivational Interviewing

The five principles of Motivational Interviewing are as follows:

- Express Empathy
- Develop discrepancy between the individual's goals and current situation
- Avoid confrontation
- Recognize and adjust to resistance to promote change talk
- Promote self-efficacy

Expressing Empathy

MI emphasizes "meeting an individual where she/he is at" and accepting that the patient may be very early in the process of recognizing their addiction. Before MI was used in addiction treatment, patients were viewed as "in denial" and often sent away from treatment and told to "come back when you are ready to change." This toxic, judgmental attitude and approach toward people with PSUD is neither ethical nor acceptable in 2020. Patients sent away from treatment or kicked out of treatment are at very high risk of overdose and death.

MI recognizes resistance and ambivalence as a "normal" part of making difficult behavioral changes. Instead of judging the individual as being "not ready," or "in denial" use of MI skills allows the counselor to communicate understanding and acceptance to the patient. Early in an individual's struggle with their PSUD, it is often hard for these individuals to see the need to change. The use of MI allows the counselor to express to the patient that the decision to change their life and begin a program of recovery is a decision that can only be made by the patient.

Through the expression of empathy, the clinician accepts the patient's feelings and beliefs and communicates them in a respectful, non-judgmental manner in the form of a *Reflection*, one of the four MI Micro-skills.

It is important for the counselor to communicate to the patient that they recognize the patient-counselor relationship as partnership. The individual with PSUD brings to the treatment program a set of life circumstances and some challenges they are facing. The counselor has information and support that hopefully can be useful to the patient. The counselor, serves at the behest of the patient and is there to listen to the patient, provide acceptance and support for him/her and offer information and guidance if desired by the patient.

Developing Discrepancy

The Cambridge Dictionary defines "discrepancy" as: "a difference between two things that should be the same."

With MI we try to help patients develop a discrepancy between 1. where they currently are in relation to their stated goal(s) and 2. where they would ultimately like to be or like to achieve.

Patients are encouraged to discuss aspects of how they could change their lives to better achieve their goals. It can be helpful to encourage them to think about how they could make these changes: "change talk." In this discussion it is helpful for patients to talk about: the good things about making those changes as well as the not-so-good things about making the changes. Engaging in this exercise helps to create a vision for the direction the change process can take and serve as a roadmap for change and this change can be the foundation in developing a sense of self-efficacy and self-accountability.

A useful tool in the effort to develop discrepancy between the individual's current situation or life circumstances and personal goals, is to look to the future. Often when a person who uses substances reflects back upon her/his past, he/she feels all negative emotions, including shame, guilt, self-doubt, trauma, and disappointment. Looking ahead provides an opportunity for hope and a reason to make change. Listening for "Change Talk" as the patient describes the urgency and importance that cutting back or ceasing drug use gives the counselor insight into what is important to the patient what some steps are that they can take.

Avoiding Confrontation and Adjusting to Resistance

A safe and trusting environment is the keystone of establishing the foundation of a positive working relationship. Understanding and acceptance of the patient's perspective is foremost to establishing rapport. Acceptance of the individual is not the same as approval of the patient's behaviors. Lecturing, arguing, criticizing, making sarcastic comments and scolding are inconsistent with the spirit of MI and tend to produce discord and friction in the counselor-patient relationship. Active listening to understand the patient's perspective about their drug use and its role in their life is an important step in relationship building.

Promote Self-Efficacy

Recognizing incremental change in our patients is an invaluable tool towards facilitating "self-efficacy." The use of affirmations to highlight their positive actions can help to bolster confidence and enhance motivation while reinforcing the exact behaviors most likely to lead to a successful recovery.

Genuine affirmations increase change talk. "It's great you were able to come in today." "Great work in following the schedule you made. That is a big step in the right direction." When a patient shows up late to her/his appointment, the counselor who scolds that the patient for tardiness fails to acknowledge that the patient has indeed attended his/her appointment. Acknowledging the challenges the patient faces in taking multiple buses, traveling great distances, or getting her kids off to school prior to coming into the appointment is a way to validate the patient and enhance motivation.

Enhance Change-Talk

Expressions of *Desire* ("I want to …", "I would like to …"), *Ability* ("I think I can do that!", "I've done that before!") *Reasons* ("If I don't make these changes I think my partner is going to leave me!") and *Need* ("I got so sick the other day, I have to stop drinking!") are considered preparatory change talk statements. These statements can be viewed as an invitation to the counselor to provide an open-ended question, affirmation, or reflective statement as a way to learn more, reinforce, or check for clarity on the statement made.

Motivational Interviewing Core Skills

Expressions of *Commitment, Activation, or Taking Steps* are considered "Mobilizing Change-Talk" with an individual preparing to act, move into action, or having already taken steps to elevate their condition. Again, utilizing the MI Micro-skills of:

Open-ended Questions,

Affirmations,

Reflections and,

Summaries.

(OARS) can serve the counselor in reinforcing statements of change (Change-talk) thereby increasing the likelihood of change occurring.

Curiosity is an incredibly powerful resource at the disposal of the counselor, which will go a long way to establishing rapport and building trust. Being curious about your patients indicates to him/her that you are interested in them. Be curious. "Where did you go to high school"? "Were you involved in sports? " "How many brothers and sisters do you have and where do they live? " Understand the challenges that stimulant use has presented for the patient and their family. This will ultimately be a central theme in developing discrepancy.

Open-ended questions such as: "How would you like for things to be different? " "What would it take to achieve those goals you just described ? " will provide individuals an opportunity to articulate where they would ultimately like to be, and what they would like to accomplish during the time they are seeing you. Gaining this insight can be invaluable, both in terms of developing a treatment plan and in learning to understand what is important to your patient.

An individual who uses stimulants may want to regain custody of their children, or they may want to get their probation officer off their back. As they consider these challenges, they often do not view their drug use as the problem, rather, they view the problem as the child protective services or the probation officer.

Many counselors would consider these individuals to be in "denial" and confront them by saying "You know, your meth use is why you lost your children and if you stopped using meth you might have a chance to get them back." or "If you your

urine sample is negative for drugs and if you go to meetings, your probation officer might see you as being serious about your recovery."

In each of these cases, the patient has indicated what their desires are, "to get their children back" or to "get in the good graces of their probation officer." A simple reflection, such as, "You're children are important to you", or an open-ended question, "What would it take to get your PO off your back?" provide an opportunity for the patient to express their own course of action(s) for change, and avoids discord in the form of an argument or confrontation around the need to stop using substances.

As we began this section on Motivational Interviewing, we will end this section by emphasizing that **Motivational Interviewing is a set of skills that must be learned and used in your treatment activities. Practice, practice, practice.**

Case Example 1:

Carl is 41-year-old male with an 11-year history of meth use. He is separated from his wife of 14 years, Rachel, and three children, Carl Jr age 14, Erin age 12 and Jonathan age 9.

Carl recently lost his job as a driver at the quarry as a result of his arrest and conviction for reckless driving and driving under the influence of methamphetamine. Carl was referred to the Safeway Treatment Program by his probation officer who appears to be interested in Carl's recovery and rehabilitation.

This is Carl's third treatment episode for methamphetamine use disorder in the last four years. His longest period of abstinence over that period is 4 months.

You are conducting an orientation session and inquiring about his interest in treatment:

Counselor: Good Afternoon Carl, my name is Chris, nice to meet you. How are things going for you?

Carl: Not so well. My PO is on my case and has told me that I either come here or go to jail. I've been to treatment two times and it doesn't work. I don't think I need treatment. I've been to jail and now I know I am just not going to use.

If you were Carl's counselor how would you respond?

Potential responses could be:

1. You value your freedom.
2. So, you didn't have a choice!
3. You have a pretty good idea of how to stop your meth use.
4. Maybe you didn't put enough effort into the program to allow it to work.

How do you think the patient would respond to each of the above statements?

Which if the above statements would result in the least amount of push back from the patient, and encourage some form of Change-talk?

If you selected either statement 1 or 3 you are on the right path.

Counselor: You value your freedom!

Carl: Sure do. Look, the accident wasn't my fault. Some old lady stopped short in front of me and I barely clipped her fender. She insisted on filing a police report and when they arrived, they recognized me from a previous arrest and decided to take me in. I hadn't used meth in a couple days and they said the test was positive. My PO got his shorts in a bunch and told me that I had to get back into treatment. I don't use that often, and don't deserve to go to jail.

Potential responses:

1. Everyone says it wasn't their fault.
2. Driving under the influence is a felony.
3. You've been able to stop using before. How did that go for you?
4. You and the police are on a first name basis.

If you selected # 3 you are most likely to get a response that encourages change talk.

Counselor: You've been able to stop using before. How did that go for you?

Carl: Yeah, I was actually doing pretty well. I was going to meetings. Rachael and I were talking more, and I was spending more time with the kids; I really do miss them.

This statement is filled with Change-talk. How would you respond to Carl? What would keep him sharing his **D**esires, **A**bilities, **R**easons, and or **N**eed to make changes?

Case Example 2:

Tyler is an 18-year-old male with a 12 month history of meth use. He lives with his mother and her boyfriend Fred, and three younger siblings, Robert age 15 and Angela age 12 and Henry age 4 months.

Tyler's father and mother have been separated for three years and his Father, Randolph relocated about a year and a half ago.

Tyler was referred by the school counselor who recognized that Taylor's grades had dropped significantly which may exclude him from going to the state college as he was planning to do in the fall. Additionally, Tyler's baseball coach was concerned as Tyler has been losing weight and has lost interest in playing baseball in this his senior year as indicated by his missing practices.

Tyler has never been in treatment, though has had a number of referrals to the vice principal's office over the last 16 months for getting into physical altercations during class. Tyler's mother LeAnn is concerned about Tyler because he appears to anger easily, is not as easy going as he used to be and does not bring his friends around the house as he did in the past.

You are conducting an orientation session and inquiring about why Tyler is at your program:

Counselor: Good Afternoon Tyler my name is Alex. Nice to meet you. What brings you to our program?

Tyler: Look, I don't really care what your name is and the only reason I'm here is because the vice principal and my mother said that I have to, otherwise I won't graduate.

Potential responses:

1. Look! I was just trying to be nice. You don't have to be rude.
2. Graduating is really important to you.
3. It's your choice to be here or not. You can leave anytime you'd like.
4. Being told what to do is irritating and you like to make your own decisions.

If you selected either option 2 or 4 you are on your way to partnering with Tyler, gaining his trust, and establishing rapport.

Tyler: Of course I want to graduate. Do you think I want to live in this shithole with my mom and that idiot boyfriend of hers?

Potential responses:

1. You're unhappy living with your mom and Fred and see college as a way out.
2. You are lucky to have Fred and your mom provide food and shelter for you.
3. What's so bad about living here?
4. You've gone through a lot of changes in the last year or so and it's been really difficult.

If you selected either option 1 or 4, you would encourage discussion around Tyler's future and college, or you will delve into the difficulties he has had since his father and mother separated.

Tyler: It's been really bad since mom and dad split up. Dad moved away, Fred moved in and lost his job. I have to get the kids ready for school 'cause mom leaves early to go to work to support his sorry ass. He stays home drinks and does drugs. Mom comes home, has to help the kids with their homework, cooks and cleans and does it over again. I'm good helping get the kids off to school, but I hate coming home and watching how he treats the kids and mom.

