TREATING
SUBSTANCE USE DISORDERS
A Quick Reference Guide

Based on *Practice Guideline for the Treatment of Patients With Substance Use Disorders,* Second Edition, originally published in August 2006. A guideline watch, summarizing significant developments in the scientific literature since publication of this guideline, may be available in the Psychiatric Practice section of the APA web site at www.psych.org.

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Medical Editors, Quick Reference Guides
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Laura J. Fochtmann, M.D.

Staff
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Claudia Hart, Director, Department of Quality Improvement and Psychiatric Services
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The development of the APA Practice Guidelines and Quick Reference Guides has not been financially supported by any commercial organization. For more detail, see APA's "Practice Guideline Development Process," available as an appendix to the compendium of APA practice guidelines, published by APPI, and online at http://www.psych.org/psych_pract/treatg/pg/prac_guide.cfm.

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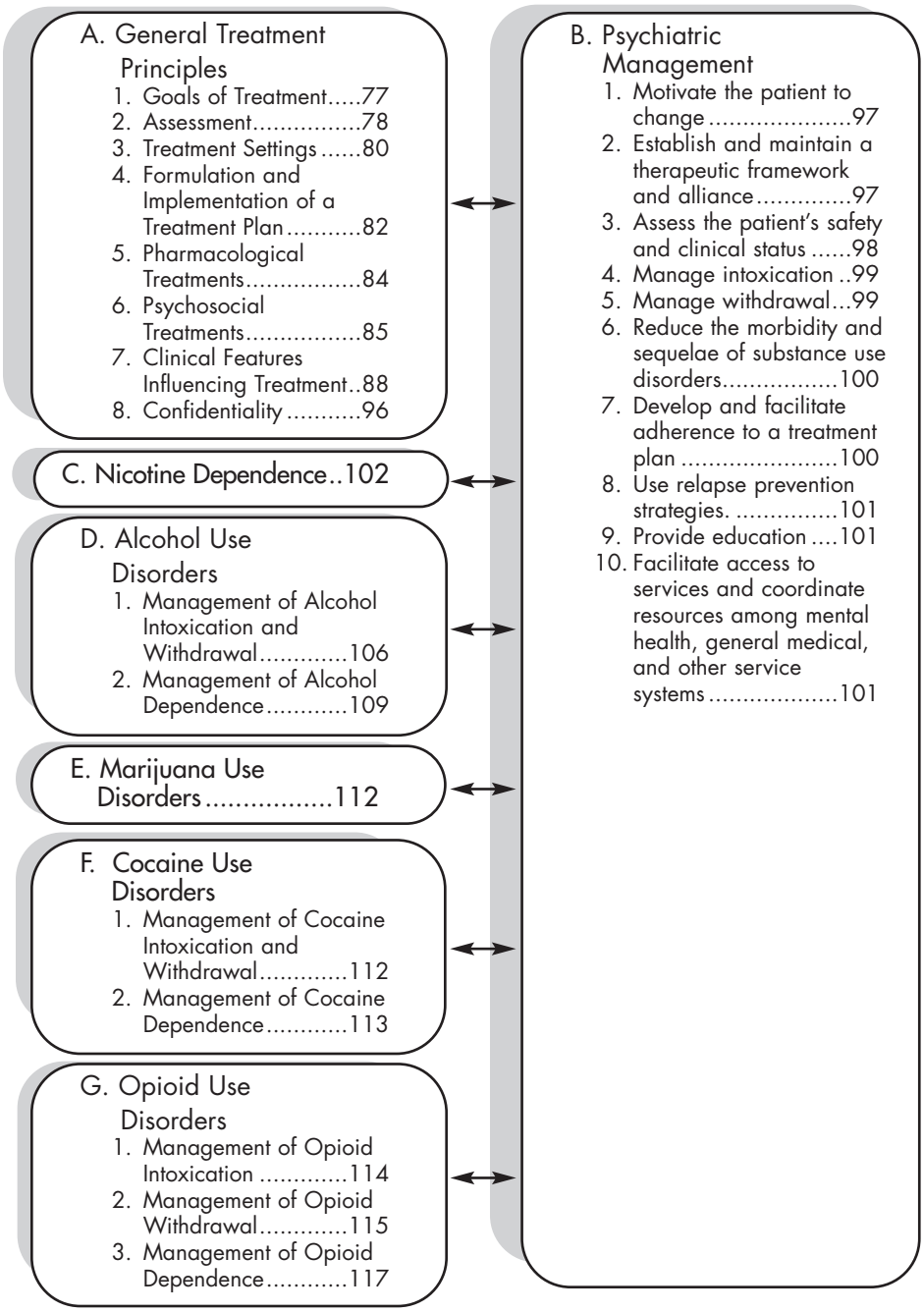

A. General Treatment Principles
1. Goals of Treatment.....77
2. Assessment.....78
3. Treatment Settings.....80
4. Formulation and Implementation of a Treatment Plan.....82
5. Pharmacological Treatments.....84
6. Psychosocial Treatments.....85
7. Clinical Features Influencing Treatment..88
8. Confidentiality.....96
C. Nicotine Dependence..102
D. Alcohol Use Disorders
1. Management of Alcohol Intoxication and Withdrawal.....106
2. Management of Alcohol Dependence.....109
E. Marijuana Use Disorders.....112
F. Cocaine Use Disorders
1. Management of Cocaine Intoxication and Withdrawal.....112
2. Management of Cocaine Dependence.....113
G. Opioid Use Disorders
1. Management of Opioid Intoxication 114
2. Management of Opioid Withdrawal.....115
3. Management of Opioid Dependence.....117
B. Psychiatric Management
1. Motivate the patient to change.....97
2. Establish and maintain a therapeutic framework and alliance.....97
3. Assess the patient's safety and clinical status 98
4. Manage intoxication ..99
5. Manage withdrawal...99
6. Reduce the morbidity and sequelae of substance use disorders.....100
7. Develop and facilitate adherence to a treatment plan 100
8. Use relapse prevention strategies. 101
9. Provide education 101
10. Facilitate access to services and coordinate resources among mental health, general medical, and other service systems 101

A. General Treatment Principles

1. Goals of Treatment

A multimodal treatment approach is typically required, since individuals with substance use disorders are clinically and functionally heterogeneous. The primary aims of treatment include motivating the patient to change and helping the patient learn, practice, and internalize changes in attitudes and behavior conducive to relapse prevention. Additional goals of treatment include the following:

Help the patient reduce use of the substance or achieve complete abstinence.

- Abstinence is associated with the best long-term outcomes.
- Many patients are unable or unwilling to achieve abstinence and simply wish to reduce use to controlled levels.
- Controlled use may decrease associated morbidity but is unrealistic for many patients and may dissuade them from working toward abstinence.

Help the patient reduce the frequency and severity of substance use episodes.

Improve psychological and social functioning.

- Repair disrupted relationships and enhance familial and interpersonal relationships that will support an abstinent lifestyle.
- Develop social and vocational skills.

