Evidence-Based Practice

A GUIDE TO EVIDENCE-BASED PRACTICES

for INDIVIDUALS WITH SUBSTANCE USE DISORDERS

SAGINAW COUNTY COMMUNITY MENTAL HEALTH AUTHORITY

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Table of Contents

FORWARD

This is the third in a series of reports on evidence-based practices compiled for the Saginaw County Community Mental Health Authority (SCCMHA). It is hoped that this report, like the two that preceded it, will serve to inform policy and practice by fostering the allocation of scarce resources for services and supports that have been scientifically demonstrated to be effective.

The material in this report is derived from peer-reviewed journal articles, monographs, manuals, texts, reports, practice guidelines, and expert consensus documents within the fields of substance use disorder treatment, mental health, child welfare, education, housing, and the justice system. It examines relevant issues in substance use disorder treatment, various interventions and concepts with a base of evidence to support their use, and current practices and areas that are of interest at national, state and local levels. Many of the practices and issues that have been covered in other reports in this series are not repeated here in order to conserve resources; the reader is referred to those source documents where relevant.

The electronic version of this report has hyperlinks (denoted by blue underlined text) embedded within the document so that the reader can find additional information quickly, particularly in previous reports in this series, web sites, and within this document. A variety of resources are provided for readers who wish to pursue more information on topics of interest. Hyperlinks to web sites for programs and interventions are included where available.

The reader will note that terminology differs from previous reports in this series. The person who avails themselves of substance use disorder treatment is referred to as a client or patient; the more familiar term consumer is not used in the substance use treatment literature. Medically-oriented treatment programs, such as medication-assisted treatment, or MAT, programs use the term patient, while other programs use the term client. Both terms are used herein. In addition, person first language is not used in reference to the lesbian, gay, bisexual, transgender (LGBT) population in order to adhere to the way the professional literature and this population refers to itself.

It should be noted that this report is a snapshot in time and depicts aspects of the field relevant to public sector work currently available. As the field develops, and new evidence accumulates, revisions and updates will be needed.

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EXECUTIVE SUMMARY

This report is organized into sections that cover a variety of topics related to understanding the dynamics of substance use disorders and treatment approaches found in the current literature. The first section offers a brief review of relevant concepts related to the selection of evidence-based practices for use with individuals who have substance use disorders. The reader can find more information on this topic in the previous evidence-based practice reports in this series located on the web at http://www.sccmha.org/quality.html. The second section offers an overview of recovery, self-help, and empowerment. Peer operated models that are used to support empowerment and recovery are discussed.

The third section offers information on culture in relation to treatment issues. It covers stigma as well as age, gender, ethnic identity, and sexual orientation. This is followed by a section on working with families that includes examples of evidence-based interventions and programs. The fourth section covers material on prevention and offers descriptions of preventive interventions and programs not covered in previous reports. The fifth section is an overview of systems collaboration including working with medical services, education, housing, employment, education, faith-based organizations, and the justice and mental health systems. Examples of effective interventions as well as some that are of current interest are provided for each area. In addition, models for service delivery within systems of care such as case management and wraparound are discussed.

The section on psychotherapy covers a variety of interventions provided on an individual and group basis, and is followed by a review of somatic therapies. It includes an overview of medical detoxification, pharmacotherapeutic alternatives, treating co-occurring disorders, pain management, multimodal approaches, and acupuncture. The next section offers an overview of the service continuum including placement criteria, engagement, and the various settings of service provision.

The final section covers measurement and includes discussions of screening, assessment, and outcomes evaluation. The summary and conclusion section offers a review of salient points derived from the literature base. A number of appendices are attached to the document. The first offers a list of references and is followed by a list of resources. These are followed by a glossary, quick reference guide, listings of substances of abuse, screening and assessment instruments as well as biological testing, an overview of confidentiality, sources of public funding for treatment, and, lastly, the National Standards for Culturally and Linguistically Appropriate Services (CLAS).

INTRODUCTION

People with substance use disorders come from all walks of life, and age and ethnic groups. Substance use problems exact a significant toll on society due to adverse consequences including a multitude of social problems (e.g., family and interpersonal difficulties, injuries, criminal behaviors, lost productivity, and premature morbidity and mortality). However, it has been shown that the appropriate and judicious use of scarce prevention and treatment funds can mitigate human, economic, health care, mental health care, criminal, morbidity, social welfare, and educational harm. Moreover, substance use disorders cannot be effectively treated in isolation from health, mental health, social and economic challenges (e.g., poverty, homelessness, joblessness, etc.) all of which pose risks to recovery. Numerous studies show every dollar spent for treatment yields significant savings in criminal justice and health care expenditures. Treatment has also been shown to improve the likelihood of employment with studies indicating increases of up to forty percent subsequent to treatment.

However, while it has been acknowledged that treatment is effective, no single treatment approach has been found to be effective for all persons with substance use disorders. A variety of scientifically based approaches to treatment exists, including cognitive-behavioral therapies and medications as well as combinations of therapies, and other services designed to meet the needs each individual are required.

Almost all individuals with addictive disorders believe they can stop using substances on their own, and most try to stop without treatment. However, most attempts result in failure to achieve long-term abstinence. And, because substance use disorders are typically chronic and characterized by occasional relapses, short-term, one-time treatment episodes are often inadequate. For many, treatment is a long-term process that involves multiple interventions and attempts at abstinence.

The field of substance use disorders has changed in a number of ways in recent years:

- The historical focus on deficits and limitations has been replaced with the identification and enhancement of strengths and competencies.
- Clients are given a voice in the selection of treatment goals and types of treatment they can receive. Treatment entails the development of therapeutic partnerships with clients who play an active role in treatment planning, goal setting and strategy development rather than functioning as passive recipients. Research suggests that substance use disorder treatment is more effective when selections are made from alternatives rather than assignment to specific treatments without options. The ability to choose also appears to reduce resistance and premature termination from treatment.
- Clinicians assume more responsibility in helping clients with the change process; they are responsible for engendering motivation.
- Treatment has been shown to be more effective when it is based on individual needs, rather than that which is standardized, irrespective of problems or severity of substance use.
- Disciplinarian, confrontational and authoritative clinical styles (e.g., authority to recommend termination from treatment programs for rule violations, penalties for drug test failures, promotion to increased treatment phases for compliance and following directions) have been replaced with empathic responding and optimism regarding clients' capacities to change. Research has demonstrated that clinician support, compassion, empathy, warmth, respect, genuineness, and affirmation lead to improved

outcomes from treatment. Conversely, confrontational and directive approaches can engender resistance and lead to less beneficial treatment outcomes.

- Early interventions, prior to substance use becoming problematic, are being offered rather than waiting for people to hit bottom and suffer serious, adverse, and sometimes irreparable, consequences of use to motivate behavior change. Individuals, whose substance use is considered problematic or risky, but not yet serious, are offered early intervention (e.g., education and brief intervention) in opportunistic settings that are not within traditional substance use treatment settings (e.g., general medical offices, welfare offices, and offices within the judicial system). Such settings provide opportunities to engage individuals with a substance use disorder in single therapeutic encounters and/or refer them to specialized providers for treatment.
- Duration of treatment is predictive of outcomes. Research has demonstrated that, while there is no predetermined length of treatment, beneficial outcomes from treatment are contingent upon adequate lengths of time in treatment. In general, less than ninety days of participation in outpatient and residential treatment produces limited or ineffective results. Treatment episodes of three months or longer often predict positive outcomes. (Sixty to eighty percent of individuals who suffer a relapse do so within three to four months.) Unfortunately, most people drop out of treatment prior to obtaining all of the benefits that it can confer.
- Ongoing participation in aftercare or self-help groups subsequent to treatment has been shown to be associated with beneficial outcomes.
- Managed care and other funding mechanisms have engendered a shift to outpatient from inpatient settings and limited the duration of some treatments.
- Substance use disorders are recognized as existing along a continuum from risky or problematic use to a variety of types of abuse to dependence. Increasing severity is not an inevitable progression. Many individuals never move beyond risky consumption patterns; others cycle through periods of excessive use, dependence and abstinence. Thus recovery differs among individuals and changes over time within the same individual. It is now recognized that a person's readiness to change rather than the severity of substance use is the most critical factor for achieving beneficial outcomes.
- Treatment goals such as harm reduction (i.e., decreasing the intensity of use and high risk behaviors, the substitution of less risky substances) may be a focus, particularly early in treatment, rather than abstinence.
- The substance abuse treatment system engages in collaborations with other systems (e.g., mental health, justice, medicine, public welfare, education, etc.) rather than functioning as isolated system.
- Change is recognized as a process rather than an outcome.
- It is recognized that recovery from substance use problems can occur with very limited treatment as evidenced by self-directed recovery from excessive or problematic alcohol consumption, drug use, and cigarette smoking.
- It is recognized that many people require multiple treatment episodes, and these can have a cumulative effect. The treatment of substance use disorders is a cyclical, not a linear, process. Recurrence of use does not necessarily indicate failure. In fact, recurrence of substance use is the rule rather than the exception and so common that is now considered a normal part of the change and recovery process. Clients often experience longer periods between episodes of use, and shorter less severe episodes of use during the course of recovery.

CENTER FOR SUBSTANCE ABUSE TREATMENT MODEL FOR COMPREHENSIVE ALCOHOL AND OTHER DRUG (AOD) ABUSE TREATMENT
• Assessment, including a medical examination, substance use history, psychosocial evaluation and, when warranted, a psychiatric evaluation, as well as a review of socioeconomic factors and eligibility for public health, welfare, employment, and educational assistance programs. • Same-day intake to maintain involvement and interest in treatment. A rapid intake approach that decreases delays in the time from first contact to first appointment is an effective engagement strategy. • Documentation of findings and treatment to enhance clinical supervision. • Preventive and primary medical care provided onsite. • Testing for infectious diseases at intake and at intervals throughout treatment such as hepatitis, retrovirus, tuberculosis, HIV/AIDS, syphilis, gonorrhea, and other sexually transmitted diseases. • Weekly random drug testing to support abstinence and monitor adherence to treatment. • Pharmacotherapeutic interventions provided for co-occurring psychiatric, opiate, alcohol, nicotine and co-existing medical disorders. • Group counseling interventions to address the emotional, physical, and social problems of persons with HIV/AIDS. • Basic substance abuse counseling, including psychological, psychiatric, and family or collateral counseling. • Staff training and education which are integral to successful treatment programs. • Practical life skills counseling, including vocational and educational counseling and training. • General health education, including nutrition, sex and family planning, and HIV/AIDS counseling, with an emphasis on contraception counseling for adolescents and women. • Peer/support groups, particularly for those who are HIV-positive or who have been victims of rape or sexual abuse. • Liaison services with immigration, legal aid, and criminal justice system authorities. • Social and athletic activities to retrain patients' perceptions of social interaction. • Alternative housing for homeless patients or for those whose living situations are conducive to maintaining lifestyles that maintain addictions. • Relapse prevention, which combines aftercare and support programs (e.g., self-help groups such as Alcoholics Anonymous and Narcotics Anonymous) within an individualized plan to identify, stabilize, and control the stressors that trigger and promote relapse. • Outcome evaluation to enable refinement and improvement of service delivery.

(Adapted from SAMHSA TIP # 17)

AN OVERVIEW OF EVIDENCE-BASED CONCEPTS

The substance use disorder treatment field, much like the rest of mental health, has long been characterized by inconsistent and idiosyncratic interventions that are based on practitioners' personal preferences, experiences, intuition, and individual styles. There is a significant gap between treatments that have been demonstrated to be efficacious and those actually delivered in everyday clinical practice. Practices that have robust support are frequently not used, or are used ineffectively. Many studies document the provision of treatment that does not adhere to the base of evidence of effectiveness. For example, the Institute of Medicine cites studies showing that less than eleven percent of individuals with alcohol dependence receive treatment that is consistent with the base of scientific evidence that has been established. Studies show that methadone maintenance treatment is highly effective but is often administered in inadequate doses or with insufficient counseling and adjunctive services rendering it less effective. On the other hand, many treatments that are widely used have not undergone rigorous evaluation (e.g., twelve-step based treatments such as the Minnesota Model and auricular acupuncture). Compounding these problems is the fact that only a few clinical trials have been conducted for many of those that have been empirically validated.

There is no generally agreed-upon definition of what research findings constitute evidence-based practices and, in many instances, whether practices can be adapted appropriately to meet individuals' unique needs. Moreover, there is no single definition of treatment and standard terminology is lacking to describe the various dimensions and components of treatment. Numerous variations exist in practice rating and review methodologies, an issue brought to national attention in a 1998 report produced by the Institute of Medicine titled *Bridging the Gap Between Practice and Research*. For purposes of this document, commonly accepted criteria for the evaluation of evidence-based practices include:

- At least one randomized clinical trial[2] has found that the practice is more effective than treatment as usual. A clinical trial is evaluated on the following factors:

[2] In order to be judged effective, an intervention must have been tested and demonstrated to be effective in a randomized clinical trial, the best existing method for determining whether interventions lead to improvements. A randomized clinical trial can be defined as a prospective study that compares the effect of a specific intervention to a control intervention in groups of participants who are assigned to the particular treatment groups on a random basis. Random assignment is used to preclude potential bias that may influence outcomes in assigning specific types of participants to the groups and assists in evenly distributing subject characteristics between groups.

It should be noted that, while randomized controlled trials are the recognized gold standard of research in the generation of evidence-based practices, the field of behavioral health often cannot use them due to lack of ability to provide double blind conditions and lack of true placebo conditions. In addition, withholding or delaying treatment poses serious ethical problems and is not considered an option for substance use disorder treatment studies. Random assignment can be an extremely effective, but patients must grant informed consent for random assignment to alternative treatments and those who are willing to be part of experiments may not necessarily be representative of the group as a whole (e.g., they may be more motivated), thus producing a biased sample. Therefore, much of the research in the field relies on quasi-experimental and qualitative studies.

  - The results have been published in a refereed professional publication or journal
  - The trial adequately addresses missing data in the analyses, including subject attrition
  - Data collection methods are adequate and include multiple outcome measures, if appropriate, and an adequate follow-up period
  - The relevance and quality of the outcome measures, including reliability and validity
  - The appropriateness and technical adequacy of the data analysis
  - The degree to which the trial addresses plausible threats to validity
  - Whether or not outcomes are assessed in a blind fashion
  - The data were obtained prospectively
  - There was a clear presentation of inclusion and exclusion criteria
  - There was adequate sample size to offer reasonable statistical power and a stable estimate of the effect size (e.g., $N \geq 30$)
  - The statistical methods are described explicitly and clearly
  - Diagnostic methods are appropriate and adequate
- The practice has demonstrated effectiveness in several replicated research studies using different samples, at least one of which is comparable to the population to be served, or there is clear evidence that the benefits are likely to generalize
- The practice either targets behaviors or shows beneficial effects on behaviors that are generally accepted outcomes
- The practice can be logistically applied in everyday clinical settings in different geographic areas
- The practice is cost effective, and trainers are available
- The practice is manualized or otherwise sufficiently operationalized so that it can be implemented in accordance with the standards of the model
- The practice is acceptable to practitioners and treatment recipients
- The practice is based on a clear and well-articulated theory
- The practice has methods of ensuring fidelity to the model
- The practice can be evaluated adequately
- The practice leads to adequate retention of participants
- The practice adequately addresses different ethnic/racial, age groups, genders, and other cultural factors
- The practice can be used by staff from diverse backgrounds, with differing educational and training experiences

The reader can find more information on concepts related evidenced-based practices in the other volumes in this series located at http://www.sccmha.org/quality.html.

EMPOWERMENT AND RECOVERY

Empowerment is fundamental to building resilience, facilitating recovery, and moving from dependence to independence. Peer-based and operated supported recovery models have a long history in the field of substance abuse treatment dating back to the eighteenth century and include self-managed recovery houses, Native American recovery circles, and mutual or self-help programs (e.g., twelve-step and secular groups). While not a form of treatment, such models nevertheless can provide effective reinforcement and motivation for individuals both during and subsequent to active treatment as complementary components of the recovery process.

Self-help programs assist participants in developing appropriate social skills, establishing healthy social networks, and engaging in substance-free healthful activities[3]. They help individuals take responsibility for their own recovery and are sources of social support, peer identification, relapse prevention, and treatment reinforcement. Peers who are in recovery function as role models and mentors relating their own stories of recovery which can exert a positive effect on others. Moreover, peers can often view signs of relapse in others well before seeing them in themselves. Most treatment programs encourage participation in mutual help programs and a number even mandate such attendance.

The most frequently used and available self-help strategy is the twelve-step approach, exemplified by Alcoholics Anonymous (AA). Alcoholics Anonymous started as a fellowship dedicated to assisting people desiring to abstain from alcohol consumption in 1935 by Bill W. (a stockbroker) and Dr. Bob (a surgeon). The Twelve Steps were composed in 1938 and originally appeared in the *Big Book* of AA. In AA, sobriety is maintained by applying the Twelve-Step philosophy and sharing experiences with others who have suffered similar problems. Many participants find another AA member who serves as their sponsor and offers guidance and help during crises in which one is vulnerable to a return to substance use. A variety of AA meetings and memberships exist including those for women, Native Americans, non-smokers, individuals who are HIV positive and those who are gay, lesbian, bisexual or transgender.

The sharing and group support approach led to the development of a number of self-help programs, such as Al-Anon (for families and friends) and Narcotics Anonymous (NA) for persons with addictions to substances other than, or in addition to, alcohol and secular groups. Self-help meetings can be organized around a variety of specific characteristics (e.g., gender, dual-diagnosis status, sexual orientation, and career orientation). A number of alternatives to Twelve-Step programs are available such as Rational Recovery, Secular Organizations for Sobriety (Save Ourselves), and Women for Sobriety. There are also self-help groups that have a specific religious orientation such as Overcomers Outreach (for Christians), Jewish Alcoholics, and Chemically Dependent Persons and Significant Others.

[3] The value of recreational activities include: (1) social skills acquisition, (2) learning cooperation and trust, (3) experiencing healthy competition and teamwork, (4) bonding with others, (5) structure, and (6) health benefits. Recreational activities that involve physical exercise often diminish agitation, stress, anxiety, and depression, and increase appetite and healthy sleep.

It is recommended that adolescents, older adults, persons of color, and those who are lesbian, gay, bisexual or transgender (LBGT) participate in groups whose membership includes similar individuals. A number of communities have LGBT-specific twelve-step meetings (e.g., AA, NA, and Al-Anon). However, LGBT people erroneously link AA to religion and choose not to participate since many religious institutions denounce or condemn homosexuality, and references to a higher power or God in the twelve-step model can engender fear of prejudice rather than assurance of support. The need to accept one's powerlessness which is a central tenet of twelve-step self-help programs may not be acceptable to members of certain minority groups who have endured oppression and social powerlessness.

Specialized Twelve-Step groups are available for women. The traditional Twelve Steps have engendered some controversy regarding their appropriateness for this population. For example, the requirement that women submit to a higher power has been criticized as disempowering to women, who may need to be more (rather than less) assertive. Feminist literature has been critical of the Twelve Steps due to interpretations of submission as surrender, and language which is viewed as sexist and over simplified.

Twelve-step groups do not always welcome people with co-existing disabilities, particularly those who need to take medications. Some groups view medication as a crutch and may view participants on medication as lacking sobriety. The original twelve steps have been adapted for individuals with brain injuries, limited reading skills, and mental retardation. Individuals with mental retardation have been found to benefit from a facilitator although facilitators are typically not part of standard twelve-step meetings.

Peer self-help participation during incarceration can prepare clients for participation in such organizations in the community following release. Community self-help organizations can offer peer role models who have overcome the dual stigma of substance abuse and a criminal history and provide an effective therapeutic connection between incarceration and transition to the community.

Dual recovery mutual self-help groups for individuals with co-occurring substance use and psychiatric disorders arose from the traditional twelve-step fellowship recovery movement and the mental health consumer movement (e.g., Double Trouble in Recovery, Dual Disorders Anonymous, and others). These groups promote personal responsibility for recovery and rely on peer support for maintaining recovery.

It should be noted that there is a paucity of scientifically sound research on the efficacy of self-help programs primarily due to participant anonymity. Moreover, the constitutionality of mandating participation in spiritually-based groups has been challenged. Nonetheless, self-help groups offer a number of benefits including, availability during a variety of day and evening hours, the provision of a non-using peer support group, and lack of cost for attendance and participation. Reductions in substance abuse among participants of mutual self-help groups have been associated with frequent meeting attendance, finding a sponsor, working the twelve steps, and leading meetings.

Research indicates that clients should be encouraged to participate in self-help groups, but not be required to do so. And, although participation in self-help groups has been shown to be associated with beneficial outcomes and to provide a significant source of support, they are not necessary for all clients. Some clients who refuse to participate nonetheless achieve beneficial treatment outcomes.

The **Behavioral Health Recovery Management** project offers a listing of various mutual aid resources at www.bhrm.org. Other resources can be found the on web site of the **National Mental Health Consumer's Self-Help Clearinghouse** at www.mhselfhelp.org. In addition, a listing of self-

help programs can be found in Appendix B of this document. Other peer support models that have been found to be effective, including peer counseling, mentoring, and outreach, are discussed below.

Peer counselors[4] have been found to be of assistance since they have shared life experiences with various populations served. Compeer programs in which volunteers assist clients in maintaining sobriety and managing other aspects of their lives include peer-run support groups, drop-in centers, peer respite services, and peer counseling at Centers for Independent Living (that help individuals deal with limitations posed by co-existing disabilities). The services of volunteer alumni and family members of alumni are also used in many programs and have been found to be effective in engaging and retaining individuals and families in treatment.

Mentoring is another peer support model used to help clients obtain personal and social support as well as assistance in accessing community resources. Mentors function as role models and encourage the development of life skills. Mentoring is often used in the justice system particularly for women and youth. Individuals who are no longer involved with the criminal justice system and have successfully navigated life in the community can become important role models for people who are transitioning into the community from a correctional facility. They can be of assistance through the provision of transportation to treatment and social service appointments, assistance with preparation for job interviews, and attendance at twelve-step and peer support group meetings. In some justice system mentoring programs, mentors meet with individuals prior to release to provide encouragement assistance with goal-setting (e.g., finding a job, locating housing, obtaining social supports, and applying for benefits).

Peers are also used in various outreach models, particularly to engage individuals with substance use problems who are homeless since they are acquainted with local communities and the informal rules governing their behavior. A common form of community-based street outreach is the indigenous leader outreach model, which uses individuals who are in recovery to locate and contact people who use injection drugs. Some outreach programs also use street outreach workers to distribute coupons redeemable for free treatment. Studies of outreach programs have shown that they are successful in helping people enter treatment.

Alternatives for Girls (AFG), located in Detroit, is an example of an effective treatment program that incorporates peers as outreach staff. The program employs young women who have histories of participation in high-risk activities (e.g., school truancy, substance abuse, or gang involvement) as peer educators to work with at-risk peers. They receive training from the program to work on the street with women who are homeless and engage in high-risk activities (e.g., prostitution and substance abuse) in teams comprised of staff and trained volunteers and drive throughout the streets of areas of Detroit in vans that function as mobile bases and offer assistance (e.g., food, clothing, shelter, HIV prevention materials, crisis intervention services, transportation to medical services, and referrals). In

[4] There is some debate in the literature regarding the therapeutic effectiveness of persons in recovery who function as therapists. Research indicates that treatment outcomes are no different from treatment provided by therapists lacking such first-hand experience with substance use, and that clients do not perceive differences in treatment. However, there are differences in treatment methods used and perceptions regarding substance disorders. The literature recommends that all therapists possess appropriate credentials whether in recovery or never having experienced a substance use disorder.

addition to the services offered through the mobile unit, support groups, activities, and case management services are provided.

THE CULTURAL CONTEXT

In recent years much greater attention has been paid to the role of culture in the treatment process with an appreciation for the ways language, literacy levels, communication styles, family values and dynamics, use of indigenous rituals and healing practices, cultural norms and institutions, and differing cultural views of substance abuse add to the complexity of working with individuals who experience difficulties with substance use. The concept of multiculturalism has challenged that of the melting pot of assimilation into American culture; contemporary views hold that people no longer decide to discard their ethnocultural identities, but rather, embrace and honor them.

While it is often assumed that cultural diversity is relevant to specific ethnic and racial groups, diversity is applicable to a number of different groups and characteristics that affect treatment including age, gender, sexual preference, socioeconomic status, geographic locale (rural, suburban, or urban), language spoken, literacy level, employment status (e.g., chronic unemployment or underemployment), living situations (including homelessness), childcare responsibilities and/or pregnancy, co-occurring mental and substance use disorders, co-existing disabilities, and criminal justice status (including incarceration, parole and probation).

Cultural differences are manifest in help-seeking behaviors, caretaking and care giving behaviors, views regarding the causes of illnesses, sexuality and homosexuality, death and dying, and communication (e.g., eye contact, and touching). Culture can affect attitudes regarding proper family behavior, family hierarchy, and norms regarding boundaries (so that in some what may appear to be enmeshment or disengagement may actually be culturally congruent), dealing with shame and guilt, and acceptable levels of substance consumption.

Stigma can discourage people from entering treatment and cause them to leave treatment prematurely. It creates barriers in other parts of the health care system as evidenced by inadequate doses of adequate pain medication often given to people with substance use disorders in medical settings and the refusal of some organ transplant programs to provide liver transplants to individuals on methadone maintenance therapy. Stigma can affect substance abuse treatment programs as well. Most notable is the NIMBY (not in my back yard) syndrome that prevents new programs from opening in the face of community opposition. Information on SAMHSA's (Substance Abuse and Mental Health Service Administration) national campaign to combat stigma and promote recovery, Partners for Recovery, can be found on the web at http://pfr.samhsa.gov/.

The stigma associated with substance use disorder treatment is especially relevant to women and older persons and may lead to delays in seeking treatment. Mothers may forestall obtaining treatment due to fears of loss of custody and/or feelings of guilt or shame for placing their children in dangerous situations and activities they have engaged in to acquire substances.

Treatment and services are considered to be more effective when delivered in clients' native languages and in a manner that is sensitive to specific cultural patterns of beliefs, feelings, and behaviors. For example, individuals from Western cultures may respond to interventions that stress individualism and self-control, whereas individuals from more sociocentric cultures that place a high value on lifelong family member interdependence may respond better to family-oriented approaches. Counseling clients from such families to achieve more independence from their families is incongruent, but working with them to achieve more support and interpersonal effectiveness with family members is congruent.

While much has been written on various aspects of working with multiple cultures, there is a paucity of research on the ways culturally competent treatment for specific populations should be delivered. For instance, studies indicate that ethnic match between the clinician and client is a factor in treatment, but is not the only one of significance, and ethnic match does not always lead to improved outcomes since degrees of acculturation and language can also influence the process and outcome of treatment. Moreover, providers from diverse groups are not well represented in the treatment system so that it is not always possible to provide such a match. (Eighty-five percent of providers are Caucasian, but almost half of clients are from other ethnic groups.)

In general, it is recommended that staff members represent the cultural diversity of programs' client populations and that forms, books, videos, and other materials reflect the culture and language of the people served. It is also recommended that programs maximize treatment accessibility (e.g., through propinquity to public transportation and locations viewed as safe for evening visits). Facilities should also be accessible to individuals with co-existing disabilities, and services should be available during hours and on days that are convenient for clients. Research demonstrates that treatment programs located in areas convenient to clients are associated with lower attrition rates.

Cultural competence entails understanding the characteristics of racial and ethnic groups' histories, acculturation levels, beliefs about health, family and community roles and relationships, and attitudes regarding substance use disorders. Additionally, it encompasses understanding the mores of groups linked by gender, age, geography, sexual preferences, criminal activity, substance use, and medical and mental illnesses. Organizational culture is an important factor in welcoming members of other cultures (e.g., incorporation of cultural traditions such as holidays).

Five elements of cultural competence have been identified:

❶ Valuing diversity
❷ Cultural self-assessment
❸ Understanding the dynamics of cultural interactions
❹ Incorporating cultural knowledge
❺ Adapting practices to the diversity of the setting

Appendix J contains the National Standards for Culturally and Linguistically Appropriate Services (CLAS). The paragraphs below discuss cultural issues related to working with people who experience difficulties with substance use in terms of ethnicity, sexual orientation, gender, and age.

Ethnic Groups

Ethnic groups represent diverse populations and the differences among individuals within racial and ethnic groups suggest that individuals who represent particular groups may not be sensitive to all of the issues of those groups. Moreover, individuals do not fit into just one population category; a person can be a member of several populations (e.g., a Latina who is pregnant, bisexual, and has major depression). Thus, information regarding specific populations should not be used to categorize people or indicate applicability to all individual members of such groups. In sum, individuals belong to multiple groups, have multiple identities, and reside within multiple contexts and are thus the experts regarding what culture, ethnicity, identity, and other characteristics signify to them.

Members of minority groups more frequently receive treatment that is not consistent with evidence-based standards. For example, studies of methadone maintenance programs have found that lower and less effective doses are often used for African American patients. Clients who are members of ethnic minority groups demonstrate a high rate of dropping out of treatment after the first therapy session. Ethnic groups are disproportionately affected by the social consequences of substance use.

While rates of drug use among Caucasians and African Americans are about the same, African Americans are arrested for drug related crimes five times more often than Caucasians. More Caucasians are referred to treatment, while people of color are more often incarcerated. Hispanics/Latinos and individuals with cognitive disabilities and substance use issues are also disproportionately involved in the criminal justice system.

Native Americans have the highest rates of substance use disorders of any ethnocultural group and they start using substances at younger ages, at higher rates, and in combination more than any other group. Native Americans tend to delay seeking treatment and are more likely to suffer from nutritional deficiencies, medical complications including sexually transmitted diseases, and fetal alcohol syndrome. Culturally congruent interventions for this population entail the use of traditional practices such as Talking Circles, Sweat Lodges, Four Circles, Vision Quest, medicine cards, herbs, tribal medicines, and intervention from natural healers and community members (e.g., family, tribal healers, elders and holy persons) who serve as counselors, mentors, and role models.

The involvement of the church and treatment that incorporates spiritual elements are culturally congruent for many African Americans. Treatment that incorporates Afrocentric values (e.g., collective self-esteem, community, spirituality, conventional family roles), focuses on prosocial reasons for ceasing substance abuse, and includes families, can be more beneficial.

Language can be a barrier to treatment for Hispanics/Latinos. Bilingual staff and translated written materials are important ingredients of treatment programs for this population. Culturally congruent interventions involve the extended family and significant others as well as traditional folk remedies and healers.

Asian and Pacific Islanders may not seek treatment until difficulties become severe. Interventions that use nonverbal and indirect communication techniques may be more culturally congruent for Asian cultures that find discussion of underlying feelings unacceptable and do not make emotional-physical connections. Techniques that use confrontation and group therapies may not be effective due to violations of cultural norms. Treatment that incorporates traditional methods of healing such as meditation, qigong, yoga, massage, acupuncture, and tai chi may be helpful.

Substances of abuse affect different groups in different ways. For example, Chinese people tend to metabolize nicotine thirty-five percent more slowly than Hispanics/Latinos and Caucasians. Although the clearance of nicotine is similar for African Americans and Caucasians, the clearance of cotinine, a metabolite of nicotine, is slower in African Americans, so more nicotine, and more tobacco smoke toxins per cigarette, are consumed. There are also variations in sensitivity to alcohol. For example, more than eighty percent of some Asian groups (compared to ten percent of Caucasians) are sensitive to alcohol due to genetic differences in liver enzymes that metabolize alcohol. Approximately fifty percent lack aldehyde dehydrogenase-2 (ALDH2) which eliminates acetaldehyde formed by ethanol metabolism. African Americans and Hispanics/Latinos have higher mortality rates from cirrhosis of the liver than do Caucasians, Asians, and Pacific Islanders. African Americans are at greater risk than other populations for the co-occurrence of diabetes and hypertension that can predispose them to risk for cerebrovascular accidents and alcohol consumption can affect levels blood sugar.

The effects of pharmacotherapeutic interventions can vary among different ethnic groups. For example, propranolol (a beta blocker used for withdrawal management) is less effective in African Americans than Caucasians. Asians are more sensitive to the effects of beta blockers on heart rate and blood pressure, and hence require lower doses. Fifteen to twenty-five percent of African Americans have less of the enzyme activity needed to eliminate diazepam so it may have a longer half-life than it does in other ethnic groups. Many Asians are poor metabolizers of diazepam requiring

lower dosages. African Americans may be at greater risk of developing toxic side effects from antidepressants since they are likely to metabolize tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs) less efficiently than Caucasians and hence may require lower doses of these medications. Asians appear to metabolize clomipramine more slowly than Caucasians, but may metabolize phenelzine faster, resulting in the need for higher doses relative to that which would be appropriate for Caucasians.

WOMEN AND INFANTS

Research suggests that the causes, consequences, and costs of women's substance use problems differ in a number of ways from that of men's. For example, the onset of substance abuse among women is more likely to be tied to specific events (e.g., losses from divorce or the death of a loved one). Women also tend to enter treatment at later stages than men, and encounter many gender-related barriers to treatment. Women are more likely to be caretakers for minor children or elderly parents and need to balance these family responsibilities as well as resource requirements (e.g., food, housing, medical care, personal safety) with their own treatment needs. Women who have substance disorders have an increased incidence of co-occurring mental illnesses (e.g., depression, eating disorders, posttraumatic stress disorder, anxiety), co-existing medical problems (e.g., gynecological disorders, sexually transmitted diseases, HIV, and hepatitis B), are at increased risk for suicide, and forty-four to seventy percent have histories of physical, sexual, and emotional abuse. Women metabolize alcohol differently then men and have been found to develop more severe medical problems associated with alcohol use while consuming smaller amounts of alcohol than men (e.g., alcohol-related hepatic injury and cardiomyopathy).

In 1992 the block grant funds administered by the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Treatment (CSAT) began to require a ten percent set-aside of funds for specialized programs for women. Programs that receive public funding for women's services are mandated to provide or arrange for the following services for pregnant women and women who have dependent children (including those who are trying to regain custody of their children):

- Primary medical care
- Primary pediatric care, including immunizations
- Gender-specific treatment for substance disorders
- Therapeutic interventions for children in the custody of women in treatment
- Case management
- Transportation

Effective treatment for women includes components that address specific issues such as child care, parenting skills, establishing healthy relationships, trauma/abuse, avoiding domestic violence, preventing HIV infection and other sexually transmitted diseases, reproductive health, and enhancing self-esteem. The importance of relationships with their children has been found to be a significant motivator. Research indicates that women experience more beneficial outcomes from single-gender treatment groups that are specific to women.

One of the most significant barriers to accessing treatment for women who are pregnant is the stigma associated with substance use. Often, such women do not access treatment services until they are in the mid to late second trimester. Research suggests that reducing substance use during pregnancy can decrease later substance use disorders in both mothers and their children. However, those who cease substance use during pregnancy are at heightened risk for relapse during the first six weeks post partum.

A safe amount of alcohol consumption during pregnancy has yet to be determined. Research has clearly demonstrated that exposure to alcohol at different times during pregnancy causes damage to fetal brains and other organs. Deficits in learning and memory, attention, cognitive functioning, motor control and behavior have been documented in children exposed to alcohol in utero. Fetal alcohol syndrome is the most common preventable cause of mental retardation. Common prenatal complications of other types of substance use during pregnancy include preterm labor, intrauterine growth retardation, low birth weight, central nervous system damage, congenital physical malformations hepatitis B and HIV infection and others.

Infants exposed to substances in utero and their families require an array of social and health care services and supports to maintain an intact family structure. Interventions tend to focus on the mother-child dyad and also include fathers and extended family members, particularly those who do not abuse substances. The primary goal is to maintain an intact family. Essential services include quality day care, individual and family counseling and crisis counseling, housing assistance and emergency shelter, emergency financial assistance, and temporary or respite care. Outreach, provided by mothers who are in recovery, can function as role models, help with transportation, home visits, and procurement of other services and supports.

Postnatal interventions focus on helping mothers effectively parent their children, refrain from substance use, and address social needs. Early intervention for infants includes nutrition supports (especially if there is an inadequate sucking reflex), psychomotor assessment and monitoring of development, vision and hearing screenings, speech and language assessments and therapy if needed, emotional development assessments and therapy if needed, play therapy, early educational needs assessments, physical therapy, and immunizations. Access to such federal programs as Early Periodic Screening, Diagnosis and Testing (EPSDT), maternal and child health services, community health centers, services and supports under the Individuals with Disabilities Education Act (IDEA), Medicaid, WIC (Women, Infant and Children), TANF (Temporary Assistance to Needy Families), food stamps, housing assistance, and the Healthy Start Program should be available. Case Management can be critical to ensuring access to needed services and supports.

ADOLESCENTS

Many adolescents explore the use of substances and, by age eighteen, most have tried them at least once. The United States has the highest rate of drug abuse among adolescents of all industrialized nations and the onset of substance use is occurring at younger ages. Substance use can exert profound effects on the developing brain and impair intellectual, emotional, and social development. Yet, children and adolescents who abuse substances are under treated.

Adverse outcomes associated with substance use and abuse among adolescents include poor school performance, problems with authority, engaging in high-risk behaviors (e.g., driving while intoxicated and engaging in unprotected sexual activity), death from overdose, suicide, infectious diseases (including HIV/AIDS), and unwanted pregnancies. The leading causes of death during adolescence and young adulthood are from motor vehicle and other unintentional accidents, homicides, and suicides, fifty percent of which are associated with substance intoxication. Operating a motor vehicle while under the influence of alcohol occurs more than twice as often during adolescence than adulthood.

Warning Signs of Substance Use
▪ Marked change in physical health ▪ Deteriorating performance in school or work ▪ Marked alterations in personality, dress, or friends ▪ Engagement in serious delinquent or criminal behaviors ▪ HIV high-risk activities (e.g., injection drug use or sex with injection drug user) ▪ Serious mental health problems (e.g., suicidal ideation or severe depression)

Research indicates that multimodal treatment services are most effective for adolescents and that effective interventions share the following features:

- Comprehensive evaluation to identify problems and treatment needs in multiple domains
- The use of empathic, supportive, and motivation-enhancing techniques to improve engagement and retention
- The use of behavioral techniques informed by urine toxicology results to promote and shape prosocial behaviors and discontinuation of substance use and other problem behaviors
- The use of cognitive-behavioral and skills-building techniques delivered in individual or group formats to enhance self-efficacy, problem-solving, decision-making, communication, anger management, mood regulation, coping, and relapse prevention skills. Such techniques are used to help adolescents anticipate and avoid high-risk situations and identify triggers for substance use, decrease associations with peers who use substances, and encourage involvement in enjoyable, prosocial activities that are incompatible with substance use.
- Involvement of the family in treatment, with a focus on enhancement of parental monitoring and behavioral management skills, and use of restructuring interventions to correct ineffective patterns of interaction, relationships, and behaviors to improve overall family functioning (e.g., strategic-structural family therapy)

LBGT Cultures

Youth who are lesbian, gay, bisexual, and Transgender (LGBT) have been shown to be at high risk for developing substance use disorders. Some research indicates that the rate of alcohol use disorders in this population is three times higher than in the general population. Additional issues include rejection by family and friends, harassment, and verbal and physical abuse. These youth may run away from home, end up homeless, and engage in intravenous drug use and prostitution. LGBT youth who are homeless are at high risk for victimization and exploitation due to survival sex (i.e., the exchange of sex for food, clothing, money, and shelter), suicide (estimated to be three times higher than their peers), sexually transmitted diseases, pregnancy, substance abuse, mental health problems and medical problems. Those who remain at home have been found to experience more difficulties with schoolwork, sexual abuse, and substance abuse than their cohorts.

While they face the same developmental tasks as their peers, LGBT youth must also deal with the additional challenges of dealing with the stigmatization of their identities. These youth have significant rates of anxiety, depression, suicidal ideation and attempts. Many do not broach difficulties with health care providers for fear of further rejection and alienation. Their reluctance to seek health care can result in late diagnosis and less favorable treatment outcomes.

Most communities lack services and supports that provide assistance with feeling comfortable with, and taking pride in, one's sexual identity. There is also a dearth of substance use disorder treatment

resources for this population and, while some treatment models have been developed, most have not been evaluated.

LGBT adults face double stigmatization and can encounter bigotry in employment, human service agencies, the criminal justice system, and health care settings. They often experience a number of co-occurring disorders including posttraumatic stress disorder, affective disorders, sexual trauma, suicidality, and eating disorders. The health care needs of this community have often been ignored, denigrated or denied. LGBT-sensitive substance abuse treatment services are lacking, and issues related to the association between hepatitis, HIV infection and substance abuse are not usually addressed adequately.

Studies of individuals from LGBT cultures indicate an association with substance use, particularly alcohol, but also marijuana and cocaine use at rates that are higher than their heterosexual cohorts, particularly among those who are younger. However, it should be noted that data on the precise incidence and prevalence of substance use disorders is lacking. Social settings for people who are LGBT have been limited to private homes, bars and clubs where drugs and alcohol are often used. Party drugs such as methylenedioxymethamphetamine (MDMA, also known as ecstasy or X-C-T), ketamine (or Special K) along with gamma hydroxybutyrate (GHB) are used at circuit parties (i.e., weekend long gatherings that focus on dancing, sexual activities, and the use of alcohol and drugs), raves, dances, and celebrations. Party drugs can cause impaired judgment and increase the potential for engaging in high risk sexual behaviors which can lead to HIV and hepatitis C transmission. Research has found that men who have sex with men (MSMs) and who abuse alcohol, stimulants, inhalants, and other street drugs are more likely to engage in unprotected sex, share needles, and become infected with HIV.

LBGT persons of color experience double minority status, specific cultural or ethnic issues related to homosexuality or sexual behaviors, and face racism in addition to attempting to fit into the LBGT community. Some cultures (e.g., Latin-based cultures) stigmatize men who are like women, while others may not censure sex between men, but at the same time not acknowledge or discuss it, particularly in relation to married men or men who consider themselves heterosexual (or bisexual). A lesbian, gay, bisexual, transgender orientation may be even more unacceptable in some ethnic minority groups than mainstream culture.

Studies indicate that individuals who are transgender experience more exposure to discrimination and violence than gays and lesbians. Hormone therapies can affect mood, particularly when not taken in accordance with standard regimens. Improper ingestion of estrogen mimics premenstrual symptoms which can trigger or exacerbate post acute (substance) withdrawal syndrome and lead to relapse. Female-to-male hormone use requires injections and the use of needles increases risk for hepatitis C and ovarian cystic syndrome, and can be a trigger for injection substance use relapse. Hormones can impair liver function, and when combined with the effects of alcohol and other substances of abuse, exacerbates this problem. It is recommended that medically managed hormone therapy be continued during substance abuse treatment. This also avoids the risks associated with using and or injecting street or black market hormones.

There is a paucity of research on substance abuse in the transgender community, but the literature points to significantly high rates. There is also a significant amount of HIV infection especially in the male-to-female group. Lack of social supports, negative experiences with social service and health care systems, isolation, low self-esteem and internalized transphobia are significant issues for this population to be addressed in treatment. Transgendered individuals face issues pertaining to housing, inpatient care, and shelters in relation to sleeping arrangements and rest room use. Treatment programs that use urine screening administration observation should inquire which gender observers

are preferred by LGBT clients. Separate, non-gender specific bathroom facilities are preferable since individuals who are undergoing gender reassignment, or may be living as the gender opposite the one they were born with, may use rest room facilities that differ from expectation.

In sum, LGBT clients may be coping with coming out, sexual orientation and gender identity societal stigmas, HIV/AIDS, discrimination, same-sex relationships, and rejection by family, employers, and work colleagues all of which can adversely impact the ability to alter substance use and other harmful behaviors. Some LGBT clients may need to address their feelings regarding their sexual orientation and gender identity as part of the recovery process in order to prevent relapse.

In general, effective treatment for substance disorders includes addressing LGBT clients' feelings regarding their sexual identity (i.e., level of comfort) and the impact of homophobia and heterosexism. In addition, interventions should be tailored to the individual's stage of the coming out process (i.e., identity confusion, comparison, tolerance, acceptance, pride, identity synthesis) and address the extent of their social support network including current relationships (e.g., partner[s] and family of choice), past and present relationships with families of origin, and health issues (including HIV status). Research indicates that LGBT individuals experience more beneficial outcomes in groups that are specific to this population; mixed treatment settings are not recommended due to conflicts that can arise from homophobic behavior.

Older Adults

Older adults are one of the fastest growing and most vulnerable segments of the population. And, while the substance abuse research literature first depicted older adults as a distinct population in 1964, it was not until the late 1980s that this cohort received significant attention. Substance use problems in adults aged sixty and older often go unidentified, undiagnosed, and untreated, despite the fact that problems with alcohol and/or prescription drugs affect an estimated seventeen percent of this population, substance use disorders are often more severe in this population, and there is increased risk for the co-occurrence of medical disorders.

Individuals aged sixty-five and older consume more prescription and over-the-counter drugs than any other age group in the United States. It has been estimated that eighty-three percent take at least one prescription medication, and a significant proportion of prescriptions are for psychoactive, mood-altering medications (e.g., benzodiazepines, antidepressants, and opiate/opioid analgesics[5]) that pose a risk potential for misuse, abuse, or dependency as well as impairments in psychomotor performance, vision, and attention. Most research indicates that the majority of adults who take these medications do so for health-related conditions or to ameliorate stress and do not intend to abuse or become dependent on them. However, the physiological aging process produces reductions in the ability to absorb and metabolize them, allowing drugs to accumulate more rapidly and increasing the likelihood for toxicity and adverse effects. Drug-drug and drug-alcohol interactions are more problematic for older adults due to slowed metabolic and clearance mechanisms which cause a delay in the resolution of adverse reactions. Adverse effects from continuous use of psychoactive

[5] Dosage needs decrease with age due to slowing of the onset of action secondary to reductions in the rate of gastrointestinal absorption and longer duration of action secondary to reductions in metabolism and liver functioning.

substances, even at therapeutic doses, have been associated with a number of central nervous system effects in this population including reductions in psychomotor performance, impairments in reaction time, loss of coordination, confusion, ataxia, falls, excessive drowsiness during the day, amnesia, rage, exacerbation of emotional states, and withdrawal effects upon abrupt discontinuation.

Older adults are more vulnerable to the deleterious effects of alcohol due to age-related changes (e.g., increased sensitivity and reduced tolerance, decreased metabolism of alcohol in the gastrointestinal tract[6], reduced body water) and co-occurring illnesses. Standard thresholds for at-risk consumption and tolerance can pose risks for this population. Hypertension and diabetes mellitus can be exacerbated by relatively small amounts of alcohol consumption. In addition, consumption of alcohol can trigger or exacerbate additional medical problems (e.g., increased risk for hypertension, cardiac arrhythmia, myocardial infarction, cardiomyopathy, increased risk for hemorrhagic stroke, immune system impairment, and capability to combat infection and cancer, cirrhosis and other liver diseases, reductions in bone density, gastrointestinal bleeding, depression, anxiety, and other mental health problems, and malnutrition).

The combination of alcohol with drugs poses a risk. For example, the combination of alcohol and diazepam can lead to death. Alcohol can increase lithium toxicity and augment central nervous system depression in combination with tricyclic antidepressants. High doses of benzodiazepines in combination with barbiturates or alcohol can be lethal. The combination of meperidine and a Monoamine Oxidase Inhibitor (MAOI) can cause hyperthermia, rigidity, blood pressure fluctuations, hyperreflexia, coma, and death. Cognitive impairments in older adults are both confused with, and exacerbated by, alcohol use. In addition, chronic alcohol consumption can cause serious, irreversible changes in brain function and may have direct neurotoxic effects leading to alcohol-related dementia (ARD) or may be associated with the development of other dementing illnesses such as Wernicke-Korsakoff syndrome. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) recommends that individuals over the age of sixty-five consume no more than one drink[7] per day.

Complaints regarding sleeping difficulties are common among older individuals. Sleep patterns typically change as people age. Increased episodes of sleep with rapid eye movement (REM), decreased REM length, decreased stages III and IV sleep, and increased awakenings are common patterns, all of which can be worsened by alcohol use. Such difficulties can occur in conjunction with psychiatric, medical and pharmacological problems, and changes in the circadian rhythms that occur with aging. A number of medications cause inadequate patterns of sleep. These include anti-Parkinson drugs, beta blockers, MAOIs, and SSRIs.

While benzodiazepines have been shown to be effective as a short-term intervention for insomnia, they can exacerbate sleep apnea and lead to rapid development of tolerance and dependence along with REM sleep rebound effects upon abrupt discontinuation. They can cause confusion and problems with equilibrium and thus pose risks for individuals who arise frequently during the night. Antihistamines are also prescribed for sleeping problems, but older individuals are at increased risk

[6] The decrease in gastric alcohol dehydrogenase enzyme exacerbates problems with alcohol since it is metabolized more slowly, so the blood alcohol level remains elevated for a longer time. Increased strain is also placed on the liver since the stomach is less actively involved in metabolism.

[7] A standard drink is one twelve-ounce can of beer or ale, a single one and a half-ounce shot of hard liquor, a five-ounce glass of wine, or a four-ounce glass of sherry, liqueur, or aperitif. See at-risk drinking for more information on this topic.

for adverse effects such as orthostatic hypotension, confusion, central nervous system depression, and also appear to be more susceptible to their anticholinergic effects. Antihistamines and alcohol potentiate one another which can exacerbate the previously-noted problems as well as the development of tolerance within days or weeks of onset of use. These drugs are not recommended for older adults living alone, and their efficacy for sleep disturbances is dubious. It is recommended that first-line treatments for insomnia include intervention for underlying disorders and behavioral interventions (e.g., relaxation techniques, avoiding caffeine and alcohol, and reducing late evening food and fluid intake).

While there is a paucity of research on substance use disorders focused on older adults and a lack of empirically proven treatment techniques, data indicate that age is associated with beneficial treatment outcomes. The older an individual is, the more likely they are to remain in treatment, finish a course of treatment, and experience beneficial outcomes subsequent to treatment. Age-specific programs have been shown to result in higher rates of treatment session attendance and adherence to interventions than mixed-aged treatment. Programs for older adults include the following elements:

- Age-specific groups that are supportive and nonconfrontational and focus on fostering self-esteem
- A focus on coping with depression, loneliness, and loss (e.g., death of a spouse and retirement)
- A focus on rebuilding social support networks
- Pacing and content appropriate for older persons
- Linkages with medical and older adult services and supports
- Case management

WORKING WITH FAMILIES

Most individuals with substance disorders, contrary to long-held popular belief, maintain close ties with their families, particularly their mothers. In fact, studies have consistently documented they maintain more contact with their families of origin than their cohorts in the general population. However, people with substance use disorders also often experience marital, relationship, and family problems (e.g., neglect and abuse), and such difficulties can function as relapse triggers.

Studies have shown that there is an increased likelihood for child abuse by parents with substance use disorders. The abuse of substances has been found to be a factor in incidents of abuse or neglect of approximately three quarters of all children in foster care placements. In addition, youth who have been in foster care have been found to experience higher rates of both substance use and disorders.

Adults who have histories of child abuse and neglect have been shown to be at high risk for developing substance abuse disorders and that such histories can negatively impact recovery. A review of the literature reveals that women with substance abuse disorders are almost two times more likely than women in the general population to report childhood sexual abuse and are also more likely to have experienced physical abuse. Men who endured abuse as children have also been found to be more apt to experience substance use problems.

Research also indicates that many individuals receiving substance use disorder treatment who have histories of childhood abuse and neglect have co-occurring mental health disorders, particularly posttraumatic stress disorder (which increases the risk for relapse since its symptoms produce intrusive memories and can result in efforts to avoid them through self-medication). They are also more likely to have attempted suicide and are prone to developing relationship problems, dissociative disorders, antisocial personality disorder, paranoid symptoms, and to experience legal difficulties.

Childhood abuse needs to be identified and addressed during substance disorder treatment in order to decrease risk for intergenerational transmission of substance use disorders and repetition of problematic parent-child interactions, including abuse and neglect. Outcomes data suggest that interventions that target breaking the cycle of substance abuse and child maltreatment are more successful when they are family-centered and include access to basic necessities, such as food, housing, and transportation; medical care; counseling related to substance abuse prevention, parenting education and skills; mental health services; family planning services; child care; family therapy; life skills training (e.g., financial management, assertiveness training, stress management, coping skills, home management, anger management, conflict resolution, and communication skills); educational and vocational assistance; and language and literacy skills development. Studies indicate that such services, when provided concurrently with substance abuse treatment, lead to more beneficial outcomes including recovery.

Research on the link between violence and substance abuse indicates that substance abuse is often a significant risk factor for violent behavior and alcohol is the substance used most frequently. There is evidence that amphetamines, cocaine and other substances (e.g., hallucinogens) also potentiate violent behavior. It is estimated that twenty-five to fifty percent of men who engage in acts of domestic violence experience problems with substance abuse and that a significant portion were reared by parents with substance abuse problems. Studies also suggest that women with substance abuse problems are more apt to be victims of violence. Thus, the use of substances by either partner is a risk factor for domestic violence. It is recommended that substance abuse treatment include screening (and assessment where indicated) of all clients for past (i.e., childhood physical and sexual abuse) and present domestic violence. The literature on this topic suggests that lack of attendance to

domestic violence decreases the effectiveness of substance abuse treatment and is a factor in relapse.

Women who have been battered and return to violent relationships are at increased risk for relapse and can be vulnerable to life event relapse triggers including situations or experiences (e.g., witnessing a couple in an argument, sensory stimuli, or proximity to certain men) that can engender feelings of fear and victimization experienced during the period of victimization. These need to be addressed as additional relapse triggers during treatment. The most significant risk factor for relapse has been postulated to be re-victimization by an abusive partner; domestic violence is highly recidivistic whether or not the relationship is maintained. Anger management, violence prevention, and safety planning are needed to address this.

The violent behavior of a batterer can impede substance abuse treatment, contribute to relapse, and interfere with recovery. On the other hand, substance abuse can impede interventions designed to alter violent behavior. While abstinence alone does not alter battering behavior, substance abuse increases the likelihood for violent behavior and negatively impacts the ability to change behavior. While the use of alcohol has been linked to violent behavior in about fifty percent of cases, it should be noted that substance abuse is only one of a number of factors (e.g., witnessing parental violence during childhood) correlated with violent behavior, and violent behavior does not necessarily cease with the cessation of substance abuse. It should also be noted that while crises are typically viewed as opportunities to engage clients in treatment, batterers with substance use disorders typically abrogate responsibility and project anger onto others, so a crisis can function as a precipitant of violent behavior.

Substance abuse treatment programs typically involve families in counseling. However, couples and family counseling may be contraindicated in situations of domestic violence and should be deferred until batterers have successfully completed batterer's programs. Caution must also be exercised for encouraging involvement in twelve-step self-help and treatment programs due to distortions and misinterpretations of concepts (e.g., using codependence to indicate victim culpability or to engender guilt and shame for expecting the batterer to cease engaging abusive behavior).

There is a paucity of research on treatment programs for batterers. Interventions that encompass all relevant domains of clients' lives and involve coordination of services and supports with relevant agencies have been shown to lead to more beneficial outcomes. Victims require acknowledgement of the abuse, assistance with separation of responsibility from that of the batterer, knowledge of the potential for an escalation of the violence, a safety assessment and plan, and referrals for legal services, shelter/housing, medical and mental health care, and domestic abuse counseling.

The psychoeducational treatment model for battering is most often used. It is a cognitive-behavioral approach that is designed to promote responsibility for violent behavior and the development of self regulatory mechanisms, compassion and empathy, and a vocabulary to express appropriate emotional intimacy. Modeling is used to alter behavior in individual or group sessions, typically in single gender group treatment. Elements include:

- No-violence contracts with tangible consequences/sanctions for violations, which can be strengthened through court-mandated treatment specifications and sanctions for lack of adherence
- Emotional regulation techniques (e.g., anger management, assertiveness, stress management)
- A focus on survivor safety
- Insistence upon assumption of personal responsibility for one's behavior
- Values development

- Alteration of attitudes toward women

The Duluth model (http://www.duluth-model.org/) is the most commonly used intervention for batters and has a number of variations that all include victim safety and collaboration of community resources including law enforcement, courts, domestic violence shelters, health care, batterer's programs, and advocates. It focuses on confrontation of denial of violent behavior, examining expressions of power and control, alternatives to dominance, and fostering behavioral change. This model provides education to men regarding power and control, as well as assistance in the management of anger and personal difficulties. A community collaborative component is designed to ensure that batterers are arrested and prosecuted, and victims are protected. Information on promising violence prevention and psychoeducational programs can be found on the web site of the Partnership Against Violence Network (Pavnet) located at www.pavnet.org.

Research has demonstrated that stable marital and family adjustment is associated with improved treatment outcomes and that involvement of family and/or significant others who support a substance-free lifestyle, and whose commitment is highly valued (e.g., live-in partners, spouses, family members, people who have maintained close personal relationships), can help foster contemplation of change, involvement in treatment, and recovery. Studies have shown that marital and relationship counseling can have beneficial effects on substance abuse treatment. For example, behavioral relationship therapy has been shown to enhance interpersonal relationships, reduce substance use, enhance maintenance of sobriety, and decrease the probability of treatment dropout. In general, spousal involvement in treatment produces better treatment results than that without spouse involvement. Moreover, unilateral interventions with spouses have been found to increase clients' motivation for treatment.

Studies indicate that substance use affects family structure and can impact extended family members as well. Research has demonstrated that families in which one member abuses substances are at increased risk for other members developing substance use problems. For example, many adolescents who abuse substances have at least one parent who also engages in substance abuse. Parental substance abuse behavior has been shown to be the most significant risk factor for future difficulties in children. Moreover, treatment for adolescents with substance disorders has been demonstrated to reduce the likelihood for siblings to engage in similar behavior and mitigates the likelihood for future adversities such as unemployment, criminal behavior, and ongoing substance use disorders.

Family therapy can be used to ameliorate the influence of substance use on clients and families, help them develop ways to live without substances, and restructure ineffective interactions associated with substance abuse. In addition, it can help prevent the intergenerational transmission of substance use disorders by decreasing the impact and recurrence of substance use disorders. A number of studies have found that family therapy leads to higher treatment engagement and retention rates and is more effective than individual counseling or therapy, peer group therapy, and family psychoeducation. It has been shown to be an effective means of engaging adolescents in treatment, an often very challenging proposition as most do not view their substance use as problematic and rarely seek treatment. (Rather, they are typically coerced by the justice system or their parents.)

Studies have demonstrated that even brief family therapy models are more effective for children and adolescents than individual or group treatments. Different models of family therapy have been shown to increase engagement and retention in treatment, decrease substance use and other unwanted behaviors, reduce relapses, and enhance social functioning. Opportunities for family education and supports groups can be especially beneficial for individuals who are from sociocentric cultures that

place value on interdependence (e.g., many African American families incorporate individuals into a network of support, and Hispanics/Latinos often have extended involved family networks).

A number of family therapy models have been shown to be effective and have been adapted for use in substance use disorder treatment although no single model has yet to be shown to be singularly most helpful. Specific family therapy approaches such as Brief Strategic Family Therapy[8], Functional Family Therapy, Parent Management Training, Multisystemic Therapy, Structural/Strategic Family Therapy, and Multidimensional Family Therapy (discussed below), have been shown to lead to reductions in substance use in adolescents and improvements in family functioning. Information on these interventions can be found in *A Guide to Evidence-Based Mental Health Practices for Children, Adolescents and their Families*.

Children have been found to benefit from age-appropriate support groups prior to participation in family therapy. Such groups offer opportunities to help them develop an understanding of substance use disorders, explore feelings, and prepare for participation in family therapy. Family therapy is contraindicated in instances where family members are actively using substances, engaging in violent behavior (e.g., domestic violence and child abuse), maintaining significant levels of anger, and denying that the individual's substance use is problematic. Studies show that physical and substance abuse must be addressed contemporaneously in order to ensure safety.

Family Support Network for Adolescent Cannabis Users (FSN)

FSN is a manualized family intervention for adolescents that is used in conjunction with other interventions (e.g., Cognitive-Behavior Therapy, Multidimensional Family Therapy, Community Reinforcement Approach, and Motivational Enhancement Therapy) in order to enhance outcomes through inclusion of families in the recovery process and improve family functioning through communication, problem-solving and relationship skill building, and parental effectiveness in dealing with substance abuse and associated behaviors. FSN focuses on ameliorating deficits in family functioning in the areas of authority, roles, boundaries, communication, and routines. This program consists of three primary components:

- Case management which includes referrals to community support groups and other support services for both parents and adolescents. The procedures combine motivational enhancement and cognitive behavioral therapies as one possible treatment overlay for the adolescent.
- Six didactic ninety-minute parent education (PE) groups comprised of up to ten parents. Sessions are interactive and focus on:
    1. The family support network, adolescent development, and functional families
    2. Drugs and adolescents

[8] A Manual for Brief Strategic Family Therapy is available for download from http://www.drugabuse.gov/TXManuals/bsft/BSFTIndex.html.

3. Relapse signs and recovery
4. Boundaries, limits, authority, and discipline
5. Communication, conflict resolution, and fighting fair
6. The family context

- Three or four in-home ninety-minute family therapy sessions designed to enhance parenting skills and teach techniques for coping with parenting pressures, and promote the establishment or restoration of appropriate authority, roles, rules, boundaries, communication, and routines.

The manual for this promising approach is part of the SAMHSA Cannabis Youth Treatment Series (CYT) and can be downloaded from http://kap.samhsa.gov/products/manuals/cyt/pdfs/cyt3.pdf.

NETWORK THERAPY (NT)

Network Therapy is an office-based cognitive-behavioral intervention that incorporates components of Community Reinforcement and Behavioral Couples Therapy (i.e., behavioral skills training and medication monitoring by a significant other). The therapy employs a team of substance-free family members and friends who are engaged by the therapist to support treatment and abstinence via abstinence-based and relapse-prevention strategies. NT is used adjunctively with individual therapy and twelve-step group participation, and can be used in conjunction with pharmacotherapy (i.e., disulfiram, buprenorphine, and naltrexone), as well as Relapse Prevention Therapy and contingency contracting, and during ambulatory detoxification,.

This approach has been found to be effective in enhancing abstinence, particularly when used in a multimodal approach with pharmacotherapy. A Network Therapy Rating Scale (NTRS) has been developed to measure fidelity to the model. A manual is available and can be downloaded at not cost from http://www.med.nyu.edu/substanceabuse/manuals/nt/network-therapy.html.

MULTIDIMENSIONAL FAMILY THERAPY (MDFT)

MDFT is a four to six-month intervention for youth from diverse backgrounds between the ages of eleven and eighteen that incorporates structural and strategic family therapy to enhance a family's ability to bolster adolescents' abilities to withstand negative peer and social influences. It is designed to decrease or eliminate adolescent substance abuse and other problem behaviors, as well as improve overall family functioning. It is a SAMHSA model program that has a robust research base of support for adolescents who have problems with substance use and conduct.

MDFT views adolescent substance use in terms of a network of influences (i.e., individual, family, peer, community) and each is targeted during treatment. In addition to altering lifestyles that include substance use, MDFT addresses positive peer relations, healthy identity formation, bonding to school and other prosocial institutions, and the promotion of a developmentally appropriate balance between increased autonomy and emotional ties to parents. Parent-oriented interventions focus on fostering parental commitment and investment, enhancing parent-child relationships and communication, and developing effective parenting practices (e.g., limit-setting, monitoring, and appropriate autonomy granting).

MDFT includes individual and family sessions, as well as sessions with various family members and extra familial sessions. Sessions can be held in clinics, homes, courts, schools, community-based clinical settings, or other community locations. Sessions can also be provided via telephone. It can be used with socioeconomically diverse populations, Caucasians, African-Americans, and

Hispanic/Latino youth who are at risk for substance use problems, and/or are abusing substances, and their families in a variety of communities. In addition, MDFT has been shown to be effective for adolescents who are involved in the juvenile justice system as well as those who have co-occurring substance use and psychiatric disorders.

MDFT can be applied in different formats including a four to six-month, sixteen to twenty-five-session intensive outpatient model, and a less intensive model that consists of twelve sessions held over the course of three months. It consists of three treatment stages: Stage I: Build the Foundation; Stage II: Work the Themes; and Stage III: Seal the Changes and Exit. Progression through the phases is predicated on success with the previous ones.

MDFT is comprised of five assessment and intervention modules. Session content and foci include such issues as developmental tasks and concerns, peer relationships, involvement in the legal and juvenile justice systems, and drug use as a means of coping with circumstances or psychological status. The five assessment and intervention modules are:

- Interventions with the Adolescent
- Interventions with the Parent
- Interventions to Change the Parent-Adolescent Interaction
- Interventions with Other Family Members
- Interventions with Systems External to the Family

During individual sessions, developmental tasks such as decision-making and mastery, communication, and skills to deal with stressors are focused on to promote prosocial skills. Employment skills and vocational training are also part of treatment. Parallel sessions with parents focus on improving parenting behaviors. Parents are helped to examine their particular parenting styles, distinguish influence from control, and accept that not everything can or should be changed in order to have developmentally appropriate positive influences on their children.

Studies have shown that MDFT leads to significant reductions in substance use and problem (externalizing and internalizing) behaviors, as well as improvements in school performance and family functioning that endure well beyond treatment. A prevention version of MDFT for adolescents who are at high risk for alcohol and marijuana use and antisocial behavior has shown to lead to increased self-concept, family cohesion, bonding to school, and decreased antisocial behaviors by peers. It costs approximately $50,000.00 to train one team in MDFT. Information on training options can be obtained from hliddle@med.miami.edu. The manual for MDFT provided within the context of the SAMHSA Cannabis Youth Treatment Series (CYT) program can be downloaded from http://kap.samhsa.gov/products/manuals/cyt/pdfs/cyt5.pdf.

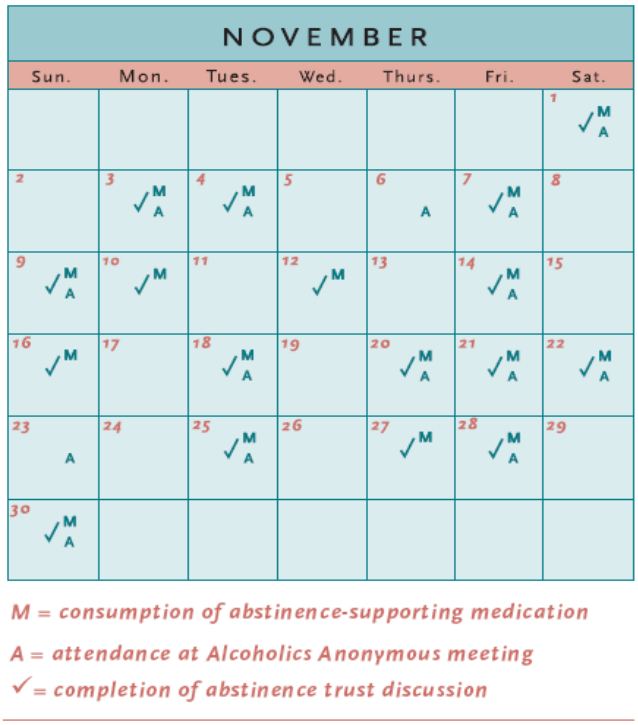
Behavioral Couples Therapy (BCT)

BCT consists of twelve to twenty sessions conducted with clients and their spouses or partners over a period of three to six months. Components include engagement, recovery contracts that use rituals to support abstinence, relationship enhancement through communication skills development and activities, and post treatment intervention to support ongoing recovery and relapse prevention. The therapy can be conducted in a number of formats as either a standalone intervention or adjunctively to individual counseling. It can also be administered as group behavioral couples therapy (GBCT) with three or four couples for nine to twelve weeks.

At the beginning of treatment, a recovery contract is developed which includes an agreement by the couple to engage in daily abstinence or sobriety trust discussions and an agreement by both partners not to discuss past substance abuse or fears of future substance abuse between scheduled sessions;

such discussions are reserved for in-session work. Abstinence trust discussions and other related activities (e.g., attendance at self-help support groups) in the recovery contract are documented on a calendar which serves as an ongoing record of progress that can be used as a visual and temporal chronicle of successes and difficulties encountered in adherence. Ingestion of daily medication doses can be incorporated into discussions with the partner witnessing and providing verbal reinforcement for adherence.

Sample Calendar for Recording Recovery Contract Activities



(NIDA, 2004)

During treatment sessions behaviors stipulated in recovery contracts (e.g., abstinence trust interaction) are performed so that the therapist can provide encouragement or corrective feedback. Adherence to agreed-upon activities from previous sessions, any difficulties experienced, and homework assignments are also reviewed during sessions. The partners report any relationship or other problems that may have arisen in order to resolve them, or formulate a plan to resolve them. Both partners' relationship satisfaction is monitored during each session using two brief measures: the Marital Happiness Scale (which assesses relationship adjustment) and the Response to Conflict Scale (which evaluates their use of ineffective methods such as yelling, sulking, or hitting to handle relationship conflicts) during the previous week. Skills that address specific problems experienced are focused on during sessions. New material (e.g., instruction in, and rehearsal of, skills to be practiced at home during the ensuing week) is then introduced. Behavioral homework assignments are given to complete prior to the next session. These are designed to increase positive feelings, shared activities, and constructive communication:

- The *Catch Your Partner Doing Something Nice* exercise during which each partner notices and acknowledges one pleasurable behavior that the other performs each day.

- The *Caring Day* assignment during which each partner plans ahead to surprise the other with a day when he or she does some special things to show caring.
- Planning and engaging in mutually agreed-upon shared rewarding activities.
- Practicing effective communication skills (e.g., paraphrasing, empathizing, and validating)

Once abstinence and relationship stability have been attained, discussion of plans for the maintenance of therapeutic gains subsequent to termination of treatment ensues along with discussion and planning for relapses, including resumption of substance use and/or recurrence of relationship problems. During the final sessions, a continuing recovery plan is written that includes ongoing post-treatment activities designed to foster stable abstinence (e.g., continuing daily abstinence trust discussions and attendance at self-help support meetings), relapse contingency plans (e.g., re-contacting the therapist, re-engaging in self-help support meetings, and contacting a sponsor), as well as activities to maintain the quality of the relationship (e.g., continuing to schedule shared pleasurable activities). Additional relapse prevention sessions subsequent to completion of treatment have been shown to help with maintenance of treatment gains.

BCT has robust empirical support for its effectiveness with diverse populations. Studies have consistently shown it leads to less frequent drinking and other substance use, reductions in inpatient treatment episodes, more abstinent days, more satisfied relationships and family functioning, reductions in intimate partner violence, improvements in the psychosocial adjustment of offspring, and decreased risk of marital separation. BCT is most effective when only one partner has a substance use problem. It is contraindicated for couples whose relationships include destructive or harmful behavior (e.g., severe physical aggression). Such couples are referred for domestic violence treatment. BCT is fully manualized, with manuals and related materials available at no cost from http://www.addictionandfamily.org/.

Community Reinforcement Training (CRT)

Community Reinforcement Training is designed to capitalize on instances in which individuals with alcohol use disorders are motivated to engage in treatment. It entails providing concerned others with motivational training and encouraging independence from the person. Several reinforcement techniques are taught including the provision of positive consequences for not drinking, scheduling activities that compete with drinking, ignoring the person when they are drinking alone, and allowing the person to experience the negative consequences of drinking. The concerned other takes advantage of situations in which the person is feeling regret for their actions and exhibits a higher level of motivation to make behavior changes by suggesting treatment and immediately contacting a provider to set up an appointment. A number of sessions are held with spouses during which they are taught how to implement a safety plan if the risk of physical abuse is high, encourage abstinence and treatment seeking, and assist in treatment.

Family members are seen the day they telephone seeking help for a family member. Thus, availability during nonworking hours is critical for instances during which crises may occur and the individual requests help. Immediate office-based meetings, even during the middle of the night, are held. Studies have shown that CRT is effective in reducing alcohol consumption, and increasing rates of treatment engagement and retention.

Community Reinforcement Approach (CRA)

CRA is a brief systemic and behavioral family intervention provided as an office or home-based model that is designed to assist significant others, usually spouses, learn to support sobriety by reinforcing

abstinence through alternative activities (e.g., family, work, social, and recreational endeavors) that are incompatible with substance use, while allowing the individual to be subjected to negative consequences of intoxication. Such alternative sources of reinforcement are made available when the individual is sober/substance-free and made unavailable when the individual engages in substance use. Significant others also learn to identify instances in which the person is willing to enter treatment, and provide encouragement in a non-confrontational manner. They are also aided in recognizing and responding to warning signs of domestic violence by de-escalating conflict to ensure their own safety. In addition, significant others participate in couples counseling and help their spouses find employment. Women who participate in CRA receive parenting skills training and can attend parenting classes to acquire knowledge regarding the normal stages of child development.

Significant others attend sessions subsequent to the individual's agreement to receive treatment and participate in communication skills training and reciprocity marriage counseling sessions to foster the development of mutually reinforcing behaviors. Significant others monitor daily disulfiram intake and respond if doses are missed. Contracts are also used between spouses to negotiate contingent interactions such as engaging in enjoyable activities when abstinent and foregoing them when using. Clients can participate in employment and social skills counseling. A Job Club component offers skills training, job application assistance, assertiveness and positive interaction practice, job interviewing practice, and job maintenance skills (e.g., punctuality, teamwork, dealing with problems that arise at work). Once a client has secured employment, their involvement in the Job Club ceases. Work with the clinician on maintenance of the job continues, however. Research supports the efficacy of providing employment assistance.

CRA has a significant base of evidence for reducing alcohol and opioid use. It has been shown to increase the engagement and retention of persons with substance use disorders and their families in treatment with or without voucher-based incentives. It has also been found to be effective for individuals with alcohol use disorders deemed treatment-resistant. Outcome studies indicate that CRA leads to significant reductions in alcohol consumption and, when applied during the precontemplation phase, leads to increased entry into treatment. CRA Plus Vouchers has been shown to be of significant benefit to individuals with cocaine dependence and is effective for adolescents. A CRA manual for treating cocaine dependence is available from the National Institute on Drug Abuse located on the web at http://www.drugabuse.gov/pdf/CRA.pdf.

Community Reinforcement and Family Training (CRAFT)

CRAFT is an enhanced modification of CRA that is designed to engage adults with substance use problems in treatment and consists of two phases. During the first phase the concerned other employs reinforcement techniques to help reduce substance use. When the person demonstrates motivation for treatment, the concerned other immediately calls the provider to set up an intake appointment that is scheduled within forty-eight hours. Phase II is designed to engage the person in treatment by using motivational enhancement techniques. Treatment goals are developed and drug refusal training, social skills training, and relapse prevention training are provided.

CRAFT emphasizes communication skills for significant others to use which include clear, specific and positive interactions, as well as labeling feelings, expressing understanding of the other's perspective, acceptance of partial responsibility when warranted, and offers for assistance. The welfare of significant others is stressed; they are encouraged to reduce their own levels of stress by enhancing self-care and seeking positive social supports. Significant others also help in analyzing behavior patterns surrounding substance use. Interpersonal cues, triggers and consequences are identified along with positive consequences to enhance sober and adaptive behaviors. The risk of

domestic violence is assessed using the Conflict Tactics Scale. A safety plan and strategies are developed.

Outcome studies indicate CRAFT is very effective in engaging individuals in treatment. In addition, significant others display reductions in anxiety, anger and depression irrespective of the client's treatment status. A manual for CRAFT is available for download from http://www.bhrm.org/guidelines/CRAmanual.pdf.