Counselor: Your mom is lucky to have you to help out with your brothers and sister. You have been through a lot in a short period of time. Your parent's separation, Fred moving in, having a younger brother, Henry and now, getting ready to graduate.

Tyler: I can't keep up. Between taking care of the kids in the morning, and working at the paint store after school, my grades are worse than they have ever been. I was hoping to go to State, but that is not going to happen. I love baseball and with my job, I haven't been to practice in three months. I'm worried about my mom and the kids.

Potential responses:

1. You feel responsible for your mom, brothers, and sister, and if you were to go to State, there would be no one to take care of them!
2. A lot of people work and go to school.
3. So how does your meth use help your mom and siblings?
4. Using meth helped you to take care of your family, while going to school and working, though it doesn't seem to be working now!

Options 1 or 4 would acknowledge the challenges Tyler faces while option 1 would focus on his responsibilities including the potential impact going away to school would have while option 4 would bring his meth use into perspective as it relates to simply trying to keep up.

Tyler: Yeah, when I first started using, I was superhuman. I could get the kids ready, go to class, do my homework at lunchtime, play some ball and work at the paint store. Pretty soon, I couldn't focus on school or baseball, so I quit going to practice and started working more. They like me at the paint store 'cause I work really hard, though more recently they're not happy with me 'cause I yelled at a

customer who was being a jerk. It's not really a problem. I can stop anytime I want.

Counselor: Tyler, would it be ok if I showed you something?

Tyler: Sure, what is it?

Counselor: This is called a "Readiness Ruler."

Tyler: What's it for?

Counselor: Here I'll show you.

On a scale of 0 to 10 with 0 being not at all important and 10 being the most important, how would you rate the importance of your getting treatment for your meth use?

Tyler: I told you that I could quit any time

Counselor: Ok, so how would you rate your need for treatment for your meth use?

Tyler: Maybe a 2 or 3 at the most.

Counselor: Thank you Tyler. I'm just curious why you didn't rate it a 0 or 1?

Tyler: You've been talking to my mother, haven't you?

Counselor: Actually, I haven't, though I would like to if you are ok with that. Now getting back to the Readiness Ruler, why didn't you rate it a 0 or 1?

Tyler: It's obvious, my grades suck, I'm not playing baseball and I won't be going to State.

Counselor: You enjoy baseball, pride yourself in getting good grades, and were looking forward to going away to school.

Tyler: Yeah, life was great for me before dad left?

Counselor: You miss your father.

Tyler: Yeah, I miss him. He took care of the family, not like Fred. Mom and he didn't get along so well, but at least mom was able to take care of the kids and I was able to play ball.

Counselor: I'd like to come back to your father if that is ok, though for now, I would like to finish the Ruler if that is ok with you.

Tyler: Sure, I'm curious about this ruler thing.

Counselor: What would have to happen for you to rate the importance of treatment for your meth use to be say a 5 or 6.

Tyler: That's easy. Getting kicked out of school would be one thing. If I graduate, I can at least go to Community and maybe even play baseball. If I get kicked out of school, I'm a lifer at the paint store, and that would suck.

Counselor: It's pretty clear that graduating is really important to you. What else might happen to raise the importance?

Tyler: If I keep losing weight, get arrested, lose my job, or get kicked out of my house. There are a lot of things that would make it more important.

As you can see from this exchange that Tyler has experienced significant change in his young life. Tyler bears the burden of responsibility for his mom and siblings, and at the same time continues to have hopes and aspirations to go to college to make a better life for himself.

Let us take some time to discuss this exchange between Tyler and his counselor. How do you think the conversation went, and what might you have done differently?

Chapter 4 Patient Orientation

When individuals are admitted into treatment for PSUD, they complete a variety of medical and psychosocial evaluations and frequently treatment placement assessments using the ASAM Criteria. After the individual has completed the evaluation and placement process and if he/she is appropriate for treatment in the outpatient protocol described in the TRUST manual, he/she can be oriented for treatment. It may be that this orientation is provided at the same time as the medical/psychosocial assessment or in a subsequent appointment. To promote engagement, the time period between the assessment and the orientation should be as short as possible.

Important considerations and skills in orienting patients to the TRUST protocol.

After the patient completes the assessment, it is important to orient him/her to the elements of the TRUST protocol. It is useful to begin the orientation by asking the patient to provide an overview of his/her drug use history, with detailed information about recent stimulant use (amount, frequency, route of administration and time since last use). If there has been very recent use (past 24 hours) or very heavy use over the past 30 days (particularly via injection), the patient's attention span is likely to be limited, and the orientation should emphasize immediate priorities and expectations. For those who are less acutely impaired, the provider may take more time to explain the rationale for the program, the elements of the program, and find out more about the patient and their life in an effort to build a positive rapport.

It is important to give the patient an opportunity to talk about what he/she wants from treatment. For many patients, this will be straightforward. The patient will describe how stimulant use has damaged his/her life and why he/she is in treatment to become abstinent from stimulants. Other patients will have goals that are less clear. They may say they hope to reduce, but not discontinue use of stimulants, or they may say they feel that they don't have a problem with stimulants, but they have been forced into treatment by family or legal pressure. Motivational interviewing skills will be extremely valuable in working with these patients (see previous chapter).

It is important to keep in mind that if individuals who use stimulants are attending treatment, their risk of overdose death is reduced. Getting them into treatment and retaining them in treatment are priorities. Not everyone enters treatment saying "the right things." However, individuals who express ambivalence about abstinence as a treatment goal and/or who express outright skepticism about treatment can benefit from information they receive in treatment and certainly, over time, they may modify their views of treatment and/or the benefits of discontinuing stimulant use. It is important to remember that this treatment is intended to meet their needs and treatment goals, which may or may not be the same as those of the majority of patients (and counselors).

Regardless of a patient's motives for treatment or treatment expectations, the priority is to get them "connected" to a counselor and to keep them coming back.

For ambivalent/skeptical individuals who are very vocal and dogmatic in their views, it may be necessary to conduct all their treatment sessions as individual sessions, rather than have them attend group. The same treatment content that is scheduled for group sessions can be delivered and discussed in individual sessions. Having an individual in a treatment group who has treatment goals that are very different than the other group members can be disruptive to the group and distract from the purpose of the group for all of the patients including the individual.

Patients should be oriented to the fact that the typical service schedule is for two visits per week for 12 weeks, followed by at least another 3 months of continuing care/recovery services. The counselor can discuss with the patient when the two sessions would be most convenient and plan a treatment schedule, with one individual and one group session. If possible, the same counselor should deliver all services to an individual patient as a way of maximizing rapport building and development of strong positive relationship.

It is helpful to explain to the patient that the treatment services will include some group sessions, some individual sessions, one urine test per week, the development

of an exercise program and that the patient will be able to earn some incentives, in the form of gift cards.

In fact, when the patient attends the orientation session, they will receive their first gift card worth $5 (and they have choices in the type of card they choose). Following this first session patients can earn up to an additional $70 worth of gift cards or other incentives via the incentive system developed by each organization.

An unusual aspect of the TRUST protocol is that physical exercise in a formal component of the treatment experience. There is research to support the fact that for individuals with PSUD, a program of regular exercise (3X per week, 30-40 minutes) can reduce symptoms of anxiety and depression, promote recovery in the brain's dopamine system and reduce relapse to stimulant use following a period of abstinence. Exercise is an active and very useful part of treatment for individuals with PSUD. The rationale and plan for exercise will be developed between the counselor and patient in the individual session component of the program.

It is useful in establishing rapport for the counselor to listen to any patient concerns and answer any questions the patient may have about the treatment. It is important to clarify that the individual and group sessions are designed to provide patients with new information and useful information for addressing their use of stimulants. Patients will be encouraged to take part in discussions, but it is their choice when and how much they want to talk. It is useful in empowering patients if the counselor can explicitly express to patients that this is their treatment experience and the counselor's role is to provide them with the most accurate information and guidance possible, but the treatment benefits will result from actions and attitudes of the patient.

It is important for counselors to keep in mind that when individuals who use cocaine and/or methamphetamine enter treatment, they are often disoriented, emotional, sleep deprived, and ashamed. For individuals with PSUD to "connect" with a therapist, it is important for the therapist to maintain a nonjudgmental and compassionate perspective. Frequently individuals entering treatment have engaged in behavior they feel guilty about, and they are frequently defensive about the damage their drug use has done to their friends, their families, and themselves. It is important for counselors to express encouragement, optimism, and genuine empathy. The point of most frequent treatment drop out is in the first 3 sessions. Counselors' ability to express genuine acceptance and compassion is essential.

Calendar and dots.

One of the treatment activities that is conducted at each treatment session (individual and group) is a simple visual tracking exercise using a calendar page and colored stickers or "dots". Patients are encouraged to put a colored "dot" on each day that they have abstained from stimulant use. This calendar provides a visual record of their success at developing days abstinent from stimulants. Patients are encouraged to do this exercise based upon their self-report of stimulant use. This small simple exercise can develop symbolic importance to patients, and frequently they will look forward with great enthusiasm to applying the dots to their calendar. On days when stimulant use occurs, no dot is applied. Over time for the majority of patients, the calendar pages become filled with dots and are a source of pride.

At the end of the orientation session, this exercise is introduced to patients. For those who have some non-use days, they can apply dots to their pretreatment stimulant abstinent dates. For many, they may have used within hours and do not have any days to mark with a dot. When they come in for each session, they are encouraged as a first activity to apply these dots throughout the 12-week treatment experience.

Orientation Checklist

In the orientation session it is useful to:

Review drug history and recent events that have brought the individual to treatment.

1. Determine goals in treatment and discuss and agree on a treatment session schedule.
2. Describe the group and individual session format and content.
3. Provide a brief explanation of the incentive and exercise treatment components.
4. Begin "calendar and stickers" routine.
5. Make a specific plan for first treatment session.

Orientation Summary: We are glad you have come to treatment, and we hope you fully benefit by attending all the scheduled sessions. "Come to Treatment, Stay in Treatment"

It can be helpful to give patients the metaphor that treatment groups and individual sessions are like doses of medicine. The more consistent they are in attending, the more "medicine" they receive and the more they benefit. If they have some challenges in attending treatment, we hope that they will let the counselor know so they can get some help with finding a way to "attend".

It is good to remind patients that if they are going to miss an appointment, let the counselor know and see how an alternative can be created to allow the patient to participate in the session.

Let the patient know that if they unexpectedly miss an appointment, you will call/text/email them to connect and reschedule.

In addition, it is good to let the patient know that if they are going to be late for a session, they should come anyway. Attending twice per week provides a valuable structure to their recovery and a brief visit is far better than no visit.

If patients encounter problems between appointments (for example, craving, emotional difficulty, relapse), they should contact the therapist by phone or text. It is important for patients to know that the counselor can provide support as they face challenges in their day to day activities.

COVID-19 Considerations and/or Transportation Considerations.