2. Assessment

- Obtain information from the patient and, with the patient's permission, from collateral sources (e.g., available family members, friends, current and past treaters, employers) as appropriate.
- If necessary, depending on the clinical circumstances and patient motivation, conduct the assessment across multiple sessions.
- Recognize that some groups of individuals may be at increased risk of having a substance use disorder (e.g., nicotine dependence in gay, lesbian, and bisexual individuals and in patients with schizophrenia) or may be more likely to have undetected or undertreated substance use disorders (e.g., elderly individuals).
- Include in the assessment the items described in Table 1.
- Consider using empirically validated screening tools for substance use disorders (e.g., CAGE [Have you ever felt the need to **C**ut down on drinking, been **A**nnoyed by others' criticism of your drinking, felt **G**uilty about drinking, needed an **E**ye-opener drink first thing in the morning?], Alcohol Use Disorders Identification Test, Drug Abuse Screening Test) to help identify unrecognized substance use disorders.
- Consider using qualitative or quantitative screening of blood, breath, or urine to identify recent substance use.
- Consider whether diagnostic tests are indicated to assess for the presence or absence of pregnancy (in women of childbearing age) or general medical conditions that are common among individuals with substance use disorders.

TABLE 1. Items to Include in an Assessment

Detailed history of the patient's past and present use of substances, including
- types of substance used (including nicotine, caffeine, prescribed and over-the-counter medications) and whether multiple substances are used in combination;
- mode of onset, quantity, frequency, duration, route of administration, and pattern and circumstances of substance use (e.g., where, with whom);
- timing and amount of most recent use; and
- degree of associated intoxication, withdrawal, and subjective effects of all substances used.

History of prior substance use treatments (e.g., settings, context, modalities, duration, and adherence), efforts to stop substance use, and outcomes (e.g., duration of abstinence, subsequent substance use, reasons for relapse, social and occupational functioning achieved).

Current readiness to change, including
- awareness of substance use as a problem,
- plans for ceasing substance use,
- motivations for substance use, including desired effects,
- barriers to treatment and to abstinence,
- expectations and preferences for future treatment, and
- effects on cognitive, psychological, behavioral, social, occupational, and physiological functioning.

General medical and psychiatric history and physical and mental status examination to
- determine prior psychiatric treatments and outcomes,
- identify co-occurring general medical and psychiatric disorders, particularly those that are common in individuals with substance use disorders,
- determine current use of prescribed and unprescribed medications, and
- assess for signs and symptoms of current intoxication or withdrawal.

Family history of substance use or psychiatric disorder.

Social history (including family and peer relationships, financial problems and legal problems) and psychosocial supports (including influence of close friends or other household members to support or undermine past efforts at abstinence).

Educational and occupational history, including school or vocational adjustment and identification of occupations at increased risk of substance use.

3. Treatment Settings

Treat in the least restrictive setting that is likely to be safe and effective.
The particular substance used will determine the medical risks associated with substance use, intoxication, and withdrawal and influence the safety of specific treatment settings.

Choose a site of care based on the patient's
- ability to cooperate with and benefit from the treatment offered,
- ability for self-care,
- ability to refrain from illicit use of substances,
- ability to avoid high-risk behaviors,
- need for structure, support, and supervision,
- social environment (which may be supportive or high risk),
- history of response in particular settings,
- need for particular treatments or treatment intensity that may be available only in certain settings,
- need for specific treatments for co-occurring general medical or psychiatric conditions,
- ability to access a particular treatment setting, and
- preference for a particular treatment setting.

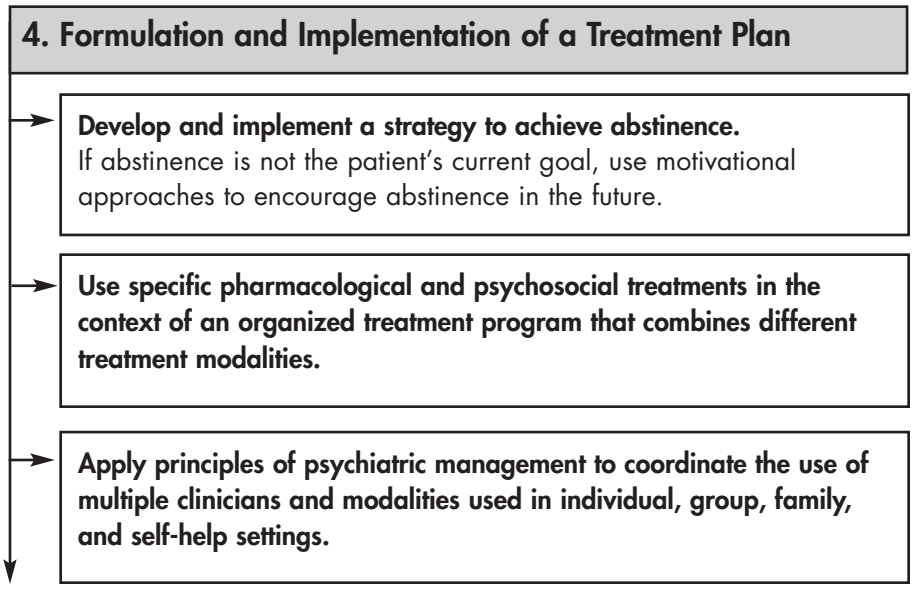
Move from one level of care to another on the basis of the factors above and an assessment of the patient's ability to benefit from a different level of care.
Table 2 suggests appropriate treatment settings for different patient-related factors.

TABLE 2. Treatment Settings

Setting	Consider for Patients Who
Hospitalization	• Have a drug overdose that cannot be safely treated in an outpatient or emergency department setting (e.g., cardiac instability or toxicity, decreasing levels of consciousness) • Are at risk for severe or medically complicated withdrawal syndromes (e.g., dependence on multiple substances, past history or current signs of delirium tremens) or cannot receive the necessary medical assessment, monitoring, and treatment in a less intensive setting • Have co-occurring general medical conditions (e.g., severe cardiac disease) that make ambulatory detoxification unsafe • Have a documented history of not engaging in or benefiting from treatment in a less intensive setting (e.g., residential, outpatient) • Have a level of psychiatric comorbidity that would markedly impair their ability to participate in treatment or have a co-occurring disorder that by itself would require hospital-level care (e.g., depression with suicidal thoughts, acute psychosis) • Manifest substance use or other behaviors that make them an acute danger to themselves or others • Have not responded to or were unable to adhere to less intensive treatment efforts and have a substance use disorder that endangers others or poses an ongoing threat to their own physical and mental health
Residential treatment (e.g., 24-hour open-milieu care, therapeutic communities)	• Do not meet the clinical criteria for hospitalization but whose lives and social interactions have come to focus predominantly on substance use • Lack sufficient social and vocational skills and drug-free social supports to maintain abstinence in an outpatient setting • Demonstrate denial that could respond to interpersonal and group confrontation

TABLE 2. Treatment Settings *(continued)*

Setting	Consider for Patients Who
Partial hospitalization	• Require intensive care but have a reasonable probability of refraining from illicit use of substances outside a restricted setting • Are leaving hospitals or residential settings but who remain at high risk for relapse • Are thought to lack sufficient motivation to continue in outpatient treatment • Have severe co-occurring psychiatric conditions • Have a history of relapse to substance use in the immediate posthospital or postresidential period • Are returning to high-risk environments and have limited psychosocial supports for remaining drug free • Are doing poorly despite intensive outpatient treatment
Outpatient	• Demonstrate a clinical condition or have environmental circumstances that do not require a more intensive level of care • Are being treated for nicotine or marijuana use disorders, unless requiring a more intensive level of care for other conditions



Tailor the treatment plan to individual needs and preferences.
- Consider patient preferences for specific treatment approaches.
- Choose treatments that take into consideration the patient's characteristics and clinical status.
- Use the patient's needs to adjust treatment duration, which may vary from a few months to many years.

Intensify monitoring for substance use and consider whether adjustments in the treatment plan are needed during periods of high risk of relapse.