PREVENTION

Numerous risk factors for substance use disorders have been identified including poverty, racism, fragile families, ineffective family interactions, problems in social functioning, inadequate parenting skills (e.g., inconsistent discipline, harsh or lax discipline, lack of reward/reinforcement for prosocial behaviors), physical or sexual abuse, parental substance abuse, sibling substance use, parental incarceration, smoking, residence in communities of lower socioeconomic status, academic failure, and affiliation with peers who abuse substances and/or engage in criminal activities (e.g., gang involvement).

Risk Factors for Alcohol and Other Drug Abuse

These factors are not definitive; rather their presence suggests that an individual may develop a problem. Absence of risk factors provides no assurance that an individual will not develop a problem with drugs or alcohol.

Psychiatric
Depression
Anxiety
Low self-esteem
Low tolerance for stress
Other mental health disorders (e.g., learning disabilities)
Feelings of desperation
Feelings of loss of control over one's life
Feelings of resentment

Behavioral
Use of other substances
Aggressive behavior in childhood
Conduct disorder; antisocial personality disorder
Avoidance of responsibilities
Impulsivity and risk-taking
Alienation and rebelliousness; reckless behavior
School-based academic or behavioral problems; school drop-out
Involvement with criminal justice system or illegal activities
Poor interpersonal relationships

Demographic
Male gender
Inner city or rural residence combined with low socioeconomic status; lack of employment opportunities

Family
Use of drugs and alcohol by parents, siblings, spouse
Family dysfunction (e.g., inconsistent discipline, poor parenting skills, lack of positive family rituals and routine)
Family trauma (e.g., death, divorce)

Social
Alcohol- and drug-using peers
Social or cultural norms approving use
Expectations about positive effects of drugs and alcohol
Availability of or accessibility to alcohol and drugs

Genetic
Inherited predisposition to alcohol or drug dependence
Deficits in neurotransmitters (e.g., serotonin)
Absence of aldehyde dehydrogenase (flushing or palpitations occur when alcohol ingested)

Source: Adapted from Hawkins et al., 1985; Kandel et al., 1986; Newcomb and Bentler, 1988; Heath et al., 1989; Brook and Brook, 1990; Landy et al., 1991a; Landry, 1994.

(SAMHSA TIP # 24)

Primary prevention is indicated for individuals who have not experienced problems with substance use, but are at risk for developing problems (e.g., children whose parents have substance use disorders). It is recommended that efforts focus on families and incorporate treatment for mothers (particularly parenting skills development) as a preventive measure for their children to reduce child maltreatment. Primary preventive efforts entail educational messages and commendations for healthy behaviors. Individuals who are at risk due to excess consumption, but not dependent on substances, have been shown to benefit from even a single session of brief intervention that includes information regarding how their consumption compares with medically acceptable limits, potential health consequences, and referrals for treatment. Seventy-four percent of individuals who are at high risk report decreasing consumption after one or more brief treatment sessions, and forty-eight percent cease use altogether. Persons who are at serious risk and have substance dependence should be referred for treatment. Studies show this tiered approach leads to a sixty percent reduction in substance abuse.

Prevention Strategies
• Information dissemination to promote awareness and knowledge of the nature and extent of substance abuse, substance use disorders, and effects on individuals, families, and communities. It also includes awareness of prevention policies, programs, and services, and helps set and reinforce community norms (e.g., drug dealers will not be tolerated in the neighborhood). • Prevention education to impact critical life and social skills (e.g., decision-making, refusal skills, critical analysis (of media messages), and judgment. • Alternatives to establish constructive and healthful substance-free activities and encourage individuals to use alternative methods of meeting needs usually filled by the use of substances. • Problem identification and referral including identification, education, and counseling for individuals, especially youth, who are at high risk of developing substance use problems. • Community-based processes to enhance the ability of communities to provide prevention and treatment services more effectively, including organization, planning, and collaboration activities to build healthy communities that encourage healthy life-styles. • Environmental approaches to construct or alter written and unwritten community standards, codes, and attitudes to reduce substance use problems within the community, including laws to restrict availability and access, price increases, and communitywide actions.

Substance abuse prevention curricula have traditionally focused on information dissemination. However, research demonstrates that while such a didactic approach may be effective at transmitting information regarding substance abuse, it is not effective at altering core attitudes and behaviors. A review of the literature in the substance abuse prevention field suggests certain types of school-based curricula can effectively reduce substance abuse during adolescence. Prevention curricula delivered in an interactive format to small groups of youth have been shown to result in robust and enduring beneficial outcomes. Such curricula give students tools to recognize internal pressures (e.g., stress or anxiety) and external pressures (e.g., peer attitudes and advertising) that may influence them to use alcohol, tobacco, and other drugs. Another effective prevention program component involves helping students develop and practice personal, social, and refusal skills. The incorporation of social skills training to resist substance use has been found to be more effective than programs designed to increase knowledge bases. Changing perceptions of friends' tolerance of drug use has been found to be a significant mediator of effects on substance use. The section on collaboration with schools offers information on effective prevention programs delivered in educational settings.

Evidence-based prevention programs have been found to be cost-effective; studies show that for every dollar spent on prevention, four to five dollars are saved in treatment costs. A number of these are described below. The nurse home visitation model, Head Start, family strengthening programs, Functional Family Therapy, Multisystemic Therapy, FAST, and other prevention models are described in *A Guide to Evidence-Based Practices for Children, Adolescents and their Families*.

Communities Mobilizing for Change on Alcohol (CMCA)

CMCA is a SAMHSA model program that is designed to reduce access to alcohol by youth aged thirteen to twenty by changing communities' policies and practices. The program uses an array of social organizing techniques to address legal, institutional, social, and health issues by eliminating sales of alcoholic beverages to underage youth by retailers and preventing the provision of alcohol to youth by adults. CMCA can be implemented in rural, suburban, and urban communities and involves all members of a community including:

- Civic groups, which can adopt policies to prevent underage drinking at organization-sponsored events as well as initiate and participate in community-wide efforts to prevent underage alcohol use.

- Faith-based organizations, which can provide a link between prevention organizations, youth, parents, and the community as well as offer education, prevent teens from accessing alcohol at events, and participate in community-wide efforts to restrict alcohol from youth.
- Schools, which can teach alcohol refusal skills, and develop and enforce policies restricting alcohol use and access.
- Community groups, which can control the availability and use of alcoholic beverages at public events (e.g., music concerts, street fairs, and sporting events).
- Law enforcement agencies, which can encourage voluntary compliance checks or mandate compliance checks by law enforcement or licensing authorities. Police can also encourage and support the use of administrative penalties for failure to comply with state or local laws relating to the sale of alcohol to minors.
- Liquor licensing agencies, which can offer and promote mandatory or voluntary programs that train managers, owners, servers, and vendors in ways to avoid selling alcohol to underage youth and patrons who are intoxicated.
- Advertising outlets, which can remove advertising for alcoholic beverages from public places or wherever youth are exposed to these messages. In addition, restrictions on alcohol companies' sponsorship of community events can be put into place.

Studies of communities that have used the CMCA model indicate alterations in alcohol consumption behaviors of young adults aged eighteen to twenty, and beneficial changes in the practices of establishments that serve alcoholic beverages as well as merchants who sell alcoholic beverages, and reductions in arrests of youth aged eighteen to twenty for driving under the influence of alcohol.

The University of Minnesota's Alcohol Epidemiology Program's web site, located at www.epi.umn.edu/alcohol/, offers free materials on reducing youth access to alcohol to assist in the implementation of CMCA, including:

- Alcohol Compliance Checks: A Procedures Manual for Enforcing Alcohol Age-of-Sale Laws that is designed for public officials, law enforcement officers, and community groups, and provides a guide for developing and implementing a compliance check system for establishments that sell or serve alcohol.
- Model Ordinances: This material provides information on and samples of specific local laws that regulate alcohol use in the community in order to reduce the supply of alcohol to youth under age twenty-one.
- Model Public Policies: These are sample alcohol control policies aimed at limiting social and commercial access to alcohol, including beer keg registration; restricting alcohol use in public places and at community events; restricting alcohol advertising; developing social host liability laws; initiating responsible beverage sales, service training, and compliance checks; banning alcohol home delivery; and restricting alcohol companies' sponsorships of community events.
- Model Institutional Policies: These are sample policies that describe actions that can reduce youth access to alcohol and can be used by community institutions, including civic groups, colleges and universities, faith-based organizations, hotels, police, schools, employers, and parents.
- Reprints of Papers: These are articles published in scientific journals on subjects related to the CMCA project.

COMMUNITY TRIALS INTERVENTION TO REDUCE HIGH-RISK DRINKING (RHRD)

Community Trials to Reduce High-Risk Drinking is a multi-component, community-based program developed to alter alcohol consumption and related problems (e.g., drinking and driving, underage drinking, and binge drinking) to decrease injuries related to accidents and violence. The program incorporates five prevention components:

- Alcohol Access - to assist communities in using zoning and municipal regulations to restrict alcohol access through alcohol outlets (bars, liquor stores, etc.) density control.
- Responsible Beverage Service (RBS) - to assist alcohol beverage servers and retailers develop policies and procedures to reduce intoxication and driving after drinking through training and testing.
- Risk of Drinking and Driving - to increase actual and perceived risk of arrest for driving after drinking through increased law enforcement and sobriety checkpoints.
- Underage Alcohol Access - to reduce access to alcohol by youth via training alcohol retailers to avoid selling to minors as well as individuals who provide alcohol to minors, and via increased enforcement of underage alcohol sales laws.
- Community Mobilization - to provide communities with tools to form coalitions needed to implement and support interventions that address the previous four prevention components.

Outcome studies indicate the use of this program leads to reductions in intentional and unintentional alcohol-related injuries (i.e., automobile and household accidents, and assaults) and in formal and informal access to alcohol by youth, increased enforcement of drinking and driving laws, mobilization of community members and key policy makers, and the development of relevant alcohol beverage service and sales policies. Communities report reductions in self-reported driving when over the legal limit of alcohol, amounts consumed per drinking occasion, self-reports of having had too much to drink, nighttime injury crashes, crashes in which the driver had been drinking, assault injuries observed in emergency rooms, and hospitalizations for assault injuries. Information on this SAMHSA model program can be obtained from http://www.prev.org/. The program's materials are available in English and Spanish.

FAMILY MATTERS

Family Matters is a home-based program designed to prevent tobacco and alcohol consumption in children aged twelve to fourteen years old. The program is delivered through four booklets successively mailed to homes along with token participation incentives (e.g., imprinted pencils, buttons, balloons, or magnets). Subsequent to each mailing, health educators telephone parents to encourage them to complete each book, prescribed parent-child activities, and answer any questions they may have.

The booklets contain readings and activities designed to elicit considerations of general family characteristics and attitudes regarding tobacco and alcohol use, adult supervision and support, rule-setting and monitoring, family communication, attachment, time together, education encouragement, family/adult substance use, substance availability, peer attitudes, and media orientation toward substance use. Each booklet contains information based on behavioral science theory and research and includes participant activities. The booklets, in order of delivery, are:

- *Why Families Matter*, which describes the program and encourages participation

- *Helping Families Matter to Teens*, which offers a consideration of general family factors (e.g., communication skills and parenting styles) that influence adolescent alcohol and tobacco use
- *Alcohol and Tobacco Rules are Family Matters*, which focuses on behavior-specific factors that families can influence (e.g., the availability of tobacco and alcohol in the home and family rules about child substance use)
- *Non-Family Influences that Matter*, which addresses non-family influences on adolescent substance use (e.g., friends who use and the media) and reviews the main points of the program

Although Family Matters was designed for use with families in which at least one adult can read English, it has found to be effective for Asian, African American, Hispanic/Latino and Caucasian families from all socioeconomic levels residing in urban and rural settings. Outcome studies indicate the program leads to significant reductions in the prevalence of adolescent tobacco and alcohol use. Information on this SAMHSA model program and free materials are available for download from http://familymatters.sph.unc.edu/Program_materials.htm.

FAN (Family Advocacy Network) Club

FAN Club is designed for parents of participants in Boys and Girls Clubs of America's SMART Moves program, including Start SMART for youth aged ten to twelve, Stay SMART for youth aged thirteen to fifteen, and SMART Leaders for youth from fourteen to seventeen years of age who have completed the Stay SMART program. The program can be implemented in community-based youth organizations, recreation centers, and schools in association with a local Boys and Girls Club. This parent involvement program, called the Family Advocacy Network, is offered in combination with a three-year sequential drug prevention program for early adolescents participating in Boys & Girls Clubs who are at high risk for substance abuse.

FAN Club consists of activities in four general categories: basic support, parent support, educational program, and leadership activities. This three-year sequential program consists of:

- Start SMART (ten sessions for one and a half hours)
- Stay SMART (twelve sessions for one and a half hours)
- SMART Moves
- SMART Leaders (five sessions for one and a half hours)

The program uses role playing, group activities and discussion to foster social skills development, negative peer influence resistance skills, problem-solving and decision-making skills, and conservative group norms related to substance use and knowledge regarding the health consequences of alcohol, tobacco and other drug uses.

Outcome studies indicate participation leads to increased ability to refuse substances and negative attitudes regarding marijuana use. The program has been found to be effective for youth from Hispanic/Latino, Caucasian, and African American families. Information on this SAMHSA model program can be found on the web from http://www.bgca.org.

Focus on Families (FOF)

FOF is a promising program for parents receiving methadone maintenance treatment and their children. Parents receive relapse prevention and coping skills training. In addition, parent management training is provided during a five-hour family retreat and in thirty-two one ninety-minute

parent training sessions. Children participate in twelve of the sessions to practice developmentally appropriate skills with their parents. Sessions cover the following topics:

- Family goal-setting
- Relapse prevention
- Family communication
- Family management
- Creating family expectations about alcohol and other drugs
- Teaching children skills such as problem-solving and resisting offers for drugs
- Helping children achieve academic success

Outcome studies indicate FOF participation leads to significant reductions in parental drug use and relapses, improvements in parenting, coping and drug refusal skills. Improvements in family functioning (e.g., decreases in drug use among family members, family conflict, and family stress) are also seen. Improvements in parents' abilities to interact with school personnel, increases in substance-free, more prosocial peer affiliations, and less social isolation have also been documented. Children who participate have been shown to display less favorable attitudes towards drugs as well as decreases in involvement in parental drug use, antisocial behaviors, and improvements in academic performance. Other outcomes linked to participation in FOF include higher earnings, reductions in healthcare costs as well as morbidity and mortality, domestic violence, use of social services, crime, delinquency, and use of income support programs. Information about FOF and order forms for the workbook and curriculum ($200.00) can be found on the web at http://depts.washington.edu/sdrg/FOF.htm.

PARENTS WHO CARE (PWC)

Parents Who Care is a skill-building educational program for families with children aged twelve to sixteen that targets family and peer risk factors (e.g., parent and sibling substance use, positive parental attitudes towards drug use, ineffective and inconsistent parenting, family conflict, inadequate family communication and involvement and bonding, and affiliations with peers who engage in delinquent behaviors and use substances). The program focuses on strengthening family bonds and establishing clear standards for behavior in order to help parents appropriately manage their adolescent's behavior while encouraging growth toward independence.

The program is led by a facilitator on a once weekly basis for five to six ninety-minute sessions in schools, healthcare organizations, civic organizations, social service organizations, and faith-based institutions. Parents are provided with their own parent module for use at home. A PWC book has been developed that consists of seven chapters and corresponding video segments. The video depicts common parenting challenges of four ethnically diverse families. The program is structured around three major topics: (1) setting the stage, which covers the importance of risk and protective factors; (2) the effects of communication; and (3) family management.

Outcomes for parent participants indicate improvements in family discipline and supervision, parental commitment to school, family attitudes regarding antisocial behavior, and family bonding. Information on this SAMHSA model program can be found on the web at www.drp.org.

PROJECT VENTURE (PV)

Project Venture is an outdoors experiential youth development program originally designed for high-risk Native American youth in grades five through nine in Native American school and community settings in rural and socioeconomically challenged areas. The program has been successfully

replicated in rural Alaska Native, Hispanic/Latino, and Native Hawaiian, and urban Native American settings, and shown to be beneficial for middle school-age youth from a variety of other ethnic groups. PV uses Native American traditional values to help youth develop positive a self-concept, effective social skills, a community service ethic, internal locus of control, and enhanced decision-making and problem-solving skills. The program's components include:

- Classroom-based problem-solving activities
- Outdoor experiential activities
- Adventure camps and treks
- Community-oriented service learning

Studies have shown that participants who initiate first substance use at older ages, experience significant reductions in lifetime tobacco and alcohol use and the frequency of tobacco and inhalant use. They have also been found to display less depressive symptomatology and aggressive behavior, and improvements in school attendance. Information on this SAMHSA model program can be found on the web at www.niylp.org/.

Preparing for the Drug Free Years (PDFY)

Preparing for the Drug-Free Years is a curriculum designed to reduce adolescent drug use and behavior problems by helping parents acquire skills to consistently communicate clear norms in opposition to adolescent substance use, assume responsibility for their families in an effective and proactive manner, reduce family conflict, and help their children learn skills to resist antisocial peer influences. The program is designed for parents of children in the fourth through eighth grades, aged nine to fourteen, and prior to the onset of experimentation with drugs. Sessions focus on family relationships and communication, family management skills, and resolution of family conflict.

PDFY incorporates behavioral skills training, communication, and parent training. It is conducted by two volunteer workshop leaders during five two-hour sessions or ten one-hour sessions. It is recommended that at least one of the workshop leaders be a parent. The sessions are interactive and skill-based and include opportunities for parents to rehearse skills and receive feedback from the leaders and their peers. Parents are provided education regarding the nature of substance use problems, how to increase their children's opportunities for meaningful involvement in the family, including behavioral, cognitive and social skills needed for meaningful involvement. They are also taught to provide reinforcement and appropriate consequences for behavior, use family meetings to enhance communication and strengthen family bonds, establish a family position on drugs, reinforce their children's substance refusal skills, express and manage anger constructively, enhance their children's participation in the family, and create a parent support network.

Evaluations of PDFY indicate it leads to significant reductions in children's antisocial behavior, improved academic skills, increased bonding with prosocial peers, and fewer incidents of drug use in school. It has been found to be effective in urban, multi-ethnic communities that include African American, Caucasian, Hispanic/Latino, Native American, and Asian/Pacific Islander families. Information and training costs for PDFY can be found on the web at www.drp.org.

Start Taking Alcohol Risks Seriously (STARS) for Families

Start Taking Alcohol Risks Seriously (STARS) for Families is an alcohol use prevention program for at-risk youth in middle and junior high school, aged eleven to fourteen, that can be implemented within schools, health clinics, youth organizations, work sites, family homes, religious organizations, and

other community sites. It is designed to promote the postponement of alcohol use until adulthood and consists of three components:

- Health Care Consultation: A nurse or other health care provider conducts a brief (twenty minute) annual health consultation incorporating a range of prevention messages regarding ways to avoid alcohol use.
- Key Facts Postcards: Ten Key Facts postcards are mailed to parents or guardians in sets of one or two per week for five to ten weeks. The cards tell parents what they can say to their children to help them avoid alcohol. A detachable postage-paid portion of the card provides information about the interaction with their children and its usefulness that parents can mail in.
- Family Take Home Lessons: Parents and guardians are provided with four weekly take-home prevention activities they can complete with their children and return. The lessons include an alcohol avoidance contract for the child to sign and a feedback sheet to collect satisfaction and usage data from parents.

Studies of the program have shown that participants avoid or reduce alcohol consumption well past termination of participation. Information on this SAMHSA model program can be found on the web at www.nimcoinc.com.

KEEP A CLEAR MIND (KACM)

Keep A Clear Mind is a take-home drug preventive program for elementary school students aged eight to twelve in the fourth through sixth grades and their parents. It consists of sets of activities to be completed by parents and their children together on a weekly basis including:

- Four take-home lessons on tobacco, alcohol, marijuana, and saying no to drugs
- Five biweekly parent newsletters provided subsequent to completion of the four take-home lessons
- Student incentives

The four weekly lessons are sent home with the student and each lesson includes a feedback sheet for parents to indicate that it has been completed and returned at the end of each week by the students who receive a small incentive (e.g., KACM bookmark, bumper sticker, or pencil). Incentives are given for completing lessons rather than for scores although additional incentives for scoring well on the lessons can be used.

The program can also be provided in youth organizations, religious groups, and health centers. Some of the materials have been translated in Vietnamese, Hmong, and Spanish. Outcomes include increased ability to resist peer pressure to use alcohol, tobacco, and marijuana, as well as expectations regarding future tobacco use. Information on this SAMHSA model program can be obtained from http://www.uark.edu/depts/hepoinfo/clear.html.

SYSTEMS COLLABORATION

Individuals who have problems with substance use are more likely to experience a host of biopsychosocial problems (e.g., medical conditions, unemployment, housing instability, financial challenges, etc.) than their cohorts in the general population. Substance use disorders are often identified by a number of public agencies and systems including education, child welfare, homeless and domestic violence shelters, justice, vocational rehabilitation, public housing, law enforcement, family service agencies, disability organizations, faith-based organization, public health, mental health, as well as substance abuse treatment. Moreover, there is often an overlap of clients between these various systems and agencies.

Currently, most community service systems function as a series of parallel programs with their own sources of funding, leadership, and constituencies, subjecting clients to fragmentation and leaving them with unmet needs. Clients who require services from more than one system or program face a number of barriers (e.g., differing eligibility requirements, hours of operation, philosophies, conflicting performance demands, and locations), and can receive services that are counterproductive because they are not part of a coordinated treatment plan.

Few substance abuse treatment programs have the resources to address all of the myriad difficulties experienced by clients, and they are under increasing pressure to do more with fewer resources. One means to extend limited resources is through integration/collaboration with other service system providers. Intersystem and interagency linkages can be used to leverage scarce resources and alleviate fragmentation. Moreover, research has demonstrated that substance abuse treatment is more effective when combined with other interventions designed to address the full range of clients' needs including education, life skills (e.g., parenting), physical and mental health care, housing, vocational training, employment, child care, specific cultural/gender needs, legal problems (e.g., eviction from housing, suspension or revocation of a driver's license), transportation, and domestic violence.

(NIDA, 1999)

Other benefits of a collaborative system of care include opportunities to provide client-centered services and supports that are focused on meeting clients' needs by matching those needs with appropriate services (as opposed to fitting them into predefined programs), such as wraparound services, that follow the client. Individualized and monitored (via case management) comprehensive services and supports from a variety of agencies can respond to multiple needs. The service and support mix can change as clients' needs change.

CREATING LINKAGES WITH MEDICAL CARE

It is estimated that approximately half of individuals who make appointments with primary care providers experience some type of difficulty related to substance use. Sixty percent of patients with alcohol dependence are seen in primary care settings for other reasons during any one six-month period. In addition, it has been estimated that at least twenty-five percent of patients treated in hospitals have some type of substance use-related problem. Hospitals often deal with a population who has frequent, revolving admissions to hospital emergency rooms or inpatient beds due to medical or psychiatric complications resulting from substance use.

Although individuals requesting medical care are not seeking treatment for substance use problems, routine screening offers opportunities for detection, intervention, and referral. Screening has been demonstrated to improve rates of identification of individuals in need of intervention and can be provided as part of routine health examinations, prior to prescribing medication, and in emergency medicine and urgent care centers. Research has demonstrated that screening for substance disorders is more acceptable when conducted as part of a comprehensive health risk examination of diet, exercise, medication use, and weight control. In addition, general health care settings do not carry the stigma associated with substance abuse treatment.

It is recommended that all patients receive screening for substance use disorders and problems, in order to prevent under diagnosis, using standardized and validated instruments[9]. The Patient Health Questionnaire is a self-administered instrument that screens for depression, alcohol abuse, anxiety disorders, eating disorders and somatoform disorders in primary care settings. It can be found on the web at http://www.pdhealth.mil/guidelines/downloads/appendix2.pdf. Other instruments can be found in Appendix G.

The Center for Substance Abuse Treatment (CSAT) recommends that all individuals aged sixty and over be screened for prescription drug and alcohol abuse as part of regular physical examinations. The CAGE and the MAST-G (Michigan Alcoholism Screening Test) have been validated for older adults. There is strong support for asking every pregnant woman about substance use and providing counseling regarding abstinence (at the very least during the pregnancy) to ameliorate the deleterious effects of substances on developing fetuses and neonates. In utero exposure to drugs can cause

[9] Primary care providers may under diagnose substance use problems, particularly in women and the elderly. For example, they may diagnose depression in women, but not link it to substance abuse. Therefore, the use of standardized and validated instruments is recommended.

intrauterine growth retardation, prematurity, low birth weight, birth defects, infections, neonatal abstinence syndrome, neurophysiological and neurobehavioral dysfunctions. Moreover, the effects of exposure to substances can endure well beyond the neonatal phase of development, although long-term effects on outcomes have yet to be determined.

Integration of mental health and substance abuse treatment into primary care settings has been found to be an effective means of reaching individuals who have substance disorders. Onsite systems increase client follow-up and adherence to medical treatment, as well as eliminate no shows for referral appointments. The most effective onsite medical systems provide a range of medical services, screening for infectious diseases (e.g., hepatitis, syphilis), HIV counseling and testing, prophylaxis against TB and HIV-related opportunistic infections, antiretroviral therapy, immunizations (i.e., pneumococcal, haemophilus influenzae, and hepatitis B), family planning and pregnancy services, and treatment of episodic illnesses, inpatient follow-up, and coordination of care. The effectiveness of such collaborative efforts depends on cross-system interdisciplinary training and education.

Primary care settings are conducive to the provision of brief intervention for mild to moderate substance use problems. Studies have found that primary care clinicians can help many patients reduce alcohol consumption and its adverse consequences through ten to fifteen-minute office-based interventions. However, this potential is largely untapped as are opportunities to discuss substance abuse prevention during routine visits. Brief intervention, which is based on motivational enhancement, focuses on self-help and self-management and is typically provided by paraprofessionals or non-specialists. Studies show that medical encounters (e.g., in clinics, emergency rooms and other settings) in which screening and brief intervention are included lead to more than fifty percent reductions in alcohol use that endure over time. Cost-benefit analyses show that a four-fold savings in health care costs can be attained. In addition, brief treatment of two to nine sessions that focus on rapid implementation of strategies for change and referrals for more intensive treatment are effective.

Brief intervention has also been found to be effective in reducing smoking. The United States Public Health Service's *Clinical Practice Guideline on Treating Tobacco Use and Dependence* indicates that practitioners should use the five As (ask, advise, assess, assist, arrange follow-up) with all persons who express a willingness to cease smoking. The five As have been shown to increase quit rates in primary care settings. It has also been found that when physicians advise their patients to quit smoking (a three-minute intervention), there are small improvements in quit rates, but when more time is spent in face-to-face interventions quit rates increase. A significant increase in quit rates occurs when multiple providers (e.g., dentists, nurses, psychologists, and pharmacists) deliver messages on smoking cessation.

The 5 As for Brief Intervention
Ask about tobacco use. Identify and document tobacco use status for every patient at every visit.
Advise to quit. In a clear, strong, and personalized manner urge every tobacco user to quit.
Assess willingness to make a quit attempt. Is the tobacco user willing to make a quit attempt at this time?
Assist in quit attempt. For the patient willing to make a quit attempt, use counseling and pharmacotherapy to help him or her quit.
Arrange follow-up. Schedule follow-up contact, preferably within the first week after the quit date.

(SAMHSA TIP # 45)

Many individuals who have substance use disorders suffer from related health conditions that are caused by substance use (e.g., liver disease, cardiovascular disease, seizures, organic brain disorders, malnutrition, and chronic obstructive pulmonary disease), and/or exacerbated by lack of preventive health care or treatment of existing conditions, or are transmitted directly or indirectly by

substance abuse due to behavioral risk factors primarily through the reuse of contaminated syringes, needles, or other paraphernalia by more than one person (e.g., endocarditis, bacteremia/septicemia, fungal infections, and others) and high-risk sexual behaviors resulting from substance-related sexual disinhibition (e.g., HIV/AIDS, hepatitis B and C, tuberculosis, syphilis, chlamydia, gonorrhea, herpes simples, and chancroid).

And, conversely, individuals with diagnosed sexually transmitted diseases and tuberculosis are at higher risk for substance abuse. Diminishing health due to HIV/AIDS is a risk factor for relapse due to pain, reductions in functional capacity, fatigue, debility, anxiety, fear, grief and in some instances, isolation from family and others. Relapse can lead to nonadherence with medical treatment regimens. For example, substance abuse can affect treatment for HIV/AIDS due to the associated mental impairments that can interfere with the ability to adhere to medication regimens.

It is recommended that screening for infectious diseases be conducted as part of initial physical examinations for all clients in substance abuse treatment programs. Risk reduction education and counseling (e.g., safe sexual practices and birth control) along with appropriate medical care should also be available in concert with public health and primary care which can help prevent the spread of diseases and prevent those who are not infected from getting infected. The treatment of co-occurring medical conditions offers an opportunity to engage clients in substance abuse treatment through focusing on the adverse effects of substance use on their health.

Intervention for substance use disorders can prevent HIV infection, and risk reduction interventions that foster altering substance use and sex-related behaviors decrease risk for contracting or transmitting HIV. It is recommended that HIV sexual risk reduction programs be integrated into substance disorder treatment programs and that the same skills used to deal with high risk situations for substance use be applied to high risk unsafe sex situations[10].

While a variety of interventions have been used to reduce the consequences of injection drug use, needle and syringe exchange programs have been demonstrated to reduce the risk of HIV and hepatitis and do not lead to increases in injection drug use. Syringe exchange programs have also been shown to help link individuals who use injection drugs with HIV risk reduction counseling, substance abuse treatment, and other supports.

It is estimated that about twenty-five percent of individuals with TB[11] do not adhere to prescribed treatment regimens. The Centers for Disease Control (CDC) recommends the use of Directly Observed Therapy (DOT) which has been found to improve adherence rates and prevent the reactivation of latent infection. An additional strategy entails continuation of treatment regimens at sites of opportunity where people with TB infection are seen regularly for other services (e.g., substance abuse treatment programs) which also allow for DOT. DOT has been shown to be effective

[10] The Substance Abuse Prevention and Treatment Block Grants Interim Final Rule of 1993 requires states to coordinate substance abuse prevention and treatment with other services including HIV/AIDS treatment.

[11] Substance abuse treatment programs that receive funding through the Substance Abuse Prevention and Treatment (SAPT) Block Grant are mandated to provide or arrange for TB-related services which must include screening, evaluation, treatment and follow-up. Programs must also provide appropriate referrals for applicants in need of TB evaluation or treatment who are not admitted to treatment due to lack of space.

in decreasing relapse and developing drug resistance. Current information on infectious diseases can be found on the web site of the CDC (www.cdc.gov).

Substance use problems and disorders complicate diagnosis, clinical management, and lead to less optimal outcomes for a number of significant medical problems and illnesses including diabetes, hypertension, asthma, breast cancer, pneumonia, sleep disorders, and chronic pain. In addition, the use of substances is a significant risk factor in unintentional injures (both fatal and nonfatal) as well as intentional injuries from assaults, suicides and homicides. Research indicates that cocaine, amphetamines, and marijuana are risk factors for traumatic injuries, especially when combined with alcohol consumption, and particularly in motor vehicle accidents. Studies have shown that more than fifty percent of traumatic brain injuries (TBIs), thirty-nine to fifty percent of spinal cord injuries, more than fifty percent of burn injuries, and the majority adult drownings occur in the presence of substance use, particularly alcohol. Moreover, the effects of substance use can cause complications for assessment, treatment and interfere with recovery from traumatic injuries. Substances affect the respiratory, cardiovascular, and central nervous systems and can also exacerbate the severity of injuries. In addition, interactions between substances and medications and anesthesia agents can have interactional effects, some which can be lethal.

Studies indicate that treatment for traumatic injuries does not routinely include screening for substances. Moreover, even when screening is conducted and positive results are obtained, the results may be utilized for immediate medical intervention, but not to confirm substance use problems or address treatment needs. It is recommended that all patients presenting with traumatic injuries be screened for substance use disorders, that brief interventions be conducted, and referrals for treatment be made when indicated to help prevent future injuries.

Individuals who have co-existing physical disabilities experience higher rates of substance use disorders. It is estimated that fifteen to thirty percent of people who have physical disabilities have co-occurring substance use problems, a rate twice that found in the general population. Risk factors for substance use problems include social isolation, under and unemployment,[12] physical abuse, chronic pain, access to prescription medications, homelessness, lack of recreational opportunities, and victimization[13] all of which are experienced at greater levels than the general population, and all which are exacerbated by substance use. These individuals, coping with the dual stigma of a disability and a substance use disorder, are less likely to seek or complete treatment due to architectural (i.e., physical), attitudinal, and/or communication barriers.

Substance use can lead to adverse consequences for individuals with disabilities. For example, the consumption of alcohol fosters, irritates and inflames bladder infections that commonly occur with mobility impairments (e.g., spinal cord injuries) and suppresses the effects of antibiotics. Moreover, alcohol consumption has been implicated in the development of autonomic hyperreflexia which leads to a rapid increase in blood pressure, sometimes with fatal results. Balance problems can be exacerbated by alcohol and mood altering drugs. TBIs pose a risk for seizures, and alcohol can lower

[12] It is estimated that thirty percent of adults with disabilities live below the poverty line, a rate that is twenty percent higher than that of individuals who do not have disabilities. Moreover, they expend a significant portion of their incomes on disability-related services and supports.

[13] Individuals with disabilities are at increased risk for being victims of violence (e.g., domestic abuse) and sexual abuse.

the seizure threshold. The effects of medications on people with disabilities can be nullified by alcohol and other drugs as well as potentiate interactions that are potentially lethal.

It has been estimated that up to forty percent of clients in treatment have a co-existing disability, but many hide their disabilities. Substance abuse treatment often does not adequately meet the needs of individuals with disabilities despite legal mandates to do so (i.e., the 1992 amendments to the Rehabilitation Act of 1973 and Americans with Disabilities Act [ADA] of 1990). ADA[14] mandates physical accessibility of treatment facilities for people who have disabilities and that clinicians possess an understanding of issues related to disability. It is recommended that treatment programs screen all clients for disabilities.

Physical barriers such as a lack of elevators and ramps, wall phones that are too high for individuals who use wheelchairs, deep pile carpeting, loose rugs, wall mounted fire extinguishers, lack of raised Braille signage, table surfaces that do not accommodate wheelchairs, and lighting that is either too dim or bright can pose significant access challenges for individuals with disabilities. Moreover, lack of progress in treatment is often misconstrued as a lack of motivation when in reality it may be due to a functional limitation[15] (e.g., lack of reading skills or difficulties in processing and/or retaining information).

Assistive devices and options can be used to reduce barriers to treatment and accommodate various disabilities including Telecommunication Devices for the Deaf (TDDs) or Telephone Relay Service, computer terminals, Computer Assisted Realtime Transcription (CART) services, tactile interpreters, forms in large print, speech synthesizers, communication boards, sign language interpreters, picture books, comic books, props, art activities, illustrated flash cards, audio and video recordings, sound amplification devices, more frequent breaks/rest periods during treatment, role-laying, and memory books.

It is generally recommended that individuals with disabilities be integrated into existing treatment programs with the exception of individuals who identify with Deaf Culture and prefer specialized programs which address their specific needs and have staff who are fluent in sign language[16]. Research shows that individuals who have disabilities benefit from substance abuse treatment and maintain sobriety with modifications to treatment and case management supports. For example, expressive therapy (or using movement to express feelings) has been shown to be effective for individuals with cognitive disabilities, including mental retardation. Role-playing can help individuals with mental retardation internalize behaviors associated with the roles assumed in these kinds of activities.

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[14] ADA excludes transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments, and other sexual behavior disorders from the definition of disability. Psychoactive substance use disorders resulting from current illegal use of drugs are also excluded.

[15] There are seven areas of functional limitation: executive functions, self-care, mobility, social skills, problem-solving, communication, and learning.

[16] Written English is a second language for individuals whose first language is American Sign Language (ASL). When interpreters are used, they should be determined qualified by a chapter of the Registry of Interpreters for the Deaf or another screening organization) to minimize translation challenges. Interpreters should always be neutral third parties who are hired for the specific purpose of interpretation of sessions; family members and friends should not be used.

HOUSING

It has been estimated that about half of all individuals who experience homelessness have had a diagnosable substance use disorder at some point in their lives. Many also have co-occurring psychiatric disorders and co-existing medical conditions (e.g., malnutrition, diabetes, liver disease, neurological impairments, pulmonary diseases, heart disease, skin conditions, dental health problems, infectious diseases such as HIV/AIDS, tuberculosis, and hepatitis B and C).

Substance use is both a precipitant and consequence of homelessness and can lead to loss of housing as well as exacerbate difficulties in securing safe and sober housing subsequent to becoming homeless. Most landlords will not rent to individuals who are actively using substances. Moreover, the use of illicit substances can be used to deny admission or evict people from federally assisted housing. Individuals who have engaged in criminal activities that are drug-related must be denied admission to public housing and most other federally assisted programs. Yet, a fixed address is required to apply for and receive certain entitlements. Safe, secure and substance-free housing is critical to recovery, but often difficult to acquire. Services, supports and treatment cannot be effective without housing. Many individuals with substance disorders have histories of rental difficulties or criminal records and need opportunities to build rental histories. A number of substance abuse treatment programs have incorporated housing into the range of services they offer to meet needs of their clients with housing challenges.

Homelessness and substance abuse also affects young people, many of whom run away from homes where they experienced abuse and neglect. Research studies of youth who are homeless suggest that most use multiple substances. In addition, many share needles and drug paraphernalia which adds to their risk for contracting HIV and other diseases. Their use of survival sex (i.e., trading sex for shelter, food, drug money) adds to the risk for contracting HIV and sexually transmitted diseases. A number of outreach programs have been developed to respond to the needs of these youth. Most focus on assisting them in negotiating entry into programs that provide services and supports including emergency shelter, residential treatment, transitional living programs, treatment for HIV, job training, education, sexual and reproductive health care, and counseling. It should be noted that many of these youth may not be able to safely return home due to the less than optimal conditions that led to their exit in the first place.

Outreach to individuals with substance use disorders who are homeless has been shown to be effective when provided by outreach workers who are in recovery and have histories of homelessness. Such shared experiences can foster engagement with a population that is difficult to reach. Flexible, low demand services are often used to accommodate people who are initially reluctant or unwilling to make a commitment to more extensive care. Such services can be used to increase motivation for treatment and engagement in more intensive services and supports. For example, drop-in centers have been shown to be effective in engaging individuals who are homeless in treatment.

In addition to outreach, other essential components of effective services and supports for this population include case management and a range of housing options. Studies have demonstrated that people with substance use disorders who are homeless need services and supports that address tangible immediate needs for housing, income, employment, access to flexible, low-demand interventions, and long-term continuous treatment and supports; short-term treatment has not been found to be effective for this population. Collaboration among providers and service sectors is essential to serving this population who should be able to enter through any door (e.g., jail, mental

health programs, welfare offices, and substance abuse treatment) and have access to an array of desired supports and services. In addition, access to housing should not be made contingent upon receipt of treatment.

Continuum of Care supportive housing programs subscribe to an abstinence/sobriety model based on the belief that adherence to treatment and sobriety promotes housing stability. But, studies show this model produces only modest improvements in housing stability, particularly for individuals who suffer from co-occurring substance use and psychiatric disorders and have experienced chronic homelessness. Moreover, there is no empirical support for the practice of requiring individuals to participate in psychiatric treatment or attain sobriety before obtaining housing. On the other hand, the Housing First approach used by the Pathways to Housing program has one of the highest independent housing rates for individuals who were formerly homeless. This program ascribes to the philosophy that providing housing first creates a foundation for the onset of the process of recovery since a residence of one's own can function as a motivator to refrain from substance abuse.

The Housing First model is an approach to ending homelessness that centers on the rapid provision of housing and then providing services and supports as needed. This model is housing-based and eschews traditional approaches (e.g., transitional housing and emergency shelters) by helping individuals and families access and sustain permanent rental (not time-limited) housing as quickly as possible. A variety of services and supports are delivered on a time-limited or long-term basis depending upon need following housing placement to promote housing stability and well-being. Moreover, housing is not contingent on compliance with services. Instead, participants must comply with standard lease agreements and are provided with the services and supports that are necessary to help them do so successfully. This model has been found to be consistent with what most people experiencing homelessness want and seek assistance for.

The Pathways program uses a harm-reduction approach to address substance abuse and psychiatric symptoms or crises to reduce the adverse consequences of substance abuse and psychiatric symptoms. Participants are allowed to make choices (e.g., whether to use substances or take medication) and continue to receive housing and supports irrespective of their choices. In addition to an apartment, participants are offered treatment, support, and other services by the program's Assertive Community Treatment (ACT) team.

The National Alliance to End Homelessness coordinates a network dedicated to Housing First information that can be found on the web at http://www.endhomelessness.org/section/tools/housingfirst.

EMPLOYMENT

Individuals with substance use disorders experience high rates of underemployment and unemployment despite having educational levels comparable to that of the general population. Substance use disorders present significant impediments to obtaining and maintaining employment due to absenteeism, injury, illness, decreased functional capacity, and job-maintenance behaviors (e.g., attendance, punctuality, grooming, responses to supervision, and difficulties with co-worker interactions) rather than the skills needed to perform a job. Employees who have substance use disorders have been found to use more sick days and benefits, experience more extended absences, are tardy three time more often, five times more apt to file workers' compensation claims, more prone

to engage in property theft, and exert only about seventy-five percent of their productive capacity while on the job.

There are even more significant obstacles to employment for individuals with substance use disorders and criminal justice system involvement. Employers are reluctant to hire individuals who have a history of a substance disorder, particularly those who also have a criminal record[17]. Many lack marketable skills and work experience because they were unemployed or underemployed prior to incarceration. These individuals may also lack the social skills necessary to seek and hold jobs.

A number of programs have been developed to help prepare individuals who are incarcerated or on parole for employment through the provision of life skills training, job preparation skills, job placement, social support, and follow-up assistance. In addition, comprehensive programs also address the stigma associated with having been incarcerated, problems with substance use, affordable housing, child care, psychiatric disorders, and other barriers to securing and maintaining employment. During incarceration benefits from job training and job readiness preparation, skills identification and assessment, role playing for future interviews and job situations, and reach-in programs that serve as quasi-internships or offer transferable pre-employment experience have been found to be effective. Some correctional agencies conduct job fairs in which local businesses provide information on available positions in the community for inmates who are about to be released. These events provide an opportunity for employers to visit correctional facilities, engage inmates in practice interviews, assist with resume writing, and conduct job skills assessments, while inmates obtain assistance with locating jobs that may be available in the community.

While employment was not typically a focus of substance abuse treatment in the past, it has become one in recent years due to welfare reform and other factors. Many of the individuals who have continued to rely on welfare benefits have substance use disorders. In addition, a lot of these are young women with children who often fear loss of custody of their children if identified as having a problem with substance use. The Temporary Assistance to Needy Families (TANF) program of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 imposes work requirements and limits on the amount of time an adult is eligible for benefits. TANF recipients must (with a few exceptions) become employed within two years, and no family can receive benefits for more than five cumulative years (with exceptions for hardships). In addition, recipients can be screened for substance use, and positive results can lead to disruptions in the receipt of benefits.

Under section 115 of the Personal Responsibility and Work Opportunity Reconciliation Act, individuals convicted of a state or federal felony offense of possession, use, or sale of drugs (with the exception of alcohol) are subject to a ban on receiving federal cash assistance from the TANF program and food stamps, even if they serve the full term of a sentence, unless the state in which they reside has passed legislation opting out of or lessening this restriction. Moreover, an individual who has been convicted of a crime cannot be included in the calculation of household size for TANF benefits or food stamps, but their income and resources are included in calculating eligibility for food stamps which penalizes the entire household rendering it eligible for less assistance each month. This results in a decrease of resources available to individuals to alter their circumstances to secure and retain

[17] Although there are laws that prohibit employment questions regarding arrests, employers can inquire about convictions.

employment and eliminate contact with people, places, and situations associated with former substance use.

The 1998 amendments to the Higher Education Act of 1985 added a provision that makes an individual convicted (in the criminal as opposed to juvenile justice system) of the possession or sale of a controlled substance ineligible to receive any federal grant, loan, or work assistance funding for higher education. The period of ineligibility varies from one year to an indefinite length of time in accordance with whether the conviction is for possession or sale and is for a first, second, or subsequent offense. And, these restrictions are placed on an individual in addition to the sentence imposed by the criminal justice system. Eligibility can be reinstated subsequent to satisfactory completion of an approved drug rehabilitation program that must include at least two unannounced drug tests. (Interestingly, the law does not include alcohol-related convictions, or prohibit student loans for individuals convicted of non-drug-related violent crimes such as assault, rape, or murder.)

The importance and, in many instances, the necessity, of work as part of the recovery process is increasingly being recognized in the substance abuse treatment field. In addition to the provision of a source of income, work augments self-esteem, provides opportunities for substance-free socialization, demonstrates accountability, and, for individuals in the justice system, is an important part of residing within mainstream society. Studies point to the importance of employment prior to or during treatment since it is highly associated with treatment retention, beneficial outcomes, and reductions in the occurrence and severity of relapses to substance use as well as criminal behavior. In fact, it is recommended that vocational services be fully integrated into treatment and that vocational specialists become part of the treatment team (either through direct hire or contract).

STRATEGIES FOR PROMOTING EMPLOYMENT
Job Placement Strategies: ◆ Job search assistance, either in a group setting or through one-on-one counseling or coaching, sometimes through job clubs[18] with workshops, access to phone banks, and peer support. ◆ Self-directed job search, where individuals search and apply for jobs on their own. Sometimes individuals must submit a log of their job contacts. ◆ Job development and placement, where program staff members identify or develop job openings for participants. Counselors refer individuals to openings, often using computerized job banks. In more intensive models, staff members develop relationships with specific firms, gaining knowledge of potential job openings or commitments to hire through the program. Job Training Strategies: ◆ Classroom occupational training, by training or educational institutions such as community colleges or vocational schools, community-based organizations, or nonprofit or for-profit training centers. Training may include formal postsecondary programs leading to certification or licensing in a particular occupation. ◆ On-the-job training with public or private sector employers, who usually receive a subsidy to cover a portion of the wages paid during the training period. The employer subsidy may be drawn from welfare or food stamp payments that otherwise would have been paid to the individual recipient. ◆ Use of a mentor, who provides support to the client within the work setting. A mentor could be someone who went through substance abuse treatment and is now working. Broad Education Strategies: ◆ Remedial education, such as preparation for the general equivalency diploma (GED), basic skills instruction in reading and

[18] Job clubs are group oriented behavioral programs that help individuals secure employment opportunities.

mathematics, or English-language classes for persons whose primary language is not English, and computer-skills building.
- Postsecondary degree programs (e.g., associate's or bachelor's degree), generally financed by grants, Federal loans, or scholarships.

Mixed Strategies:
- Vocational training plus basic skills, either in the workplace or in instructional centers/classes.
- Supported work experience, with pre-employment preparation, assignment to public jobs, and gradually increasing hours and work responsibility combined with ongoing counseling, education, and peer support.

(SAMHSA TIP # 38)

Effective vocational services are tailored to the individual's stage of employment or work readiness. For example, clients with solid work histories require different services and supports than clients who do not have work histories and whose lives have been beset with substance use problems. Prevocational services and supports include life skills training to manage independent living, training and education, as well as work adjustment (e.g., attention to details, successful task completion, accountability, frustration tolerance, working as a team member) provided by job coaches for individuals who have never held a job. Clients often require inoculation against crises at work and assistance with identifying relapse triggers at work and ways to cope with them. Triggers can include job loss, lack of structure that leads to boredom, socialization activities that include alcohol, family members who are invested in the person's non-employment role, and paydays.

COLLABORATION WITH SCHOOLS

Education is a building block for self-esteem, employability, and can support recovery. Research has shown that treatment outcomes improve when they are provided in combination with education programs, particularly for clients with histories of low educational achievement and literacy challenges.

Educational settings offer many opportunities to provide preventive and early intervention services and supports. School personnel can help identify students with substance use problems as well as those who are risk for problems as well as provide curricula aimed at prevention and intervention. A number of school-based prevention and early intervention programs are described below.

ACROSS AGES

Across Ages is a school and community-based drug prevention program for youth aged nine to thirteen years of age. The program pairs older adult mentors (aged fifty-five and older) with youth during their transition to middle school. In addition to mentoring, Across Ages incorporates community service, social competence and appropriate resistance behaviors/skills training, and family activities to build youths' sense of personal responsibility for self and community to prevent, decrease, or delay the use of alcohol, tobacco, and other drugs and associated psychosocial problems.

Across Ages has been shown to be effective for African American, Hispanic/Latino, Native American, and Caucasian youth. Participants demonstrate improved commitment to school, healthier attitudes and behaviors regarding not using substances, a sense of social responsibility, problem-solving skills. adopting prosocial values, as well as increased knowledge regarding the consequences of substance use, and avoidance of later substance use. Information about this SAMHSA model program and a fidelity instrument can be found on the web at http://templecil.org/programs.

ALL STARS

All Stars is a school or community-based program designed to delay and prevent high risk behaviors (e.g., substance use, violence, and premature sexual activity) in middle school-aged adolescents from eleven to fourteen years of age in grades six and seven. The program consists of thirteen lessons provided during the first year, and nine booster lessons provided during the second. All Stars is available in formats for delivery in schools as part of regular classroom instruction, and in after-school and community-based organizations and programs.

The program emphasizes prosocial character and environment development, fosters positive norms that support the choice to avoid high-risk behaviors, promotes perceptions that engaging in high-risk behaviors interferes with desired and valued lifestyles, strengthens bonds to prosocial groups and institutions that promote positive values, and increases the amount of positive attention young adolescents receive from parents and other respected adults.

The program has been used effectively in rural, suburban, and urban settings with children from diverse ethnic and socioeconomic backgrounds. Outcome studies indicate participation leads to reductions in substance use, delays in the onset of sexual activity, and increased commitment to avoid high-risk behaviors. The teacher format has been shown to be more effective than the specialist (i.e., mental health professional) format. Information on this SAMHSA model program can be found at www.allstarsprevention.com.

ATLAS (Athletes Training and Learning to Avoid Steroids)

ATLAS is a school-based program for male high school athletes aged thirteen to nineteen in grades nine through twelve that uses a sports team, positive peer pressure, and role modeling to decrease the use of anabolic steroids, alcohol and other drugs, and performance-enhancing supplements. ATLAS fosters the use of healthy nutrition and physical exercise as alternatives to substance use. It focuses on potential immediate consequences (rather than future adverse effects) of substance use.

The program consists of a ten-session, forty-five minute, interactive curriculum that is conducted with school sports teams in classrooms using role plays, educational games, the creation of mock public service campaigns, and cordial competition between squads. Student athlete peers function as leaders, and coaches function as facilitators. Students are divided into small groups with a peer (squad) leader for each group. Athletes are taught to attain their athletic goals using sports nutrition and strength training, and avoiding harmful substance use. Team workbooks, sports menus, and training guides complement the program's instructional materials.

ATLAS has been successfully implemented in urban and rural schools with participants from diverse racial, ethnic, and socioeconomic backgrounds. Beneficial outcomes include improved substance use resistance skills, increases in perceived personal susceptibility to the harmful effects of drugs, beliefs that coaches will not tolerate steroid use, improved perceptions of personal athletic competence, reductions in drinking and driving episodes, enhanced knowledge regarding alcohol, marijuana and anabolic steroids, and decreases in intent to use anabolic steroids. Information on this SAMHSA model program can be obtained from the web at www.atlasprogram.com.

Protecting You/Protecting Me (PY/PM)

Protecting You/Protecting Me is a five-year classroom-based alcohol-use prevention curriculum for elementary students in grades one through five, aged six to eleven, and high school students in eleventh and twelfth grades, aged sixteen to eighteen. The curriculum incorporates information on brain development, focuses on the immediate risks of using alcohol prior to the age of twenty-one, and includes parental involvement activities. It can be taught by trained high school students as well as teachers.

The program consists of forty-two thirty to fifty-minute lessons, eight of which are taught during grades one through four, ten taught during the fifth grade, and forty required reinforcement activities, eight of which are used during each grade. PY/PM uses role-playing, small group and classroom discussions, reading, writing, story telling, surveys, art, and music. It is designed to be presented as part of a school's core curriculum and contains eight topics:

- Our Brain
- Growth and Development
- Health and Safety
- Rules and Laws
- Friends
- Choices and Decisions
- Media Awareness
- Communication (especially with adults)

PY/PM has been found to be effective for children from all socioeconomic and cultural backgrounds and has been used with more than three thousand five hundred students in elementary schools in California, Connecticut, Guam, Michigan, Montana, and Texas, including those living on tribal reservations. Outcome studies indicate elementary school participants show improvements in vehicle

safety skills (i.e., the ability to protect themselves when there is no option other than riding with a driver who is impaired), increases in knowledge regarding the brain and development, and stress management and decision-making skills. High school student participants also demonstrate accurate perceptions of the risks associated with underage alcohol use. Information on this SAMHSA model program can be found at http://www.pypm.org/about_us/index.cfm.

LIFESKILLS TRAINING (LST)

LifeSkills Training is a SAMHSA model program for elementary school children aged eight to eleven and middle school children aged eleven to fourteen. It consists of two curricula that are delivered in a series of classroom sessions over the course of three years. The program targets children from a variety of ethnic groups (e.g., Caucasian, African-American, Hispanic/Latino, and Asian-American) in urban and suburban schools who have not engaged in substance use. The sessions use lecture, discussion, coaching, and practice to enhance self-esteem, feelings of self-efficacy, ability to make decisions, and resist peer and media pressure. The program consists of three major components:

- **Drug Resistance Skills** which enable children to recognize and challenge common misconceptions about substance use, as well as deal with peers and media pressure to engage in substance use.
- **Personal Self-Management Skills** to help children examine self-image and its effects on behavior, set goals and keep track of personal progress, identify everyday decisions and how they may be influenced by others, analyze problem situations, and consider the consequences of alternative solutions before making decisions.
- **General Social Skills** which are designed to teach children skills to surmount shyness, communicate effectively and avoid misunderstandings, verbal and nonverbal assertiveness for making or refusing requests, and impart awareness of choices other than aggression or passivity in the face of difficult situations.

The elementary school curriculum is comprised of twenty-four thirty to forty-five-minute classroom sessions conducted over the course of three years. The first year (Level 1) is composed of eight class sessions and covers all skill areas. The remaining booster sessions are divided into eight class sessions for Level 2, and eight for Level 3. The booster sessions provide additional skill development and opportunities to practice in key areas. Level 1 is designed for either the third or fourth grade when the transition from elementary to middle school begins. Both the elementary and middle school programs can be taught intensively (consecutively every day, or two to three times a week) until the program is complete, or in a more extended schedule (once a week). Both formats have been found to be equally effective.

The curriculum for middle (or junior high) schools is comprised of fifteen forty-five-minute classroom sessions. A booster intervention is taught during ten classroom sessions held during the second year and in five sessions held during the third year. The initial program is implemented during sixth or seventh grade, followed by booster sessions over the next two years. Optional violence prevention units are available for each year of the program.

Outcome studies indicate that LT leads to reductions in the initiation of cigarette smoking, alcohol use, heavy drinking, drinking to intoxication one or more times a week, marijuana use, long-term and short-term substance abuse, amounts of cigarette smoking, and use of inhalants, narcotics, and hallucinogens. Program materials can be downloaded at no cost from http://www.lifeskillstraining.com/planning.php.

PROJECT ALERT

Project ALERT is a drug prevention curriculum for middle school students aged eleven to fourteen. It is conducted over two years in fourteen lessons that focus on substances that adolescents are most likely to use (e.g., alcohol, tobacco, marijuana, and inhalants). Participatory activities and videos are used to motivate participants to oppose drug use, teach skills and strategies to resist pro-drug pressures, and establish nondrug-using norms.

The program uses classroom discussions and small group activities led by trained teachers to stimulate peer interaction and challenge students' beliefs and perceptions about substance use. Role-playing activities are used to facilitate learning and mastering resistance skills. Videos are used for modeling appropriate behaviors. Homework assignments that also involve parents are used to facilitate parent–child discussions about substances and ways to resist using them.

Project ALERT has been shown to be effective for students from socioeconomically and ethnically diverse backgrounds (e.g., Caucasians, African Americans, Hispanics/Latinos, Asian Americans and Native Americans) in urban, rural, and suburban communities. Outcomes studies indicate that the program leads to reductions in pro-drug attitudes and beliefs, intentions to use substances, beliefs that substance use is not harmful, and perceptions that many peers use substances. It also leads to increases in beliefs that one can successfully resist both internal and external pressures to use substances, and significant reductions in the use of marijuana and cigarettes, and initiation of marijuana use. A fidelity instrument and information about this SAMHSA model program can be found on the web at http://www.projectalert.best.org/Default.asp?bhcp=1.

LIONS-QUEST SKILLS FOR ADOLESCENCE (SFA)

Lions-Quest Skills for Adolescence is a prevention program designed to be used on a school-wide and/or classroom basis during grades six through eight for ten to fourteen-year old students that involves educators, parents, and community members. SFA consists of five components:

- A classroom curriculum which consists of one hundred two skill-building lessons. Implementation formats include a nine-week, forty-lesson mini-course, and a three-year program with all one hundred two lessons. It includes forty-five-minute lessons that are organized into eight sequential thematic units, and a service-learning unit that extends throughout the curriculum. The classroom curriculum-based program can be delivered on a daily basis, two to three times per week, or once weekly. Each been shown to be equally effective. It uses inquiry, presentation, discussion, group work, guided practice, and reflection to develop positive social behaviors (e.g., self-discipline, responsibility, good judgment, and respect for self and others).
- Parental and family involvement is achieved through shared homework assignments, four parent meetings, a parent book, and direct parental involvement in school activities.
- Creation of a positive school climate which involves school staff, students, parents, and community members in the establishment of a school climate committee to reinforce curriculum themes through school wide events.
- Involvement of the community including school staff, parents, Lions Clubs and other service organizations, as well as youth-serving organizations in training workshops, school climate events, panel discussions, service projects, and parent meetings.
- Professional development for each implementer though attendance at a two or three-day instructional workshop.

SFA has been found to be effective in both public and private schools with children from diverse cultural and socioeconomic backgrounds. The program has been translated into sixteen languages. Studies indicate that participants delay the initiation of regular cigarette smoking and experimental use of marijuana through the end of the seventh grade, the initiation and monthly use of alcohol and binge drinking for Hispanics/Latinos, and progression to regular cigarette smoking and experimental marijuana use among students who had initiated regular alcohol use or binge drinking, but not regular cigarette smoking, by the end of the sixth grade. Information on this SAMHSA model program can be found on the web at http://www.lions-quest.org/.

PROJECT EX

Project EX is a school-based tobacco-use cessation program for high school students from diverse cultural backgrounds in urban and suburban schools aged fourteen to nineteen who use tobacco. The program involves enjoyable, motivating activities including games, talk shows, and alternative exercises such as yoga. It consists of an eight-session curriculum that is delivered over six weeks and focuses on coping with stress, dealing with nicotine withdrawal, relaxation techniques, and ways to avoid relapse. The program is designed to foster interpersonal, coping, commitment-building, and decision-making skills, and provides training in self-control.

Outcome studies indicate that Project EX helps participants cease using tobacco and maintain quit rates. It is a SAMHSA model program. Material costs for the program include $60.00 for the teacher's manual (with audio CD), $35.00 for a set of five student workbooks, and $2.50 each for student pretests/posttest surveys, plus shipping and handling. Training ranges from $1,100.00 to $2,000.00 plus travel. Information is available from http://tnd.usc.edu/ex/index.php.

PROJECT SUCCESS

Project SUCCESS (Schools Using Coordinated Community Efforts to Strengthen Students) is a preventive and intervention program designed to decrease substance use among high school adolescents aged fourteen to eighteen who display multiple difficulties and are high risk. The program is conducted by master's degreed professionals in schools who provide a range of substance use prevention and early intervention services including information dissemination, normative and preventive education, counseling and skills training, problem identification and referral, community-based and environmental interventions. Program components include:

- Prevention Education Series, which is an eight-session substance abuse prevention education program.
- Individual Assessments that are conducted subsequent to the Prevention Education Series to determine level of substance use, family substance abuse, and need for additional services.
- Individual and Group Counseling, which consists of a series of eight to twelve individual or group sessions conducted in the school. Students attend one of seven different groups based on their developmental levels, substance use, and family history of substance abuse. Individual sessions are scheduled as needed.
- Parent Programs, which include an evening dinner meeting for parents with a speaker who discusses what they can do to prevent and reduce substance use.
- Referrals for students and parents who require treatment, more intensive counseling, or other services and supports.

The program has been shown to be effective for African American, Asian American, Caucasian, and Hispanic/Latino youth of both genders who display a variety of difficulties (e.g., poor academic

performance, emotional problems, school discipline problems, truancy, negative attitudes toward school, and criminal behaviors). Outcomes evidenced include significant reductions in substance use (e.g., alcohol, tobacco, and marijuana) in participants as well as students who associate with participants. Information on this SAMHSA model program is available from http://www.sascorp.org/school.htm.

PROJECT NORTHLAND

Project Northland is a multi-year alcohol use intervention program for sixth, seventh, and eighth grade students aged ten to fourteen. It includes parental involvement and education programs, behavioral curricula, peer participation, and community activities designed to address alcohol consumption. Each intervention year has an overall theme tailored to the developmental levels of participants and consists of four components:

- *Slick Tracy Home Team* involves sixth graders and their parents in enjoyable and educational activities at home. It entails the use of the *Slick Tracy* comic book series to stimulate discussion of alcohol-related issues.
- *Amazing Alternatives!* is a curriculum of eight forty-five-minute teacher and peer-led classroom-based sessions. It is designed to teach seventh graders skills to identify and resist influences to use alcohol and encourage alcohol-free alternative activities.
- *PowerLines* contains eight forty-five-minute sessions that are part of a four-week program for eighth grade students. It teaches students how communities influence behavior and ways they can create changes in communities.
- *Supercharged* includes strategies and materials for schools that can be used to involve parents and communities.

The program has been shown to lead to delays of the ages at which participants start consuming alcohol, reductions in alcohol use among those who have already tried alcohol, and decreases in the number of alcohol-related problems experienced by youth who consume alcohol. It also has been found to have beneficial effects on cigarette smoking, peer influences to use alcohol and normative expectations regarding youthful alcohol consumption, as well as parent-child communication about the consequences of alcohol use and the reasons for not using alcohol. Information on this SAMHSA model program can be found on the web at http://www.epi.umn.edu/projectnorthland/Schoolba.Html.

CLASS ACTION

Class Action is part of the Project Northland school-based alcohol-use prevention curriculum for high school students. It uses interactive, peer-led sessions to discuss and debate the consequences of substance abuse in order to alter social norms around alcohol use and convert negative peer pressure into positive peer pressure. It is designed to develop resistance to substance use, decision-making, social competence, and leadership skills. It can be used as part of the Project Northland series or as a stand-alone program.

The Class Action curriculum is delivered in eight to ten once weekly classroom sessions during which students are divided into six legal teams to prepare and present hypothetical civil cases in which individuals have been harmed due to underage drinking. Students build legal cases and present them to a jury of their peers using a casebook and audio taped affidavits and depositions. The six case topics include: date rape; drinking and driving; drinking and vandalism; drinking and violence; fetal alcohol syndrome; and school alcohol policies. Class Action encourages community involvement through the use of outside speakers during the classroom sessions or on a school-wide basis, student research on alcohol-use issues in their own communities, and student involvement in community

events (using ideas from Project Northland's *SuperCharged!* materials). A parent education component entails the distribution of four colorful postcards with key messages for parents about teen alcohol use and their role in prevention.

The program has been used effectively with students from diverse cultural backgrounds (e.g., Caucasian, Native American, African American, Asian American, and Hispanic/Latino). Outcomes studies indicate that participant communities experience reductions in adolescent alcohol consumption. Information on this SAMHSA model program can be found on the web at http://www.hazelden.org/.

PROJECT TOWARD NO DRUG ABUSE (TND)

Project Toward No Drug Abuse is a school-based program designed to help high school students aged fourteen to nineteen resist substance use. TND consists of twelve forty to fifty-minute lessons provided for four to six weeks that include motivational activities, social skills training, and decision-making components delivered through group discussions, games, role-playing exercises, videos, and student worksheets. The program is designed to teach increased coping and self-control skills to foster understanding of cognitive misperceptions that may lead to substance use, and expression of a desire not to abuse substances; help participants understand the sequence of substance abuse and the consequences of using substances; correct myths concerning substance use; demonstrate effective communication, coping, and self-control skills; and promote a commitment to discuss substance abuse with others. TND consists of the following components:

- Education on the progression of substance use to substance abuse
- Exercises to promote motivation for opposing substance abuse (e.g., a mock *Talk Show* that provides empathy lessons, discussions on stereotyping, and the effects of being labeled a substance abuser)
- Interpersonal skills development (e.g., communication and active listening)
- Coping skills development (e.g., learning the value of personal health in daily living and life goals)
- Self-control training (e.g., social self-control skills, understanding positive and negative thought and behavior loops, and violence prevention)
- Cognitive misperception correction (e.g., substance use myths and denial)
- Tobacco cessation strategies
- Decision-making skills development and commitment building
- The *TND Game* (a classroom competition to impart information on substance use and its effects)
- The *Drugs and Life Dreams* program video
- The use of longitudinal assessment materials

Outcome studies show that participants display reductions in cigarette, marijuana and drug use as well as decreases in levels of alcohol consumption, and carrying weapons by males. Information on this SAMHSA model program can be found at http://tnd.usc.edu/.

PROJECT TOWARDS NO TOBACCO USE (TNT)

Project Towards No Tobacco Use is a classroom-based curriculum designed to prevent or reduce tobacco use in youth aged ten to fifteen in grades five through ten that is delivered by teachers who have received training in the model. It includes ten core sessions and two booster sessions and is comprised of the following components:

- A ten-day classroom-based social influences program that examines media, celebrity, and peer portrayals of tobacco use
- Training in active listening, effective communication, general assertiveness development, and methods for enhancing self-esteem
- Education regarding the course of tobacco-related use illnesses and diseases; correction of misperceptions of tobacco use prevalence estimates
- Learning tobacco-specific cognitive coping skills and assertive refusal techniques
- Practicing ways to counteract media portrayals of tobacco use including social activism letter writing to make public commitments to not using tobacco products
- Use of homework assignments, a classroom competition (i.e., the "TNT Game"), and a two-lesson booster program
- Longitudinal assessment material

TNT has been shown to be effective in helping youth resist tobacco use, advocate for zero tobacco use, and demonstrate effective communication, refusal, and cognitive coping skills, as well as identify how the media and advertisers influence youth to use tobacco products, and methods for enhancing self-esteem. The program has been shown to lead to reductions in the initiation of cigarette smoking and the use of smokeless tobacco, as well as the frequency of cigarette smoking. Information on teacher training and purchasing student and teacher materials for this SAMHSA model program can be found at http://www.etr.org/.

ADOLESCENT TRANSITIONS PROGRAM (ATP)

The Adolescent Transitions Program is a middle school intervention for families that offers a three-tiered approach in which schools establish Family Resource Centers that offer the opportunity for schools to partner with parents to provide information regarding risk factors for early substance use and parenting practices that reduce the risk for substance use by their children. A video called *Parenting in the Teenage Years* is used to help parents identify observable risk factors to facilitate parents' evaluation of their own level of risk, as well as that of their children, and discriminate between effective and ineffective family management skills (e.g., positive reinforcement, monitoring, limit-setting, and relationship skills). The Family Check-Up component offers family assessments and professional support to identify families at risk for problem behavior and substance use. The Parent Focus curriculum provides professional support for parents who are making changes indicated in Family Check-Up assessments. Professional support is offered, including a brief family intervention, school monitoring system, parenting groups, behavioral family therapy, and case management services depending upon need.

ATP uses information dissemination to foster family management practices that promote school success and prevent the development of early-onset alcohol and other substance use. Home visits are provided to increase participation in family-centered interventions and increase parental engagement. Video examples and a pencil-and-paper rating form are employed to help parents identify observable risk factors within the context of parent-child interactions. A six-week health curriculum that promotes school success and reductions in substance use and conflict is offered to families who are at risk. Information on this SAMHSA model program can be obtained from http://cfc.uoregon.edu/atp.htm.

KEEPIN' IT REAL

Keepin' it REAL (Refuse, Explain, Avoid, Leave) is a school-based prevention program for elementary, middle, and early high school students aged ten through seventeen that incorporates

traditional ethnic values and practices that protect against drug use. It consists of ten lessons with five videos that demonstrate the use of resistance strategies and skills taught in the lessons. The videos, produced by youths and based on actual student experiences, demonstrate how students can use REAL strategies to resist drug use. Students are taught how to say no to substance use through strategies in the acronym REAL (Refuse, Explain, Avoid, Leave). Students learn how to recognize risk, value their perceptions and feelings, embrace their cultural values (e.g., avoiding confrontation and conflict in favor of maintaining relationships and respect), and make choices that support them. Mexican American, African American and multicultural versions have been developed so that students can recognize themselves in the prevention message and can see solutions that are sensitive to their unique cultural environments. The program targets adolescents before they actively begin to engage in risky behaviors such as experimentation with alcohol and drugs as well as those who engage in substance use.

One monthly booster session conducted during the eight months subsequent to completion of the classroom-based intervention is recommended. In addition, optional program prevention messages and resistance strategies can be reinforced in the community through television and radio public service announcements and billboards.

Outcome studies indicate participants display reductions and cessation in substance use (especially alcohol and marijuana), increased repertoires of resistance skills and more frequent use of those skills, personal anti-drug norms, and adoption of strategies to resist using alcohol, cigarettes, and marijuana, as well as retention of unfavorable attitudes regarding peers who use substances, and perceptions that peers' substance use experimentation is significantly less than previously believed. Information about this SAMHSA model program can be found on the web at http://keepinitreal.asu.edu.

CASASTART

CASASTART (Striving Together to Achieve Rewarding Tomorrows) is a school-centered program for preadolescents aged eight to thirteen who are at risk for engaging in substance use and criminal behaviors. In this program, key community stakeholders (e.g., schools, law enforcement, faith-based organizations, social services, and health agencies) are mobilized in a collaborative effort. Children who are at risk are provided with case management to coordinate and provide services and supports. Biweekly case review conferences as well as quarterly administrative and advisory council meetings are held. Each case manager serves fifteen children and their families. All participants receive the following:

- Social support
- Family services
- Education services
- After-school and summer activities
- Mentoring
- Community policing/enhanced enforcement
- Juvenile justice intervention (if needed)
- Incentives

Outcomes studies indicate that participants display improvements in attachments to positive individuals and institutions, positive peer influences, and reductions in associations with peers who engage in delinquent acts, negative peer pressure, use of gateway drugs, violent offenses, and involvement in drug selling. Participants have also been found to be more likely to be promoted to the

next grade. Information on this SAMHSA model program can be obtained from lmurray@casacolumbia.org.

PROJECT STAR

Project Students Taught Awareness and Resistance (STAR) is a community-based prevention program that can be used by schools, parents, community organizations, the media, and health policymakers. The program addresses influences adolescents face regarding substance use. To address demand, the program seeks to alter behavior through teaching resistance skills. To address supply, the program seeks to alter the environment by involving entire communities in drug-prevention activities. It consists of the following components:

- School Program: This is a two-year program presented to students during the transition year to middle or junior high school (typically in the sixth or seventh grade). The first year consists of about ten sessions that focus on increasing skills to resist pressures to use drugs. A five-session booster program is provided during the second year. Peer leaders help teachers facilitate the program. Techniques include group discussion, role-playing, and homework assignments completed with participants' families.
- Parent Program: This component is implemented during the second year of the program and includes workshops on parenting skills and neighborhood activities. A minimum of three planning meetings and an educational seminar are held.
- Community Organization: This component is implemented during the third year to assemble and train community leaders in planning and implementing substance use prevention services.
- Policy Program: This component is designed to change local ordinances to restrict students' access to cigarettes, alcohol, and marijuana, as well as support prevention efforts by leaders from the community organization component.
- Media Program: This is an ongoing component of the multi-year effort that uses television, radio, and newspapers to introduce the program to communities, provide information about activities, and reinforce program components.

Teachers receive training during a two-day workshop followed by annual half-day training sessions for the school program. Principals and volunteer parents receive training in a one-day workshop to become leaders for the parent program component. The training for community leaders takes place over several sessions.

Outcome studies indicate significantly reduced weekly and monthly cigarette, alcohol, and marijuana use on a community-wide basis. The program is rated by SAMHSA as an effective program.

NOT ON TOBACCO (N-O-T)

Not On Tobacco is a tobacco cessation program designed for youth aged fourteen through nineteen years of age who currently smoke, particularly those who smoke on a daily basis, or who are likely to have a nicotine addiction. It can be used in schools or other community settings and is designed to help youth stop smoking, decrease the number of cigarettes smoked, increase healthy lifestyle behaviors (e.g., exercise and nutrition), reduce unhealthy lifestyle behaviors (e.g., use of alcohol and illicit substances), and enhance life-management skills (e.g., stress, decision-making, and peer and family relationships).

The curriculum consists of ten fifty-minute once weekly sessions conducted for small groups by teachers, school nurses, counselors, or other staff and volunteers for ten consecutive weeks, and four

optional booster sessions. N-O-T has gender-specific components, content, and techniques for males and females since males and females may start and stop smoking for different reasons. The program provides training in self management and stimulus control, social skills and social influences, stress management, relapse prevention, techniques to manage nicotine withdrawal, weight management, and resisting peer pressure.

N-O-T has been found to be effective for youth with a range of smoking behaviors, including those with significant levels of dependence. It has been used with African American, Native American, Asian American, Hispanic/Latino, Native Hawaiian, Pacific Islander, and Caucasian youth in rural, urban, and suburban schools and communities.

Program facilitators receive one-day training from the American Lung Association (ALA), which includes a bound copy of the curriculum, evaluation tools, and ongoing technical support. The training includes support, guidance, and instruction on topics such as understanding reasons for smoking, preparing to quit, nicotine addiction and withdrawal, accessing and maintaining social support, coping with stress, and preventing relapses. Information on this SAMHSA model program can be found on the web site of the American Lung Association at http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=39866.

TOO GOOD FOR DRUGS (TGFD)

Too Good For Drugs is a school-based prevention program for middle and high schools students that is designed to reduce the intention to use alcohol, tobacco, and illegal drugs. It is provided from kindergarten through twelfth grade for students aged five to eighteen and consists of sequential curricula, developmentally appropriate for each grade level, each of which builds on skills learned during the previous ones.

The set of courses focuses on personal and interpersonal skills related to alcohol, tobacco, illegal drug use, appropriate attitudes toward alcohol, tobacco, and illegal drug use, knowledge of the negative consequences of alcohol, tobacco, and illegal drug use, benefits of a drug-free lifestyle, and positive peer norms. Interactive teaching methods (e.g., role playing, cooperative learning, games, small group activities, and class discussions) are used to encourage students to bond with prosocial peers. Students receive recognition for involvement. A family component is used in each grade level that includes *Home Workouts* for families in kindergarten through eighth grade, and *Home Pages* for those in high school.