During the current COVID-19 pandemic, it may not be practical for patients to attend twice weekly in person sessions. It may be necessary to use telemedicine/zoom/skype etc. for some patients for some sessions. There is no research currently available to guide how this can be done optimally. Some experienced treatment practitioners currently in this struggle have observed that they feel that for many patients, individual sessions can be done with good participation and effect over a video platform. Group sessions are more challenging to do on a group platform, but possible. The one observation made by numerous experienced clinicians is that it is not optimal to move the entire treatment to a distance platform. Some amount of in-person attendance is considered important. According to these clinicians, a mixture of in-person and video sessions may be optimal.

Of course, in the case of patients with high risk profiles and high concern about infection it may be necessary to deliver all sessions by video or even telephone (or a "chat" service?). Similarly, some patients start treatment with an ability to travel to the clinic, but at some point lose their transportation. For these patients a video service may be the only viable alternative.

Chapter 5 Contingency Management/Motivational Incentives

Contingency Management (CM). Contingency management (CM), also known as motivational incentives, applies the principles of positive reinforcement for performance of desired behaviors consistent with abstinence from cocaine or MA. CM involves the contingent delivery of an incentive for "target behaviors" such as attendance at treatment sessions, drug-negative urine specimens, documented completion of a homework assignment, or other behaviors that promote reduction/cessation of stimulant use. Incentives include desired items or privileges, such as vouchers or gift cards or other desired items. The goal of contingency management is to use robust incentives to help individuals struggling with psychoactive stimulant use disorder to discontinue or reduce their cocaine and/or methamphetamine use.

There are multiple ways to structure and individualize the use of incentives.

- A straightforward method is to deliver an agreed upon incentive every time a specified target behavior occurs (e.g., a $10 gift card every time a stimulant-free urine sample is produced; or when a treatment session is attended).
- Another method is to use an escalating schedule of vouchers that can be redeemed for desired goods. The value of the voucher can initially be modest (e.g., $5) and the value can increase with longer and longer periods of abstinence. An example of escalating schedule is providing a $5 voucher for each stimulant-free sample until three consecutive negative samples are given, and at that time the value of the incentive voucher increases to $10 per sample; if a drug positive sample is given, the value "resets" to the earlier lower value.
- Another method uses the "fishbowl approach," which uses drawings of slips of paper with varying values to create a variable schedule of rewards (Petry, 2000). With the "fishbowl" some slips of paper say, "Good job" and have no monetary value. Other slips have small amounts ($1 and $5) and there are slips with moderate size values ($10 and $20) and one jumbo prize ($100). When the desired behavior occurs, patients initially get one draw, as they get consecutive instances of desired behaviors, they get more draws for each target behavior (a form of reward escalation).

As reflected by the research below, this relatively simple, positive reinforcement procedure has been shown to produce and sustain robust and clinically meaningful

reductions in stimulant use. There have been multiple systematic reviews and meta-analyses that clearly document that of all behavioral strategies (and there are no approved effective medications), contingency management/Incentives has by far the best evidence of effectiveness for the reduction of stimulant use by individuals with PSUD (e.g., DeCrecenso, et al., 2018; Farrell et al., 2019).

Research support for CM/Incentives

Some of the specific research findings supporting contingency management for the treatment of psychoactive stimulant use disorders include the landmark paper by Higgins et al. (1991) that documented highly significant reductions in cocaine use and very large and significant increases in extended periods of cocaine abstinence using CM. Roll et al., (2006) extended these findings to individuals who use MA and reported that CM produced significantly greater retention in treatment and significantly more MA-negative urine samples. Rawson et al. (2002) found that with individuals in methadone treatment who also used cocaine, CM produced significantly more cocaine-free UAs than no treatment (other than methadone) or cognitive behavioral therapy (CBT). Further, the addition of CBT did not produce additional benefits over and above CM alone.

Although there is strong empirical support for CM, its application in real world treatment settings has been limited, even though NIDA and SAMHSA have joined to produce a set of "Blending" manuals and materials to support the use of CM (https://www.drugabuse.gov/blending-initiative/motivational-incentives-package). Roll et al. (2009) described some of the obstacles that interfere with broad scale application of CM in community treatments. One effort that has shown promise is a large implementation trial promoting the use of CM as a routine treatment approach within Veterans Affairs (VA). The effectiveness of this implementation project has been documented by DePhilippis et al., (2018) who reported that CM is being successfully implemented across a large number of VA sites and that patient outcomes were significantly improved by the addition of CM within these treatment settings.

Implementation of Incentives in TRUST

In Chapter 4, the Patient Orientation chapter, the concept of incentives is explained to the patient. In fact, we recommend that individuals who are entering treatment are automatically given a $5 gift card for attending the initial Patient Orientation session. This $5 gift card provides a small incentive to promote treatment

initiation and lets patients experience the reality that they can earn incentives as part of treatment in the TRUST protocol. As always when incentives are provided the gift card should be presented with praise and enthusiasm. A note: **Cash is never used as an incentive**. For people with PSUD, cash can be a trigger and can result in triggering use of stimulants.

Current Limitations of the incentive program within TRUST. In the 2020 version of the TRUST manual, we are going to refer to the use of incentives as the "incentive program," rather than contingency management. Contingency management as delivered in the research studies described above used incentive amounts in the $100-$300 per month range, often for 6 months or more. In the robust CM programs funded in these NIDA research studies, study participants could earn over $1000 via the contingency management arrangement. The incentive escalation and reset components of a contingency management protocol are likely essential for maximum impact. However due to the funding limitations described below a full, robust CM program is not currently possible when treating patients who are being treated via Medicaid funds.

Due to federal regulations, the use of incentives is limited to a maximum of $75 per patient per year. This restriction applies to individuals whose healthcare is being funded via Medicaid. With this modest amount it is unlikely that a complex CM procedure is warranted. In the 2020 TRUST protocol, we recommend using a simple incentive procedure that does not require extensive record keeping and changing of values.

Current federal restrictions on incentive amounts.

At present, federal Medicaid regulations restrict the amount of money that can be used to patient incentives for all individuals whose healthcare is being paid for via Medicaid. For those using non-Medicaid sources (e.g.. private insurance), this restriction does not apply. For those on Medicaid, the source of the incentive money does not matter. The relevant issue per the Medicaid Inspector General is that high value incentives (over $75 total) are viewed as "kick-backs" and therefore the source of the money for incentives is irrelevant.

There are current efforts to get this restriction waived to allow higher amounts of money to be used in incentives when treating individuals for StUD. If the restriction is lifted and higher amounts are allowed, the TRUST protocol will be modified to allow for use of a robust CM program.

Ideas for using incentives within the TRUST protocol

There is an excellent resource (Higgins SAMHSA Manual http://ctndisseminationlibrary.org/pdf/291.pdf) which provides many practical suggestions for using incentives. We recommend downloading this manual for use in developing an incentive program.

Although the incentive program incorporated into the TRUST protocol does not use the robust incentive amounts in the NIDA research trials, it does incorporate a $75 per patient incentive program. Initially we considered putting in one specific incentive program that all TRUST programs would use with all patients. However, after discussion with some of the individuals who will be using the TRUST manual, we realized that different programs could use different incentive programs to address different behavior challenges of different patients. Consequently, we will provide several suggestions, plus the Higgins SAMHSA manual, and will expect each organization to develop incentive programs based on sound behavioral principles.

A set of options for incentive programs:

- Provide an automatic $5 gift card for attending the patient orientation session (recommended).
- Design an incentive program that will deliver the entire $75 to each patient, if possible. We want patients to earn the $75 total if possible. (Having an "incentive program" that uses candy bars, or very small gifts, or "incentives" of little monetary value, is not a viable "incentive program.") However, small gifts such as donuts, protein bars, or other snacks at sessions is a great idea and helps make the treatment experience more positive and likely promotes retention in treatment. Although these small gifts are good to promote a positive environment, they **are not a meaningful incentive program of the type we are asking for in TRUST**.
- Focus incentive program on early weeks in treatment. In most cases, incentives are important in the initial 4-6 weeks to prevent early drop out. One of the most basic incentive plans is to provide a $10 gift card for attendance at each individual session (or each group session). Use of the incentives in this manner is simple, and if patients successfully attended the first 7 individual sessions as scheduled, they would have used their $75 allocation by week 7. While this could result in a drop off in attendance after 7 weeks, it would be addressing the critical issue of engaging patients for the initial period of treatment. However, since many (most?) patients

will not produce the target behavior perfectly during the first 7 weeks, the incentives will likely continue into later weeks.

- A variation on the previous plan is to provide $5 gift cards for each individual and each group session. The question to address here is, "Is a $5 gift card enough to impact the behavior" over the early treatment period. This may differ from program to program.
- Another variation is to provide a $10 gift card for each stimulant-free urine specimen. If this model is used, it is essential to have point of care urine testing, so the incentive can be delivered immediately after the sample is provided and tested. In addition, specimens should be temperature monitored to ensure validity.
- A fishbowl technique can be used rather than the simple "gift card for each behavior" in each of the situations described above. The techniques for the fishbowl are described in the Higgins SAMHSA manual. Some fishbowl considerations
    - Using the $75 limit, it is important for the slips in the fishbowl have many small amounts ($1 and $5) so that patients have an excellent opportunity to earn something quickly in treatment.
    - Using the $75 total amount, it is recommended to have 20% of slips that say "Good job"; 25% of slips worth $1; 25% of slips worth $5; 20% of slips worth $10; 8% of the slips worth $20 and 2% of the slips worth $25. This will allow for a high % of "winners" and over 50% of the slips worth $5 or more.
    - Fishbowl can easily be used for attendance or drug urinalysis results.
    - When used for attendance at group sessions, it is often possible to amplify the impact of the incentive with group participation and group enthusiasm.
    - It is possible to design a fishbowl model that rewards consecutive target behaviors (e.g., sessions attended, and/or stimulant free urine samples). The first target behavior results in one draw from the fishbowl. 3 consecutive target behaviors earns 2 draws from the bowl and so on.
    - One issue of importance with the fishbowl is to ensure there is no "cheating." Patients have been known to make their own "slips" for high values and have concealed them in hand when they reach into the bowl. If a patient seems to be receiving an unusually high rate of high value slips, close monitoring is needed.

General recommendations on use of incentives in TRUST.

- **Maintain security and a record of incentive delivery**. Use of incentives involves having incentives in the clinic that are worth considerable value. For example, if a program is going to treat 40 patients with TRUST and they plan to use gift cards incentives, they will have 40X$75 worth of gift cards. In this case, $3000 worth of gift cards will be used over the course of the program. It is extremely important to have a robust security and recordkeeping plan for the gift cards. In situations where a large supply of gift cards is kept in clinics, they can be great sources of temptation for patients and staff if not carefully monitored and secured. Theft of gift cards by patients and/or staff is a very demoralizing event, and good security and recordkeeping are needed to avoid this situation.

- If gift cards are used, have a variety of cards for stores where they can be redeemed. Some patients prefer gasoline cards, others Walmart or Target, others grocery store cards. It is important that the cards can be redeemed for items that are desired by the patient. To the extent possible, if gift cards can be used that do not allow for purchase of alcohol, this is an excellent option.

- If, during the COVID pandemic, in person contact is reduced but treatment is still being delivered via telemedicine/zoom/skype, it is possible to provide electronic gift card delivery. Hopefully when COVID adaptations are made to treatment programming, efforts to sustain the incentive program will be made.