High risk periods include
- early stages of treatment,
- times of transition to less intensive levels of care,
- first year following cessation of active treatment, and
- periods with increased social facilitation of substance use (e.g., holiday parties), significant symptoms of psychiatric or general medical conditions, intensified life stress, or lifestyle changes.

Consider including individuals in the patient's family or support network as part of treatment planning.
- Assist the patient in maintaining existing relationships or repairing troubled ones.
- Reinforce education about the substance use disorder and its treatment.
- Collaborate with the family and support network in monitoring the patient's progress.
- Incorporate family into the treatment of children and adolescents whenever possible.

Consider recommending participation in self-help groups.

5. Pharmacological Treatments

For selected patients, medications may be used for the following purposes:

To treat intoxication states.

To decrease or eliminate withdrawal symptoms in an effort to reduce craving and risk of relapse.

- Substitute an agonist for the particular class of substance being used (e.g., methadone or buprenorphine for opioids, nicotine replacement therapies for tobacco, benzodiazepines for alcohol).
- Consider using other medications that may also decrease withdrawal symptoms (e.g., clonidine for opioid withdrawal).

To decrease the reinforcing effects of abused substances.

Consider using medications that block the subjective and physiological effects of subsequently administered drugs (e.g., the opioid antagonist naltrexone to block effects of opioids).

To promote abstinence and prevent relapse.

Consider use of medications such as

- Disulfiram, which can discourage alcohol use by the patient's knowledge of its unpleasant drug-drug interaction.
- Naltrexone, which decreases alcohol craving presumably through the effects of opioid receptors in mediating the reinforcing effects of alcohol.
- Acamprosate, which is presumed to promote abstinence from alcohol use by decreasing neuronal hyperexcitability.
- Bupropion, which decreases nicotine craving and urges to smoke.

To treat co-occurring psychiatric conditions.

- Address co-occurring psychiatric disorders to improve adherence and success with substance use disorder treatment.
- See p. 92 for additional considerations in the treatment of substance use disorders in the presence of other co-occurring psychiatric disorders.

6. Psychosocial Treatments

Psychosocial treatments are an essential component of a comprehensive treatment program. Integrating or blending psychosocial treatments can be helpful when patients have co-occurring substance use and other psychiatric disorders. Depending on the specific substance use disorder being treated (see sections C, D, E, F, and G), the availability of specific psychosocial treatments, and patient preference, choose among the following:

Cognitive behavioral therapies (CBTs)

Goals of CBTs

- Alter dysfunctional cognitive processes that lead to maladaptive behaviors.
- Intervene in the chain of events leading to substance use.
- Help reduce acute or chronic craving.
- Promote and reinforce the development of effective social skills and behaviors.

Types of CBTs

- *Standard cognitive therapy*—modifies maladaptive thinking patterns to reduce negative feelings and behavior (e.g., substance use).
- *Social skills training*—improves an individual's capacity for effective and meaningful communication through listening to others, imagining others' feelings and thoughts, monitoring and modifying one's own nonverbal communications, adapting to circumstances to maintain relationships, and being assertive.
- *Relapse prevention*—employs cognitive behavioral techniques to help patients develop self-control to avoid relapse.

Motivational enhancement therapy

Motivates the patient to change by empathically asking about the pros and cons of specific behaviors and exploring the patient's goals and associated ambivalence.

6. Psychosocial Treatments *(continued)*

Behavioral therapies

- Contingency management rewards abstinence (e.g., with vouchers) or punishes drug-taking (e.g., by notification of courts, employers, or family members) as measured by random, supervised urine, saliva, or hair-follicle monitoring.
- Community reinforcement provides patients with natural alternative reinforcers to abstinence through social community involvement (e.g., with family, peers).
- Cue exposure and relaxation techniques expose a patient to cues that induce craving while preventing actual substance use in order to facilitate extinction of classically conditioned craving.

12-step facilitation

Promotes abstinence by utilizing a brief, structured, manual-driven professionally supervised format to enhance a patient's motivation and facilitate participation in 12-step programs.

Psychodynamic and interpersonal therapies

May facilitate abstinence, especially when combined with other treatment modalities (e.g., pharmacotherapies and self-help groups).

Group therapy

- Can be supportive, therapeutic, and educational.
- Increases accountability by providing opportunities for the group to respond to early warning signs of relapse.

Family therapy

Dysfunctional families are associated with poor short- and long-term patient outcome. The goals of family therapy include the following:

- Encourage family support for abstinence.
- Obtain information about the patient's clinical status.
- Maintain marital relationships.
- Address interpersonal and family interactions that lead to conflict or that enable substance use behaviors.
- Reinforce behaviors that help prevent relapse and enhance the prospects for recovery.

Self-help and 12-step-oriented programs

- Alcoholics Anonymous (AA) and other 12-step-oriented programs provide tools to help participants maintain sobriety, including the 12 steps, group identification, mutual help and sharing of their experiences, strength, and hope with one another.
- Encouraging participation in self-help groups can be an important adjunct to treatment for some but not all patients.
- Refusal to participate is not synonymous with resistance to treatment in general.
- Patients who require psychoactive medications (e.g., lithium, antidepressants) should be directed to groups that are supportive of such treatment.
- Self-guided therapies monitoring alcohol or tobacco use may be helpful in primary care populations but tend to be less useful in patients presenting to specialized substance use disorder treatment programs.

7. Clinical Features Influencing Treatment

Consider whether the plan of treatment needs to be modified on the basis of individual patient characteristics described in Table 3.

Show sensitivity to cultural differences and incorporate cultural beliefs about healing and recovery to improve outcomes in ethnic minority groups.

Recognize that use of multiple substances is common and can complicate assessment and treatment.

- Signs and symptoms of intoxication or withdrawal may be an amalgamation of effects from two or more substances.
- The time courses of withdrawal syndromes resulting from two or more substances may overlap.
- Detoxification from two or more substances may be needed simultaneously.
- Pharmacological treatments for one substance use disorder may result in drug interactions with another substance of abuse.
- Treatment plans should incorporate specific therapies to address each individual substance use disorder as well as consider whether integrative treatment approaches are indicated.

Consider whether the treatment plan requires modification on the basis of co-occurring general medical conditions.

- Be alert for signs and symptoms of medical conditions that may be associated with specific substance use disorders (see Table 4).
- Recognize that nicotine replacement therapies (NRTs) and bupropion appear to be safe and effective when used to treat nicotine dependence in patients with co-occurring general medical conditions.
- Check for potential interactions between abused substances and prescribed medications to treat co-occurring conditions (e.g., effects of smoking on metabolism of drugs via cytochrome P450 1A2, metronidazole, and alcohol use).
- Check for potential interactions between medications used to treat substance use disorders and those used to treat co-occurring conditions (e.g., naltrexone and opioid treatment of pain).
- Recognize that pain from general medical conditions is often inadequately treated in individuals with substance use disorders.
- Address issues such as lack of health care access and a chaotic lifestyle that may limit the capability of individuals with substance use disorders to receive appropriate treatment for co-occurring medical disorders.

Consider the benefits and risks for the individual patient when choosing medications to treat co-occurring disorders.

- Consider the recommended treatment for the co-occurring disorder in the absence of a substance use disorder.
- Consider the safety, tolerability, and abuse potential of each medication.
- Determine whether modifications in medication or dose are needed because of potential drug-drug interactions.
- Review additional considerations as described in Table 5.