The components of TGFD include:

- Multi-lesson, multi-grade-level curricula that consists of ten lessons per grade level, from kindergarten through eighth grade; twenty-six high school lessons, with fourteen core lessons delivered in the same class, and twelve infusion lessons included in other academic classes over the course of a single grade level
- Normative education to provide accurate information about the percentage of youth that use drugs and the percentage that would disapprove if their friends used drugs
- Information about the harmful effects of drug use to amplify students' perceptions of risk
- Prosocial skills development which features goal setting, decision-making, coping, communication, and peer refusal skills
- Diverse role-playing situations that relate to alcohol, tobacco, and illegal drug use and associated problem behaviors with opportunities for skill practice
- Cooperative learning to promote prosocial skills and academic development

- Parental involvement to foster discussion and reinforce concepts and skills students learn in the program

Outcome studies indicate that participation in TGFD leads to reductions in intentions to use alcohol, tobacco, and illegal drugs, more appropriate attitudes toward alcohol, tobacco, and illegal drugs, improvements in decision-making, goal setting, and peer resistance skills, as well as increases in friendships with peers who are less likely to use alcohol, tobacco, and illegal drugs. The program has been found to be most effective when conducted during each school year. Information on this SAMHSA model program can be found at http://www.mendezfoundation.org/educationcenter/tgfd/index.htm.

SAFE CHILDREN: SCHOOLS AND FAMILIES EDUCATING CHILDREN

SAFE Children is school-based program designed for children aged five to six who are transitioning into elementary school and at high risk for substance abuse and other problem behaviors. It is a twenty-week program for families residing in inner city high-risk neighborhoods that focuses on building support networks among parents, developing parenting skills and knowledge of child development, helping parents better understand schools and how they work, and promoting children's basic reading skills. The program is offered in Spanish and English and has two components:

1. A twenty week family group curriculum that focuses on:
   - Enhancing parent and child understanding of, and involvement with, the school
   - Strengthening family relationships
   - Supporting successful parenting practices
   - Creating a supportive and normative social network

   Sessions include dissemination of information, group discussion, family activities, and assignment of between-session activities.
2. Twice-weekly individual tutoring sessions that are phonics-based. Each thirty-minute session includes direct instruction, sound and word activities, and time for reading practice.

Family group meetings are typically held in rented space in neighborhood locations that are easily accessible to families (e.g., public facilities, park buildings, and houses of worship).

Participants have been shown to display significant increases in academic achievement, including higher rates of appropriate grade-level achievement and school completion. They also display reductions in substance use and delinquent and violent behaviors during adolescence. In addition, parent participants have been shown to maintain involvement in their children's school lives. Information on this SAMHSA model program can be found on the web at http://www.psych.uic.edu/fcrg/index.html.

SAFE DATES

Safe Dates is a school-based program for male and female middle and high school students aged twelve to eighteen that is designed to halt or prevent the initiation of psychological, physical, and sexual abuse on dates or between individuals involved in dating relationships. It can be used as a stand-alone intervention or as part of health education, family, general life skills curricula, as well as drug and alcohol prevention, and general violence prevention programs. Safe Dates can be delivered by teachers and counselors; some schools have trained student peer leaders to teach the curriculum or assist with program delivery.

The program includes a curriculum with nine fifty-minute sessions, a forty-five-minute play that is performed by students, and a poster contest, all of which aim to alter adolescent dating violence norms, promote positive gender role norms, improve conflict resolution skills for dating relationships, promote victim and perpetrator's beliefs in the need for help, increase awareness of community resources for dating violence, promote help-seeking by victims and perpetrators, and improve peer help-giving skills. The program includes interactive exercises such as games, small and large group discussions, role playing, and writing exercises. The nine session topics are:

Session 1: Defining Caring Relationships: Students are introduced to Safe Dates and use a bingo game and discussion to evaluate how they want to be treated in dating relationships.

Session 2: Defining Dating Abuse: Students clearly define what dating abuse is through the discussion of scenarios and statistics.

Session 3: Why Do People Abuse?: Students identify the causes and consequences of dating abuse through small and large group scenario discussions.

Session 4: How to Help Friends: Students learn why it is difficult to leave abusive relationships and how to help a friend who has been abused through a decision-making exercise, dramatic reading, and the "Friends Wheel".

Session 5: Helping Friends: Students use stories and role plays to practice effective skills for helping or confronting friends who have been abused.

Session 6: Overcoming Gender Stereotypes: Students learn about gender stereotypes and how they affect dating relationships through a writing exercise, scenarios, and small-group discussions.

Session 7: Equal Power Through Communication: Students learn eight skills for effective communication and practice these skills in role plays.

Session 8: How We Feel, How We Deal: Students learn effective ways to recognize and handle anger through a feelings diary and a discussion of hot buttons so that anger does not lead to behavior that is abusive.

Session 9: Preventing Sexual Assault: Students learn about sexual assault and how to prevent it through a quiz, a caucus, and a panel of peers.

Safe Dates includes a forty-five-minute play about dating abuse and violence called *There's No Excuse For Dating Abuse* which is performed by students and can be presented either at the beginning or the end of the program, during a school assembly, or at other school or community events. Student actors subsequently lead small group discussions using local statistics on teen dating abuse and other issues presented in the play. A poster contest, held after the ninth session, reinforces the concepts learned in the curriculum.

The program involves family members through a parent letter and brochure which contain resources and information regarding the problem of teen dating abuse. In addition, schools can host parent education programs or talk with parents of children who are victims or perpetrators of dating abuse. Teachers are encouraged to find and use community-based domestic violence and sexual assault information, products, and services that provide accurate health information. School-wide dating abuse prevention campaigns or events that promote group activities, rather than individual dating (e.g., community service projects and class parties), can also be used to supplement core program elements.

Safe Dates has been demonstrated to be effective for African American and Caucasian males and females. Participants report less psychological, physical, and sexual dating violence perpetration and victimization. Fidelity to the program requires the inclusion of all nine sessions of the curriculum, the play, and the poster contest. Information on ordering materials for this SAMHSA model program can be found at http://www.hazelden.org/OA_HTML/ibeCCtpItmDspRte.jsp?a=b&item=2770.

PARTNERING WITH FAITH-BASED ORGANIZATIONS

Faith-based organizations can be valuable collaborative partners, particularly with regard to culturally diverse populations. In some cultures religion is highly regarded. For example, Hispanic/Latino, Native American, and African American cultures have a great deal of respect for religion and spirituality. Substance abuse treatment providers can avail themselves of the assistance of ministers, priests, or spiritual leaders when working with clients from these backgrounds.

Some members of minority groups may seek assistance for substance use problems from sources outside the formal substance abuse treatment system such as group elders, members of the clergy, and members of their social support networks. Others may prefer to participate in treatment programs that adhere to practices specific to their cultures. Efforts are being made to train clergy in assessment and principles of substance abuse counseling to integrate substance disorder treatment into their practices. (Federal funding is available to support this.) Conversely, there is also an effort being made to integrate spirituality into substance abuse treatment programs.

Spirituality plays a role in recovery (as evidenced by twelve-step programs) and is also considered to be a protective factor against the development of substance use disorders. Six in ten people in the United States consider themselves to be religious, and eight out of ten feel religion/spirituality is a source of comfort and support. Many turn to faith during times of crisis, including when confronted with a substance use problem. Research has shown that religious affiliation is negatively correlated with substance abuse and individuals who identify religion as important are significantly less likely to use substances. Attendance at religious services one or more times per week is associated with significant reductions in substance use in both adults and adolescents. For youth, there appears to be an inverse correlation between religious involvement and use of drugs so that the more active the youth's religious activity, the less they are apt to use drugs which suggests that such activities act as protective factors for youth who are at risk.

Faith-based organizations can provide spiritual assistance, a sense of belonging, emotional support, and offer substance abuse and treatment education to communities. Sermons, classes for youth and adults, newsletter articles, and other such activities can be used to help congregants learn about substance use disorders and influence attitudes regarding such problems. Members of the clergy can be a resource for prevention and treatment by addressing substance use issues in sermons and incorporating messages regarding prevention and recovery in their ministries and organizations' programs, services, and counseling. They can also help link members of their congregations to treatment and self-help resources in the community. Additional advantages of including faith-based organizations in substance treatment include accessibility since they are located where people reside, and the view of clergy as wanted helpers allowing them to knock on parishioners' doors and gain entry.

It should be noted that there is a paucity of research demonstrating effective ways religion and spirituality can be incorporated into prevention and treatment. There are few program models and a lack of rigorous evaluation of those that do exist with the exception of CASASTART and Creating Lasting Connections. Moreover, there is no agreed-upon standard of spirituality (religious or otherwise) in the treatment field.

CREATING LASTING CONNECTIONS (CLC)

Creating Lasting Connections (CLC) is a community and faith-based family strengthening program that is designed to delay the onset and subsequent use of alcohol and other drugs by adolescents. It

targets youth aged nine to seventeen and their families who are at risk for substance use problems. Interventions include skills training modules, early intervention activities, and case management services. The program has been used in American Indian schools, with Asian immigrants and Pacific Islander youth, Hispanic/Latino youth in community settings, and with youth in detention centers. It is provided in churches, housing projects, and other community settings.

The program consists of two main components and runs for approximately one year. The system level component mobilizes communities by engaging staff from faith-based organizations and volunteers to advocate for substance abuse prevention programs, resources, and services. Church Advocate Teams are organized and receive about eight to ten weeks of training. These teams then identify, recruit and engage high risk families in the community, assist with program implementation, and evaluation.

The client level component consists of parent and youth training modules, early intervention services, and follow-up case management which are provided in three phases. The first two phases are the Family and Individual Domains. A parent training component is implemented during the first phase and a youth training component is implemented during the second phase. Two parent training modules, *AOD Issues Training* and *Not My Child*, are provided for sixteen to twenty hours. The *AOD Issues Training* module teaches parents about substance use and abuse, prevention programs available in the community, and offers information regarding substance dependency. The *Not My Child* module emphasizes family planning and management skills for addressing substance use as well as developing expectations and consequences for youth. The last training module, titled Straight Communications Training, involves both parents and adolescents and emphasizes communication skills. It incorporates role-playing and family-oriented social activities. Parents and their offspring meet separately for eight to twelve hours and then together to practice techniques.

Early intervention services are offered for at least a year throughout the three phases. These services are intended to foster family resiliency by offering ongoing support and resources. Case management services are offered during phase three, subsequent to completion of both training modules. These follow-up services are provided on a bi-monthly basis via telephone or home visits from a case manager. Services and referrals are offered for approximately five to six months after the program ends.

Outcome studies have shown participation leads to improvements in church and community engagement (i.e., successful family recruitment, levels of empowerment and participation), parental knowledge and beliefs about substance use issues, youth involvement in setting and adhering to alcohol and drug rules, use of community resources, family and youth functioning (e.g., improved communication and bonding with family members, and reduced parent-child conflicts), and use of community services. The program has been shown to delay the onset and reduce the frequency of alcohol and drug use. Information on this SAMHSA model program can be found on the web at http://www.copes.org/.

COLLABORATION WITH THE JUSTICE SYSTEM

It has been estimated that up to eighty percent of individuals who are on parole, probation, and incarcerated have substance use problems that are associated with criminal activities they have engaged in, many of whom cycle in and out of the justice system. A number of studies have shown that there is a link between substance use and the commission of criminal offenses. It is estimated that almost two-thirds of individuals who are incarcerated were under the influence of a substance at the time they committed an offense. Almost sixty percent of prisoners in state institutions report substance use (other than alcohol) during the month preceding the commission of an offense. Up to fifty percent of parole violations (which account for a third of new admissions to prisons) in many jurisdictions are associated with substance use. Studies indicate that forty-two percent of individuals arrested for sex offenses[19] test positive for substances at the time of arrest. Two of every three individuals who have committed sex offenses and are incarcerated have a history of substance involvement. A number of these individuals also have co-occurring psychiatric disorders and developmental disabilities.

The number of arrestees with substance use issues, estimated to be seventy-nine percent nationally, has placed a significant burden on the criminal justice system and has caused overcrowding in jails, prisons, and juvenile detention centers. Moreover, most of these individuals do not receive treatment for substance use problems while incarcerated or in the community subsequent to release from incarceration.

It is recommended that screening for substance use problems and co-occurring psychiatric and medical disorders (e.g., infectious diseases) be conducted on all individuals upon entry into the justice system and follow-up assessments be provided for positive screens. Research demonstrates that substance use disorder treatment during and following incarceration can lead to reductions in future drug use and criminal behavior as well as improvements in social functioning. Reductions have been shown in rates of rearrest, conviction, re-incarceration, and time to recidivate. Data indicate that for every dollar invested in treatment, $7.14 is saved in future costs due to decreases in criminal activities and improvements in physical health.

It should be noted that there is robust evidence demonstrating that people who are coerced into treatment do as well as those who voluntarily participate, particularly those who are not apt to seek treatment on their own. In fact, outcomes for the former group are often better since they tend to remain in treatment longer; longer durations of treatment are associated with more beneficial outcomes. Studies on coerced treatment indicate it is most effective when participants perceive the coercion to be the result of concern for them, is done in a manner that is fair and respectful, without deception, and takes into consideration their perspectives and treatment choices. It is recommended

[19] It is generally recommended that sex offending behavior be addressed prior to focusing on substance use issues. However, treatment must take into account both problems. Cognitive-behavioral interventions that focus on relapse prevention have been used with some benefit for individuals who commit sexual offenses. Mutual support groups are contraindicated for this population.

that individuals who are coerced into treatment be incorporated into community-based treatment with clients who have not been coerced in order to obtain support from clients who are committed to treatment.

WOMEN IN THE JUSTICE SYSTEM

The number of women who have been incarcerated for drug offenses has increased significantly, particularly among those who are African American and Hispanic/Latina. In comparison to men, women are less likely to have committed violent offenses, are more likely to have experienced physical and sexual abuse, have co-occurring psychiatric disorders, experience underemployment or unemployment, more likely to use more than one substance and use them more frequently, be under the influence of drugs at the time of the commission of a crime, and have responsibility for the support of their children. In addition to significant rates of co-occurring psychiatric disorders, these women experience substantial rates of HIV infection (related to prostitution, needle sharing, and unprotected sex), and sexually transmitted diseases (STDs). Women suffer more from the social stigma of substance abuse and often from additional stressors of incarceration, single motherhood, poverty, homelessness, and lack of education and employment skills.

Most women who are incarcerated are parents; incarceration is disruptive to maintaining relationships with children (as well as spouses/partners). Children's protective services agencies take children subsequent to arrest, and, a significant percentage of mothers lose custody of their children on a permanent basis due to incarceration. In a number of jurisdictions using drugs during pregnancy is a criminal offense. However, regaining custody of children or delivering babies outside of an institution can serve as strong incentives for entering treatment.

Women with substance disorders who are incarcerated are vulnerable to recidivism and relapses when they are unable support themselves and their families through gainful employment following release. These women have been adversely affected by changes in various laws. For example, welfare-to-work legislation renders anyone who has been convicted of a drug-related felony ineligible for cash assistance or food stamps. In addition, under the Adoption and Safe Families Act of 1997, parents of children in foster care for fifteen or more of the past twenty-two months may have their parental rights terminated. Since the average prison term for women is fifteen months, an increasing number are experiencing loss of custody and contact with their children.

Despite the glaring need, there is a lack of treatment for women who are incarcerated, especially that which includes parenting and family reunification components. Moreover, aftercare services in communities are also lacking. A number of elements have been identified as critical to the promotion of recovery for females involved with the justice system:

- Longer term treatment
- Graduated series of intermediate sanctions
- Clear sanctions and rules in treatment programs
- Comprehensive services and supports
- A continuum of community-based care accessed immediately upon release

Gender-based, trauma-sensitive supports are recommended including using female staff, minimizing the removal items of clothing[20], and incorporating issues related to trauma in treatment. It is further recommended that all women in the justice system receive screening for histories of (physical, sexual and emotional) abuse during childhood and adulthood. In addition, case management and linkages to an array of services (e.g., medical, legal, housing, educational, and vocational) are recommended for these women.

DIVERSION

It costs less to provide treatment than to incarcerate individuals for substance use. Studies have shown that effective treatment leads to benefits that outweigh societal costs by a factor of four to one in terms of incarceration, foster care for children, welfare, and prevention of HIV, fetal alcohol syndrome, and treatment of medical complications in infants exposed to substances.

The criminal justice system uses a number of mechanisms to engage individuals in treatment[21] including diversion of offenders who are not violent into treatment, making treatment a condition of pretrial release or probation, and drug courts that mandate, arrange for, and monitor treatment and other services as an alternative to incarceration. The most effective models involve the integration of criminal justice and substance abuse treatment systems in screening, referral, testing, monitoring, supervision, and the systematic use of graduated sanctions and rewards. Successful system integration hinges on cross-training efforts that focus on developing a shared understanding of how both systems operate.

Diversion to treatment can occur at several points in the justice system continuum. The Sequential Intercept Model can be used to guide collaborative efforts between the mental health, substance abuse treatment, and criminal justice systems. The five points of intercept are:

- Law enforcement/emergency services
- Initial detention/initial hearings
- Jails, courts, forensic evaluations, hospitalizations
- Re-entry
- Community corrections and community support

Pre-arrest offers an opportunity for police officers to refer individuals to treatment. Arrest, often a significant event and crisis, provides an opportunity to engender engagement in substance abuse treatment on a voluntary basis. Arraignment offers the opportunity for screening, testing, and assessment for substance use and disorders and other needs. The use of substance disorder treatment options during plea bargaining can be an effective engagement strategy. Prior to

[20] Traditional justice system responses to disruptive behaviors such as seclusion (often with a minimum of clothing to prevent harm), physical restraint, intense observation, straps or cloth limb restraints, and significant doses of tranquilizers can replicate previously experienced traumatic assaults or incidents of abuse.

[21] One early approach developed to address treatment engagement within the criminal justice system was civil commitment, a legal procedure that permitted people with substance use disorders to be committed to compulsory drug treatment programs that typically involved a period of residential care and community-based aftercare that was developed during the 1960s. The California Civil Addict Program (CAP), an early prototype, was found to be highly effective in decreasing daily narcotic use and associated crime by program participants to one-third of that found in non-participants.

incarceration, defendants may opt for treatment rather than incarceration, or for treatment to reduce the length of a sentence.

Pretrial diversion[22] offers an ideal opportunity for intervention. Respite Probation Before Judgment is a form of pretrial diversion in which a defendant is placed on probation and charges remain pending. The condition of probation can include court-ordered treatment. If probation is successfully completed, charges may be dropped.

Drug courts can be used to divert some individuals into treatment instead of costly involvement with the justice system. Sentencing can include substance abuse treatment and intermediate sanctions programs. The combination of judicial sanctions include intensive outpatient treatment, day reporting centers, intensive supervision, house arrest, curfew, residential treatment, halfway houses, and boot camps. Other models include conditional pretrial release to treatment programs and those with conditional probation with sanctions.

Diversion programs employ sanctions commensurate with the degree of noncompliance (e.g., positive urine screens, commission of delinquent/criminal acts, lack of participation or elopement from treatment programs, or failure to comply with diversion program contracts) and are aimed at reparation and restoration. Consequences can range from termination of diversion contracts, petition to the justice system for adjudication, renewal of suspended proceedings, intensive supervision, or detention/incarceration. Successful completion of diversion programs can result in rewards such as dismissal of all charges and expungement of case records. Completion of treatment is characterized by the achievement of specific goals/behaviors (e.g., skill acquisition and demonstration), rather than lengths of stay in programs or numbers of substance-free urine screens.

One condition of release that is often used is required participation in treatment during which a pretrial supervision agency or probation department monitors adherence. Failure to adhere can result in a return to jail for detention prior to trial. Successful completion of treatment or other conditions, on the other hand, can result in mitigation of the sentence imposed by the court if the person receives a conviction. Or, in some instances, arrest charges are dropped if treatment is completed. However, failure to complete treatment and satisfy other conditions of diversion can result in a harsher sentence than if the individual had not entered a diversion program if prosecution proceeds and a conviction results.

Drug Treatment Courts (DTCs)

During the 1980s the criminal justice system became overwhelmed with cases involving people with substance use problems committing nonviolent offenses. It was clear that traditional responses such as incarceration for longer periods (under mandatory sentencing laws) or probation sentences did not address the problem. In response, treatment drug courts were developed during the late 1980s. There are now over seventeen hundred in operation, and more are in various stages of planning across the country. DTCs provide diversion from jail or prison through expedited involvement in treatment for individuals with substance abuse problems who do not display violent behaviors. Some of these

[22] Pretrial drug testing is considered a search under the fourth amendment of the U.S. Constitution.

courts have expanded admission criteria to include individuals with histories of multiple prior offenses related to substance abuse. Several different diversion models are used by DTCs including pre-sentence diversion, processing through postplea or pre-sentence arrangements, and post conviction arrangements. Successful completion of treatment programs can result in dismissal of original charges, reducing or setting aside sentences, lesser penalties, or a combination of these.

Treatment Drug Courts, also known as drug courts, represent an approach to the integration of substance abuse treatment with pretrial processing of criminal cases. They are a collaborative partnership between courts, substance abuse treatment providers, community supervision, and other ancillary services, and feature a rehabilitative team approach that combines mandatory treatment involvement with accountability through surveillance, monitoring, and regular feedback to the court and team. Drug courts use close supervision, drug testing, and incentives and sanctions to help participants adhere to treatment plans. These courts focus on the period of post-arrest to provide interventions designed to break the drug-crime cycle by diverting individuals into treatment and show significant promise in the engagement and retention of offenders with substance involvement in treatment and other related services and supports.

The success of DTCs has stimulated the development of several other specialty court models for populations with substance use problems, including DUI/DWI courts, juvenile drug courts, and family drug courts for parents with substance use problems who are at risk of losing custody of their children. Drug courts tend to vary as they are based upon local jurisdictional needs. Some handle both defendants during the pretrial phase as well as those who have been adjudicated. Some handle only cases involving drug possession, while others accept a much broader range of criminal cases (typically of a nonviolent nature) that are instigated by substance use problems. One type, known as the Coerced Abstinence Model Drug Court, uses drug testing and sanctions without substance use disorder treatment. However, while reductions in recidivism have been shown from the use of this model, its impact on drug use is less clear.

While there is no universal model for drug courts, and not all are diversion models, they all share common elements:

Key Components of Drug Courts
• Integration of substance use disorder treatment services and supports with justice system case processing • Promotion of public safety and protection of participants' due process rights using nonadversarial approaches by the prosecution and defense councils • Early identification and prompt referral of eligible participants to treatment • Access to a continuum of substance abuse treatment services and supports • Monitoring of abstinence via frequent substance testing • Coordinated responses to participants' adherence; accountability is maintained through graduated sanctions and rewards • Ongoing judicial review, supervision, and interaction with participants • Monitoring and evaluation to measure program goals attainment and effectiveness of the program • Ongoing interdisciplinary education • Partnerships among drug courts and various public community agencies • Aftercare and support services following completion of treatment

Eligibility criteria used by drug court programs include a current charge of purchase or possession of a small quantity of illegal drugs, or possession with intent to sell or distribute; a current charge of another nonviolent offense (e.g., forgery, passing worthless checks, prostitution, or burglary) that was committed while under the influence of drugs or alcohol; a current charge of operating a motor vehicle while intoxicated or under the influence of drugs or alcohol; a history of and current substance use problems; a criminal history that does not include conviction of a felony crime or violent act, and a willingness to participate in a treatment program. In general, drug courts exclude defendants who

have been charged with drug trafficking and sales, except in situations where an individual's role in distribution is relatively minor and appears to stem from a problem with a substance use disorder. In addition, some courts will not accept defendants who have severe psychiatric problems that have not been stabilized and those with medical conditions that require immediate attention. While some courts accept defendants with extensive criminal records, federal policy precludes the use of federal funds for interventions for offenders who display violent behaviors.

A DTC team consists of a judge, prosecutor, defense counsel, treatment providers, corrections personnel, mental health providers, and social service agencies (e.g., housing authorities). Judges take an active and leading role in monitoring defendants' progress in the treatment process through mandatory court appearances and data from urinalyses. Judges generally require defendants to appear at regularly scheduled status hearings during which their treatment progress is reviewed. While patterns vary from court to court, status hearings may be held as often as once a week during the first month or so. As treatment progresses (and especially if defendants appear to be making satisfactory progress), the frequency of status hearings decreases, but the court continues to monitor defendants. Judges encourage offenders to stay in treatment through graduated rewards and sanctions.

Prosecutors ensure that participants meet established admission criteria, review treatment progress reports (and ask judges to impose sanctions if defendants fail to comply with program requirements). Defense attorneys review charges against defendants as well as any information available from police reports or other documents disclosed by prosecutors, advise defendants about their constitutional rights (e.g., right to counsel and right to a speedy trial) and options, including participation in treatment programs, explain how various treatment program outcomes will affect the disposition of their cases, and provide encouragement and support for participation and compliance with program conditions.

A screening officer (who can be a pretrial services officer, TASC program coordinator, a member of a jail administrator's staff) reviews the list of defendants arrested each day and screens each for eligibility based on criminal justice criteria (e.g., current charges and prior record) as well as substance use problems and infectious diseases. This individual may also supervise defendants released from custody for adherence to program conditions. A court clerk or court coordinator assists with scheduling status hearings and other court appearances, organizes and prepares files for cases on each day's calendar, helps judges review the status of cases subject to judicial supervision; follows up on defendants who fail to appear in court as scheduled, and maintains communication with judges, treatment program liaison officers, and others involved in program operations. An assessment officer (typically a person with master's degree in a discipline associated with substance abuse treatment or the equivalent in actual experience) conducts assessments of substance use problems and makes recommendations regarding substance abuse treatment. Court case managers help judges manage courts' pending caseloads and daily calendars and liaise with representatives of agencies involved (including treatment providers). Treatment case managers coordinate service and support provision, including treatment and ancillary services (e.g., housing, medical care, nutrition, literacy training and job placement). In some jurisdictions, this function is performed by a treatment program liaison officer. Treatment Program Liaison Officers explain program operations to defendants, ensure progress reports are provided to judges, prosecutors and defense lawyers in advance of status review hearings, provide information on available treatment options, and help arrange for transportation for defendants to treatment programs.

One key aspect of judicial supervision is the use of sanctions when a defendant fails to comply with program conditions, and the use of rewards for continued adherence and abstinence. Court sanctions have been found to be an important element in treatment due to the leverage they exert on defendants' entry into and adherence to treatment. Research shows that people involved in the

criminal justice system have limited rates of retention and graduation from substance use treatment programs in the absence of such leverage.

Sanctions include verbal admonishments and warnings from the bench in open court; demotion to an earlier program phase; increased drug testing and court appearances; confinement in the courtroom or jury box; increased treatment intensity; increased monitoring; fines; community service or work program requirements; increasing periods of confinement in jail (during which treatment is provided); and termination from the program and reinstatement of regular court processing. In traditional courts, probation is revoked when defendants are found using substances in violation of conditions of probation. DTCs, in contrast, deal with renewed substance use as part of the recovery process and as an indication that treatment plans need to be reviewed and sanctions be imposed. If this is ineffective, a term in jail or a community correction facility with increasing duration for each violation may be warranted.

Forms of Intermediate Sanctions[23] for Adults
▪ Means-based fines (or day fines) calibrated by a court to both the severity of the crime and the discretionary income of an offender and in contrast with traditional fines imposed at the discretion of a judge according to ranges set by legislatures for particular offenses. Defendants with more income (and/or fewer familial obligations) pay a higher overall fine than those with lower incomes (and/or more obligations) for the same crime. This approach to setting the fine amount is typically coupled with expanded payment options and collection procedures that are tighter than usual. ▪ Community service is the performance of services or manual labor for governmental, private, or nonprofit organizations for a set number of hours with no payment. Community service can be arranged for individuals, case by case, or organized by corrections agencies as programs. For example, a group of offenders can serve as a work crew to clean highways or paint buildings. ▪ Restitution or the payment of the costs of victims' losses or injuries and/or damages to victims. In some cases, payment is made to a general victim compensation fund; in others, especially where there is no identifiable victim, payment is made to the community as a whole (with the payment going to a municipal or state treasury). ▪ Special needs probation programs or caseloads wherein officers with special training carry restricted caseloads. These approaches are typically used with offenders who have committed some categories of domestic violence, sex offenses, driving under the influence, and with those who have a mental illness, developmental disability, or substance use disorder. Supervision in a specialized caseload usually entails more intensive or intrusive supervision, the provision of enhanced psychosocial services, and/or specific training or group activities (e.g., anger management classes or victim impact meetings). ▪ Outpatient or residential substance abuse treatment centers which can be either public or private. ▪ Day centers or residential centers for other types of treatment or training that provide services other than substance abuse treatment (e.g., skills training to enhance employability). ▪ Intensive supervision probation involving closer supervision and greater reporting requirements than regular probation that can range from more than five contacts a week to fewer than four per month. Supervision usually entails other obligations (to attend school, have a job, participate in treatment, or the like). ▪ Intensive supervision parole which is similar to intensive supervision probation, but is usually provided by parole agents subsequent to completion of a prison term to offenders serving the balance of sentences in the community. ▪ Brief jail incarceration (e.g., for one to three days) is often used with offenders who have committed major program infractions in DTCs or other diversion programs. It provides respite from temptations to use drugs and reinforcement of the importance of sobriety and treatment. However, incarceration can be used counterproductively if it is lengthy and prevents the offender from reengaging in treatment activities.

[23] Sanctions are most effective when they are used to motivate, and as a step in treatment, rather than as punishment. The use of graduated sanctions is a primary factor in the effectiveness of intermediate sanctions. Sanctions should be immediately applied on a consistent basis for positive drug tests, appointment no-shows, and behavior that is prohibited and/or violates program rules.

Forms of Intermediate Sanctions[23] for Adults
▪ Day reporting centers[24] to which offenders must report for a certain number of hours each day, and/or report by phone throughout the day from a job or treatment site, as a means of monitoring and incapacitating them. ▪ Curfews or house arrest (with or without electronic monitoring) entails restricting offenders to their homes for various durations of time, ranging from all the time to all times except for work or treatment hours, with a few hours for recreation. Frequently, the curfew or house arrest is enforced by means of an electronic device which can alert corrections officials to unauthorized absence from the house. ▪ Halfway houses or work release centers which offenders can leave for work, school, or treatment but are otherwise restricted to. Such facilities are in the community or attached to a jail or similar institution. ▪ Boot camps (also called shock incarceration) sentences are for relatively short periods (three to six months). Boot camps are characterized by intense regimentation, physical conditioning, manual labor, drill and ceremony, and military-style obedience.

(SAMHSA TIP # 17)

Incentives are used to reward progress in treatment and can include encouragement and praise from the bench; ceremonies and tokens of progress, including advancement to the next phase of treatment; decreased supervision; reduced frequency of court appearances; decreased fines or fees; dismissal of charges or decreases in terms of probation; reduced or suspended incarceration; and graduation ceremonies.

Studies indicate that DTCs are effective in producing reductions in rates of incarceration, re-arrests, longer times prior to subsequent arrests and convictions, as well as increased rates of treatment retention and aftercare linkages. In addition, they generate cost savings (at least in the short term) from reductions in the use of jails/prisons, criminal activities, other criminal justice system costs, as well as hospitalizations for health problems. Data from some research shows that ten dollars are saved for each dollar spent on drug courts.

More information on drug courts can be found on the web site of the National Association of Drug Court Professionals (http://www.nadcp.org/) and the web site of the U.S. Department of Justice's Drug Courts Program Office (DCPO) located at http://dcpi.ncjrs.gov/dcpi/index.html. In addition, a discussion of family dependency treatment courts can be found in *A Guide to Evidence-Based Mental Health Practices for Children, Adolescents and their Families*.

JUVENILE DRUG COURTS

Juvenile drug courts have been in operation since 1996 and receive federal funding through public law 103-322. They are designed for youth who have been charged with non-violent drug-related offenses, and/or exhibit substance use disorders. Although a number of models have been developed, they share the following characteristics:

- Early and comprehensive intake assessments, with an emphasis on youth and family functioning throughout court processes
- Coordination between courts, school systems, treatment providers, and other community agencies
- Case management services and supports

[24] Studies show that the use of day reporting centers leads to decreases in recidivism, time to re-offense, and costs, especially when combined with case management.

- Active and continuous supervision of the adolescent
- The use of both sanctions for noncompliance and incentives to recognize progress by adolescents and their families

Court teams consisting of judges, law enforcement, prosecutors, defense attorneys, detention liaisons, and mental health professionals develop treatment plans that address youths' educational, mental health and family needs. Family members often participate in parent support groups and home-based interventions. Judicial monitoring and random drug screens are used to determine family and youth adherence and maintain provider accountability. Judges provide encouragement through public praise for progress and sanctions for lack of progress and/or nonadherence to treatment plans (e.g., brief detention).

Youth who are waived to adult courts, those who have been charged with extremely serious offenses, or have displayed chronic patterns of delinquent behavior are generally excluded from participation in diversion programs.

Studies show that eighty percent of the youth who participate in juvenile drug court programs in some jurisdictions return to school or stay in school on a full-time basis.

Diversion Options for Youth
▪ Intensive community supervision in which the youth remains in the community and must regularly report to an assigned probation counselor. This allows youths to attend school and maintain family relationships with minimal interruption. The planned frequency of the required contacts probation counselors can vary from several times a day to twice per week; less than twice a week is not considered intensive supervision. Telephone contact may be used to supplement face-to-face meetings. ▪ Day reporting centers are part of community supervision programs and can be set up in accessible community locations (e.g., schools and shopping centers). Some provide education, recreation, or social services. ▪ Day treatment can include education and social services help with social skills development and also provide supervision and control in a familiar setting. In many day treatment programs, youth take classes in the morning, participate in a group activity (such as playing sports) in the afternoon, and return home at night. ▪ Evening and weekend programs. Offer supervision and programming similar to day treatment. Tutoring, recreation, employment, and treatment services can be provided to supplement regular educational or work programs. ▪ Tracking programs hire staff (usually part-time) to monitor youths and report their compliance with specific requirements (e.g., school attendance, participation in counseling, and job performance). ▪ Electronic monitoring via an electronic device that monitors youths' movements, but is not used as a stand-alone option. ▪ Home detention with parental supervision in the home and permission to leave only to attend school or work. This is typically used on a short-term basis prior to the development of a long-range plan. ▪ Home tutoring entails supplementing regular educational programs to remedy educational deficits and offers contact with an adult role model as well as supervision. ▪ Mentor tutoring entails the provision of a trained adolescent tutor which, in addition to educational tutoring, can offer advice, emotional support, and a prosocial relationship. ▪ Work and apprenticeship provided by local businesses usually in conjunction with an educational program to instill a work ethic, sense of responsibility and accomplishment while enhancing community relations. ▪ Restitution to try to rectify damage caused to victims either in cash or in services (totaling specific dollar value), and most often ordered for property crimes, it provides an alternative to incarceration, thereby reducing public costs while compensating victims. ▪ Community service entails the provision services that benefit an entire community (e.g., cleaning up parks or working in nursing homes) under supervision. ▪ Volunteer programs provided under supervision such as tutoring youths, supervising work and recreational activities, offering friendship and role modeling.

CORRECTIONAL FACILITY-BASED TREATMENT

While the enactment of harsher sentencing laws for drug offenses has led to increases in the number inmates with substance use problems, contemporaneous public treatment services funding reductions have engendered an enhanced scope of service delivery responsibilities for correctional facilities

including identifying and addressing health problems (e.g., HIV/AIDS, tuberculosis, and hepatitis), domestic violence, pregnancy, childcare, violence, victimization, psychiatric and substance use disorders, homelessness, and educational/employment deficits and challenges.

Research suggests that correctional facility-based substance use disorder treatment leads to reductions in criminal recidivism, longer durations to rearrest subsequent to release from incarceration, decreases in relapse rates, and significant cost savings. In addition, studies indicate that such treatment helps in day-to-day facility management as evidenced by reductions in inmate behavior problems (e.g., violence and drug use and dealing when random urinalysis in conducted in tandem with treatment), and disciplinary infractions. However, in spite of these positive outcomes, the majority of jails do not offer treatment for substance use disorders. Most offer self-help programs and some have detoxification and assessment services. Methadone is not widely available in jails and prisons forcing inmates to detoxify cold turkey. Pregnant women are the only population eligible for methadone maintenance in jails and prisons.

A number of models have been used for the treatment of individuals who are incarcerated including didactic education classes, self-help programs, and residential milieus such as therapeutic communities. It has been found that treatment is most effective when provided within segregated units in order to establish a supportive therapeutic milieu. The optimal duration for prison inmates is nine to twelve months followed by immediate participation in aftercare treatment subsequent to release and linkages to ancillary community services and supports (e.g., housing, employment, medical care, etc.). Residential treatment after release has been shown to lead to decreased rates of re-arrest and relapse as well as increased rates of employment. In general, longer episodes of treatment are associated with decreases in substance use, severity of substance use, problems related to substance use, predatory illegal behaviors and increases in employment and wages earned. Participation in aftercare treatment is more likely to occur when an individual has received treatment while incarcerated. However, the majority of detainees are not linked with aftercare, and most jails do not use diversion programs such as drug courts.

Prison and jail-based treatment that integrates cognitive-behavioral techniques has been found to be effective in decreasing recidivism. However, research also indicates that the effects of treatment dissipate over time so that positive benefits seen one year subsequent to release are frequently attenuated over the ensuing three years.

Cognitive-Behavioral Therapy Programs for Offenders

Efforts to reduce drug-related crimes have included drug interdiction, prosecution, incarceration and mandatory sentencing. However, these have had negligible impact on dug use as well as the violence linked to the distribution and sale of illicit substances. While studies show that punishment does not usually deter criminal behavior, substance abuse treatment that also addresses such behavior can lead to reductions in recidivism. Structured and intensive cognitive-behavioral approaches that address criminogenic thinking and behaviors can be effective in developing and enhancing life management, problem-solving, and self-control skills; developing affiliations with prosocial peers and role models; promoting closer family ties and enhancing positive family structures; and managing and altering antisocial thoughts, attitudes, and feelings. A number of programs have been developed to address criminogenic ideation and behavior including Moral Reconation Therapy (MRT), Thinking for a Change (TFAC), and Reasoning and Rehabilitation (R&R). However, while these programs are in use in numerous jurisdictions, studies of them are generally methodologically weak and equivocal with regard to rates of recidivism.

THINKING FOR A CHANGE (TFAC)

TFAC is a cognitive-behavioral program for offenders developed by the National Institute of Corrections (NIC) of the U.S. Department of Justice in 1997 that is used in state correctional systems, jails, community-based corrections programs, and probation and parole departments. The curriculum uses problem-solving, cognitive restructuring, and social skills development to increase awareness of self and others. It is comprised of twenty-two core lessons and ten additional lessons that can be provided on an indefinite basis. Role plays and in vivo practice sessions (i.e., homework) are used as teaching methods. TFAC is conducted in closed-ended groups of eight to twelve individuals and sessions are held twice per week for one to two hours.

TFAC starts with instruction of an introspective process for examining ways of thinking, feelings, beliefs, and attitudes which is reinforced throughout the program. Social skills training is provided as an alternative to antisocial behaviors. Participants are taught to report situations that could lead to criminal behavior, and identify thoughts, feelings, attitudes, and beliefs that might lead to the commission of offenses. They document and use a thinking report as a way of determining awareness of risky thinking that leads to difficulties. The social skills component of the program entails practice in role plays followed by group discussion and assessment of how well each participant adheres to the steps of the social skill being learned. Participants apply problem-solving steps to problems in their own lives. The program culminates by integrating the skills learned into steps for problem-solving to work through challenging situations without engaging in criminal behavior. Lesson plans and manuals for the program can be found on the web at http://www.nicic.org in English and Spanish.

REASONING AND REHABILITATION (R&R)

Reasoning and Rehabilitation is an educational program designed to teach juveniles and adults who have committed offenses prosocial cognitive skills and values. It is used throughout the Canadian correctional system, as well as in a number of jurisdictions in the United States. The program teaches skills aimed at ameliorating social and cognitive deficits that are linked to criminal behavior. Participants are taught to think prior to acting, anticipate problems and plan for reactions, focus more on problems and solutions, consider others' points of view, and maintain a more flexible, open, rational and reflective manner of thinking. The program consists of thirty-five two-hour sessions delivered two to four times per week to groups of four to ten participants. It uses role playing, video-recorded feedback, modeling, group discussion, games, and homework review to inculcate skills. Didactic presentations are not used.

The program focuses on:

- Interpersonal problem solving (to enhance problem awareness, problem definition, information gathering, distinguishing facts from opinion, alternative thinking, means end testing, consequential thinking, decision-making, and perspective taking)
- Self-control and self-management (to counteract anger and impulsive behaviors, substance use, moods swings, and low motivation) to reduce impulsivity
- Assertiveness and social interaction (to ameliorate social isolation, lack of social skills, and dominance or submissiveness)
- Social perspective taking (to counteract lack of understanding of others' points of view and low levels of empathy for others)
- Critical reasoning (to counteract being easily influenced and easily led and failure to question or analyze)
- Cognitive style and values reasoning (to promote basic values orientation and counteract interpersonal hostility, cognitive distortions, and rigid beliefs)

Research studies on Reasoning and Rehabilitation indicate contradictory results and are thus inconclusive regarding its effects on re-incarceration. The program is under copyright to T3 and Associates (http://www.t3.ca/).

Moral Reconation Therapy (MRT)

MRT is a cognitive-behavioral program that uses education, group and individual counseling, and structured exercises to alter decision-making and promote moral reasoning. The program is conducted in classes of five to twelve participants on a weekly basis. Open-ended ongoing groups that meet from once per month to five days a week for ninety minutes with five to six participants (and up to twenty or more) are also part of the program. MRT contains twelve to sixteen steps depending on the treatment population and focuses on seven treatment issues:

- Confrontation and assessment of self (i.e., beliefs, attitudes, behavior, and defense mechanisms)
- Assessment of current relationships, including planning to restore those that have been damaged
- Reinforcement of positive behavior and habits to increase awareness of moral responsibility
- Facilitation of positive identity formation through exploration of the inner self and personal goals
- Enhancement of self-concept
- Reduction of hedonism to develop the ability to delay gratification and control pleasure-seeking behaviors
- Development of higher stages of moral reasoning to enhance concern for others and the social system

During group sessions, participants present/share exercise assignments from the MRT Workbook which each participant receives. MRT steps begin with relatively simple tasks (i.e., exercises) that progressively increase in complexity. Lower level steps are concerned with issues of honesty, trust and acceptance, while higher steps move toward active processes of repairing damaged relationships and long-term planning.

While outcomes studies indicate this program leads to reductions in behavioral and disciplinary problems, anger, depression, and increases in self-esteem, they tend to be methodologically weak which undermines the ability to draw conclusions regarding its effects on re-incarceration. MRT workbooks cost $25.00 each, and the classes cost $20.00 per session. Participants who earned less than $30,000.00 during the year previous to participation can qualify for a fifty percent reduction in session fees. The program is copyrighted and trademarked. Information is available from http://www.moral-reconation-therapy.com/.

Transition Planning

Lack of access to immediate community-based services and supports such as medical care, family and social supports, gainful employment/income, and substance abuse treatment, following release from a correctional institution can result in relapse, homelessness, re-incarceration, and other adverse outcomes. Studies show that gains made in treatment can dissipate when there is a lack of continuity of treatment subsequent to release.

While outcomes studies on transition planning procedures are lacking, a number of studies have shown that specific elements lead to improved benefits. One model that is gaining acceptance is the APIC Model which promotes collaboration between the criminal justice, mental health and substance

abuse treatment systems. It is not known which of the elements of the APIC model are most critical to beneficial outcomes.

APIC MODEL	
Assess	Assess psychosocial, medical, behavioral needs and strengths, motivation for treatment, capacity for change, and public safety risks
Plan	Plan for the treatment and services required to address immediate and long-term needs including community resources (e.g., family support, housing, medication, integrated treatment for co-occurring disorders, case management and outreach, medical care, income supports and entitlements, food and clothing, transportation, and child care)
Identify	Identify required community and correctional programs responsible for post-release services, ensuring that the intensity of supervision and treatment match the severity of criminal behavior and history, level of disability, motivation for change, and availability of community resources
Coordinate	Coordinate the transition plan to ensure implementation and avoid gaps in care with community-based services through case management and inreach services from community-based providers

The most effective models of transition start planning ninety days prior to release and incorporate case management to link individuals with resources. Transition coordinators working in tandem with case managers have been found to be effective in providing assistance with access to needed resources during transition from incarceration to the community. A number of jurisdictions use probation and parole officers who have behavioral health expertise and receive cross-training with behavioral health clinicians to foster collaborative working relationships.

Outreach, reach-in, and third party are the three types of program models that are used to provide transitional services. In the outreach model correctional institutions designate staff to create linkages to services and supports within the community. Here the institution assigns a case manager to coordinate treatment and other services and supports in the community. The reach-in model, on the other hand, entails the initiation of transitional services by community-based programs. In the reach-in model community-based programs initiate treatment and transitional services and supports prior to the inmate's release. A case manager is assigned from the program. This model has been found to be most effective for jail settings due to shorter stays necessitating rapid engagement.

In the third party model an independent entity provides coordination of transitional services. The independent agency functions as a liaison, identifying and matching the individual with transitional services and supports, coordinating (but not delivering) services and supports, and is exemplified by the Treatment Accountability for Safer Communities (TASC) program. The third-party entity provides ongoing case management and is accountable to both supervision and treatment agencies. It provides reports on the parolee's treatment progress. This model has been found to be most effective in situations where services and supports are fragmented and multiple programs and services are located within the community.

Characteristics of Outreach and Reach-in Models

- Early prerelease planning
- Development of an effective community re-entry and relapse prevention plan
- Establishment of linkages among service systems as designated by the plan
- Incorporation of continued community treatment plans as a condition of parole or probation where possible
- Monitoring the offender to ensure that linkages have been made, transition services are appropriate, and new issues that have arisen are being addressed
- Establishment of a standard protocol for this function within the system's infrastructure

(Contracted third-party services can fit with either model)

Some transitional models uses components of both outreach and reach-in models wherein institutional staff identify community services and supports, and providers in the community simultaneously initiate treatment and transition services prior to release. Such mixed models offer opportunities for integration of the criminal justice and substance abuse treatment systems. Cross-system integration using any of the models listed above for transition planning has been demonstrated to lead to reductions in recidivism and found to be cost-effective.

Effective transition programs have the following components:

- Provider reach-in
- Multi-agency collaboration and planning
- Intensive supervision
- Continuity of treatment
- Management of incentives

The components of effective post-release transition programs include:

- Continuing substance abuse treatment that lasts at least six months to one year
- Probation/parole supervision including regular urinalyses to ensure abstinence and rapid assistance for relapses, which when paired with criminal justice sanctions, lead to increased beneficial effects.
- Case management to coordinate services between stages of the justice system. Case management is used to ensure that immediate needs (e.g., medical, dental and mental health care services; child care and custody assistance; housing, educational, employment, legal aid; and procurement of entitlements) are met. Case management has been found to enhance retention in community-based treatment among individuals involved in the criminal justice system.
- Participation in mutual help and support groups. Studies show that individuals who have the highest rates of participation in groups such AA, NA, and others have the greatest success during parole. Such groups serve as bridges between the institution and the community if participation is begun prior to release.

INTENSIVE COMMUNITY-BASED AFTERCARE PROGRAM (IAP)

The IAP program is a U.S. Department of Justice Office of Juvenile Justice and Delinquency Prevention model program that provides prerelease and preparatory planning during incarceration, transition planning activities involving institutional and aftercare staff during community re-entry, long-term service and supports, and social control using electronic monitoring and enhanced drug testing. IAPs focus on integrated services and collaboration among service providers. The transition components of IAP programming include:

- Early parole planning (subsequent to incarceration and well prior to release)
- The incorporation of multiple perspectives into plans (including those of case managers, institution staff, youth, parents, and community providers)
- Parole officer visits to the institution (on a routine basis prior to release)
- Treatment that is initiated at the institution and continued in the community (and includes multi-family counseling, life skills training, vocational skills training, individual counseling, substance use issues, etc.)
- Prerelease visits to community programs (on supervised day trips) made by the youth
- Pre-parole furloughs (which consist of overnight/weekend passes or conditional release prior to the official parole date)

- Transitional residential placement
- Transitional day programming
- Phased supervision levels on parole

A system of graduated responses (i.e., consequences and incentives) is used to ensure accountability. These range from work program assignments, community service orders, and time-outs in detention, to short-term placements in secure units. In one IAP, a curriculum taught during the month before release focuses on social skills training and issues related to street readiness. Additionally, an educational liaison worker is assigned from the school district most of the youth will be returning to. At another site, monthly visits from senior parole counselors are provided prior to release. Post-release visits to the home occur at least three times a week. These include weekly family meetings and unannounced spot checks at school, home, or place of employment. IAP institution-based and community-based case managers carry small caseloads. Team-oriented approaches to case planning are used.

MICHIGAN PRISONER REENTRY INITIATIVE (MPRI)

The Michigan Prisoner ReEntry Initiative (MPRI) is a transition planning initiative designed to decrease criminal recidivism through access to services, supports and supervision that is initiated upon entry into prison and provides assistance with transition, community reintegration, and aftercare. An Intensive Parole Re-entry Unit (IRU) focuses on developing strategies to help participants successfully complete parole and become productive citizens. The IRU engages prisoners in programming within facilities and works with Field Operations Administration (FOA) staff and community transition teams to develop comprehensive parole release plans. Programming includes prerelease planning, cognitive restructuring and anger management, parenting skills, budgeting, fair housing issues, child care concerns, and domestic violence, as well as academic and other skills development. Re-entry agents within facilities collaborate with correctional facility staff, prisoners, and community resources to develop individualized Transition Accountability Plans (TAPs). TAPs assess strengths and needs in the areas of housing, employment, educational/vocational/employment training, substance abuse, mental health, physical health, income support, family reunification, and transportation. Transition teams, community agencies, and service providers work with prisoners to develop parole release plans. They meet individually with prisoners to discuss areas of need during visits to facilities or through video conferencing and match needs with available community services. Reunification sessions are held with prisoners and their families or support systems to discuss and resolve issues that may pose barriers to successful functioning in the community.

INTEGRATED TREATMENT FOR CO-OCCURRING PSYCHIATRIC DISORDERS

People with substance use disorders experience significant rates of co-occurring psychiatric disorders with prevalence rates ranging from fifty to seventy-five percent among individuals receiving treatment. Personality disorders are the most common types of co-occurring disorders experienced by participants in substance abuse treatment programs. Studies indicate that fifty-seven to eighty-four percent of persons with borderline personality disorder[25] or traits have current or past substance use disorders. Approximately half of individuals with a substance use disorder also experience an affective or anxiety disorder. Older adults are considered to be at greatest risk for co-occurring mood and substance disorders. Twelve to thirty-four percent of individuals with substance use disorders also have posttraumatic stress disorder, and women experience posttraumatic stress disorder (PTSD) at rates ranging from thirty to fifty-nine percent. Research indicates that fifteen percent of women and one percent of men in substance abuse treatment have a co-occurring eating disorder.

Studies show that persons with psychiatric disorders are at least twice as likely to engage in substance abuse as individuals who do not have such disorders. Individuals with co-occurring psychotic disorders are at higher risk for a host of adversities including engaging in violent and self-injurious behaviors such as domestic violence and abuse or neglect of their children. They are also more susceptible to housing instability and homelessness, victimization, psychiatric hospitalization, legal difficulties, incarceration, unemployment, life-threatening infectious diseases, nutritional deficiencies, insufficient financial resources, and experience less beneficial treatment outcomes.

The most common precipitant of psychiatric relapse is the use of alcohol, marijuana, and cocaine, and the most common precipitant of relapse to substance use is untreated psychiatric disorders particularly for individuals accustomed to relying on substances to manage psychiatric symptoms. Untreated psychiatric problems are also a common cause of substance abuse treatment failure.

The co-occurrence of psychiatric and substance use disorders in adolescents is relatively common. Studies indicate that conduct disorder, oppositional disorder, attention deficit/hyperactivity disorder, mood disorders (especially depression), bipolar disorder, anxiety disorders (e.g., posttraumatic stress disorder stemming from sexual or physical abuse) are prevalent. Adolescents who experience co-occurring psychiatric and substance use disorders have poorer treatment outcomes. The presence of ADHD complicates substance use disorder intervention because it is treated with dextroamphetamine and methylphenidate[26] which are potential drugs of abuse. Moreover, treatment of co-occurring psychiatric disorders in this population does not result in a decrease in substance use or result in abstinence.

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[25] Dialectical Behavior Therapy (DBT) integrates substance use disorder treatment where appropriate through the same strategies that are used for any targeted problematic behavior including behavior analyses of alternative functional responses, problem-solving, skills training, contingency management, exposure, cognitive modification, etc. For a discussion of DBT, see *A Guide to Evidence-Based Practices for Adults with Mental Illness*.

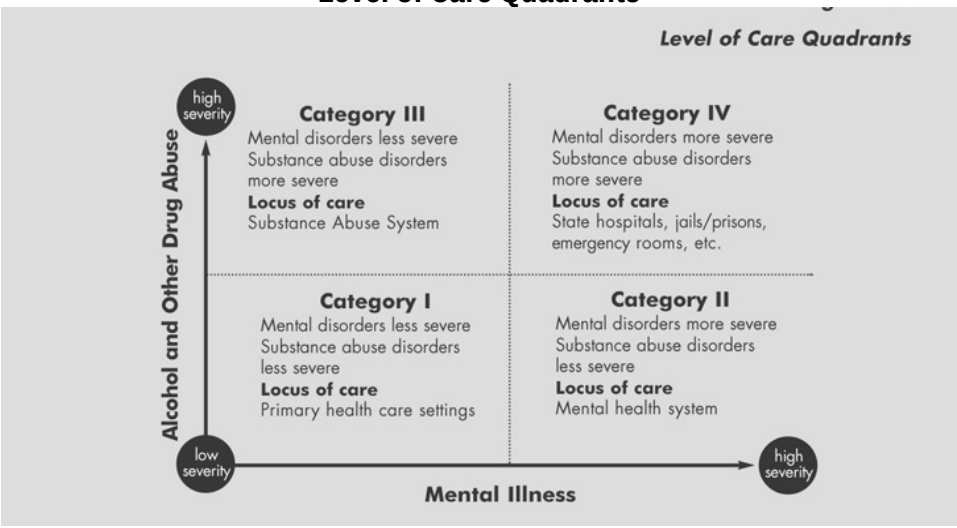
[26] Methylphenidate can be ground up and insufflated like cocaine and cause sudden cardiac arrest when ingested in this form.

Research suggests that there is a complex relationship between psychiatric and substance use disorders. Substance use can cause psychiatric symptoms, mimic psychiatric disorders, trigger or exacerbate psychiatric disorders, and lead to the development of psychiatric disorders that do not remit upon cessation of substance use. It can also mask psychiatric symptoms and disorders. Psychiatric symptoms can be precipitated by withdrawal from substances, and symptoms of withdrawal can mimic psychiatric disorders. Psychiatric disorders can engender behaviors that mimic behaviors that are associated with substance disorders. Psychiatric and substance disorders can co-occur.

Generally, substance-induced psychiatric symptoms resolve within days to weeks of abstinence. The appropriate minimum abstinence interval varies, depending on both the diagnosis under consideration and the substance of abuse. Long-acting drugs (e.g., diazepam, methadone) require longer periods of abstinence than shorter acting compounds (e.g., alcohol, cocaine) for differential diagnosis.

The four-quadrant model of care developed by the National Association of State Mental Health Program Directors (NASMHPD) and the National Association of State Alcohol and Drug Abuse Directors (NASADAD) is a useful paradigm for delineating a continuum of responsibility for the provision services and supports for individuals with co-occurring disorders.

Level of Care Quadrants



Quadrant I: This quadrant includes individuals with low severity substance abuse and low severity mental disorders. These low severity individuals can be accommodated in either intermediate outpatient mental health or substance abuse treatment settings with consultation or collaboration between settings, if needed. Alternatively, some individuals will be identified and managed in primary care settings with consultation from mental health and/or substance abuse treatment providers.

Quadrant II: This quadrant includes individuals with high severity mental disorders who are usually identified as priority consumers within the mental health system and who also have low severity substance use disorders (e.g., substance dependence in remission or partial remission). These individuals typically receive continuing care in the mental health system and are likely to be served in a variety of intermediate level mental health programs using integrated case management.

Quadrant III: This quadrant includes individuals who have severe substance use disorders and low or moderate severity mental disorders. They are generally well accommodated in intermediate level substance abuse treatment programs. In some cases there is a need for coordination and collaboration with affiliated mental health programs to provide ongoing treatment of the mental disorders.

Quadrant IV: Quadrant IV is divided into two subgroups. One subgroup includes individuals with serious and persistent mental illness (SPMI) who also have severe and unstable substance use disorders. The other subgroup includes individuals with severe and unstable substance use disorders and severe and unstable behavioral health problems (e.g., violence, suicidality) who do not (yet) meet criteria for SPMI. These individuals require intensive, comprehensive, and integrated services for both disorders. The locus of treatment can be specialized residential substance abuse treatment programs such as modified therapeutic communities, state hospitals, jails, or even in settings that provide acute care such as emergency rooms.

(SAMHSA TIP #42)

A number of strategies have been demonstrated to be of promise in treating co-occurring disorders including:

- Incorporating mental health practitioners, including psychiatrists, into substance abuse treatment programs, and incorporating substance abuse treatment practitioners into mental health treatment programs
- Integrated screening and assessment
- Pharmacotherapy
- The principle of every door is the right door to enter for services (i.e., there is no wrong portal of entry)
- Interventions that are matched to specific diagnoses and stages of change for each disorder/problem
- Psychoeducational approaches that include information on psychiatric disorders and substance abuse, and relapse prevention
- Dual recovery self-help groups (e.g., Double Trouble), held onsite and available in the community, to focus on interrelated mental and substance use disorders and identify relapse triggers
- Motivational Interviewing (MI) to enhance intrinsic motivation for change through the exploration and resolution of ambivalence
- Motivational enhancement interventions provided in individual and/or group sessions that target both mental health and substance use problems
- Contingency Management (CM) techniques that modify behavior through the use of positive and negative consequences
- Cognitive-Behavior Therapy (CBT) to alter self-defeating or negative ideation and behaviors through the modification of cognitive distortions
- Relapse Prevention Therapy (RPT) to help clients recognize triggers/cues and intervene in the relapse process to decrease the frequency and severity of relapses
- Modified Therapeutic Community (MTC) programs with conflict resolution groups (as opposed to traditional encounter groups) which are highly structured, guided, of low emotional intensity, and targeted at self-understanding and behavior change.
- Unique programming geared to specific populations (e.g., individuals with specific disorders [e.g., bipolar illness], women, individuals who are homeless, and persons with criminal justice system involvement)

- Treatment that addresses the array of mental health, substance abuse, medical and psychosocial challenges experienced by individuals with co-occurring disorders (e.g., housing, employment, infectious diseases, and social supports)
- Addressing and treating trauma (due to the strong connection between substance use disorders and trauma)
- Continuity of support and services post discharge
- Short, structured sessions with gradual pacing, visual aids (e.g., illustrations, concept mapping,[27] written outlines for all sessions that list specific learning objectives that are behaviorally anchored, notes, tapes and mnemonic devices), practice, rehearsal (e.g., role plays of real life situations), and repetition for individuals who are challenged by neurocognitive deficits of serious mental illnesses

Additional information on integrated treatment for co-occurring disorders can be found in *A Guide to Evidence-Based Practices for Adults with Mental Illness*.

Trauma-Informed Approaches to Substance Use Disorder Treatment

The prevalence of clients with histories of abuse indicates a need to address trauma concurrently with substance use issues. Some may require an extended period of abstinence prior to addressing trauma, while others may feel ready to confront such issues sooner, especially if symptoms of PTSD are interfering with the ability to establish and maintain abstinence.

Most trauma-informed interventions include the following components:

- Identification of the nature and extent of the trauma, including symptoms, survival strengths, distorted behaviors and feelings, the manner in which ongoing symptoms (e.g., dissociation and substance abuse) are used to numb the pain of a history of abuse
- The development of safe havens for survivors
- A supportive treatment environment that includes confidentiality, opportunities to speak or pass during group discussions, interactional group rules that preclude advice-giving, criticism, or confrontation
- The development of recovery skills including cognitive, problem-solving, relaxation, stress management, coping, relapse prevention, and safety planning skills

A number of interventions have been developed to address trauma. Two programs and an intervention are discussed below.

Seeking Safety

Seeking Safety is a present-focused manualized intervention with twenty-five topics that integrates treatment for PTSD and substance use disorders that can be combined with trauma-processing techniques. It can be used for men or women, in individual or group formats, and within outpatient or residential treatment facilities. Sessions focus on skills designed for both substance use problems and

[27] Concept mapping refers to visual presentations of concepts in order to make patterns evident.

PTSD (e.g., distraction techniques that can be used to subdue the triggers for both disorders) to help clients attain a sense of self-control and avert engagement in high risk behaviors, relationships, ideation and behaviors. Seeking Safety covers five areas:

❶ Safety, the priority of treatment.
❷ Integrated treatment of both disorders including helping participants understand the two disorders and why they frequently co-occur, teaching safe coping skills that apply to both disorders, exploring the relationship between the two disorders in the present (e.g., using a substance to cope with trauma flashbacks), and teaching that recovery from each disorder requires attention to both disorders.
❸ A focus on ideals; the title of each session is framed as a positive ideal that is the opposite of the negative characteristics of PTSD and substance abuse.
❹ Four program components: cognitive, behavioral, interpersonal, and case management. The interpersonal domain deals with issues regarding trust of others, confusion regarding expectations in relationships, avoidance of reenactments of abusive power, and dealing with the perpetuation of substance abuse in relationships. The case management component offers help obtaining referrals for problems such as housing, job counseling, HIV testing, domestic violence, and child care.
❺ Attention to clinician processes.

Seeking Safety is comprised of twenty-five topics. Seven interpersonal topics are: Asking for Help; Honesty; Setting Boundaries in Relationships; Healthy Relationships; Community Resources; Healing from Anger; and Getting Others to Support Your Recovery. The seven behavioral topics are: Detaching from Emotional Pain: Grounding; Taking Good Care of Yourself; Red and Green Flags; Commitment; Coping with Triggers; Respecting Your Time; and Self-Nurturing. The seven cognitive topics are: PTSD: Taking Back Your Power; Compassion; When Substances Control You; Recovery Thinking; Integrating the Split Self; Creating Meaning; and Discovery. In addition, four combination topics are: Introduction to Treatment / Case Management; Safety; The Life Choices Game (Review); and Termination.

Studies of the program show that it leads to significant reductions in substance use, trauma-related symptoms, suicide risk, suicidal thoughts, depression, and cognitions related to substance use, as well as improvements in social adjustment, family functioning, problem solving, and didactic knowledge related to the treatment. The Seeking Safety website, http://www.seekingsafety.org/, provides sample topics, articles, and other materials that can be directly downloaded in English and Spanish.

TRAUMA RECOVERY AND EMPOWERMENT (TREM)

TREM is a group intervention designed for women survivors of trauma that addresses issues of physical, sexual, and/or emotional abuse. It consists of thirty-three seventy-five-minute sessions conducted over a nine-month period led by female clinicians that usually includes between six to eight participants. It is provided in outpatient mental health settings, homeless shelters, welfare-to-work programs, and correctional facilities (prisons). The session topics are divided into the following sections:

Part I:	Empowerment (eleven topics): introduces themes of gender identity, sexuality, interpersonal boundaries, and self-esteem without specifically addressing abuse issues.
Part II:	Trauma Recovery (ten topics): focuses on sexual, physical, and emotional abuse and their relationship to psychiatric symptoms, substance abuse, and current relationships.

Part III: Advanced Trauma Recovery Issues (nine topics): examines additional trauma issues such as blame, responsibility, and the role of forgiveness in recovery.

Part IV: Closing Rituals (three topics): allows group members to assess their own progress and plan for continued healing either on their own or as part of a community of other survivors.

Part V: Modifications or Supplements for Special Populations: addresses issues related to specific populations (e.g., women who have a serious mental illness, women who are incarcerated, women who are parents, women who engage in abusive behaviors, and male survivors).

Each session also includes an experiential exercise (physical activity, poetry, singing, drawing, and storytelling) to promote group cohesiveness and foster the inclusion of less verbal members.

Pilot studies of TREM have demonstrated that this is a promising model that leads to improvements in overall functioning and, psychiatric symptoms as well as reductions in the use of emergency services, HIV risk behavior, and substance use. Variations of the model have been developed for adolescent girls (G-TREM) and for men (M-TREM). Information can be obtained from http://www.communityconnectionsdc.org/trauma/trem.htm.

GROUNDING

Grounding (also referred to as centering, looking outward, distraction, and healthy detachment) has been found to be of benefit to individuals with co-occurring disorders who have experienced trauma from sexual abuse. It is often used for posttraumatic stress disorder symptoms, substance abuse cravings, panic, intense anxiety, and rage. Grounding consists of techniques that soothe and distract individuals from strong emotions and assist them in anchoring in the present and, hence, in reality. The technique must be practiced on a frequent basis in order to be most effective.

GROUNDING TECHNIQUES
▪ **Anchoring/grounding** entails sitting in a relaxed posture in a chair with eyes closed (or open if uncomfortable closing them), focusing on breathing. The person is asked to concentrate on feeling the chair supporting their weight and the floor underneath their feet. The person is helped to recognize how grounded they are in the present and that despite anxiety experienced from reliving moments from the past, they remain safe and grounded in the present. ▪ **Mirroring** entails practicing breathing techniques and synchronizing breathing with that of the therapist. ▪ **Timeout** entails allowing the person to leave the room for a few moments in order to stop a current activity or behavior pattern that is disruptive.

Mental grounding entails describing one's environment in detail (e.g., the color of the walls, types and kinds of furniture, temperature, etc.), playing category games with oneself (e.g., names of composers, cars, television shows, novels, etc.), age progressions starting at a younger age and working one's way to the present, describing an everyday activity in detail (e.g., cooking a meal), using imaginal exercises to obtain a mental picture of change (e.g., driving away from a painful situation); using humor to alter mood, counting or saying the alphabet slowly, and self talk using safety statements. Physical grounding includes activities that alter sensation. These include physical movement, touching objects, exercise, eating, and focusing on breathing. Soothing grounding includes coping self-statements, planning a safe treat (e.g., a nice meal), recollections of a safe place, thinking of things one is looking forward to, etc.

SUICIDALITY

Substance abuse is a significant risk factor for suicide, particularly subsequent to relapse following a long period of abstinence, and in instances of contemporaneous psychosocial or financial loss.

Substance intoxication or withdrawal can cause or exacerbate suicidal ideation or threats, and the presence of a co-occurring disorder (particularly depression) compounds this risk. Mood altering substances, particularly alcohol, have been found to be used by more than seventy percent of people who attempt suicide. A significant relationship between aging, alcohol use and suicide has been shown to exist. Individuals over the age of sixty-five comprise twenty-five percent of the national suicide rate. Older white males with depression who consume significant amounts of alcohol subsequent to the deaths of their spouses have the highest rate of completed suicides. A significant association between opioid use disorders and risk for suicide has also been documented. The use of a combination of substances increases risk for suicide or accidental overdose. Individuals who use multiple substances have been found to be more apt to experience psychiatric disorders, and the risk for suicide is highest among individuals who use a combination of opiates and benzodiazepines and/or alcohol. Individuals with HIV infection and a substance use disorder can also be at risk for suicide, especially if they are suffering from a mood disorder. Studies have shown that psychiatric and medical treatment can decrease rates of suicidal ideation among this population.

Research indicates that early recognition and treatment of psychiatric and substance use disorders, particularly depression, hold the most promise for the prevention of suicide. It is recommended that all clients in substance abuse treatment programs be screened for suicidality. Such screening should include questions regarding past suicidal feelings and attempts as well as current feelings/thoughts. No standardized assessment instrument has been validated for suicide risk. The QPR (Question, Persuade and Refer) Institute for Suicide Prevention's assessment interview matches level of risk to level of care and emergency mental health intervention for persons who are suicidal. It consists of a thirteen question protocol. Information is available on this method from the QPR web site, http://qprinstitute.com/.

It should be noted that, while no-suicide contracts are commonly used in clinical practice, there is little evidence to support their use as a sole intervention. QPR recommends a more complete informed consent, and a safety and risk management process that requires the individuals to consent to remain substance free and sober, adhere to medical advice, eliminate implements for suicide, make a commitment to personal safety, seek help in an emergency, and follow through on referrals or treatment recommendations.

SERVICE COORDINATION

About one half of all individuals who make appointments for treatment fail to show up for the first appointment and twenty percent fail to appear for the second appointment. Individuals who are employed, are past the precontemplation stage of motivation, have a family and social support network, and experience co-occurring psychiatric disorders are more apt to initiate treatment. However, individuals who have severe dependence or are older are less likely to enter treatment. Studies show that people who believe that treatment will help with specific life problems (e.g., housing, employment, child care, health care and transportation), usually provided via wraparound services, are more apt to initiate and remain in treatment. Individuals who receive such wraparound services have been found to stay in treatment for longer periods of time and improve more than those who do not receive these services. Using case management to ensure the provision of wraparound services has been shown to be beneficial since it can surmount barriers to access. The distribution of lists of contact names and phone numbers, based on the assumption that people will take the initiative to schedule appointments and contact resources for services and supports, has been found too often to be inadequate as evidenced by lack of follow through. Case management can be used to enhance

follow through. Pooled funding or shared cost models are sometimes used to support case management functions.

CASE MANAGEMENT

The recognition of substance abuse disorders as illnesses and the need for assistance from various resources engendered the use of case management within the substance abuse treatment field. Historically, case management types of services were provided by members of the clergy and workers in skid row missions, detoxification centers, and halfway houses. The inception of case management for individuals with substance use disorders on a national scale began with the Treatment Alternatives for Safe Communities (TASC) program in 1972 to create linkages between the substance abuse treatment and criminal justice systems and was then known as Treatment Alternatives to Street Crime.

Individuals with substance use disorders often experience multiple difficulties (e.g., health problems, housing instability, legal problems, employment issues and others) in addition to the need for substance abuse treatment. Moreover, trying to obtain basic needs and additional services and supports when an individual is actively using substances can be an overwhelming task. The behaviors associated with substance use can also diminish a person's ability to gain access to formalized systems of services. Case managers, functioning as boundary spanners, facilitate interagency collaboration and coordinate all aspects of treatment, both within and between treatment programs and other resources. Case management is often used adjunctively to treatment to assist clients as they move through the recovery continuum from pretreatment to primary treatment to aftercare to ensure access to an array of services and supports delivered at the optimum levels of intensity and duration.

Case management[28] has no precise definition and assumes different forms depending upon setting, organizational structure, and local service system configuration. Despite the numerous designs of case management services and disagreement in the literature regarding the concept of case management, there is a high degree of consensus regarding five core functions that are endemic to all case management services:

❶ Assessment
❷ Planning
❸ Linking
❹ Monitoring
❺ Advocacy

Four models of case management have been adapted from the field of mental health for substance use disorder treatment:

[28] The National Association of Alcoholism and Drug Abuse Counselors identifies case management as one of eight essential counseling skills needed. According to the literature, case managers with advanced educational degrees (i.e., master's prepared professionals) are preferred.

❶ **Broker/Generalist** models are designed to identify needs and provide assistance in accessing resources. This type of case management is generally limited to initial exchanges rather than intensive long-term relationships, although brief ongoing monitoring may be provided. Active advocacy is not included. This model is generally most effective for clients who have sufficient resources, reside in areas with integrated treatment and social services, and are in earlier stages of illness.

❷ **Strengths-Based** case management fosters the use of networks of assistance, offers assertive outreach, and emphasizes the relationship between the case manager and client. It is a preferred model and has been shown to lead to beneficial outcomes (e.g., retention in treatment, decreased substance use, and increased employment.)

❸ **Assertive Community Treatment (ACT)**[29] for individuals with substance disorders differs from the original Program of Assertive Treatment (PACT) model for individuals with serious mental illnesses in that it has time limits on service since it is expected that clients will progress through the treatment continuum and experience episodes of protracted abstinence. Assertive community treatment is increasingly being used as a model for ex-offenders in the justice system. ACT has been implemented as a sole service as well as in conjunction with therapeutic communities.

For persons with co-occurring disorders, the provision of substance use services within an ACT team has been shown to be critical to success; research shows that ACT is not effective in decreasing substance use when the services for addressing substance use issues are brokered and not provided directly by the ACT team. An integrated treatment approach has been shown to lead to decreases in substance use, homelessness, and the severity of mental health symptoms.

❹ **Clinical/Rehabilitative** approaches entail the provision of therapy (e.g., individual psychotherapy, skill building, and family therapy) as well as resource procurement, and have been used for persons with co-occurring substance use and psychiatric disorders. This form of case management is economical since one clinician provides all services. An example is Family/Larger System/Case Management Therapy which is used for families who are involved with systems such as schools, courts, health care, mental health, faith-based organizations, foster care, child welfare and others. It focuses on empowering families to deal effectively with these systems and agencies.

Case management has been found to be effective for individuals who are homeless. One effective type entails the use of peer case managers who are in recovery and have experienced homelessness to engage persons who are homeless in services. They are usually stationed in shelter care facilities. Another type consists of mobile case management teams that seek out people with substance disorders who are homeless in shelters and other areas where they sleep and congregate.

Case management has been shown to be of benefit to individuals who have substance disorders, especially those with co-occurring disorders, co-existing conditions, and related issues (e.g., homelessness, responsibility for parenting young children, HIV/AIDS, acute health problems,

[29] ACT, although often classified as a form of case management, is not in actuality a form of case management, but rather a program, the details of which can be found in *A Guide to Evidence-Based Practices for Adults with Mental Illness*.

developmental issues associated with adolescence and old age, physical disabilities, sexual orientation, and involvement in criminal activities), need multiple services and supports for an extended period of time, and experience difficulties in accessing those services and supports.

Individuals with co-existing disabilities often experience difficulties in multiple life domains and thus may require a number of services and supports (e.g., safe, affordable and accessible housing, employment, recreational opportunities, and medical care). Case management can be especially helpful in coordinating the involvement of multiple (and fragmented) service systems and providers that persons with co-existing disabilities may be eligible for. Since the lack of recognition and attention to disability-related issues can interfere with treatment, it is recommended that services and supports in the above-noted areas be provided concurrently rather than subsequent to treatment.

There is a paucity of quality research on case management in the field of substance abuse treatment, and it is difficult to generalize findings from the studies that have been conducted since they are fraught with methodological problems (e.g., small sample sizes, intervening contextual community factors, lack of differentiation between case management and comparison interventions, and issues related to measurement). However, it should be noted that case management is inherently difficult to evaluate due to the critical role contextual factors play in the operation of programs. Moreover, in community-based treatment a potentially beneficial service like case management cannot be realistically withheld from certain clients making it difficult to ascertain whether certain outcomes are due to case management or another intervention or factor. Finally, because the establishment of linkages between agencies is an essential component, the environment in which case management functions can impact its effectiveness.

In general, it can be concluded that, aside from the need for more rigorous, methodologically sound studies, case management can be used to enhance substance disorder treatment, especially for clients with co-occurring disorders who need multiple services and supports over an extended period of time and confront difficulties in accessing those services and supports. Studies that have reviewed treatment maintenance and case management suggest a positive correlation between the two. And, maintenance of treatment is positively correlated with beneficial outcomes.