Not an incentive: Compensation for the 12-week evaluation.

We are hoping to collect some evaluation data from individuals who enroll in the TRUST protocol. One important component of the evaluation will be a short questionnaire that we expect to be collected at 12 weeks after attendance at the Program Orientation session. We hope to collect these questionnaires FROM ALL PATIENTS, whether they are in treatment or not. At the time they complete the 12-week evaluation questionnaire, they will be compensated with a $25 gift card. This $25 gift card is <u>compensation</u> for their completion of the evaluation forms, it is not an "incentive." And we hope it will be collected from all patients, whether they have remained in treatment or not. Patients should be reminded that they will receive the $25 at the 12 weeks and if they remain in treatment, they will be sure to get this compensation with certainty. While this does not represent an incentive, since it is, in fact, compensating them for completing the forms, it does not count in the $75 incentive limit.

Chapter 6: Exercise for Psychoactive Stimulant Use Disorder

As reviewed below, there is excellent evidence that physical exercise has many medical and psychological benefits. There is a growing body of literature that exercise can have substantial benefits for individuals in recovery from drugs and alcohol use disorder. One of the recent studies by the authors has shown exercise to be particularly useful for individuals who use methamphetamine. One study does not provide sufficient evidence to establish exercise as a specific evidence-based intervention for people with psychoactive stimulant use disorder. However, we think it is very promising, and when all the general health and mental health benefits are considered, we think the inclusion of exercise can be of great help to individuals in early recovery (and later recovery) from PSUD.

Although we think the evidence supports promoting exercise with our patients in PSUD recovery, we cannot claim to know the best types of exercise, nor, and importantly, the best way to get individuals in treatment to develop exercise as part of their lives. This will be your challenge. We offer some suggestions, but at the present time, these are "best guesses" and we hope clinicians using this manual will use their clinical creativity to help patients develop exercise as a short term treatment strategy as well as a lifetime habit.

Exercise is effective for medical conditions and symptoms

The U.S. Department of Health and Human Services' updated *Physical Activity Guidelines for Americans* (USDHHS, 2018) provides a comprehensive review of the literature and documents strong evidence for the general health benefits of physical activity. For adults, improvements ensuing from regular exercise at moderate levels include lower risk of early death, heart disease, stroke, diabetes, high blood pressure, adverse blood lipid profile, metabolic syndrome, and colon and breast cancers. Exercise is helpful for the prevention of weight gain and weight loss, particularly when combined with a lower caloric diet and is also associated with improved cardio-respiratory and muscular fitness, and better sleep and cognitive function.

Exercise is effective for psychiatric conditions and symptoms

Aerobic and resistance exercise interventions are useful for a wide range of psychiatric conditions, including anxiety and depression (Saeed, Cunningham, & Bloch, 2019; Zschucke, Gaudlitz, & Ströhle, 2013). The majority of studies have demonstrated efficacy of exercise in reducing symptoms of depression in both inpatient (Martinsen, Medhus, & Sandvik, 1985) and outpatient (e.g., McNeil, LeBlanc, & Joyner, 1991) settings; favorable results have been highlighted in several review articles (e.g., Barbour, Edenfield, & Blumenthal, 2007; Martinsen, 2008) and meta-analyses (Craft & Landers, 1998; North, McCullagh, & Tran, 1990).

Exercise improves cognition

Cognitive deficits have been observed in individuals who use various substances long-term. Individuals who use methamphetamine suffer from cognitive impairments during initial months of abstinence, including working memory, selective attention (Simon et al., 2002), learning (Gonzalez et al., 2004) and decision-making (e.g., Bechara & Damasio, 2002; Paulus, Hozack, Frank, Brown, & Schuckit, et al., 2003). Meta-analyses of randomized, controlled trials confirm that normal and cognitively impaired adults derive cognitive benefits from physical exercise (Angevaren, Aufdemkampe, Verhaar, Aleman, & Vanhees, 2008; Colcombe & Kramer, 2003; Etnier, Nowell, Landers, & Sibley, 2006; Heyn, Abreu, & Ottenbacker, 2004).

Exercise and substance use disorders

Neurobiology of exercise and substance use disorders

Exercise may hasten or improve recovery from SUDs by modifying underlying neurobiological processes, such as dopamine activity (Robertson et al., 2016). A study demonstrated reversal of methamphetamine-induced striatal dopamine transporter and tyrosine hydroxylase damage after exercise in rodents (O'Dell, Galvez, Ball, & Marshall, 2012). Cognitive deficits have been observed in individuals who use substances chronically as evidenced by poor performance on memory, attention tasks, and learning deficits (Ramey & Regier 2018). Substance use disorders are also associated with poor impulse control and selective processing (Lundvquist, 2005). These deficits are positively affected by exercise. In addition, exercise has been shown to ameliorate negative mood states that may contribute to substance relapse, and prior literature has suggested that low brain-derived neurotrophic factor (BDNF) levels in individuals with SUDs may predispose individuals to higher rates of psychiatric comorbidity (Angelucci et al., 2007).

Study of exercise as an intervention for methamphetamine use disorder

From 2010–2015, a UCLA research team conducted a NIDA-funded evaluation of exercise as a therapeutic intervention for individuals who use methamphetamine in early abstinence. The study examined the utility and efficacy of an 8-week, evidence-based aerobic and resistance exercise intervention to promote improved treatment outcomes for a sample of 150 individuals in residential treatment for methamphetamine use disorder. The study examined medical, psychiatric, neurocognitive, and behavioral benefits that may accrue during participation in the 8-week exercise intervention, as well as possible sustained beneficial impacts on drug use following completion of the exercise protocol and discharge from the residential treatment program. The project also included a brain imaging component to collect data leading to an improved understanding of the mechanisms that may underlie observed effects on treatment outcomes and symptom remediation associated with the exercise intervention.

DSM-IV-diagnosed methamphetamine dependent individuals were screened to determine eligibility, and those randomized to the exercise intervention participated in supervised progressive endurance and resistance training 3 times per week for 8 weeks (24 sessions), consistent with current guidelines for comprehensive exercise programs (American College of Sports Medicine [ACSM], 2000). Each session consisted of a 5-minute warm-up, 30 minutes of aerobic activity on a treadmill, 15 minutes of resistance training, and a 5-minute cool-down with stretching and light calisthenics. The goal of the aerobic training was to accumulate at least 30 minutes of continuous aerobic exercise at a target intensity set by data derived from maximal incremental exercise testing, as described below. Information derived from the incremental testing was also used to define a safe ceiling for exercise intensity for each participant. The goal of the resistance training was to develop adaptations in muscle strength and body composition to complement the aerobic training program. A total of nine exercises involving the major muscle groups were performed each day.

Participants randomized to the control condition participated in a health and wellness education session 3 times a week for 45 minutes.

Results from the exercise study

Over the course of the 8-week trial, individuals who used methamphetamine were able to safely engage in exercise and derived significant health benefits over a short period. Study results demonstrated that in comparison to the control condition:

-Exercise improved aerobic fitness, body composition, and muscle strength.
-Exercise improved striatal dopamine receptor binding.
-Exercise increased heart rate variability.
-Exercise group participants with less severe baseline methamphetamine use had lower relapse rates after discharge.
-Exercise reduced depression and anxiety symptom severity.
-Exercise reduced craving for methamphetamine.

Conclusion

Exercise is a useful approach to aiding individuals with SUDs in their efforts to avoid relapse after they have achieved abstinence via treatment. Exercise facilitates abstinence by enhancing positive mood states and reduces craving via the effects of exercise on the endogenous opioid system and potentiation of dopaminergic transmission. Exercise also improves sleep (Youngstedt, 2005) and performance on cognitive tasks, which may be impaired in individuals who use substances chronically. Relief of distressing psychological symptoms may serve to complement relapse prevention skills taught in common therapy approaches for individuals who use substances to promote health and positive behavioral changes consistent with treatment goals.

Implementation of Exercise in TRUST

Exercise: A million types and the key challenge… Getting people to exercise

There is no one specific exercise that is recommended above other types in the TRUST approach. Exercise physiologists frequently suggest that exercise that elevates the heart rate above 120 beats per minute, at least three time per week for 30 minutes is a minimum necessary dose to produce measurable benefits. This amount of exercise is believed to stimulate brain neurochemistry and produce benefits for people with PSUD as described above. The three times per week exercise used in the UCLA study did, in fact, stimulate the regrowth of dopamine receptors and reduced symptoms of anxiety, depression, and craving. Consequently, a minimum of three times per week for 30 minutes is a good target.

(Although the American Council on Exercise recommends 150 minutes of exercise per week, this may be an unrealistic goal for patients in PSUD treatment).

With individuals who have recently been using methamphetamine, exercise should be introduced gradually. Individuals who have been recently using methamphetamine are very physically deconditioned, and the stimulant use has put a strain on the cardiovascular and pulmonary systems. Consequently, immediate, vigorous exercise could have some significant medical risk. Individuals entering treatment for psychoactive stimulant use disorder should have an admission physical exam that indicates they are suitable for exercise. Starting people with 10- to 20-minutes of moderate exercise is recommended for the first 2-3 sessions before increaseing to 30 minute sessions (or more). For individuals with significant medical issues, if medically approved to exercise, an even more gradual schedule should be considered.

Although aerobic exercise (exercise that increases the body's use of oxygen) seems to have the most evidence of health benefits in general, many individuals may also want to add strength training and other forms of exercise. As long as the desired exercise can be done safely (e.g., having a spotter when using weights), a variety of options is generally beneficial.

How do you get patients to exercise in the TRUST protocol?

At present, there is no clear-cut answer to this question. We know exercise can be useful from research study results, but we have no experience in how to get patients in treatment for PSUD to participate. For this we are counting on clinicians using the TRUST manual to be innovative and develop some recommendations for the "how to" successfully get patients to engage in and maintain a program of exercise.

Help them develop a program of exercise: There is a great deal of encouragement in popular self-help books, websites, etc., to encourage people to increase "activity" (e.g., take the stairs, walk to the store, rather than drive, etc.). These recommendations are surely beneficial to general health, but we think it is important for patients using the TRUST protocol to develop a specific plan of regular exercise that they can commit to and keep track of. Their exercise plan will add structure to their lives and provide a new non-drug related behavior for building a life in recovery. Doing an exercise program 3 times per week for 30

minutes not only adds the benefits of exercise, it is one more behavioral component to a non-drug using lifestyle.

Monitor and encourage. Once the idea of exercise has been introduced (Individual coaching session 3), at each individual and group session, it is recommended that the therapist inquire about exercise activity and provide enthusiastic encouragement for those who report exercising. Therapists should keep the treatment experience focused on positive reinforcement, with no criticism or "finger-wagging" toward patients who are not exercising, but encouragement to make progress. In individual coaching sessions, it is useful to make a note about patient exercise, so they can see you are keeping track. As with any behavior change, development of an exercise program will likely not be done immediately or perfectly, but you the therapist can provide a clear message to the patient that you see exercise as important by asking about it at every session and recording and monitoring exercise. Even a separate calendar page to record days that the patient exercises may be something they want to keep in their TRUST workbook. REINFORCE SMALL STEPS OF PROGRESS. CELEBRATE ACCOMPLISHMENTS (e.g., a week of exercise with 3 sessions accomplished; 2 consecutive weeks of 3 times per week exercise, etc.). ACKNOWLEDGE AND PRAISE.