TABLE 3. Individual Patient Characteristics That May Influence Treatment

Characteristic	Notes
Age	Most adolescents with substance use disorders have co-occurring psychiatric diagnoses. Early efforts at preventing and identifying substance use disorders in adolescents are crucial. Abuse and dependence on prescribed medications in the elderly can lead to adverse outcomes, particularly in combination with alcohol use disorders. Cognitive impairments may increase with advanced age and influence treatment planning.
Gender	Women may have greater rates of co-occurring mood or anxiety disorder or histories of physical or sexual abuse. Women may be more concerned about weight gain with smoking cessation. Women may have more adverse physical outcomes from smoking and from alcohol or opioid use disorders. Men are more likely to use cigars, pipes, and smokeless tobacco, with associated increased rates of oral cancers.
Race, ethnicity, and culture	Consider possible effects of race and ethnicity on the likelihood of developing substance dependence and the metabolism of substances and medications used to treat substance use disorders.
Family and psychosocial context	Consider the influence of the social milieu on shaping attitudes and motivations about substance use and treatment. Address family and social factors that may be more common in individuals with substance use disorders, including socioeconomic and legal difficulties, domestic violence, child abuse or neglect, or psychiatric illness in other family members.

TABLE 4. Medical Disorders Associated With Specific Substances

Substance	Medical disorders
Alcohol	*Gastrointestinal:* esophagitis, Mallory-Weiss tear, gastritis, peptic ulcer disease, fatty liver, alcohol-induced hepatitis, cirrhosis, acute or chronic pancreatitis *Cardiovascular:* hypertension, cardiomyopathy, coronary artery disease *Neurological:* Wernicke encephalopathy, alcohol-related dementia, cerebellar degeneration, peripheral neuropathy, stroke, seizures *Hematological:* thrombocytopenia, anemia *Neoplastic:* cancers of the esophagus, liver, and pancreas *Other:* sexual dysfunction, sleep disorders, B vitamin deficiency, peripheral myopathy
Nicotine	*Cardiovascular:* coronary artery disease, vascular disease *Respiratory:* chronic obstructive pulmonary disease *Neoplastic:* cancers of the mouth, esophagus, and lung
Cocaine	*Cardiovascular:* ischemic heart disease, cardiac arrhythmias, cardiomyopathy, aortic dissection, myocardial infarction *Respiratory:* spontaneous pneumothorax, pneumomediastinum, bronchitis, pneumonitis and bronchospasm (when smoked) *Neurological:* seizures, stroke *Other:* sinusitis, nasal irritation, septal bleeding and perforation (with intranasal use), HIV and hepatitis (with intravenous use), weight loss and malnutrition
Opioids (when used intravenously)	*Gastrointestinal:* acute and chronic viral hepatitis *Cardiovascular:* endocarditis *Respiratory:* tuberculosis (which may be treatment resistant) *Neurological*: meningitis *Other:* cellulitis, abscesses, osteomyelitis, HIV

7. Clinical Features Influencing Treatment *(continued)*

Modify the plan of substance use disorder treatment to address other aspects of co-occurring psychiatric disorders.

- Address the augmented risk for suicidal and aggressive behaviors during substance intoxication or withdrawal in individuals with other co-occurring psychiatric disorders.
- Incorporate indicated psychosocial as well as pharmacological therapies to address each disorder.
- Integrate psychosocial and pharmacological treatments of substance use disorders and co-occurring psychiatric disorders.
- Consider whether early stages of treatment may need to be more intensive than when treating individuals with substance use disorders alone (e.g., earlier use of nicotine replacement, supplemental use of nicotine patch with other nicotine replacement therapies or group or individual behavioral therapy with smoking cessation).
- Consider the potential effects of substance cessation on the symptoms of the co-occurring psychiatric disorder when timing treatment efforts.
- Attend to insomnia, which is common and may predict relapse; although evidence is limited, CBT or sedating psychotropic medications (e.g., trazodone, gabapentin) may be considered.
- Address factors that may be more likely to influence treatment adherence in individuals with co-occurring disorders (e.g., concern about medication interactions, cognitive impairment, limited motivation, lack of peer and social support).
- Consider whether treatment could be enhanced through approaches such as assertive community treatment, stage-based motivational models, social skills or money management training, contingency techniques, and recovery-oriented perspectives.
- Encourage attendance at 12-step groups that support appropriate use of psychotropic medications.

TABLE 5. Treatments for Other Co-occurring Psychiatric Disorders in Patients With Substance Use Disorders

Medication	Notes
Anticonvulsants	The anticonvulsants carbamazepine, gabapentin, and valproate have been used to treat alcohol withdrawal and might work especially well in patients with co-occurring psychiatric disorders. Valproate has shown promise in stabilizing mood and reducing drinking in patients with bipolar disorder. Drug-drug interactions can occur between anticonvulsants (e.g., valproate and either lamotrigine or carbamazepine) or with other psychotropic medications, as a result of displacement from plasma protein binding sites and metabolism through UDP-glucuronosyltransferase and the cytochrome P450 2C9 enzyme.
Antidepressants	Monoamine oxidase inhibitors (MAOIs) may have interactions (e.g., with alcohol, cocaine and other stimulants, meperidine, dextromethorphan). Tricyclic antidepressants and MAOIs may be toxic in overdosage. Simultaneous use of antidepressants and substances of abuse may increase sedation or cardiovascular effects. Bupropion may theoretically increase the risk of psychosis in psychotic patients, but concomitant treatment with antipsychotic medication will reduce this risk. Drug-drug interactions mediated through the cytochrome P450 system are common (e.g., methadone and antidepressants metabolized via cytochrome P450 2D6 or 3A4).
Antipsychotics	Clozapine may have benefits in decreasing substance use among individuals for whom it is otherwise indicated. Smoking decreases blood levels of some antipsychotics (e.g., clozapine, olanzapine, haloperidol, fluphenazine, thioridazine, chlorpromazine) via the cytochrome P450 1A2 enzyme. Simultaneous use of some antipsychotics and substances of abuse may increase sedation or cardiovascular effects.

TABLE 5. Treatments for Other Co-occurring Psychiatric Disorders in Patients With Substance Use Disorders *(continued)*

Medication	Notes
Anxiolytics and sedative-hypnotics	Anxiolytics and sedative-hypnotics with abuse potential should be prescribed cautiously (e.g., dispense in limited quantities, keep track of prescription refills, and monitor ongoing medical necessity and response to medication). These medications may have increased sedative and respiratory effects in combination with specific substances (e.g., alcohol, other sedatives, opioids). Drug-drug interactions may be mediated through the cytochrome P450 system (e.g., CYP 3A4, CYP 2C19).
Stimulants	Evidence suggests that appropriate use of stimulants in attention-deficit/hyperactivity disorder does not augment later risk of substance use disorders. Limit abuse potential by prescribing these medications cautiously (e.g., dispense in limited quantities, keep track of prescription refills, and monitor ongoing medical necessity and response to medication).

7. Clinical Features Influencing Treatment *(continued)*

Consider the possibility of pregnancy in women of childbearing age as part of the treatment planning process.

- Use a therapeutic approach that is supportive and maintains patient confidentiality.
- To women who request it, provide education and counseling to help them make an informed decision about continuing or terminating a pregnancy.

Modify the treatment of pregnant women to optimize the well-being of the patient and the fetus.