Case Management in the Justice System

In the criminal justice system, case managers link individuals with needed resources, track progress, monitor court-imposed conditions, and report information to supervisory authorities. Case management has been shown to be an effective means of dealing with the fragmentation of the criminal justice system as well as social service, mental health and health care systems.

The criminal justice system consists of a number of components including county jails, state prisons, and probation. Probation can include halfway house supervision, intensive probation, or electronic monitoring. Those released from custody may be on parole or under some other post-incarceration supervision; in some jurisdictions probation sentences may follow sentences of incarceration. Case management helps ensure continuity during moves from one level of supervision to another, from one status to another, and one location to another including re-entry into the community. Transitional agents often function as case managers to assist with transitions between levels of care.

Accessing community resources can be challenging for individuals subsequent to incarceration. In addition to assuming responsibility for meeting one's daily needs, the stresses of finding housing, health care, transportation, employment, child care, and meeting the requirements for supervision and treatment, can increase the potential for relapse. Treatment schedules can conflict with parole mandates, and job-seeking, school, or employment can compete for the time allocated to treatment. Coordinated transition planning can reduce such conflicts and help the person surmount problems in

meeting all demands. In addition, help can be provided in applying for social security, Medicaid, veterans' entitlements, and other benefits (and applications can be initiated prior to release).

Many jurisdictions use case management services in an effort to decrease recidivism and address mental health, substance disorders, developmental disabilities, HIV/AIDS and other serious medical conditions, and domestic violence affecting juveniles and adults who have been arrested, and are on probation or parole. The case management model most often used is a mixture of clinical and brokered models. Studies have suggested that case management in the justice system leads to reductions in recidivism and relapse as well as the promotion of social integration and public safety at significant cost savings.

TREATMENT ACCOUNTABILITY FOR SAFER COMMUNITIES (TASC)

TASC is one of the earliest models for case management services within the criminal justice system. It was initiated in 1972 when the White House launched a demonstration program known as Treatment Alternatives to Street Crime (TASC) to divert individuals in the criminal justice system into substance abuse treatment. The program was initially designed to identify appropriate offenders in the criminal justice system, assess their needs for substance use treatment, refer them to treatment, monitor their progress in treatment (including conducting regular and random urinalysis testing), and report progress back to the criminal justice system.

The model has since been expanded to include offenders throughout the criminal justice system, including specific populations such as women or adolescents. In addition, it has been adapted and incorporated into drug courts. Some jurisdictions use TASC programs to create collaborative relationships between prosecution, probation, parole, and substance abuse treatment programs to provide a range of services and supports (e.g., screening and assessment, referral to community-based services, monitoring of treatment progress and compliance, case management, and liaison with courts). These programs can be integrated into substance abuse treatment programs, court services departments, or function as freestanding organizations.

TASC programs offer an alternative to incarceration or supplement criminal justice sanctions. They are designed to deal with multiple needs including parenting skills, medical care, family relationships, counseling, education and employment, and legal issues. TASC programs initiate case management services as early as possible including during pretrial, pre-sentence, post-adjudication, or prerelease.

TASC Program Components
◆ Coordination between criminal justice and substance disorder treatment systems
◆ Screening, early identification, assessment, and prompt referral
◆ Access to a continuum of alcohol, drug, and other related treatment and rehabilitation services
◆ Frequent clinical status monitoring via drug testing
◆ Client monitoring
◆ Use of legal sanctions as inducements to remain in treatment
◆ Case management
◆ Client advocacy
◆ Clinical interventions
◆ Relapse prevention
◆ Staff training
◆ Data collection and management

Evaluations[30] of TASC programs indicate that, while they have been shown to be effective in identifying offenders who have substance abuse problems and issues and referring them to treatment programs, outcomes in terms of recidivism to criminal behavior and relapse have been equivocal. Some studies indicate positive outcomes while others show only rather modest reductions in substance abuse. Other studies indicate inconclusive results with regard to criminal recidivism. Nonetheless, individuals involved in TASC programs have been shown to remain in treatment longer than other clients involved in the criminal justice system (as well as those who participate in treatment on a voluntary basis).

TASC has developed a number of monographs and guidelines that include training materials, curricula and manuals, and, in partnership with SEARCH, Inc., a management information system called TASC-MIS. TASC also has material for use with females under the supervision of correctional systems. Information can be found on the web at http://www.nationaltasc.org/.

WRAPAROUND

Wraparound services are designed to enhance or supplement treatment services to meet the needs of clients in multiple domains. Inherent in the provision of wraparound services is some form of case management. Studies have shown that wraparound services contribute to beneficial treatment outcomes.

Wraparound services can include:

- Childcare
- Transportation
- Reading assistance for patients with literacy challenges
- Primary healthcare, including screening and referral for HIV/AIDS, tuberculosis, and other infectious diseases
- Financial assistance
- Legal aid
- Mental health services
- Education
- Vocational/educational services
- Liaison services with the Immigration and Naturalization Service
- Supportive living arrangements, such as recovery houses
- Services for victims of domestic violence

[30] The most extensive, although limited, evaluations of the impact of TASC programs have been based on analyses of data from the Treatment Outcome Prospective Study (TOPS), a longitudinal study of eleven thousand individuals with substance abuse problems in ten cities that examined treatment outcomes, including relapse to criminal activity after treatment.

PSYCHOTHERAPY

Treatment for substance use disorders focuses on activities that are designed to assist clients to recognize the extent of their problems with substances, and acquire and use motivation and tools to attain and maintain sobriety.

For years the common belief was that individuals needed to hit bottom in order to be ready to change. Currently, it is recognized that many individuals can derive benefits from treatment even if they are not completely ready. Moreover, excluding people who are deemed unready or not motivated for treatment would exclude that vast majority of clients; many would never begin the process of treatment and recovery.

Only a small number of clients are served by an abstinence only policy of admission to treatment. Risk or harm reduction approaches, on the other hand, can provide intervention for people who are willing to control their substance use. Moreover, while total abstinence has been shown to be strongly associated with long-term beneficial outcomes, for many individuals intermediate steps are needed to achieve abstinence. Individuals who have a significant resistance to abstention may find trial moderation to be an acceptable goal.

There is a lack of research indicating that cold turkey is the most effective or only means of achieving long term sobriety. Warm turkey approaches, on the other hand, can lead to beneficial outcomes for some individuals, particularly those whose difficulties with substance use are less severe. Such approaches consist of setting progressively reduced daily and weekly limits on the use of a substance while working toward a long-range goal of abstinence. Clients maintain daily records of consumption and schedule treatment sessions on an as-needed basis. The tapering down method, for example, has been found to be effective for cigarette smokers in decreasing levels of dependence prior to a quit date. Trial abstention is another method and is used for reducing alcohol consumption that is based on research showing that three months of abstinence from alcohol consumption is predictive of long-term remission of dependence.

The sections below describe interventions that have been shown to be of benefit in reducing and/or eliminating substance use and related problems.

BRIEF INTERVENTION

Brief intervention focuses on the reduction or elimination of substance use to minimize or prevent the harm associated with such use either via the technique itself or through referral for treatment. It is conducive to primary care and other opportunistic settings because it can be conducted within a limited number of (three ten to fifteen-minute) sessions that encompass assessment and motivational counseling to decrease substance abuse or promote entry into treatment.

Brief intervention incorporates five basic steps irrespective of the number of sessions or length of intervention:

1. Introduction of the issues within the context of the individual's health
2. Screening, evaluation, and assessment
3. The provision of feedback regarding screening results, impairment, and risks
4. Discussion of change strategies and goal-setting
5. Summarization and reaching closure

There are six components of brief intervention designed to alter substance use behavior captured in an acronym called **FRAMES**:

- **Feedback** regarding personal risk or impairment is given in a non-confrontational manner following assessment of substance use patterns and associated problems. Such feedback usually entails presenting information from standardized instruments and compares clients' scores with normative data from the general population or groups receiving treatment.
- **Responsibility** for change is placed directly and explicitly on clients in a manner that respects their rights to make choices for themselves in order to empower them so they are more invested in the process of change. Clients are thus deemed the leading experts regarding their own needs.
- **Advice** regarding changing (i.e., reducing or stopping substance use) is given clearly in a nonjudgmental manner. This is best accomplished via suggestions rather than directives. Research indicates that educational advice based on scientific evidence is effective.
- **Menus** of self-directed change options and treatment alternatives are offered. A menu of options contributes to enhancing the effectiveness of treatment and reducing premature termination from treatment and resistance to change.
- **Empathic** counseling offered in a warm, respectful, and understanding manner using reflecting listening skills. Positive outcomes are associated with this style.
- **Self-efficacy,** or optimistic empowerment, is engendered to encourage change.

Brief intervention for older adults with alcohol consumption issues includes the following steps:

1. Customized feedback on the person's responses to screening questions regarding drinking patterns and other health habits such as smoking and nutrition.
2. Discussion of types of drinkers in the United States and where the person's drinking patterns fit into the population norms for his or her age group.
3. Reasons for drinking in order to understand the role of alcohol in the context of the person's life, including coping with loss and loneliness.
4. Consequences of heavier drinking; some older individuals can experience problems in physical, psychological, or social functioning even though their consumption is less than established cutoff levels.
5. Reasons to cut down or quit drinking that can be key motivators for this population (e.g., maintaining independence, physical health, financial security, and mental capacity).
6. Sensible drinking limits and strategies for cutting down or quitting (e.g., the development of social opportunities that do not involve alcohol, resumption of previously enjoyed hobbies and interests, and the pursuit of volunteer activities).
7. A drinking agreement in the form of a prescription. Agreed-upon drinking limits that are signed by the patient and the practitioner have been found to be especially effective in altering drinking patterns.
8. Coping with risky situations (e.g., social isolation, boredom, and negative family interactions).
9. A Summary of the session.

Brief intervention has been demonstrated to be effective in reducing or eliminating alcohol consumption and associated problems in adolescents, adults, and older adults in a variety of settings. Studies have found that a reduction in drinking occurs after the first follow-up visit, and, even without repeated follow-up sessions, discernible behavior change occurs immediately. Some research

indicates that individuals who experience recurrent and significant substance use difficulties that have lead to social, interpersonal or legal problems, and have previous histories of substance abuse treatment are less apt to be responsive to brief intervention.

MOTIVATIONAL INTERVIEWING (MI)

Motivation for change is a critical component in addressing substance use disorders. Longitudinal research studies indicate that level of motivation, or readiness for change, is a significant predictor of a positive therapeutic alliance, treatment retention, treatment outcomes (e.g., substance use, employment, and psychological functioning), and whether substance use will change or remain static. Different kinds of assistance are required depending upon which stage of change individuals are in and are moving towards. Motivational Interviewing is designed to foster intrinsic motivation for change through the exploration and resolution of ambivalence. It involves accepting clients' levels of motivation as the basis for change and avoiding argument and confrontation in order to focus on establishing rapport.

Motivational Interviewing was originally developed for intervention for alcohol consumption problems. MI has been found to be effective for people who are initially ambivalent or reluctant to change, particularly when the problematic behavior is rewarding (e.g. smoking and drinking excessively). This technique avoids confrontation (e.g., disagreeing, emphasizing evidence of impairment, and arguing), as this is associated with higher levels of resistance and reductions in the likelihood of behavior change. Instead, reasons for concern and change are elicited from the person. These are then explored in a supportive manner. The goal is to highlight any discrepancies between present behavior and desired goals to trigger behavior change.

PRINCIPLES OF MOTIVATIONAL INTERVIEWING	
Express empathy (i.e., acceptance of the individual's perspectives without judgment) through reflective listening	• Acceptance facilitates change • Skillful reflective listening is fundamental • Ambivalence is normal
Develop discrepancy between clients' goals or values and their current behavior	• The client rather than the counselor should present the arguments for change • Change is motivated by a perceived discrepancy between present behavior and important personal goals or values
Roll with resistance (i.e., avoid argument and direct confrontation)	• Avoid arguing for change • Resistance is not directly opposed • New perspectives are invited, but not imposed • The client is a primary resource in finding answers and solutions • Resistance is a signal to respond differently
Support self-efficacy and optimism; focus on clients' strengths to support optimism and hope needed for change	• An individual's belief in the possibility of change is an important motivator • The client, rather than the clinician, is responsible for selecting and carrying out change • The clinician's own belief in the person's ability to change becomes a self-fulfilling prophecy

Research has shown that some treatment approaches can lead to reductions in motivation for positive changes in substance use. Confrontation has long been used in substance abuse treatment to break

through defenses in order to overcome denial. However, research indicates that such techniques are less effective in helping alter substance use behavior, can be construed as attacking, and have an adverse effect on the therapeutic alliance and process. Moreover, confrontational group processes, programs, and clinicians have been demonstrated to produce adverse outcomes (especially when applied to individuals who use stimulants). Techniques that employ confrontation regarding substance use behaviors by significant others, such as the Johnson Intervention,[31] have been shown to be effective when used by significant others, but to have adverse outcomes when used in treatment programs. On the other hand, supportive accurately empathic clinical styles have been shown to be effective. Confrontation is now viewed as a goal rather than a style or technique that permits clients to face difficult situations.

Motivational interventions have been adapted for use with individuals who have serious mental illnesses and/or co-occurring disorders as well as for people who are homeless. In order to be effective, motivational enhancement techniques must be matched to the client's stage of recovery. Such techniques are integrated as part of the Stages of Change Transtheoretical Model.

Stages of Change Transtheoretical Model and Motivational Strategies	
Stage of Change	**Motivational Strategies**

Precontemplation
 	
The person has no intention to change in the foreseeable future and may not be aware of problems.
	• Establish rapport, ask permission, and build trust.
	• Raise doubts or concerns in the client about substance-using patterns by
	  • Explore the meaning of events that brought the client to treatment or the results of previous treatments
	  • Elicit the client's perceptions of the problem
	  • Offer factual information about the risks of substance use
	  • Provide personalized feedback about assessment findings
	  • Explore the pros and cons of substance use
	  • Help a significant other intervene
	  • Examine discrepancies between the client's and others' perceptions of the problem behavior
	• Express concern and keep the door open.

Contemplation
 	
The person is aware that a problem exists and is thinking seriously about overcoming it, but has not made a commitment to take action. During this stage the person is weighing the pros and cons of the problem and its solution.
	• Normalize ambivalence.
	• Help the client tip the decisional balance scales toward change by:
	  • Eliciting and weighing pros and cons of substance use and change
	  • Changing extrinsic to intrinsic motivation
	  • Examining the client's personal values in relation to change
	  • Emphasizing the client's free choice, responsibility, and self-efficacy for change
	• Elicit self-motivational statements of intent and commitment from the client.
	• Elicit ideas regarding the client's perceived self-efficacy and expectations regarding treatment.
	• Summarize self-motivational statements.

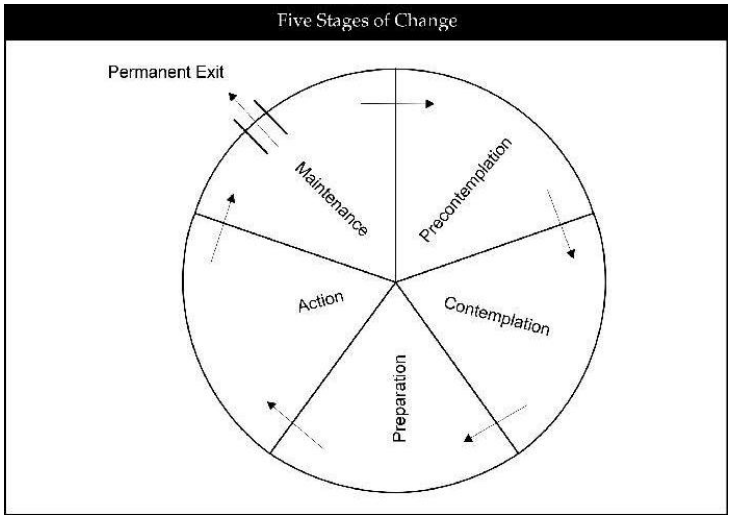
[31] The Johnson Intervention was developed in the 1960s at the Johnson Institute in Minneapolis. It is a method for mobilizing, coaching, and rehearsing with family members, friends, and associates to help them confront someone they believe to have a substance use disorder. During the intervention they articulate their concerns, strongly push for entry into treatment, and explain consequences in the event of refusal (e.g., divorce or loss of a job). They typically prepare in secret to use the element of surprise. This approach has mostly been applied to problematic alcohol consumption, but has also been adapted for other types of substance abuse.

STAGES OF CHANGE TRANSTHEORETICAL MODEL AND MOTIVATIONAL STRATEGIES	
Preparation Intention and behavior are combined: action is planned within the next month. Action has been taken to no avail in the past year. Some reductions in problems behaviors have been made, but the person has not set a criterion for effective action.	• Clarify the client's own goals and strategies for change. • Offer a menu of options for change or treatment. • With permission, offer expertise and advice. • Negotiate a change - or treatment - plan and behavior contract. • Consider and lower barriers to change. • Help the client enlist social support. • Explore treatment expectancies and the client's role. • Elicit from the client what has worked in the past either for him or others whom he knows. • Assist the client to negotiate finances, child care, work, transportation, or other potential barriers. • Have the client publicly announce plans to change.
Action Modifications in behavior, experience, or environment are made to overcome the problem. The person has successfully altered the addictive behavior for one to six months. (Action does not denote change, however.)	• Engage the client in treatment and reinforce the importance of remaining in recovery. • Support a realistic view of change through small steps. • Acknowledge difficulties for the client in early stages of change. • Help the client identify high-risk situations through a functional analysis and develop appropriate coping strategies to overcome these. • Assist the client in finding new reinforcers of positive change. • Help the client assess whether she has strong family and social support.
Maintenance The individual is actively working to prevent relapse and consolidate gains achieved during the Action stage. The person is remaining free from addictive behavior and is consistently engaging in a new incompatible behavior for more than six months.	• Help the client identify and sample drug-free sources of pleasure (i.e., new reinforcers). • Support lifestyle changes. • Affirm the client's resolve and self-efficacy. • Help the client practice and use new coping strategies to avoid a return to use. • Maintain supportive contact (e.g., explain to the client that you are available to talk between sessions). • Develop a "fire escape" plan if the client resumes substance use. • Review long-term goals with the client.
Recurrence The individual has experienced a recurrence of symptoms and must now cope with consequences and decide what to do next.	• Help the client reenter the change cycle and commend any willingness to reconsider positive change. • Explore the meaning and reality of the recurrence as a learning opportunity. • Assist the client in finding alternative coping strategies. • Maintain supportive contact.

(Adapted from SAMHSA TIP # 35)

The process of change is cyclical and individuals usually move back and forth between the stages of change and cycle through them at different rates. Progress through the stages of change is circular or spiral, not linear; many individuals go through several revolutions of the different stages several times prior to achieving stable change. Recurrence of substance use (i.e., relapse) is not considered a failure and does not need to be calamitous or prolonged.

As clients move through the different stages of recovery, treatment needs to move with them; interventions that are effective early in treatment may be ineffective and perhaps harmful if provided in the same manner later on in treatment.



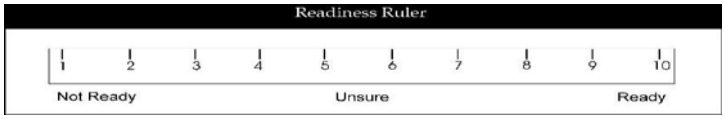
Studies show that there is a strong tendency toward relapse during the early part of the treatment process and that individuals in the early part of recovery face greater risks for returning to substance use than those who have been abstinent for three, six, or eighteen months. In addition, total abstinence has been demonstrated to be strongly associated with beneficial long-term outcomes; studies show that almost ninety percent of individuals who maintain abstinence for two years remain abstinent at ten-year follow-up.

The elements of Motivational Interviewing include:

- **The FRAMES approach**
- **Decisional balance exercises** that explore the benefits and disadvantages of change are used. This entails a cognitive appraisal or evaluation of the reasons not to change (i.e., the positive or good aspects of substance use) and the reasons to change (i.e., the less positive aspects of substance use). The person is assisted to recognize and weigh the negative aspects of substance use so that the scale tips toward beneficial behavior. The person takes both sides of the argument and articulates the competing sides of their ambivalence regarding change. Psychoeducation regarding the interaction of substance abuse with other problems (e.g., health, legal, parenting, employment, and mental illness) can be incorporated into the technique. Decisional balancing can be very effective during the contemplation stage in assisting clients in moving to the action stage.

- **Discrepancies between personal goals and current behavior** are developed to help clients recognize gaps between their future goals and current behavior.
- **Flexible pacing** that takes into account the client's stage of change.

The **Readiness Ruler** is a simple method that can be used to ascertain readiness to change by asking where clients are on a scale of one to ten. Individuals in the precontemplation stage will score between zero and three.



- **Personal contact with clients not in treatment** to enhance continuity of communication and the therapeutic relationship. Such contacts can include phone calls, handwritten letters, etc., and have been shown to be effective in helping clients return to treatment after an absence, remain involved, and/or adhere to treatment regimens.

A motivational style of counseling can be used to instill motivation at the outset as well as throughout the treatment process. In addition, it has been found helpful as:

- A means of rapid engagement in general medical settings to facilitate referrals to treatment
- A first session to increase the likelihood that clients will return, and to offer a beneficial intervention for those who do not return
- An empowering brief consultation for clients placed on waiting lists
- Preparation for treatment to increase retention and participation
- A means to help individuals coerced into treatment move beyond initial feelings of anger and resentment
- A means to overcoming defensiveness and resistance
- A stand-alone intervention in settings where there is only brief contact
- A counseling style used throughout the process of change

Motivational techniques have a strong base of evidence to support their use for all age groups and can be used in individual, family, and group session formats as well as in numerous settings. Such techniques are associated with increased participation in treatment and beneficial outcomes (e.g., reductions in consumption and high-risk lifestyle behaviors, and improvements in social adjustment, rates of abstinence and treatment referral acceptance). In addition to its effectiveness, motivational interviewing is a low cost intervention that that can be delivered in two to four outpatient sessions; Motivational Interviewing does not assume a long-term client-therapist relationship. Even a single session of MI has been found to invoke behavior change so that even if clients are not engaged in a long course of treatment (as is often the case), immediate help has been provided. Additional information on motivational interviewing can be found on the web site of the Motivational Interviewing Network of Trainers (MINT), http://www.motivationalinterview.org/.

Motivational Enhancement Therapy (MET)

Motivational Enhancement Therapy combines MI with systematic feedback of assessment results and incorporates strategies to induce rapid and internally motivated change (rather than providing guidance in a stepwise fashion through the recovery process). MET consists of an initial assessment, followed by two to four individual treatment sessions. The first treatment session focuses on providing feedback generated from an initial assessment to stimulate discussion regarding personal substance use and elicit self-motivational statements. The principles of Motivational Interviewing are used to strengthen motivation and construct a plan for change. Coping strategies for dealing with high risk situations are suggested and discussed. During subsequent sessions change is monitored, cessation

strategies being used are reviewed, and encouragement for commitment to change or sustained abstinence is provided. MET can be used as a stand-alone brief intervention or can be integrated with other interventions (e.g., Cognitive- Behavior Therapy). Significant others are sometimes included in sessions.

Research has demonstrated that MET is associated with increased participation in treatment and beneficial treatment outcomes (e.g., decreased consumption of substances, increased abstinence, better social adjustment, and successful treatment referrals). MET with a family component has been found to be effective for adolescents by improving commitment to treatment and motivation, as well as reducing substance abuse and high risk behaviors (e.g., drinking and driving, and unsafe sexual practices). Project MATCH, the largest clinical trial conducted to compare various treatment approaches for alcohol use disorders, found that a four-session course of motivational enhancement therapy resulted long-term outcomes similar to those of other more intensive outpatient treatment methods and that it is applicable to diverse cultural and socioeconomic groups.

GUIDED SELF-CHANGE (GSC)

Guided Self-Change is a brief motivational intervention designed to assist individuals who have problems with alcohol use and experience mild to moderate alcohol dependence without severe consequences or withdrawal symptoms, and are committed to altering their use of alcohol and/or drugs. The program is comprised of the following components:

- A full clinical assessment with personalized feedback
- Four individual counseling sessions
- Optional follow-up sessions
- Self monitoring
- Goal setting
- Homework and short reading assignments
- Evaluation of high risk drinking and drug use situations
- Development of effective coping strategies and an action plan

The manualized version of GSC consists of an initial assessment and four sixty-minute individual treatment sessions and two follow-up telephone calls. During the initial assessment, drinking behavior, high risk drinking situations, and self-efficacy are assessed, and drinking goals are identified (e.g. abstinence or moderation). Treatment sessions address the content of two reading assignments, the first of which presents a general behavioral analysis of drinking, and the second of which focuses on problem-solving skills and relapse prevention. Each reading is followed by two homework assignments involving identification and analysis of high versus low-risk problem drinking situations, generating a set of options or alternatives to high-risk drinking situations and their likely consequences, and completing a checklist that asks about lifestyle behaviors as they relate to alcohol use. Motivational strategies are used to enhance commitment to change while cognitive relapse techniques are taught to assist in identifying triggers and facilitating recovery from relapse. Individuals with medical contraindications (e.g. severe liver disease) are advised to set a goal of complete abstinence, while those who opt for moderation of drinking are taught drinking guidelines (e.g., consume no more than three standard drinks per day on four or fewer days of the week, and consume no more than one drink per hour if driving).

Outcome studies indicate that GSC leads to reductions in amounts of alcohol consumed, increases in days abstinent, and decreases in days of heavy consumption. A cultural adaptation of GSC has been developed that includes a family component (GSC-F) for Hispanic/Latino adolescents.

Behavior Therapy

Behavior therapy for the treatment of substance disorders has a robust base of evidence to support its effectiveness and can be used in individual, group, and family formats for people of all ages. Behaviorally oriented interventions include a number of approaches designed to help individuals recognize and change ineffective behaviors, develop new or enhanced social skills to foster and sustain recovery, and learn techniques for responding to cues and cravings without relapsing.

Behavioral therapy for adolescents incorporates changing unwanted behaviors by clearly demonstrating desired behaviors and consistently rewarding incremental steps toward achieving desired behaviors. Therapeutic activities include fulfilling specific assignments, rehearsing desired behaviors, recording and reviewing progress, and praise and privileges given for meeting assigned goals. Urinalysis is conducted on regular basis to monitor substance use.

Behavior therapy for adolescents is designed to increase three types of control:

1. Stimulus Control to help with avoidance of situations associated with substance use and learning to spend more time in activities incompatible with substance use.
2. Urge Control to help with recognizing and changing thoughts, feelings, and plans that lead to substance use.
3. Social Control which involves family members and other significant people in helping with avoidance of substances. A parent or significant other attends treatment sessions when possible and assists with therapy assignments and reinforcing desired behavior.

According to research studies, this therapy helps adolescents become substance free and increases their ability to remain substance free subsequent to treatment. In addition improvements have been shown in employment/school attendance, family relationships, levels of depression, and rates of institutionalization. Beneficial results are attributed primarily to the inclusion of family members in therapy and providing rewards for abstinence verified by urinalysis.

Behavioral Self-Control Training (BSCT)

Behavioral Self-Control Training is designed to promote harm reduction through moderation of alcohol use or abstinence. It consists of eight sequential steps that can be used in conjunction with a therapist or provided through guided self-help manuals, correspondence, or a computer program:

1. The person establishes an upper limit on the number of drinks per day, and the peak blood alcohol level for a single drinking occasion.
2. The person initiates self-monitoring of both the number of drinks consumed and settings and circumstance in which they are consumed (e.g., when, where, with whom, and how they are feeling) to provide the basis for a functional analysis.
3. The person begins to modify the rate at which alcohol is consumed (e.g., by changing from their usual alcoholic beverage of choice to one containing less alcohol, by sipping a drink over a longer period of time, or by spacing the number of drinks consumed across time).
4. The person develops and practices using assertive refusal skills when offered alcoholic beverages.
5. The person establishes a reinforcement system to reward attainment of alcohol consumption goals.
6. The person uses self monitoring to determine social, emotional, and environmental antecedents that trigger excess consumption.
7. The person acquires effective coping skills to employ instead of drinking.

8. The person learns ways to avoid relapse to excess alcohol consumption.

Studies indicate that BSCT leads to significant reductions in drinking behavior among individuals with mild to severe alcohol use problems. Moreover, these treatment gains appear to persist over time with studies showing lasting effects for several years. Recent evidence indicates that a computer-based version of BSCT is also effective in producing substantial reductions in alcohol consumption for individuals with mild to moderate alcohol problems.

COGNITIVE-BEHAVIOR THERAPY (CBT)

Cognitive-behavior therapy is designed to help clients identify external and internal cues that can trigger episodes of substance use and develop coping skills to deal with them by modifying negative, irrational, distorted, or self-defeating ideation (e.g., all or nothing thinking and magnification/minimization), and alter behavior (e.g., find ways to avoid high risk situations). CBT focuses on overt, observable behaviors (e.g., drinking alcohol) and identifies steps to avoid situations that lead to substance use. A course of CBT is typically twelve to fifteen sessions conducted within a twelve week timeframe. It is comprised of three central components:

- **A functional analysis** to identify the antecedents and consequences of substance use behaviors that function as triggers and maintenance factors. A functional analysis focuses on the number, range, and effectiveness of coping skills, assesses emotional states, thinking, and aspects of the environment that are associated with substance use in order to identify situations that are especially high risk. The components of a functional analysis consist of (1) an examination of the types of circumstances, situations, thoughts, and feelings that increase the likelihood the person will use substances; (2) an examination of the positive, immediate, but short-term consequences of substance use; and (3) a review of the negative, and often delayed consequences, of substance use.
- **Coping skills training** to foster the development and use of ways of dealing effectively with high risk situations without the need to use substances. The skills taught can be specific to substance use (e.g., substance refusal skills and coping with cravings) or general interpersonal and emotional issues (e.g., anger management, problem solving skills assertiveness, or communication skills training). Role playing and rehearsal are used to practice during sessions with feedback given by the therapist. Homework assignments are used for in vivo practice between sessions.

  Cognitive-Behavioral Coping-Skills Therapy (CBST) is designed to enhance cognitive and behavioral skills to alter drinking behaviors. CBST encompasses a number of approaches that, while different in terms of content, duration, and modality, share a focus on alcohol-related stimuli (i.e., alcohol cues) that help maintain harmful levels of alcohol consumption, lead to resumptions of drinking following aborted attempts at abstinence, and the use of individual coping skills training to address deficits. All CBST approaches teach skills (using a standard set of techniques) to help patients identify specific situations in which coping inadequacies typically occur. Techniques such as instruction, modeling, role playing, and behavioral rehearsal are used to enhance coping skills in such situations. Research indicates that CBST is one of the most effective approaches for alcohol disorders. However, the specific CBST components that account for its effectiveness have yet to be identified. It should also be noted that CBST is maximally effective when it is part of a comprehensive treatment program. It has been found to be most beneficial for individuals with severe alcohol dependence.

- **Relapse prevention** to alter cognitions involved in relapse and promote positive self-efficacy. In cognitive-behavioral approaches, clients are helped to view relapses as the result of a lack of appropriate and effective coping skills for specific situations (and not the result of personal failings) that can be altered with skill development and practice. Relapse prevention also helps with preparation for the potential for a relapse and plan ways to avoid it, or, if a relapse cannot be prevented, stop the process quickly with a minimum of harm.

CBT has a robust base of research to support its effectiveness in the treatment of substance use disorders. However, studies indicate that CBT does not decrease the rate of relapse, but rather appears to lead to reductions in the severity of relapses. CBT is contraindicated for individuals with active psychosis and active symptoms of bipolar illness, who lack stable living situations, are medically unstable, and have substance dependence disorders (with the possible exceptions of alcohol and marijuana dependence). CBT has been found to be most effective when provided subsequent to the stabilization of acute phases of mental illnesses and substance disorders. CBT with a family component has been found to be effective for adolescents.

CONTINGENCY MANAGEMENT (CM)

Contingency Management is designed to alter behavior through consistent application of reinforcing environmental consequences. It is typically used to enhance behaviors such as adherence to medication regimens or treatment plans, maintaining abstinence, participating in group and individual therapies, and achieving specific goals. Behaviors that are incompatible with substance use are fostered. Reinforcers typically consist of prizes, vouchers, retail items, and privileges.

Principles of Contingency Management for Substance Abuse Treatment
• Positive reinforcers provided by the clinician when abstinence is demonstrated • Withholding designated reinforcers when the targeted substance is detected • Assistance with establishing alternate healthier activities • Readily detectable behaviors targeted for change • Frequent monitoring through urinalysis several times per week to ensure the person's use of a targeted substance is readily detected and to verify abstinence • Prompt reinforcement with tangible rewards of desired behaviors (e.g., negative drug tests earn clinic privileges, small gifts, or gift certificates for merchandise) • Demonstration of unchanged undesirable behavior results in a lack of reward; mild sanctions (e.g., delayed methadone take home privileges) are used for inappropriate behaviors

Contingency management entails the identification and selection of a specific measurable target behavior (e.g., substance-free urine samples) ascertained through a functional analysis. Explicit and desirable contingencies are identified and selected to be used as rewards given each time the target behaviors are displayed. While it is recommended that rewards not be exchangeable for cash (to avoid funding purchases of substances), they can have a cash equivalent (e.g., nonrefundable movie or meal passes). Reinforcers need to be of a sufficient magnitude to alter behavior and also be desirable. In addition, links between targeted behaviors and rewards need to be specified. Tailoring contingencies to meet clients' needs has been found to be more effective.

Clients with co-occurring psychiatric and substance use disorders and those involved in the justice system have been found to benefit from CM as a means to enhance engagement and retention in treatment. CM can be used to address co-occurring interpersonal, legal, and employment problems through activity reinforcement. In such procedures clients select two or three goal areas to focus on. Each week one activity related to each goal is selected (e.g., calling GED programs, attending a medical appointment, filling out a job application, etc.).

Contingency management has a significant base of empirical evidence to support its use for difficulties with a variety of substances (e.g., marijuana, opioids, cocaine, and alcohol) and has been found to have the strongest support of any intervention for individuals who use stimulants, even those who have a high degree of treatment-resistance. Contingency management is most effective when used within a comprehensive treatment program, not as a stand-alone intervention. It has been demonstrated to increase adherence to treatment, attainment and maintenance of abstinence as evidenced by negative drug tests, attendance at counseling and medical appointments, as well as employment and volunteering for participants in methadone maintenance therapy. When used in combination with progressive muscle relaxation and systematic desensitization, contingency management has been found to be effective eliminating opioid use.

Written contracts have been shown to be a helpful component of CM, especially for adolescents as they confer a sense of control and personal investment in one's own welfare during a period of life when authority issues and the establishment of one's identity are paramount. Written contracts are used to specify the duration and any changes over time in contingencies. Contingency contracts have been demonstrated to lead to decreases in relapses and increases in treatment retention. Contracts that focus on goals that support recovery (e.g., saving money, attending vocational training, attending therapy sessions, etc.) have been shown to lead to more beneficial outcomes than those that focus on substance use (e.g., negative drug screens). Moreover, contracts have been found to be more effective when the consequences that can result from a breach are more severe. Such contracts with people who have co-existing disabilities may need to be more explicit, and the consequences for relapses in particular may need to be individually tailored to individual capacities for achievement.

Community Reinforcement Approach (CRA) Plus Vouchers

Community Reinforcement Approach (CRA) Plus Vouchers is twenty-four-week outpatient therapy designed to produce abstinence from cocaine in order to enhance the opportunity to learn skills that will help sustain abstinence, as well as decrease alcohol consumption for individuals whose drinking is associated with cocaine use. One or two individual counseling sessions per week are provided which focus on improving family relationships, developing skills to minimize substance use, developing new recreational activities and social support networks, and vocational counseling. Clinic-monitored disulfiram therapy is provided for individuals with alcohol use problems. Participants submit urine samples two or three times per week and are given vouchers for negative samples. The value of the vouchers increases with consecutive substance-free samples. Vouchers can be exchanged for retail goods that are consistent with a cocaine-free lifestyle.

CRA Plus Vouchers has been shown to facilitate engagement in treatment and attaining significant periods of abstinence from cocaine. It has been used effectively for individuals receiving methadone maintenance therapy who use intravenous cocaine as well as in outpatient detoxification from opiates. A CRA treatment manual is available from the NIDA Clearinghouse and can be downloaded at no cost from the web at http://www.nida.nih.gov/TXManuals/CRA/CRA1.html.

Studies have shown that contingency management procedures that offer vouchers lead to increased treatment retention and abstinence. Such incentives have been found to be particularly effective for adolescents. The use of vouchers has been shown to produce beneficial effects for individuals who use opioids, marijuana, benzodiazepines, nicotine, and alcohol. However, beneficial effects are less likely to occur when abstinence is required from multiple substances simultaneously to earn rewards. Therefore, it is recommended that a single substance be targeted to achieve initial success. This may promote further motivation for abstinence from other substances as most studies show that abstinence from one substance leads to reductions in the use of other substances.

Voucher programs have been criticized for being expensive and for paying clients to attain and maintain sobriety instead of taking personal responsibility to do so. Earning chances to draw slips of paper from a bowl and win prizes with an inverse correlation with the chances of winning expensive ones is an alternative that offers intermittent reinforcement at less cost. One treatment program cited in the literature uses the opportunity to draw a slip of paper which offers the potential for winning a prize for drug-free urine tests. Prizes are small (about $1.00 for donuts and bus tokens, etc.) and large (about $20.00 for a walkman, watches, and sweatshirts) and not all slips offer prizes. Some programs solicit local businesses to donate prizes.

For adolescents, permission to use the car and money for dates are rewards that parents can use without incurring additional expenses. The use of medication take-home privileges[32] (which eliminate the need for patients to visit the clinic daily to consume their medication under staff supervision) in methadone maintenance programs, along with other incentives such as publicly displayed gold stars and inexpensive gifts (e.g., coffee cups, gasoline coupons) earned for substance abstinence and counseling attendance. Gift certificates, entertainment tickets, toys for patients' children, special scheduling for medication administration, and meal vouchers have been found to be effective lower cost alternatives.

Voucher-Based Reinforcement Therapy in Methadone Maintenance Treatment (VBRT)

Voucher-Based Reinforcement Therapy in Methadone Maintenance Treatment is designed to help patients achieve and maintain abstinence by providing them with a voucher each time they provide a drug-free urine sample. The voucher has monetary value and can be exchanged for goods and services consistent with the goals of treatment. Initially, the voucher values are low, but their value increases with the number of consecutive drug-free urine specimens the individual provides. The contingency of escalating incentives is designed specifically to reinforce periods of sustained drug abstinence. Cocaine or heroin-positive urine specimens result in resetting the value of the vouchers to the initial low value.

Studies show when vouchers are received in exchange for drug-free urine samples, significantly longer periods of abstinence are attained. However, cessation of VBRT has been shown to lead to increases in substance use.

Relapse Prevention Therapy (RPT)

Relapse to substance use is a predictable, interruptible, and preventable process that is preceded by warning signs that one can learn to identify. Relapses do not eliminate positive recovery changes; clients do not need to start over, but rather avoid further substance use, remain in treatment, resume the recovery process where last left off, and enhance skills to help avoid future relapses. Relapse is not a sign of treatment failure; a return to substance use during treatment is a signal to review treatment/recovery plans (not for discharge from treatment). Relapse is not necessarily a sign of poor

[32] Contingent methadone take-home doses have shown to be effective when combined with other services and supports.

motivation, and, although it can be a sign of extreme ambivalence or poor motivation to stop using, even individuals with significant levels of motivation can experience relapses.

The absence of relapse does not guarantee successful recovery. Many clients who experience relapses make significant beneficial changes in personal growth and mastery, although some clients with uninterrupted abstinence never experience substantive changes or achieve lasting growth. Abstinence is an important first step in the recovery process, but is not the final or only goal.

A critical element in relapse prevention is an appreciation that relapses are preceded by triggers or cues that signal trouble and precede exposure to events or internal processes (i.e., high risk situations) in which substance use is likely to occur. A number of relapse prevention approaches have been developed that can be provided on an individual basis or in group sessions that include practice and role playing ways to effectively cope with high risk situations. In general, relapse prevention approaches share the following common elements:

- Psychoeducation regarding the relapse process and ways to interrupt it
- Identification and monitoring of high risk situations and warning signs of relapse
- Enhancement of self-efficacy in dealing with potential relapse situations
- Development of coping and stress management skills
- Counteracting euphoric recall and the desire to test control over use
- Development of a balanced lifestyle that includes healthy leisure and recreational activities
- Responding safely to slips (i.e., lapses) to avoid escalation into full-blown relapses
- Establishment of behavioral accountability for slips and relapses via biological monitoring

Relapse Prevention Therapy (RPT) consists of coping skills training, cognitive therapy, and lifestyle modification. Coping-skills training, the cornerstone of RPT, teaches strategies to understand relapse as a process, identify and cope effectively with high-risk situations, cope with urges and cravings, implement damage control procedures during a lapse to minimize its negative consequences, remain engaged in treatment (even after a relapse), and learn how to create a more balanced lifestyle.

In RPT the positive and negative consequences of continued drug use are explored using the decisional balance technique discussed above. Clients are helped to identify high risk situations and learn skills to avoid them or effectively cope with them when they occur. A relapse emergency plan is developed in order to limit the severity and duration of relapses. A focus is placed on learning specific skills to identify and effectively cope with urges and cravings.

Relapse Prevention Therapy
• Assessment to provide assistance in gaining awareness of problems in objective terms, ascertain motivation for change, and identify risk factors that increase the possibility of relapse • Techniques to foster insight/awareness and provide alternative beliefs regarding the nature of the process of behavior change and assistance in the clarification of patterns of emotion, thinking, and behavior related to substance abuse • Coping skills training s (e.g., refusal skills, anger management, anxiety management in social situations, etc.) • Cognitive strategies to mange urges and cravings, identify early warning signals, and reframe reactions to an initial relapse • Lifestyle modification strategies to enhance overall coping capacities (e.g., meditation and exercise)

RPT has a strong research base to support its efficacy in reducing smoking, alcohol, marijuana, cocaine, opioid and other drug use as well as for treating individuals who experience co-occurring mental illnesses. Beneficial outcomes have been demonstrated in decreasing the severity of relapse and its effects have been shown to endure well beyond treatment. Individuals with polysubstance use disorders may require separate relapse prevention interventions for each substance since the risks for relapse can be different for each one.

The Matrix Model

The Matrix Model is an outpatient approach developed during the 1980s for the treatment of individuals who use cocaine and methamphetamine. The model integrates relapse prevention, motivational interviewing, psychoeducation, family therapy, and twelve-step program involvement. It consists of group sessions that focus on early recovery skills, relapse prevention, family education, and social support, as well as twenty individual sessions, that are conducted over a twenty-four-week period. Participants are monitored via urinalysis.

Outcome studies indicate participants demonstrate significant reductions in substance use, improvements in psychological functioning, and reductions in engaging in high risk sexual behaviors that are associated with the transmission of HIV. In addition, the Matrix Model has been demonstrated to enhance the efficacy of naltrexone treatment for opiate addiction. Two and four month versions of the model have been developed in order to accommodate cost containment concerns.

The Matrix Model materials have been manualized into treatment protocols with detailed instructions including work sheets for individual sessions, family educational groups, early recovery skills groups, relapse prevention groups, conjoint sessions, urine tests, Twelve-Step programs, relapse analysis, and social support groups. These can be found at http://www.matrixinstitute.org/.

Supportive-Expressive Psychotherapy

Supportive-Expressive Psychotherapy is a time-limited, focused psychotherapy adapted for individuals who use heroin and cocaine that focuses on exploring the role that substances play in relationship difficulties, unsettling feelings, and other problems. The therapy has two primary components: supportive techniques to help patients feel comfortable discussing personal experiences, and expressive techniques to help them identify and work through interpersonal relationship issues. The therapy focuses on the role of substances in relation to problematic feelings and behaviors, and alternatives to substance use for solving problems.

Supportive-Expressive Psychotherapy has been found to be effective for participants in methadone maintenance treatment who have co-occurring psychiatric problems. Outcomes include reductions in opiate use, with post treatment maintenance of gains and the need for less methadone. Beneficial outcomes have been shown to be enhanced when the treatment is provided in conjunction with drug counseling.

Individualized Drug Counseling

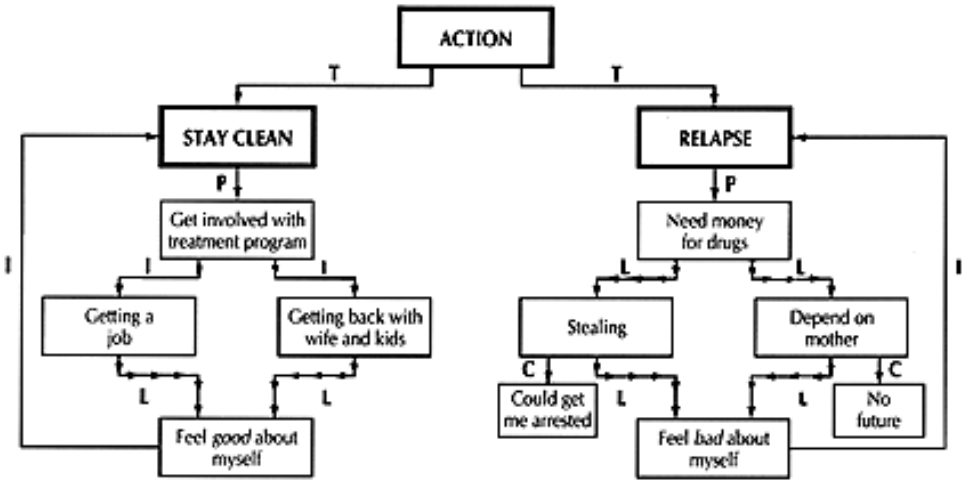
Individualized Drug Counseling is designed to reduce or eliminate the use of illicit substances. It also focuses on related domains including employment, criminal behaviors, family/social relationships, and the individual's recovery program. Individualized Drug Counseling emphasizes short-term behavioral goals and provides assistance in the development of coping strategies and techniques for abstaining from drug use and maintaining abstinence. Twelve-step self-help participation is encouraged and referrals for medical, psychiatric, employment, and other services are made by the clinician. Sessions are held one or two times per week.

Studies have shown that Individualized Drug Counseling, when combined with methadone treatment, results in significant reductions in heroin and cocaine use. A manual for conducting Individualized Drug Counseling is available from NIDA (the National Institute on Drug Abuse) at no cost from http://www.nida.nih.gov/TXManuals/IDCA/IDCA1.html.

NODE-LINK MAPPING

Node-Link Mapping is a cognitively based technique that uses flowcharts and other visual aids to diagram relationships between thoughts, actions, feelings and substance use, as well as to increase participation in counseling. In Node-Link Mapping the clinician and patient develop and draw a map or diagram as they document different aspects of treatment issues being explored. Arrows are used to link each statement or node of information to another to form the map which depicts the relationship between thoughts, feelings, actions, and consequences.

In the example diagram below, the map starts with two possible types (T) of action that can be taken during treatment (i.e., remain substance free or relapse). Links are depicted by arrows that display the relationship of the thought, feeling, or action in one node to that in the succeeding node. Here, the participants decided that one part (P), or element, of remaining substance-free could be to get involved in a treatment program. Involvement in treatment, in turn, could influence (I) subsequent actions, such as getting a job, that could lead (L) the patient to experience positive feelings about themselves. In turn, these positive feelings could influence the maintenance of abstinence.



(Dees, et al., 2000)

Studies have found that Node-Link Mapping encourages communication about topics such as family, employment, and substance use, and leads to improvements in motivation, self-esteem, and rapport with clinicians. Counseling that includes Node-Link Mapping has been demonstrated to be more effective for individuals with limited attention capacity than standard counseling. It has been shown to be helpful for engaging diverse populations (e.g., Hispanics/Latinos and African Americans) in treatment, and leads to reductions in substance use.

TWELVE-STEP FACILITATION THERAPY (TSF)

Twelve-Step Facilitation Therapy is a brief, structured, manualized outpatient treatment designed to facilitate early recovery that is conducted on an individual basis for twelve to fifteen sessions. It is based on the behavioral, spiritual, and cognitive principles that form the basis of twelve-step fellowships which incorporate acceptance of the need for abstinence from substance use and surrender (i.e., the willingness to participate actively in twelve-step fellowships as a means of sustaining sobriety). Treatment goals are broken down into a series of cognitive, emotional, relationship, behavioral, social, and spiritual objectives. The model facilitates active participation and

involvement with twelve-step self-help organizations, such as Alcoholics Anonymous and Narcotics Anonymous. A component of TSF includes conjoint sessions with significant others.

TSF encourages the provision of adjunctive therapies for interpersonal difficulties (e.g., marital conflicts and family problems) until participants have achieved about six months of sobriety. It can be provided in combination with pharmacotherapy for substance use disorders, major affective disorders, and psychotic disorders. The model has been adapted for use in a group format. Another adaptation has been made for cocaine use in which clients are seen twice a week for the first three weeks followed by the standard hourly once per week format.

TSF has been found to be effective for alcohol use disorder and concurrent alcohol and cocaine abuse and dependency in individuals from diverse socioeconomic, educational, and cultural backgrounds. Outcome studies show that it leads to increased rates of abstinence and twelve-step group involvement. Individuals who have severe symptoms of cocaine or opiate use, are unemployed, and have no source of spousal or other family support appear to benefit the least from TSF. This therapy is not compatible with interventions designed for the controlled use of substances.

Brief Marijuana Dependence Counseling (BMDC)

BMDC is a promising program that consists of nine or ten once-weekly individual sessions held over the course of twelve weeks for adults with cannabis dependence. It is comprised of three primary intervention components: Motivational Enhancement Therapy (MET), Psychosocial Problem Solving (PPS), Cognitive-Behavioral Therapy (CBT), skills building, and includes case management. The program uses six core skill topics: coping with other life problems, understanding marijuana use patterns, coping with cravings and urges to use, managing thoughts about marijuana use, problem-solving, and marijuana refusal skills.

The treatment is conducted in three phases. The first phase encompasses setting individual treatment goals and enhancing self-efficacy to make lifestyle changes based on the application of information derived from a personal feedback report (PFR) in an effort to attain goals and increase motivation. Phase two includes a case management module and PPS. It focuses on other life problems and consists of five steps: (1) assessment and problem identification; (2) goal setting; (3) resource identification; (4) specification of a plan; and, (5) goal attainment progress monitoring.

The third phase consists of core sessions and elective sessions which focus on skill building to facilitate the acquisition of problem-solving skills, avoidance of and coping with high risk situations, relapse prevention, and maintenance of helpful behaviors and gains over time. The core sessions focus on (1) understanding marijuana use patterns; (2) coping with cravings and urges to use; (3) managing thoughts about restarting marijuana use; (4) problem-solving; and (5) marijuana refusal skills. The elective sessions focus on: (1) planning for emergencies/coping with a lapse; (2) awareness of potentially high-risk decisions; (3) managing negative moods and depression; (4) assertiveness training; and (5) anger management.

The manual for BMDC can be downloaded at no cost from
http://kap.samhsa.gov/products/brochures/pdfs/bmdc.pdf.

Group Therapy

Group therapy is one of the most frequently used modalities for the treatment of substance use disorders although the base of evidence for its effectiveness is rather limited. Groups offer a number of advantages including economies of scale leading to cost effectiveness (since one therapist can provide services for several clients simultaneously), the provision of positive peer support for

abstinence, reduced social isolation, assistance from peers in the development of effective coping and problem-solving skills, the provision of role models of people in recovery, opportunities for social skills development and rehearsal, and acculturation into the traditions of recovery. Groups also offer the opportunity to acquire skills to cope with problems through seeing how others deal with such problems, as well as interaction within a safe, supportive, substance-free environment. Groups can be conducted in outpatient, inpatient, and residential settings. Time-limited group therapies typically last from six to twelve sessions and are ninety minutes to two hours in length. Research indicates that the majority of clients in group therapy experience improvement within two to three months.

Because recovery is an ongoing process, clients may require different groups as they progress or encounter impediments. Clients may also participate in more than one group at the same point in time. The types of groups that are beneficial are determined by stage of change and needs at specific points in time. It should be noted that not all clients derive benefits from all groups and there is no single model of group therapy required or appropriate for all clients.

Client Placement by Stage of Recovery

	Psychoeducation	Skills - Building	Cognitive-Behavioral	Support	Interpersonal	Relapse Prevention	Expressive	Culture-Specific
Early	+++	++	+	+++	+		+	*
Middle	+	++	++	++	+++	+++	+	*
Late and Maintenance			++	+	+++			*

Key:

Blank Generally not appropriate

\+ Sometimes necessary

++ Usually necessary

+++ Necessary and most important

* Depends on the culture and the context of treatment

Client Placement Based on Readiness for Change

	Psychoeducation	Skill Building	Cognitive-Behavioral	Support	Interpersonal Process	Relapse Prevention	Expressive	Culture
Precontemplation	+		+		+			+
Contemplation	+	+	+	+	+		+	+
Preparation	+	+	+	+	+		+	+
Action	+	+	+	+	+	+	+	+
Maintenance		+	+	+	+	+	+	+
Recurrence		+	+	+	+	+	+	+

(SAMHSA TIP # 41)

Studies show that groups need to explicitly articulate the reasons for each member's participation to reduce dropouts. Acceptance of the contract prior to participation has been found to be the most significant factor in successful groups in outpatient settings. It is recommended that prior to participation in groups, clients receive orientation regarding group rules, appropriate behavior, confidentiality and expectations regarding attendance, participation, honesty, and giving feedback to others. During group therapy sessions, excessive retelling of substance use stories (i.e., drugalogues) is prohibited as such narratives can extol use, generate euphoric recall, and become triggers for cravings and relapse.

Most groups are comprised of heterogeneous members who share similar needs. However, group therapy has been shown to be more effective when membership is comprised of individuals who have shared commonalities including culture, gender, and sexual preference because members are more likely to feel comfortable with others who have shared backgrounds. For example, same sex groups are more effective for women as they are more likely than men to have experienced traumatic events. Since perpetrators are most often male partners, male family members, or male acquaintances, women can be less willing to disclose and discuss their victimization in mixed gender groups.

Research indicates that women derive more benefits from groups that are comprised of all women rather than mixed gender groups. Treatment retention is longer, more participants complete treatment programs and avail themselves of more services during treatment. They are also more apt to feel they are successful in treatment.

Research indicates that older adults bond into groups at a more rapid rate than younger adults and age-specific groups for older adults are more effective. It is recommended that groups for individuals who are lesbian, gay, bisexual, and transgender (LGBT) include attention to safe-sex practices and feelings regarding same-sex experiences. If groups are inclusive of heterosexual and LGBT clients, sensitivity training regarding LGBT issues and concerns needs to be conducted; homophobic behavior in groups can have a deleterious effect.

A number of different types of groups are used in substance abuse treatment several of which are described in the paragraphs that follow.

Psychoeducational groups are designed to provide education regarding substance abuse, related behaviors, and its consequences to clients and families. Such groups are highly structured and often follow a manual or curriculum, use videos or lectures designed to have direct applications to clients' lives and instill self-awareness, offer options for growth and change, identify community resources that can aid in recovery, develop an understanding of the process of recovery, and prompt people using substances to take action on their own behalf (e.g., enter a treatment program). Techniques such as role playing, group problem-solving exercises, and structured experiences are used to foster active learning. Handouts and homework assignments are used adjunctively. Psychoeducational groups actively engage participants in discussion and encourage them to relate what they are learning to their own issues.

Psychoeducational groups are used to help individuals in the precontemplative or contemplative stages of change to reframe the impact of substance use on their lives, develop an internal need to seek help, and discover avenues for change. They are also effective in helping clients in early recovery learn more about their disorders, recognize barriers to recovery, and enhance understanding of avenues for recovery.

Topics typically covered in psychoeducational groups can include, but are not limited to:

- The dynamics of addiction and the addiction process
- The role and process of treatment and recovery
- The medical aspects of addiction
- The importance of abstinence from substances
- Appropriate uses of prescription and over-the-counter drugs
- Maximizing the use of self-help and support groups
- Spirituality and the development of external sources of support
- The roles of nutrition, exercise, leisure, and recreation in recovery
- Relationship skills
- Sex, sexuality, and recovery
- Conflict resolution and confrontation skills
- The family dynamics of addiction, healthy relationships, and family functioning
- Avoidance and diffusion of triggers for craving and relapse
- Relapse management skills
- Substance refusal skills
- Minimizing risks for HIV/AIDS and sexually transmitted diseases

Group-based didactic and experiential sessions are provided for family members and significant others to help engage them in treatment and enhance their understanding of the treatment and recovery process. Groups can help families understand the behavior of a person with substance use disorder in a way that allows them to support the individual in recovery and learn about their own needs for change. They also help clients and families learn about other resources that can be helpful in recovery (e.g., meditation, relaxation training, anger management, spiritual development, and nutrition). Multifamily groups can be used to show benefits others have received from treatment. Topics covered in family educational sessions include, but are not limited to:

- The dynamics of addiction, treatment, and recovery in the family
- Relapse and relapse prevention
- Family dynamics and issues commonly experienced by families with a member who has a substance use disorder
- Healthy family functioning
- Communication and problem-solving in the family
- Management of family social functions
- Introduction to Al-Anon, Alateen, and other supports for family members

Psychoeducational groups for older adults have been found to effective when they include information about the developmental tasks of the later stages of life (e.g., retirement, loss, illness of a partner/spouse, nutrition, household management, and exercise), support systems, and the medical aspects of aging and substance use disorders. Groups tailored for older adults need to consider accommodations for sensory deficits by maximizing multi-sensory inputs (e.g., simultaneous visual and auditory presentation of material, documents with enlarged print, voice enhancers, blackboards, overhead projectors, and flip charts).

Psychoeducational groups have been shown to be beneficial for clients of all age groups as well as those with co-occurring psychiatric disorders. Such groups are considered a useful and necessary, but not sufficient, component of substance abuse treatment.

Skills development groups are designed to help participants develop skills needed to attain and maintain abstinence (e.g., anger management, relaxation, and coping with urges to use substances). A number of different skills development groups are used in treatment, the majority of which use a cognitive-behavioral approach. The most common type is the coping skills training group designed to promote the achievement and maintenance of abstinence. The skills focused on can be directly related to substance use (e.g., ways to refuse offers of drugs, avoid triggers for use, or cope with urges to use) or apply to broader areas relevant to continued sobriety (e.g., ways to manage anger, solve problems, or relax). Skills development groups are usually time-limited and include eight to ten participants during which the skills being taught during sessions are practiced.

Relapse prevention groups focus on helping participants recover from relapse or maintain abstinence and are designed for clients who have attained abstinence but need skills to maintain abstinence, are experiencing a crisis, or are at risk for returning to substance use. Such groups focus on skills and knowledge to anticipate, identify, and manage high risk situations that lead to relapse, develop alternative ways of coping with stressful situations, and reduce the intensity of relapses. Relapse prevention groups use activities, problem-solving, and skill-building, and incorporate techniques found in other types of groups, particularly cognitive-behavioral, psychoeducational, skills development, and process-oriented groups.

Relapse prevention groups appear to be more effective than other approaches for clients who have more severe levels of substance use, greater levels of negative affect, and more pronounced deficits

in coping skills. Potential participants need to achieve a period of abstinence prior to participation. It has been found that there is little measurable difference in outcomes between relapse prevention conducted in individual and group formats.

Cognitive-behavioral groups have long played a significant role in treatment, particularly for individuals in early recovery. The majority of cognitive-behavioral groups emphasize structure, goal orientation, and a focus on immediate problems. In general, techniques include those which (1) teach group members about self-destructive actions and thinking that leads to ineffective behavior, (2) focus on problem-solving and short and long-term goal setting, and (3) help clients monitor feelings and behavior, particularly those associated with substance use. Cognitive restructuring is used to promote change in learned behaviors by altering thinking patterns, beliefs, and perceptions. Various interventions including identification of conditioned stimuli associated with specific substance use-related behaviors, avoidance of such stimuli, development of enhanced contingency management strategies, and response-desensitization are incorporated to increase awareness of behaviors that may lead to relapse and develop strategies to persist in recovery. These types of groups help participants develop social networks that support continued abstinence. Treatment manuals are available for a number of different kinds of cognitive-behavioral groups.

Support groups are a frequently used treatment component and originated in the tradition of self-help. They are designed to strengthen participants' efforts to develop and maintain the ability to manage thinking and emotions, develop more effective interpersonal skills, and improve self- esteem and self-confidence. Support group members also help each other with pragmatic concerns (e.g., maintaining abstinence and managing day-to-day living). Participants typically talk about their current situations and recent problems that have arisen. Discussions tend to focus on practical issues related to maintaining abstinence (e.g., ways to deal with legal issues or avoid places that tempt people to use substances). Group members are encouraged to share and discuss their common experiences. Support groups provide guidance through peer feedback, and group members generally require accountability from one another. Group leaders minimize confrontation in order to reduce anxiety.

Support groups have been developed for all stages of treatment in all treatment settings (inpatient, outpatient, continuing care, etc.), the purpose of which varies in accordance with participants' motivation and stage of recovery. Groups can be open-ended, with a changing population of members, or closed. Many reflect the twelve-step tradition, but others are based on recovery tools, such as relapse prevention. Interventions tend to be more interpretive and observational and less directive than in other types of groups in order to encourage and facilitate supportive interaction among group members. Support groups can be particularly helpful for clients who are apprehensive or new to abstinence.

> Support Together for Emotional/Mental Serenity and Sobriety (STEMSS) is a supported, self-help, recovery-oriented, open-ended group approach for individuals with co-occurring psychiatric and substance use disorders that was developed in 1984. It is psychoeducational in nature and uses facilitators (e.g., counselors, clinicians, nurses, or paraprofessional staff) to promote peer leadership and consumer governance of group meetings which complement participation in twelve-step programs. While most groups begin with trained facilitators, and a number maintain a central role for facilitators, the model encourages peer facilitation to the maximum extent possible. Facilitators and professionals function as resources for the provision of accurate information, guidance, and assistance in the achievement of self-empowerment, peer leadership, and self-governance, rather than as leaders.

The program is comprised of six steps that are designed to complement those of Alcoholics Anonymous and Narcotics Anonymous:

1. I admit and accept that my mental illness is separate from my chemical dependency, and that I must work a double-recovery program.
2. As a result of this acceptance, I am willing to accept responsibility for my life and help for my recovery.
3. As a result of this acceptance I came to believe that, with help and understanding, recovery is possible.
4. As a result of this belief, I accept the fact that medical management must play a large part in my recovery process. This may include prescribed medications taken as directed.
5. As part of this recovery process, I accept the fact that I must maintain a lifestyle free from all recreational chemicals including alcohol and drugs.
6. In following these steps throughout my life, I will reach my goals and help others to begin the recovery process.

Members are encouraged to pursue their own ongoing therapy and attend support groups especially Alcoholics Anonymous, Narcotics Anonymous, and mental health groups. Emphasis is placed on accepting responsibility for one's own recovery and coming to grips with the emotional growth necessary to break the cycle of dependency, disease, and despair. The medical aspects of mental health are emphasized, and members are encouraged to discuss their symptoms, medications, and side effects as full partners in the treatment partnership. The goal is to help members remain stable and substance free in order to fully participate in society. The model recognizes the role of pharmacology in psychiatric treatment and acknowledges the ease of confusion between a medication and a drug. Various adaptations to the format include:

- Step Education Groups to introduce the model and the steps. Facilitators can provide information about the steps and members can volunteer to speak about a step. Discussion may be used to begin modeling group skills. A variation is the Speaker Meeting which entails presentation on a topic of interest by an invited guest.
- Step Exercise Groups use pen and paper worksheets to examine the steps in order to help participants consider recovery concepts and become acquainted with one another.
- Step Discussion Groups select one of the six steps (in rotation) for discussion by each member in turn in a manner that is similar to Twelve-Step meetings. This is the most common format for STEMSS.
- Step Process Groups are highly interactive and cover the steps and group process in greater depth. These can be of particular benefit for consumers in later stages of change for obtaining feedback on personal issues and working on relapse prevention skills.
- Open Topic Process Groups are often led by clinicians and consist of rounds and agenda-setting by members.

STEMSS is currently in use throughout the United States and Canada in settings including treatment centers, community support programs, and homeless shelters in urban and rural areas. It has been translated into Spanish.

Other types of groups used in treatment include expressive groups, communal and culturally-specific groups, problem-focused groups, and interpersonal process groups (which explore developmental issues that contribute to substance use disorders or interfere with recovery).

Substance Use Disorder Treatment Groups						
Group Types	Group Model or Combination of Models					
	Skills Development	Cognitive–Behavioral Therapy	Interpersonal Process	Support	Specialized Group	Psycho - educational
Anger/feelings management	•	•				•
Skills-building	•	•				
Conflict resolution	•	•				•
Relapse prevention	•	•		•		•
12 -Step psychoeducational					•	•
Psychoeducational						•
Trauma (abuse, violence)			•	•		•
Early recovery	•	•		•		•
Substance abuse education						•
Spirituality -based				•		
Cultural					•	•
Psychodynamic			•	•		
Ceremonial healing practices					•	
Support				•		
Family roles (psychoeducational)						•
Expressive therapy					•	
Relaxation training	•					
Meditation	•					
Multiple-family	•			•		•
Gender specific				•	•	
Life skills training	•	•				
Health and wellness						•
Cognitive–behavioral	•	•		•		
Psychodrama					•	
Adventure-based					•	
Marathon					•	
Humanistic/existential			•	•		

(SAMHSA TIP # 41)

Group therapy is contraindicated for individuals who refuse to participate, cannot respect group agreements, norms and values (e.g., privacy and confidentiality of group members, regular attendance), and lack adequate impulse control.

Groups can create bonding to treatment and promote retention in treatment. Studies show that individuals are more likely to remain abstinent and committed to recovery when they participate in groups. Group therapies have been found to be most effective when combined with individual treatment. Research indicates that smaller groups conducted in friendly, comfortable environments are associated with higher rates of retention.

SOMATIC THERAPY

Pharmacotherapy is used: (1) to replace a harmful substance with a safer drug of the same class (e.g., methadone); (2) to suppress symptoms of withdrawal; (3) to discourage continued substance use by precipitating an unpleasant reaction or reducing the euphoric effects of a substance (e.g., disulfiram and naltrexone); (4) for agonist substitution therapy (which replaces an illicit drug with a prescribed medication); (5) to treat co-occurring psychiatric disorders; and (6) to decrease potential relapses.

Generic	Brand
Alcohol	
Alcohol withdrawal agents	
benzodiazepines (e.g., lorazepam)[33]	Ativan
anticonvulsants (e.g., carbamazepine, divalproex sodium, gabapentin)	Tegretol, Depakote, Neurontin
barbiturates	
Alcohol relapse prevention agents	
disulfiram	Antabuse
naltrexone hydrochloride	ReVia, Depade
acamprosate	Campral
nalmefene hydrochloride	Revex
topiramate[34]	Topamax
Opioids	
Opioid withdrawal agents	
buprenorphine	Subutex
buprenorphine and naloxone	Suboxone
clonidine	Catapres
methadone hydrochloride	Methadone
nalmefene hydrochloride	ReVia, Depade
naltrexone hydrochloride	Revex
Opioid maintenance agents	
buprenorphine	Subutex
buprenorphine and naloxone	Suboxone
LAAM (levo-alpha-acetyl-methadol)[35]	
methadone hydrochloride	Methadone

Pharmacotherapy can be used effectively to facilitate recovery, but, in and of itself, does not promote the lifestyle changes required for long-term recovery and is therefore rarely adequate as a stand-

[33] Baclofen (gamma-aminobutyric acid B (GABA(B)), a receptor agonist used for spasticity) has been found to be as effective as diazepam in treatment of uncomplicated alcohol withdrawal syndrome and is a promising pharmacological compound for use in the treatment of alcohol dependence. It has been found to reduce cocaine use.

[34] There is some evidence indicating topiramate (an anticonvulsant) is effective in reducing craving and heavy drinking and improving abstinence among people with alcohol dependence. It may also be effective for cocaine addiction.

[35] Levo-alpha-acetyl-methadol (LAAM) suppresses opioid withdrawal symptoms for forty eight to seventy two hours. The Food and Drug Administration approved LAAM for use in (opioid treatment programs (OTPs) in 1990, but in 2003 strengthened warnings in the product's labeling due to cardiac-related adverse events, including QT interval prolongation (slowing of cardiac induction) and death from torsade de pointes arrhythmia. In 2003 the manufacturer announced it would cease production in 2004. While LAAM has been shown to be as effective as methadone and buprenorphine in decreasing opioid use and enhancing treatment retention, it is no longer available.

alone intervention for successful treatment on a long-term basis. Medications have been found to be most effective when used in conjunction with psychosocial interventions. Multimodal approaches that combine maintenance medication with behavioral interventions have been shown to lead to more beneficial outcomes (e.g., enhanced motivation, adherence to treatment regimens, and cessation of opioid abuse). For example, medication assisted treatment (MAT) programs for opioid use disorders have been shown to lead to significant reductions in substance use, HIV risk, and criminal behavior, as well as substantial improvements in health and employment when treatment is provided in combination with psychotherapeutic interventions (e.g., individual psychotherapy for patients with co-occurring psychiatric disorders, family therapy, contingency contracting, and vouchers).

It should be noted that many of the medications (e.g., methadone, buprenorphine, naltrexone, disulfiram, and bupropion) used for adults with substance use disorders have not been studied in controlled trials with adolescents. Moreover, little information is available on potential adverse interactions with drugs of abuse in adolescents.

Medical Detoxification

Medical detoxification entails the systematic withdrawal from substances to ameliorate the acute physiological effects of ceasing substance use. Medications are used for detoxification from opiates, benzodiazepines, alcohol, nicotine, and barbiturates and other sedatives. It should be noted that detoxification is considered to be a precursor to treatment since it does not result in behavioral changes needed to sustain recovery. Research has demonstrated that continuing treatment subsequent to detoxification is essential for recovery and individuals who receive ongoing services and supports experience more beneficial outcomes than those who do not. However, the majority of individuals who undergo detoxification do not receive treatment following detoxification, although women are more apt to receive treatment following detoxification. In addition, it has been shown that addressing attendant problems such as housing, finances, and child care, etc. increases the likelihood for completion of detoxification and subsequent participation in treatment.

Detoxification is conducted in outpatient, residential, or inpatient settings. It is increasingly being performed on an on outpatient basis which has been found to be safe and effective for individuals with good psychosocial supports (that can be relied upon to monitor and assist with progress), who lack histories of severe withdrawal symptoms, do not have serious alcohol dependency, do not engage in polysubstance abuse, and do not operate dangerous machinery (including automobiles) during the process. Individuals who have histories of delirium tremens or withdrawal seizures, display suicidality, homicidality, or psychosis, have co-occurring medical conditions, are unable to adhere to treatment, and lack the capacity for informed consent, social support, and transportation are candidates for residential or inpatient detoxification treatment.

It is recommended that pregnant women who have difficulties related to alcohol use be treated in inpatient settings under medical supervision that includes obstetrical care because the abrupt cessation of alcohol consumption can lead to symptoms of withdrawal, some which can pose threats to mothers and their fetuses. Some older persons may also require inpatient detoxification since it poses more medical risk for this population. It is also recommended that individuals with co-occurring psychiatric disorders continue to receive psychiatric medications during detoxification/withdrawal treatment; lack of treatment for mood, anxiety, and thought disorders can trigger relapse.

Common Drug Intoxication Signs and Withdrawal Symptoms				
	Cocaine	Alcohol	Heroin	Cannabis
Intoxication				
Action	Stimulant	Sedative	Sedative, euphoriant, analgesic	Euphoriant, at high doses may induce hallucinations
Characteristics of intoxication	↑BP, ↑HR, ↑temp, ↑energy, ↑ paranoia, ↓fatigue, ↓appetite, move bowels/urine	• Sedation, ↓respiration • Depresses CNS system, can result in coma, death	Drowsiness, "nodding," euphoria	↓BP, ↑HR, ↓ intraocular pressure, conjunctival injection
Withdrawal				
Onset	Depends upon type of cocaine used: crack will begin within hours of last use	24-48 hours after blood alcohol level drops	Within 24 hours of last use	Some debate about this, may be a few days
Duration	3-4 days	5-7 days	4-7 days	May last up to several weeks
Characteristics	Sleeplessness *or* excessive restless sleep, appetite increase, depression, paranoia, decreased energy	↑BP, ↑HR, ↑temp, nausea/vomiting/diarrhea, seizures, delirium, death	Nausea, vomiting, diarrhea, goose bumps, runny nose, teary eyes, yawning	Irritability, appetite disturbance, sleep disturbance, nausea, concentration problems, nystagmus, diarrhea
Medical/psychiatric issues	Stroke, cardiovascular collapse, myocardial and other organ infarction, paranoia, violence, severe depression, suicide	Virtually every organ system is affected (e.g., cardiomyopathy, liver disease, esophageal and rectal varices); fetal alcohol syndrome and other problems with fetus	During withdrawal individual may become dehydrated	

(SAMHSA TIP # 45)

The management of alcohol withdrawal usually entails the administration of thiamine, multivitamins, and benzodiazepines and, at times, concurrently with anticonvulsants, beta adrenergic blockers, or antipsychotics. The primary goal of medical management of withdrawal from alcohol is to prevent tonic-clonic seizures and delirium tremens (DTs). Benzodiazepines are recommended for individuals who cease alcohol use abruptly, have a history of seizures (even in the absence of withdrawal symptoms), a history of DTs, are experiencing symptomatic withdrawal, have concurrent acute medical conditions and cannot tolerate the symptoms of withdrawal, and have moderate to severe symptoms with a score higher than fourteen on the CIWA-Ar.

Benzodiazepines (e.g., lorazepam and diazepam) decrease the likelihood of withdrawal seizures and episodes of delirium tremens as well as suppress severe anxiety, insomnia, tremulousness, tachycardia, rising blood pressure, and grand mal seizures. They are administered intravenously for the initial treatment of alcohol-related status epilepticus. Benzodiazepines rarely produce respiratory depression, liver toxicity, or allergic reactions and are cross-tolerant with alcohol. Research has not yielded information regarding the most effective benzodiazepine for the treatment of alcohol withdrawal; studies indicate they are all roughly equivalent. Lorazepam (Ativan) is recommended for older individuals and those with severe liver disease. Oxazepam (Serax) is often used in the presence of severe liver failure due to its short half-life (six to eight hours), simple metabolism, and lack of

metabolites. Chronic cigarette smoking induces benzodiazepine metabolism and therefore affects the dosage required. However, interactions between benzodiazepines and alcohol can lead to coma, respiratory suppression, and lack of motor coordination (which can lead to automobile accidents and falls). In addition, benzodiazepines are drugs of abuse.

Individuals with serious alcohol abuse problems can suffer from malnourishment, dehydration, and electrolyte balance disturbances (particularly if experiencing vomiting or diarrhea). Fluids, electrolytes, thiamine (to reduce the potential for developing Wernicke-Korsakoff syndrome, magnesium[36] (for those with normal kidney function), and glucose are administered at the outset of treatment. Individuals who are malnourished are at risk for Wernicke-Korsakoff syndrome.