Exercise examples

There are almost an unlimited number of types of exercise

1. Jogging, running, fast walking
2. Use of exercise equipment (Doing a circuit) in a gym
3. Zumba
4. Pilates
5. Swimming
6. Hiking
7. Biking
8. Basketball
9. Martial Arts
10. Tai Chi
11. Cardio-Kickboxing
12. Spin classes
13. Jump rope
14. Weight training

And many, many more.

It is important for patients to make their exercise a priority (like going to treatment sessions and self-help meetings).

Join a gym, health club or Y. If patients are able to join a gym, health club or YMCA/YWCA and get into classes with others, this is a great way to meet new nondrug-using people and get reinforcement from a trainer/spin class leader, etc. Encourage the patient to investigate any benefits related to their health insurance coverage.

Join a sports team or running/cycling/hiking group. For many, being part of a team or group is really useful to help provide a structure and commitment to their exercise program. In addition, as with joining a gym, members of this group can help develop a new peer group of non-drug-using friends.

Use a TV or exercise website. There are numerous TV programs and websites that have daily exercise programs (do an internet search: "TV exercise programs; or, "exercise websites"). For individuals who are not able to join some kind of group activity, the convenience of having a regular schedule of exercise at home can make participation more practical.

Purchase home exercise equipment. There are many types of exercise bikes, treadmills, and machines (new and used) to promote stretching and lifting. Although some are quite expensive, it is possible to find used and less expensive models. This type of exercise equipment can make access to exercise quite easy.

Use an exercise app. There are an increasing number of apps that can be useful to promote and keep a record of exercise. "Map my walk" is a widely used one that is free and can monitor walking/running activity. Search App store on phones for exercise app options (many of which are free).

Conclusion

Developing a formal exercise component into a structured treatment protocol for PSUD is a new concept. "Treatment" for SUD is generally viewed as some kind of talk therapy, self-help program participation, or medication. The scientific support for exercise is growing, and exercise has been accepted in many other areas of medical and psychiatric treatment.

While the evidence for using exercise seems very promising, as yet we don't know the best ways to promote successful engagement and long term participation in exercise as part of a recovery program. We hope that those clinicians who use the TRUST protocol will develop innovative and successful approaches that can be shared with others.

Chapter 7 Drug Cessation Group (DCG)

The drug cessation group (DCG) is the initial group treatment experience for patients consisting of four, 60-minute groups. Often patients enter this group only a few days from their last use of stimulants or even with drugs still in their bloodstream. Therefore, frequently patients enter this group in a very emotionally unsteady or even volatile condition. Some may be very hyperactive, talkative, and unfocussed, while others may be very withdrawn, subdued, and reluctant to talk. The most important thing is that they have shown up for the group. Because this is the most important fact for all patients, patients deserve praise and a genuine and enthusiastic welcome to the group.

DCG Format and Content

Because being in a group is a new experience for many individuals, it is important for group leaders to be sensitive to how patients are functioning and to make sure they are not severely intoxicated or upset. If there are individuals who are too intoxicated or emotionally volatile, they should be taken aside and seen by another staff member who can assess their status and schedule them for the next available DC group. Patient safety considerations should be assessed, and a plan for their safe transportation to their housing arranged.

Each group session is initiated by asking each individual if they are OK and ready to begin. To begin each session, it is useful for the group leader to provide:

- A short introductory description of the purpose of the group (to help patients learn some information and skills that are important to stopping drug use).
- The group's duration (60 minutes).
- The format of the group (a topic and worksheet for discussion, plus time to learn about the patient).
- Permission for patients to talk or not to talk depending on their preference.
- A review of the group rules.
- Reminder of confidentiality of the group.

Because the group members are early in treatment and new to treatment, it's important for the leader to make the group a "safe" place. The group leader is the person in charge of the group, and it's important for the patients to know that the group leader will guide the discussions. Criticism or attacks by one patient on another is not allowed, and that the group agenda is fully under the control the group leader. This is NOT a "what's on your mind" group.

At the beginning of each group it is useful to allow each patient to introduce themselves and give a bit of background about how they happen to be in treatment, how long they have been in treatment, and what they hope to get from treatment. (Of course, if a patient is not comfortable talking, that is ok, and the group leader will suggest that he/she will come back to the patient at a later time to see if they feel comfortable talking).

The topic will be introduced, and the first 30 minutes of the group will be spent discussing the topic. Worksheets are passed around with a clipboard and pen/pencil. The group leader, or one of the group members who volunteers, reads through the worksheet out loud, then the members are given 5 minutes to write in some responses.

Using the worksheets as a focal point for discussion, the group leader asks patients for a sample of their responses and if this topic sounds like something they have experienced. Some patients will have a great deal to contribute, others will be quiet. It's important for the group leader to allow the time to be shared among all the group members. Surely the session will not be equally divided among members (some will not want to talk at all), but it's important that all members be given an opportunity and encouragement to speak and that no group member, including the counselor or facilitator, monopolize the group.

The primary conversations in the group are between the group leader and each patient. In some ways, the group is almost a series of 1:1 sessions, while others are observing. At this early stage of group involvement, it is important for the group leader to manage the group quite assertively, linking patients' comments to a central theme. While patients may be asked to make observations about other patients' comments or challenges, spontaneous inter-patient dialogue generally is kept to a minimum (especially if there are patients being critical or confrontational).

From 30-45 minutes into the group, patients are given an opportunity to talk about their challenges, accomplishments and ask questions.

During the last 15 minutes, the scheduling handout is reviewed. For individuals who are in their first group, the group leader will introduce the concept to the new patient(s) and help them develop a very rudimentary first schedule. During this time, the other group members can be working on their schedules. In the final 5 minutes, the schedule of each patient (DC worksheet A) is reviewed in group and the group leader can praise good decisions and/or suggest alternative plans if appropriate.

Drug Cessation Session Group Descriptions

DCG A: Scheduling

Helping patients create a plan for each day for staying away from stimulants is a central component to using behavioral treatment to stop using stimulants. Every session ends with every patient making a rough, hourly plan for the next 3-4 days. On a patient's first session, they are given a brief introduction to the task. Often the group leader works with new patients during their first session to help them understand the task. Once everyone has completed a schedule, they briefly discuss them and talk about any anticipated challenges and activities they may be looking forward to completing.

DCG 1: Drugs-Drug Paraphernalia-Drug-using Friends.

One of the most important things to do when deciding to abstain from drug use is to throw away any remaining drugs and paraphernalia. This session helps patients take an inventory of their house, car, and other places where drug paraphernalia is located. Drug using friends and acquaintances also present extreme risk. Patients should determine who they need to avoid and have a prepared strategy for successfully avoiding these people, while developing drug refusal skills when they are unable to avoid them.

DCG 2: Five Common Challenges in Stopping Drug Use

There are a number of issues that are commonly experienced by individuals who use stimulants as they attempt to stop using cocaine or methamphetamine. This worksheet includes 5 of those issues and gives patients an opportunity to learn about the importance of these issues and to consider how they might address them going forward. Drug using friends, drugs or alcohol at home, anger/irritability, boredom/loneliness, and special occasions present problems can trigger craving and lead to drug use.

DCG 3: Triggers-Thought-Stopping

The Thought-Stopping handout is very useful to give patients some help in addressing drug cravings. Thought-stopping is a skill that patients can use to block drug thoughts and thereby regain control of their thinking process. Cravings do not have to overwhelm them. They can prevent cravings from occurring by blocking the thoughts that develop into craving. Another way to stop a craving is to engage in an activity to interrupt the process. This can be meditating, exercising, talking to someone, walking, or eating. They need to use this process quickly before the physiology of the craving gets started. Talk about how the craving cycle occurs and explore ways that will work to interrupt the cycle.

DCG 4: Your Brain and Stimulant Recovery

An understanding of the Pavlovian conditioning that underlies the craving and drug use cycle demystifies the seemingly self-destructive pattern of addictive use for both the patient and family. This session is an opportunity to provide a brief explanation of the powerful conditioned cravings that persist despite intentions to stop drug use. The automatic nature of these cravings requires that real behavior change takes place. This topic is the underlying premise for many subsequent topics such as scheduling, triggers, and thought-stopping. It can be helpful to describe Pavlov's conditioning experiment and parallel the bell and salivary response with stimulants triggers and the craving response.

Cocaine and methamphetamine change the brain. It takes time for the brain to "recover" after stimulant use ends. It can be 4-6 months or more before the brain returns to something close to "normal" functioning. Over the course of this period it is common for a person to experience fluctuations in mood, thinking, and energy.

A common mistake is to conclude that rough periods in the recovery are related to sobriety when in fact they are likely the aftereffects of the past drug use. Depression, sleep disturbances, ebullience, irritability, high or low energy, and drug cravings may all occur at different times over months. Understanding that this is a normal occurrence and is reflective of a healing process can prevent catastrophizing and succumbing to relapse.

Scheduling

Every session ends with the scheduling exercise. Scheduling provides structure for patients so that they can fill their time with non-drug-using behaviors. Free time almost inevitably leads to drug use. It is important to plan a daily schedule to reduce this possibility. Also, scheduling is especially important in the sense that it gives patients a way to proactively implement positive recovery activities. A form is provided to help plan a schedule.

Chapter 8: Recovery Skills Group (RSG)

The 12 weekly, 90 minute sessions of the Recovery Skills Group (RSG) provide information, promote new skills, provide strategies for addressing challenging situations and encourage patients to make valuable behavior change. The topics and materials included in these 12 sessions are adapted from the NIDA Community Reinforcement Approach (CRA) manual (NIDA, 1998) and the cognitive behavior therapy materials included in the Matrix Manual (SAMHSA, 2006). The group setting provides an opportunity for patients to learn from other patients and to develop a peer group and receive support and encouragement.

RSG Format and Content

The session format and counseling approach used in the RSG are similar to the methods used in the DCG (Chapter 5). Patients are given the opportunity to apply dots to their calendars. Each group meeting begins with new members introducing themselves and giving a brief description of their substance use history.

Following the introductions and during the first 15 minutes of the session, the counselor orients group members to the session topic in a casual, didactic manner, emphasizing why this topic is important. It can be useful to have a patient-volunteer read through the worksheet (some people are uncomfortable reading aloud and should not be pressured to complete this task).

The counselor then addresses specific parts of the topic, and/or specific input given by patients to written responses on the worksheet. Each patient should have the opportunity to discuss the topic and how it does/does not apply to their situation. Over the first hour of the meeting, the counselor ensures that all the important aspects of the topic are covered and that premature digressions from the main topic are avoided. The counselor wraps up the discussion period with a reiteration of the session topic and the important issues relevant to it.

During the last 30 minutes of each group session, the counselor asks patients whether they have had any recent problems or whether they wish to bring up any matters. Individual patients, particularly those who have been having problems or those who have not participated in the group session, should be encouraged to participate. General questions that usually evoke a response include the following:

What new developments have occurred with the problem you brought up last time? Describe any cravings and talk about how you handled them. What are your plans for not using stimulants this week?