- Encourage abstinence from substance use.
- Ensure adequacy of maternal nutrition.
- Encourage participation in prenatal care.
- Work with the patient's obstetrician to reduce the risk of obstetrical complications (e.g., low birth weight with nicotine dependence; effects on fetal growth and later behavioral, cognitive, or academic deficits with marijuana dependence; fetal alcohol spectrum disorder with alcohol use disorders; placental blood flow abnormalities, neonatal abstinence syndrome, and premature labor and delivery with cocaine use disorders; miscarriage, preeclampsia, low birth weight, premature labor and delivery, stillbirth, and neonatal abstinence syndrome with opioid use disorders).
- Motivate the patient to remain in treatment and use aggressive relapse prevention strategies after delivery to decrease relapse risk.
- Counsel women who are likely to return to a substance-abusing milieu about long-term community treatment options and harm-reduction behaviors.
- Arrange for appropriate postnatal care when necessary.
- Consider referring the patient for education in parenting skills.

Choose treatments in pregnant women based on consideration of the risks and benefits of treatments for the fetus as well as the patient.

- Psychosocial treatments are generally considered initially in treating pregnant women.
- Agonist therapy (e.g., nicotine replacement therapy in smokers, methadone or buprenorphine in opioid-dependent women) is preferable and likely to be associated with fewer risks to the fetus than continued substance use.
- Compared with continued heroin use, methadone maintenance is still considered the treatment of choice for women who are unable to remain substance-free, because it has a long history of use and improves infant outcomes. Buprenorphine may also be useful in treating pregnant women with opioid dependence and may be less likely to cause neonatal abstinence syndrome.
- Narcotic antagonist therapy (e.g., naloxone, naltrexone) is not recommended, because it can contribute to spontaneous abortion, premature labor, and stillbirth.

8. Confidentiality

Provide treatment in a context that respects patients' privacy and confidentiality.

- Restrict disclosures of information from treatment records to circumstances in which there is
  - written patient consent,
  - information needed relating to a medical emergency,
  - court authorization,
  - a need to protect or warn third parties of potential harm by the patient,
  - disclosure in response to a crime committed at the treatment program or against program staff, or
  - reporting of suspected child abuse or neglect or, in some jurisdictions, suspected abuse of elderly individuals.
- Be aware of federal law and regulations that mandate strict confidentiality for information about patients being treated for substance use disorders (i.e., 42 U.S.C. Sections 290 dd-3 and ee-3; 42 C.F.R. Part 2) and those that address privacy in individuals with co-occurring psychiatric disorders (i.e., HIPAA [Health Insurance Portability and Accountability Act of 1996]).
- Be familiar with local and state reporting laws concerning the HIV/AIDS status of a patient in substance abuse treatment and the reporting of possible abuse and neglect of children, other dependents, or elderly individuals who may be at risk in the families of substance users.

B. Psychiatric Management

During the ongoing process of choosing among and implementing various treatments, psychiatric management is crucial to monitoring the patient's clinical status and coordinating treatment components. Psychiatric management includes the following:

Motivate the patient to change.

- Use an empathic, nonjudgmental, and supportive approach to examining the patient's ambivalence about changing addictive behaviors.
- Elicit patient's reasons for change (e.g., pregnancy; cost; worsening of general medical conditions; social stressors) and barriers to change (e.g., weight gain).
- Base motivational strategies on the patient's readiness-to-change stage (precontemplation, contemplation, preparation, action, or maintenance).
- Consider use of specific techniques to motivating change, such as motivational interviewing, A-FRAMES (**A**ssessment, providing objective **F**eedback, emphasizing that **R**esponsibility for change belongs to the patient, giving clear **A**dvice about the benefits of change, providing a **M**enu of options for treatment to facilitate change, using **E**mpathic listening, and emphasizing and encouraging **S**elf-efficacy with the patient), motivational enhancement therapy, or other adjunctive psychotherapies.

Establish and maintain a therapeutic framework and alliance.

- Be flexible, honest, respectful, warm, and open to facilitate building a positive alliance that will enhance the likelihood of substance abstinence and better psychological functioning at follow-up.
- Use specific strategies for strengthening the alliance, such as exploration, reflection, highlighting past therapy successes, providing accurate interpretation, facilitating expression of affect, and attending to the patient's experience.
- Set limits when indicated.

B. Psychiatric Management *(continued)*

Assess the patient's safety and clinical status.

Look for the following:

- Potential emergence of self-destructive, suicidal, or homicidal thoughts or behaviors
- Potential emergence of other dangerous behaviors such as driving while under the influence of substances, domestic violence, or child abuse or neglect
- Evidence of complications of chronic substance use (e.g., dementia with chronic heavy use of alcohol)
- Treatment-emergent side effects
- Evidence of relapse
  - Test breath, blood, saliva, and urine on a random basis for abused drugs or their metabolites or for state-dependent markers. Examples of such assessments include breath tests for alcohol or carbon monoxide (with smoking), blood tests for carbohydrate-deficient transferrin (CDT), mean corpuscular volume (MCV) or gamma-glutamyl transpeptidase (GGT) that may indicate a return to alcohol use, and urine tests for nicotine or cotinine, alcohol or a metabolite (ethyl glucuronide), opioids, cannabis, cocaine, and other substances of abuse.
  - Consider using direct supervision of urine sample collection to increase validity.
  - Determine the frequency of monitoring based on the stage of recovery, keeping in mind that more intensive monitoring may decrease the risk of relapse.

Manage intoxication.

- Provide acutely intoxicated patients with decreased exposure to external stimuli, reassurance, reorientation, and reality testing in a safe, monitored environment.
- Ascertain which substances have been used, the route of administration, the dose, the time since last dose, and whether the level of intoxication is waxing or waning. When multiple substances have been used, consider the effects of each.
- Hasten removal of substances from the body—e.g., by gastric lavage (if the substance has been recently ingested) or by increasing the rate of excretion.
- Reverse drug effects by administering antagonists (e.g., naloxone for heroin overdose) that can displace agonists from neuronal and other receptors.
- Use other approaches to stabilize the physical effects of substance overdose (e.g., intubate to decrease aspiration, use medications to support blood pressure).

Manage withdrawal.

- Watch for withdrawal syndromes in physically dependent individuals who discontinue or reduce their substance use after heavy or prolonged use.
- Consider factors that may influence severity of withdrawal (e.g., type of substance used and its rate of metabolism, time since last use, concurrent use of other substances or prescribed medications, co-occurring general medical or psychiatric disorders, past withdrawal experiences [especially for alcohol]).
- Replace the abused drug with a drug in the same or a similar class with a longer duration of action and taper the longer-acting drug.
- Treat with medications to ameliorate withdrawal symptoms (e.g., clonidine for opioid withdrawal or benzodiazepines or anticonvulsants for alcohol withdrawal).

B. Psychiatric Management *(continued)*

Reduce the morbidity and sequelae of substance use disorders.

- Develop a comprehensive plan to address problems in biological, psychological, and social functioning.
- Assess for general medical conditions that may be caused or exacerbated by substance use disorders or that occur more commonly in patients with substance use disorders (e.g., hepatic or hematologic dysfunction with alcohol use disorders, cardiopulmonary disease in smokers, blood-borne and sexually transmitted diseases in intravenous substance users).
- Diagnose and treat co-occurring psychiatric disorders that
  - affect the course and outcome of the substance use disorder,
  - may complicate the substance use treatment,
  - may reemerge with cessation of substance use, and
  - may require the addition of specific treatments (e.g., an antidepressant medication).

Develop and facilitate adherence to a treatment plan.