Anticonvulsants[37] have long been used in Europe for the treatment of alcohol withdrawal. Both carbamazepine (Tegretol) and valproate (Depakote, Depakene) enhance GABA function by an apparently different mechanism than benzodiazepines and have been found to be effective in suppressing alcohol (and benzodiazepine) withdrawal symptoms and do not produce effects found desirable by individuals who abuse alcohol. Phenobarbital can be used for alcohol detoxification in persons who also have an addiction to sedative-hypnotics. However, it increases the seizure threshold. It should be noted that anticonvulsant medications (e.g., valproic acid) and short-acting barbiturates (e.g., phenobarbital) have teratogenic effects and are thus contraindicated during pregnancy. Barbiturates have been used for nearly a century to treat alcohol withdrawal, but, with the exception of phenobarbital, lead to severe lethal interactions with alcohol, can cause death from overdose when used alone, induce rapid tolerance, and have a high potential for abuse.

Benzodiazepines, when ingested in overdose, are rarely lethal alone, but are frequently combined with alcohol, and, at times, with other sedative-hypnotics and other drugs of abuse, which can prove fatal. Management of overdose of benzodiazepines and other sedative-hypnotics in part follows principles of ACLS (Advanced Cardiac Life Support) with specific attention to ventilation. Additionally, benzodiazepines are removed from the gastrointestinal tract using lavage and cathartics, particularly for recent overdoses. Flumazenil (Romazicon), a competitive antagonist that acts at the benzodiazepine receptor, can reverse the sedative and overdose effects of benzodiazepines (but not that of alcohol or other sedative-hypnotics).

Rapid benzodiazepine withdrawal has been shown to cause catatonia in older persons. Carbamazepam and valproate can aid in withdrawal from benzodiazepines in this population. Long-acting benzodiazepines (e.g., clonazepam) are substituted and then tapered in instances of maintenance benzodiazepine treatment for medical conditions. Individuals who experience significant depressive symptoms may require treatment with antidepressants (e.g., nefazodone or fluoxetine) prior to initiating the final phase of pharmacological withdrawal. However, antidepressants can decrease the rate of metabolism of benzodiazepines and valproate.

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[36] Hypomagnesemia can cause seizures and cardiac arrhythmias. In patients with normal kidney function, magnesium is safe.

[37] Older, first-generation, anticonvulsants have only been studied for mild to moderate withdrawal, can cause rare but serious hepatic and bone marrow toxicities, interact with several other classes of medication, and are only available in oral forms. Newer drugs such as tiagabine, oxcarbazepine, and gabapentin do not appear to pose these risks, but studies confirming their effectiveness and safety are lacking.

Inpatient withdrawal from sedatives and hypnotics (i.e., barbiturates and benzodiazepines) is recommended for pregnant women due to the need for continuous monitoring of mother and fetus. Untreated withdrawal symptoms can lead to hyperpyrexia, electrolyte abnormalities, cardiovascular collapse, and death. Benzodiazepine withdrawal during pregnancy is accomplished via tapering in order to avoid fetal withdrawal and other adverse effects on the mother and fetus.

Stimulant withdrawal is not medically life threatening and, in contrast to alcohol and barbiturate withdrawal, does not require pharmaceutical intervention. However, individuals who have recently used cocaine can experience cardiac complications (e.g., prolonged QTc interval and vulnerability to arrhythmia and myocardial infarction), strokes, and seizures as well as other medical problems (e.g., dental disease, neuropsychiatric abnormalities, and movement disturbances/disorders). The greatest risk from stimulant abstinence syndrome is for harm to self or others. Cocaine-induced depression usually dissipates in a matter of hours, while withdrawal-associated depression following high-dose methamphetamine use is more prolonged. During the tweaking phase of withdrawal, agitated paranoia, extreme frustration, intense drug cravings, suicidal ideation, and minimal provocation to violence can occur.

There are no medications with proven efficacy for the treatment of stimulant withdrawal, nor are there any specific antagonists or antidotes for stimulant overdose. However, some medications can be used to attenuate symptoms and provide support. Amantadine helps lessen cocaine use in the presence of severe withdrawal symptoms. Observation and monitoring of vital signs (for rising pulse rate, temperature, or blood pressure) in a cool[38], subdued environment (to help reduce agitation and overreaction to external stimuli) until symptoms subside over several hours are required for detoxification that is uncomplicated. Rapid acting benzodiazepines (e.g., lorazepam or diazepam) have been found to help reduce anxiety and agitation. It is recommended that individuals who have experienced an overdose of stimulants be treated on an inpatient basis, particularly in instances of polysubstance use.

Hyperthermia is managed by sedation (to retard and stop agitated movements) and rapid cooling with body ice packs, mist and fan techniques, or cooling blankets. Hypertension is managed by using rapid acting antihypertensive agents (e.g., the vasodilator nitroprusside or the alpha-adrenergic blocker phentolamine). Uncontrolled hypertension can be managed by intravenous administration of phentolamine or dopamine. Seizures are treated in the same manner as status epilepticus with intravenous diazepam or another benzodiazepine. Diazepam has been found to be most effective if administered before or shortly after cocaine ingestion, but is less effective after seizures have begun. Phenobarbital or phenytoin can be used if diazepam is ineffective. Nitrates are indicated for cocaine-induced myocardial ischemia to alleviate coronary vasoconstriction. Beta-adrenergic blockers (e.g., propranolol) are contraindicated because they may enhance vasospasm. Aspirin is used to reduce cocaine-mediated platelet aggregation. Standard treatments for arrhythmias, including phenytoin, are used. Atrial arrhythmias that do not respond to cooling and sedation may require calcium channel blockers or mixed alpha-/beta-adrenergic blockers such as verapamil (Calan), esmolol (Brevibloc),

[38] An overheated room and physical exertion can potentiate adverse effects of stimulants because they affect the heat-regulating mechanism of the body at the same time that blood vessel constriction conserves heat.

and labetalol (Normodyne or Trandate). Sodium bicarbonate has been shown to be helpful for cocaine-induced wide-complex arrhythmias.

The symptoms of heroine and morphine withdrawal start eight to twelve hours after the last dose and persist for five to seven days. Withdrawal from methadone starts twelve hours after the last dose and can persist for three weeks or longer, although usually at a lower intensity than other opioid abstinence syndromes. If left untreated, opioid withdrawal gradually increases in severity and then decreases. Uncomplicated withdrawal (unlike that from sedatives and alcohol) is not life-threatening, although underlying cardiac disease can worsen with autonomic arousal (e.g., increased pulse, blood pressure, and diaphoresis). Moreover, pain is apt to increase due to decreased pain threshold and lack of analgesia previously provided by opioids.

Opioid withdrawal is managed by methadone, buprenorphine, naltrexone or nalmefene (all of which are discussed below), and adjunctive medications for stomach cramps, nausea, vomiting and diarrhea. Clonidine is also used for mild symptoms of opioid withdrawal, including tachycardia. However, since clonidine detoxification is less effective for many symptoms, adjunctive medications (e.g., acetaminophen, aspirin, or ibuprofen) are often needed to treat insomnia, muscle pain, bone pain, and headache. The advantages of using clonidine include the lack of special licensing requirements for dispensing it (in contrast to methadone). Also, it does not precipitate withdrawal (in contrast to naltrexone) when taken too soon following the last dose of methadone. Clonidine patches seems to be more effective in reducing cravings than the oral formulations. It is recommended that clonidine detoxification be provided on an inpatient basis due to its inability to reverse all opioid withdrawal symptoms.

Medically managed withdrawal from opioids is not recommended for pregnant women due to increased fetal risk for intrauterine death. Narcotic agonists (e.g., Narcan) are not used in pregnant women with substance use disorders as they can lead to spontaneous abortion, premature labor, or stillbirths. The second trimester is the safest for detoxification. A methadone taper is used for detoxification from heroin during pregnancy.

MEDICATIONS

DISULFIRAM

Disulfiram has been available since the 1940s. It is used as an aversive medication; when ingested with alcohol it produces unpleasant effects[39] by interfering with the metabolism of acetaldehyde (an intermediary product in the oxidation of alcohol) causing it to accumulate in the blood. Disulfiram can be initiated subsequent to a lack of alcohol consumption for four or five days and is continued as long as it is effective in helping with the maintenance of abstinence, which can be for several years. It is often prescribed for individuals who are abstinent, in recovery, and facing high risk situations.

[39] The consumption of alcohol within twelve hours of ingesting disulfiram produces facial flushing within fifteen minutes, then intense vasodilation of the face and neck with suffusion of the conjunctivae, throbbing headache, tachycardia, hyperpnea, and sweating. Nausea and vomiting ensue after thirty to sixty minutes. It can lead to hypotension, dizziness, anxiety, and, sometimes, fainting and collapse. The reaction lasts one to three hours.

Disulfiram is contraindicated during pregnancy (as it has been associated with clubfoot and congenital malformities), and co-existing acute hepatitis, significant cardiac disease, severe chronic lung disease or asthma, schizophrenia and bipolar disorder (as it can precipitate psychosis), suicidal ideation/intent, rubber allergy, and work that entails handling alcohol or solvents (e.g., mechanics and painters). In addition, it is not generally recommended for older patients due to adverse effects of alcohol-disulfiram interaction and its toxicity.

A substantial literature base has been generated on the use of disulfiram, but there is a paucity of controlled clinical trials, and those that exist reveal mixed findings. There is some evidence that disulfiram reduces drinking days, but little exists to show that it enhances abstinence (which is a robust predictor of outcome). Disulfiram is more likely to be beneficial when it is prescribed in conjunction with psychosocial interventions including self-help groups, and when given in a monitored (i.e., supervised) fashion, such as by treatment staff in a clinic or at home by a spouse. If a spouse or other family member functions as a monitor, only observation is provided; administration is not recommended.

NALTREXONE

Naltrexone, an allyl derivative of noroxymorphine synthesized in the 1960s, is a long-acting synthetic opioid antagonist that was approved by the Food and Drug Administration (FDA) in 1984 to treat opioid dependence, in 1994 for the treatment of alcohol dependence (the first new medication for this in almost fifty years), and as a preventive treatment for relapse for individuals with alcohol dependence in 1995. It works by blocking opiate receptors that are involved in the rewarding effects of drinking alcohol and the craving for alcohol subsequent to abstinence. Naltrexone tightly binds to mu opiate receptors and, because it has a higher affinity for these receptors than heroin, morphine, or methadone, it displaces those drugs from receptors and blocks their effects. If opiates are already present (i.e., bound at receptor sites), then naltrexone displaces them almost immediately and precipitates withdrawal symptoms (e.g., anxiety, irritability, yawning, runny eyes and nose, perspiration, vomiting, cramps, tremors, and insomnia). If opiates are administered subsequent to naltrexone, it blocks pleasurable feelings as well as the development of physical dependence with regular administration at sufficient doses.

Naltrexone is used for the treatment of opioid use disorders following medically supervised withdrawal and nonuse of opioids for about fourteen days in order to avoid opiate abstinence syndrome. It blocks opioid effects for two to three days and has no narcotic effect so withdrawal symptoms are not precipitated when it is discontinued. Tolerance does not develop, so it can be discontinued without tapering. Moreover, naltrexone does not have abuse potential since it does not have addictive properties or produce physical dependence. It has a long half-life and its therapeutic effects can last up to three days.

Naltrexone has no opioid agonist effects so cravings continue to be experienced, thus reducing motivation for adherence. Moreover, individuals must be fully withdrawn for up to two weeks from all opioids prior to the initiation of naltrexone, leaving them vulnerable to relapse and at increased risk for death from overdose subsequent to discontinuation. Treatment retention has been shown to be problematic; rates of premature termination range from seventy to eighty percent in some studies. Adherence is improved when treatment is combined with vouchers.

Naltrexone has been found to be very effective in preventing relapse to opioid use and is most effective for individuals with high levels of motivation who want to achieve total abstinence (e.g., those on parole, probation, in work-release programs, and professionals such as anesthesiologists and other healthcare practitioners), have undergone detoxification, and require added support to prevent relapse. It is also beneficial for patients who are in early stages of opioid dependence.

A number of studies have demonstrated that naltrexone is effective for reducing alcohol consumption with outcomes indicating less frequent drinking, less consumption of alcohol during drinking episodes and fewer relapses to heavy drinking, particularly when used in conjunction with psychosocial interventions, especially cognitive-behavioral therapy. Individuals who experience significant levels of craving for alcohol, cognitive ability challenges, have a limited education, a family history of alcohol dependence, and significant levels of physical or emotional stress have been shown to benefit from naltrexone in combination with other psychosocial interventions. The beneficial effects of naltrexone diminish subsequent to termination of treatment. Unlike disulfiram, naltrexone does not appear to alter the absorption or metabolism of alcohol or precipitate adverse effects when taken in combination with alcohol.

Naltrexone is contraindicated during pregnancy and breast feeding because it affects a number of hormones (e.g., luteinizing hormone, prolactin, and growth hormone). It is not used to treat adolescents due to the lack of data on safety and efficacy for this population. Naltrexone is also contraindicated for people who have chronic pain that does not respond to non-narcotic medications (e.g., due to hemophilia, sickle cell disease, chronic kidney stones, chronic pancreatitis, or advanced cancer).

One of the most serious adverse effects of naltrexone is hepatotoxicity. High doses administered to individuals with obesity have been found to lead to hepatocelluar injury. (However, obesity and opiate or alcohol dependence are associated with liver abnormalities.) Naltrexone is not combined with opioids, thioridazine, oral hypoglycemics, or drugs that are associated with potential liver toxicity (e.g., acetaminophen and disulfiram). It appears to be safe when used in combination with antidepressants. Initial medical workups are required prior to starting naltrexone, including liver function tests, which should be repeated periodically during treatment. Moreover, because it is an opioid antagonist, opioid analgesics such as morphine and codeine cannot be used routinely. If opioids are required for pain management subsequent to recent naltrexone ingestion, pain relief can be obtained at higher than standard doses. Naltrexone is discontinued for two to three days, and an opioid is then administered in conventional doses. In emergency situations requiring opiate analgesia, rapidly acting analgesics with minimal respiratory depression are used and titrated in accordance with patients' responses.

ACAMPROSATE

Acamprosate, a synthetic derivative of homotaurine (a structural analog of gamma-aminobutyric acid (GABA) that interacts with glutamate receptors, was approved by the FDA in 2004 for the treatment of alcohol dependence. Acamprosate therapy is usually initiated subsequent to full withdrawal and abstinence from alcohol. It has been found to be generally safe and has a dose-response effect on drinking behavior. Studies indicate it leads to the promotion of abstinence, increased time to first drink, and increased rates of treatment retention and completion. Treatment duration varies between three and twelve months. There is some evidence to support the combination of acamprosate with naltrexone or disulfiram for individuals who do not respond to monotherapy.

Acamprosate does not appear to interact with psychiatric medications, alcohol, and other medications used for the treatment of alcohol disorders. Moreover, it does not have addictive properties, abuse potential, or risk for overdose. Individuals with liver problems can use this medication (rather than naltrexone) since it is not metabolized to a significant degree in the liver. Monitoring for symptoms of depression and suicidal ideation are recommended due to increases in suicidal events (e.g., ideation, attempts, and completions) observed among patients in clinical trials. Acamprosate is contraindicated for individuals who have serious renal problems.

METHADONE

Methadone, a synthetic opioid that is the most commonly used medication for detoxification and treatment of opioid abuse, is a long-acting agonist at the mu opioid receptor site that displaces heroin (and other opioids) and restabilizes the site, thereby reversing opioid withdrawal symptoms and, when used on a maintenance basis, the immunologic and endocrinologic impairments caused by long-term heroin use. Research indicates that methadone does not cause the medical abnormalities and behavioral destabilization that are induced by rapid fluctuations in drug levels caused by using heroine several times a day. Methadone significantly reduces the desire for heroine, blocks its euphoric effects, suppresses withdrawal, blocks the effects of other opioids, and decreases craving for opioids.

Methadone is highly regulated and can only be prescribed for withdrawal by physicians practicing in or affiliated with Substance Abuse and Mental Health Services Administration (SAMHSA)-certified Opioid Treatment Programs (OTPs) [i.e., methadone clinics][40] or during hospitalization for another medical condition[41]. Methadone has two enantiomeric forms, (R)-methadone (or levo or L-methadone), and (S)-methadone (or dextro or D-methadone), which are used in a 50:50 racemic mixture in OTPs. Only (R)-methadone has clinically significant mu receptor agonist activity, and its potency as an analgesic is fifty times greater than that of (S)-methadone. (R)-methadone also has a significantly higher mean clearance rate than (S)-methadone.

Methadone is metabolized primarily by the CYP 450 enzymes[42] (i.e., CYP/3A4, CYP/2B6, CYP/2D6, CYP/1A2, CYP/2C9, and CYP/2C19) in the liver, and different isoforms metabolize (R) and (S)-methadone differently. Genetic factors affect the functioning of these enzymes and produce wide variations in methadone metabolism. For example, while CYP/2D6 selectively metabolizes the (R)-methadone enantiomer, some individuals do not produce much CYP/2D6, while others have very high CYP/2D6 activity. The latter group may require much higher methadone doses to compensate for this high rate of (R)-methadone metabolism. Individuals also differ considerably in CYP/3A4 and CYP/1A2 activity.[43]

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[40] Federal regulations stipulate that eligibility for opioid pharmacotherapy programs is based on addiction to an opioid for at least one year prior to admission. A physician can request an exception to the one-year rule for individuals who have been released from correctional facilities within six months of the release, women who are pregnant, and patients who have previously received treatment for up to two years following discharge. Individuals who are younger than eighteen years of age must have experienced at least two documented outpatient psychosocial or detoxification trials within twelve months to be eligible, and must have written consent from a parent, legal guardian or relevant state authority.

[41] It has been suggested that the stigma and inconvenience associated with receiving methadone maintenance in OTPs have, in part, contributed to the less than twenty-five percent of the individuals with opioid addictions who receive treatment, and has prevented more physicians from gaining experience and expertise in the treatment of opioid addictions with methadone.

[42] This system is one of many hepatic liver enzyme systems responsible for the metabolic breakdown of various drugs into inactive compound products. Different drugs and compounds have varying affinities for the CYP450 system. The higher the affinity, the more rapidly the drug or compound breaks down. Some compounds can slow the metabolism or breakdown of other drugs with a lower affinity, leading to a buildup of that drug or compound in the body.

[43] A discussion of CYP 450 can be found in the Ethnopsychopharmacology section of *A Guide to Evidence-Based Practices for Adults with Mental Illness*.

Drugs that induce or inhibit CYP 450 enzyme activity can affect methadone metabolism. If these enzymes are stimulated by other medications, the duration of methadone's effect and serum methadone levels can be decreased thereby precipitating withdrawal symptoms. If these enzymes are inhibited by other medications, methadone metabolism may be slowed, and serum methadone levels and duration of effect can be increased. Some medications (e.g., fluconazole) increase methadone levels and others (e.g., nevirapine, efavirenz, and ritonavir) lower them. Rifampin (an anti-TB medication), accelerates the clearance of drugs metabolized by the liver so that up to a fifty percent increase in methadone dosage may be needed. Other common inducers include carbamazepine, phenytoin, and phenobarbital. Psychiatric medications sharing the same metabolic pathways as methadone include some selective serotonin reuptake inhibitors (SSRIs), which inhibit the isoenzymes that metabolize methadone and can increase serum methadone levels. For example, fluvoxamine has been shown to induce over-sedation and respiratory depression when combined with methadone, while fluoxetine and sertraline do not increase methadone levels significantly. Methadone impairs the metabolism of tricyclics and can cause increased tricyclic medication blood levels. It is not used in combination with opioid agonists/antagonists such as pentazocine (Talwin) as this will precipitate withdrawal. Up-to-date information regarding medication interactions with methadone can be found on the web at medicine.iupui.edu/flockhart.

When participants in OTPs are admitted for inpatient treatment of disorders other than substance use, federal regulations allow hospital physicians to continue prescribing maintenance doses of methadone. Methadone maintenance treatment is continued in accordance with patients' daily doses during hospitalization for medical problems. However, it is likely that larger doses of medications for anesthesia will be required, and additional medication for pain relief may be needed.

Since methadone is a full mu opioid agonist, overdose and death can occur if it is taken in amounts exceeding tolerance levels. Potentially lethal respiratory depressant effects also can occur if methadone is used in combination with substances that depress the central nervous system, (e.g., alcohol and benzodiazepines.) Methadone can produce cardiotoxic effects, QT interval prolongation, and cardiac arrhythmia (torsade de pointes).

Methadone has been shown to be safe for use during pregnancy[44] and is approved by the FDA for treatment of opioid addiction during pregnancy. It decreases fluctuations in maternal serum opioid levels and thus offers protection to the fetus from repeated episodes of withdrawal (which can cause premature labor and other adverse effects). Many women require increased methadone dosages during the last trimester because of increases in blood volume and metabolic changes due pregnancy. Methadone can be used while breastfeeding unless the mother has HIV infection.

Methadone maintenance treatment in OTPs that incorporate monitoring, counseling services (e.g., individual, group, and family therapies), and vocational resources and referrals has been demonstrated to lead to reductions and cessation of opioid use and its adverse consequences, including medical problems (e.g., cellulitis, hepatitis), criminal behavior (by as much as fifty percent) associated with obtaining drugs, psychiatric symptoms,[45] unemployment, and family and social

[44] Prenatal care for pregnant women substance abuse treatment is mandated by the federal government.

[45] Research shows that individuals who have a co-occurring mental illness or hepatitis C may require fifty percent or greater than standard methadone dosages to attain stabilization.

problems. Studies also have found that methadone maintenance treatment increases adherence to HIV/AIDS therapeutic regimens, reduces seroconversion to HIV/AIDS, and decreases the mortality associated with opioid use disorders. However, it is estimated that about one in four individuals do not achieve maximal benefit from methadone maintenance treatment. Retention rates and outcomes are improved with more frequent counseling and higher doses (of an average of sixty to one hundred twenty milligrams per day). Methadone treatment typically requires a minimum of twelve months of participation to derive maximum benefit and, for some individuals, maintenance on methadone is beneficial for a period of years.

BUPRENORPHINE

Buprenorphine, a derivative of the opium alkaloid thebaine, is a partial agonist at the mu opioid receptor and an antagonist at the kappa receptor that is used to suppress withdrawal, reduce craving, and block the euphoric and reinforcing effects of opioids. Buprenorphine can be used for medically supervised withdrawal and detoxification from opioids as well as for long-term maintenance. It can be taken on a daily basis or less frequently. Its effectiveness for gradual detoxification has been shown to be better than for rapid detoxification.

Studies have demonstrated that buprenorphine is effective in decreasing opioid use, increasing treatment retention, has few side effects, and is acceptable to most patients. It has very high affinity and low intrinsic activity at the mu receptor and displaces morphine, methadone, and other opioid full agonists from the receptor. In addition, buprenorphine dissociates from opioid receptors at a slow rate allowing for daily or less frequent dosing (e.g., three times per week). Buprenorphine is abusable, but its abuse potential and level of physical dependence (i.e., withdrawal discomfort) are lower than that of opioid full agonists. It has a lower ceiling effect[46] at higher doses, and is safer in overdose compared with opioid full agonists. However, buprenorphine can precipitate opioid withdrawal when administered subsequent to the recent use of heroin.

Buprenorphine is available in two sublingual forms including Subutex which contains only buprenorphine for initiating treatment, and a combination of buprenorphine and naloxone (Suboxone) for medically supervised withdrawal and maintenance treatment. The sublingual tablet with naloxone is designed to decrease the potential for abuse via injection. Injection of the combination tablet results in the predominance of the antagonistic effect of naloxone. An injectable form (Buprenex) has been approved by the FDA for the treatment of pain, as a detoxification agent, and for opioid maintenance treatment as an alternative to methadone maintenance.

Buprenorphine is metabolized in the liver by the CYP3A4 subgroup of CYP450 enzymes, and, like methadone, its rate of metabolism is affected by co-administration of other medications, medications that may inhibit, induce, or be metabolized by the cytochrome P450/3A4 enzyme system particularly

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[46] Because of its low intrinsic activity at the mu receptor, at increasing doses, and unlike a full opioid agonist, the agonist effects of buprenorphine reach a maximum and do not continue to increase linearly with increasing doses (i.e., the ceiling effect). Due to the ceiling effect an overdose is less likely to cause fatal respiratory depression than an overdose of a full mu opioid agonist. However, persons who are treated with opioids for chronic severe pain may not be good candidates for buprenorphine treatment because of the ceiling effect on buprenorphine's analgesic properties.

benzodiazepines, other sedative drugs, opioid antagonists, opioid agonists, and HIV antiretroviral medications (e.g., protease inhibitors). In addition, the consumption of alcohol while taking this medication can lead to a lethal interaction. It is not used in combination with opioid agonists (e.g., naltrexone) because it can precipitate opioid withdrawal syndrome. Finally, it should also be noted that because buprenorphine is a partial agonist at higher doses, it can precipitate opioid-like withdrawal symptoms in the presence of significant physical dependence on opioids (making it appear to function more like an antagonist).

There is a paucity of well designed research on the effects of buprenorphine on pregnant women and fetal development and is therefore not recommended for use during pregnancy. There is also a lack of information on its interaction with antipsychotic and mood stabilizing medications (e.g., lithium). Buprenorphine can alter the metabolism of antiseizure medications (e.g., phenytoin, carbamazepine, and valproic acid), and such medications can alter the metabolism of buprenorphine. There is also a risk for interactions between buprenorphine and sedative-hypnotics (e.g., phenobarbital and clonazepam); the combination can cause depression of the central nervous system. If both are used, lower dosages of both types of medication are indicated. Buprenorphine is not recommended for individuals who display active suicidality. It has not been found to be effective for the treatment of other drugs of abuse in individuals with polysubstance dependence.

Hospitalization for medical problems may necessitate temporary suspension of buprenorphine treatment due to its attenuation or blocking of the effects of opioids. At analgesic doses, buprenorphine is twenty to fifty times more potent than morphine. Patients with acute pain on maintenance doses of buprenorphine who do not obtain relief from non-opioid medications are treated with standard pain management intervention (e.g., short-acting opioid pain relievers) subsequent to discontinuation of buprenorphine. Buprenorphine is not restarted until sufficient time has elapsed for the clearance of opioid pain medications (as evidenced by the onset of early withdrawal symptoms) in order to prevent precipitating withdrawal. Individuals treated with long-acting opioids for chronic severe pain may not be good candidates for buprenorphine treatment due to the ceiling effect on its analgesic properties. Moreover, it may be difficult to achieve analgesia with short-acting opioids for individuals receiving buprenorphine maintenance therapy prior to its clearance; higher doses of short-acting opioids may be required.

Buprenorphine can be prescribed and dispensed in physicians' offices, although there are specific training and certification requirements delineated in the Drug Addiction Treatment Act of 2000 (DATA 2000), the text of which can be found at http://www.buprenorphine.samhsa.gov/fulllaw.html. Physicians must obtain a waiver exempting them from federal requirements regarding prescribing controlled substances and obtain subspecialty board certification or training in treatment and management of patients with opioid dependence. Information on requirements for physicians as well as eight hours of on-line training can be found at www.buprenorphine.samhsa.gov. As of December 2006, physicians who meet the criteria can treat up to one hundred patients at any one time. This patient limit applies to both solo and entire group practices.

NALMEFENE

Nalmefene (a drug that is used to reverse the effects of anesthesia), is an opioid antagonist that, like naltrexone, has no agonist activity, no abuse potential, a longer half-life, greater bioavailability, and lacks dose-dependent liver toxicity. (It differs from naltrexone by substitution of the ketone group at the 6-position of naltrexone with a methylene (CH2) group, which significantly increases binding affinity to the mu opioid receptor.) It is indicated for the management of opioid overdose and complete or partial reversal of opioid drug effects, including respiratory depression, induced by either natural or synthetic opioids. Nalmefene, like other opioid antagonists, can potentiate acute withdrawal symptoms

in individuals who have some degree of opioid tolerance and dependence. It is thus used with extreme caution in the presence of physical dependence on opioids or following surgery involving high doses of opioids.

Nalmefene has been shown to be safe and efficacious when used to treat alcohol dependence and leads to reductions in intake rather than the achievement of complete abstinence. Studies indicate nalmefene decreases relapses to heavy alcohol consumption and is the first medication to show efficacy in controlled trials without the provision of concomitant psychosocial intervention. However, it has yet to receive FDA approval for the treatment of alcohol use disorders.

NICOTINE REPLACEMENT THERAPY (NRT)

Cigarette smoking accounts for more deaths each year than AIDS, alcohol, cocaine, heroin, homicides, suicides, motor vehicle accidents, and fires combined. Individuals who smoke are at increased risk for a number of medical problems (e.g., myocardial infarction, coronary artery disease, hypertension, stroke, peripheral vascular disease, chronic obstructive lung disease, chronic bronchitis, several types of cancer [lung, stomach, head and neck, and bladder], gastro-esophageal reflux disease, gastric ulcerations, and cataracts) as well as premature wrinkling of the skin. Smoking also appears to have an anti-estrogen effect that may lead to the early development of osteoporosis in women.

It is estimated that ninety percent of persons entering substance abuse treatment programs and fifty to ninety-five percent of individuals with co-occurring psychiatric disorders use nicotine. Individuals with serious mental illnesses who smoke display more positive symptoms, are prescribed more medications, experience more side effects from medications, and are hospitalized more frequently than those who do not smoke.

Individuals with co-occurring disorders need to be monitored for changes in mental status and psychopharmacotherapeutic side effects because some psychotropic medications interact with tobacco smoke. Tobacco is metabolized by the CYP 450/Ia2 isoenzyme in the liver. The metabolism of tobacco increases the metabolism of some psychotropic medications such as fluphenazine, haloperidol, clozapine, and olanzapine secondary to aromatic polynuclear hydrocarbons (i.e., tar). The cessation of smoking reduces the activity of the CYP 40/Ia2 enzymes and, hence, the metabolism of psychotropic medications. This, in turn, increases the blood level of the medications which can increase their side effects and reduce adherence to treatment regimens.

Effects of Abstinence from Smoking on Blood Levels of Psychiatric Medications		
Abstinence Increases Blood Levels	**Abstinence Does Not Increase Blood Levels**	**Effect of Abstinence on Blood Levels Is Unclear**
Clomipramine Clozapine Desipramine Desmethyldiazepam Doxepin Fluphenazine Haloperidol Imipramine Oxazepam Nortriptyline Propranolol	Amitriptyline Chlordiazepoxide Ethanol Lorazepam Midazolam Triazolam	Alprazolam Chlorpromazine Diazepam

(SAMHSA TIP # 45)

Tobacco dependence was not generally addressed in substance abuse treatment programs until rather recently due to a concern that the additional stress of quitting smoking would adversely affect

recovery. However, research indicates that this is a false assumption. In fact, research has demonstrated that interventions for nicotine cessation do not interfere with recovery or increase the risk for relapse. Some studies indicate that recovery from substance use disorders may assist in abstinence from nicotine. In addition, there is data suggesting that tobacco craving may increase craving for illicit drugs so that individuals who smoke may not be as successful in abstaining from them.

Integration of tobacco dependence treatment (based on motivation/stage of commitment to quit) into mental health and substance abuse treatment is supported by the literature. It is recommended that all clients be screened for tobacco use. Cotinine (a primary metabolite of nicotine that remains in the body for several weeks and can be measured from hair, blood, urine or saliva samples) and carbon monoxide (CO) levels (which can be measured with a CO meter) can be used to ascertain the amount of nicotine use. An additional measurement option is the Fagerstrom Test for Nicotine Dependence (FTDN) is a six item self-report tool that has been shown to be predictive of withdrawal symptoms and severity of craving. Two questions from the scale that assess the number of cigarettes smoked per day and amount of time prior to the first cigarette are as predictive as the full scale.

Tobacco dependence treatment guidelines recommend addressing the problem during all clinical encounters along with the use of medications approved by Food and Drug Administration as first-line interventions (e.g., bupropion SR/zyban and nicotine replacement treatments including nicotine polacrilex [gum], nicotine transdermal patch, nicotine nasal spray, nicotine lozenge, sublingual tablet and nicotine inhaler). All NRTs have been shown to be effective with one-year quit rates between eleven and thirty-four percent. In addition, Nicotine Anonymous (http://www.nicotine-anonymous.org/) can provide support to clients and their families.

Bupropion SR was approved by the FDA for smoking cessation in 1997 and was marketed under the trade name of Zyban. It has been shown to be effective, but is contraindicated in the presence of a history of seizures, head trauma, anorexia bulimia, and heavy alcohol consumption. Varenicline tartrate (Chantix) was approved by the FDA in May, 2006 for smoking cessation. It binds to nicotine receptors in the brain and reduces withdrawal symptoms, and blocks the effects of nicotine if smoking is resumed. A course of treatment is twelve weeks in duration. Individuals who achieve cessation can continue treatment for an additional twelve weeks to increase potential for long-term cessation. Clonidine, nortriptyline, and moclobemide have also been found to be effective treatments, but are not approved by the FDA for smoking cessation therapy. Nortriptyline and clonidine are second-line treatments according to the U.S. Public Health Service's guideline on the treatment of tobacco use and dependence.

NRTs provide less than half of the nicotine plasma levels achieved through smoking cigarettes. Combination therapies (e.g., the patch and gum) have been used to augment nicotine levels and increase the effectiveness of therapy. There is some evidence to support the combination of the patch (a passive nicotine delivery system) with an active, self-administered therapy (e.g., gum and nasal spray) when monotherapy has not been successful. The combination of bupropion SR and the transdermal patch has been found to lead to higher quit rates over a twelve-month period.

The majority of smokers make several quit attempts on their own. Seventy-five to eighty percent of individuals who attempt to quit experience relapse. Fear of weight gain is a common barrier to quit attempts, especially in women. However, dieting during smoking cessation has been shown to lead to relapse (as has alcohol consumption). There is also some evidence showing that women do not benefit as much as men from NRT, but may benefit more from non-NRT treatments such as bupropion and naltrexone which can attenuate weight gain.

Research shows that extending treatment longer than typical smoking cessations programs improves quit rates to fifty percent at one year post intervention. Evidence indicates that these medications are effective when used alone, but the addition of psychosocial interventions potentiates their effectiveness by fifty percent. Moreover, there is a direct correlation between the intensity of counseling and quitting success and that even very brief counseling improves success rates. In sum, NRTs in combination with behavioral interventions (ranging from self-help materials to individual cognitive-behavioral interventions that teach people to recognize high risk smoking situations, develop alternative coping strategies, manage stress, enhance problem-solving skills, and increase social supports) have been shown to be effective.

Combined Behavioral & Nicotine Replacement Therapy

Combined Behavioral and Nicotine Replacement Therapy consists of the use of a transdermal nicotine patch or nicotine gum to reduce symptoms of withdrawal for initial abstinence and a concurrent behavioral component to provide support and reinforcement for coping skills. The latter component consists of behavioral skills training designed to help individuals learn to avoid high risk situations for smoking relapse early on and plan strategies to cope with such situations later on. Participants practice skills during treatment and in social and work settings. Other coping techniques (e.g., cigarette refusal skills, assertiveness, and time management) are also taught.

Pharmacology for Co-Occurring Disorders

The most common agents used to treat anxiety disorders are benzodiazepines (e.g., alprazolam and lorazepam) and antidepressants. Because benzodiazepines can cause significant problems they are generally not recommended for people with substance use disorders or for the long-term treatment of anxiety or depressive disorders. Selective serotonin reuptake inhibitors (SSRIs) for the treatment of co-occurring depressive disorders and buspirone (a partial 5-HT1A agonist) for anxiety disorders are examples of psychoactive drugs with low abuse potential.

Abuse Potential of Common Psychiatric Medications

Medication Class	High Abuse Potential	Moderate Abuse Potential	Low Abuse Potential
Sleep medications	Benzodiazepines: • Diazepam • Flurazepam • Chlordiazepoxide • Clonazepam (Klonopin) and others • Chloral hydrate • Barbiturates • Meprobamate	• Diphenhydramine • Hydroxyzine (Vistaril) • TCAs	• Trazodone (Desyrel)
Antianxiety	• Benzodiazepines	None	• TCAs • Buspirone
Antidepressants	• Methylphenidate • Dextroamphetamine	None	• Fluoxetine and others • SSRIs • TCAs • Bupropion • Venlafaxine (Effexor) • Nefazodone (Serzone) • Mirtazapine
Mood stabilizers	• Clonazepam	None	• Lithium carbonate • Carbamazepine • Sodium valproate

Abuse Potential of Common Psychiatric Medications			
			(Depakote) • Gabapentin (Neurontin) • Phenytoin (Dilantin)
Antipsychotics	None	None	All, for example: • Chlorpromazine • Thioridazine • Haloperidol • Risperidone (Risperdal) • Olanzapine (Zyprexa)
Anti-Parkinsonian medications	None	• Trihexyphenidyl (Artane) • Benztropine (Cogentin)	None
Agents for treating substance abuse	• Methadone • LAAM • Buprenorphine	• Clonidine (Catapres) (should be prescribed with caution since it can be used to self-administer for heroin withdrawal and can cause a rapid drop in blood pressure.)	• Naltrexone (ReVia) • Disulfiram (Antabuse) • Bupropion (Zyban)

(SAMHSA TIP # 37)

Buspirone has been found to be effective for patients with alcohol abuse/dependence and co-occurring anxiety disorders. When combined with cognitive behavioral therapy, it leads to reductions in symptoms of anxiety and increases in treatment retention. It also appears to exert modest effects on decreasing the frequency of alcohol consumption and the risk for resumption of heavy drinking. Fluoxetine has been shown to be effective for people with co-occurring alcohol disorders and major depression. Venlafaxine and bupropion have shown promise in pilot studies for comorbid depression and substance use disorders. In addition, studies of desipramine and imipramine have shown improved mood and reduced risk of relapse.

Bipolar disorder can be complicated by the use of substances with resulting increased likelihood for episodes of depression, mania, and rapid cycling. A manic state can be produced by stimulants (e.g., cocaine) during intoxication and from depressants (e.g., alcohol) during withdrawal. A period of confirmed abstinence, generally one to two weeks, is usually required prior to initiating treatment with mood stabilizers in order to assess the role of substances in inducing manic symptoms. Anticonvulsant mood stabilizers, (e.g., divalproex sodium and carbamazepine) have been shown to be effective in controlling mania and in treating co-occurring substance use disorders.

Medications used to treat HIV/AIDS (e.g., protease inhibitors) can interfere with the metabolism of medications used for the treatment of psychiatric and substance use disorders (e.g., methadone), as well as with that of substances that are abused. Medications that have anticholinergic effects (e.g., tricyclics and antipsychotics) block saliva flow, produce dry mouth, cause or exacerbate oral candidiasis, other mouth infections, and dental caries. The stimulation from antidepressant medications can trigger mania or hyperactivity, particularly in individuals with co-existing HIV infection and substance use disorders who may have mild central nervous system impairment from HIV. Individuals with HIV infection are more sensitive to extrapyramidal symptoms produced by antipsychotic medications (e.g., haloperidol). Second generation antipsychotics (e.g., risperidone, olanzapine, and quetiapine), with the exception of clozapine (which should not be used due to the potential for agranulocytosis), are recommended. Sedative-hypnotics and other central nervous system depressants can cause confusion, memory impairment, and depression. In addition, some medications used to treat HIV/AIDS and its complications can affect treatment for hepatitis since a number of HIV/AIDS treatment drugs are processed through the liver; their effects can be either increased or decreased due to hepatitis or chronic alcohol use.

Medical Management of Pain

People with substance use disorders are often under treated for acute pain. Reluctance to provide adequate pain treatment is usually based on the erroneous belief that maintenance doses of opioid addiction treatment medication also relieves acute pain. Patients in MAT programs have been shown to have high rates of acute pain, and thirty to sixty percent experience chronic pain. Long-term opioid pharmacotherapy produces substantial tolerance to the analgesic effects of opioid treatment medications so typical maintenance doses afford little to no pain relief and, due to tolerance for narcotics, higher doses of narcotic analgesia and more frequent dosing intervals are generally required for effective pain control.

It is recommended that patients with substance abuse problems be prescribed drugs with a low potential for: (1) abuse, (2) exacerbation of the effects of substances that are abused, and (3) lethality in overdose. It is also recommended that medications be dispensed in limited amounts and be closely monitored. In general, a hierarchical approach to prescribing is recommended to minimize the potential for abuse. In this approach, the lowest doses of safer, less abusable medications are prescribed first, and the most potentially abusable medications are used only when other agents have not been effective. Dispensing medication in small amounts helps limit overuse, misuse, or abuse of medications with the potential for abuse. In addition, it is recommended that one prescriber be assigned to write all prescriptions and that patients be requested to sign a contract to this effect. Nonopioid alternatives (e.g., nonsteroidal anti-inflammatory drugs, COX-2 inhibitors, physical therapy, or surgical intervention) are often recommended prior to treatment with opioids for pain management to minimize the risk of exacerbation of addiction posed by analgesics containing opioids. In fact, relapse to illicit opioid use has been shown to occur when opioid analgesics are given to people in recovery.

It is recommended that shorter acting narcotics be used for time-limited periods while methadone is continued at usual doses for pain control. Methadone doses several times per day can be used for individuals with opioid addictions who have severe chronic pain. Acute pain is managed with adequate doses of alternative mu opioid agonists (e.g., morphine, hydromorphone, or oxycodone), while continuing the maintenance dose of methadone. Partial agonists such as buprenorphine, butorphanol tartrate, and nalbuphine, as well as mixed opiate agonist-antagonists (e.g., pentazocine [Talwin]), are contraindicated because they can precipitate withdrawal. Certain types of pain have been found to be relieved by anticonvulsant adjuvant medications such as carbamazepine or phenytoin, but both are potent CYP 450/3A inducers that can lead to a sharp reduction in serum methadone levels. Gabapentin, effective for neuropathic pain, does not alter CYP 450/3A isoenzymes and thus does not change methadone levels.

Acupuncture

Acupuncture is an ancient Chinese therapy in which thin needles are inserted subcutaneously at various points on the body. It is based on the belief that the body's normal functioning depends on a balance of two opposite polar energies that flow along lines of the body called meridians. Approximately one thousand acupuncture points are aligned along these meridians, and their stimulation by the needles is believed to correct energy imbalances and enhance the body's natural capacity to heal itself. Auricular (ear) acupuncture has been used throughout the world as an adjunctive treatment during opioid detoxification for about thirty years and is used by more than four hundred treatment programs and forty percent of drug courts in the United States. It is one of the more widely used alternative therapies within the context of treatment for substance use disorders.

In addition to its use as an adjunct to treatment and to help relieve symptoms of withdrawal during detoxification, acupuncture is also used for the management of chronic pain. It is sometimes an effective alternative to narcotic analgesics for individuals who experience chronic pain from co-existing disabilities as it sometimes reduces neuropathic pain. Current use of acupuncture to help with detoxification generally involves a five-point auricular application. Several research studies have indicated that acupuncture can be effective in reducing cravings and in ameliorating withdrawal symptoms.

Acupuncture appears to reduce the craving for a variety of substances of abuse and contribute to improved treatment retention rates. In particular, it has been viewed as an effective adjunct to treatment for alcohol and cocaine disorders, and also has played an important role in opioid treatment (i.e., methadone maintenance). It is used as an adjunct during maintenance, such as when tapering methadone doses. However, acupuncture has not been subjected to rigorous controlled research and is not recommended as a stand-alone treatment for opioid withdrawal. In addition, there are some objections to its use within the substance abuse treatment field including the view that it is a hindrance to treatment, replaces needle rituals that are part of substance abuse, and its calming effect can undermine treatments that involve confrontational approaches.

THE SERVICE CONTINUUM

Treatment for substance use disorders can be provided in a variety of settings. Studies indicate that there is no strong correlation between treatment settings and beneficial outcomes. The choice of setting is typically predicated on safety and least restrictiveness, with subsequent movement along a continuum of care as motivation and adherence to treatment changes. Emphasis is placed on the provision of appropriate and specific treatment, rather than placement into established programs to ensure that treatment is clinically driven.

Treatment type and intensity should be driven by client need, rather than limitations based on the category of care (e.g., intensive outpatient) or service delivery setting (e.g., hospital). One method to accomplish this is unbundling to allow any type of clinical service (e.g., psychiatric consultation) to be offered within any setting (e.g., therapeutic community) in order to maximize individualization of care and provide needed treatment within any clinically appropriate setting.

THE SERVICE CONTINUUM

- ***Traditional outpatient services*** *are typically delivered by therapists in clinic or office settings.*
- ***Intensive outpatient programs*** *are staffed by non-medical staff in clinic settings who provide treatment for six to nine hours per week during two or three visits.*
- ***Partial hospitalization and day treatment programs*** *use a combination of medical and non-medical staff to deliver a high intensity of treatment. Day treatment is the most intensive level of outpatient treatment and can range from several hours a week to five days per week and include individual, group and family therapies. Sessions can be held during the day, afternoon, after school hours, weekends, or evenings to accommodate clients' schedules. It offers an intermediate level of care between traditional outpatient and inpatient treatment.*
- ***Inpatient*** *programs are delivered in hospitals and freestanding clinics and provide twenty-four-hour nursing care in addition to intensive treatment.*
- ***Transitional residential programs*** *and halfway houses usually have twenty-four-hour supervision from non-medical staff or clients who are in recovery. Participants are often employed and receive counseling and peer support during the evening and weekend hours.*
- ***Therapeutic communities (TCs)*** *typically have twenty-four-hour supervision by non-medical staff or clients who are in recovery. They usually provide highly intensive counseling services, rely on peer support and confrontation to shape behavior, and are based on the concept of self-help. Lengths of stay tend to range from six months to a year or longer.*
- ***Residential treatment programs*** *usually provide twenty-four-hour supervision by non-medical staff with limited availability of medical staff. These programs provide highly intensive substance abuse counseling and peer support. Participants may participate in the maintenance of the facility. The length of stay typically ranges from seven to thirty days.*
- ***Recovery maintenance*** *activities are not treatment per se, but are highly valuable for ongoing maintenance of sobriety. These include twelve-step and other support groups that focus on maintaining gains achieved in treatment settings.*

PLACEMENT CRITERIA

Placement guidelines, such as those promulgated by the American Society of Addiction Medicine, are designed to ensure that patients are placed into the least intensive level of care that will achieve treatment objectives without relinquishing safety or security. Such guidelines seek to improve the effectiveness of care, ensure access to affordable care, and support the development of cost-effective treatment systems.

The ASAM PPC-2R (American Society of Addiction Medicine Patient Placement Criteria, Second Edition, Revised) is designed to match treatment to client needs and characteristics, and represents the most widely accepted standards of care for treating substance use disorders. It includes adolescents and individuals with co-occurring psychiatric disorders. It should be noted that the ASAM criteria are not criteria for treatment or service matching; matching is based upon identification of needs for a wide range of services and supports.

American Society of Addiction Medicine (ASAM) Patient Placement Criteria	
• Level 0.5:	Early Intervention
• Level I:	Outpatient Treatment
• Level II:	Intensive Outpatient Treatment / Partial Hospitalization
• Level III:	Residential / Inpatient Treatment
• Level IV:	Medically Managed Intensive Inpatient Treatment

Each level of care includes descriptions of appropriate treatment settings, staff, and services, as well as admission, continued service, and discharge criteria for the following six dimensions:

- Potential for acute intoxication or withdrawal
- Biomedical conditions and complications
- Emotional, cognitive and behavioral conditions or complications
- Readiness to change (treatment acceptance or resistance)
- Relapse and continued use or continued problem potential
- Recovery/living environment

The ASAM criteria have been adopted on the basis of face validity, but have not been demonstrated to be clinically verified. Moreover, the criteria are guidelines; no uniform protocols have been developed to ascertain which clients are placed into which levels of care. Information on the ASAM criteria can be found on the web at http://www.asam.org/.

ENGAGEMENT

An individual's decision to seek assistance may endure for only a brief period of time. Many individuals fail to attend initial appointments if they are scheduled too far in the future. Therefore, it is recommended that appointments be scheduled as soon as possible (i.e., within twenty-four hours following the initial contact). One view holds that potential clients must make calls for the initial appointments and, unless they do so, it is inappropriate to schedule them in order to affirm intent and decrease denial and no shows. However, data indicates there are no differences in rates of no shows based upon who makes an initial appointment. And, due to ambivalence regarding treatment, methods designed to screen out individuals who are in denial actually function as barriers to entry into treatment.

A number of characteristics have been shown to impact treatment engagement and retention, including the extent of support from family and significant others and motivation to alter substance-using behaviors, as well as the presence of impositions from the criminal justice system, child protective services, family, or employers. Program engagement and retention are also associated with positive therapeutic relationships between clinicians and clients. Factors associated with premature termination of treatment include severe crack cocaine use, criminal activity, and co-occurring psychiatric and substance use disorders.

Studies show that the more prepared clients are for treatment, the longer they remain in treatment. It is recommended that orientations to treatment include program expectations to foster client ownership and foster responsibility, rather than imparting rules, which signify staff dictates or commands. A

number of pretreatment techniques appear to decrease the incidence of premature departure from treatment including:

- Role induction that uses formats such as interviews, lectures, and videos to educate individuals about the reasons for therapy, setting realistic goals for therapy, and expected client behaviors.
- Vicarious pretraining using interviews, lectures, videos, or other formats to demonstrate what takes place during therapy so the client can experience the process vicariously.
- Experiential pretraining using group exercises to teach client behaviors such as self-disclosure and examination of emotions.
- Motivational interviews using specific listening and questioning strategies to help clients overcome doubt about making changes.

Mobile Treatment Units

Mobile treatment units typically use vans that provide treatment services within large cities (e.g., Baltimore, Boston, San Francisco, and Seattle) and offer program accessibility to promote engagement and retention in treatment. Mobile programs either offer comprehensive maintenance services (with medication, collection of samples for drug testing, and counseling) or function in conjunction with fixed-site outpatient programs that offer medical care, counseling and other psychosocial services, as well as medication that is delivered via the mobile units.

Mobile treatment units are often used in locations where fixed-site programs are unavailable, for individuals who have ambulatory challenges, and for patients initially stabilized in OTPs who are transferred for continued treatment. However, these units not staffed on weekends are appropriate only for patients who meet state and federal regulations for weekend take-home methadone. One significant advantage of mobile treatment units is that more individuals who experience opioid addictions can be treated without having to deal with negative community responses to OTPs (e.g., NIMBY syndrome). Another advantage is the opportunity to reach individuals who are unable or unwilling to visit fixed-site offices.

Intensive Outpatient Treatment (IOT)

Intensive Outpatient Treatment (IOT) is marked by a lack of standardization and variation in scope and intensity of services. Programs can range from about nine hours per week to twenty or more. Some IOTs operate as day treatment or partial hospitalization programs within hospitals, correctional settings, homeless shelters, and schools. Some programs provide access to non-institutional housing (e.g., apartments or houses) located near program sites, while others operate in conjunction with residential treatment programs.

IOTs use multidisciplinary treatment teams that include physicians, counselors, case managers, social workers, family therapists, psychologists, and psychiatrists, and liaise with criminal justice, child welfare, and other agencies. Services provided include substance withdrawal management, family, marital, couples, and group therapies, parenting skills training, pharmacotherapy, child care, transportation services, organized recreational and leisure activities, nutrition counseling, HIV/AIDS counseling, vocational rehabilitation, literacy and general equivalency diploma preparation, transition and continuing care services, alumni activities, and outreach.

Core Elements of Intensive Outpatient Treatment
▪ Screening ▪ Assessment ▪ Routine and random toxicology screening ▪ Treatment planning ▪ Twenty-four-hour crisis management ▪ Pharmacotherapy and medication management ▪ Individual counseling ▪ Group therapy ▪ Education about AOD issues ▪ Family education and counseling ▪ Self-help and support group orientation ▪ Case management services ▪ Discharge and transitional service planning ▪ Program and outcome evaluation

There are a number of advantages to IOT including cost (which is often less than half that for inpatient treatment), which allows for a longer duration of treatment; the ability of patients to continue to function in their established roles with minimal disruption to work/school and family life; opportunities for daily in vivo practice and application of skills acquired in the program (e.g., drug refusal skills, open communication, relapse prevention, and stress reduction techniques); opportunities to enhance participants' psychosocial supports and provide intensive family interventions; the provision of services at times that are convenient for clients; and opportunities for participation in self-help groups during treatment. In addition, IOT offers intensive treatment without removing mothers from home and is especially effective for this population when child care services are made available. Challenges faced by IOT programs include increased risk for relapse from uncontrolled environmental factors; less insulation from family and social crises; absence of supervision during nontreatment hours; increased difficulty in obtaining third-party reimbursement; and less control over acute patient management problems.

Studies show that IOT participation leads to comparable outcomes found in traditional twenty-eight-day inpatient programs. In addition, research indicates that withdrawal can be safely (and cost effectively) managed within IOT settings. IOTs have been adapted to accommodate the needs of clients who are homeless and those with serious co-occurring psychiatric disorders and other biopsychosocial problems.

Day Treatment With Abstinence Contingencies & Vouchers

This day treatment program is designed for individuals who are homeless and have an addiction to crack cocaine. Participants spend five and one half hours each day in the program for the first two months. Lunch and transportation to and from shelters are provided. The program offers individual assessment and goal setting, individual and group counseling, psychoeducational groups (e.g., didactic groups on community resources, housing, cocaine, and HIV/AIDS prevention; establishing and reviewing personal rehabilitation goals; relapse prevention; weekend planning), and participant-governed community meetings during which participants review goals and provide support and encouragement to each other. Individual counseling is provided once per week, and group therapy sessions are held three times per week. Subsequent to two months of day treatment, and at least two weeks of abstinence, participants graduate to a four-month work component that pays wages that can be used to rent inexpensive drug-free housing. A voucher system is used to reward engagement in drug-free related social and recreational activities.

This model has been shown to be effective in reducing alcohol and cocaine use as well as days spent homeless. The provision of employment supports and abstinence-contingent housing following participation lead to even more significant reductions in substance use and increases in housing stability.

Sobering Stations

Sobering stations are twenty-four-hour facilities designed as safe substance-free environments in which individuals who are intoxicated can be housed and monitored until they are capable of leaving in a safe condition. The average length of stay is about four to eight hours. Sobering stations offer an alternative for individuals who are at risk of arrest for public intoxication. Persons who are picked up by law enforcement authorities can be transported to sobering stations where they are monitored by trained staff and referred to other services instead of being arrested. Individuals are offered detoxification services when appropriate and referrals to social services agencies are made as needed.

Sobering stations have been identified as a best practice by the U.S. Department of Housing and Urban Development (HUD) and have been established in a number of communities across the country.

Residential Care

The residential care continuum ranges from settings with high levels of professional supervision to group homes with a minimum of professional supervision and involvement, and varying lengths of stay. Most residential programs are staffed at least in part by people who are in recovery. Short-term residential models provide intensive treatment typically based on a modified twelve-step approach, and focus on stabilization and initiation of recovery prior to discharge to outpatient care. Long-term residential treatment is used for individuals deemed to be in need of a structured support system for a sustained period to foster positive changes and stabilization in attitudes and lifestyle. The duration of long-term residential treatment programs vary, but most are about six months, although some have lengths of stay of nine to twelve months and longer.

Some residential programs are abstinence-based while others are risk reduction-based. In the former services include substance abuse counseling, education regarding HIV/AIDS, mental health counseling, vocational rehabilitation, and support groups. Such programs tend to focus on helping individuals transition from active use to living without substances and enforce rules against substance use; substance use can result in discharge from the program. Risk reduction-based residential programs offer similar services but include individuals who may still be using substances. Their philosophy is to ensure basic needs are met while providing support and education to encourage the reduction or cessation of substance-abusing behaviors.

Services range from high to low intensity and can be delivered in specialized care settings (e.g., halfway houses, group homes, board and care facilities, domiciliary facilities for veterans) and in nonspecialized settings (e.g., extended care facilities, life care programs, subacute nursing homes where primary care doctors make rounds and visiting nurses attend occasionally). Specialized programs have been developed for individuals with co-existing cognitive impairments caused by chronic illnesses or traumatic injuries.

Residential care with monitoring and support is indicated for individuals who have indwelling intravenous for infusion therapy (e.g., for AIDS treatment and other medical conditions) due to the risk for misuse for administration of heroin, cocaine and other drugs; lack transportation or have limited

mobility; are at risk for self or other harm; lack significant social supports; and display an inability to adhere to routine medical instructions. In addition, residential programs that provide a slower paced, more repetitive treatment approach can be beneficial for older adults.

Outcome studies on long-term residential treatment, while rather scarce, indicate that it is generally more effective than outpatient interventions and that length of stay is a critical factor. Beneficial outcomes have been shown to be maximized when AA, NA, or other support groups are introduced to residents during the re-entry phase of treatment, and are endorsed and encouraged as an aftercare support.

Residential Student Assistance Program (RSAP)

The Residential Student Assistance Program (RSAP) is a substance abuse prevention program developed for high-risk adolescents aged fourteen to seventeen years of age living in residential facilities due to early substance use; whose parents abuse substances; have participated in violent or delinquent acts; have histories of physical, sexual, or psychological abuse; experience chronic failure in school; and have mental health problems, including suicide attempts. The program uses master's prepared professional counselors in residential facilities to provide a full range of substance abuse prevention and early intervention services including information dissemination, normative and preventive education, problem identification and referral, community-based interventions, and environmental approaches. The counselors work with adolescents individually and in small groups. Program components include:

- The Prevention Education Series, an eight-session substance use prevention education program
- Assessment, provided after the Prevention Education Series, to determine level of substance use, family substance abuse, and need for additional services
- Individual and group counseling, provided following assessment and consisting of a series of eight to twelve group sessions. Residents are placed in one of five different groups based on their developmental differences, substance use patterns, and family history of substance abuse. Individual sessions are provided as needed.
- Referrals for residents to treatment, more intensive counseling, or twelve-step groups. In addition, training and consultation are provided for the residential facility staff.

Outcome studies indicate participants display significant reductions in the use of alcohol and marijuana, and, as preventive approach, refrain from initiating use. Information and fidelity instruments for this SAMHSA model program can be found on the web at www.sascorp.org/residesap.htm.

Therapeutic Communities (TCs)

Therapeutic communities, the most common type of long-term residential treatment, were begun in 1958 prior to the development of formal systems of substance abuse treatment. The first TC, Synanon, was established in California by a member of Alcoholics Anonymous who wanted to offer a substance-free environment in which individuals with substance use disorders could re-establish their lives using the principles of Alcoholics Anonymous and social learning.

TCs are designed to foster healthy lifestyles, abstinence from substances of abuse, and the identification of areas for change (e.g., behavior that is antisocial). The community encompasses the social environment, peers, and staff role models. Changes are effectuated through learning from other residents, staff, and other authority figures. In other words, the community itself functions as teacher and therapist. Recovery is viewed as altering negative patterns of thinking, behaviors, and feelings

that predispose individuals to substance use, as well the development of a responsible substance-free lifestyle. TC programs typically utilize group activities and routinely provide wraparound services and supports.

Self-development is taught via maintenance of the TC through job functions, chores, and participation in other facility operating functions. The day is highly structured and treatment is provided on a twenty-four, seven day per week plan of activities and responsibilities. There are three stages in TC programs: induction, primary treatment, and preparation for separation from the TC. The length of stay varies from six to eighteen months, with average stays of between six and twelve months.

Longitudinal studies show that TCs are effective in decreasing substance use and criminal behaviors, increasing employment, and lead to improvements in psychological well-being (e.g., reductions in depression and increases in self-esteem and socialization). Beneficial outcomes have been found to be correlated to length of stay with longer stays leading to more significant improvements.

The operational standards for therapeutic communities have undergone field testing conducted by Therapeutic Communities of America and the U.S. Office of National Drug Control Policy. There are more than one hundred twenty standards that cover eleven domains including the theoretical basis, administration, staffing, stages of treatment, aftercare, and others. These are available from www.whitehousedrugpolicy.gov/national_assembly/publications/therap_comm/therap_comm.pdf.

The Mid-America Addiction Technology Transfer Center in Kansas City, Missouri offers a two-day training course consists of lectures, small groups, and instructional materials on the TC model and how it works. Information can be found at www.mattc.org/index.html. In addition, information on TCs is available from Therapeutic Communities of America (TCA), http://www.therapeuticcommunitiesofamerica.org.

The therapeutic community model has been adapted to address the needs of specific populations including individuals with co-occurring mental illnesses, adolescents, individuals in the criminal justice system, and women and children.

Modified Therapeutic Communities (MTCs)

MTCs for individuals with co-occurring disorders use adaptations to the therapeutic community model to accommodate psychiatric symptoms, neurocognitive impairments, and reduced urge control. Four types of interventions are used in MTCs: community enhancement, therapeutic/educative, community/clinical management, and vocational. In general, MTCs offer more flexibility, lower intensity, and more individualization of supports. They adhere to the basic tenets of TCs (i.e., the creation of milieus that are designed to promote cultures of mutual self-help and affiliation with the community to promote change). Encounter groups that are used in the TC model have been replaced by conflict resolution groups which are led by staff and emphasize education and learning new behaviors as well as reduced emotional intensity. MTCs also include families in activities including weekend visits, education and counseling. Classes on prevention are offered to children. The inclusion of families occurs during the later part of treatment in order to promote reintegration into the family and community.

Research on MTCs indicate they produce a number of beneficial outcomes including reductions in substance use, depression, and incarceration, as well as improvements in measures of psychological well-being, and increases in employment. The model has been reported to be cost-effective with one study showing a $6.00 benefit for each dollar spent on the program. SAMHSA's National Registry of Effective Programs and Practices (NREPP) rates MTCs for individuals with co-occurring disorders as a promising approach.

Prison-Based Therapeutic Communities

Prison-based TCs were developed as a result of evidence that New York's Stay 'N Out program, started in 1974, is highly effective in decreasing rates of recidivism for both men and women. The majority of prison-based therapeutic communities last for a minimum of six months in duration, although research indicates that the most beneficial outcomes are derived from prison-based TCs of nine to twelve months in duration.

Program components include:

- Community meetings, events, and ceremonies
- Seminars
- Group encounters
- Group therapy
- Individual counseling (both from staff and peers)
- Tutorial learning sessions
- Remedial and formal education classes
- Participant job/work responsibilities
- Explicit treatment phases that are designed to provide incremental degrees of psychological and social learning including:
    - Orientation to acquaint participants with the rules of the TC and establish routines
    - Group and individual counseling to work on issues of recovery
    - Recovery maintenance and relapse prevention
    - Reentry planning

Prison-based TCs have been found to be highly effective treatment programs. Outcome studies show reductions in re-arrests and relapses when aftercare in the community is provided; lack of continuity in the form of aftercare leads to high relapse rates subsequent to release from incarceration. It has also been found that separation from the prison subculture during treatment is the most effective approach for engendering attitudinal and behavioral changes among participants.

Therapeutic Communities for Women

TCs have been demonstrated to be effective for women who are incarcerated as well as those who are not involved in the justice system. Adaptations of the TC model to meet the needs of women include reductions in the levels of confrontation (which is provided in a supportive manner emphasizing participants' power to make their own decisions). An empowerment model is used to foster independence, coping, and decision-making skills. Issues such as substance abuse, parenting, relationships, domestic violence, sexual abuse, and others germane to women are addressed.

It has been shown that the inclusion of children is an important element in TCs for women. Programs that permit women to enter with their children have been demonstrated to increase treatment retention and improve outcomes (e.g., reductions in relapses and increased employment). This is supported by research that shows that continued interactions between mothers and their children are beneficial to both.

Forever Free is an example of a prison-based residential treatment program for women. It is an intensive twenty-hour a week program that lasts for a minimum of six months and uses a cognitive-behavioral curriculum designed for women that emphasizes relapse prevention. Participants are also involved in a prison-based work program an additional twenty hours per week. The program's

components include anger management, assertiveness training, self-esteem, understanding healthy versus disordered relationships, posttraumatic stress disorder, parenting, sex and health, and abuse. Additional aftercare components have been added since its inception in 1997 including community-based residential treatment. Evaluation studies have shown that participants display reductions in arrests and drug use as well as increases in employment with more significant improvements for those who are involved in aftercare.

Sister in Sober Treatment and Empowered Recovery (SISTER) is a jail-based modified therapeutic community that offers a range of services including individual and group counseling, acupuncture, GED, literacy, work training, HIV education and counseling, and a program for prostitutes called the EX-SEX Workers Group. There are specific groups for lesbian and bisexual women, African Americans, Hispanics, and Pacific Islanders. AA and NA meetings are held on-site in English and Spanish. Pre-release planning includes educational and vocational assessments, job training, and relapse prevention. Residential treatment is provided subsequent to release. Outcome studies indicate decreases in recidivism and violent crimes. Participants who are involved in community residential treatment following incarceration have been shown to benefit the most.

THERAPEUTIC COMMUNITIES FOR ADOLESCENTS

Therapeutic communities for adolescents are typically used for those who experience severe difficulties with substance use (typically initiating use at young ages) other serious behavior problems (e.g., conduct disorder, attention deficit hyperactivity disorder, learning problems, and difficulties with authority figures), and require long-term treatment. Some adolescent TCs are designed for adolescents who are involved with protective services due to abuse or neglect, are homeless, and for those with psychiatric treatment needs (including medication). Others have been designed for adolescents involved in the juvenile justice system who have behavior disorders.

In these TCs the community functions as the primary therapist and family for the adolescent. Treatment is a community process; all members have responsibilities to function as therapists and teachers. Adolescent TCs often use cognitive restructuring to alter thinking and redirect attention to healthier behaviors. Adaptations to the standard TC model for adolescents include:

- Lengths of stay have been shortened
- Treatment stages reflect progress in behavioral, emotional, and developmental areas
- Less confrontational techniques are used
- Participants have less voice in program management (In TCs for adults, residents advance through the phases of treatment with increasing responsibilities and privileges culminating in responsibility for the TC's operation. This does not occur in adolescent TCs because staff members assume parental roles.)
- Staff members provide more supervision and evaluation
- Neurological impairments, particularly learning disabilities, and related disorders (e.g., ADHD), are assessed
- There is less stress on work and more on education, including schoolwork; some adolescent TCs include college preparatory programs

- Family involvement is a critical component[47] and family-oriented services and supports are provided (e.g., family education programs, family assessment, family therapy, multifamily education, and family counseling)
- Probation officers, social workers, or other supportive adults can participate in therapy when parental support is absent

In addition to the above noted-modifications, access to psychiatric services is provided for treatment of ADHD, depression, and other co-occurring disorders. TCs for adolescents include teachers as well as psychologists, social workers, substance abuse counselors, and vocational counselors found in adult TCs. Comprehensive models of adolescent TCs have schools with full-time or part-time state-certified teachers to conduct classes. Residents are required to receive at least five hours of academic instruction per school day. Teachers actively participate in treatment planning and behavior management training activities. The workload is lighter for residents of adolescent TCs than those of adult TCs due to school.

Participant drop out is a significant issue for adolescent TCs (as it in TCs for women). Most adolescents who drop out do so within the first thirty days of admission. Beyond that period the dropout rate decreases. Programs with the highest retention rates are those in which participants are legally mandated to treatment. This is a significant issue as research has demonstrated that adolescents require longer term treatment than adults. Evaluations of adolescent TCs indicate that improvements are seen in the frequency and extent of substance use (particularly marijuana) and involvement in criminal activities (e.g., drug sales, property and violent crimes).

HALFWAY HOUSES

Halfway houses typically provide transitional support for individuals who have been discharged from more restrictive settings but are not yet ready to function independently in the community. Residents are expected to follow house rules and share in house responsibilities. Supervision is provided by staff. Residents are involved in community activities including work, counseling, and education. Evening group activities are structured around residents' work schedules. Some half-way houses provide treatment including individual counseling and group, family, and couples therapy. Lengths of stay can be limited or contingent upon the achievement of specific goals. Halfway houses for women are scarce and few can accommodate children.

Criminal justice system halfway houses do not necessarily include any substance abuse treatment although they typically include the elements listed above. These halfway houses can be used as a step up to increased freedom for persons released from prison or as a step down for individuals who require more supervision (e.g., for violation of probation requirements). Regular drug testing is conducted and positive screens can result in sanctions, including re-incarceration. Participants leave the facility for work, school, or therapy, but are otherwise restricted to the halfway house. Criminal justice system halfway houses are located within the community, but can be attached to a jail or other correctional institution. Lengths of stay may be tied to lengths of sentences and are typically based on progress toward specific goals.

[47] Families were often seen as the cause of their adolescent's problem in previous TC models and were not allowed to interact with their children during treatment in TCs.

Group Homes

Group homes, or three-quarter-way houses, function as transitional living arrangements that incorporate a variety of levels of treatment planning and staff supervision. Residents may be employed or attend school and participate in treatment outside of the home. Responsibilities for the house are shared and residents are involved in governance activities. The length of stay is usually unlimited as long as abstinence is maintained. All group home models incorporate substance-free living to support abstinence.

Therapeutic Foster Care is a type of group home setting in which a small group of adolescents are placed into a family home with foster parents (who may be in recovery themselves). A discussion of therapeutic foster care can be found in *A Guide to Evidence-Based Mental Health Practices for Children, Adolescents and their Families*.

The Oxford House Model

Oxford House is a group home model that includes resident self-governance and self-sufficiency and is described as democratically run, self-supporting, and substance-free. Oxford House, Inc., a publicly supported, non-profit 501(c)3 corporation, is the umbrella organization that provides a network connecting all Oxford Houses and allocates resources to duplicate the Oxford House concept. The organization was established in 1975 and there are now more than one thousand Oxford Houses in the United States as well as locations in Canada and Australia.

Oxford Houses are designed to prevent relapse. All Oxford Houses are self-run in a democratic fashion. Members are responsible for all household expenses. Any member who uses alcohol or drugs is immediately expelled. Each house must abide by these regulations in order to obtain and retain its Oxford House Charter. The number of residents in a House may range from six to fifteen and there are houses for men, women, and some that accept women with children.

Information about this model can be found on the web at http://www.oxfordhouse.org/ or www.icagroup.org. The Oxford House Manual can be found at http://www.oxfordhouse.org/chapter-maunal.pdf.

Acute Care

Acute care settings (e.g., emergency rooms and hospitals) are used for detoxification, stabilization and establishing linkages to resources for ongoing treatment.

Inpatient Treatment

Inpatient treatment was originally developed for the treatment of alcohol use disorders and typically consisted of twenty-eight-day stays in hospitals or residential treatment facilities during which daily activities were provided in a structured format. Generally supportive, and sometimes confrontational in nature, inpatient treatment was aimed at combating denial and initiating participation in the twelve steps of recovery originally delineated by Alcoholics Anonymous. Treatment components included didactic learning about the processes of substance use illnesses and recovery, engagement in self-help programs, and family involvement. The traditional twenty-eight-day inpatient treatment regimen was developed with little contribution from empirically based research. In recent years, the use of this model has been steadily declining. Third party coverage is typically limited to brief (three to five day) inpatient stays for detoxification of individuals in need of intensive medical monitoring and management of symptoms of withdrawal.

Generally accepted criteria for detoxification on inpatient basis include (1) severe overdose, respiratory depression, or coma; (2) severe withdrawal syndromes complicated by polysubstance use or a history of delirium tremens and/or seizures; (3) acute or chronic unstable general medical conditions that could complicate withdrawal (as can occur in older adults) such as renal disease, cardiac problems, or diabetes; (4) marked psychiatric comorbidity with dangerousness to self or others; and (5) acute substance dependence and a history of unresponsiveness to other less intensive forms of treatment.

AFTERCARE

Follow-up and continuing care have been found to be critical to recovery. Aftercare, or continuing care, follows discharge from programs when clients no longer require the level of intensity provided during primary treatment. Aftercare can include participation in self-help groups, residential care, ongoing pharmacotherapy, and other relapse prevention activities. It can also include booster sessions to review relapse prevention, self-management, and other skills acquired during therapy.

Persons in aftercare require an array of services and supports including, safe and affordable housing in a drug-free environment, income, employment, a substance-free social support system, and medical care. Aftercare components for individuals with co-occurring disorders typically include life skills education, twelve-step or double trouble group participation, case management, supported employment, and assistance with housing. Aftercare is also a critical component of treatment programs for persons involved in the justice system following release from incarceration or court-ordered treatment. Such individuals often require assistance in multiple domains (as previously discussed in the section on case management).

Individuals with co-existing disabilities can require more sustained aftercare resources to enhance skills, develop alternative social support networks, obtain employment, and achieve other related treatment goals. Aftercare services for individuals with co-existing disabilities tend to include:

- Ongoing and frequent monitoring via different modes of communication
- Inclusion of friends, family, and advocates whose care and support are often relied upon
- An expanded circle of people involved with recovery (e.g., personal care attendants, residential facility staff, and home health care providers)
- Modifications to aftercare plans that include additional supports and services (e.g., transportation and communication aides)
- Significant coordination and case management services that are resource intensive
- Transition planning that includes information sharing regarding needs, functional limitations and capabilities, and accommodations

OTP participants on methadone maintenance therapy may prefer to receive ongoing care from community-based physicians[48] who are affiliated with, or have arrangements with OTPs. Participants

[48] Methadone can be ordered by private physicians, and medication can be obtained from specially registered pharmacies under a SAMHSA-approved protocol. Under this arrangement, patients on extended take-home-dosing schedules (up to one month) no longer have to ingest their doses under observation.

who display one year of stability in treatment, a history of negative drug tests, social stability, and minimal need for psychosocial services and supports are deemed good candidates for such aftercare. Office-based opioid treatment (OBOT) offers several advantages including less intensive service requirements, less restrictive environments, minimization of stigma, and expansion of treatment options, especially in areas where access to OTPs is limited. Studies show that such arrangements are beneficial and participants experience few relapses. Moreover, little to no diversion of medications occurs and there are higher levels of patient satisfaction when compared to OTP medication provision (although not significantly different from comparable OTP-based monthly visits and take-home schedules).

A number of strategies are used to help clients maintain contact with treatment programs following discharge including:

- Continuing care or aftercare group meetings that can be attended on a weekly or more frequent basis as needed
- Individual counseling made available on an as needed basis
- Family therapy for clients and their families, as well as for families without clients present during episodes of relapse
- Substance-free activities such as recreation, leisure, education, and social activities (e.g., dances, field trips, summer barbecues, picnics, holiday events, and lectures on topics not necessarily related to treatment or recovery)
- Alumni meetings
- Alumni clubs with regular meetings and events sponsored by programs (e.g., speakers on motivational and educational issues)
- Peer mentoring programs in which alumni assist new clients through sharing experiences, advice, and information regarding program expectations
- Surveys and newsletters mailed to alumni as a way to collect post treatment data, encourage participation in alumni activities, and encourage ongoing contact with the program (particularly during crises)

MEASUREMENT

SCREENING AND ASSESSMENT

Screening for substance use is designed to identify individuals who have, or are at risk for, substance use-related problems, and identify persons who require further assessment. While many widely used and well-researched screening and assessment instruments are available, no single tool is available for all forms of substances of abuse or has been found appropriate for all populations. Screening and assessment instruments vary widely in their ability to detect substance use disorders and attendant mental health, physical health, family functioning, social functioning, and employment problems.

An ideal screening instrument correctly identifies most individuals with substance use disorders and does not select many who do not have substance use disorders. In general, it is preferable to use screening instruments that possess a high degree of sensitivity even at the cost of specificity. Instruments used should be broad in their ability to detect persons who have a potential substance use problem irrespective of specific substance(s) used.