The counselor summarizes the discussion and acknowledges any unresolved issues. Discussion of these issues can be carried over to the next meeting. The counselor can ask patients who during the session mentioned cravings or who appear troubled, angry, or depressed to stay afterward to talk briefly and to schedule them for individual sessions as soon as possible. All sessions should end with a brief review of their scheduling exercise, a reminder that groups are confidential and a commitment by each patient attend the next RSG meeting.

Special Challenges:

At times, the counselor may need to intervene assertively in response to specific types of patient behavior in the group. This intervention may consist of quieting a patient, limiting a patient's involvement in the group, or removing a patient from the group. Below are some strategies for handling troublesome behaviors.

Behavior: Occupying too much session time with an issue that has been addressed. Intervention: Politely suggest that it is time to allow others to discuss their issues and move on.

Behavior: Arguing in favor of behavior that is counter to recovery (e.g., using, dropping out of group, using self-control instead of avoiding triggers) after receiving repeated feedback. Intervention: Use MI skills to have patient review the pros and cons of courses of action.

Behavior: Making threatening, insulting, or personally directed remarks; behaving in a manner obviously indicative of intoxication. Intervention: Politely request the patient come out of the group with you and ask another counselor to safely get the patient home and address any immediate crises. Be sure that the patient has calmed down before leaving them. Arrange for transportation home if the patient cannot drive or get home safely.

Behavior: Having a general lack of commitment to treatment, as evidenced by poor attendance, resistance to treatment intervention, disruptive behavior, or repeated relapses. Intervention: Using MI skills, in individual session explore with patient if they can discuss their feelings about treatment and the various

components of treatment. Ask if the patient would like to make changes in the treatment schedule or type of sessions. Adjust the treatment plan to better meet the needs of the patient.

Adapting Patient Worksheets.

Worksheets are written in simpler language than the session descriptions for counselors. The patient materials should be understandable for someone with an eighth-grade reading level. Difficult words (e.g., abstinence, justification) are occasionally used. Counselors should be prepared to help patients who struggle with the material. Counselors should be aware that handouts will need to be adapted for patients with reading difficulties.

Recovery Skills Group Descriptions

RSG 1: Anchoring Down to Avoid Relapse Drift/Mooring Lines

This group is designed to highlight the specific components of the recovery process that have already been started and must be continued. Also, it can help to highlight how recovery has been helped by avoiding certain risky situations. Remember, patients very early in sobriety or those who are still using will not have many mooring lines, if any, in place yet. A review of mooring lines is scheduled twice during the 12-week initial treatment and should be reviewed regularly in continuing care.

RSG 2-3: Internal/External Trigger Questionnaire/Trigger Chart

This session gives the patient a sense that his stimulant use will not be set off by random events. By asking what situations may be triggering them to stimulant use, they become more aware of when they are more likely to use. When they change these triggering behaviors or stay away from the triggering situations, the chance of using can be reduced. The exercises in this session should help give the patient a feeling of greater understanding about what sets off the use episodes and how to avoid using. The reflexive nature of the craving process covered in the DC group "Your Brain and Recovery" should be emphasized to stress the importance of identifying and avoiding triggers.

RSG 4: Taking Care of Yourself

Doing things to take care of yourself is a way of showing respect for yourself. Emphasize that as a person in recovery, it is important to recognize personal value. Part of recovery is taking action to improve health and reflect a change in lifestyle. Some areas where action might be taken include dental, vision, grooming, diet, and healthy habits. Looking better and feeling better move a person farther away from the old ways.

RSG 5: Be Smart. Not Strong

Many times, people in recovery try to test the strength in their recovery process and put themselves into high-risk situations: Trying to be strong is not being smart. An exercise is included in the session to make patients more aware of how smart they are being in their recovery. Trying to tough it out with addiction is not smart.

RSG 6: Relapse Justification

The thinking, which is characteristic of a person moving toward drug use, is examined in this session. The point should be stressed that one may be less susceptible to these relapse justifications if they are identified and evaluated ahead of time. Ask patients to pick out particular relapse justifications to which they may have been susceptible in the past.

RSG 7: Anchoring Down to Avoid Relapse Drift/Mooring Lines.

This group is designed to highlight the specific components of the recovery process that have already been started and must be continued. Also, it can help to highlight how recovery has been helped by avoiding certain risky situations. Remember patients in very early sobriety or those who are still using will not have many mooring lines, if any, in place yet. A review of mooring lines is scheduled twice during the 12-week initial treatment and should be reviewed regularly in continuing care.

RSG 8:Addictive Behavior.

Ask patients to identify which behaviors were characteristic of their addiction. Emphasize that the re-emergence of these behaviors is an important relapse signal. This is a good opportunity to point out necessary behavioral change and how these changes can lead the way to long-term sobriety.

RSG 9: Brain Tips

The brain is affected in many ways as a result of stimulant use. In fact, chronic use of cocaine and methamphetamine "injure" the brain. It's important to understand the ways in which the brain is injured and how this may affect thoughts, emotions and behaviors.

In early recovery many of our interactions with the world and with how we think and feel are changed and impaired. It is important to understand recovery from stimulant dependence involves a true "healing" of the brain.

Discussion of the topics in these sheets can help patients understand the reality of stimulant dependence and recovery as involving the brain functioning in many ways.

RSG 10: Stimulants and Sex – A Natural Connection.

This session opens the door on a sensitive and important topic. It gives the patient an opportunity to discuss sexual issues in a safe environment. This topic can sometimes be uncomfortable unless the topic is presented as a natural part of the addiction/recovery process. It is important to maintain a serious tone in this group. Explicit detailing of sexual experiences is not important. The relationship between sex and relapse should be discussed.

RSG 11: Recognizing and Reducing Stress.

Stress is a major cause of relapse. The two informational sheets provide some of the ways that stress can become part of addiction and can be a challenge in recovery. Patients can use the two information sheets to identify possible areas of stress.

The worksheet can help patients recognize their own signs of stress. They may be showing obvious signs of stress but not seeing these signs as being stress related. The leader and fellow group members may be able to help bring the signs to the patient's attention. Once signs of stress are recognized it is important to be able to alter behavior to reduce the level. As they become familiar with various stress reduction techniques, they should be encouraged to incorporate them into their daily living to prevent and reduce stress.

RSG 12: Relapse Prevention

Relapses do not just happen. There are warning signs in behavior and thinking that patients can be taught to monitor. Also, there is frequently an emotional building prior to a relapse. This is a subtle and difficult concept. People with substance use disorders need to learn the indicators of stress and anxiety such as insomnia, nervousness, or headaches, and to view these as signals of possible relapse. Learning from previous relapses is critical.

Chapter 9: Individual Coaching Sessions (ICS)

The individual coaching session (ICS) component of the TRUST protocol provides patients with an opportunity to establish an individualized relationship with a counselor and receive some of the TRUST protocol information that is optimally discussed in a 1:1 setting. The 1:1 setting allows the patient to discuss some issues they may not be comfortable discussing in a group setting. In this setting they can receive the nonjudgmental guidance and support of the counselor. Use of motivational interviewing skills in this context is strongly encouraged. The topics of the ICS include materials from CBT and CRA and are delivered with a motivational interviewing style.

Individual Coaching Session Rational and Content

The ICS provides an opportunity for patients to develop their own recovery plan with the guidance and "coaching" of a counselor. In some programs, the incentive component may be involved with these session and many of the other behavior change treatment components are discussed in these sessions.

Physical exercise. The ICS also provides the opportunity to help patients develop a program of physical exercise. Exercise is included in the TRUST protocol because there have been several studies that have shown it to be useful in stimulant recovery. There is not a recommendation for a specific exercise program, but, in general, most studies of exercise have shown benefits from some type of aerobic exercise (e.g., running, bicycling, jogging, basketball, treadmill) that is done 3-4 times per week, for a minimum of 20 minutes. Not every patient will develop a program of regular exercise, but those who do, will find the exercise to be very useful in reducing anxiety and depression and the weight gain that some patients find undesirable when they reduce their stimulant use.

Exercise provides patients with a new form of non-drug related activity and it has been shown to be associated with less stimulant use (reduced relapse). As with any new health promoting behavior, all patients will not develop robust plan of exercise, but all attempts should be praised and encouraged. Over the course of the 12 week program, we recommend the counselor ask about exercise frequently and help problem solve difficulties patients have in starting and sustaining exercise.

There are numerous websites, videos and television programs that offer exercise coaching and specific exercise programs. There are numerous apps for smartphones that provide excellent exercise coaching and support. Even the "Map my Walk" app that records the number of steps taken can be used to help patients increase their activity level. Developing an exercise program is surely not a "one size fits all" concept. Counselors should be supportive of small steps and encouraging of patients to "keep trying".

Session Format and Content

One weekly, 45-minute session, provides an important opportunity for counselors to address the individual needs of patients. As described below, there are session topics and worksheets that cover some specific content areas of importance in

stimulant treatment. However, these 12 individual coaching sessions need to have a balance of the planned worksheet topic coverage and time for counselors to ask questions and learn about details of the patients' background and current life and future aspirations and at the same time build rapport with patients and provide them with positive reinforcement for their recovery efforts. In general, the topic can be covered in 20-25 minutes. The balance of the session can be used to discuss issue of current concern to the patient as well as review ongoing recovery activities (e.g. scheduling, exercise, etc.)

If possible, ICS should be scheduled on a day of the week that is not contiguous with the group sessions. For example, if the DCG and RSG are held early in the week (Monday/ Tuesday), it is preferable that the ICS be scheduled toward the end of the week (Thursday/ Friday) or vice versa. ICS scheduling should accommodate the patients' work/childcare/transportation/etc. situation to the extent possible. It is really important that patients who are working can attend treatment sessions during times that do not conflict with work hours (e.g., evenings). If a patient must choose between going to work or going to treatment, this almost always leads to premature treatment termination. Similarly, patients with transportation challenges need special accommodation (e.g., travel support or sessions via a secure website platform (e.g., Zoom, etc.)).

Individual Coaching Session Descriptions

ICS A: <u>Relapse Analysis and Chart.</u>

This session is not routinely scheduled, but it is useful when someone has relapsed. If the patient enters the session and reports a relapse, it is useful to do at the start of the session to try and reframe the relapse, not as a failure, but as a signal that a change in the recovery plan is needed. Using this form can help reduce the embarrassment and upset that the patient feels about the relapse. Relapse does not occur suddenly and unpredictably. However, it often feels like it happens that way to the patient. Use the relapse analysis chart can be helpful in understanding the factors and signals that led to the relapse.

ICS 1: Functional Analysis

A functional analysis is an essential "starting point" to give the counselor a picture of the way in which stimulant use has become integrated into each patient's life. Listening to the individual describe the details of his/her drug use, provides a valuable array of information that will be critically important in helping the patient develop a plan of recovery. It is important for the counselor to express genuine interest in and curiosity about the details of the when, where, why, with whom and what happens of an individual's stimulant use. Ask questions, be curious, try to understand how stimulants have become a part of each individual's life.