- Monitor attitudes about participating in treatment and adhering to specific recommendations.
- Address barriers to treatment participation (e.g., social, economic, and psychological influences; medical conditions with chronic pain or fatigue).
- With the patient's permission, consider involving significant others in promoting adherence.
- Consider specific rehabilitative interventions to improve functioning if impairment interferes with treatment adherence.
- Consider using motivational enhancement strategies or monitoring programs (e.g., legally mandated, employee assistance, or impaired professional programs).

Use relapse prevention strategies.

- Help the patient anticipate and avoid drug-related cues (e.g., instruct the patient to avoid drug-using peers).
- Decrease access to abusable substances.
- Train the patient to self-monitor states associated with increased craving.
- Use contingency contracting (e.g., set up positive and negative reinforcements in advance).
- Teach desensitization and relaxation techniques to reduce the power of substance-related stimuli.
- Help patients develop alternative, nonchemical coping responses.
- Provide social skills training.
- Provide positive feedback for the patient's successes, even if relapse does occur.
- Analyze relapses and periods of sobriety from functional and behavioral standpoints and modify the treatment plan, including psychotherapy, accordingly.

Provide education.

- Educate the patient, family, and significant others about substance use disorders, including the etiology and nature of substance use, the effects of substances on the brain and other organs, and the benefits of abstinence and available options for treatment.
- Direct patients to available educational resources (e.g., telephone quitlines and Internet resources for smoking cessation available at www.cdc.gov/tobacco/).

Facilitate access to services and coordinate resources among mental health, general medical, and other service systems.

- Coordinate and integrate the patient's care and address social, vocational, educational, and rehabilitative needs in a collaborative fashion with other professional disciplines, case management services, community-based agencies, treatment programs, and lay organizations.
- Coordinate management of general medical conditions with the patient's primary care physician.

C. Nicotine Dependence

Provide pharmacological treatment for individuals who wish to stop smoking and have not achieved cessation without pharmacological agents or who prefer to use such agents.

- The five NRTs (i.e., patch, gum, lozenge, nasal spray, inhaler) and bupropion are first-line treatment approaches that are equally effective in alleviating withdrawal symptoms and reducing smoking.
- Choice of first-line treatments is based on patient preference, route of administration, and side-effect profile (Table 6).
- Significant adverse events of NRTs, including dependence, are rare.
- Using a combination of these first-line treatments may improve outcome (e.g., two NRTs or an NRT plus bupropion).
- If withdrawal contributes to relapse, additional NRT (e.g., increased dose or number of NRTs, different formulation that yields higher nicotine levels) should be considered.
- Combined psychosocial and pharmacological therapy produces the best outcomes.
- Nortriptyline and clonidine have utility as second-line agents but appear to have more side effects (Table 6).
- Other medications and acupuncture have not been proven to be effective.

Provide psychosocial treatments as essential components of a comprehensive treatment program as well as for individuals who prefer these approaches.

- Such treatments are typically provided in a multimodal package that includes advising the patient to stop smoking, helping the patient decide on the timing of a quit attempt, advising against caffeine and alcohol use, helping the patient learn skills to avoid relapse, and helping the patient select a quit date (with abrupt cessation preferred over gradual cessation).
- Treatment outcome is improved by follow-up visits 1–3 days after cessation.
- If relapse is not due to withdrawal, alter psychosocial therapy type or intensity.
- When delivered in individual, group, telephone, or self-help (written, video, Internet) formats, potentially helpful psychosocial treatments include the following:
  - *Brief interventions.* Include behavioral supportive cessation counseling with aspects of motivational enhancement therapy (MET).
  - *Behavioral therapies.* Include contingency management, cue exposure, and "rapid smoking" aversion approaches.
  - *Cognitive-behavioral therapies.* Address cognitive coping skills, such as identifying maladaptive thoughts, challenging them, and substituting more effective thought patterns to prevent a slip from becoming a relapse (e.g., not viewing the slip as a catastrophe), and behavioral coping skills, such as removing oneself from the situation, substituting other behaviors (walking, exercising), and using skills to manage triggers (assertiveness, refusal skills, time management).
  - *Social support.* Appears to be beneficial as a specific intervention or with support provided by a spouse.
- Psychosocial treatments that have not been proven effective include inpatient treatment, hypnosis, and 12-step-oriented groups.

TABLE 6. Pharmacological Treatments for Nicotine Dependence

	Dosing and Implementation	Side Effects	Comments
Nicotine Replacement			
Nicotine patch[a,b]	Use the 7-, 14-, 21-mg/24-hour patch[c] or the 15-mg/16-hour patch.	Minor skin reactions, nausea, insomnia, and (with 24-hr patches) increased or vivid dreaming	Abrupt discontinuation does not produce withdrawal, so there appears to be no need to taper patch doses.
Nicotine gum[a,b]	Take one 2- or 4-mg piece per hour[c]	Difficulty chewing, sore jaw, burning in the mouth, mild throat irritation	Absorption through buccal mucosa; acidic beverages decrease absorption.
Nicotine lozenge[a]	Take one 2- or 4-mg lozenge per hour[c]	Nausea, heartburn, mild throat or mouth irritation	Lozenges should be sucked on rather than bitten or chewed; absorption through buccal mucosa; should not be used by those with phenylketonuria; may be preferred for those with dental problems.
Nicotine nasal spray[a]	Take one 1-mg droplet dose up to 30 times per day.	Nasal and throat irritation, rhinitis, sneezing, coughing, watering eyes	Appears to have some dependence liability.
Nicotine inhaler[a]	Use 6–16 cartridges per day, each inhaled frequently for 20 mins.	Throat irritation or coughing	Absorption through buccal mucosa; acidic beverages. decrease absorption

TABLE 6. Pharmacological Treatments for Nicotine Dependence *(continued)*

	Dosing and Implementation	Side Effects	Comments
Non-nicotine Treatments			
Bupropion, sustained release[a]	Start at 150 mg/day 7 days prior to quit date; after 4–5 days, increase to 150 mg b.i.d.	Headache, insomnia	Greater likelihood of having seizures with preexisting seizure disorder or with eating disorders.
Nortriptyline	Start at 25 mg/day 10–14 days prior to quit date and increase to 75 mg/day.	Anticholinergic side effects, postural hypotension, sedation, effects on cardiac conduction, toxicity in overdose	
Clonidine	Take 0.1–0.4 mg/day (orally or via transdermal patch).	Dry mouth, sedation, constipation; rarely, postural hypotension and rebound hypertension	α_2 agonist; decreases sympathetic activity originating at the locus coeruleus.

[a]FDA approved for use in the treatment of nicotine dependence.
[b]Approved as an over-the-counter medication.
[c]The higher dose is recommended for individuals who are more highly dependent on nicotine (e.g., as measured by the Fagerström Scale for Nicotine Dependence).

D. Alcohol Use Disorders

1. Management of Alcohol Intoxication and Withdrawal

Assess symptoms of intoxication and withdrawal.

- Consider using standardized alcohol withdrawal scales such as the Clinical Institute Withdrawal Assessment of Alcohol Scale—Revised, to assess level and change in alcohol withdrawal symptoms.
- Laboratory tests should be used to determine whether the presence of other substances is contributing to the clinical presentation.
- Withdrawal symptoms generally begin within 4–12 hours after cessation or reduction of alcohol use, peak in intensity during the second day of abstinence, and generally resolve within 4–5 days.
- Gastrointestinal distress, anxiety, irritability, elevated blood pressure, tachycardia, and autonomic hyperactivity occur in mild to moderate withdrawal.
- Symptoms of severe withdrawal occur in fewer than 5% of patients and include delirium, hallucinations, grand mal seizures, respiratory alkalosis, and fever.