Features governing the selection of screening and assessment instruments include:

- Test-retest reliability
- Convergent validity (i.e., the instrument is strongly correlated with other instruments that purport to measure similar constructs)
- Availability of normative data for representative samples/groups based on, for example, age, race, gender, and different types of settings (e.g., schools, detention centers, and treatment settings)
- Relative ease of administration
- Length
- The availability of detailed user's manuals
- Appropriate scoring materials
- Cost (e.g., fees for use, credentials required of screeners/assessors, etc.)
- Window of detection (i.e., current use vs. lifetime use)
- Sensitivity in the measurement of meaningful behavioral changes over time
- Demonstrated ability to measure outcomes that correspond to criteria or standards for comparison (e.g., school performance, performance in treatment, and substance use relapse)

Because individuals' situations and treatment needs change over time, screening and assessment should be conducted on an ongoing basis. For example, it is recommended that screenings for adolescents who are at high risk for substance use problems be repeated every six months.

In addition to screening for substance use disorders, it is recommended that clients receive screening for co-occurring psychiatric disorders, co-existing disabilities, infectious diseases (including tuberculosis, hepatitis, HIV/AIDS, and sexually transmitted diseases), nutritional deficits, liver disease, violence, sexual abuse, incest, trauma, and dental problems.

Assessment has long been recognized as a core component of effective substance disorder treatment. The Center for Substance Abuse Treatment (CSAT) indicates the following elements should be included in assessments, consistent with a biopsychosocial perspective:

Domain	Description
Medical Conditions and Complications	Infectious illnesses, chronic illnesses requiring intensive or specialized treatment, pregnancy, and chronic pain
Motivation/Readiness to Change	Degree to which the client acknowledges that substance use behaviors are a problem and is willing to confront them honestly
Physical, Sensory, or Mobility Limitations	Physical conditions that may require specially designed facilities or staffing
Relapse History and Potential	Historical relapse patterns, periods of abstinence, and predictors of abstinence; client awareness of relapse triggers and craving
Substance Abuse/Dependence	Frequency, amount, and duration of use; chronicity of problems; indicators of abuse or dependence
Developmental and Cognitive Issues	Ability to participate in confrontational treatment settings, and benefit from cognitive interventions and group therapy
Family and Social Support	Degree of support from family and significant others, substance-free friends, involvement in support groups
Co-Occurring Psychiatric Disorders	Other psychiatric symptoms that are likely to complicate the treatment of the substance use disorder and require treatment themselves, concerns about safety in certain settings (note that assessment for co-occurring disorders should include a determination of any psychiatric medications that the patient may be taking for the condition)
Dependent Children	Custody of dependent children or caring for non-custodial children and options for care of these children during rehabilitation
Trauma and Violence	Current domestic violence that affects the safety of the living environment, co-occurring posttraumatic stress disorder, or trauma history that might complicate rehabilitation
Treatment History	Prior successful and unsuccessful rehabilitation experiences that might influence decisions about type of setting indicated
Cultural Background	Cultural identity, issues, and strengths that might influence the decision to seek culturally specific rehabilitation programs, culturally driven strengths or obstacles that might dictate level of care or setting
Strengths and Resources	Unique strengths and resources of the client and his or her environment
Language	Language or speech issues that make it difficult to communicate or require an interpreter familiar with substance abuse

(SAMHSA TIP # 45)

It should be noted that assessment instruments are not a substitute for client interviews; interviews are used to validate findings of assessment instruments. Collateral reports and laboratory tests are used to supplement and/or augment information from assessments and can be useful for individuals who cannot accurately recall information (e.g., due to cognitive impairments) and for those who are reluctant to disclose (e.g., fear of repercussions from illicit drug use, stigma, etc.).

Appendix G contains several screening and assessment instruments, available information on where to obtain them, and an overview of biological testing options.

OUTCOMES

Historically, evaluations of the effectiveness of substance abuse treatment programs focused on the number of clients seen, census levels, or adherence to protocols and regulations without consideration of retention of clients in treatment, post treatment functioning, or the use of aftercare services and supports. In the past, substance abuse treatment programs did not receive funding to collect outcome data and were discouraged from using funds designated for services to conduct evaluations. Currently, however, funders and the desire to improve services have promoted data collection related to outcomes.

Outcome information can be used to evaluate the effectiveness of services and supports in order to ascertain components that are effective and those that are not, assist in resource allocation decision-making, justify programmatic costs and ascertain cost offsets, make program modifications, garner support and funding streams, demonstrate improvements in clients' health status, level of functioning, quality of life, and increase client satisfaction. Outcome data should be disseminated to stakeholders in a manner that allows for making a meaningful impact on determining future program development and design.

While it is generally agreed that evaluation is a worthwhile endeavor, there is little agreement on specific individual outcome measures. For many years, abstinence[49] was the criteria by which success was judged. Now, however, there is recognition that a number of different criteria (e.g., improvements in personal relationships and family functioning, reductions in encounters with the justice system, increases in employment, decreases in substance use, and client satisfaction[50]) need to be used to judge success. Moreover, it is recognized that ongoing outcome assessment is also important as changes over time and life circumstances can impinge upon efforts to maintain sobriety. It is recommended that follow-up data be collected at thirty, sixty, and ninety day post treatment intervals for at least one year after discharge.

Payors have increasingly demanded treatment approaches that have been validated in outcome studies, especially studies that have been able to quantify savings in the expenditure of resources. In 2004 SAMHSA started integrating performance measurement into the SAPT Block Grant as part of its National Outcomes Measures (NOMs) initiative. The NOMs domains and their associated outcome measures are as follows:

- Reduced Morbidity (for substance abuse: abstinence from drug/alcohol use, including decreased use of substances of abuse, nonuser stability, increasing perceived risk, increasing disapproval, increasing age of first use; for mental health: decreased mental illness symptomatology)
- Employment/Education (getting and keeping a job; workplace drug and alcohol policy; alcohol, tobacco, and other drug-related school suspensions and expulsions; or enrolling and staying in school)
- Crime and Criminal Justice (decreased criminality, incarcerations, and alcohol-related car crashes and injuries)
- Stability in Housing (increased stability in housing)
- Social Connectedness (family communication about drug use, increasing social supports and social connectedness)
- Access/Capacity (increased access to services/ increased service capacity)
- Retention (for substance abuse: increased retention in treatment, access to prevention messages, evidence-based programs/strategies; for mental health: reduced utilization of psychiatric inpatient beds)

[49] Since relapse is an expected aspect of recovery, abstinence may not be the sole indicator of successful treatment. Moreover, subsequent to treatment, some individuals will not attain abstinence for the remainder of their lives but will enjoy improvements in stability and productivity.

[50] At this time, there is no nationally recognized client satisfaction survey for substance abuse treatment.

- Perception of Care (or services)
- Cost Effectiveness
- Use of Evidence-Based Practices

Substance Abuse and Mental Health Services Administration
National Outcome Measures (NOMs)

DOMAIN	OUTCOME	MEASURES		
		Mental Health	Substance Abuse	
			Treatment	Prevention
Reduced Morbidity	Abstinence from Drug/Alcohol Use	NOT APPLICABLE	Reduction in/no change in frequency of use at date of last service compared to date of first service ▶	30-day substance use (non-use/reduction in use) ▶
				Perceived risk/ harm of use ▶
				Age of first use ▶
				Perception of disapproval/attitude
	Decreased Mental Illness Symptomatology	Under Development	NOT APPLICABLE	NOT APPLICABLE
Employment/ Education	Increased/Retained Employment or Return to/Stay in School	Profile of adult clients by employment status and of children by increased school attendance ▶	Increase in/no change in number of employed or in school at date of last service compared to first service ▶	Perception of workplace policy; ATOD-related suspensions and expulsions; attendance and enrollment
Crime and Criminal Justice	Decreased Criminal Justice Involvement	Profile of client involvement in criminal and juvenile justice systems	Reduction in/no change in number of arrests in past 30 days from date of first service to date of last service ▶	Alcohol-related car crashes and injuries; alcohol and drug-related crime
Stability in Housing	Increased Stability in Housing	Profile of client's change in living situation (including homeless status) ▶	Increase in/no change in number of clients in stable housing situation from date of first service to date of last service ▶	NOT APPLICABLE
Social Connectedness	Increased Social Supports/Social Connectedness[1]	Under Development	Under Development	Family communication around drug use
Access/Capacity	Increased Access to Services (Service Capacity)	Number of persons served by age, gender, race and ethnicity ▶	Unduplicated count of persons served; penetration rate-numbers served compared to those in need ▶	Number of persons served by age, gender, race and ethnicity
Retention	Increased Retention in Treatment - Substance Abuse	NOT APPLICABLE	Length of stay from date of first service to date of last service ▶	Total number of evidence-based programs and strategies; percentage youth seeing, reading, watching, or listening to a prevention message
			Unduplicated count of persons served ▶	
	Reduced Utilization of Psychiatric Inpatient Beds - Mental Health	Decreased rate of readmission to State psychiatric hospitals within 30 days and 180 days ▶	NOT APPLICABLE	NOT APPLICABLE
Perception of Care	Client Perception of Care[2]	Clients reporting positively about outcomes ▶	Under Development	NOT APPLICABLE
Cost Effectiveness	Cost Effectiveness (Average Cost)[2]	Number of persons receiving evidence-based services/number of evidence-based practices provided by the State	Number of States providing substance abuse treatment services within approved cost per person bands by the type of treatment	Services provided within cost bands
Use of Evidence-Based Practices	Use of Evidence-Based Practices[2]		Under Development	Total number of evidence-based programs and strategies

[1] For ATR, "Social Support of Recovery" is measured by client participation in voluntary recovery or self-help groups, as well as interaction with family and/or friends supportive of recovery.
[2] Required by 2003 OMB PART Review.

SUMMARY AND CONCLUSIONS

A number of conclusions can be drawn from the literature including:

- No single treatment is available that is appropriate for all individuals with substance use problems and disorders.
- Clients should be offered the choice of appropriate treatment and support options; they are more apt to remain committed to treatments they have selected.
- It is critical to match treatment settings, interventions, services, and supports to each individual's particular problems and needs in order to maximize the potential for beneficial outcomes. Treatment matching has been shown to increase treatment retention and lead to more beneficial outcomes from treatment. In addition, it is more cost-effective since unnecessary and inappropriate treatment is eliminated.
- Treatment needs to be readily available and accessible since individuals with substance use problems can be ambivalent about entering treatment. Potential opportunities can be lost if treatment is not immediately available or readily accessible when people are ready to be engaged.
- Effective treatment addresses not only substance use problems but associated medical, psychological, social, vocational, and legal needs and challenges.
- Collaboration with other systems (e.g., medical, social services, mental health, justice, education, and child welfare, etc.) offers opportunities to integrate care and produce efficiencies.
- Treatment and plans of services and supports need to be assessed on a continuous basis and modified as needed to ensure that changing needs are met. Varying combinations of services and treatment components (e.g., counseling or psychotherapy, medication, medical services, family therapy, parenting instruction, vocational rehabilitation, and social and legal services) may be needed during the course of treatment and recovery.
- Treatment approaches, services and supports should be appropriate to the individual's age, gender, ethnicity, and culture as well as match their stage of readiness for change.
- Remaining in treatment for an adequate period of time is critical for treatment effectiveness. Time spent in treatment has been shown to be directly related to outcomes irrespective of modality. Research indicates that for most individuals, a minimum three months is needed to produce change. Engagement and retention strategies are needed because people often leave treatment prematurely. (Studies show that fifty percent of individuals who enter treatment leave prior to gaining benefit from it.)
- Cognitive-behavioral interventions are critical components of effective treatment for addressing motivation, building skills to resist substance use, replacing substance use activities with constructive and rewarding substance-free activities, developing problem-solving skills, and enhancing interpersonal relationships to foster adaptive functioning in the family and community.
- Pharmacotherapy services include the medical management of withdrawal, reducing relapses, treatment of co-occurring psychiatric disorders and medical problems including HIV/AIDS. Pharmacotherapy is not an effective stand-alone service; it should be integrated with other treatment services.

- Individuals with co-occurring psychiatric and substance use disorders should receive integrated treatment wherein both disorders are considered primary. And, since both disorders often co-occur, individuals presenting for either condition should be assessed and treated for the co-occurrence of the other type of disorder.
- Medical detoxification is only the first stage of treatment and, by itself, is rarely sufficient for altering long-term substance use and achieving abstinence; treatment following detoxification is essential.
- Treatment does not need to be voluntary to be effective. Legal incentives and sanctions can significantly increase engagement and retention rates as well as beneficial outcomes from treatment.
- Substance use should be monitored on a continuous basis since lapses or slips can occur during treatment. Objective monitoring of substance use can help individuals resist urges to use substances as well as provide early evidence of use so that treatment plans can be modified as needed. Feedback to patients who test positive for substance use is an important element of such monitoring.
- Treatment programs should screen for infectious diseases (e.g., HIV/AIDS, hepatitis, tuberculosis and others), provide counseling aimed at modification of behaviors that place individuals or others at risk for infection, and those with infectious diseases manage their illnesses.
- Recovery from substance use disorders can be a long-term process and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to substance use can occur during or after successful treatment episodes. Prolonged treatment and multiple episodes of treatment may be needed to achieve long-term abstinence.
- Approximately fifty to sixty percent of patients resume substance use within six months of discharge from treatment. Ongoing treatment and support is critical to long term recovery. Participation in self-help support programs both during and subsequent to treatment is often helpful in maintaining abstinence.

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APPENDIX B: SELECTED RESOURCES

SELF HELP:

Alcoholics Anonymous: http://aa.org/ or www.alcoholics-anonymous.org
Narcotics Anonymous: www.na.org
NA is a twelve-step program that has been adapted from AA and is more inclusive with respect to any mood-altering substance than AA. Narcotics Anonymous (NA) and other programs change some wording in the first and last steps (in parentheses) to make them appropriate to users of other substances.

1. We admitted we were powerless over alcohol (our addiction), that our lives had become unmanageable.
2. We came to believe that a Power greater than ourselves could restore us to sanity.
3. We made a decision to turn our will and our lives over to the care of God as we understood Him.
4. We made a searching and fearless moral inventory of ourselves.
5. We admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. We were entirely ready to have God remove all these defects of character.
7. We humbly asked Him to remove our shortcomings.
8. We made a list of all persons we had harmed and became willing to make amends to them all.
9. We made direct amends to such people wherever possible, except when to do so would injure them or others.
10. We continued to take a personal inventory and when we were wrong promptly admitted it.
11. We sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics (addicts) and to practice these principles in all our affairs.

Cocaine Anonymous (CA): www.ca.org
Methadone Anonymous (MA) is a twelve-step group that supports recovery concurrent with OAT (opioid agonist treatment). MA groups arose largely in response to the discrimination patients in medication-assisted treatment (MAT) programs have been subjected to in other twelve-step groups. Information can be obtained from the National Alliance of Methadone Advocates at www.methadone.org.
Chemically Dependent Anonymous is a Twelve-Step fellowship that focuses on abstinence from all mood altering substances. Information can be found at www.cdaweb.org.
Double Trouble in Recovery (DTR) uses an adaptation of the original twelve steps. For example, the identified problem in step one is changed to co-occurring disorders, and the population to be assisted is changed in step twelve. Meetings are chaired by members. Research on DTR has shown that participation significantly enhances dual recovery progress, including adherence to medication regimens, reductions in symptomatology and hospitalizations. Information can be obtained from http://www.doubletroubleinrecovery.org/.
Dual Disorders Anonymous uses a format similar to DTR and is a twelve step self-help program based on the principals of the twelve steps and the experiences of individuals in recovery with a dual diagnosis. The program assists with recovery from substance use disorders and psychiatric illnesses by focusing on relapse prevention and learning to avoid the risks that lead to resumption of substance use as well as reducing the symptoms of psychiatric illnesses. Group members chair meetings.
Dual Recovery Anonymous (DRA) uses an adapted and expanded version of the original twelve steps. The program retains most of the traditional language while modifying certain terms in an effort to meet the needs of mental health consumers. For example, character defect has been replaced by

terms such as assets and liabilities. The expanded approach changes the identified problem to co-occurring disorders, and the population to be assisted has been changed accordingly. In addition, DRA incorporates affirmations into three of the twelve steps. The organization provides a meeting format that is used by fellow members who chair the meetings. Information can be obtained from http://www.draonline.org/.

Dual Diagnosis Anonymous adds five steps to the traditional twelve steps which emphasize clinical interventions, therapies, and the potential need for medical management. The organization provides a meeting format that is used by fellow members who chair the meetings. Information can be obtained from the organization's web site: http://www.ddaworldwide.org/.

Depression and Bipolar Support Alliance: www.dbsalliance.org

National Alliance for the Mentally Ill: www.nami.org

Moderation Management (MM) is a mutual-help behavioral change program and national support group network for individuals concerned about their alcohol consumption and want to take action to cut back or quit drinking before drinking problems become severe. MM is designed to empower individuals to accept personal responsibility for choosing and maintaining their own path, whether moderation or abstinence. MM promotes early self-recognition of risky drinking behavior, when moderate drinking is a more easily achievable goal. It consists of a nine-step professionally reviewed program that provides information about alcohol, moderate drinking guidelines and limits, drink monitoring exercises, goal setting techniques, and self-management strategies. Members also use the nine steps to find balance and moderation in many other areas of their lives, one small step at a time. MM meetings are free of charge; small donations made by individual members and MM groups are used to support community and national programs. Information can be obtained from http://www.moderation.org/.

Founded in 1948, **Alcoholics Victorious (AV)** support groups are for recovering people who recognize Jesus Christ as their higher power. AV meetings use both the twelve steps and the Alcoholics Victorious Creed. Information can be obtained from on the web at http://www.alcoholicsvictorious.org/.

SOS (Secular Organizations for Sobriety/Save Our Selves) is a self-empowerment alternative to AA's spiritual twelve-step support model. Each SOS meeting is autonomous and held on an anonymous basis at no charge to participants and stresses James Christopher's *Sobriety Priority* abstinence-based, self-empowerment model. Information can be obtained from http://www.sossobriety.org/ and www.cfiwest.org/sos.

Recovery Training and Self-Help (RTSH) assists individuals in becoming part of a recovery community. Participants have been found to be less likely to relapse to opioid use and criminal behavior and more likely to be employed. Information can be found at www.smartrecovery.org.

Self-Management and Recovery Training (SMART) is based on Rational Emotive Behavior Therapy (REBT), developed in the 1950s by Albert Ellis and based on cognitive-behavioral therapy (CBT). It is an alternative to AA and NA and offers free face-to-face and online mutual help groups. The program emphasizes enhancing motivation, refusing to act on urges to use, managing life's problems in an effective manner without substances, and developing a positive, balanced, and healthy lifestyle. Individuals attend face-to-face meetings, online recovery meetings, read publications, or participate in on-line listserve discussion groups. The program also has coordinators, who are volunteer non-professionals, who run groups. Professional Advisors, who are volunteer behavioral health professionals, advise and support the Coordinators. A volunteer Board of Directors formulates the program and policies. The organization's web site has a list of International meeting and contact persons. There is also a recommended reading list available online as well as a library of addiction and recovery resources. Information can be obtained from http://www.smartrecovery.org/.

Rational Recovery (RR) is another self-help program that utilizes the techniques of Rational-Emotive Therapy. While the groups are considered self-help, they include the participation of an advisor who is

a licensed therapist aware of community resources and is skilled in crisis intervention. This program uses the Addictive Voice Recognition Technique (AVRT) to achieve abstinence. RR is opposed to addiction treatment based on the view that it is ineffective, often harmful rather than helpful, and requires a diagnosis. Some Rational Recovery groups are gender-based for women only. Information can be obtained from http://www.rational.org/.

Women For Sobriety (WFS) is both an organization and a self-help program for women with alcohol problems. It is the first national self-help program for women with alcohol problems and was started in 1976. Women for Sobriety focuses on sobriety and the need to overcome depression and guilt and is based on a Thirteen Statement Program that encourages emotional and spiritual growth aimed at helping women to overcome alcohol use problems and acquire a new lifestyle. The organization has adopted a set of principles that specifically address women's recovery needs through a monthly newsletter, information and referrals, phone support, group meetings, pen pals, conferences, and group development guidelines. Information can be obtained from http://www.womenforsobriety.org/.

Many adult survivors of childhood abuse do not believe they have any power or control. A twelve-step approach that asks them to accept their powerlessness can be more detrimental than beneficial for such individuals. Twelve-step organizations have been developed to work with this population, such as **Survivors of Incest Anonymous** (http://www.siawso.org/), and have modified this step to make it more relevant and helpful.

White Bison is a Native American twelve-step approach that incorporates the medicine wheel with the twelve step teachings of AA. Information can found at http://www.whitebison.org/.

Co-Dependents Anonymous, Inc. (CoDA), a fellowship of men and women whose common purpose is to develop healthy relationships. CoDA relies on the Twelve Steps and Twelve Traditions for knowledge and wisdom. Information can be found at www.codependents.org.

Adult Children of Alcoholics (ACA) is a twelve-step program for people who grew up in homes with alcohol abuse. Information can be found at www.adultchildren.org.

Families Anonymous is a Twelve-Step fellowship for relatives and friends of persons with drug, alcohol, or behavioral problems using the Twelve Steps. Members learn to achieve their own serenity in spite of the turmoil which surrounds them. In addition to booklets, pamphlets, and bookmarks, publications include daily thought book, *Today A Better Way* and a bi-monthly newsletter, *The 12 Step Rag*. Information is available from www.familiesanonymous.org.

Co-Anon Family Groups are fellowships of men and women who are husbands, wives, parents, relatives, or close friends of someone who has a substance dependency. Information can be found at www.co-anon.org/.

Alateen is a group made up of young Al-Anon members, usually teenagers, whose lives have been affected by someone else's drinking. Information can be obtained from www.al-anon.alateen.org. **Alatot** is another group for children.

Nar-Anon Family Group is a twelve-step recovery program for the families and friends of individuals with substance addictions. Information can be found at www.naranon.com.

Al-Anon is a group for relatives and friends of individuals with alcohol use disorders that offers opportunities to share experiences and focus on solving common problems. The purpose of Al -Anon is to help families by practicing the Twelve Steps, welcoming and giving comfort to families of alcoholics, and providing understanding and encouragement to the person with an alcohol use disorder. Information can be found at www.al-anon.org.

The **National Association for Children of Alcoholics (NACoA)** is a national nonprofit membership organization for children of parents with substance use disorders that provides support and advocacy, Information can be found at http://www.nacoa.org/.

Winners Circles is a mutual-help group for individuals who have been incarcerated and have a substance disorder. The group offers ex-offenders with addictive disorders the opportunity to discuss issues in common and engage in problem-solving techniques within a supportive environment.

Winners' Circles are highly specialized peer-led mutual support groups that support recovery and prevent relapse in a manner tailored to the needs of ex-offenders and modeled to some extent after Twelve-Step programs. Sharing is focused on recovery within the context of the problems faced upon re-entry from correctional institutions. Peer leaders strive to create a family-friendly atmosphere so that the Winners' Circle meetings also meet the socialization needs of ex-offenders in recovery. Ten Winners' Circles have been established throughout Illinois.

The **NARCONON** program was founded in 1966 by William Benitez, an inmate of Arizona State Prison, that now consists of a worldwide network of drug prevention and drug-free social education rehabilitation centers that use live and video presentations as well as written materials consisting of the Drug Rehabilitation Technology developed by L. Ron Hubbard. Prevention activities consist of educational programs for school children, parents and educators, training for peer leaders and professionals, and broad information campaigns. Information can be obtained from http://www.narconon.org/.

ADVOCACY:

Recovery Community Support Program (CSAT): www.samhsa.gov/search/search.html
Faces & Voices of Recovery: http://www.facesandvoicesofrecovery.org/main/index.php
SAMHSA's Recovery Community Services Program: http://rcsp.samhsa.gov/index.htm
American Civil Liberties Union (ACLU): www.ACLU.org
Advocates for Youth: www.advocatesforyouth.org
Advocates for Youth (formerly the Center for Population Options) is dedicated to creating programs and promoting policies that help young people make informed and responsible decisions about their sexual and reproductive health. It provides information, training, and advocacy to youth-serving organizations, policymakers, and the national and international media. Advocates for Youth also sponsors the Youth Resource Web site at www.youthresource.com for LGBT youth.

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION (SAMHSA) SITES:

SAMHSA Home Page: http://www.samhsa.gov/
SAMHSA Weekly Report: http://samhsa.gov/wklyrpt.htm
SAMHSA's Division of Pharmacologic Therapies (DPT): www.dpt.samhsa.gov
CSAT's Division of Pharmacologic Therapies manages regulatory oversight activities necessary to implement SAMHSA regulations (42 C.F.R. Part 8) on the use of opioid agonist medications approved by the FDA for treatment. These activities include supporting the certification and accreditation of more than 1,000 opioid treatment programs that collectively treat more than 200,000 patients annually.
Center for Substance Abuse Treatment (CSAT): http://www.samhsa.gov/csat/csat.htm
Substance use illnesses Technology Transfer Centers (ATTC): www.nattc.org
National Evaluation Data and Technical Assistance Center (NEDTAC):
http://calib.com/nedtac/index.htm
National Technical Center for Substance Abuse Needs Assessment:
http://www.tiac.net/users/ntc/
Center for Substance Abuse Prevention (CSAP): http://www.samhsa.gov/csap/index.htm
Prevline: http://www.health.org/
National Clearinghouse for Drug and Alcohol Information Online Catalog:
http://www.health.org/pubs/catalog/
Center for Mental Health Services (CMHS): http://www.samhsa.gov/cmhs/cmhs.htm
The Knowledge Exchange Network (KEN): http://www.mentalhealth.org/

OTHER FEDERAL SITES:

National Institute on Alcohol Abuse and Alcoholism (NIAAA): http://www.niaa.nih.gov/
National Institute on Drug Abuse (NIDA): http://www.nida.gov/
Department of Health and Human Services (HHS): http://www.os.dhhs.gov:80/
Healthfinder: http://www.healthfinder.gov/
HHS Partner Gateway: http://www.os.dhhs.gov:80/partner/
Drug Enforcement Administration: http://www.usdoj.gov/dea/index.htm
Food and Drug Administration (FDA): http://www.fda.gov/fdahomepage.html
Health Care Financing Administration (HCFA): http://www.hcfa.gov/
Education Center for Alcohol and Other Drug Prevention: http://www.edc.org/hec/
Justice Information Center (NCJRS): http://www.ncjrs.org/
Library of Congress: http://lcweb.loc.gov/homepage/lchp.html
Drug Abuse Warning Network (DAWN): http://www.health.org/pubs/dawn/index.htm
Monitoring the Future: http://www.isr.umich.edu/src/mtf/index.html
ONDCP Drugs and Crime Clearinghouse: http://www.ncjrs.org/drgshome.htm
White House Social Statistics Briefing Room: http://www.whitehouse.gov/fsbr/ssbr.html
Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/
Workplace Substance Abuse Prevention: www.dol.gov/dol/workingpartners.htm

EVIDENCED-BASED TREATMENT PRACTICES:

National Institute on Drug Abuse (NIDA): www.nida.nih.gov
National Institute on Alcohol Abuse and Alcoholism: www.niaaa.nih.gov
Substance Abuse and Mental Health Services Administration's (SAMHSA's) National Clearinghouse for Alcohol and Drug Information (NCADI): www.ncadi.samhsa.gov

CO-OCCURRING PSYCHIATRIC AND SUBSTANCE USE DISORDERS:

SAMHSA's Co-Occurring Center for Excellence (COCE): http://coce.samhsa.gov/
Dual Diagnosis Recovery Network (DDRN): www.dualdiagnosis.org
Support Together for Emotional/Mental Serenity and Sobriety (STEMSS)
Michael G. Bricker, Executive Director
STEMSS Institute and Bricker Clinic
140 E. Dekora Street
Saukville, WI 53080
(414) 268-0899
STEMSS is a psychoeducational group intervention. The model has been developed to train facilitators to initiate, implement, and maintain support groups for consumers. The six steps of the program and the support groups are intended to complement participation in traditional twelve-step programs.
Consumer Organization and Networking Technical Assistance Center (CONTAC): www.contac.org
CONTAC distributes a list of names and contacts for resources and information on substance addictions, co-occurring disorders, services, and mutual help support. CONTAC also offers the Leadership Academy, a training program that is designed to help consumers learn how to engage in and develop consumer services. Recently, a training component focusing on substance abuse/dependence was developed and incorporated into the program.
National Council on Alcoholism and Drug Dependence (NCADD): www.ncadd.org
NCADD has a nationwide network of nearly one hundred affiliates that provide information and referrals to local services, including counseling and treatment. NCADD also offers a variety of publications and resources.

National Empowerment Center: www.power2u.org
The National Empowerment Center has prepared an information packet, which includes a series of published articles, newspaper articles, and a listing of organizations and federal agencies that provide information, resources, and technical assistance related to substance abuse and dependence, co-occurring disorders, services, and mutual help support.
National Mental Health Association: www.nmha.org
The National Mental Health Association has expanded its mission to encompass substance abuse/addictions and co-occurring disorders. The organization continues to develop resources, documents, and publications. A designated section on the organization's Web site is dedicated to co-occurring disorders.
National Mental Health Consumers' Mutual Help Clearinghouse: www.mhselfhelp.org
The organization has developed and offers a resource kit, which provides the names and contacts for resources and information on substance addictions, co-occurring disorders, services, and mutual help support.

ORGANIZATIONS:

American Medical Association's Resources on Alcohol and Other Substances: http://www.ama-assn.org/special/aos/resource.htm
Drug Abuse Research Foundation: http://www.arf.org/
American Psychiatric Association: http://psych.org/
American Psychological Association: http://apa.org/
American Society of Addiction Medicine: http://www.asam.org
Center for Education and Drug Abuse Research (CEDAR):
http://www.eval.srv.cis.pitt.edu/~mmv/cedar.htm
Center for Substance Abuse Research (CESAR): http://www.bsos.umd.edu/cesar/cesar.html
Internet Alcohol Recovery Center: http://med.upenn.edu/recovery
National Association of State Alcohol and Drug Abuse Directors (NASADAD):
http://www.nasadad.org/default.htm
National Association of Alcoholism and Drug Abuse Counselors:
http://www.naadac.org/indexhtm
National Center on Addiction and Substance Abuse (CASA):
http://www.casacolumbia.org/absolutenm/templates/Home.aspx?articleid=287&zoneid=32
Partnership for a Drug-Free America: http://www.drugfreeamerica.org/
The National Council on Alcohol and Drug Dependence: http://www.ncadd.org/
NCADD provides assessment or referral on a sliding fee scale and has information on treatment facilities.

PREVENTION:

Substance Abuse and Mental Health Services Administration (SAMHSA): www.samhsa.gov
SAMHSA's National Clearinghouse for Alcohol and Drug Information (NCADI):
www.ncadi.samhsa.gov
Building Blocks for a Healthy Future: www.bblocks.samhsa.gov
The Center for Substance Abuse Prevention's (CSAP) Centers for the Application of Prevention Technologies (CAPTs): http://captus.samhsa.gov
A Family Guide To Keeping Youth Mentally Healthy and Drug Free: www.family.samhsa.gov/
Partners for Substance Abuse Prevention: http://preventionpartners.samhsa.gov/default.asp
Prevention Pathways: http://preventionpathways.samhsa.gov/
Prevention Platform: http://preventionplatform.samhsa.gov/

Safe Schools/Healthy Students: www.sshs.samhsa.gov/
SAMHSA Model Programs: http://modelprograms.samhsa.gov/
SAMHSA's Division of Workplace Programs: http://dwp.samhsa.gov/index.aspx
SAMHSA's Drug-Free Communities Support Program:
http://drugfreecommunities.samhsa.gov/
State Prevention Profiles: http://prevention.samhsa.gov/stateprofiles/
Synar Amendment: Protecting the Nation's Youth from Nicotine Addiction:
http://prevention.samhsa.gov/tobacco/
Too Smart To Start: www.toosmarttostart.samhsa.gov/
Centers for Disease Control and Prevention (CDC): www.cdc.gov
Office on Smoking and Health: http://www.cdc.gov/tobacco/
Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention Education Development Center, Inc.: www.edc.org/hec/
National Institutes of Health (NIH): www.nih.gov
National Institute on Alcohol Abuse and Alcoholism (NIAAA): www.niaaa.nih.gov
National Institute on Drug Abuse (NIDA): www.nida.nih.gov/
Office of Juvenile Justice and Delinquency Programs (OJJDP): www.ojjdp.ncjrs.org/
Office of National Drug Control Policy (ONDCP) Drug Policy Information Clearinghouse
www.whitehousedrugpolicy.gov
National Youth Anti-Drug Media Campaign: www.mediacampaign.org
Office of Safe and Drug-Free Schools (OSDFS): www.ed.gov/about/offices/list/osdfs/index.html
Campaign for Tobacco-Free Kids: http://tobaccofreekids.org
Children, Youth, and Families Education and Research Network (CYFERnet): www.cyfernet.org
Community Anti-Drug Coalitions of America (CADCA): http://cadca.org/
Monitoring the Future: www.monitoringthefuture.org/
National Asian Pacific American Families Against Substance Abuse (NAPAFASA):
www.napafasa.org/about/main.htm
The National Center on Addiction and Substance Abuse at Columbia University:
http://www.casacolumbia.org/absolutenm/templates/Home.aspx
National Family Partnership at Informed Families' Education Center: www.nfp.org
Red Ribbon Week Plant the Promise project: www.nfp.org/plantthepromise.htm
National Latino Council on Alcohol and Tobacco Prevention: www.nlcatp.org
Parents Resource Institute for Drug Education, Inc. (PRIDE): www.pride.org
Partnership for a Drug-Free America: www.drugfree.org
Prevention Partners, Inc.: www.preventionpartners.com/
CDC's Youth Risk Behavior Surveillance System (YRBSS):
www.cdc.gov/HealthyYouth/yrbs/index.htm
National Cancer Institute: www.cancer.gov/pinkbook
National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity
Promoting Physical Activity: A Guide for Community Action
www.cdc.gov/nccdphp/dnpa/pahand.htm
National Survey on Drug Use and Health: www.oas.samhsa.gov/nhsda.htm
NIMCO, Inc.: www.drugpreventionresources.com
Red Ribbon Resources: www.redribbonresources.com
SAMHSA Matrix: Substance Abuse Prevention & Mental Health Promotion:
www.samhsa.gov/Matrix/matrix_prevention.aspx
Tips for Teens: http://ncadi.samhsa.gov/promos/tipsforteens.aspx
Tobacco Information and Prevention Source (TIPS): www.cdc.gov/tobacco/index.htm

MAT:

American Association for the Treatment of Opioid Dependence, Inc. (AATOD): www.aatod.org)
National Institute on Drug Abuse (NIDA): www.nida.nih.gov
SAMHSA: (www.samhsa.gov)
SAMHSA's National Help Line and Treatment Improvement Exchange: www.ncadi.samhsa.gov
White House Office of National Drug Control Policy: www.whitehousedrugpolicy.gov
National Alliance of Methadone Advocates: www.methadone.org
International Center for Advancement of Substance use illnesses Treatment: www.OpiateSubstance use illnessesRx.info
Advocates for Recovery through Medicine: www.methadonetoday.org/armhelp.htm

NUTRITION & PREGNANCY:

National Center for Nutrition and Dietetics of the American Dietetic Association: www.eatright.org
Refers inquirers to registered dietitians in the local area who provide individual or group counseling or program information about diet during pregnancy.
National Women's Health Information Center: www.4women.gov/faq/preg-nutr.htm
Pregnancy and Nutrition, a seven-page pamphlet developed by this organization covers recommended dietary allowances for pregnant women, diet changes and weight gain, cravings, exercise, dietary supplements, diabetes, morning sickness, and nausea.
U.S. Department of Agriculture: www.barc.usda.gov/bhnrc/foodsurvey
The USDA has a 22-page survey form to assess respondents' knowledge of nutrition, food composition, labeling requirements, and serving sizes, as well as eating habits and attitudes.
The USDA also has information regarding food stamps on the web at www.fns.usda.gov/fns
Women, Infants and Children Program (WIC): www.fns.usda.gov/wic or www.nal.usda.gov/wicworks

JUSTICE SYSTEM:

Bureau of Justice Assistance (BJA): www.ojp.usdoj.gov/BJA/
Residential Substance Abuse Treatment for State Prisoners Formula Grant Program: www.cfda.gov
Treatment Accountability for Safer Communities (TASC): http://www.ojp.usdoj.gov/bjs/
Juvenile Justice Clearinghouse: http://www.ncjrs.org
National Evaluation Data and Technical Assistance (NEDTAC): http://www.calib.com
The National Drug Control Strategy: www.whitehousedrugpolicy.gov/
This program has encouraged the development of treatment and rehabilitation services for offenders who use drugs (e.g., Treatment Accountability for Safer Communities, formerly Treatment Alternatives to Street Crime; drug court programs; prison treatment programs).
Serious and Violent Offender Reentry Initiative: www.ojp.usdoj.gov/reentry/learn.html
In conjunction with several federal partners, the U.S. Department of Justice is spearheading this initiative to provide funding to promote successful reintegration of serious, high-risk offenders into the community. The Initiative seeks to address all obstacles to successful reentry, including substance abuse.
Parenting Programs for Male Offenders: www.vera.org/publication_pdf/fathers.pdf
SAMHSA GAINS Center: http://gainscenter.samhsa.gov/html/

This is a federal initiative for the development of resources for individuals with co-occurring substance and mental health disorders in the criminal justice system.

DRUG COURT:

National Association of Pretrial Services Agencies: www.napsa.org/
National TASC Conference (for case managers, assessment staff, clinicians): (www.nationaltasc.org/)
National Drug Court Institute: www.ndci.org/aboutndci.htm
Provides targeted training for all disciplines involved in drug courts; judges, prosecutors, defense attorneys, probation officers, treatment professionals
National Association of Drug Court Professionals Annual Training Conference: www.nadcp.org/home.html
The National GAINS Center: www.gainsctr.com/
The National GAINS Center for People with Co-occurring Disorders in the Justice System provides an online information source of value to those who work with offenders. The GAINS Center collects and analyzes information, and develops materials specifically for people who work with offenders with mental illness, and provides technical assistance to help localities plan, implement, and operate appropriate, cost-effective programs. **Training Resources for Working with the Criminal Justice System:**
Working with Criminal Justice Clients. www.neattc.org
Designed to familiarize substance abuse treatment counselors to work with criminal justice clients, the curriculum includes material on intersystem teamwork and relapse issues. **Training for Professionals Working with MICA (Mentally Ill Chemical Abusing) Offenders**. www.neattc.org
This one-day course module serves as cross-training for staff in law enforcement, mental health, and substance abuse settings.
Orientation to Therapeutic Community. www.mattc.org
Developed to introduce administrators and ancillary staff to the history, theory, and current research on the therapeutic community model, this training provides a fundamental framework for therapeutic communities. This training curriculum is not intended for front-line workers.
Therapeutic Community Experiential Training. www.mattc.org
Intended for frontline staff of start-up therapeutic communities, this five-day intensive experiential training provides participants with the knowledge, expertise, and attitudes that have been used effectively by professionals in the field.
Criminal Justice/Substance Abuse Cross Training: Working Together for Change. www.mattc.org
This program is designed to help administrators and professionals integrate criminal justice and substance abuse services systems to coordinate treatment and recovery services and overcome barriers to collaboration.
National Institute of Corrections (NIC): www.ncic.org
The Think Curriculum: Cognitive Interventions Program Manual and The Options Manual.
Virginia Substance Abuse Technology Transfer Center (VATTC): www.views.vcu.edu/vattc
Offers a criminal justice and substance abuse cross-training curriculum called Working Together for Change.
Bureau of Justice Assistance (BJA) Substance Abuse Programs: www.ojp.usdoj.gov/BJA/programs/substance_abu.html
Bureau of Justice Statistics (BJS) Statistics on Drugs and Crime: www.ojp.usdoj.gov/bjs/drugs.htm
Federal Bureau of Prisons (BOP) Substance Abuse Treatment:

www.bop.gov/inmate_programs/substance.jsp
National Criminal Justice Reference Service: www.ncjrs.gov
National Institute on Alcohol Abuse and Alcoholism (NIAAA): www.niaaa.nih.gov
National Institute of Corrections (NIC): www.nicic.org
National Institute of Justice (NIJ): www.ojp.usdoj.gov/nij
National Institute of Mental Health (NIMH): www.nimh.nih.gov
Office of Applied Studies (OAS) Substance Abuse and Mental Health Services Administration: www.oas.samhsa.gov
Office of Justice Programs (OJP): www.ojp.usdoj.gov
The Office of Juvenile Justice and Delinquency Prevention (OJJDP): www.ojjdp.ncjrs.org
Drug Strategies: www.drugstrategies.org
Re-Entry Policy Council: www.reentrypolicy.org
University of Washington Alcohol and Drug Abuse Institute: www.adai.washington.edu/instruments
American Society of Addiction Medicine: www.asam.org
TASC (Treatment Accountability for Safer Communities): www.nationaltasc.org
National Drug Court Institute: www.ndci.org
Bureau of Justice Statistics (BJS) Statistics on Drugs and Crime: www.ojp.usdoj.gov/bjs/drugs.htm
Drug Abuse Treatment Cost Analysis Program (DATCAP): www.datcap.com

PHARMACOLOGY:

A web site that provides up-to-date information on the pharmacokinetics of methadone and HIV medications is at www.hiv-druginteractions.org

PSYCHIATRIC INSTRUMENTS:

Comorbidity and Substance use disorders Center: George Warren Brown School of Social Work
www.gwbweb.wustl.edu/Users/cac/measurescollection.htm
Lists one hundred seventy five instruments for measuring aspects of substance use and psychopathology with hyperlinks to descriptions. Information for each measure or scale includes purpose, authors, key references, target populations, variables, administration and scoring options, and time estimates as well as copyright, cost, and ordering information.
Medical Outcomes Systems, Inc.: www.medical-outcomes.com
Contains a description of the Mini International Neuropsychiatric Interview as well as downloadable versions of all M.I.N.I. instruments, including the screen version and standard and expanded (Plus) 5.0.0 editions (January 2002). Although materials are protected by copyright, researchers and clinicians working in nonprofit or publicly owned settings (e.g., universities, teaching hospitals, and government institutions) may make copies for clinical or research purposes.
National Institute on Alcohol Abuse and Alcoholism: www.niaaa.nih.gov/Publications
Provides access to information first published in *Assessing Alcohol Problems: A Guide for Clinicians and Researchers*. The site specifies useful measures for screening, diagnosing, and planning treatment for alcohol-related and other psychoactive substance use disorders, as well as co-occurring disorders. The site also includes information on administration and scoring options, estimated times for administration, key variables, groups on which normative data for the instrument were based, psychometric properties, and ordering costs.
University of Adelaide (Australia) Library Guide: www.library.adelaide.edu.au/guide/ med/menthealth/scales.html

Contains a list of psychiatric rating scales and information about where copies and descriptions of these instruments can be obtained, hyperlinks to electronic versions, and references on developmental history and psychometric properties of each instrument.

PERSONS WITH DISABILITIES:

The Minnesota Chemical Dependency Program for Deaf and Hard of Hearing Individuals: www.mncddeaf.org
This program provides inpatient and outpatient substance use disorder treatment services for persons who are deaf or hard of hearing. In addition, the program provides specially developed treatment and prevention materials including a manual of specialized treatment approaches. It provides training about the delivery of substance use disorder services to deaf and hard of hearing persons. The program also receives Federal grant money to provide training opportunities to individuals who work with vocational rehabilitation. The program has a free catalog of materials on substance use disorders that are accessible for individuals who are deaf and hard of hearing.
National Association on Alcohol, Drugs and Disability: http://www.naadd.org/
The NAADD is a membership organization dedicated to improving prevention and treatment services for people with disabilities. It operates a web site and publishes the newsletter The Report on Alcohol, Drugs and Disability.
Administration of Developmental Disabilities: http://janweb.icdi.wvu.edu/
A service of the President's Committee on Employment of People with Disabilities, JAN is an international, free consulting service that can provide information about job accommodation for people with disabilities. It helps solve specific job accommodation problems through its toll-free hotline.
Library of Congress National Library Service for the Blind and Physically Handicapped: http://www.loc.gov/nls
MRI/Penn Research and Training Center on Vocational Rehabilitation And Mental Illness: http://www.matrixresearch.com/
National Institute on Disability and Rehabilitation Research: http://www.ed.gov/offices/OSERS/NIDRR
National Institute on Neurological Disorders and Stroke: http://www.nih.gov.ninds
National Research and Training Center on Psychiatric Disability: http://www.psych.uic.edu/~rtc/
President's Committee on Employment of People With Disabilities: http://www.pcepd.gov
The President's Committee on Employment of People with Disabilities is a nationwide organization of six hundred volunteer members that works to build and maintain a climate of acceptance of people with disabilities in the work force. It can assist in locating state governors' committees and local mayoral committees that address disability issues. It produces technical assistance materials, including videotapes, public service announcements, and fact sheets, and provides information on job accommodation, assistive technology, tax incentives, and other topics.
Rehabilitation Research and Training Center for Persons Who Are Deaf or Hard of Hearing: http://www.uark.edu/depts/rehabres/
Deaf and Hard of Hearing 12-Step Recovery Resources: www.dhh12s.com
Rehabilitation Research and Training Center on Blindness and Low Vision: http://www.msstate.edu/dept/rrtc/blind.html
Rehabilitation Services Administration: http://www.ed.gov/officers/OSERS/RSA/rsa.html
Research and Training Center on Rehabilitation for Persons With Long-Term Mental Illness: http://web.bu.edu/SARPSYCH/
Research and Training Center on Community Integration of Individuals With Traumatic Brain Injury: http://academic.mssm.edu/tbinet/

Research and Training Center on Community Living: http://www.ici.coled.umn.edu/ici/rtc/
Research and Training Center on Improving Community-Based Rehabilitation Programs: http://www.chd.uwstout.edu/svri/rtc.htm1
Research and Training Center on Improving the Functioning of Families Who Have Members With Disabilities: http://www.lsi.ukans.edu/beach/beachhp.htm
Research and Training Center on Independent Living for Underserved Populations: http://www.lsi.ukans.edu/rtcil/rtcbroc.htm
The Accreditation Council: http://www.thecouncil.org
This organization works to promote and measure quality services for people with disabilities and performs accreditation reviews for agencies that work with people with disabilities.
American Association of People With Disabilities: http://www.aapd.com
American Association of Retired Persons Disability Initiative: http://www.aarp.org/
American Medical Rehabilitation Providers Association (AMRPA): http://amrpa.firminc.com
Association on Higher Education and Disability: ahead@postbox.acs.ohio-state.edu and http://www.ahead.org
This organization is comprised of most student disability offices in higher education. It can assist with identifying disability services at nearby community colleges and universities.
Centers for Independent Living (CILs)
Centers for Independent Living is a national network of more than two hundred community-based service and advocacy programs run by people with disabilities.
National Council on Independent Living: ncil@tsbbsS02.tnet.com
Independent Living Research Utilization Center: http://www.bcm.tmc.edu/ilru
Consortium for Citizens With Disabilities: http://www.radix.net/~ccd/
Health Web: http:///www.ghsl.nwu.edu/healthweb/
Mainstream, Inc.: mainstream@aol.com
National Alliance of the Disabled: http://www.naotd.org
The NAOTD is an online informational and advocacy organization working toward equal rights for people with disabilities.
National Association of Developmental Disabilities Councils: http://www.igc.apc.org/NADDC
National Clearinghouse of Rehabilitation Training Materials: http://www.nchrtm.okstate.edu
National Information Center for Children and Youth With Disabilities: http://www.nichcy.org
National Institute on Life Planning For Persons With Disabilities: http://www.sonic.net/nilp
National Organization on Disability: http://www.nod.org
National Rehabilitation Information Center: http://www.naric.com/naric/
Rehabilitation Institute of Chicago: http://www.rehabchicago.org
Society for the Advancement of Travel for the Handicapped: sathtravel@aol.com
World Institute on Disability: http://www.wid.org
American Deafness and Rehabilitation Association (ADARA): ADARAorg@aol.com
The ADARA is the largest national organization for professionals who work with persons who are deaf and hard of hearing. It provides information and referral, and networking and holds biennial conferences in topics related to substance use disorders, mental health, vocation rehabilitation, job coaching, education, and interpreting.
American Foundation for the Blind: http://www.afb.org/afb
This organization provides information and referral on adaptive and assistive technology for people who are blind or visually impaired.
Association of Late Deafened Adults, Inc.: http://www.alda.org
The Arc (formerly Association for Retarded Citizens): http://thearc.org/
The Arc aids the employment of people with mental retardation or a developmental disability and publishes resource materials.

Learning Disabilities Association of America: http://www.ldanatl.org/
The Learning Disabilities Association of America is a national, nonprofit, volunteer organization dedicated to enhancing the quality of life for all people with learning disorders and their families. It is an advocacy organization that conducts education, research, and service.
National Association of the Deaf: http://www.nad.org
The National Association of the Deaf provides information and referral on deafness and accommodations for people who are deaf. It has local chapters in each State.
National Center for Learning Disabilities, Inc.: http://www.ncld.org/
National Information Center on Deafness: http://www.galludet.edu/~nicd
National Organization for Rare Disorders: http://www.pcnet.com/~orphan
A disease is considered rare if it affects fewer than two hundred thousand people in the United States; over five thousand different disorders fall into this category. The NORD provides information and referrals for people with these lesser known diseases.
Paralyzed Veterans of America: http://www.pva.org/
National Technical Institute for the Deaf: http://www.rit.edu/sa/coun/saisd

EMPLOYMENT:

America's Career InfoNet: http://www.acinet.org/acinet/
America's Labor Market Information System: http://dwsa.state.ut.us/almis/
Federal Transit Administration: http://www.fta.dot.gov/wtw
Housing and Urban Development: http://www.hud.gov/wlfrefrm.html
Matrix Research Institute: http://www.matrixresearch.org/pub2vocrehab.html
National Clearinghouse of Rehabilitation Training Materials: www.nchrtm.okstate.edu
National Occupational Information Coordinating Committee: http://www.noicc.gov/
U.S. Department of Labor: http://www.dol.gov/
Welfare Information Network: www.welfareinfo.org
Welfare to Work Partnership: www.welfaretowork.org
Workforce Investment Act of 1998 information: http://usworkforce.org

Lesbian, Gay, Bisexual and Transgender Individuals:

PFLAG: http://www.pflag.org/
Parents, Families and Friends of Lesbians and Gays is a support group that works with families of origin. Information on support, advocacy and education is available.
Legal Action Center: www.LAC.org
The Legal Action Center is the only law and policy organization in the United States that fights discrimination against people with histories of substance use disorders, AIDS, or criminal records and advocates for sound public policies in these areas. The center provides: legal services, including impact litigation, policy advocacy and research, and training, technical assistance, and education.
American Civil Liberties Union (ACLU): www.ACLU.org
Human Rights Campaign (HRC): www.hrc.org
HRC is the largest national lesbian and gay political organization. Its mission is to create an America where lesbian and gay people are assured of basic equal rights and where they can be open, honest, and safe at home, at work, and in the community. With a national staff and volunteers and members throughout the country, HRC lobbies the federal government on gay, lesbian, and AIDS issues, educates the public, participates in election campaigns, organizes volunteers, and provides expertise and training at the state and local levels.
Lambda Legal Defense and Education Fund: www.lambdalegal.org

Lambda is the Nation's oldest and largest legal organization working for the civil rights of lesbians, gay men, and people with HIV/AIDS.

National Center for Lesbian Rights (NCLR): www.NCLRights.org

NCLR is committed to advancing the rights and safety of lesbians and their families through litigation, public policy advocacy, free legal advice and counseling, and public education. NCLR also provides representation and resources to gay men and bisexual and transgendered individuals on key issues that affect lesbian rights.

National Gay and Lesbian Task Force: www.ngltf.org

NGLTF is a civil rights organization that has supported grassroots organizing and advocacy since 1973. NGLTF has been at the forefront of every major initiative for lesbian, gay, bisexual, and transgender rights, and works to strengthen the gay and lesbian movement at the state and local levels while connecting these activities to a national vision of change.

Servicemembers Legal Defense Network: www.sldn.org

On July 19, 1993, the Clinton administration announced a new policy regarding gays in the military. Dubbed "Don't ask, don't tell, don't pursue" intended to stop military officials from asking troops about their sexual orientation, end witch hunts, and stop harassment of lesbian and gay service members. But, suspect service members still face an untimely end to their careers. Most service members do not realize that the new policy affords little protection or privacy for lesbian and gay personnel, and most service members do not know what their legal rights are under the new policy.

It's Time, America! (ITA!): www.gender.org/ita/

ITA! is the first nationally organized grassroots civil rights group seeking to secure and safeguard the rights of all transgender individuals. The mission of It's Time, America! is to educate and influence the Congress, state and local governments, and transgender and non-transgender political organizations on the issues and concerns of transgender people and to take steps to safeguard and secure their rights as American citizens.

Queer Resources Directory: www.qrd.org

Queer Legal Resources: www.qrd.org/www/legal/

The Queer Resources Directory contains tens of thousands of files about various topics of interest to LGBT individuals including: tables listing the important legal cases dealing with LGBT and AIDS issues for each year from 1992 to the present, case and issue archives by subject, statewide gay rights statutes, and same gender marriage resources, Lesbian/Gay Law Notes, edited by Professor Arthur Leonard, a monthly summary of the cases important to gay/lesbian and HIV/AIDS jurisprudence, National Journal of Sexual Orientation Law, an electronic legal journal devoted to sexual orientation and the law, QueerLaw and QueerLaw-Digest, with information about companies with nondiscrimination policies that include sexual orientation; companies and organizations that provide domestic partner benefits; states that criminalize sexual acts between people of the same gender; state laws on age of consent for sexual acts between people of the same gender; and sodomy and age-of-consent laws worldwide, lists and links to groups that work on legal issues of interest to LGBT individuals.

Gay, Lesbian, Bisexual and Transgender Health Access Project: www.glbthealth.org

The Gay, Lesbian, Bisexual and Transgender Health Access Project is a collaborative, community-based program funded by the Massachusetts Department of Public Health. The Project's mission is to foster the development and implementation of comprehensive, culturally appropriate, quality health promotion policies and health care services for gay, lesbian, bisexual, and transgendered people and their families.

CULTURE:

National Standards for Culturally and Linguistically Appropriate Services (CLAS) in health care developed by the U.S. Office of Minority Health published in 2001 and available at www.omhrc.gov.
National Center for Cultural Competence at Georgetown University's Child Development Center: www.georgetown.edu/research/gucdc/nccc/index.html
The Substance Abuse and Mental Health Services Administration's (SAMHSA's) National Clearinghouse for Alcohol and Drug Information (NCADI): www.ncadi.samhsa.gov
The NCADI Web site provides access to publications on specific populations. Click on *Audience* to access information on African Americans, American Indians, Alaska Natives, Asians and Pacific Islanders, individuals with disabilities, Hispanic and Latino populations, and lesbian, gay, and bisexual individuals.
Hawaii AIDS Education and Training Center: www.hawaii.edu/hivandaids/links_culture.htm.
This site provides links to resources on clients who are homeless, have disabilities, or are members of minority groups. The information and links discuss HIV/AIDS, health care, and other relevant issues.
Effective Therapies for Minorities: Meeting the Needs of Racially and Culturally Different Clients in Substance-Abuse Treatment:
BeattySeptember/October2000;www.counselormagazine.com. This journal article includes basic steps that programs can take to move toward cultural competence.
Cultural Competence in Substance Abuse Treatment, Policy Planning, and Program Development: www.attc-ne.org/pubs/ccsat.pdf. This annotated bibliography of resources has sections on African Americans, Asian and Pacific Islanders, Native Americans, and Hispanics/Latinos, compiled by the Addiction Technology Transfer Center of New England, at Brown University's Center for Alcohol and Addiction Studies.
The Provider's Guide to Quality and Culture:
erc.msh.org/mainpage.cfm?file=1.0.htm&module=provider&language=English. This Web site provides descriptions of attributes and beliefs of many cultural groups, with links and references, as well as information on cultural diversity and self-assessment tools.
Cultural Competence Standards in Managed Mental Health Services: Four Underserved/Underrepresented Racial/Ethnic Groups: Center for Mental Health Services 1997; www.mentalhealth.org/publications/allpubs/SMA00-3457. This book discusses guiding principles for cultural competence in the context of treatment for African-Americans, Asians and Pacific Islanders, Hispanic populations, Native Americans, Alaska Natives, and Native Hawaiians.
Develop Your 'Ethnocultural Competence' and Improve the Quality of Your Practice: www.counselormagazine.com. This journal article provides a good introduction to ethnicity and culture and how both affect treatment.
Planning, Implementing and Evaluating Culturally Competent Service Delivery Systems in Primary Health Care Settings: Implications for Policymakers and Administrators:
http://www.mchgroup.org/nccc/documents/Getting_Started.html. This checklist from the National Center for Cultural Competency helps organizations implement policies and practices that support cultural competence.
A Guide to Enhancing the Cultural Competence of Runaway and Homeless Youth Programs: www.ncfy.com/pubs/culguide.htm. This guide presents tools for assessing and enhancing cultural competence in youth-serving organizations. Assessment questionnaires that focus on the community, clients, and the program itself are included in appendix A. The tools and information can be adapted for drug treatment programs.
Cultural Competence Self-Assessment Instrument: www.cwla.org/pubs.
This resource provides tools for assessing cultural competence of policies, programs, and staff and guidelines for strengthening cultural competence.
Health Resources and Services Administration. *Study on Measuring Cultural Competency in Health Care Delivery Settings: A Review of the Literature:*

www.hrsa.gov/culturalcompetence/measures. This report details a comprehensive review of the cultural competence theoretical and methodological literature.
Cultural Competency Tool (order forms at www.ahaonlinestore.com): Available from the Society for Social Work Leadership in Health Care for $15.00 for members and $20.00 for nonmembers, this instrument assists in evaluating the cultural competence of staff and can be used for performance assessment, evaluation of pre-diversity and post-diversity efforts, or compliance with Medicaid/Medicare conditions or JCAHO cultural competence standards.
Toolkit for Cross-Cultural Communication: www.awesomelibrary.org/multiculturaltoolkit.html: These materials compare patterns of communication across diverse groups and discuss myths that impair cultural competence, including a table of communication norms and values across cultures.
Intercultural Communication Institute: www.intercultural.org. This organization conducts an annual Summer Institute for Intercultural Communication.
The National Center for Cultural Competence: www.georgetown.edu/research/gucdc/nccc
Diversity Training Associates of Portland:
This organization provides consultants and trainers.
(800-484-9711, ext. 8250)

DOMESTIC VIOLENCE, ABUSE, AND NEGLECT:

National Domestic Violence Hotline: (800) 799-SAFE and (800) 787-3224 (TDD)
The National Domestic Violence Hotline links individuals and services using a nationwide database of domestic violence and other emergency shelters, legal advocacy and assistance programs, and social services programs. The hotline provides crisis intervention, information about sources of assistance, and referrals to battered women's shelters.
Rape, Abuse, and Incest National Network (RAINN): (800) 656-4673
RAINN links six hundred twenty eight rape crisis centers nationwide. Sexual assault survivors who call will be automatically connected to a trained counselor at the closest center in their area.
Childhelp USA/National Child Abuse Hotline: (800) 4A-CHILD
With a focus on children and the prevention of child abuse, this hotline provides crisis counseling, referrals, and reporting guidance to callers in crisis, including children, troubled parents, and adult survivors of abuse. All calls are answered by a staff of professional counselors. In addition, statistical and other informative materials can be ordered through this number. Access to information on partner violence is limited. Childhelp, one of the largest national, nonprofit child abuse treatment and prevention agencies in the country, also runs the nation's first residential treatment facility for abused children, provides prevention services and training, and participates in advocacy and education efforts.
American College of Obstetricians and Gynecologists (ACOG): http://www.acog.org/
ACOG has patient education pamphlets and bulletins for medical professionals on both domestic violence and substance abuse.
American Medical Association (AMA): http://www.ama-assn.org/
The AMA educates physicians through publications, conferences, and by serving as a resource center for physicians and other concerned professionals. Among its publications are six diagnostic and treatment guidelines on child physical abuse and neglect, child sexual abuse, domestic violence, elder abuse and neglect, mental health effects of domestic violence, treatment and prevention of sexual assault, and media violence.
March of Dimes Birth Defects Foundation: http://www.marchofdimes.com/
The March of Dimes provides general information on prenatal care and on the first few years of life through its resource center and its fulfillment center. The March of Dimes does not have a hotline.
March of Dimes Resource Center: resourcecenter@modimes.org

National Center for Missing or Exploited Children (NCMEC): http://www.missingkids.com/
NCMEC leads national efforts to locate and recover missing children and raises public awareness about ways to prevent child abduction, molestation, and sexual exploitation. A hotline is available to report information on missing or exploited children or to request information or assistance. NCMEC publishes materials, including handbooks, pamphlets containing parental and professional guidelines on runaways and missing or exploited children, and publication packages aimed toward families, child care and social service practitioners, and law enforcement, legal, and criminal justice professionals.
National Clearinghouse on Child Abuse and Neglect: nccanch@calib.com
This clearinghouse offers child abuse and neglect information in the form of manuals, research reports, studies, directories, grant compendia, literature reviews, annotated bibliographies, fact sheets, database searches, CD ROM databases, and on-line services. It is sponsored by the National Center on Child Abuse and Neglect.
National Coalition Against Domestic Violence: http://www.ncadv.org/
The National Coalition Against Domestic Violence serves as an information and referral center for the general public, the media, battered women and their children, and agencies and organizations. Among its purposes are to enhance coalition-building at the local, state, and national levels; support the provision of community-based, nonviolent alternatives such as safe homes and shelters for battered women and their children; provide information and referral services, public education, and technical assistance; and develop public policy and innovative legislation. The coalition maintains a public policy office in Washington, DC and a National Directory of Domestic Violence Programs.
National Sheriffs' Association: http://www.sheriffs.org/home.shtml
The National Sheriffs' Association has developed a handbook on victim's assistance for law enforcement officers who deal with all types of victims, including those of domestic violence. It provides training in dealing with victims sensitively, finding resources in one's community to help them, and setting up a victim assistance program.
National Victim Center (NVC)/INFOLINK: www.nvc.org
NVC operates an information and referral program called INFOLINK, which provides a toll-free source of comprehensive crime and victim-related information as well as referrals to over eight thousand victim assistance programs across the nation. Each caller can receive up to five of the seventy information bulletins free of charge. In addition, all INFOLINK bulletins, as well as other important information, are available on NVC's website.
FaithTrust Institute (formerly the Center for the Prevention of Sexual and Domestic Violence):
http://www.faithtrustinstitute.org/
This is a national organization working with and within religious communities on issues of sexual and domestic violence. Although the center's constituency includes those in the fields of law, health care, social services, counseling, and other fields, the center primarily targets religious professionals and teaches them how to effectively respond to and prevent sexual abuse and domestic violence. Services and products include trainings, workshops, and seminars; consultations; videos; specialized curriculum materials; and publications.
Colorado Coalition Against Domestic Violence: http://www.ccadv.org/
This group does public policy work and provides community education and training, information in the form of statistics and brochures, and technical assistance to domestic violence programs.
Family Violence and Sexual Assault Institute: fvsai@e-tex.com
To improve networking among researchers, practitioners, and agencies, the Family Violence and Sexual Assault Institute maintains an international clearinghouse, reviews its materials, and disseminates the information through its *Family Violence and Sexual Assault Bulletin*. This independent, nonprofit corporation helps crisis centers, agencies, universities, and counseling clinics develop treatment programs for partner and sexual abuse and has published several books and

bibliographies as a result of this research. The institute also provides training and consultation in the form of program evaluation, research, and technical assistance.

National Center on Elder Abuse (NCEA): http://www.elderabusecenter.org/

NCEA performs clearinghouse functions, develops and disseminates information, provides training and technical assistance, and conducts research and demonstration projects of national significance. In addition, NCEA runs the country's only automated, elder abuse literature search and retrieval system. Four organizations comprise the NCEA: the American Public Welfare Association, the National Association of State Units on Aging, the University of Delaware College of Human Resources, and the National Committee for Prevention of Elder Abuse.

National Clearinghouse on Marital and Date Rape: http://members.aol.com/ncmdr/index.html

The National Clearinghouse on Marital and Date Rape provides fee-based phone consultations for information, referrals, strategies, and advocacy. The website contains fee and membership information.

National Criminal Justice Reference Service (NCJRS): askncjrs@ncjrs.org

NCJRS, an extensive source of information on criminal and juvenile justice, provides services to an international community of policymakers and professionals. NCJRS is a collection of clearinghouses supporting all bureaus of the U.S. Department of Justice, Office of Justice Programs. It also supports the Office of National Drug Control Policy. Information is available through information specialists, online services, or its CD ROM database. NCJRS does not provide counseling or legal advice.

Health Resource Center on Domestic Violence: http://www.fvpf.org/health/

The Health Resource Center, which focuses on strengthening the health care response to domestic violence, provides resources and training materials, technical assistance, and information and referrals to health care professionals and others who help victims of domestic violence. Its products and services include comprehensive resource manuals providing the tools for an effective multidisciplinary response; multidisciplinary protocols emphasizing routine screening and identification of domestic violence; assistance with health care training programs and protocol development; models for local, state, and national health policymaking; a national network of experts for public speaking, training, and consultation; and educational materials specifically developed for health care providers.

Battered Women's Justice Project (BWJP): http://www.bwjp.org/

The BWJP serves as a resource center and national toll-free information line regarding domestic violence issues in the criminal and civil justice systems. A collaboration of three organizations, the BWJP responds to specific requests for information or technical assistance from people who work with battered women.

HIV / AIDS:

The National AIDS Treatment Information Project: http://www.natip.org/index.html
The Measurement Group: www.themeasurementgroup.com
JAMA HIV-AIDS Information Center: http://www.ama-assn.org/special/ hiv/hivhome.htm
Critical Path AIDS Project: http://www.critpath.org/critpath.htm
Bulletin of Experimental Treatments for AIDS: http://www.sfaf.org/beta
Spanish BETA: http://www.sfaf.org/betaespanol/
Positive News/Noticias Positivas: http://www.sfaf.org/treatment/positivenews/
Other online sources of BETA: http://www.critpath.org/newsletters/beta
AEGIS: AIDS Education Global Information System: http://www.aegis.com/ and http://www.aegis.com/search/
Asian and Pacific Island Coalition on HIV/AIDS: http://www.aidsinfonyc.org/apicha/home.html
Center for AIDS Prevention Studies (UCSF) CAPSweb:

http://www.epibiostat.ucsf.edu/capsweb
HIV/AIDS Outreach Project (Vanderbilt): http://www.mc.vanderbilt.edu/adl/aidsproject
JAMA's HIV/AIDS Information Center: http://www.ama-assn.org/special/hiv/ hivhome.htm
News briefings and current articles: http://www.ama-assn.org/special/hiv/newsline
East Harlem HIV Care Network: http://www.aidsnyc.org/network
AIDS Research Information Center: http://www.critpath.org/aric
Harvard AIDS Institute: http://www.hsph.harvard.edu/Organizations/hai
The Lambda Center: http://www.lambdacenter.com/index.htm
Treatment Action Group: http://www.thebody.com/tag/tagpage.html
UCSF AIDS Health Project: http://www.ucsf-ahp.org/
Centers for Disease Control and Prevention (CDC) CDC National AIDS Clearinghouse: http://www.cdcnpin.org/
Office of the Federal Register: http://www.nara.gov/fedreg/
AIDS Action Council: http://www.thebody.com/aac/aacpage.html
National Association of People with AIDS (NAPWA): http://www.napwa.org/
Anti-HIV drug database (HIV Insite): http://arvdb.ucsf.edu/
Pharmaceutical Information Network: http://pharminfo.com/drugdb/db_mnu.html
Drug Interactions: http://www.hivatis.org/fdachart.html
Community Prescription Service: http://www.prescript.com/
FDA Drug Information: http://www.fda.gov/cder/drug/default.htm
Pharminfo (includes drug database): http://www.fightinfection.com/bms/hiv.htm
Roxane Pain Institute: http://www.roxane.com/
AIDS Patent Library: http://patents.cnidr.org/
The Center Gender Identity Project: http://www.gaycenter.org/programs/mhss/gip.html
HPP/Prevention Point Needle Exchange: http://www.sfaf.org/prevention/
Drug Reform Coalition's needle exchange site: http://www.drcnet.org/gateway/nep.html
North American Syringe Exchange Network: http://www.nasen.org/NASEN_II/index.html
Queer Resources Directory: http://www.qrd.org/

Smoking Cessation:

The American Lung Association: www.lungusa.org
The American Cancer Society: www.cancer.org

Grant Information:

SAMHSA provides information about the grants it provides at www.samhsa.gov/grants/index.html
National Institute on Drug Abuse: www.nida.nih.gov
National Institute on Alcohol Abuse and Alcoholism: www.niaaa.nih.gov
Information on **grants throughout the federal government** is available from www.grants.gov
Corporate foundations grants: www.cybergrants.com
The National Center on Addiction and Substance at Columbia: www.casacolumbia.org provides links to several helpful sites.
The Substance Abuse Funding Week: www.cdpublications.com/pubs/
Provides public and private funding announcements for alcohol, tobacco, and drug abuse programs. It is available by subscription in print.
Publications on grant seeking and grant writing: www.grantsandfunding.com
The Grantsmanship Center: www.tgci.com
The Non-Profit Resource Center: www.not-for-profit.org

APPENDIX C: GLOSSARY

Affinity refers to the strength with which a drug binds to its receptor. The degree to which a drug activates its receptors is termed its intrinsic activity. Affinity for a receptor and activation of the receptor are two different qualities of a drug. A drug can have high affinity for a receptor but not activate the receptor (e.g., an antagonist). Mu opioid agonists, partial agonists, and antagonists can vary in their affinity. In addition to variations in affinity and intrinsic activity, drugs also vary in their rate of dissociation from receptors. Dissociation is a measure of the disengagement or uncoupling of the drug from the receptor. Dissociation is not the same as affinity; a drug can have high affinity for a receptor (i.e., it is difficult to displace it from the receptor with another drug once the first drug is present), but it still dissociates or uncouples from the receptor with some regularity. For example, buprenorphine's slow dissociation contributes to its long duration of action.

Agonists are drugs that activate receptors in the brain. Agonists bind to receptors and activate them to produce an effect. For example, full mu opioid agonists activate mu receptors. Opioids with the most potential for abuse are full agonists such as heroin, methadone, oxycodone, morphine and hydromorphone. The repeated administration of a mu opioid agonist results in tolerance and dose-dependent physical dependence.

Alcohol withdrawal syndrome develops in individuals who are tolerant to alcohol, as indicated by a reported history of withdrawal symptoms (particularly in the morning) during periods of heavy drinking and a history of regular morning drinking. Symptoms of alcohol withdrawal typically begin within six to twenty-four hours after reduction or cessation of alcohol use, and signs and symptoms can be severe even in the presence of a positive blood or breath alcohol level. Alcohol withdrawal signs and symptoms peak in intensity between twenty-four and forty-eight hours following cessation of alcohol use, and they generally resolve within four or five days. The most common signs or symptoms of alcohol withdrawal include tremor of the hands and tongue, hypertension, tachycardia, sweating, nausea, more active deep tendon reflexes, diaphoresis, gastrointestinal (GI) distress, irritability, insomnia, and restlessness. The most severe manifestation of an inadequately treated withdrawal syndrome is agitated delirium (delirium tremens or DTs), which generally appears three to seven days after withdrawal starts. DTs commonly presents in association with other serious medical illnesses. Impaired attention, disorientation, paranoia, hallucinations, and memory disturbances characterize alcohol withdrawal delirium, which can be life-threatening. Grand mal seizures are another severe manifestation of withdrawal; fewer than five percent of individuals experiencing alcohol withdrawal experience seizures or delirium.

Anabolic androgenic steroids (AAS) are a class of natural and synthetic steroid hormones that promote cell growth and division, resulting in growth of several types of tissues, especially muscle and bone. Different anabolic androgenic steroids have varying combinations of androgenic and anabolic properties. (Anabolism is the metabolic process that builds larger molecules from smaller ones.) Anabolic steroids were first discovered in the early 1930s and have since been used for numerous medical purposes including stimulation of bone growth, appetite, puberty, and muscle growth. The most widespread use of anabolic steroids is for chronic wasting conditions, such as cancer and AIDS. Anabolic steroids can produce numerous physiological effects including increases in protein synthesis, muscle mass, strength, appetite and bone growth. Anabolic steroids have also been associated with numerous side effects when administered in excessive doses including elevated cholesterol (i.e., increases in LDL and decreases in HDL levels), acne, elevated blood pressure, hepatotoxicity, and alterations in left ventricle morphology.

Anabolic steroid withdrawal symptoms include steroid craving, fatigue, depression, restlessness, anorexia, insomnia, reduced libido, headaches, and nausea. No detoxification procedure for anabolic steroids has been developed. While high doses of anabolic steroids can be medically dangerous, side effects (e.g., endocrine, liver, central nervous system, and cardiac function), tend to be reversible upon cessation of use.

The physiological signs of androgen exposure include hair loss, acne, dysuria, small testicles, edema of the extremities, and rapid weight gain in males. Females can develop decreased breast size, acne, virilism (i.e., clitoral enlargement, excessive and abnormal bodily hair growth, male pattern baldness) and amenorrhea. Due to anabolic steroids' long duration of action, side effects that might emerge cannot be quickly reversed by the discontinuation of these substances. Therefore, related side effects might require medical management beyond the simple recommendation that steroids immediately be discontinued. Persistent side effects include urinary tract infections, bladder irritability, skin blistering (at the injection site), erythema (abnormal skin redness) when given as a skin patch, and priapism. The latter condition constitutes an emergency that requires specialized medical attention. Edema of the hands or feet, commonly seen with anabolic steroids, can be treated with diuretics. Elevated liver function tests and jaundice usually resolve with cessation of anabolic steroid administration, although hepatic carcinoma has been reported. Other side effects such as headache, nausea, vomiting, acne, insomnia, and lethargy are time-limited and resolve after steroid cessation. Behavioral disturbances, such as psychosis or severe aggressiveness, are treated symptomatically with appropriate psychopharmacological interventions. In extreme cases of psychotic or manic presentations, emergency psychiatric hospitalization can be necessary to address dangerousness to self or others.

Antagonists bind to opioid receptors and block them (instead of activating them as agonists do). They prevent receptors from being activated by agonists. Antagonists can be viewed as a key that fits into a lock but does not open it and prevents another key from being inserted to open the lock. Individuals with physical dependence on opioids who are administered antagonists develop withdrawal syndrome because antagonists displace agonists from receptors, but do not activate the receptors, resulting in a net reduction of agonist effect.