ICS 2: Drug Refusal Skills

As many as one-third of individuals who use substances relapse as a direct result of social pressure from friends to use. Most individuals who use drugs who are trying to quit continue to have some contact, either planned or inadvertent, with friends or acquaintances who are still using. Turning down methamphetamine or cocaine or opportunities to go places where they are available will be much more difficult than most patients anticipate. When initiating drug-refusal training, counselors begin by explaining why this will be important.

For example, "drug refusal training can be very important in helping you achieve an initial period of abstinence and for maintaining that abstinence. We are going to practice ways to refuse drugs or to refuse to go to places where drugs are available. The ability to effectively say "no" in these situations will help you feel in control when faced with situations that are tempting and to which you may previously have said "yes" automatically. If you do not prepare yourself to deal with these situations, good intentions may not lead to effective refusal. An important component of this training is for you to be creative in anticipating many of the situations that may come up in the following months. We have developed some examples that we feel are typical of what many individuals who use stimulants face, but each person has a unique set of circumstances. This training will benefit you most if you include situations relevant to your life so that we can rehearse how to handle them."

Part of this session includes role-playing. The counselor should play the role of the person offering drugs and the patient should play themself. Remind the patient of

the important components of effective refusal which are provided on the session handout.

ICS 3: Exercise

Exercise is an intervention that can make a major difference in helping people with the challenging emotional symptoms that often are part of the early months of stimulant recovery. We know that chronic stimulant use damages the dopamine system and that individuals in the first 12-16 weeks (or longer) of stimulant recovery have very challenging symptoms of anhedonia, depression and anxiety. Often patients will say: "If this is how it is going to feel to be sober for the rest of my life, I can't live this way". Obviously, this emotional context can be a justification for use of stimulants. "I just needed to do this once, to feel normal", etc.

Exercise helps speed the recovery of the brain. Brain imaging studies have shown that exercise helps the dopamine system recover more quickly and that people who engage in 20-30 minutes of exercise, 3 times per week, have fewer negative emotional symptoms and fewer cravings. There have also been studies to show that exercise can help with concentration. Therefore, exercise has many of the benefits that we would find valuable in a medication to help individuals who use stimulants in recovery. In fact, exercise is a very valuable active intervention in assisting people through the challenges of the early months of recovery.

There are added benefits to exercise. Exercise is often a new (or long forgotten) set of behaviors that patients can use to build their non-drug using schedules. The exercise can be as simple as talking brisk walks with sober friends. Using exercise to build a new set of friends and ways to spend time can be an important building block in recovery.

Although exercise is introduced in this session, it is important for counsellors to come back to the topic of exercise regularly though out the 12-week protocol and in continuing care. The topic of exercise is similar to the scheduling concept. Exercise activity needs to be inquired about, verbally reinforced and encouraged and problem-solving support from counselors can be really helpful to patients in finding the time and methods for exercise.

ICS 4: Social Skills/Assertiveness Training

Many people in treatment for drug and alcohol problems have difficulty with interpersonal relations. Poor interpersonal skills can give rise to emotional states such as anger, frustration, resentment, depression, or anxiety and decrease the quality of life and increase the risk of relapse.

Social-skills training is provided to help patients to:

- Meet nondrug-using peers.
- Interact more effectively with coworkers, family members, or roommates.
- Attend social activities that are have normally been avoided.
- Express their feelings or assert themselves in an appropriate way.

The goal: to better handle interpersonal situations; to experience more positive reinforcement and fewer negative, aversive effects. Assertiveness training is particularly appropriate for patients who tend to be either too passive or too aggressive in social situations. Assertiveness training is one method for increasing positive experiences and decreasing negative experiences in social settings.

Explain to the patient : Learning how to be assertive will enable you to act in your own best interest, to stand up for yourself without experiencing excessive anxiety, to express your feelings honestly and comfortably, and to exercise your personal rights without denying the rights of others. Review the "Tips" and discuss each one.

Role play. Ask the patient to act out situations they identify as being non-assertive and provide feedback. It may help to role play first to make the patient more comfortable with the exercise.

ICS 5: Recovery Checklist

This session provides a worksheet for patients to see what proactive things they are doing in their treatment and what aspects of their treatment they need to work on.

This is an opportunity for the group members to receive and provide input on dealing with items on the checklist.

ICS 6: Motivation for Recovery

Sometimes the reasons for entering drug treatment do not make a difference in the long-term outcome of treatment. Almost always the motives for starting treatment have to do with ending or escaping a bad situation (at home, at work, bad health, depression, etc.). With some period of abstinence these reasons resolve, and the question becomes "why stay sober now?" Motivation shifts to experiencing the benefits of a drug-free life. In this session, discuss this issue and pose the questions at the end of the session to each patient to increase their awareness of why they want sobriety now. For newer patients, the motivations typically will not have changed much since beginning treatment.

ICS 7: Managing Anger

Anger is repeatedly defined as an overwhelming negative emotional trigger. The purpose of this session is to provide patients with alternative ways of dealing with anger, to avoid feeling overpowered, and to avoid the strong possibility of relapse.

For many people, substance use is a way to cope with feelings that are uncomfortable. When faced with a troubling emotion, such as anger, people often choose not to cope with it and turn to substance use instead. Patients in recovery no longer can turn to drugs and alcohol for a temporary escape from difficult emotions. However, these emotions still act as triggers for substance use. Once patients are in recovery, their failure to come to terms with their troubling feelings can lead to relapse.

People usually think of anger as a response to a person or an event. Someone makes a nasty remark or cuts you off in traffic, and this causes you to be angry. However, anger is not caused by people or events but is caused by how one thinks about them. If patients look for someone to blame when they feel angry, they can end up feeling victimized. This can lead to a downward spiral in which the more patients focus on being victims, the angrier they get.

The following steps may help patients better understand and manage their anger:

- Be honest with yourself. Admit when you are experiencing anger.
- Be aware of how your anger shows itself. Physical sensations and patterns of behavior can help you recognize when you are angry.
- Think about how anger affects others. Being aware of anger's effects on those you care about might motivate you to minimize its effects in your life.
- Identify and implement coping strategies. Keep using strategies that have always worked and find new ones that may be useful.

ICS 8: Social/Recreational Counseling

This session focuses on developing interest and participation in recreational and social activities that are pleasurable and do not involve drug use. The goal is to increase participation in social activities that may serve as alternatives drug use.

Counselors should provide a rationale for working on lifestyle changes in social and recreational areas. Many times, when drugs become a regular part of someone's life, they either stop doing many of the nondrug activities they used to enjoy, or they never start or develop any regular recreational activities. Social and recreational activities are important in most people's lives. They provide a source of enjoyment that can be looked forward to after a stressful day, a way to decrease boredom, a way to feel physically healthy, an outlet for developing a skill that makes you feel good about yourself, and a chance to be with people with whom you would like to develop friendships.

The first step in social/recreational counseling is to develop a list of potentially reinforcing activities that the patient is interested in pursuing. Counselors could also use the ***Leisure Interests Checklist*** handout to help. Once possible activities are identified, counselor and patient should attempt to categorize activities by amount of interest, cost, others' involvement, time commitment, likelihood of engaging in the activity, and whether it is physical or sedentary.

The next step is to create a list of persons who might participate in activities with the patient. This can be difficult, because patients will often report that they don't know anyone who abstains from using drugs or alcohol; this is rarely true. With gentle prompting about extended family and old acquaintances, patients can usually name at least one safe person to target as a contact.

If patients are unable to identify anyone, move on and come back to this issue later. Finding safe people has high priority, since establishing a social network of non-using friends or family members can play a substantial role in the achievement and maintenance of abstinence.

ICS 9: Daily Reminder to be Nice

The contents of this session can be delivered in a session with the patient's significant other or a supportive family member or close friend or roommate. If the other person is not able to attend the session, the contents can be reviewed with the patient who can go over them at home.

Counselors should next give patients and their partners each a copy of the ***Daily Reminder to Be Nice Form*** and explain the rationale for its use.

Explanation:

Many times in relationships, people begin to take each other for granted. This situation can be even worse in relationships that are stressed by drug use. This exercise can help to reverse the negative behavior that may have become habitual in the household.

Explain the purpose of the exercise: What I will be asking you to do is simply be nice to each other. This form lists seven ways to do that.

Review of form:

Have the patient and partner/family member practice, by completing a sample form reflecting on last week's behavior. Ask, "How do you think your partner/family members would answer?" When they review the form, they should respond directly to one another and tell each other specifically what they would like the other to do. The mood during this exercise should be light and fun. Once this is

completed and discussed, therapists can ask how the patients would feel if their partners/family members performed these behaviors every day.

To make the partners even more aware of ongoing reciprocal behavior, therapists should have them list at least 10 satisfactions their partners are providing to them as well as 10 they provide to their partners. They should be encouraged to refer to specific events rather than general attitudes. After the lists are completed, they should be discussed so agreement is reached, and the amount of existing reciprocity is assessed.

After this session, the couple should be given ***Daily Reminder*** forms to complete at home before the next session. In addition, they should be instructed to mention each day any novel, unusual, unanticipated, or unscheduled satisfaction they receive from their partners. Each session thereafter, therapists should review the completed ***Daily Reminder*** forms and discuss how the expression of appreciation or satisfaction is going.

ICS 10: Recovery Checklist

This session provides a worksheet for patients to see what proactive things they are doing in their treatment and what aspects of their treatment they need to work on. This is an opportunity for the group members to receive and provide input on dealing with items on the checklist. This is a repeat of this topic to allow the counselor and patient to see improvements or regression in recovery. The repeated review is akin to checking the recovery vital signs.

ICS 11: Relationship Happiness Scale

The contents of this session can be delivered with the patient's significant other or a supportive family member or close friend or roommate. If the other person is not able to attend the session, the contents can be reviewed with the patient who can go over them at home.

Counselors should next give patients and their partners each a copy of the ***Relationship Happiness Scale*** and ***Examples of Relationship-Related Activities*** and explain the rationale for their use.

The Happiness Scale is used to assess how happy couples are currently with various areas of their lives. Each partner should complete the form independently. Therapists should emphasize that they are to evaluate the problems in terms of current, not past, satisfaction. A list of examples (***Examples of Relationship-Related Activities***) is given to couples to provide them with types of events relevant to each area.

Once completed, therapists should collect the forms and initiate a brief discussion of their responses. Therapists should explain that this happiness scale should be completed periodically to assess changes that occur during treatment.

ICS 12: <u>Continuing Care Plan</u>

Patients should be oriented to viewing the treatment after the initial 12 weeks as a non-optional extension of the intensive treatment period. Attendance in the weekly continuing care group is critical to sustaining the progress achieved. In this session the counselor should review the ***Mooring Lines and Recovery Checklist*** handouts to reinforce continued positives and discuss areas which need more attention. In addition to attendance in the program's continuing care meeting other offsite recovery activities should be identified and planned. Some of these are community support meetings (12-Step, SMART recovery, etc.), regular exercise activities, spiritual activities, counseling, volunteer work, and others. If possible, the counselor should meet the patient at the first continuing care meeting to introduce the patient to the group and reinforce the attendance. If the patient fails to show for the meeting the counselor should call, text, or email the patient to draw him/her back in.