Determine whether risk factors for withdrawal are present.

Significant risk of withdrawal is associated with the presence of any of the following:

- Prior history of delirium tremens and/or medicated alcohol withdrawals.
- Documented history of very heavy alcohol use and high tolerance.
- Concurrent abuse of other drugs.
- Severe comorbid general medical condition or psychiatric disorder.
- Repeated failures at outpatient detoxification.

Choose an appropriate setting for treatment (see section A.3, p. 80).

- For *acute intoxication,* monitor and maintain in a safe environment.
- For *mild to moderate withdrawal,* provide generalized support, reassurance, and frequent monitoring. For most patients with mild to moderate withdrawal symptoms, this can occur in outpatient settings that provide for frequent clinical assessment and any needed clinical treatments.
- For *moderate to severe withdrawal,* arrange for an appropriate setting based on the patient's signs and symptoms, past history, co-occurring general medical and psychiatric conditions, and psychosocial support network. Residential treatment or hospitalization may be needed, particularly for patients with delirium tremens.

1. Management of Alcohol Intoxication and Withdrawal *(continued)*

Treat moderate to severe alcohol withdrawal with pharmacotherapy.

- Restore physiological homeostasis (e.g., glucose, thiamine, and fluids).
- Reduce CNS irritability with benzodiazepines.
  - Administer a benzodiazepine orally, e.g., chlordiazepoxide 50 mg every 2–4 hours), diazepam (10–20 mg every 2–4 hours), oxazepam (60 mg every 2–4 hours), or lorazepam (1–4 mg every 2–4 hours), as needed for signs and symptoms of withdrawal.
  - Calculate the total number of milligrams of benzodiazepine required in the first 24 hours and use this value to determine subsequent daily doses.
  - Taper benzodiazepines over the next 2–5 days. (Patients in severe withdrawal and those with a history of withdrawal-related symptoms may require up to 10 days before benzodiazepines are completely withdrawn.)
- Use an anticonvulsant agent (as an adjunct) for treating or preventing withdrawal seizures. Evidence is emerging for the use of anticonvulsants as a potential alternative to benzodiazepines, particularly for patients with preexisting alcohol withdrawal seizures or multiple previous medical detoxifications, and in outpatient detoxification settings.
- Beta-blockers or clonidine may be used on a short-term basis in combination with benzodiazepines to decrease symptoms of withdrawal; however, such use may complicate dosing of benzodiazepines by masking withdrawal symptoms.
- Use an adjunctive antipsychotic agent on a short-term basis for delirium or psychosis.
- Observe for reemergence of withdrawal symptoms and alcohol relapse as medications are tapered.
- Observe for emergence of signs and symptoms suggestive of a co-occurring psychiatric disorder.

2. Management of Alcohol Dependence

Consider pharmacological treatment.
The following pharmacotherapies for alcohol-dependent patients have well-established efficacy and moderate effectiveness, particularly as part of a comprehensive program of treatment (see Table 7 for implementation guidelines):

- *Naltrexone* can attenuate some of the reinforcing effects of alcohol and lead to reduced drinking and resolution of alcohol-related problems. A long-acting injectable preparation may promote adherence, but published research is limited and FDA approval is pending.
- *Disulfiram* can help deter subsequent "slips" by causing a highly aversive reaction after a patient has even a single drink.
- *Acamprosate* may decrease alcohol craving in recently abstinent individuals.

Treat or prevent common neurological sequelae of chronic alcohol use by routinely giving thiamine if moderate to severe alcohol use is present.

- Korsakoff's syndrome (alcohol amnestic disorder) should be treated vigorously with B-complex vitamins (e.g., thiamine, 50–100 mg/day i.m. or i.v.), usually after adequate fluids and glucose levels are maintained.

Consider if pharmacotherapy is needed to treat comorbid psychiatric conditions.

- For many patients, signs and symptoms of depression and anxiety may not require pharmacotherapy but instead are related to alcohol intoxication or withdrawal and remit in the first few weeks of abstinence. Treatment of nondepressed alcoholic patients with SSRIs appears to be ineffective.
- For alcoholic hallucinosis during or after cessation of prolonged alcohol use, antipsychotic medication should be considered.

2. Management of Alcohol Dependence *(continued)*

Consider providing psychosocial treatment.
Potentially helpful treatments include the following:

- Cognitive-behavioral therapies aimed at improving self-control and social skills
- Motivational enhancement therapy (MET)
- 12-step facilitation therapy
- Behavioral therapies
- Marital and family therapy
- Group therapies
- Psychodynamic/interpersonal therapies
- Brief interventions (i.e., abbreviated assessments of drinking severity and related problems and provision of motivational feedback and advice)
- Aftercare, which may include partial hospitalization, outpatient care, or self-help group involvement and which may help maintain abstinence during the period following an intensive treatment intervention (e.g., hospital or residential care)
- Self-help groups and 12-step oriented groups, such as Alcoholics Anonymous

TABLE 7. Implementation of Pharmacotherapies for Alcohol-Dependent Patients

Medication (Usual Dosage)	Side Effects	Comments
Naltrexone (50 mg/day orally)	Nausea, vomiting, headache, fatigue, and, at higher dosages, hepatotoxicity	Blocks analgesia from opiates needed for acute or chronic pain management. Works best with ancillary counseling. A long-acting injectable formulation may soon be available.
Disulfiram (250 mg/day; range 125–500 mg/day)	If used with any form of alcohol, can cause a sensation of heat in the face and neck, headache, flushing, nausea, vomiting, hypotension, anxiety; and rarely chest pain, seizures, liver dysfunction, respiratory depression, cardiac arrhythmias, myocardial infarction, and death	Educate patients about avoiding all forms of alcohol (including products such as over-the-counter cough syrup). Use only in reliable, motivated patients whose drinking may be triggered by stressful events; patients with impulsive behavior, psychosis, or suicidal thoughts are less appropriate candidates. Avoid in the presence of renal failure, moderate to severe hepatic dysfunction, peripheral neuropathy, pregnancy, or cardiac disease.
Acamprosate (666 mg t.i.d. for a total dosage of 1,998 mg/day)	Diarrhea	Excretion is via the kidneys rather than through hepatic metabolism. Works best in patients highly motivated to maintain abstinence.

E. Marijuana Use Disorders

A relapse prevention approach that combines motivational interventions and coping skills development may be useful but needs more study.

No specific pharmacotherapies are recommended at this time for the treatment of marijuana withdrawal or dependence.

F. Cocaine Use Disorders

1. Management of Cocaine Intoxication and Withdrawal

Intoxication

- Cocaine intoxication is usually self-limited and typically requires only supportive care.
- Intoxication can produce hypertension, tachycardia, seizures, and persecutory delusions in some patients that may require symptom-specific treatment.
- Acutely agitated patients may benefit from sedation with benzodiazepines.

Withdrawal

- Following cessation of cocaine use, anhedonia and craving are common.
- Currently available pharmacotherapy provides no clear benefit.

2. Management of Cocaine Dependence

Focus on abstinence.

Encourage regular participation in treatment, which has been shown to enhance effectiveness.

- Intensive (i.e., more than twice a week) outpatient treatment is most effective.
- Self-help group effectiveness is also greatest with regular participation.

Consider the following specific approaches:

- Cognitive-behavioral therapies
- Behavioral therapies, including contingency management
- 12-step-oriented individual drug counseling
- Self-help groups, including 12-step-oriented programs (e.g., Narcotics Anonymous)

For patients who have more severe dependence or have not responded to psychosocial treatment, consider adding pharmacological treatment.