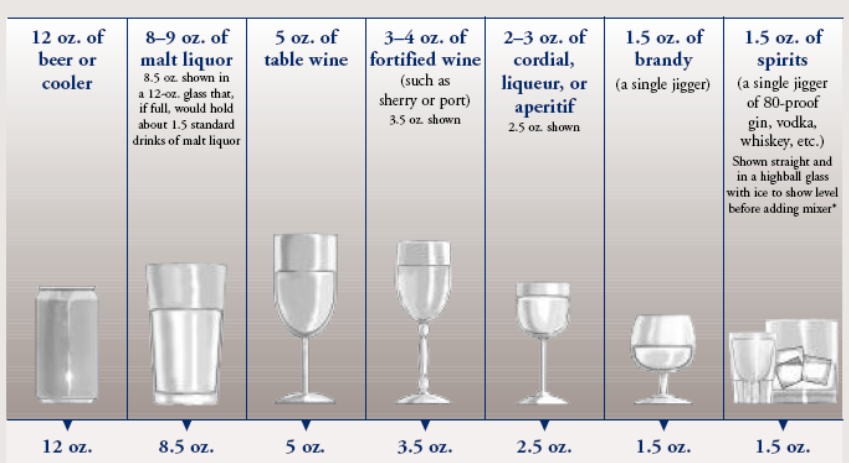
At-risk drinking is the consumption of alcohol that occasionally exceeds recommended guidelines. While such consumption places people at risk for such alcohol-related problems as burns, motor vehicle crashes, or falls, people with at-risk drinking may never experience negative consequences as a result of their alcohol use and represent an important target for preventive, educational efforts by primary care clinicians.

Moderate consumption is defined by the U.S. Dietary Guidelines as up to two drinks per day for men and one for women. Such consumption has been associated with a decrease in risk for coronary artery disease. The limits are lower for women because they have less body water proportionally than men and therefore attain higher blood alcohol concentrations subsequent to consuming the same amount of alcohol. Older adults have less lean body mass and increased sensitivity to the effects of alcohol. There is no known safe amount of alcohol that can be consumed during pregnancy.

Alcohol can interact with medications by interfering with their metabolism (usually in the liver) or enhancing their effects (especially in the central nervous system). Classes of medications that can interact with alcohol include antidepressants, barbiturates, histamine H2 receptor agonists, muscle relaxants, antihistamines, antibiotics, opioids, benzodiazepines, non-opioid analgesics, anti-inflammatory agents, and warfarin. Many over-the-counter medications and herbal preparations can cause adverse side effects when combined with alcohol. The interaction with several classes of medicine can produce serious CNS (central nervous system) depression including benzodiazepines, barbiturates, meprobamate, and other sedative hypnotic groups. Metoclopramide and sedating

antipsychotic medicines such as phenothiazines also can produce CNS suppression. In addition, metronidazole and several antibiotics (e.g., cefamandole, cefoperazone, and cefotetan) have been shown to produce a disulfiram-like reaction characterized by flushing, sweating, tachycardia, nausea, and chest pain. Acetaminophen in low doses can produce hepatotoxicity when used with alcohol. Antidiabetic agents used with alcohol can produce hypoglycemia and lactic acidosis.

U.S. Standard Drink Equivalents (NIAAA)



Source: Helping Patients Who Drink Too Much (2005)

Blood alcohol concentrations (BAC) are measured in milligrams (mg) of alcohol per deciliter (dl) of blood. This figure is converted to a percentage. One hundred mg/dl equals 100 mg prevent or 0.1 percent. Thus a BAC of .1 mg percent is equivalent to a concentration in blood of 100 mg of alcohol per deciliter of blood. A standard drink is defined as 12 ounces of beer, 1 ounce of liquor or distilled spirits, or 4 ounces of wine. Impairment from the consumption of alcohol has been shown to occur at the level of 50 mg/dl. Impairment in women and elderly individuals can occur at lower levels. Most people metabolize alcohol at a rate of 15 to 20 mg per hour. Alcohol elimination mostly undergoes zero-order kinetics (decreasing a set amount per unit of time rather than a set percentage), so the concept of half-life is not really accurate. However, first-order kinetics and half-life do occur when BAC is low (i.e., below 10mg percent), and the half-life is on the order of about fifteen minutes at that point. It should be noted that the rate of metabolism of alcohol increases with dependency; some individuals with alcohol dependence can metabolize 20-25mg/dl/hr.

Club drugs include sedative-hypnotic type agents as well as stimulants/hallucinogens. They are used in nightclubs, dance clubs, parties, and raves (overnight dance parties, usually with several hundred people in attendance). Abuse of these drugs by adolescents and young adults has risen greatly in recent years. Intoxication and overdose are the most frequent problems with the use of club drugs and some of them appear to have the potential to cause neurotoxicity as well as persistent psychiatric and neurologic syndromes. Acute intoxication and so-called bad trips can usually be managed via a quiet, non-stimulating environment with frequent supervision to monitor for harm to self or others. Low dose of short or intermediate-acting benzodiazepines have been found to help control anxiety and promote sedation. Antidepressant therapy can be required for the treatment of chronic depressive-like reactions. Antipsychotic medications may be needed for residual psychotic symptoms. Low dose, high-potency antipsychotic medications administered orally or parenterally are needed on a rare basis. Administration routes (e.g., intravenous, subcutaneous, or intramuscular routes) that avoid the digestive tract are used.

Cocaine hydrochloride is extracted from the leaves of the coca plant (erythroxylon coca), which is indigenous to the Andean highlands of South America. In its extracted and purified form, it is one of the most potent stimulants of natural origin. For thousands of years, Native Americans in the Andean region have chewed coca leaves to relieve fatigue and brewed coca leaves into a tea. In addition, Andean groups burn or smoke various parts of the coca plant as part of their religious and medicinal practices. However, none of these has the same impact as purified cocaine hydrochloride.

The German chemist Albert Niemann recognized the stimulant properties of the cocaine plant and extracted the pure chemical, cocaine hydrochloride in 1860. In the early 1880s, the drug's anesthetic properties were discovered, and it was soon used in eye, nose, and throat surgery. As physicians and other prescribers became aware of cocaine's psychoactive properties, it was widely dispensed for anxiety, depression, and addiction treatment (primarily for morphine use).

By the early 1900s the drug's popularity increased as a result extravagant claims of its curative powers, and it was the main active ingredient in a wide range of patent medicines, tonics, elixirs, and fluid extracts. (It is believed that the original formula of Coca-Cola that was developed in 1886 contained approximately 2.5 mg of cocaine per 100 mL of fluid. This formula was sold as a headache cure and stimulant.) Public health officials became alarmed by the medical, psychiatric, and social problems associated with excessive cocaine use, and these played a major role in the passage of the Harrison Narcotic Act of 1914 which severely restricted its legal uses. Demand for cocaine hit a low during the 1930s when the advent of amphetamine almost eradicated demand, and did not increase significantly again until the 1960s when the use of psychoactive drugs for recreational purposes became popular. Since the 1980s the production of coca in South America has expanded from a cottage industry of small groups of subsistence farmers into a major agricultural business financed by organized families or cartels. The manufacture and trafficking of cocaine is currently a multibillion dollar industry.

Cocaine hydrochloride is generally distributed as a white crystalline powder or as an off-white chunky material. The powder form is usually snorted intranasally. As cocaine became plentiful and less expensive in the early 1980s, its users began to experiment with its various forms and with different routes of administration. Some users began to smoke the powder form by mixing it with tobacco or marijuana. However, those who smoked the powder reported little if any intoxication. At the same time, users in South America began to smoke base (coca paste), which is one of the products from which cocaine powder is derived. Coca paste is more concentrated than the powder form and reportedly produces immediate intoxication, similar to effects from intravenous administration. Drug traffickers in the United States learned of the effects of smoking base, but confused its preparation with that of cocaine freebase, in which the cocaine alkaloid in cocaine hydrochloride is freed from its other components. Freebase cocaine does not dissolve easily in the blood or mucous membranes of the nasal passages, but is readily volatilized and can be effectively smoked. Smoking this freebase became popular during the 1970s. Chunks of the freebase form, referred to as rock or crack, are sold in small glass vials or plastic containers at a cost of $10.00 to $20.00 making it more affordable and extending its user base. By the mid 1980s, the use of crack cocaine had replaced heroin use as the main illicit drug problem especially in urban communities causing health problems, addiction, street and property crime, and warfare between street gangs battling over distribution turf. In response to drug-related crime, legal penalties for sales of cocaine and crack were increased, and jails and prisons rapidly filled with users, dealers, distributors, and those involved in the violence associated with the crack trade.

Cocaine has two main pharmacological actions. It is both a local anesthetic and a central nervous system (CNS) stimulant and is the only drug known to possess both of these properties. Cocaine exerts its local anesthetic actions by blocking the conduction of sensory impulses within nerve cells.

This effect is most pronounced when cocaine is applied to the skin or to mucous membranes. Cocaine hydrochloride has an approved medical use as a local anesthetic for surgeries of the nose, throat, and larynx.

Cocaine blocks the synaptic reuptake of dopamine. It causes the dopamine system to be stimulated by preventing dopamine from being removed from the intracellular space. Cocaine blockade of the dopamine reuptake transporter extends the availability of dopamine in the synaptic space where it continues to occupy the dopamine receptor and causes the postsynaptic neurons to fire for a longer than normal period. This extended firing of the postsynaptic neurons is initially experienced subjectively as a positive sensation involving increased energy, arousal, and stimulation as well as a generalized state of euphoria in combination with feelings of increased energy, confidence, mental alertness, and sexual arousal.

Cocaine rapidly produces an intense high when snorted, smoked, or injected intravenously, but it is rapidly metabolized making the high short-lived. Efforts to replicate the initial high prompt users to take it often and repeatedly. Psychologically, the drug's chronic effects are the opposite of the desired initial effects and continued use increases paranoia and confusion, and causes an inability to concentrate and an inability to perform sexually. Cocaine use is associated with a variety of cardiovascular complications including angina pectoris, myocardial infarction, and sudden death.

Coke bugs are tactile hallucinations (also called formications) that feel like bugs crawling on or under the skin. Chronic and high-dose stimulant abuse can cause various types of hallucinations.

Crack cocaine refers to cocaine (cocaine hydrochloride) that has been chemically modified so that it will become a gas vapor when heated at relatively low temperatures. It is also called rock cocaine.

Cross tolerance occurs when medication reduces or prevents the euphoric effects of heroin or other short-acting opioids so that the feeling of being high is no longer experienced when the opioids are used.

Endogenous opioids are a class of neuropeptides that includes endorphins and enkephalins. They produce euphoric, pleasurable effects and decrease sensitivity to pain. Heroin and morphine mimic the effects of endogenous opioids by stimulating opioid receptors. Alcohol also stimulates the release of endogenous opioids which activate the central dopamine reward system.

Euphoric recall is the act of remembering only the pleasures associated with stimulant use and not the adverse consequences. Euphoric recall is a potent relapse risk factor because it minimizes clients' perceptions of stimulants' danger, promoting ambivalence about quitting. For these reasons, so-called war stories that include euphoric recall and selective memory are powerful relapse triggers and should be strongly discouraged in recovery groups.

Fentanyl is a synthetic opiate analgesic that is used to treat severe pain and for pain management after surgery. Its street names include Apache, China girl, China white, dance fever, friend, goodfella, Tango and Cash, jackpot, murder 8, and TNT.

Fetal Alcohol Effects (FAE) is a term that is used to characterize children who have been exposed to alcohol in utero but do not have all of the traits of fetal alcohol syndrome. Many of these children display difficulties with behavior, cognition and growth defects. They do not have the facial features of FAS.

Fetal Alcohol Syndrome (FAS) is characterized by:

a. Prenatal or postnatal growth retardation; failure to thrive (weight, length, and / or head circumference less than the tenth percentile).

b. Central nervous system dysfunction, including intellectual, neurologic, and behavioral deficits manifested as mild to moderate mental retardation, hypotonia (poor muscle tone), and irritability during infancy, and hyperactivity during childhood. Mental abnormality occurs in eighty five percent of FAS children, and although IQ scores vary, affected children rarely show normal mental ability.
c. Facial dysmorphology (structural abnormalities) including at least two of three characteristics:
    1. Microcephaly (head circumference less than the tenth percentile).
    2. Microphthalmia (abnormal smallness of the eye) or short palpebral fissures, ptosis (dropping eyelid), strabismus (imbalance of the eye muscles), or epicanthal folds (folds of the skin of the upper eyelid over the eye).
    3. Poorly developed philtrum, thin upper lip (vermilion border), short upturned nose, or flattening or absence of the maxilla (upper jaw).

Gamma-Aminobutyric Acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system. Research has demonstrated that alcohol significantly alters GABA-mediated neurotransmission. $GABA_A$ (a subtype of GABA) receptors are also believed to mediate development of tolerance and dependence on alcohol. Alcohol is believed to exert its acute behavioral effects by a selective enhancement of $GABA_A$ receptor activity. $GABA_A$ receptor antagonists block the ability of alcohol to cause ataxia (inability to coordinate muscle activity during voluntary movement) and anesthesia. Alcohol also potentiates the effects of GABA in the cerebral cortex and cerebellum.

Gamma-hydroxybutyrate (GHB) is a compound that is produced in the central nervous system, and acts as an inhibiting neurotransmitter similar to GABA. In pharmacologic doses, GHB acts as a sedative-hypnotic medication. GHB intoxication may look like alcohol or sedative-hypnotic intoxication. Although GHB is illegal, psychotropic compounds similar to GHB, such as gamma-hydroxy lactone (GBL) and 1,4-butanediol (1,4-BD), are widely available chemical compounds and can be obtained through catalogs and the Internet. These compounds produce effects similar to those of GHB. GHB use has increasingly been reported in night clubs and at raves by adolescents and young adult populations. Also known as Liquid X, GHB has euphoric properties, and overdoses can cause electrolyte imbalances, decreased respiration, confusion, and hypertension, as well as seizure-like activity and vomiting. GHB withdrawal includes confusion, psychosis, and delirium, as well as autonomic effects (e.g., tremor, diaphoresis, hypertension, temperature changes) which are usually less severe than for alcohol withdrawal. Withdrawal is far less likely than overdose which requires airway and respiratory management. Interestingly, GHB has been found in European studies to be as effective as diazepam for treating alcohol withdrawal symptoms, and has been shown to decrease agitation and anxiety more rapidly and with less sedation.

Glutamate an excitatory neurotransmitter is associated with many learning, memory, and developmental processes. Alcohol normally inhibits the effects of glutamate. However, during abstinence following chronic alcohol use, excitation of the glutamatergic system is believed to have a role in alcohol withdrawal-induced seizures.

Hallucinogens can produce sensory abnormalities and hallucinations, and most have some adrenergic effects as well. They also are referred to as psychedelics and psychomimetics. The more traditional hallucinogens such as lysergic acid diethylamide (LSD) are considered primarily serotonergic-acting agents. Some of the other compounds including phenylethylamines have hallucinogenic properties but act like amphetamines as well and include mescaline and MDMA (3,4-methylenedioxy-N-methylamphetamine). Others are MDA (3,4-methylenedioxyamphetamine) and DOM (dimethyloxymethylamphetamine). Other hallucinogens are acetylcholine antagonists such as

belladonna, benzotrophine (used to treat parkinsonian symptoms), and many common over-the-counter antihistamines.

Hallucinogen intoxication often begins with autonomic effects, sometimes nausea and vomiting, and mild increases in heart rate, body temperature, and slight elevations of systolic blood pressure. Dizziness and dilated pupils may occur. The prominent effects during intoxication are sensory distortions with illusions and hallucinations. Visual distortions are more common than auditory or tactile ones. So-called bad trips can involve anxiety (including panic attacks), paranoid reactions, anger, violence, and impulsivity. Individuals may feel they can fly or have special powers, and thus injure themselves in falls or other accidents due to delusions or misperceptions. Suicide attempts also can occur during bad trips.

Inhalants/Solvents includes a large and varied group of psychoactive substances that all share the common characteristic of being inhaled for their effects. They are commonly found in household, industrial, and medical products. These drugs are used primarily by adolescents, although some, especially the nitrates, are used by adults as well. In addition to short-term intoxicating affects, nitrates are used to enhance sexual pleasure by vasodilation that produces a rush and sensation of warmth. No withdrawal syndrome has been associated with nitrate abuse. Most inhalants produce some neurotoxicity with cognitive, motor, and sensory involvement. Additionally, damage to the heart, lungs, kidneys, liver, pancreas, and bone marrow has been reported. Many of the medical consequences of inhalant usage remit upon abstinence.

Type	Examples	Chemicals in Inhalant/Solvent
Adhesives	Airplane glue	Toluene, ethyl acetate
	Other glues	Hexane, toluene, methyl chloride, acetone, methyl ethyl ketone, methyl butyl ketone
	Special cements	Trichloroethylene, tetrachloroethylene
Aerosols	Spray paint	Butane, propane (U.S.), fluorocarbons, toluene, hydrocarbons, "Texas shoe shine" (a spray containing toluene)
	Hair spray	Butane, propane (U.S.), chlorofluorocarbons (CFCs)
	Deodorant; air freshener	Butane, propane (U.S.), CFCs
	Analgesic spray	CFCs
	Asthma spray	CFCs
	Fabric spray	Butane, trichloroethane
	PC cleaner	Dimethyl ether, hydrofluorocarbons
Anesthetics	Gaseous	Nitrous oxide
	Liquid	Halothane, enflurane
	Local	Ethyl chloride
Cleaning agents	Dry cleaning	Tetrachloroethylene, trichloroethane
	Spot remover	Xylene, petroleum distillates, chlorohydrocarbons
	Degreaser	Tetrachloroethylene, trichloroethane, trichloroethylene
Solvents and gases	Nail polish remover	Acetone, ethyl acetate
	Paint remover	Toluene, methylene chloride, methanol acetone, ethyl acetate
	Paint thinner	Petroleum distillates, esters, acetone
	Correction fluid and thinner	Trichloroethylene, trichloroethane
	Fuel gas	Butane, isopropane
	Lighter	Butane, isopropane
	Fire extinguisher	Bromochlorodifluoromethane
Food products	Whipped cream	Nitrous oxide
	Whippets	Nitrous oxide
"Room odorizers"	Locker Room, Rush, Poppers	Isoamyl, isobutyl, isopropyl or butyl nitrate (now legal), cyclohexyl *(SAMHSA TIP # 45)*

Ketamine is a white crystalline powder that is soluble in water and alcohol. It is a synthetic drug that produces hallucinations, analgesia, and amnesia, and can cause euphoria. Users can experience impaired thought processes, confusion, dizziness, impaired motor coordination, and slurred speech. Ketamine and PCP (phencyclidine) were developed during the 1950s as anesthetic agents for humans. Phencyclidine was briefly marketed for human anesthetic use but taken off the market because of an unusually high incidence of psychotic symptoms. PCP remains in legitimate use for veterinarian anesthesia for large animals as does ketamine for small animals. Although both drugs were originally developed for intravenous use, they are now manufactured illicitly as oral drugs of abuse. PCP frequently is sold as LSD.

Withdrawal symptoms from Ketamine and PCP (Phencyclidine) include drug craving, depression, increased appetite, and hypersomnolence. There is research evidence that ketamine and PCP may have neurotoxic effects; studies indicate memory impairment which is persistent with chronic ketamine use. Syndromes of acute intoxication with hallucinations, delusions, agitation, and violence are the most significant problems. Both drugs require management for the agitation and psychotic features produced during acute use. Large overdoses require airway management and ventilatory support for some hours. The behavioral management of the agitation and violence that may be seen is best managed in a controlled environment with limited stimuli and very close supervision. Occasionally, oral or parenteral uses of sedating medications (e.g., benzodiazepines) are required. In extreme situations, restraints may be required for protection of patients and staff. There are no studies to guide the treatment of ketamine or PCP detoxification. The need to manage withdrawal symptoms from these drugs is unlikely, but if it arises, benzodiazepines are administered.

Marijuana, the most commonly abused illicit drug in the United States, is a dry, shredded green/brown mix of flowers, stems, seeds, and leaves of the hemp plant cannabis sativa that is typically smoked as a cigarette (joint, nail), or in a pipe (bong). It can also be smoked in blunts, which are cigars that have been emptied of tobacco and refilled with marijuana, often in combination with another drug. In addition, marijuana can be mixed in food or brewed as a tea. A more concentrated, resinous form of it is called hashish, and, in the form of a sticky black liquid, hash oil. Street terms for marijuana include pot, herb, weed, grass, widow, ganja, and hash, as well as terms derived from trademarked varieties of cannabis, such as Bubble Gum, Northern Lights, Fruity Juice, Afghani #1, and a number of Skunk varieties.

The main active chemical in marijuana is THC (delta-9-tetrahydrocannabinol). THC acts on cannabinoid receptors involved in memory (hippocampus), concentration (cerebral cortex), perception (sensory portions of the cerebral cortex) and movement (cerebellum, substantia nigra, and globus pallidus). When THC activates these cannabinoid receptors, it interferes with the normal functioning of these areas of the brain. In low to medium doses, marijuana causes relaxation, decreased coordination, reduced blood pressure, sleepiness, disruption in attention, and an altered sense of time and space. In high doses, marijuana can cause hallucinations, delusions, impaired memory, and disorientation. The onset of its effects start within one to ten minutes after it is taken and can last three to four hours or even longer. Experiments have shown that THC can affect norepinephrine and dopamine, serotonin, and GABA levels.

THC abstinence syndrome usually starts within twenty-four hours of cessation of use. The most frequently occurring symptoms of THC withdrawal are anxiety, restlessness and irritability, sleep disturbances, and changes in appetite (usually anorexia). Other symptoms that occur less frequently include tremor, diaphoresis, tachycardia, and gastrointestinal disturbances (e.g., nausea, vomiting, and diarrhea). Cognitive difficulties and depression have also been reported and may persist, but usually improve with time. Withdrawal symptoms are usually self-limiting and there are no medical complications; medication is not typically needed for management. Persistent difficulties with sleep

can be treated with trazodone. However, trazodone can lead to orthostatic hypotension, dizziness, and may increase falls, particularly in individuals over the age sixty. Benzodiazepines and other addictive medications are contraindicated.

Methamphetamine (MA): Amphetamine, the predecessor to MA, was first synthesized in 1887 and became commercially available in 1932 as a nasal spray for the treatment of asthma. Amphetamine's stimulant properties were soon recognized, which led to additional medical and functional applications. By 1937, amphetamine was available by prescription to treat narcolepsy and attention deficit/hyperactivity disorder (AD/HD). After the introduction of amphetamine, other more potent forms were developed and made readily available to the public including dextroamphetamine sulfate (Dexedrine) and methamphetamine (Methedrine). Due to their stimulant properties, these new forms were also used to enhance performance. For example, during World War II, MA was widely used by soldiers to fight fatigue and enhance performance and by pilots to stay awake for long periods of time. After World War II, intravenous MA abuse reached epidemic proportions in Japan when supplies stored for military use became available to the public.

During the 1950s legally manufactured MA tablets were often used by truck drivers to stay awake on long hauls, by athletes to enhance performance, and by students to study long hours and maintain busy schedules. While MA required a medical prescription, non-medical use was generally considered to be a method of enhancing performance and was not associated with substance use disorders. However, this changed during the 1960s due to increased availability of injectable MA which spread among a subculture known as speed freaks. The dangers of abuse soon became apparent, and, eventually, many pharmaceutical amphetamine products were removed from the market and physicians did not prescribe the remaining products as liberally. However, as the supply of amphetamine and MA decreased, demand in the black market soon increased, which fostered illicit production. Ultimately, the Controlled Substances Act, passed in 1970, severely restricted the legal production of these stimulants and led to a decline the production and distribution during that decade. This Act, however, did not eliminate the use of MA since the materials and equipment required to produce it are inexpensive, it is relatively easy to manufacture, and the active ingredients needed for its preparation are relatively easy to obtain. Also, in comparison to other stimulants such as cocaine, MA is cheaper and its effects are longer lasting. Clandestine manufacturers developed alternative methods of production not covered under the law and responded to increased demand with more production. By the mid-1980s, the number of illegal, makeshift MA laboratories in rural desert area communities in the Southwest proliferated. The manufacture of MA in these rural regions was preferred because the cooking process produces a strong chemical smell making home laboratories easy to detect.

Efforts to curb production resulted in the passage of the Chemical Trafficking and Diversion Act of 1988 which amended the 1970 legislation to require wholesalers to record imports and exports of some of the chemical precursors of MA (e.g., ephedrine, pseudoephedrine, phenylacetic acid, benzyl cyanide, and benzyl chloride). But, these chemicals could still be easily obtained outside the United States, especially Mexico and increased the Mexican drug cartels' share of the wholesale MA market in this country. By the late 1980s, MA spread to other areas of the United States such as Hawaii, where MA was smuggled in from Taiwan and South Korea. By 1990, MA was being distributed from Hawaii to the U.S. mainland.

MA, known by many street names (e.g., speed, chalk, crank, crypto, crystal, crystal meth, meth, quill, speed, tweak, white cross, yellow bam, cristy, hanyak, ice, L.A. glass, quartz), can be swallowed in pill or tablet form, snorted (intranasally) in its powdered form, or injected intravenously in its solution form. Of these three routes of administration, injection leads to the quickest and most intense effects, or what is termed the rush. MA can be transformed into a high purity solid form of clear, large, chunky

crystals, known as ice or glass, which can be smoked and results in a more immediate and powerful rush than when administered intravenously. The euphoria reportedly lasts longer than that of smoked crack cocaine.

Groups for whom MA abuse has become problematic are women, gay men, and Asian-Pacific Islanders, although on a national level, approximately eighty percent of individuals treated are Caucasian. Increasing use has been found in Hispanic/Latino and Native American populations in Arizona and Minnesota. The White House launched an initiative called The President's National Strategy for Combating Methamphetamine Abuse to enhance law enforcement efforts, regulation of precursor chemicals, international initiatives, tougher criminal penalties, legislative proposals, and training of investigators and prosecutors, as well as treatment, prevention, and a public education campaign. This initiative led to passage of the Comprehensive Methamphetamine Control Act in 1996, which created the Methamphetamine Interagency Task Force to design, implement, and evaluate education, prevention, and treatment practices and strategies of the federal government with respect to methamphetamine and other synthetic stimulants.

The physiological effects of MA are generally similar to those of cocaine and include increased heart rate, elevated blood pressure, elevated body temperature, increased respiratory rate, and pupillary dilation. Other acute effects include rapid heart rate, irregular heart rate, and irreversible, stroke-producing damage to small blood vessels in the brain. It impairs the functioning of both the dopamine and serotonin systems and MA-induced neuronal toxicity specific to certain brain regions (primarily the limbic reward system) both biochemically and anatomically. These adverse effects are often long-lasting, and there is speculation that some types of damage may be permanent and that they may underlie cognitive and emotional deficits evidenced in many users. Animal studies have shown that chronic use of MA can significantly reduce brain dopamine levels for up to six months after last use, with less significant reductions persisting for up to four years.

Chronic abuse of MA can lead to in inflammation of the heart lining, damaged blood vessels, and skin abscesses from administration via injection. Persons who use the drug on a chronic basis can display episodes of violent behavior, paranoia, anxiety, confusion, and insomnia. Heavy users show progressive social and occupational deterioration. Psychotic symptoms sometimes persist for months or years after last use. In addition, breathing fumes from an active MA laboratory can be life threatening. The risk of chemical exposure is significant. Children who are exposed can experience medical problems, developmental delays, and brain damage.

MDMA (3, 4-methylenedioxy-methamphetamine) commonly known as ecstasy, was synthesized around the turn of the century and patented by Merck Pharmaceuticals in 1914. There are a number of related compounds that are designated by their initials (MDMA, MDA, MDEA, DOM, 2-CB, and DOT). These drugs are phenel-ethylene stimulants with various substitution groups off the benzene ring that give the medications hallucinogenic properties.

Methylenedioxymethamphetamine is a synthetic drug with hallucinogenic and amphetamine-like (i.e., stimulant) properties. Its effects are reminiscent of lysergic acid diethylamide-25 (LSD). Known by its street name, Ecstasy, MDMA first became popular at raves (weekend long dance parties) and all-night parties. It has spread beyond those venues and is also popular among gay males in urban settings. It is usually ingested orally in tablet or capsule form. Effects of MDMA include feelings of mental stimulation, emotional warmth, empathy toward others, a general sense of well-being, decreased anxiety, and enhanced sensory perception.

During the 1970s some psychiatrists in the United States began using MDMA as a psychotherapeutic tool, despite the fact that the drug had never undergone formal clinical trials nor received approval from the U.S. Food and Drug Administration (FDA) for use in humans. (In fact, it was not until late

2000 that the FDA approved the first small clinical trial for MDMA to determine if the drug could be used safely with two sessions of ongoing psychotherapy under carefully monitored conditions to treat post-traumatic stress disorder.) The drug gained a small following among psychiatrists during the late 1970s and early 1980s because it was perceived to enhance communication during psychotherapy sessions and reportedly increased insight into problems. Around this time MDMA also started becoming available on the street. The U.S. Drug Enforcement Administration (DEA) banned the drug in 1985 and placed on its list of Schedule I drugs (i.e., substances with no proven therapeutic value.)

MDMA can produce a variety of adverse health effects, including nausea, chills, sweating, involuntary teeth clenching, muscle cramping, and blurred vision. Individuals who use significant amounts can experience paranoid ideation, psychotic symptoms, obsessional thinking, anxiety and impaired cognitive performance. MDMA has been shown to be toxic to serotonergic neurons in several animal studies. Overdose can also occur with resultant high blood pressure, faintness, panic attacks, and, in severe situations, loss of consciousness and seizures. MDMA can also reduce cardiac efficiency and its metabolites interfere with the ability to metabolize the drug so that additional doses can lead to high blood levels that can worsen its cardiovascular and other toxic effects. While withdrawal is unlikely to produce the need for medical attention, overdose and intoxication can due to hyperthermia, dehydration, water intoxication with low sodium, rhabdomyolysis, renal failure, cardiac arrhythmia, and coma.

Neonatal Abstinence Syndrome (NAS) occurs in approximately sixty to eighty percent of infants who are exposed to heroin. The onset typically occurs seventy-two hours after birth and can result in death if severe and untreated. The syndrome involves the central and autonomic nervous systems, gastrointestinal system, and pulmonary system. Central nervous system (CNS) signs include irritability, hypertonia, hyperreflexia, abnormal suck, and poor feeding. Seizures are seen in one to three percent of infants. Gastrointestinal signs include diarrhea and vomiting. Respiratory signs include tachypnea, hyperpnea, and respiratory alkalosis. Autonomic signs include sneezing, yawning, lacrimation, sweating, and hyperpyrexia. If the infant is hypermetabolic, the postnatal weight loss may be excessive and subsequent weight gain suboptimal.

Delayed effects include subacute withdrawal with symptoms such as restlessness, agitation, irritability, and poor socialization that may persist for four to six months. There is an increased incidence of Sudden Infant Death Syndrome (SIDS). Behavioral and developmental consequences, such as hyperactivity and poor school performance, have been inconsistently reported. Studies of these behavioral and developmental consequences are difficult to interpret because of poor long-term follow-up and inability to control for postnatal environmental influences.

Specific drugs approved by the FDA for treating withdrawal include methadone for heroin, and other opiate withdrawal and benzodiazepines (for alcohol withdrawal).

Nicotine is the principal addictive agent in tobacco. Nicotine binds to nicotinic acetylcholine receptors in the brain and stimulates the release of dopamine in the nucleus accumbens area (considered the reward center of the brain). This increase in dopamine is similar to that from stimulants.

Smoking cessation also may affect the metabolism of other drugs primarily through the Cytochrome P 450 (CYP450) system. During detoxification from nicotine, some medications will have their metabolism altered, including theophylline, caffeine, tacrine, imipramine, haloperidol, pentazocine, propranolol, flecainide, and estradiol; in general, these effects are short-lived and seldom severe. Nicotine also reduces beta blockers' ability to lower blood pressure and heart rate and decreases the amount of sedation from benzodiazepines as well as decreases the amount of pain relief provided by some opioids, most likely because of its stimulant effects.

Opiates are drugs derived from opium, the dried juice of the opium poppy (papaver somiferum). The pharmacologically active substances, which constitute approximately twenty five percent of the extract, are the alkaloids morphine, codeine, and papaverine. The newer synthetic compounds which resemble morphine in their action are called opioids. The principal effect of opium and opioids is to relieve pain.

Opioids are naturally occurring chemicals such as enkephalins and endorphins (endogenous opioids) that exert opiate-like effects by interacting with central nervous system opioid receptors. All opioids (e.g., heroin, morphine, hydromorphone, oxycodone, codeine, meperidine, and methadone) produce similar effects by interacting with endogenous opioid receptors. Heroin and methadone are opioid agonists. The repeated administration of opioid agonists results in dose-dependent physical dependence and tolerance. Physical dependence is manifested as a characteristic set of withdrawal signs and symptoms upon reduction, cessation, or loss of an active compound at its receptors.

Opioid receptors are molecules on the surfaces of cells to which opioid compounds attach and through which they exert their effects. Different types of opioid receptors are present in the brain. The receptor most relevant to opioid abuse and treatment is the mu receptor. It is through activation of the mu receptor that opioids exert their analgesic, euphorigenic, and addictive effects. The roles of other types of opioid receptors in the brain (i.e., non-mu opioid receptors) in the addictive process are not well defined.

Partial agonists have some properties of both full agonists and antagonists and activate receptors, but not to the same degree as full agonists. Increasing the dose of a partial agonist does not produce as great an effect as does increasing the dose of a full agonist. The agonist effects of a partial agonist reach a ceiling at moderate doses and do not increase from that point, even with increases in dosage. In other words, partial agonists bind to receptors and activate them but to a lesser degree than full agonists. At lower doses in individuals who are not dependent on opioids, full agonists and partial agonists produce effects that are indistinguishable. As doses are increased, both full and partial agonists produce increasing effects. At a certain point, however, the increasing effects of partial agonists reach maximum levels and do not increase further, even if doses continue to rise. This is known as the ceiling effect. Any effect is mediated by mu opioid receptors (e.g., analgesia, euphoria, respiratory depression). As higher doses are reached, partial agonists can act like antagonists, occupying receptors but not activating them (or only partially activating them), while at the same time displacing or blocking full agonists from receptors. Buprenorphine is an example of a mu opioid partial agonist. Partial agonists can precipitate withdrawal as they can displace a full agonist from receptors which results in a reduction of agonist effect.

Physical dependence is caused by neuroadaption of brain cells to the presence of a substance. Physical dependence is not necessarily indicative of a substance use disorder or addictive disorder (characterized by habitual and compulsive use). It is possible to be physically dependent upon a substance without addiction to the substance. Also, it is possible to be addicted to a substance without being physically dependence on it.

Pill count or callback is used to ascertain adherence to drug regimens in OTPs. In this procedure the patient is called on an unannounced basis and must go the OTP within a specified period of time (usually twenty-four to thirty-six hours) with all MAT medications. The number of pills must correspond to the number expected based prescribed ingestion. Callbacks are not used for all patients, but rather for those who are at high-risk.

Pretreatment is the process of educating, preparing, and motivating individuals for treatment when appropriate programs are not immediately available. Pretreatment efforts can include education about substances of abuse and their effects, the effectiveness of treatment, and the benefits of living a

substance-free life. The pretreatment process is intended to prepare persons for treatment by providing education about recovery; increasing self-awareness regarding abuse and addiction and their effects on individuals and families; providing understanding of the need for treatment; increasing awareness about solutions and resources; and generating motivation for treatment.

Rohypnol is a benzodiazepine that is sold in Europe and Mexico as a sedative-hypnotic. It is occasionally used as a club drug and at dance clubs. During the last decade it began to be smuggled into the United States and has been commonly used among homeless youth involved in the sex industry. Rohypnol has a reputation as a date rape drug because it can produce powerful amnestic and hypnotic effects, as well as coma.

Routes of administration include (1) oral consumption (i.e., swallowing), (2) intranasal consumption (i.e., snorting), (3) inhalation into the lungs (generally by smoking), and (4) intravenously via hypodermic syringe.

> A substance that is swallowed goes to the stomach and on to the intestinal tract. Some substances easily pass through the digestive tract into the bloodstream. Other substances are broken down into their chemical components (i.e., metabolized) in the digestive system, thereby destroying the substance.
>
> Substances that are inhaled into the lungs adhere to the lining of the nasal passages (the nasal mucosa) through which they enter directly into the bloodstream. Inhaled substances are usually first changed into a gaseous form by igniting (e.g., marijuana) or volatilizing by intense heat (e.g., crack cocaine, the ice form of MA). The lungs offer a large surface area through which the gaseous form may quickly pass directly into the bloodstream.
>
> Injected substances enter the bloodstream directly, although at a somewhat regulated rate, in their unmetabolized form.
>
> Once a substance enters the bloodstream, it is transported throughout the body to various organs and organ systems, including the brain. Substances that enter the liver may be metabolized there. Substances that enter the kidney may be excreted. If a woman is pregnant, and the substance is able to cross the placenta, it will enter the fetus' bloodstream. Nursing babies may ingest some substances from breast milk.
>
> To enter the brain, a substance's molecules must first penetrate its chemical protection system, which consists mainly of the blood-brain barrier. Tight cell-wall junctions and a layer of cells around the blood vessels keep large or electrically charged molecules from entering the brain. However, small neutral molecules, like those of cocaine and MA, easily pass through the blood-brain barrier and enter the brain. Once inside the brain, substances of abuse begin to exert their psychoactive effects.

Sensitization or **kindling**, is the reverse of tolerance and produces undesirable effects with lower doses of a drug than were required to yield these same reactions in an earlier phase of the addictive process.

Strategic/Structural Family Therapies: Both structural and strategic models of family therapy look at roles, boundaries and power in order to determine how effectively family structures are operating. They identify the function that substance abuse plays in maintaining family homeostasis and determining changes needed in family structure. They seek to assist families in altering behaviors that support substance abuse and other problems within the family. During treatment family members develop and practice alternative ways of interacting.

Strategic family therapy focuses on one problem identified by a family. This type of therapy deals with basic family interactions and behaviors that maintain the problem. Relabeling and reframing as well as focusing on sequences of interactions are used. Directives are developed to alter the sequences. Strategic family therapy for substance use treatment focuses on the positive interpersonal facets of substance use, particularly the ways it provides benefits to the family and negative consequences for the family should the use cease. Paradoxical interventions (e.g., suggesting that the family is not ready to change yet) are used to evoke change and growth.

Structural family therapy emphasizes the significance of the hierarchy of power within families as well as the identification of ineffective uses of power (e.g., scapegoating). Extreme disengagement and inappropriate coalitions within the family that maintain the substance use are targeted for change by restructuring boundaries that are too rigid or augmenting those that are too enmeshed or fused. For example, in families with substance abuse, one parent is often over involved with a child. In such situations boundaries that support the parents as a unit (or subsystem) capable of maintaining a hierarchical relation with their children and resist interference from older generations of the family or people outside the family are strengthened. Other restructuring techniques include system re-composition, structural modification, and system focusing. System re-composition helps family members build new systems (including those outside the family) or remove themselves from existing systems (e.g., physical separation, altering patterns of interaction and communication). Structural modification entails constructing or reorganizing patterns of interaction (e.g., shifting triangles to develop more functional alliances). System focusing (i.e., reframing or re-labeling) another technique, involves presenting an alternative perspective on an apparent problem so that it appears solvable, or as having positive effects for those who view it as a problem. Relabeling is used to help family members appreciate their participation in one member's relapse by presenting what they might lose in the face of successful recovery. Relabeling also creates alternatives for solving problems and provokes family members to alter their behavior.

Take-home medication refers to unsupervised doses. A patient in an OTP can, for example, receive a single take-home dose of medication for a day that the OTP is closed (e.g., Sundays, holidays). There are eight criteria for take-home medication that a medical director of an OTP can make that are specified in federal regulations (42 CFR, Part 8 §12(i)):

1. Absence of recent drug and alcohol abuse
2. Regular OTP attendance
3. Absence of behavioral problems at the OTP
4. Absence of recent criminal activity
5. Stable home environment and social relationships
6. Acceptable length of time in comprehensive maintenance treatment
7. Assurance of safe storage of take-home medication
8. Determination that rehabilitative benefits of decreased OTP attendance outweigh the potential risk of diversion

A maximum of thirty days supply of take-home medication is permitted if the patient is free from illicit substances for a minimum of two years of continuous treatment.

Transgender individuals include those transitioning from male-to-female (MTF) and female-to-male (FTM) who desire or have had hormone therapy, or sex reassignment surgery; cross-dressers or transvestites who desire to wear clothing associated with another sex; transgenderists who live in the gender role associated with another sex without desiring sex reassignment surgery; bigender persons who identify as both man and woman; drag queens and kings who are usually gay men and lesbian women who "do drag" and dress up in, respectively, women's and men's clothing; female and male

impersonators who are males that impersonate women and females who impersonate men, usually for entertainment.

Tweaking occurs at the end of a methamphetamine binge when nothing alleviates feelings of emptiness and dysphoria, including taking more methamphetamine. Tweaking is very uncomfortable, and the person may take a depressant (e.g., alcohol and heroine) to ease the dysphoria. Tweaking is the most dangerous stage of the methamphetamine abuse cycle as the person may exhibit violent behavior. Tweaking effects after persistent bingeing on ice are particularly dangerous since clients can misinterpret caretakers' gestures and turn against them. Restraints and sedation in a secure facility may be necessary, although stress reduction techniques and other approaches to preventing harm are also used.

Unilateral Family Therapy (UFT) involves working with spouses (typically wives) of family members not contemplating change who are abusing substances (typically alcohol). There are a number of different forms of unilateral family therapy, but all entail assisting a spouse who does not use substances in the identification and use of opportunities to encourage change in a partner with a substance problem. One model is comprised of three phases. During the first phase of three to eight once weekly sessions, the spouse receives education of the effects of alcohol, monitors the extent and time of their partner's drinking, learns to enhance the marital relationship through pleasurable activities when the partner is not drinking, and ceases or alters previous ineffective behaviors to control drinking. During the second phase (five to eighteen weeks) interventions are tailored to dealing with the partner's resistance to change. The third phase of three to six weekly sessions consists of working on maintaining gains in both spouses. Outcome studies indicate that participants display improvements in coping skills, marital relationships, and reductions in alcohol consumption as well as stress.

Wernicke-Korsakoff syndrome is clinically characterized by cognitive deficits (especially anterograde memory deficits), gait ataxia, and nystagmus. Wernicke's encephalopathy is a degenerative brain disorder caused by the lack of thiamine (vitamin B1). It may result from alcohol abuse, dietary deficiencies, prolonged vomiting, eating disorders, or the effects of chemotherapy. Symptoms include mental confusion, vision impairment, stupor, coma, hypothermia, hypotension, and ataxia. Korsakoff's amnesic syndrome, a memory disorder, also results from a deficiency of thiamine, and is associated with alcoholism. The heart, vascular, and nervous systems are involved. Symptoms include amnesia, confabulation, attention deficit, disorientation, and vision impairment. The main features of Korsakoff's amnesic syndrome are impairments acquiring new information or establishing new memories, and in retrieving previous memories. Although Wernicke's and Korsakoff's may appear to be two different disorders, they are generally considered to be different stages of the same disorder, which is called Wernicke-Korsakoff syndrome. Wernicke's encephalopathy represents the acute phase of the disorder, and Korsakoff's amnesic syndrome represents the chronic phase. Treatment involves replacement of thiamine and providing proper nutrition and hydration. In some instances, pharmacotherapy is also recommended. Most symptoms can be reversed if detected and treated promptly. However, improvement in memory function is slow and, usually, incomplete. Without treatment, these disorders can be disabling and life-threatening.

APPENDIX D: QUICK REFERENCE GUIDE

TARGET	EFFECTIVE INTERVENTIONS	INEFFECTIVE OR UNPROVEN INTERVENTIONS	COMMENTS
PREVENTION	• Resistance-skills training for students • Families and Schools Together (FAST) • Nurse Home Visitation Program • Functional Family Therapy (FFT) • Multisystemic Therapy (MST) • Multidimensional Family Therapy (MDFT) • Communities Mobilizing for Change on Alcohol (CMCA) • Community Trials Intervention to Reduce High-Risk Drinking (RHRD) • Family Matters • Focus on Families (FOF) • FAN (Family Advocacy Network) Club • Parents Who Care (PWC) • Project Venture (PV) • Preparing for the Drug Free Years (PDFY) • STARS for Families • Keep A Clear Mind (KACM) • Across Ages • All Stars • ATLAS (Athletes Training and Learning to Avoid Steroids) • Protecting You/Protecting Me (PY/PM) • LifeSkills Training (LST) • Project ALERT • Lions-Quest Skills for Adolescence (SFA) • Project SUCCESS • Class Action • Project Toward No Drug Use (TND) • Project Toward No Tobacco Use (TNT) • Adolescent Transitions Program (ATP) • Keepin' It REAL	• Drug Resistance Education (DARE) • Drug-free recreational and cultural activities for youth • General school-based drug prevention information approaches • Self-esteem enhancement programs	FFT, MST and MDFT are also treatment programs; information on them can be found in *A Guide to Evidence-Based Mental Health Practices for Children, Adolescents and their Families*

TARGET	EFFECTIVE INTERVENTIONS	INEFFECTIVE OR UNPROVEN INTERVENTIONS	COMMENTS
	• CASASTART • Project STAR • Too Good For Drugs (TGFD) • SAFE Children: Schools and Families Educating Children • Safe Dates • Creating Lasting Connections (CLC) • Residential Student Assistance Program (RSAP)		
Cocaine	• Contingency Management (CM) • 12-Step Facilitation Therapy (TSF) • Behavioral Couples Therapy (BCT) • Community Reinforcement Approach (CRA) • CRA + Vouchers • Day Treatment with Abstinence Contingencies & Vouchers • Individual Cognitive-Behavior Therapy • The Matrix Model • Relapse Prevention Therapy (RPT) • Supportive-Expressive Psychotherapy • The Matrix Model • Supportive-Expressive Psychotherapy	Acupuncture	
Opioids	• Methadone • Buprenorphine • Contingency Management (CM) • Approach (CRA) + Vouchers • Voucher-Based Reinforcement Therapy (VBRT) • Naltrexone • LAAM • Behavioral Couples Therapy (BCT) • Supportive-Expressive Psychotherapy • Contingency Management (CM) • Supportive-Expressive Psychotherapy	Acupuncture	LAAM has been withdrawn from the market.
Tobacco/Nicotine	• Nicotine Replacement		

TARGET	EFFECTIVE INTERVENTIONS	INEFFECTIVE OR UNPROVEN INTERVENTIONS	COMMENTS
	Therapy (NRT) • Combined Behavioral & NRT • Clonidine • Bupropion • Not-On-Tobacco program • Brief Intervention (The 5 As) • Project EX • Project Toward No Tobacco Use (TNT)		
Alcohol	• Naltrexone • Acamprosate • Nalmefene • Cognitive-Behavioral Coping-Skills Therapy (CBST) • Behavioral Marital Therapy (BMT) • Behavioral Self-Control Training (BSCT) • Disulfiram + Behavioral Contracting or Behavioral Couples Therapy (BCT) or Community Reinforcement Approach (CRA) • CRA + Vouchers • 12-Step Facilitation Therapy (TSF) • Brief Intervention • Motivational Enhancement Therapy for Problem Drinkers • Relapse Prevention Therapy (RPT) • Multidimensional Family Therapy (MDFT) • Project SUCCESS • Project Northland • Guided Self-Change (GSC) • Contingency Management (CM)	• Relaxation Training • The Minnesota Model • Acupuncture	While studies show that consistent use of disulfiram lead to favorable outcomes, adherence issues reduce its effectiveness
Methamphetamine	• Drug Courts • Contingency Management • The Matrix Model		
Co-occurring Disorders	• Integrated Dual Disorders Treatment (IDDT) • Dialectical Behavior Therapy (DBT) • Trauma-informed treatment		

TARGET	EFFECTIVE INTERVENTIONS	INEFFECTIVE OR UNPROVEN INTERVENTIONS	COMMENTS
	• Contingency Management (CM)		
Pain	• Methadone	Acupuncture	
Cannabis	• Cannabis Youth Treatment (CYT) • Brief Marijuana Dependence Counseling (BMDC) • Multidimensional Family Therapy (MDFT) • Contingency Management (CM)		CYT is comprised of Motivational Enhancement Therapy, Cognitive Behavioral Therapy, Family Support Network, Community Reinforcement Approach, and Multidimensional Family Therapy
Polysubstance Use	• Multidimensional Family Therapy (MDFT)		
Non-specific Substances	• Motivational Interviewing (MI) • Brief Intervention • Contingency Management (CM) • Multisystemic Therapy (MST) • Multidimensional Family Therapy (MDFT) • Community Reinforcement and Family Training (CRAFT) • Node-Link Mapping • Relapse Prevention Therapy (RPT) • Seeking Safety • Behavioral Couples Therapy (BCT) • Behavior Therapy for Adolescents • Brief Strategic Family Therapy (BSFT) • Dialectical Behavior Therapy (DBT) • Cognitive-Behavior Therapy (CBT) • Individualized Drug Counseling	Group Therapies	

APPENDIX E: COMMONLY ABUSED DRUGS

Substances: Category and Name	Examples of *Commercial* and Street Names	DEA Schedule*/ How Administered**	*Intoxication Effects*/Potential Health Consequences
Depressants			
barbiturates	*Amytal, Nembutal, Seconal, Phenobarbital;* barbs, reds, red birds, phennies, tooies, yellows, yellow jackets	II, III, V/injected, swallowed	*reduced pain and anxiety; feeling of well-being; lowered inhibitions; slowed pulse and breathing; lowered blood pressure; poor concentration*/confusion, fatigue; impaired coordination, memory, judgment; respiratory depression and arrest, substance use illnesses *Also, for barbiturates—sedation, drowsiness*/depression, unusual excitement, fever, irritability, poor judgment, slurred speech, dizziness *for benzodiazepines—sedation, drowsiness*/dizziness *for flunitrazepam*—visual and gastrointestinal disturbances, urinary retention, memory loss for the time under the drug's effects
benzodiazepines (other than flunitrazepam)	*Ativan, Halcion, Librium, Valium, Xanax;* candy, downers, sleeping pills, tranks	IV/swallowed	
flunitrazepam***+	*Rohypnol;* forget-me pill, Mexican Valium, R2, Roche, roofies, roofinol, rope, rophies	IV/swallowed, snorted	
Dissociative Anesthetics			
ketamine	*Ketalar SV;* cat Valium, K, Special K, vitamin K	III/injected, snorted, smoked	*increased heart rate and blood pressure, impaired motor function*/memory loss; numbness; nausea/vomiting *Also, for ketamine—at high doses, delirium, depression, respiratory depression and arrest*
Opioids and Morphine Derivatives			
codeine	*Empirin with Codeine, Fiorinal with Codeine, Robitussin A-C, Tylenol with Codeine;* Captain Cody, Cody, schoolboy; (with glutethimide) doors & fours, loads, pancakes and syrup	II, III, IV/injected, swallowed	*pain relief, euphoria, drowsiness*/respiratory depression and arrest, nausea, confusion, constipation, sedation, unconsciousness, coma, tolerance, substance use illnesses *Also, for codeine—less analgesia, sedation, and respiratory depression than morphine*
fentanyl	*Actiq, Duragesic, Sublimaze;* Apache, China girl, China white, dance fever, friend, goodfella, jackpot, murder 8, TNT, Tango and Cash	II/injected, smoked, snorted	
morphine	*Roxanol, Duramorph;* M, Miss Emma, monkey, white stuff	II, III/injected, swallowed, smoked	
opium	*laudanum, paregoric;* big O, black stuff, block, gum, hop	II, III, V/swallowed, smoked	
other opioid pain relievers (oxycodone, meperidine, hydromorphone, hydrocodone, propoxyphene)	*Tylox, OxyContin, Percodan, Percocet;* oxy 80s, oxycotton, oxycet, hillbilly heroin, percs *Demerol, meperidine hydrochloride;* demmies, pain killer *Dilaudid;* juice, dillies *Vicodin, Lortab, Lorcet; Darvon, Darvocet*	II, III, IV/swallowed, injected, suppositories, chewed, crushed, snorted	
Stimulants			
amphetamines	*Biphetamine, Dexedrine;* bennies, black beauties, crosses, hearts, LA turnaround, speed, truck drivers, uppers	II/injected, swallowed, smoked, snorted	*increased heart rate, blood pressure, metabolism; feelings of exhilaration, energy, increased mental alertness*/rapid or irregular heart beat; reduced appetite, weight loss, heart failure *Also, for amphetamines—rapid breathing; hallucinations*/tremor, loss of coordination; irritability, anxiousness, restlessness, delirium, panic, paranoia, impulsive behavior, aggressiveness, tolerance, substance use illnesses *for cocaine*—increased temperature/chest pain, respiratory failure, nausea, abdominal pain, strokes, seizures, headaches, malnutrition *for methamphetamine—aggression, violence, psychotic behavior*/memory loss, cardiac and neurological damage; impaired memory and learning, tolerance, substance use illnesses *for methylphenidate—increase or decrease in blood pressure, psychotic episodes*/digestive problems, loss of appetite, weight loss
cocaine	*Cocaine hydrochloride;* blow, bump, C, candy, Charlie, coke, crack, flake, rock, snow, toot	II/injected, smoked, snorted	
methamphetamine	*Desoxyn;* chalk, crank, crystal, fire, glass, go fast, ice, meth, speed	II/injected, swallowed, smoked, snorted	
methylphenidate	*Ritalin;* JIF, MPH, R-ball, Skippy, the smart drug, vitamin R	II/injected, swallowed, snorted	
Other Compounds			
anabolic steroids	*Anadrol, Oxandrin, Durabolin, Depo-Testosterone, Equipoise;* roids, juice	III/injected, swallowed, applied to skin	*no intoxication effects*/hypertension, blood clotting and cholesterol changes, liver cysts and cancer, kidney cancer, hostility and aggression, acne; adolescents, premature stoppage of growth; in males, prostate cancer, reduced sperm production, shrunken testicles, breast enlargement; in females, menstrual irregularities, development of beard and other masculine characteristics

(NIDA)

* Schedule I and II drugs have a high potential for abuse. They require greater storage security and have a quota on manufacturing, among other restrictions. Schedule I drugs are available for research only and have no approved medical use; Schedule II drugs are available only by prescription (unrefillable) and require a form for ordering. Schedule III and IV drugs are available by prescription, may have five refills in 6 months, and may be ordered orally. Most Schedule V drugs are available over the counter.

** Taking drugs by injection can increase the risk of infection through needle contamination with staphylococci, HIV, hepatitis, and other organisms.

*** Associated with sexual assaults.

Polysubstance Use

Psychoactive substances are frequently used to attenuate aversive symptoms experienced in the posteuphoric phase of use or may be administered to prolong or counter particular effects of stimulant intoxication. Individuals who use cocaine often also use alcohol, marijuana, or opiates. People who use MA tend to use marijuana. Most people who use stimulants also engage in cigarette smoking to relieve perceived stress. Speedballing (or the concurrent use of opioids and cocaine or other stimulants) is done to smooth the effects of each drug. Patients in medication-assisted treatment (MAT) for opioid use commonly use alcohol, amphetamines, benzodiazepines and other prescription sedatives, cocaine, and marijuana. Overdose deaths can occur when alcohol is used alone in high doses or in lower doses with opioid treatment medication or sedatives. Alcohol-related factors are a major cause of death among patients in MAT, both during and after treatment, and of administrative discharges from OTPs. On average, patients in MAT who have an alcohol dependency experience more medical and psychiatric disorders, greater criminality, and poorer social and family functioning and peer relations. Alcohol abuse among patients in MAT can affect treatment compliance and outcomes adversely. Continuous use may induce enzyme activity that increases the metabolism of treatment medication, reducing medication plasma levels and resulting in symptoms of under medication that further complicate treatment. Stimulant abuse, especially cocaine, is another serious problem in many OTPs. Adverse effects of these substances include cardiovascular effects (hypertension, stroke, arrhythmias, and myocardial infarction), respiratory effects (perforation of nasal septum and bronchial irritation) if inhaled or smoked, or mental effects (anxiety, depression, anger, paranoia, and psychotic symptoms).

Some individuals who are taking prescribed neuroleptics take stimulants to counteract the sedating properties of these antipsychotic medications. Individuals on methadone maintenance often abuse tricyclic antidepressants, especially amitriptyline, and it has been estimated that fifty to seventy-five percent have a concomitant alcohol use disorder. Eighty to ninety percent of individuals with a cannabis use disorder also abuse alcohol.

It is estimated that sixty-two to ninety percent of individuals who use cocaine concurrently consume alcohol to prolong the high and attenuate the agitation and sleeplessness that emerge at the end of a binge. However, the combination of cocaine and alcohol can be hazardous because of the formation of the metabolite cocaethylene (an ethyl ester of benzoylecgonine / psychoactive derivative of cocaine formed exclusively during the combined administration of cocaine and alcohol) when the two substances are used together which is hepatotoxic. In addition, cocaethylene can increase the cardiotoxic effects of either substance alone. The mixture of opioids, cocaine, and alcohol can be lethal and has been identified as a leading cause of accidental overdose.

Polysubstance use and psychiatric disorders are both associated with adverse treatment outcomes when not properly identified and addressed. Interventions for withdrawal from polysubstance use

disorders involve sequential treatment in accordance with severity of withdrawal. Sedative-hypnotic withdrawal is treated first followed by opioid detoxification.

Benzodiazepines such as diazepam and clonazepam have antianxiety and sedative effects. They are schedule IV drugs, signifying relatively low abuse liability. However, people with other substance use disorders are more likely to abuse benzodiazepines. When used in prescribed doses, benzodiazepines are not dangerous for patients in MAT, except when they cause patients to seek other drugs with sedative effects. High-dose benzodiazepines can cause serious problems, including severe intoxication and higher risk of injuries or fatal overdoses.

Non-benzodiazepine sedatives such as intermediate or short-acting barbiturates or glutethimide are more likely than benzodiazepines to produce lethal overdose because of the development of tolerance to their sedative and euphoric effects but not to their respiratory-depressant effects. In addition, non-benzodiazepine sedatives induce cytochrome P450/3A, which is involved in methadone, and buprenorphine metabolism.

APPENDIX F: SELECTED PRESCRIPTION DRUGS WITH POTENTIAL FOR ABUSE

Substances: Category and Name	Examples of *Commercial* and Street Names	DEA Schedule*/ How Administered**	*Intoxication Effects*/Potential Health Consequences
Depressants			*reduced pain and anxiety; feeling of well-being; lowered inhibitions; slowed pulse and breathing; lowered blood pressure; poor concentration*/confusion, fatigue; impaired coordination, memory, judgment; respiratory depression and arrest, substance use illnesses *Also, for barbiturates—sedation, drowsiness*/depression, unusual excitement, fever, irritability, poor judgment, slurred speech, dizziness *for benzodiazepines—sedation, drowsiness*/dizziness *for flunitrazepam*—visual and gastrointestinal disturbances, urinary retention, memory loss for the time under the drug's effects
barbiturates	*Amytal, Nembutal, Seconal, Phenobarbital;* barbs, reds, red birds, phennies, tooies, yellows, yellow jackets	II, III, V/injected, swallowed	
benzodiazepines (other than flunitrazepam)	*Ativan, Halcion, Librium, Valium, Xanax;* candy, downers, sleeping pills, tranks	IV/swallowed	
flunitrazepam***+	*Rohypnol;* forget-me pill, Mexican Valium, R2, Roche, roofies, roofinol, rope, rophies	IV/swallowed, snorted	
Dissociative Anesthetics			*increased heart rate and blood pressure, impaired motor function*/memory loss; numbness; nausea/vomiting *Also, for ketamine—at high doses, delirium, depression, respiratory depression and arrest*
ketamine	*Ketalar SV;* cat Valium, K, Special K, vitamin K	III/injected, snorted, smoked	
Opioids and Morphine Derivatives			*pain relief, euphoria, drowsiness*/respiratory depression and arrest, nausea, confusion, constipation, sedation, unconsciousness, coma, tolerance, substance use illnesses *Also, for codeine—less analgesia, sedation, and respiratory depression than morphine*
codeine	*Empirin with Codeine, Fiorinal with Codeine, Robitussin A-C, Tylenol with Codeine;* Captain Cody, Cody, schoolboy; (with glutethimide) doors & fours, loads, pancakes and syrup	II, III, IV/injected, swallowed	
fentanyl	*Actiq, Duragesic, Sublimaze;* Apache, China girl, China white, dance fever, friend, goodfella, jackpot, murder 8, TNT, Tango and Cash	II/injected, smoked, snorted	
morphine	*Roxanol, Duramorph;* M, Miss Emma, monkey, white stuff	II, III/injected, swallowed, smoked	
opium	*laudanum, paregoric;* big O, black stuff, block, gum, hop	II, III, V/swallowed, smoked	
other opioid pain relievers (oxycodone, meperidine, hydromorphone, hydrocodone, propoxyphene)	*Tylox, OxyContin, Percodan, Percocet;* oxy 80s, oxycotton, oxycet, hillbilly heroin, percs *Demerol, meperidine hydrochloride;* demmies, pain killer *Dilaudid;* juice, dillies *Vicodin, Lortab, Lorcet; Darvon, Darvocet*	II, III, IV/swallowed, injected, suppositories, chewed, crushed, snorted	
Stimulants			*increased heart rate, blood pressure, metabolism; feelings of exhilaration, energy, increased mental alertness*/rapid or irregular heart beat; reduced appetite, weight loss, heart failure *Also, for amphetamines—rapid breathing; hallucinations*/tremor, loss of coordination; irritability, anxiousness, restlessness, delirium, panic, paranoia, impulsive behavior, aggressiveness, tolerance, substance use illnesses *for cocaine*—increased temperature/chest pain, respiratory failure, nausea, abdominal pain, strokes, seizures, headaches, malnutrition *for methamphetamine—aggression, violence, psychotic behavior*/memory loss, cardiac and neurological damage; impaired memory and learning, tolerance, substance use illnesses *for methylphenidate—increase or decrease in blood pressure, psychotic episodes*/digestive problems, loss of appetite, weight loss
amphetamines	*Biphetamine, Dexedrine;* bennies, black beauties, crosses, hearts, LA turnaround, speed, truck drivers, uppers	II/injected, swallowed, smoked, snorted	
cocaine	*Cocaine hydrochloride;* blow, bump, C, candy, Charlie, coke, crack, flake, rock, snow, toot	II/injected, smoked, snorted	
methamphetamine	*Desoxyn;* chalk, crank, crystal, fire, glass, go fast, ice, meth, speed	II/injected, swallowed, smoked, snorted	
methylphenidate	*Ritalin;* JIF, MPH, R-ball, Skippy, the smart drug, vitamin R	II/injected, swallowed, snorted	
Other Compounds			*no intoxication effects*/hypertension, blood clotting and cholesterol changes, liver cysts and cancer, kidney cancer, hostility and aggression, acne; adolescents, premature stoppage of growth; in males, prostate cancer, reduced sperm production, shrunken testicles, breast enlargement; in females, menstrual irregularities, development of beard and other masculine characteristics
anabolic steroids	*Anadrol, Oxandrin, Durabolin, Depo-Testosterone, Equipoise;* roids, juice	III/injected, swallowed, applied to skin	

(NIDA)

*Schedule I and II drugs have a high potential for abuse. They require greater storage security and have a quota on manufacturing, among other restrictions. Schedule I drugs are available for research only and have no approved medical use; Schedule II drugs are available only by prescription (unrefillable) and require a form for

ordering. Schedule III and IV drugs are available by prescription, may have five refills in 6 months, and may be ordered orally. Most Schedule V drugs are available over the counter.

**Taking drugs by injection can increase the risk of infection through needle contamination with staphylococci, HIV, hepatitis, and other organisms.

***Associated with sexual assaults.

+Not available by prescription in U.S.

APPENDIX G: SCREENING AND ASSESSMENT INSTRUMENTS

SCREENING INSTRUMENTS

Substance use illnesses Severity Index (ASI)
The ASI is a general instrument for screening. It assesses a person's status in seven areas of functioning: alcohol use, drug use, medical status, psychiatric status, employment and financial support, legal status, and family and social relationships. It is used in a structured interview and takes fifty to sixty minutes to administer, and five minutes to obtain a severity rating. Computerized scoring is available. The ASI has good reliability and validity for diverse populations, including those in the justice system, and can be used to gather data at intake and intervals during to treatment to measure progress as well as at discharge to ascertain outcomes, and post discharge. The tool can also be used for treatment planning and outcome evaluation. It is also available in Spanish. There is no cost for use and minimal charges for photocopying and mailing. It is available from the National Technical Information Service (NTIS), www.ntis.gov, or from www.tresearch.org.

Substance Abuse Subtle Screening Inventory (SASSI)
The SASSI is a brief self-report that is available in separate versions for adults and adolescents. The Adult SASSI-3 helps identify individuals who have a high probability of having a substance dependence disorder with an overall empirically tested accuracy of ninety-three percent. The Adolescent SASSI-A2 is designed to identify individuals who have a high probability of having a substance use disorder, including both substance abuse and substance dependence, with its decision rules yielding an overall accuracy of ninety-four percent. The SASSI includes both face valid and subtle items that have no apparent relationship to substance use. The subtle items are included to identify individuals with alcohol and other drug problems who are unwilling or unable to acknowledge substance misuse or symptoms associated with it. The SASSI-2 has been shown to have less predictive value for African Americans when compared to Hispanics/Latinos and Caucasians. Support materials for the SASSI include User's Guides containing easy-to-understand instructions for administering, scoring, interpretation, and manuals providing comprehensive information on development, reliability, and validity can be found at www.sassi.com.

Global Appraisal of Individual Needs (GAIN)
The GAIN has eight sections: background, substance use, physical health, risk behaviors, mental health, environment, legal, and vocational. Each section contains questions on the recency of problems, breadth of symptoms, and recent prevalence in days or times, as well as lifetime service utilization, recency of utilization, and frequency of recent utilization. The items are combined into over one hundred scales and subscales that can be used for DSM-IV based diagnosis and ASAM based level of care placement as well as outcome monitoring. The instrument's psychometrics and the scale norms have been established for both adults and adolescents overall and by level of care (within age). The indices are: substance problem substance frequency, current (past week) withdrawal, health distress, health problem, cognitive impairment, general mental distress, traumatic stress, behavior complexity, emotional problem, treatment resistance, treatment motivation, self efficacy, problem orientation, environmental risk, recovery environment risk, general conflict tactic (violence) scale, traumatic victimization, interpersonal sources of stress, other sources of stress, general social support, illegal activities, employment inactivity, and training (school) activity. Information can be obtained from www.chestnut.org/li/gain.

Alcohol Dependence Scale (ADS)
This is a twenty-five-item instrument available in pencil and paper, computer self-administered, and interview formats that screens for alcohol dependence symptoms. It provides a quantitative measure of the severity of alcohol dependence symptoms. The items cover alcohol withdrawal symptoms, impaired control over drinking, awareness of a compulsion to drink, increased tolerance to alcohol, and salience of drink-seeking behavior. It takes about ten minutes to complete and has good reliability and validity. Information can be obtained from http://eib.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nNodeID=3583&sLanguageISO=EN.

Simple Screening Instrument for Substance Abuse (SSI-SA)
This is a sixteen-item screening instrument that examines symptoms of both alcohol and drug dependence. It covers the following domains: substance consumption, preoccupation and loss of control, adverse consequences, problem recognition, tolerance, and withdrawal. It can be self-administered or used as part of a diagnostic interview. Both forms are available from http://www.mhacg.org/simplescreen.htm.

Alcohol Use Disorder Identification Test (AUDIT)
The AUDIT is used to identify individuals whose consumption of alcohol is harmful to their health. It is a ten item screening questionnaire that includes three questions on the amount and frequency of drinking, three questions on alcohol dependence, and four questions related to problems caused by alcohol. It takes two minutes to administer, less than one minute to score, and requires training to administer. This instrument has been validated cross-culturally and has been found to detect alcohol reliably. It was designed to be used in primary health care settings and provides early detection of hazardous and harmful alcohol consumption, and focuses on present use rather than lifetime use. A manual and video training modules are available from Project Cork at http://projectcork.org/. This instrument is in the public domain and may be downloaded from http://silk.nih.gov/silk/niaaa1/publication/instable.htm.

CAGE Questionnaire
The CAGE Questionnaire is designed to detect alcoholism and takes less than on minute to administer and score. It is easy to use and does not require training for administration. The CAGE is often used primary care settings. It is available for download from Project Cork at http://projectcork.org/ and has been found to have validity for screening older adults as well as younger ones. The CAGE is as follows:

1. *Have you ever felt you should cut down on your drinking?*
2. *Have people annoyed you by criticizing your drinking?*
3. *Have you felt bad or guilty about your drinking?*
4. *Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?*

Item responses are scored 0 for no and 1 for yes. A higher score indicates problems with alcohol. A score of 2 or higher is considered to be clinically significant.

The CAGE has been criticized for not being gender sensitive in that females with alcohol problems are less likely to screen positive than their male counterparts. The CAGE only identifies alcohol dependence. Because the instrument asks about lifetime experiences rather than current consumption, a person who no longer drinks can screen positive.

The **CUGE** is the CAGE questionnaire that replaces the second question with *Have you often driven under the influence?*

CAGE-AID (CAGE Adapted to Include Drugs)
The CAGE-AID has been tested in primary care settings and is as follows:

- *Have you ever felt you should cut down on your drinking or drug use?*
- *Have people annoyed you by criticizing your drinking or drug use?*
- *Have you felt bad or guilty about your drinking or drug use?*
- *Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?*

Drug Abuse Screening Test (DAST)
The DAST is a brief simple method for identifying individuals who are abusing psychoactive drugs. It results in a quantitative index score of the degree of problems related to drug use and misuse. It consists of twenty items and can be administered in a structured interview or as a self report. A yes or no response is required for each of the twenty questions and it takes five minutes to administer. All items that are endorsed in the direction of increased drug problems are summed to reach a total or summary score. The DAST form and scoring key are available either without cost or at nominal cost from http://www.projectcork.org/clinical_tools/html/DAST.html.

A self scoring version with immediate results is available at http://kc.vanderbilt.edu/substanceuseillnesses/dast.html.

Health Screening Survey (HSS)
The HSS is a ten-question masked alcoholism screening instrument that measures the average quantity and frequency of alcohol use in the previous three months. It includes parallel questions regarding weight, exercise and smoking. It has been validated for use with individuals in primary care settings. The HSS contains four subscales: one measuring amount of alcohol consumption, the CAGE questionnaire, one for self-perception of current problems with alcohol, and one for self-perceptions of past problems with alcohol. Consumption of twenty or more drinks per week, two or more positive responses to the four CAGE questions, self-perception of a current problem with alcohol use, or self-perception of a past problem with alcohol use indicates problem drinking. The HSS can be found at http://pathwayscourses.samhsa.gov/aaac/pdfs_aaac/hss.pdf.

Level of Care Utilization System (LOCUS)
The LOCUS is designed to assess immediate service needs (e.g., for clients in crisis), plan for the resource needs of defined populations over time, and monitor changes in status or placement at different points in time. The instrument is divided into three sections. The first section defines six evaluation parameters or dimensions: risk of harm, functional status, medical, addictive, psychiatric co-morbidity, recovery environment, treatment and recovery history, and engagement. A five-point scale is constructed for each dimension and the criteria for assigning a given rating or score in that dimension are elaborated. The LOCUS takes fifteen to thirty minutes to administer and twenty minutes to score and there is no user fee. The LOCUS can be obtained from www.wpic.pitt.edu/aacp/find.html/.

Michigan Alcoholism Screening Test (MAST)
The MAST is a twenty-five item questionnaire that is designed to provide a rapid and effective screen for lifetime alcohol-related problems and alcoholism. It consists of twenty-five questions and takes ten minutes to administer and five minutes to score. No training is required for administration. The MAST has been validated for use with individuals who have sustained traumatic injuries. A self scoring version can be found at http://www.reboundhangover.com/mast.htm.

Michigan Alcoholism Screening Test – Geriatric Version (MAST-G)
The MAST-G was developed for use with older adults and can be used in a variety of settings including primary care, nursing homes, congregate living settings, etc. It consists of twenty-four yes-no questions with the more yes responses indicating a problem with alcohol use. It can be found at
http://www.ssc.wisc.edu/wlsresearch/pilot/P01-R01_info/aging_mind/Aging_AppB5_MAST-G.pdf.
A short version, the SMAST-G is available from http://positiveaging.org/provider/pdfs/alcohol_smast_g.pdf.

Brief Michigan Alcoholism Screening Test (BMAST)
This is a ten-item questionnaire that can be used in an interview or paper and pencil format. It takes five minutes to administer and two to three minutes to score. It is available for download from Project Cork at http://www.projectcork.org/clinical_tools/index.html.

Rapid Alcohol Problems Screen (RAPS)
This instrument has been shown to be sensitive to African American, Hispanic/Latino, and Caucasian women and is useful in emergency rooms. It consists of the following questions, and a positive answer to one question indicates a positive test:

- *Do you sometimes take a drink in the morning when you first get up?*
- *During the past year, has a friend or family member ever told you about things you said or did while you were drinking that you could not remember?*
- *During the past year, have you had a feeling of guilt or remorse after drinking?*
- *During the past year, have you failed to do what was normally expected of you because of drinking?*
- *During the past year, have you lost friends or girlfriends or boyfriends because of drinking?*

T-ACE

This is a four-item questionnaire that is used to detect alcohol use in women who are pregnant. It was developed for use by obstetricians and gynecologists to detect high-risk drinking in women and is a modification of the CAGE. The T-ACE has four questions. A question on tolerance (T) is substituted for the CAGE item concerning guilt. The item asks, "How many drinks does it take to make you high?" or "How many drinks can you hold?" The other three questions are the CAGE questions on feeling annoyed or guilty and on having an eye-opener (a drink first thing upon awakening). The instrument has been found to have high sensitivity and surpasses the MAST and CAGE in identifying risk-drinking behavior. The T-ACE has been validated only with pregnant women. It is available from Project Cork at http://www.projectcork.org/clinical_tools/html/T-ACE.html.

NET

The NET, developed for use with pregnant women, has three questions. One question is from the MAST: *Do you consider yourself a normal drinker?* Another is from the CAGE: *Do you ever have an eye-opener?* A third question is from the T-ACE: *How many drinks can you hold?* A response indicating more than three drinks scores positive on the last item. Its sensitivity has been validated only with pregnant women.

TCUDS II TCU Drug Screen II

The TCU Drug Screen II (TCUDS II) is a standardized fifteen-item screening tool that helps identify individuals with a history of heavy drug use or dependency. The instrument is widely used in adult criminal justice and correctional settings. Items on the TCUDS II represent key clinical and diagnostic criteria for substance abuse dependence as specified in the Diagnostic and Statistical Manual (DSM-IV) and the NIMH Diagnostic Interview Schedule (NIMH DISC). The first part of the scale includes questions related to drug and alcohol use problems and the second part addresses frequency of use and readiness for treatment. One potentially important feature of the scale is its ability to distinguish between criminal offenders with documented drug dependence and those who misuse drugs but are not dependent. This distinction is important for criminal justice officials who must make decisions about which offenders should be referred to treatment and the most appropriate types of treatment interventions for different offenders. The TCUDS II takes approximately five minutes to complete and can be used either in an interview or as a self-administered instrument. In order to promote reliable self-administration in criminal justice settings, clinical language was reworded to an eighth-grade reading level.

TWEAK

The TWEAK was developed for use with pregnant women and consists of five items that assess tolerance (T); worry (W): "Have close friends or relatives worried or complained about your drinking?"; eye-opener (E); amnesia (A): "Has a friend or family member ever told you things you said or did while drinking that you could not remember?"; and the need to cut down on drinking (K). The TWEAK has been found to be most effective for pregnant women. It has also been found to be sensitive to African Americans.