Chapter 10: Continuing Care Group

The 12-week TRUST program is one way in which evidence-based strategies can be combined into a protocol to organize treatment materials. However, 12-weeks represents an introduction and initial skill building period that can help develop a long term recovery program. As we have come to recognize addiction as a chronic brain disorder that requires long term guidance and support, it is a mistake to think that completing a 12-week treatment episode is sufficient for meaningful engagement in recovery.

We present the following brief section to help you consider what kinds of ongoing support and treatment materials can be useful to your patients. At minimum, continuing attendance at a weekly session for an extended period is highly recommended if, the progress made in the first 12 weeks is going to be maintained. However, the content of the sessions, needs to be developed to meet the needs of the individuals in your treatment facility and you may need a menu of ongoing services.

We recommend as a minimum, a weekly continuing care group that patients who have completed the 12 week TRUST protocol can advance to for as long as they benefit. It is important to present this group as continuing care, not "aftercare" which implies the treatment is over and this group is optional. Recovery from stimulant dependence takes longer than 12 weeks. Frequently if a treatment service presents an intensive treatment phase followed by "aftercare," patients get the message that "aftercare" is not important, and they discontinue involvement.

The continuing care group provides a safe and intimate therapeutic setting where the norms of the groups have previously been established and patients join already familiar others group members. As a result of the cohesiveness of the group, some patients will come to view it as their "home group."

This groups serves several purposes:

1. It is a support group of peers.
2. It is a relapse prevention group.
3. It helps patients stay on the course established in the initial 12-weeks of treatment.
4. It provides accountability of the things in place which are key to recovery (e.g., a review of the mooring lines).
5. It provides accountability for experimenting with new goals and behavioral changes.
6. If there is repeated relapse or a deterioration in the behaviors which had supported abstinence, the group may be instrumental in getting a person into a higher level of care.

If possible, to answer questions and reduce patient anxiety about entering a new group, it is useful for the counselor to meet the patient immediately before the first continuing care meeting to welcome the patient, explain the group and how it is different from earlier group sessions in the TRUST protocol. If the patient fails to show for the meeting the counselor should reach out to the patient (call, text, or email) to reinforce the invitation and show interest in the patient's continuing to receive support.

Start the group with the agenda and expectations followed by introduction of new members who are asked to give a brief account of the challenges and accomplishments over the initial 12 weeks of treatment. Have patients provide a brief check-in covering triggers, cravings and successes. Time can be limited to 3 or 5 minutes per patient depending on the size of the group. It is a good idea to inform patients in the agenda how much time they will have for the check in.

It is useful to have a topic to provide a focus for the session, these topics should be tailored to address issues of importance to be members of the group. There are numerous manuals and websites and training documents listed in the Appendix that provide materials for consideration. The TRUST program organizers can provide suggestions and guidance if requested.

The last quarter of the group can be an open discussion of any relevant problems. By this time, patients should be able to share their support by giving examples of how they have handled similar problem. Remember to remind patients not to give advice unless it is asked for. Telling people what to do generally shuts down the process of the individual sharing and problem-solving.

Attendance in the program's continuing care meeting is frequently done in combination with community support meetings (12-Step, SMART recovery, etc.), regular exercise activities, spiritual activities, counseling, volunteer work, and others.

The following are some sample topics and worksheets that can be useful for continuing care sessions.

Attending Events with a Sober Objective

Sober Objective- It is important to have a sober objective before attending a potentially triggering event. A sober objective is your reason for attending an event other than using drugs or alcohol. The sober objective should include the specific reason I am attending an event and the things I plan to do there.

If I don't have a sober objective, I should not attend the event.

My Plan B- What I will do instead of attending the event if I recognize that the event will be too triggering for me. This way, I will have a pre-planned alternative way to spend that time. It's never too late to choose to use your Plan B (even if you're in the parking lot, ready to walk in to the event).

Fill this out with any events between now and our next meeting. Use the example on the next page as a guide.

Event	Sober Objective	Possible Risks	Exit Strategy	Plan B

Example:

Event	Sober Objective	Possible Risks	Exit Strategy	Plan B
The wedding of a friend (I will only stay for the ceremony)	To support the newlyweds, tell them how beautiful they look and compliment the parents on a lovely ceremony.	Alcohol or drugs will be available.	Have my own transportation and leave if the risk occurs.	Go on a hike and picnic with sober friends

APPENDIX: OTHER EVIDENCE-BASED PRACTICES/MANUALS/WEBSITES

- **Contingency Management/Motivational Incentives**

The CM Manual; A Guide to Instituting Low-Cost Motivational Incentives. Designed by Christine Higgins, Dissemination Specialist, Mid-Atlantic Node of the National Institute on Drug Abuse, Clinical Trials Network

Contingency Management for Healthcare Settings Online Training
https://attcnetwork.org/centers/northwest-attc/cm

Promoting Awareness of Motivational Incentives
https://www.drugabuse.gov/blending-initiative/motivational-incentives-package

- **Community Reinforcement Approach**

Community Reinforcement; Community Reinforcement and Family Training Support and Prevention (CRAFT-SP). Steven M. Scruggs, Robert Meyer and Rebecca Kayo Published by the Department of Veterans Affairs, South Central Mental Illness Research, Education, and Clinical Center (MIRECC), 2001. Last updated 12/15/2014.
https://www.mirecc.va.gov/visn16/docs/CRAFT-SP_Final.pdf

The Community Reinforcement Approach: A Guideline developed for the Behavioral Health Recovery Management Project. Robert J. Meyers and Daniel D. Squires, University of New Mexico Center on Alcoholism, Substance Abuse and Addictions, Albuquerque, New Mexico. The Behavioral Health Recovery Management project is an initiative of Fayette Companies, Peoria, Il; Chestnut Health Systems, Bloomington, Il; and the University of Chicago Center for Psychiatric Rehabilitation. This project was funded by the Illinois Department of Human Services', Office of Alcoholism and Substance Abuse.

- **Cognitive Behavioral Therapy**

Counselor's Treatment Manual: Matrix Intensive Outpatient Treatment for People With Stimulant Use Disorders. Center for Substance Abuse Treatment. HHS Publication No. (SMA) 13-4152. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2006. https://store.samhsa.gov/product/Matrix-Intensive-Outpatient-Treatment-for-People-With-Stimulant-Use-Disorders-Counselor-s-Treatment-Manual/SMA13-4152

Anger Management for Substance Use Disorder and Mental Health Clients. A Cognitive-Behavioral Therapy Manual
https://store.samhsa.gov/sites/default/files/d7/priv/anger_management_manual_508_compliant.pdf

Getting Off: A Behavioral Treatment Intervention for Gay and Bisexual Male Methamphetamine Users
Getting Off: A Behavioral Treatment Intervention for Gay and Bisexual Male Methamphetamine Users, A Training Manual for Counselors
www.friendscommunitycenter.org/resources

- **Motivational Interviewing**

Enhancing Motivation for Change in Substance Abuse Treatment (TIP 35) (Substance Abuse and Mental Health Services Administration (SAMHSA) This guide helps clinicians influence the change process in their patients by incorporating motivational interventions into substance use disorder treatment programs.

Research about Motivational Interviewing (PubMed/National Library of Medicine search)

Motivational Interviewing Network of Trainers (MINT**)**
International non-profit organization of trainers in MI that aims to promote good practice in the use, research, and training of MI. Website includes information on upcoming events/trainings and a "Library" of MI publications, coding and assessment tools, practice tools, and more.

- **Motivational Interviewing Training and Technical Assistance**

https://attcnetwork.org/centers/northwest-attc/motivational-interviewing-mi

MI manuals and other resources are available through UNM at https://casaa.unm.edu/mimanuals.html

Self-paced basic MI training available through the ATTC network at https://healtheknowledge.org/course/search.php?search=tour+of+motivational+interviewing+

Tour of Motivational Interviewing (HealtheKnowledge/ATTC)
4-hour online training that takes the learner on a tour of the essential skills used to strengthen an individual's motivation for behavior change. ***4 hours of CE available!***

Motivational Interviewing CME/CE and Patient Simulations (NIDA-SAMHSA Blending Initiative) Includes: *Talking to Patients about Health Risk Behaviors with MI Patient Simulation* and *Engaging Adolescent Patients About Marijuana Use*

Education on Motivational Interviewing and an opportunity to earn credit
https://healtheknowledge.org/course/index.php?categoryid=53

https://www.drugabuse.gov/blending-initiative/motivational-interviewing-assessment

- **Other Resources**

Substance Abuse and Mental Health Services Administration. Trauma-Informed Care in Behavioral Health Services. Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13-4801. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014.
https://store.samhsa.gov/product/TIP-57-Trauma-Informed-Care-in-Behavioral-Health-Services/SMA14-4816?referer=from_search_result

Substance Abuse and Mental Health Services Administration. SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach. HHS Publication No. (SMA) 14-4884. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014
https://store.samhsa.gov/product/SAMHSA-s-Concept-of-Trauma-and-Guidance-for-a-Trauma-Informed-Approach/SMA14-4884?referer=from_search_result

HIV Rapid Testing
https://www.drugabuse.gov/blending-initiative/hiv-rapid-testing

Buprenorphine
https://www.drugabuse.gov/blending-initiative/buprenorphine-suite-blending-products

Twelve-step Facilitation:
https://pubs.niaaa.nih.gov/publications/projectmatch/match01.pdf

Treatment Planning
https://www.drugabuse.gov/blending-initiative/treatment-planning-matrs

Texas Christian University, Institute of Behavioral Research
Brief interventions, including:
Getting Motivated to Change
Straight Ahead: Transition Skills for Recovery
Understanding and Reducing Angry Feelings
WaySafe; Mapping Your Way to a Healthy Future
Treatment Readiness and Induction Program
https://ibr.tcu.edu/manuals/background-and-overview/

National Institute on Drug Abuse: Principles of Effective Treatment
https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/principles-effective-treatment

Center of Excellence for Integrated Health Solutions. Funded by Substance Abuse and Mental Health Services Administration Operated by the National Council for Behavioral Health
https://www.thenationalcouncil.org/integrated-health-coe/

National Institute on Drug Abuse & Substance Abuse and Mental Health Services Administration Blending Initiative
https://www.drugabuse.gov/nidasamhsa-blending-initiative

Assertive Community Treatment: Getting Started with EBPs. DHHS Pub. No. SMA-08-4344, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, 2008.

The California Evidence-Based Clearinghouse for Child Welfare; Information and Resources for Child Welfare Professionals
https://www.cebc4cw.org/program/community-reinforcement-approach/detailed

TIP 33: Treatment for Stimulant Use Disorders: Treatment Improvement Protocol (TIP) Series 33. HHS Publication No. (SMA) 09-4209. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014.
http://adaiclearinghouse.net/downloads/TIP-33-Treatment-for-Stimulant-Use-Disorders-61.pdf

Substance Abuse and Mental Health Services Administration. A Guide for Taking Care of Your Family Member After Treatment in the Emergency Department. HHS Publication No. SMA18-4357ENG. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Revised 2018.
https://store.samhsa.gov/product/A-Guide-for-Taking-Care-of-Your-Family-Member-After-Treatment-in-the-Emergency-Department/sma18-4357eng?referer=from_search_result

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