Medications have had limited effectiveness, but topiramate, disulfiram, and modafinil currently show promising results in conjunction with psychosocial therapies.

G. Opioid Use Disorders

1. Management of Opioid Intoxication

Recognize and treat acute intoxication.
Patients with opioid use disorders frequently relapse and present with intoxication.

Level of Intoxication	Indicators	Treatment
Mild to moderate	Drowsiness, pupillary constriction, slurred speech	Specific treatment is usually not required
Severe overdose (may be fatal)	Respiratory depression, stupor, coma	Requires treatment in inpatient or ER setting. May require ventilatory assistance. Use naloxone to reverse.

Reverse respiratory depression by administering naloxone.

- Usual dose is 0.05–0.4 mg i.v., with the lower dose used in opioid-dependent individuals; with significant respiratory depression, 2.0 mg i.v. is suggested.
- A positive response (with increases in respiratory rate and volume, increased systolic blood pressure, and pupillary dilation) should occur within 2 minutes.
- If there is no response, the same or a higher dose (e.g., 0.8 mg) of naloxone can be given twice more at 5-minute intervals.
- Failure to respond to naloxone suggests a concurrent, or completely different, etiology for the problem (e.g., barbiturate overdose, head injury).

2. Management of Opioid Withdrawal

The goals of management are to ameliorate acute opioid withdrawal symptoms and facilitate entry into a long-term treatment program.

Monitor for withdrawal from other substances.
Concurrent use of or withdrawal from other substances (particularly alcohol, benzodiazepines, or other anxiolytic or sedative agents) can complicate the treatment of opioid withdrawal.

To control opioid withdrawal symptoms, stabilize the patient with methadone or buprenorphine, then gradually taper.

Methadone

- The daily stabilization dose should be based on the response of objective signs of withdrawal to a methadone dose of 10 mg every 2–4 hours as needed.
- During the first 24 hours, 10–40 mg of methadone will stabilize most patients and control withdrawal symptoms.
- Once the stabilization dosage is determined, methadone can be slowly tapered (e.g., by 5 mg/day).
- When the methadone dosage drops below 20–30 mg/day, many patients begin to complain of renewed (but milder) withdrawal symptoms. These may be ameliorated by the addition of clonidine (see below).

Buprenorphine

- Stabilization and suppression of withdrawal symptoms typically occur at a dosage of 8 mg/day or less on an inpatient basis and 8–32 mg/day on an outpatient basis.
- Tapering and discontinuation of buprenorphine occur over 10–14 days, with dosage reductions of 2 mg/day.

2. Management of Opioid Withdrawal *(continued)*

If opioids are discontinued abruptly, consider using clonidine to suppress withdrawal symptoms.

- Clonidine suppresses nausea, vomiting, diarrhea, cramps, and sweating but does little to reduce muscle aches, insomnia, and drug craving.
- Be aware that some patients are extremely sensitive to clonidine and experience profound hypotension, even at low doses.
- On day 1, clonidine-aided detoxification involves either a test-dose approach or a treatment dose ranging from 0.1 to 0.3 mg in three divided doses. Thereafter, dosage is adjusted until withdrawal symptoms are reduced.
- If blood pressure falls below 90/60 mm Hg, the next dose should be withheld.
- Tapering can be resumed while the patient is monitored for signs of withdrawal.
- Advantages over methadone:
  - Clonidine does not produce opioid-like tolerance or physical dependence.
  - Use of clonidine avoids the postmethadone rebound in withdrawal symptoms.
  - If indicated, an opioid antagonist (e.g., naltrexone) can be used immediately after the course of withdrawal.
- Disadvantages:
  - Side effects include insomnia, sedation, and hypotension.
  - Clonidine will not ameliorate some symptoms of opioid withdrawal, such as insomnia and muscle pain.
  - Clonidine is contraindicated in patients with moderate to severe hypotension and cardiac, renal, or metabolic disease.
- Clonidine-assisted detoxification is easiest to carry out in inpatient settings.
- Outpatient detoxification with clonidine is a reasonable approach with experienced staff; outpatients should not be given more than a 3-day supply of clonidine for unsupervised use.

3. Management of Opioid Dependence

For patients with a prolonged history (>1 year) of opioid dependence, consider providing agonist maintenance treatment (e.g., methadone or buprenorphine).

- Agonist maintenance treatment reduces the morbidity, mortality, and other deleterious effects associated with opioid dependence, even if abstinence is never achieved.
- Treatment aims to facilitate engagement in a comprehensive program of rehabilitation that can improve overall functioning through addressing substance use, psychosocial issues, and psychiatric and somatic needs.
- Implementation is described in Table 8.

As an alternative strategy, consider maintenance therapy using naltrexone, an opioid antagonist that blocks effects of usual street doses of opioids.

Clonidine pretreatment can minimize naltrexone-precipitated withdrawal symptoms in opioid-dependent patients who are in transition to narcotic antagonist treatment, but patients must be monitored for the initial 8 hours (because of the potential severity of naltrexone-induced withdrawal) as well as receive careful monitoring of blood pressure throughout withdrawal.

Avoid use of ultrarapid opioid detoxification.

Induction of opioid withdrawal by administration of naltrexone while patients are under general anesthesia has an adverse risk/benefit ratio and a lack of proven efficacy.

3. Management of Opioid Dependence *(continued)*

Consider combining psychosocial treatments with opioid agonist or antagonist therapies to improve treatment adherence and prevent relapse.

The following treatments may be helpful:

- Cognitive-behavioral therapies
- Behavioral therapies including contingency management
- Psychodynamic psychotherapies
- Drug counseling
- Group and family therapies
- Self-help groups

TABLE 8. Implementation of Methadone, Buprenorphine, or Naltrexone

	Dosing	Side Effects	Comments
Opioid Agonists			
Methadone	Once daily dosing (half-life is about 24 hours) Dosages of 40–60 mg/day (and sometimes less) usually block withdrawal; larger dosages are often needed to block opioid craving and lead to better outcomes.	Constipation, increased sweating, and sexual difficulties are common. Overdosage can result in respiratory depression. Side effects from cytochrome P450 (CYP) 3A4–mediated drug-drug interactions can occur.	Available primarily through specially licensed opioid treatment programs, although exceptions exist for medically ill patients.
Buprenorphine	Long duration of action permits dosing every 48–72 hours. Daily sublingual maintenance doses are 8–32 mg.	Side effects are generally milder than with other mu opioid agonists but, especially when buprenorphine is combined with benzodiazepines, may include respiratory depression.	Use of a buprenorphine/naloxone combination tablet decreases drug diversion risk. Can be administered in office-based practices after completion of formal training.

TABLE 8. Implementation of Methadone, Buprenorphine, or Naltrexone *(continued)*

	Dosing	Side Effects	Comments
Opioid Antagonist			
Naltrexone	Can be administered orally three times per week (e.g., 100 mg on Monday and Wednesday, 150 mg on Friday).	Dysphoria, anxiety, gastrointestinal symptoms, and, at significantly higher dosages, liver function test abnormalities. Naltrexone can precipitate severe withdrawal symptoms in opioid-dependent patients.	Only use in patients who have been withdrawn from opioids under medical supervision and have been free for at least 5 days from short-acting opioids and 7 days from longer acting opioids. Utility is often limited by low treatment retention and poor adherence; a long-acting injectable preparation may promote adherence, but research is limited and FDA approval is pending.