T	**Tolerance:** How many drinks can you hold?
W	Have close friends or relatives **worried** or complained about your drinking in the past year?
E	**Eye-opener:** Do you sometimes take a drink in the morning when you first get up?
A	**Amnesia:** Has a friend or family member ever told you about things you said or did while you were drinking that you could not remember?
K (C)	Do you sometimes feel the need to **cut** down on your drinking?
Scoring: A 7-point scale is used to score the test. The "tolerance" question scores 2 points if a woman reports she can hold more than five drinks without falling asleep or passing out. A positive response to the "worry" question scores 2 points, and a positive response to the last three questions scores 1 point each. A total score of 2 or more indicates the woman is likely to be a risk drinker.	

The instrument is available from Project Cork at http://www.projectcork.org/clinical_tools/index.html.

Recovery Attitude and Treatment Evaluator (RAATE)

The RAATE is designed to assist in determining the appropriate level of care upon admission, making continued stay or transfer decisions during treatment (utilization review), and documenting appropriateness of discharge. It measures treatment process and assesses the need for continuing care and readiness for discharge. It is a thirty-five item structured interview that takes twenty to thirty minutes to administer and less than five minutes

to score. The RAATE is administered by trained chemical dependency professional (RAATE-CE) and patient (RAATE-QI). A manual is available for $35.00 and the scoring templates for $8.75 from Evince Clinical Assessments located at www.evinceassessment.com.

Substance Abuse Treatment Scale (SATS)
The SATS is designed to assess an individual's stage of substance abuse treatment, and to monitor the progress of individuals with severe mental illnesses make toward recovery from substance use disorders. It is not used to determine diagnosis. It is a brief, relatively non-confrontational questionnaire for detection of alcoholism that takes less than one minute to administer and score. No training required for administration and the instrument is easy to learn, remember, and replicate. There is no user fee and it can be downloaded from the Center for Mental Health Services at www.mentalhealth.org/cmhs/CommunitySupport/research/toolkits/pn6toc.asp.

Time Line Follow Back Procedure (TLFB)
The TLFB is a structured interview that uses a one to three month calendar of cues (e.g., holidays, family events, trips) to aid recollection in order to quantify daily alcohol use over a period of time. It is used during one-on-one interviews (in person or by phone), in groups, or via computer and has shown been shown to have high test-retest reliability in a variety of populations (including those who are homeless and have co-occurring psychiatric disorders) who consume alcohol. The TLFB has been shown to be an accurate method for assessing current alcohol consumption. Information on constructing calendars can be found at http://www.us.oup.com/us/doc/pdr/tlfbAids.doc.

Maternal Substance Use Survey
This is a twenty-two item survey that covers women's health status, alcohol and other drug use, and family circumstances. A separate form is used to gain information related to drug use prior to and during pregnancy. It is available from the National Clearinghouse for Alcohol and Drug Information (NCADI) located at http://www.health.org/pubs/catalog/.

Problem Oriented Screening Instrument for Teenagers (POSIT)
The POSIT is a screening tool for adolescents that designed to identify potential problem areas that require further in-depth assessment and can be used by school personnel, juvenile and family court staff, medical and mental health care providers, and staff in substance abuse treatment programs. It is a self-administered one hundred thirty-nine item yes/no screening questionnaire. The life areas and problems assessed are: substance use and abuse, physical health, mental health, family relations, peer relations, educational status (i.e., learning disabilities/disorders), vocational status, social skills, leisure/recreation, and aggressive behavior/delinquency. It takes twenty to thirty minutes to complete and two seconds for computerized scoring. When used in conjunction with POSIT, the POSIT follow-up questionnaire can be used as a measure of change or an outcome measure. It is also available in Spanish and can be obtained free of charge from the National Clearinghouse for Alcohol and Drug Information at http://ncadi.samhsa.gov/.

Comprehensive Adolescent Severity Inventory (CASI)
The CASI is a general screening interview (including Breathalyzer and urine drug test results), providing an in-depth assessment of the severity of an adolescent's substance use and related problems. Information is collected in ten areas: (1) psychological, (2) significant life changes, (3) educational experiences and plans, (4) substance use, effects of use, and treatment experiences, (5) use of free time, including employment and sources of financial support, (6) leisure activities, (7) peer relationships, including sexual activity and related diseases, (8) family history and relationships including physical and sexual abuse, (9) legal history, and (10) psychiatric status, including treatment experiences. At the end of topic areas 3 through 10, space is provided for assessor's comments and confidence ratings (assessor's ratings regarding subject's misrepresentation or inability to understand the questions). Only preliminary psychometric data are available on the CASI. Information can be obtained from meyershagan@erols.com.

Adolescent Drinking Index (ADI)
The ADI is a twenty four-item rating scale that quickly assesses alcohol use disorders in adolescents who have psychological, emotional, or behavioral problems. It also identifies adolescents who need further alcohol

evaluation or treatment. ADI defines the type of drinking problem and can help develop treatment plans and recommendations. It can be administered to individuals or groups and takes five minutes to complete and ten minutes to score. It can be obtained from Psychological Assessment Resources for a fee from http://www3.parinc.com/products/product.aspx?Productid=ADI.

Adolescent Alcohol and Drug Involvement Scale (ADIS)
The ADIS is a twelve-item research and evaluation tool developed as a brief measure of the level of drug involvement in adolescents. The scale is an adaptation of Mayer and Filstead's Adolescent Alcohol Involvement Scale (AAIS) and is a paper and pencil questionnaire for self-administration by adolescents. It can be used in groups or individually. While there are nominally twelve items, the "check all that apply" nature of many of the questions in fact yields answers to fifty three discrete questions. It takes four to five minutes to complete and two to three minutes to score. It can be found at http://www.pophealth.wisc.edu/UWPHI/research/ADIS/documents/AADIS%20Survey.pdf.

Drug Use Screening Inventory-Revised (DUSI-R)
The DUSI-R is a one hundred fifty nine-item instrument that documents the level of involvement with a variety of drugs and quantifies severity of consequences associated with drug use. The profile identifies and prioritizes intervention needs and provides an informative and facile method of monitoring treatment course and aftercare. The DUSI-R is a self-administered instrument. It can be administered in groups. It assesses a number of areas: substance use behavior, behavior patterns, health status, psychiatric disorders, social skills, the family system, school work, peer relationships, leisure, and recreation. It takes twenty to forty minutes to complete and fifteen to twenty minutes to score. A Spanish version is available. It can be ordered from http://www.dusi.com/contact.html.

Personal Experience Screening Questionnaire (PESQ)
The PESQ is a forty-item questionnaire that screens for the need for further assessment of drug use disorders. It provides a red or green flag problem severity score and a brief overview of psychosocial problems, drug use frequency, and faking tendencies. The instrument assesses drug use problem severity, psychosocial problems, drug use frequency and onset, and faking tendencies. It takes ten minutes to complete and three minutes to score. It can be ordered from http://portal.wpspublish.com/portal/page?_pageid=53,70480&_dad=portal&_schema=PORTAL.

Rutgers Alcohol Problem Index (RAPI)
The RAPI is a twenty three-item self-administered screening tool for assessing problem drinking in adolescents. But, RAPI is only a measure of adolescent drinking problems; additional information about intensity of use, motivations for use, and contexts of use, is needed when conducting a full assessment of problem drinking. It takes ten minutes to complete and three minutes to score. It is available from http://alcoholstudies.rutgers.edu/pdf/RAPI23Y.pdf.

Teen Substance Addiction Severity Index (T-ASI)
The T-ASI is a semi-structured interview instrument providing baseline information on adolescents prior to entering inpatient care for substance use disorders. Information is collected in eight areas: (1) demographic, (2) chemical use, including consequences of use and treatment experiences, (3) school status, (4) employment/support status, (5) family relationships, including physical abuse and sexual abuse, (6) peer/social relationships, (7) legal status, and (8) psychiatric status, including treatment experiences. At the end of topic areas 2 through 8, space is provided for assessor's comments, a problem severity rating, and confidence ratings (assessor's ratings regarding subject's misrepresentation or inability to understand the questions). It is available from kaminer@psych.uchc.edu or www.uchu.edu.

Juvenile Automated Substance Abuse Evaluation (JASAE)
The JASAE evaluates alcohol and drug use/abuse by juveniles, generally between the ages of twelve and eighteen. It also examines respondent attitude and life stress issues to determine if, and to what degree, problems exist in these areas. Patterns of substance use/abuse, including drug of first and second choice, and when these drugs were last used are measured. It also measures attitude and life stress issues pertinent to age

and life situations of adolescent population. The JASAE takes twenty minutes to complete, three to five minutes to score, and is also available in Spanish. Information can be obtained from www.adeincorp.com.

Risk Assessment Battery (RAB)
The RAB is used to measure the risk for acquiring infectious diseases. It is a self-administered questionnaire designed for use with for people with substance use disorders that provides a rapid (less than fifteen minutes) and confidential, non-interview method of assessing both needle use practices and sexual activity associated with HIV transmission. The instrument consists of forty-five questions in which respondents check off the answer that best describes their behavior. This instrument focuses on HIV risk behaviors, including sexual and drug-related behaviors. Information is available from http://www.uphs.upenn.edu/rap/index.htm.

Biological Testing

A number of methods are available for detecting substance use including urinalysis, blood, hair, sweat analysis, tissue, and saliva analyses. Detection of substances depends on usage factors (e.g., dose used, frequency of use, proximity of last use) and characteristics of the specific drug. Most common drugs of abuse (e.g., cocaine, methamphetamine, heroin, and marijuana), or their metabolites, are readily detectable in urine. Recent alcohol use is detectable in saliva, breath, blood, and urine samples. Saliva and breath analysis for alcohol and urinalysis for drugs other than alcohol are currently recommended because they are reliable and relatively inexpensive compared with other methods of chemical testing. While chemical testing is the most physically intrusive and most expensive of the methods for identifying drug use, it is the most accurate. Breath analysis is the most common and cost-effective method used for detecting levels of alcohol intoxication. Since alcohol evaporates quickly from urine, urinalysis generally is not used to test for alcohol.

Urinalysis is generally the standard method used to determine substance use. Urine screens are less costly than drawing blood samples for testing and are readily available in medical settings. Moreover, most drugs are undetectable in blood after twelve hours. Both qualitative and quantitative urine assays are usually needed to verify use and time/amount taken. Repeated assays may be used to track elimination of stimulants from the system if large amounts have been detected. Enzyme immunoassay (EIA) and radioimmunoassay (RIA) are commonly used for routine drug screening. Gas chromatography-mass spectrometry (GC-MS), considered the gold standard of urinalysis, is a separate technology that is considerably more sensitive, labor intensive and costly, is used to confirm positives from EIA and RIA tests. Initial screenings typically utilize an enzyme multiplied immunoassay test (EMIT), a radio -immunoassay (RIA), or a florescent polarization immunoassay (FPIA) test. Each is based on antigen-antibody interactions and is highly sensitive for specific drugs. Gas chromatography with mass spectrometry (GC/MS) is a highly sensitive and specific test that is labor intensive and costly, and is generally used to confirm the results of screening tests.

Urine immunoassay testing kits (dipstick tests) offer a rapid detection method. Temperature-sensitive strips, specific gravity, and creatinine can be used to lessen the potential for false or adulterated samples.[51] Most guidelines recommend supervision of collection by a staff member of the same gender to decrease opportunities to adulteration and tampering with specimens. Urine testing is not feasible for individuals who have renal failure (e.g., those on dialysis) or bladder control problems.

[51] Tampering with specimens to avoid detection includes substituting another person's sample, dilution of the specimen, and adding Epsom salts and sodium bicarbonate to it to neutralize pH. Thus, urine samples should be checked for temperature, color, and consistency (sediment). Some specimen containers are equipped with temperature strips, and some laboratories routinely assess samples for color and other anomalies.

Individuals who have used drugs within seventy-two hours prior to a test will screen positive irrespective of dependency or first time use. A drug user who knows that testing is likely or who, for a variety of other reasons, has abstained from drugs (other than marijuana) within that time period will test negative. Since marijuana is fat-soluble, its metabolites can be detected in urine for two weeks or longer, depending on the sensitivity of the test and the patient's pattern of use.

The cutoff level is the amount of drug or metabolite that must be in the specimen for a test to show a positive result. A positive test indicates the amount of drug present is above the cutoff level; negative results show there is no drug or the amount is below the cutoff level. The cutoff level is usually measured in nanograms per milliliter (ng/ml), and recommended cutoff levels for illicit drug categories have been developed by the Division of Workplace Programs, Center for Substance Abuse Prevention (CSAP). Cutoff levels for confirmation tests are generally set lower than those for initial tests (see table on the following page).

Morphine (the metabolite of heroin) is detected by urine testing. Methadone, however, cannot be detected as an opiate in some drug tests, unless a methadone assay is conducted. Oxycodone cross-reacts only at high concentrations. Buprenorphine does not cross-react with the detection procedures for methadone or heroin. Although buprenorphine and its metabolite are excreted in urine. Urine testing does not detect synthetic opioids (e.g., methadone, hydrocodone) or oxycodone.

Low-potency benzodiazepines (e.g., diazepam and chlordiazepoxide) are readily detected in routine urine drug screens. However, clonazepam, flunitrazepam, alprazolam, and several other benzodiazepines may be undetected in urine samples. Since the combination of buprenorphine and benzodiazepines can be lethal, it is essential to screen effectively for the recent use of benzodiazepines. It may be necessary to specifically request that a sample be evaluated for benzodiazepines that are not detected on routine drug screens.

Stimulants can be detected in urine for approximately twenty-four to forty-eight hours after use and, maximally, for three days after a single dose, and seven to twelve days subsequent repeated high doses. Cocaine is excreted more rapidly and is more difficult to detect in urine than methamphetamine. However, an EMIT test can detect benzoylecgonine, an inactive cocaine metabolite, in urine for up to seventy-two hours after it is last ingested. Benzoylecgonine has been found in urine as long as twenty-two days after last cocaine intoxication. Many prescription and over-the-counter drugs (e.g., diet aids and cold remedies) contain phenylpropanolamine or ephedrine that may yield positive EMIT or RIA tests for amphetamines. A procedure that does not have cross-reactivity to phenylpropanolamine or ephedrine is needed to confirm that amphetamine was consumed.

Biochemical markers of nicotine dependence (e.g., nicotine, cotinine, and carbon monoxide) can be assessed. Nicotine and its metabolite cotinine can be measured in urine, blood, or saliva. Cotinine continues to be present in bodily fluids for up to seven days after cessation. However, nicotine and cotinine assays are not specific to tobacco-derived nicotine and may indicate adherence to nicotine replacement therapy rather than smoking. On the other hand, carbon monoxide can be measured in expired breath and show whether the person was smoking within a few hours prior to the test. It can also be used to monitor smoking cessation for patients on nicotine replacement therapy and may be a helpful motivator for maintenance of abstinence.

Laboratory tests commonly used to detect alcohol include tests that directly measure recent consumption such as those that measure blood alcohol content (BAC) levels, urine, Breathalyzers, and recheck Breathalyzers. Two newer tests, carbohydrate-deficient transferrin (CDT) and aspartate aminotransferase (AST) appear to have some value in identifying heavy alcohol consumption.

Sweat patches usually are used adjunctively to other forms of testing. Playing-card-sized, waterproof adhesive patches are available. Each patch is imprinted with a unique number to track its chain of custody. After a patch is worn for approximately one week, about 2 mL of sample is extracted for testing. Sweat patches provide a longer specimen collection period than either urine or blood, are less invasive and potentially embarrassing. Compared with urine specimens, sweat yields higher proportions of parent drugs, such as cocaine, heroin, or marijuana. Drug use is assessed cumulatively. However, uniform cutoff levels have yet to be established, and external contamination is possible.

Hair analysis provides a longer term look at drug use than other methods because hair retains drugs longer. The collection of hair specimens is less invasive than urine or blood sampling. However, they are more expensive and subject to environmental contamination.

Biological testing has a high level of accuracy and such tests can verify or refute self-reports regarding substance use. Drug tests provide an objective measure of treatment efficacy, and can be used to monitor progress in treatment. They also can serve as a deterrent function for individuals who are aware that they will be tested. When used during assessment, testing can encourage honest responses to questions, confirm suspicions about use when it is denied, and verify use prior to referral or admission to a treatment program. During treatment, tests help to monitor progress and, for example, in methadone maintenance programs, ensure that patients are ingesting their methadone. (SAMHSA requires eight drug tests be conducted per year for participants in methadone maintenance treatment programs.)

It should be noted most biochemical tests only provide information about very recent use and are obtrusive. No standard set of substances is tested so that assays for suspected substances have to be included. Moreover, no toxicology screen can determine with certainty that any particular substance (or any substance at all) was ingested. Numerous medications and substances can produce false positive and negative results in urine drug tests (e.g., prescribed and over-the-counter medications and foods) for different substances. Positive results do not necessarily indicate when substances were last used since metabolites for some are detectable for days or weeks after last use, but take some time after substance administration to be detectable in urine. The use of biochemical markers alone or screening instruments alone do not constitute adequate screening, but both are useful as part of a comprehensive clinical assessment.

Instruments for Withdrawal Symptoms

Clinical Institute Withdrawal Assessment (CIWA-AR)
This instrument measures the severity of withdrawal from alcohol and is comprised of a ten-item scale to calculate the severity of alcohol withdrawal syndrome. It takes two minutes to administer and four to five minutes to score. Scores range from zero to sixty-seven, and a ten or greater signifies alcohol dependence/withdrawal issues. Training is required for administration. There is no fee for use. Information can be found at www.ventana-crc.com/ and http://images2.clinicaltools.com/images/pdf/ciwa-ar.pdf.

Cocaine Selective Severity Assessment (CSSA)
The CSSA is a reliable and valid structured interview that is designed to depict the symptoms of cocaine withdrawal. It is an eighteen-item questionnaire with each item having a seven point rating scale so that a number of points can be scored on each question. Scores greater than twenty-two indicate severe cocaine withdrawal. It is available through the developer at kampman@research.trc.upenn.edu.

Fagerstrom Tolerance Questionnaire (FTQ)
This eight-item instrument has been the standard for measuring physical dependence on nicotine that has been used since 1978. A subsequent revision, the Fagerstrom Test for Nicotine Dependence (FTND) is six questions. Scores of more than seven indicate nicotine dependence. A modified version is available for download from http://www-nehc.med.navy.mil/downloads/hp/NicotineQuestionnaire.pdf.

Glover-Nilsson Smoking Behavioral Questionnaire (GN-SBQ)
This is an eleven-item, self-administered instrument that evaluates the influence of behaviors and rituals associated with smoking. It is designed to assist clinicians in the identification and quantification of the behavioral characteristics of smoking that contribute to nicotine dependence maintenance which can be used to develop a cessation strategy that incorporates behavioral and physical aspects of dependence. It is available for download from
http://www.scts-sy.org/doc/Glover%20Nilsson%20Smoking%20Behavioral%20Questionnaire.doc.

Obsessive-Compulsive Drinking Scale (OCDS)
This is a fourteen-item, pencil and paper, self-administered instrument that takes five to ten minutes to complete and one minute to score. It is available in multiple languages and is helpful in characterizing and quantifying the obsessive and compulsive qualities of craving and heavy (alcoholic) drinking. The OCDS has been shown to be sensitive to, and specific for, the obsessive and compulsive characteristics of drinking-related thought, urges to drink, and the ability to resist those thoughts and urges in people with alcohol abuse and dependence. The OCDS has been shown to be sensitive as a monitoring tool and has predictive validity for relapse drinking. There is an adolescent version, the A-OCDS.

Subjective Opiate Withdrawal Scale (SOWS)
This is a sixteen item questionnaire. The respondent rates the extent of current experience each using a scale from zero to four. Higher scores indicate more severe withdrawal. It is available for download from http://www.dassa.sa.gov.au/webdata/resources/files/Assess_withdraw_opioids.pdf.

Clinical Opiate Withdrawal Scale (COWS)
The clinical opiate withdrawal scale (COWS) is a clinician-administered, pen and paper instrument that rates eleven common opiate withdrawal signs or symptoms. The summed score of the eleven items can be used to assess a patient's level of opiate withdrawal and to make inferences about their level of physical dependence on opioids. It is available online from http://www.naabt.org/documents/COWS_induction_flow_sheet.pdf.

Objective Opiate Withdrawal Scale (OOWS)
A client is observed for about ten mines and indicates if any of the thirteen manifestations of withdrawal are present. Scores range from zero to thirteen and higher scores indicate more severe withdrawal. It can be downloaded from http://www.nceta.flinders.edu.au/pdf/GP-Project/GP-Resource-Kit_files/B45-HO6.pdf.

Clinical Institute Narcotic Assessment Scale for Withdrawal (CINA)
The CINA scale measures eleven signs and systems commonly seen during withdrawal from narcotics. The instrument can assist in gauging the severity of the symptoms and monitoring changes in clinical status over time. A copy can be found at http://www.csam-asam.org/pdf/misc/OTPGuideline2005.pdf on page 15.

Readiness to Change Instruments

In addition to the readiness ruler discussed above, there are number of instruments that can be used to assess a client's readiness to change. Below are some examples of such instruments.

Readiness To Change Questionnaire (RCQ)
The RCQ is designed to assist clinicians in determining the stage of readiness for change in individuals with alcohol use disorders as well those for whom drinking is problematic. It consists of a twelve-item questionnaire consisting of three subscales that takes two to three minutes to administer and two to three minutes to score. No training is required for administration and there is no fee for use. The RCQ contains twelve items, which were adapted from the URICA and correlate with three change stages, precontemplation, contemplation, and action, and reflect typical attitudes of persons in each level. A five-point scale is used for rating responses (from strongly agree to strongly disagree). The RCQ, which can be self-administered, has been shown to have good psychometric properties with persons who drink heavily in nontreatment settings. A version for use with alcohol problems can be downloaded from http://www.addiction.ucalgary.ca/readiness%20to%20change%20questionnaire%20(RCQ)_drinking.pdf, and one for use with for drug problems can be downloaded from http://www.addiction.ucalgary.ca/readiness%20to%20change%20questionnaire%20(RCQ)_drug.pdf.

The **RCQ (Treatment Version)** (RCQ [TV]) is a recent revision of the original RCQ that is a more appropriate alternative for determining the stage of change for persons who are seeking or already undergoing treatment for alcohol problems. The RCQ (TV) has thirty items, with six questions corresponding to each change stage, which are rated on a five-point scale ranging from strongly agree to strongly disagree. This psychometrically sound instrument can be used to decide what types of services are most appropriate for persons entering

treatment. Those who are identified as ready to change can immediately be offered skills-based, action-oriented services, while those who are not yet in an action stage should be given further motivational interventions until they progress further along the readiness continuum. More research is necessary to strengthen one of the scales and to determine the instrument's ability to predict drinking outcomes accurately.

University of Rhode Island Change Assessment (URICA)

The URICA is a thirty-two item inventory designed to assess an individual's stage of change within a theorized continuum of change. It assesses stages of change/readiness that can be used as an outcome predictor and for treatment matching. Stage of change (precontemplation, contemplation, action, and maintenance) is assessed by eight items. This instrument is used by many public sector providers due to the preponderance of clients with co-occurring psychiatric and substance disorders as it allows respondents to identify the target problem (in contrast to other instruments that are specific to substance use). The URICA takes five to ten minutes to complete and four to five minutes to score. Computer scannable forms are available. There is no fee for use. It is available from Carlo C. DiClemente at the University of Maryland's Psychology Department (diclemen@umbc.edu) and from the National Library of Medicine at http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.table.62309.

Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES)

The SOCRATES measures readiness to change and includes items specifically focused on individuals who have a drinking problem. It can be used to provide clients with feedback about their scores as a starting point for discussion. Changes in scores when the scale is readministered could assess the impact of an intervention on problem recognition, ambivalence, and progress on making changes. Parallel forms have been developed to assess motivation to change substance use as well as the motivation of a significant other to help change a partner's substance-using patterns. This instrument is in the public domain and can be obtained from William R. Miller at wrmiller@unm.edu.

Circumstances, Motivation, and Readiness Scales (CMR)

This tool is designed to predict treatment retention in outpatient and residential programs. It consists of eighteen items with four five-point Likert scales that measure external pressure to enter and leave treatment, motivation for change, and treatment readiness. It takes five to ten minutes to administer no training is required as it is self-administered. The tool is also available in Spanish. There are no user fees and it can be downloaded from www.ndri.org/.

The Circumstances, Motivation, Readiness, and Suitability Scales (CMRS)

The CMRS scales were designed to predict retention based on dynamic client factors related to seeking and remaining in treatment. The Circumstances scale is defined as the external pressure to engage and remain in treatment. The Motivation scale is defined as the internal pressure to change; the Readiness scale is defined as the perceived need for treatment; and the Suitability scale is defined as the individual's perception of the treatment modality or setting as appropriate for him/herself. A prison version has been developed. A revised version of the CMRS, the CMR, is also available. The CMR is copyrighted and can be obtained from the National Development and Research Institute at www.ndri.org.

Alcohol and Drug Consequences Questionnaire (ADCQ)

The ADCQ is a relatively new instrument for assessing the costs and benefits of changing a substance problem. It contains twenty-nine items that are divided into two categories: costs and benefits of change. Respondents are asked the importance of each item if they were to stop or cut down their use of substances (0 = not applicable, 1 = not important, 2 = slightly important, 3 = moderately important, 4 = very important, 5 = extremely important). The score is determined by adding the cost items and the benefits items to obtain two separate scores that can be compared. This instrument is not copyrighted and can be found at http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.table.62219.

Motivation for Using Substances Instruments

Alcohol Expectancy Questionnaire
The Alcohol Expectancy Questionnaire contains ninety items and uses a dichotomous agree/disagree response format. The items are grouped into six categories of perceived benefits from alcohol: global positive changes; social and physical pleasure; sexual enhancement; increased social assertion; tension reduction/relaxation; and increased arousal and aggression. This scale measures only positive expectancies, not negative ones, and has been useful in showing that clients with continued positive expectancies at the end of treatment have poorer outcomes. It has been used with adults in both clinical and nonclinical settings. A one hundred twenty-item version is available for adolescents. This instrument is in the public domain and can be downloaded from http://silk.nih.gov/silk/niaaa1/publication/instable.htm.

Alcohol Effects Questionnaire (AEQ)
In this questionnaire respondents are asked to report how strongly they agree or disagree with a particular belief on a ten-point Likert scale where 1 = mildly believe and 10 = strongly believe. The results supported the idea that the strength of an individual's belief or disbelief in alcohol-related expectancies assessed by the Alcohol Expectancy Questionnaire is different from merely agreeing or disagreeing with these same expectancies. This instrument is in the public domain and can be downloaded from http://silk.nih.gov/silk/niaaa1/publication/insaeq.htm.

Marijuana and Cocaine Effects Expectancy Questionnaires
The Marijuana Effect Expectancy Questionnaire (MEEQ) and the Cocaine Effect Expectancy Questionnaire (CEEQ) are two related scales that assess motivation to use substances. The MEEQ (seventy items) and CEEQ (sixty-four items) use a yes/no format with agree/disagree instructions similar to those of the AEQ. Subjects are asked to respond to the items according to their own beliefs and whether they have actually used the substance. Although further research is needed, it appears that expectancies differ across substance types in relation to the properties of the substance (e.g., expectation of arousal from alcohol and cocaine use but not from marijuana use).

Effects of Drinking Alcohol Scale (EDA) is a twenty-item instrument, each of which rated on a five-point scale that ranges from unlikely to very likely. The items, which reflect expected reactions to alcohol use, are grouped into five factors: nastiness, cognitive/physical impairment, disinhibition, gregariousness, and depressant effects.

Alcohol Effects Scale is a thirty-seven-item, forced-choice adjective checklist that measures three factors: stimulation/perceived dominance, pleasurable disinhibition, and behavioral impairment. This scale measures client expectations of how a moderate amount or excessive amount of alcohol would affect them.

Alcohol Belief Scale was developed to assess clients' expectations regarding the usefulness of drinking different amounts of alcohol in different contexts. The scale measures clients' beliefs regarding whether, for example, alcohol reduces discomfort in proportion to the amount consumed ("The more I drink, the better I feel"). The greatest positive expectations are reported by those with the most severe drinking problems.

Self-Efficacy Questionnaires

Self-efficacy questionnaires are used to ask clients to rate how risky certain situations are and estimate confidence in their ability to avoid the temptation to use substances in those situations.

Situational Confidence Questionnaire (SCQ)
The Situational Confidence Questionnaire has been used specifically for individuals who drink heavily. The instrument consists of one hundred items that ask clients to identify their level of confidence in resisting drinking as a response to the following eight types of situations: unpleasant emotions, physical discomfort, testing personal control over substance use, urges and temptations to drink, pleasant times with others, conflicts with others, pleasant emotions, and social pressure to drink. Clients are asked to imagine themselves

in each situation and rate their confidence on a 6-point scale, ranging from not at all confident (a rating of 0) to totally confident (a rating of 6) that they can resist the urge to drink heavily in that situation. The SCQ generally takes about twenty minutes to complete, using either pencil and paper or computer software that automatically scores answers and generates a profile of the client's alcohol use. The SCQ is accompanied by an Inventory of Drinking Situations that assesses the frequency of heavy drinking in different situations. The results of this questionnaire can be used to provide personalized feedback to the client as well as for treatment planning. High confidence scores have been shown to predict positive treatment outcomes, whereas low confidence scores have identified clients who are likely to have poor treatment outcomes. An amended version of the SCQ, the SCQ-39, is the version recommended by the questionnaire's developer. The instrument can be downloaded from http://eib.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nnodeid=4469&sLanguageiso=EN.

Brief Situational Confidence Questionnaire (BSCQ)
The Brief Situational Confidence Questionnaire is an alternative to the SCQ that contains eight items that correspond to the eight subscales in the original SCQ. Respondents are asked to rank their confidence at the time of taking the questionnaire in resisting using alcohol or a primary drug in each situation on a scale from 0 (not at all confident) to 100 (totally confident). The BSCQ, although not as comprehensive and not yet as extensively tested, has several clinical advantages over the longer version. It can be administered in a few minutes, is easily interpreted by clinicians, provides immediate feedback to the client, and can be used easily in primary care and other nonsubstance use disorder-specific settings. The BSCQ is also available in Spanish. It can be downloaded from http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.table.62275.

Alcohol Abstinence Self-Efficacy Scale (AASE)
The Alcohol Abstinence Self-Efficacy Scale measures an individual's self-efficacy in abstaining from alcohol. Although similar to the SCQ, the AASE focuses on clients' confidence in their ability to abstain from drinking across a range of twenty different situations derived from the eight high-risk categories in the SCQ. The AASE consists of twenty items and can be used to assess both the temptation to drink and the confidence to abstain. The items are divided into several subcategories that measure four types of recurrence precipitants: negative affect, social situations, physical or other concerns, and craving and urges. Clients rate their temptation to drink and their confidence that they would not drink in each situation on separate five-point Likert scales that range from 1 (not at all likely) to 5 (extremely likely). Scores are calculated separately for temptation and self-efficacy. It is easy to use, comprehensive, and a psychometrically sound measure of self-efficacy to abstain from drinking.

Mental Health Assessment Instruments

Beck Depression Inventory-II (BDI-II)
The BDI-II is used to screen for the presence and rate the severity of depression symptoms. It consists of twenty-one items to assess the intensity of depression. The BDI-II can also be used as a screening device to determine the need for a referral for further evaluation. Each item consists of a list of four statements arranged in increasing severity related to a specific symptom of depression in accordance with the criteria found in the DSM-IV. It is a paper-and-pencil test that takes five minutes to administer either as a self-administered instrument or verbally by a trained administrator. It is designed to be administered by a clinician with doctoral degree or by a master's prepared clinician with supervision by a doctoral-level clinician are required to interpret test results. A short, thirteen-item version is also available and has good concurrent validity with the long form. The manual and a pack of twenty-five record forms costs $66.00. It is available from The Psychological Corporation at www.psychcorp.com/.

Profile of Mood States (POMS)
The POMS is a sixty-five-point objective rating scale designed to measure six identifiable mood states: tension/anxiety, depression/dejection, anger/hostility, vigor/activity, fatigue/inertia, and confusion/bewilderment during the week prior to administration of the assessment. It is available from www.mhs.com.

Symptom Checklist-90-Revised (SCL-90-R)

This is a brief, multidimensional inventory designed to screen for a broad range of psychological problems and symptoms of psychopathology. The SCL-90-R takes twelve to fifteen minutes to complete and is available in paper-and-pencil, audiocassette and computer formats. It consists of ninety items and uses a five-point rating scale. The instrument has validity for detecting general distress as an indicator of psychiatric illness. It measures nine primary dimensions of mental health: somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. It includes measurements of the severity of the disorder, the intensity of symptoms, and the number of client-reported symptoms. It has high sensitivity and moderate specificity for anxiety and mood disorders in adolescents and adults with substance use disorders and is designed to provide an overview of symptoms and their intensity at a specific point in time. It is a useful tool to measure treatment progress. Information is from http://www.pearsonassessments.com/tests/scl90r.htm.

Brief Symptom Inventory (BSI)
The BSI is a short form of SCL-90-R and is designed to reflect the psychological symptom patterns of clients in psychiatric and medical settings. It takes approximately ten minutes to administer, contains fifty three items, evaluates the same nine symptom dimensions as SCL-90-R, and includes measurements of the severity of the disorder, intensity of symptoms, and number of client-reported symptoms. Because of its brevity, the BSI can be used in initial assessments, as part of a test battery, and for monitoring client progress.

Structured and Semi-structured Psychiatric Diagnostic Interview Formats

Structured diagnostic interview instruments are designed to decrease variability in information collection and enhance impartiality. Although such instruments have been shown to be valid and reliable, the accuracy of their use in routine clinical practice has not been well established. They include:

- Structured Clinical Interview for DSM-IV Axis I and II Disorders, Clinical Versions
- Composite International Diagnostic Interview, Core Version 2.1
- Psychiatric Research Interview for Substance Abuse and Mental Health Disorders
- Diagnostic Interview Schedule, Version 4
- Alcohol Use Disorder and Associated Disabilities Interview Schedule

Structured Mental Health Interviews

Diagnostic Interview Schedule (DIS)
The most recent version of DIS, version 4, is designed to elicit data relating to most DSM-IV adult diagnoses on both a lifetime and current basis. A current disorder is defined for four time periods: the last two weeks, the last month, the last six months, and the last year. Each diagnosis is based on clients' meeting a minimum number of criteria. Individuals may be assessed for the severity of each diagnosis by counting how many of the criteria they meet. Across diagnoses, severity may be determined by the number of different diagnoses present, the total number of symptoms, how many years the symptoms have been present, and the degree of functional impairment. The DIS also asks for the age at time of the last symptom, the age at which the first symptom appeared, and whether medical care was ever sought for the symptom. Virtually all response categories are close-ended and precoded, with explicit instructions. After the interviewer follows these instructions, a computer program makes the actual diagnosis and provides information such as the age of onset and termination of syndromes, the total number of symptoms ever manifested, diagnosis with earliest onset, total number of lifetime diagnoses, and the number of types of current diagnoses. The DIS can be ordered from http://epi.wustl.edu/DIS/DIShome.HTM.

Mini International Neuropsychiatric Interview (MINI)
The MINI is a brief structured interview to screen for the major psychiatric disorders in the DSM-IV. It contains one hundred twenty questions covering seventeen Axis I disorders and focuses on a core set of diagnostic questions for each disorder. It considers only those timeframes that are useful in making decisions in clinical settings. The MINI has two to four screening questions per disorder with follow-up questions for positively

endorsed screening questions. It assesses information regarding major depressive episodes, dysthymia, mania, anxiety disorders, obsessive-compulsive disorder, substance abuse disorders, psychotic disorder, anorexia nervosa, bulimia nervosa, PTSD, suicidality, antisocial disorder, somatization disorder, and attention deficit-hyperactivity disorder. The MINI can be administered in approximately fifteen minutes. A computerized version is available that can be administered by the client or a paraprofessional. It can be obtained from www.medical-outcomes.com/ at no charge. A computerized version is available in six languages in the MINI Outcomes program.

MINI Plus

The MINI Plus is a more elaborate, detailed structured interview than the shorter MINI. It elicits all the symptoms listed in the symptom criteria for DSM-IV for twenty-four major Axis I diagnostic categories, one Axis II disorder, and suicidality as well as information on the impairment criteria and about the major subtypes of each disorder covered. It takes approximately thirty to forty-five minutes to administer.

Psychiatric Research Interview for Substance and Mental Health Disorders (PRISM)

The PRISM is a psychiatric diagnostic interview designed to produce diagnoses of DSM-IV mental health and substance-related disorders. The PRISM includes a systematic set of procedures for differentiating primary disorders, substance-induced disorders, and the expected effects of intoxication and withdrawal. There are two formats for the PRISM. The DSM-IV PRISM assesses substance dependence and abuse, primary affective disorders, primary anxiety disorders, primary psychotic disorders, eating disorders, personality disorders, and substance-induced disorders. The PRISM-Longitudinal (PRISM-L) is designed for clinical trials that require collected data on the course of mental health and substance abuse disorders over time. The PRISM takes between ninety and one hundred fifty minutes to administer, depending on the history and response style of the client. It is available from http://pubs.niaaa.nih.gov/publications/prismd.pdf.

Schedule for Affective Disorders and Schizophrenia (SADS)

The SADS provides detailed descriptions of the current episodes of illness, severity of manifestations of major dimensions of psychopathology, past psychopathology, and functioning relevant to evaluation of diagnosis, prognosis, and overall severity of disturbance. By using a progression of questions and criteria, it also provides information for making diagnoses. There are various versions of SADS, some of which have been published and widely used.

Structured Clinical Interview for DSM-IV Disorders (SCID-IV)

The SCID-IV uses the DSM-IV criteria to make an Axis I and an Axis II diagnosis to rule out or establish a diagnosis of drug abuse or drug dependence, and/or alcohol abuse, or alcohol dependence. It consists of a psychiatric interview form in which diagnoses can be made by the examiner asking a series of approximately ten questions. Administration of the Axis I and Axis II batteries can take more than two hours each for individuals with multiple diagnoses. The Psychoactive Substance Use Disorders module can be used alone in thirty to sixty minutes. It takes about ten minutes to score and requires a trained clinical evaluator at the master's or doctoral level (although in research settings it has been used by bachelor's-level technicians with extensive training). There is a fee for use. It is available from American Psychiatric Publishing, Inc. located at www.appi.org/.

Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I)

SCID-I is a highly detailed interview tool that comprehensively reviews all DSM-IV Axis I disorders. It guides clinicians through an evaluation of mood disorders, anxiety disorders, dissociative disorders, cognitive disorders, somatoform disorders, substance-related disorders, psychotic disorders, eating disorders, sleep disorders, impulse-control disorders, adjustment disorders, sexual and gender identity disorders, and factitious disorders, as well as disorders usually first identified in infancy, childhood, or adolescence. SCID-I materials include a clinician version, a user's guide, an administration booklet, and score sheets. The SCID does not have to be administered in its entirety; individual disorder units (e.g., those covering depression, substance abuse, and anxiety) can be administered separately, and potentially irrelevant units (e.g., schizophrenia) can be omitted from the assessment battery. Information can be obtained from http://www.scid4.org/.

Trauma Assessment Tools

It should be noted that most trauma assessment instruments have been normed on women (as most of the research on trauma has focused on women).

Assessing Environments III, Form SD
This assessment consists of one hundred seventy items clustered into seven scales: physical punishment, sibling physical punishment, perception of discipline, sibling perception of discipline, sibling perception of punishment, deserving punishment, and sibling deserving punishment. This tool includes scales that elicit information about clients' perceptions and attributions regarding their maltreatment, an important feature since subjective evaluation of one's victimization can have an important impact on symptoms and treatment. Also, since it elicits respondents' reports of the maltreatment of siblings, a greater assessment of the family environment is permitted.

Childhood Maltreatment Questionnaire (CMQ)
This questionnaire assesses rejection, degradation, isolation, corruption, denial, emotional responsiveness, exploitation, verbal and physical terrorism, exposure to violence, unreliable and inconsistent care, controlling and stifling independence, and physical neglect. Although the focus of CMQ is on psychological abuse and neglect, it also assesses physical and sexual abuse. CMQ elicits information about the frequency of maltreatment on or before the age of seventeen. Information can be obtained from jbriere@hsc.usc.edu.

Trauma Assessment for Adults (TAA) - Self-Report
Like the structured interview form of TAA (see below), this brief seventeen-item tool assesses a wide range of potentially traumatic events. It evaluates the same set of issues and elicits the same basic information as the interview version of the instrument. It takes approximately ten to fifteen minutes, depending on the number of traumatic childhood experiences. Information can be obtained from http://www.musc.edu/cvc.

Traumatic Events Scale
This instrument evaluates a fairly wide range of both childhood and adult traumas. It examines thirty specific traumas, one third of which focus on interpersonal and environmental childhood traumas. The interpersonal traumas assessed include physical, sexual, and psychological abuse, and exposure to spousal abuse. The TES elicits details regarding the characteristics of child abuse, including age at first and last event, relationship to the abuser, and both past and current levels of distress about the abuse. TES also elicits significant details regarding sexual abuse. It can be found at
http://homepage.psy.utexas.edu/homepage/faculty/Pennebaker/questionnaires/TRAUMA.pdf.

Dissociative Experiences Scale (DES)
This brief twenty-eight-item tool elicits information about the frequency of a wide range of pathological and normative dissociative experiences. The DES assesses dissociative amnesia, gaps in awareness, derealization, depersonalization, absorption, and imaginative involvement. It takes approximately ten to fifteen minutes to complete. Information can be obtained from http://www.sidran.org.

Posttraumatic Stress Diagnostic Scale (PDS)
The PDS is a forty-nine-item tool that assesses all DSM-IV criteria for PTSD. It is designed to measure the severity of PTSD symptoms related to a single, identified traumatic event, and to make a preliminary DSM-IV diagnosis for PTSD. It includes a total severity score that primarily reflects symptom frequency. The tool provides a preliminary evaluation of DSM-IV PTSD diagnostic status, a symptom number count, a symptom severity rating, and a rating of the level of impairment of functioning. The PDS takes approximately ten to fifteen minutes to complete. Information can be obtained from http://www.ncs.com.

Modified PTSD Symptom Scale: Self-Report Version (MPSS-SR)
Adapted from the PDS, MPSS-SR is a seventeen-item tool used to measure PTSD symptoms and make a tentative assessment about whether clients' symptoms meet DSM-IV criteria for PTSD. MPSS-SR yields scores for frequency and severity of PTSD symptoms and takes approximately ten to fifteen minutes to complete. Information can be obtained from http://www.musc.edu/cvc.

Penn Inventory for Posttraumatic Stress Disorder
This twenty-six-item tool assesses most, but not all, DSM-IV symptoms for PTSD, as well as a few symptoms that are not directly related to DSM-IV criteria. This tool asks clients to select one statement of four that best describes their feelings. The inventory takes approximately five to fifteen minutes to complete. Information can be obtained from http://www.sas.upenn.edu/anthro/faculty/profiles/hammarberg.html.

Trauma Symptom Inventory (TSI)
The TSI is a one hundred-item test designed to evaluate posttraumatic stress and other psychological consequences of traumatic events, including the effects of rape, spousal abuse, physical assault, combat, major accidents, natural disasters, and childhood abuse. It has ten scales that measure the extent to which a client reports trauma-related symptoms. These scales evaluate anxious arousal, depression, anger/irritability, intrusive experiences, defensive avoidance, dissociation, sexual concerns, dysfunctional sexual behavior, impaired self-reference, and tension-reduction behavior. The TSI includes twelve critical items that can help to identify potential problems that may require immediate attention, such as suicidal ideation or behavior, psychosis, and self-mutilation. It has three validity scales that can be used to identify response trends that invalidate test results. It takes approximately twenty minutes to complete. Information can be obtained from http://www.parinc.com.

Child Maltreatment Interview Schedule (CMIS)
The CMIS is a forty-six-item tool based on behavioral descriptions that assesses emotional, physical, and sexual abuse. It evaluates five primary domains: (1) level of parental physical availability, (2) level of parental psychological availability, (3) parental disorder (e.g., history of psychiatric or substance abuse disorder treatment), (4) psychological, physical, emotional, sexual, or ritualistic abuse, and (5) perception of physical and sexual abuse status. Within each domain, questions probe the age of onset, the relationship to the abuser, and the severity of the abuse. The CMIS limits the assessment to events that occurred prior to age seventeen. A short version, CMIS-SF, contains most of the items of the original tool but with less detail. Information can be obtained from jbriere@hsc.usc.edu.

Childhood Trauma Interview (CTI)
The CTI involves forty nine screening items plus multiple follow-up probes for those items that are scored positive. It evaluates six categories of events: childhood separation and loss, physical neglect, emotional abuse or assault, physical abuse or assault, exposure to violence, and sexual abuse or assault. The CTI takes approximately thirty to ninety minutes, depending on the number of childhood trauma experiences. It is useful for collecting detailed information about a wide range of childhood traumatic events and for quantifying the frequency, duration, and severity of these events. The CTI involves queries about persons involved, the nature of the events, age at time of events, frequency of events, threats during events, clients' speaking about events, and the nature of injuries sustained. Information can be obtained from dodge.j@bronx.va.gov.

Evaluation of Lifetime Stressors (ELS)
The ELS combines a fifty-six-item self-report questionnaire with a semi-structured interview to collect detailed information about potentially traumatic events. Positive responses to the self-report are followed up with more specific questions in the semi-structured interview. It evaluates a wide range of potentially traumatic events. Approximately thirty different events are asked about, including accidents, illnesses, disasters, criminal violence, combat, and physical and sexual assault and abuse. The ELS includes questions about symptoms and experiences that suggest childhood trauma. The self-report questionnaire takes approximately ten to twenty minutes to complete, and the follow-up interview can take one to three hours. A copy can be requested from http://www.ncptsd.va.gov/ncmain/assessment/assessmt_request_form.html.

National Women's Study Event History (NWSEH)
The NWSEH elicits detailed information about traumatic experiences and evaluates a range of potentially traumatic events, including rape, attempted sexual assault, molestation, physical assault, accidents, disasters, exposure to death or serious injury, and death of a friend or family member. The NWSEH is used to evaluate thoroughly the first, most recent, and worst rape experiences; a single molestation; attempted sexual assault;

and physical assault experience. The tool asks about the client's age at the time of the event, familiarity with assailant, relationship to assailant, fear of injury, actual injury, substance abuse by assailant, and whether the incident was reported. It contains seventeen screening items with probes for positive answers to screening questions. Depending on the number of positive screening items, the test takes approximately ten to thirty minutes to conduct. Information can be obtained from http://www.musc.edu/cvc.

Trauma Assessment for Adults (TAA)
The TAA is a thirteen-item tool that evaluates a range of potentially traumatic events, including accidents, combat, disasters, serious illness, physical and sexual assaults, assaults with weapons, exposure to death or serious injury, and death or murder of a family member. It evaluates childhood sexual assault, including threat, injury, and penetration in detail. For each positive response, the tool elicits information regarding age at first or only time, age at last time, and the perception that the client would be killed or injured. Information is available from http://www.ncptsd.va.gov/ncmain/ncdocs/assmnts/trauma_assessment_for_adultsselfreport_taa.html.

Clinician-Administered Posttraumatic Stress Disorder Scale (CAPS)
The CAPS is a thirty-item structured interview that measures symptoms of PTSD and acute stress disorder related to up to three traumatic events and can be used to make diagnoses for DSM-IV PTSD and acute stress disorder. It elicits information regarding all DSM-IV PTSD symptoms, improvements in symptoms since a previous CAPS administration, general response validity, overall PTSD symptom severity, and information regarding five associated symptoms: guilt over acts, survivor guilt, gaps in awareness, depersonalization, and derealization. It takes approximately thirty to sixty minutes to administer. There are two versions of the CAPS: the CAPS-DX elicits information to make a current or lifetime diagnosis of PTSD, and the CAPS-SX assesses symptoms over the past week. Information can be obtained from http//www.dartmouth.edu/dms/ptsd.

Assessment Instruments for Adolescents

Adolescent Drug Abuse Diagnosis (ADAD)
The ADAD is a one hundred fifty-item instrument with a ten-point severity rating for each of nine life problem areas. Composite scores to measure client behavioral change in each problem area during and after treatment can be calculated. It assesses: medical, school, employment, social relations, family/background relations, psychological, legal, alcohol and drug use domains. It takes forty-five to fifty-five minutes to administer and less than ten minutes to score. It is available in several languages and can be accessed from http://eib.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nNodeID=3530.

Adolescent Diagnostic Interview (ADI)
The ADI is a structured interview designed to assess DSM-IV criteria for substance use disorders. It also measures several domains of level of functioning including peers, opposite sex relationships, school behavior and performances, home behavior, and life stress events. The ADI also screens for several co-existing mental/behavioral disorders, and memory and orientation problems. It takes thirty to ninety minutes to complete and ten to fifteen minutes to score. It can accessed at http://eib.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nnodeid=3560&sLanguageiso=EN.

Adolescent Self-Assessment Profile (ASAP)
The ASAP is a two hundred twenty-five-item self-report instrument comprising twenty basic scales and fifteen supplemental scales that provides primary order and broad scale measurement of: (1) six major risk-resiliency factors; (2) assessment of drug use benefits, involvement, and disruption; and (3) degree of drug use involvement in nine drug use categories. The core common factor structure of ASAP is based on the six primary risk-resiliency factors identified in the literature (e.g., family, mental health, school adjustment, peer influence, deviancy, and drug use symptoms). It takes twenty-five to fifty minutes to complete and five to ten minutes to score.

The American Drug and Alcohol Survey (ADAS)
The ADAS is a self-report inventory of drug use and related behaviors that is administered in school classrooms. Two versions of ADAS are available: the Children's Form (for forth through the sixth grades) and the Adolescent

Form (for the sixth through twelfth grades). In addition, supplemental inserts are available for a sixth through twelfth grade version. One of these provides an in depth measure of tobacco use, and the other assesses a variety of factors relevant to planning and evaluating prevention programs. It takes thirty to fifty minutes to complete and the Rocky Mountain Behavioral Institute, Inc. sends scores to schools within about thirty days. Information can be obtained from www.rmbsi.com.

The Chemical Dependency Assessment Profile (CDAP)
The CDAP is a two hundred thirty-two-item, multiple-choice and true-false self-report instrument to assess substance abuse and dependency problems. The eleven dimensions measured include quantity/frequency of use, physiological symptoms, situational stressors, antisocial behaviors, interpersonal problems, affective dysfunction, attitude toward treatment, degree of life impact, and three use expectancies (i.e., the client's expectation that use of the substance reduces tension, facilitates socialization, or enhances mood). It takes forty minutes to complete. It can be ordered from http://www.mhs.com/.

Hilson Adolescent Profile (HAP)
The HAP consists of three hundred ten true or false items grouped into sixteen separate scales. The contents of these sixteen scales correspond to characteristics found in psychiatric diagnostic categories. The HAP directly questions adolescents and documents their admitted behaviors rather than inferring those behaviors from statistically or theoretically derived personality indicators. It assesses alcohol use, drug use, educational adjustment difficulties, law/society violations, frustration tolerance, antisocial/risk-taking, rigidity/obsessiveness, interpersonal/assertiveness difficulties, home life conflicts, social/sexual adjustments, health concerns, anxiety/phobic avoidance, depression/suicide potential, suspicious temperament, unusual responses, and guarded responses. It takes about forty-five minutes to complete and takes two to three seconds to score online. Information can be obtained from
http://www.hilsonresearch.com/testservicedetail.asp?testserviceid=72.

Personal Experience Inventory (PEI)
This is a comprehensive assessment instrument that covers all substances and related problems. The PEI consists of two parts, the Chemical Involvement Problem Severity (CIPS) section and the Psychosocial (PS) section. It provides a list of critical items that suggests areas in need of immediate attention by the treatment provider and summarizes problems relevant for planning the level of treatment intervention. The test also contains five validity indicators to measure faking to appear good or bad. PEI is part of a three-tool assessment system, the Minnesota Chemical Dependency Adolescent Assessment Package (MCDAAP). MCDAAP also includes a structured diagnostic interview, the Adolescent Diagnostic Interview, and a brief screening tool, the Personal Experience Screening Questionnaire. As an assessment system, MCDAAP is intended to assist with screening, evaluation, and treatment planning. It takes forty-five to sixty minutes to complete and is scored by Western Psychological Services. A copy can be downloaded from
http://eib.emcdda.europa.eu/?fuseaction=public.Content&nnodeid=4370&sLanguageiso=EN&LayoutFormat=print.

Prototype Screening/Triage Form for Juvenile Detention Centers
This instrument consists of a face-to-face interview with multiple choice and open-ended questions for juvenile detainees, and obtains information on their status and functioning in ten areas: (1) education/employment, (2) home/living situation, (3) other personal information (e.g., religious practice, gang membership), (4) substance use, (5) sexual abuse history, (6) physical abuse history, (7) family history, (8) psychological/medical history, (9) mental health information, and (10) legal history. It takes forty-five minutes to complete and twenty minutes to score. It can be accessed at
http://eib.emcdda.europa.eu/index.cfm?fuseaction=public.Content&nnodeid=4458&sLanguageiso=EN.

The Texas Christian University Prevention Intervention Management and Evaluation System (TCU/PMES)
The TCU/PMES consists of three main parts: the Client Intake form (CIF), the Family, Friends, and Self (FFS) Assessment form, and the Client Follow-up (CFU) interview. The information derived is integrated to plan the

treatment and determine the appropriate level of care. In the structured interview format, the questions are read verbatim to the client. It takes one hour for the intake portion to be completed and fifteen minutes for the FFS portion. Ten to fifteen minutes are needed for scoring. Information is available from www.ibr.tcu.edu.

APPENDIX H: AN OVERVIEW OF CONFIDENTIALITY AND DISCLOSURE LAWS

During the early 1970s, Congress recognized that the stigma associated with substance abuse and fears of prosecution deterred people from entering treatment. It enacted legislation that gave clients in substance abuse treatment programs the right to confidentiality and was designed to encourage people to enter treatment without fear of stigmatization or discrimination as a result of information disclosure without the person's express permission. The regulations restrict communications more tightly in many instances than, for example, either the doctor-patient or the attorney-client privilege. Violating the regulations is punishable by a fine of up to $500.00 for a first offense and up to $5,000.00 for each subsequent offense.

The federal confidentiality laws and regulations protect any information regarding anyone who has applied for or received any substance use/abuse-related assessment, treatment, or referral services from a program that is covered under the law. Services applied for or received can include assessment, diagnosis, individual counseling, group counseling, treatment, or referral for treatment. The restrictions on disclosure apply to any information that would identify a person as having a substance use disorder either directly or by implication. The general rule applies from the time an individual makes an appointment and also applies to former clients. It also applies whether or not the person making an inquiry already has the information, has other ways of obtaining it, has some form of official status, is authorized by state law, or has a subpoena or search warrant [52]. With very limited exceptions, the federal confidentiality regulations prohibit a program from communicating with anyone in this situation, including a parent, unless the person (i.e., adolescent) consents. One exception allows a program director to communicate "facts relevant to reducing a threat to the life or physical well-being of the applicant or any other individual to the minor's parent, guardian, or other person authorized under State law to act in the minor's behalf," when the program director believes that an adolescent, because of extreme youth or mental or physical condition, lacks the capacity to decide rationally whether to consent to the notification of their parent or guardian, and when the program director believes the disclosure to a parent or guardian is necessary to cope with a substantial threat to the life or physical well-being of the adolescent applicant or someone else. This applies only to applicants for services, not to minors who are already clients. Thus, programs cannot contact parents of adolescents who are already clients without an adolescent's consent, even if counselors are concerned about an adolescent's behavior.

Any program that specializes, in whole or in part, in providing treatment, counseling, and/or assessment and referral services for patients with alcohol or drug problems must comply with the federal confidentiality regulations. Although these federal regulations apply only to programs that receive federal assistance, this category includes organizations that receive indirect forms of federal aid such as tax-exempt status, or state or local funding coming (in whole or in part) from the federal government. Coverage under the federal regulations does not depend on how a program labels its services. identifying itself a prevention program does not absolve a program from adhering to the confidentiality rules; it is the type of services, not the label used, that determines whether a program must comply. Clarifying amendments passed in 1987 make it clear that patient records generated in general medical settings and hospitals are not covered unless the treating clinician or unit has a primary interest in substance abuse treatment. Federal confidentiality laws and regulations do not apply

[52] A subpoena, search warrant, or arrest warrant, even when signed by a judge, is not sufficient, standing alone, to require or even to permit a program to disclose information.

to most primary care settings, unless facilities or practitioners are providing substance abuse treatment as a primary function.

The federal confidentiality regulations also require programs to notify patients of their right to confidentiality and to give them a written summary of the regulations' requirements, including exceptions (e.g., mandatory child abuse reporting). (The regulations contain a sample notice.) The notice and summary should be given to patients when they begin participating in the program or soon thereafter.

All disclosures, and especially those made pursuant to a consent form, must be limited to information that is necessary to accomplish the need or purpose for the disclosure. Written consents must include:

- The specific name or general designation of the program or person permitted to make the disclosure
- The name or title of the individual or the name of the organization to which disclosure is to be made
- The name of the patient
- The purpose of the disclosure
- How much and what kind of information is to be disclosed
- The signature of the patient and, when required for a patient who is a minor, the signature of a person authorized to give consent or, when required for a patient who is incompetent or deceased, the signature of a person authorized to sign in lieu of the patient
- The date on which the consent is signed
- A statement that the consent is subject to revocation at any time except to the extent that the program or person who is to make the disclosure has already acted in reliance on it (Acting in reliance includes the provision of treatment services in reliance on a valid consent to disclose information to a third party payer.)
- The date, event, or condition upon which the consent will expire if not revoked before (This date, event, or condition must insure that the consent will last no longer than reasonably necessary to serve the purpose for which it is given.)

Information obtained from a substance abuse treatment program through a patient's consent cannot be redisclosed unless permitted by the regulations. The federal confidentiality regulations require that disclosures made with written patient consent be accompanied by a written statement that the information disclosed is protected by federal law and that the person receiving the information cannot make any further disclosure of such information. Each disclosure made with a patient's written consent must be accompanied by the following written statement:

> *This information has been disclosed to you from records protected by Federal confidentiality rules (42 C.F.R. Part 2). The Federal rules prohibit you from making any further disclosure of this information unless further disclosure is expressly permitted by the written consent of the person to whom it pertains or as otherwise permitted by 42 C.F.R. Part 2. A general authorization for the release of medical or other information is NOT sufficient for this purpose. The Federal rules restrict any use of the information to criminally investigate or prosecute any alcohol or drug abuse patient.*

The federal regulations do not require programs to obtain written consent from clients prior to permitting them to see their own records.

The regulations provide two different forms of consent for clients mandated by criminal justice system. For communications between a program and the person or entity within the criminal justice system that mandates an offender's compliance with assessment or treatment, a special criminal justice system consent form is used. A general consent form authorized by the regulations is used for all other consented disclosures. The federal regulations allow disclosure without a defendant's consent in several limited situations, including medical

emergencies, under a court's special authorizing order, and in communications between substance abuse treatment program staff.

Information that is protected by the federal confidentiality laws and regulations can always be disclosed after a defendant has signed a proper consent form. Disclosures to a criminal justice system partner are permissible once a defendant has signed a criminal justice system consent form. This form must be in writing and must contain each of the following items:

- The name or general description of the program(s) making the disclosure
- The name or title of the individual or organization that will receive the disclosure
- The name of the patient who is the subject of the disclosure
- The purpose or need for the disclosure
- How much and what kind of information will be disclosed
- A statement regarding revocation of consent
- The date, event, or condition upon which the consent will expire
- The signature of the patient
- The date on which the consent is signed

Criminal and juvenile justice system consents cannot be revoked prior to their expiration events or dates. The regulations require that the following factors be considered in determining how long criminal justice system consents will remain in effect:

- The anticipated duration of treatment
- The type of criminal proceeding in which the offender is involved
- The need for treatment information in dealing with the proceeding
- When the final disposition will occur
- Other information the patient (or adolescent), program, or criminal justice agency believes is relevant

The federal confidentiality regulations permit the criminal justice system consent to be irrevocable until a certain specified date or condition occurs (e.g., "when there is a substantial change in the patient's justice system status"). This is a key difference between the criminal justice system consent form and the general consent form authorized by the federal regulations, which permit patients to revoke consents at any time.

If a defendant who is referred to a treatment program by a court or another criminal justice agency never applies for or receives services from the program, that fact may be communicated to the referring agency without patient consent.

A court may order disclosure of confidential communications by a client only if such a disclosure is necessary to protect against a threat to life or of serious bodily injury or to investigate or prosecute an extremely serious crime (including child abuse), or is connected with a proceeding at which the client has already presented evidence concerning confidential communications. Regulations allow a court to order disclosure of treatment information for the purpose of investigating or prosecuting a patient for a crime only where a crime has been committed that is "extremely serious." Federal regulations strictly prohibit any investigation or prosecution of a patient based on information obtained from a substance abuse treatment program unless the court order exception is used.

When a patient has committed, or threatens to commit, a crime on treatment program premises or against program personnel, the regulations permit the treatment program to report the crime to a law enforcement agency or seek its assistance. In such situations programs can disclose the circumstances of the incident, including the individual's name, address, last known whereabouts, and status as a patient at the program without any special authorization.

Researchers can also obtain patient identifying information if a patient has signed a valid consent form that has not expired or been revoked. This consent form differs from the criminal justice system consent form. The

patient may revoke the consent at any time, and the consent form must contain a statement to this effect. The consent form must contain a date, event, or condition upon which it will expire if not previously revoked. In addition, the consent can "last no longer than reasonably necessary to serve the purpose for which it is given."

A program can make disclosures to public or private medical personnel who need information to treat a condition which poses an immediate threat to the health of the person or any other individual. The regulations define a medical emergency as a situation that poses an immediate threat to health and requires immediate medical intervention. The medical emergency exception permits disclosure only to medical personnel. (Under this exception, however, a program could notify a private physician or school nurse about an adolescent who is suicidal so that medical intervention can be arranged. The physician or nurse could, in turn, notify the adolescent's parents, as long as no mention is made of the adolescent's substance use disorder.) Whenever disclosures are made to cope with medical emergencies, programs must document the name and affiliation of the recipient of the information, the name of the individual making the disclosure, the date and time of the disclosure, and the nature of the emergency in the client's record.

All states and the District of Columbia have statutes requiring reporting when there is reasonable cause to believe or suspect that child abuse or neglect is occurring. It is recommended that families receive notification when programs make such reports, unless the notifications would place the children in further danger. Programs are also advised to continue working with families as complaints are investigated and the child protective process develops. All states extend immunity from prosecution to persons reporting child abuse and neglect, and most have penalties for failure to report. The federal confidentiality regulations permit programs to comply with state laws that require the reporting of child abuse and neglect. However, this exception to the general rule prohibiting disclosure of any information about a client applies only to initial reports of child abuse or neglect. Programs cannot respond to follow-up requests for information or to subpoenas for additional information, even if the records are sought for use in civil or criminal proceedings resulting from a program's initial report. The only situation in which a program may respond to requests for follow-up information is when the adolescent consents or the appropriate court issues an order under subpart E of the regulations.

These standards govern all efforts by children's protective service (CPS) agencies to obtain information from programs. However, if the information is sought by law enforcement authorities, rather than by CPS, to investigate or prosecute a client for a crime, a court must make the following additional findings:

- The crime involved is extremely serious, such as an act causing or threatening to cause death or serious injury (including child abuse and neglect)
- The records sought are likely to contain information of significance to an investigation or prosecution
- There is no other practical way to obtain the information
- The public interest in disclosure outweighs any actual or potential harm to the client, the doctor-patient relationship, and the ability of the program to provide services to other clients

A court also must find that other ways of obtaining the information are not available or would be ineffective before it may issue an order. A judge can examine the records before making a decision. Before a court can issue an order authorizing a disclosure about a client that is otherwise forbidden, the program and the client whose records are sought must be given notice of the application for the order, as well as an opportunity to make an oral or written statement to the court. (If the information is being sought to investigate or prosecute a client for a crime, however, only the program need be notified. If the information is sought to investigate or prosecute the program, no prior notice at all is required.) When law enforcement personnel seek such an order, a court must also find that the program had an opportunity to be represented by independent counsel. If the program is a government entity, it must be represented by counsel.

The scope of the disclosure a court may authorize is also limited, even when a court finds good cause. The disclosure must be limited to information essential to fulfill the purpose of the order, and must be restricted to those persons who need the information for that purpose. The court also should take any other steps necessary to protect the client's confidentiality, including sealing court records from public scrutiny. Generally, the

application and any court order must use a fictitious (made-up) name for any known client, not the real name. All court proceedings in connection with the application must remain confidential unless the client requests otherwise.

If a program has to routinely share certain information with an outside agency that provides services to the program, a qualified service organization agreement (QSOA) can be used. A QSOA is a written agreement between a program and a person (or agency) providing services to the program in which that person (or agency) acknowledges that in receiving, storing, processing, or otherwise dealing with any client records from the program, is fully bound by federal confidentiality regulations; and promises that, if necessary, they will resist in judicial proceedings in any efforts to obtain access to client records except as permitted by these regulations. Disclosures under a QSOA must be limited to information needed by others so that the program can function effectively. A QSOA cannot be used between different programs providing substance abuse treatment and other services.

In December 2000, the Department of Health and Human Services (DHHS) issued the Standards for Privacy of Individually Identifiable Health Information final rule (i.e., the Privacy Rule[53]), pursuant to the Administrative Simplification provisions of the Health Insurance Portability and Accountability Act (HIPAA) of 1996, 45 C.F.R. Parts 160 and 164, Subparts A and E. Substance abuse treatment programs that are subject to HIPAA must comply with the Privacy Rule as well as 42 CFR Part 2 unless there is a conflict between them. The Privacy Rule and other guidance regarding its requirements can be accessed from the DHHS Office for Civil Rights (OCR), www.hhs.gov/ocr/hipaa/. In addition, the Substance Abuse and Mental Health Services Administration (SAMHSA) offers guidance titled *The Confidentiality of Alcohol and Drug Abuse Patient Records Regulation and the HIPAA Privacy Rule: Implications for Alcohol and Substance Abuse Programs,* which can be accessed at www.hipaa.samhsa.gov.

Information on HIPAA can be found at http://aspe.hhs.gov/admnsimp/pl104191.htm as well as http://www.hipaa.samhsa.gov/ and information on. Title 42, Part 2 of the Code of Federal Regulations (42 C.F.R., Part 2) can be found at http://www.access.gpo.gov/cgi -bin/cfrassemble.cgi?title=200142.

[53] Section 164.530(c) of the Privacy Rule requires programs that are covered entities to maintain reasonable and appropriate administrative, technical, and physical safeguards to protect the privacy of protected health information. The issue of security is addressed in more detail through a separate Security Rule issued by DHHS on February 20, 2003, that establishes the administrative, physical, and technical safeguards required to guard the integrity, confidentiality, and availability of protected health information that is electronically stored, maintained, or transmitted. Covered substance abuse programs had to be in compliance with the Security Rule by April 20, 2005. The Security Rule can be accessed through the Centers for Medicare and Medicaid Services Web site at www.cms.hhs.gov.

APPENDIX I: AN OVERVIEW OF PUBLIC FUNDING STREAMS

The majority of substance use disorder treatment is purchased and provided through the public sector. Public funding sources account for sixty-four percent of all substance abuse treatment spending, a much higher percentage than public expenditure for the rest of health care. These public sources of funding are discussed below.

SAPT BLOCK GRANT

The Substance Abuse and Mental Health Services Administration (SAMHSA)[54] provides funding for substance abuse prevention and treatment through the Substance Abuse Prevention and Treatment (SAPT) Block Grant program, the cornerstone of federal funding for substance abuse treatment programs. SAPT funds are sent to Single State Agencies (SSAs) to distribute to counties, municipalities, and designated programs. Some of the funds are subject to required set-asides for special populations. Each state maintains its own criteria for eligibility and the criteria and definitions vary greatly among states. SAMHSA also provides other funding through discretionary grants and contracts. Portions of the SAMHSA web site (www.samhsa.gov/funding/funding.html and www.samhsa.gov/budget/index.aspx) are devoted to various funding opportunities and overall budget information.

The SAPT funds can be used for individuals irrespective of the severity of their substance use difficulties or illnesses (in contrast to Community Mental Health Services Block grant programs which can be used only for adults who have serious mental illness and children who have serious emotional disturbances). The Substance Abuse Block Grant regulations require that programs set aside funds for pregnant women and women with dependent children for the provision of a comprehensive range of services and supports for these women and their children. Programs that provide services for individuals who use injection drugs must give preferential treatment to the following populations in the following order: (1) pregnant injecting drug users; (2) pregnant substance abusers; (3) injecting drug users; (4) all others.

The Children's Health Act of 2000 mandated a gradual transition from SAPT Block Grants to Performance Partnership Grants (PPGs). PPGs eventually will replace SAPT Block Grants and provide more flexibility for states as well as require more accountability based on outcome and other

[54] In 1992 the Substance Abuse and Mental Health Services Administration (SAMHSA) was created by Congressional action and Presidential signature. It assumed some of the functions of the former Alcohol, Drug Abuse and Mental Health Administration (ADAMHA), while others were assigned to the National Institutes of Health. When ADAMHA was terminated by legislative action, the research arms of the National Institutes of Mental Health, Drug Abuse, and Alcohol Abuse and Alcoholism were moved to the National Institutes of Health. The former Office of Substance Abuse Prevention (OSAP) became the new Center for Substance Abuse Prevention within SAMHSA. The former Office for Treatment Improvement became the Center for Substance Abuse Treatment within SAMHSA. The services portion of NIMH became the Center for Mental Health Services (CMHS), and became part of SAMHSA. As a result of the above changes, SAMHSA has administered and coordinated the efforts of CSAT, CSAP, and CMHS since 1992. SAMHSA has also been legally authorized, by legislative enactment, to oversee strategies for improving services for persons with co-occurring substance abuse and mental health disorders.

performance data. SAMHSA started integrating performance measurement into the SAPT Block Grant in fiscal year 2004 (as discussed in the section on outcomes above).

MEDICAID

Medicaid, which is administered by the Centers for Medicare and Medicaid Services (CMS) in conjunction with the states, provides financial assistance to states to pay for medical care of eligible persons: low-income children, pregnant women, the elderly, and people who are disabled, including those who are blind. Medicaid has been used by many states as a vehicle for expanding medical coverage for people who are uninsured through the use of different types of public-sector managed care. About two percent of total Medicaid expenditures nationally are devoted to substance abuse treatment services, which amounts to twenty percent of national expenditures for these services. It should be noted that Medicaid coverage for substance abuse treatment is significantly limited when compared to that for mental health services and supports.

Substance abuse treatment and rehabilitation is an optional benefit under Medicaid. States have the option to include or exclude these in their Medicaid programs. Thus, Medicaid expenditures, benefit levels, reimbursement, and types of services covered vary substantially from state to state. More information on this topic can be obtained from the CMS at www.cms.gov/medicaid.

Medicaid can fund substance abuse treatment through fee-for-service arrangements, managed behavioral health care organizations (MBHOs), or other managed care organizations (MCOs) via contracts. Rates of payment are determined by each state, and more than one type of arrangement may exist within a state, which may mean that rates of payment vary within the state. The services provided under managed care may differ from those under fee-for-service arrangements. Medicaid excludes coverage for services provided in an institution for mental disease (IMD), defined as a facility with more than sixteen beds that treats mental disorders, including substance use disorders, for individuals between ages twenty-one and sixty-four. However, services furnished by partial hospital and day treatment programs are not excluded.

The Medicaid Early Periodic Screening, Detection, and Treatment (EPSDT) mandate requires states to screen all children and adolescents who are eligible for Medicaid for physical and behavioral health disorders. In addition, EPSDT requires that any needed medical treatment be provided, even if the treatment is not in the state's Medicaid plan. Although the procedures and screening tools vary by state, and only slightly more than half the States perform any screening, the EPSDT program is an important entryway to substance abuse treatment for children and adolescents.

When available, Medicaid offers the following advantages for substance abuse treatment programs:

- It can provide significant treatment funding for certain high-risk groups, such as low-income mothers and adolescents.
- Client co-pays traditionally have not been required so the program receives the entire negotiated fee without having to collect funds from clients. However, some States have changed this provision recently because of budget crises.
- A Medicaid contract can provide a useful lower limit for rate negotiations with commercial payers by essentially prohibiting acceptance of a contract with another purchaser at rates lower than those established for Medicaid.
- Certification as a Medicaid provider can position a program to receive clients from other public-sector referral sources, making it possible to obtain clients from sources such as indigent care funds, social service agencies, and criminal justice systems.

- Criminal and juvenile justice systems and drug court administrators typically favor providers that are eligible for Medicaid reimbursement because some states permit treatment of offenders to be billed to Medicaid.

Information can be obtained from www.cms.hhs.gov/home/medicaid.asp.

Supplemental Security Income (SSI)

Supplemental Security Income (SSI) is financed through general tax revenues. SSI disability benefits are payable to adults or children who are blind or have certain other disabilities that make it impossible for them to work, have limited income and resources, meet the living arrangement requirements, and are otherwise eligible. SSI recipients are one of the mandated populations eligible for Medicaid, but specific provisions vary by state. Congress excluded a primary diagnosis of substance abuse as a qualifying disability under the Social Security Administration's programs, but if the person has another primary disability that qualifies the person for SSI, a secondary substance abuse diagnosis is acceptable. Many SSI recipients with psychiatric diagnoses have co-occurring substance use disorder diagnoses.

Medicare

Medicare provides health care coverage to individuals aged sixty-five and older, people who are younger than sixty-five and have certified disabilities, and those with end-stage renal disease. Medicare provides about eight percent of national expenditures for substance abuse treatment services. Medicare may provide Part A coverage for patients in outpatient treatment programs and in detoxification programs that are based in hospitals certified by Medicare. However, such programs that consist solely of psychosocial programs and provide only a structured environment, socialization, or vocational rehabilitation are not covered by Medicare. In addition, Medicare imposes strict review requirements for outpatient treatment and detoxification programs in hospitals and those considered partial hospitalization programs, as well as for their patients. In addition, Medicare may provide Part B coverage for patients in outpatient treatment and detoxification programs treated by Medicare-certified medical practitioners; however, patients whose services are reimbursed under Part B must pay fifty percent of Medicare-approved charges. Finally, Medicare recipients are eligible for a prescription drug benefit, Part D, which covers medically necessary medications used for substance abuse treatment in outpatient treatment settings. Information can be found at www.cms.hhs.gov/home/medicare.asp and www.cms.gov/medicare.

Social Security Disability Insurance (SSDI)

The Social Security Administration provides Social Security Disability Insurance (SSDI) for individuals and certain members of their families if they have worked long enough and paid Social Security taxes. SSDI is financed with Social Security taxes paid by workers, employers, and self-employed persons. To be eligible for a Social Security benefit, a worker must earn sufficient credits based on taxable work. Recipients of SSDI benefits are covered by Medicare following a twenty-four month waiting period. Disability benefits are payable to disabled workers, widows and widowers of disabled workers, or adults disabled since childhood. A substance use disorder diagnosis was excluded by the Congress as a qualifying disability under SSDI. However, if a person qualifies under another diagnosis, a secondary substance use disorder diagnosis is acceptable (e.g., a qualifying primary psychiatric diagnosis co-occurring with a secondary substance use disorder diagnosis). Information can be obtained from the Social Security Administration at www.ssa.gov/dibplan/index.htm.

STATE CHILDREN'S HEALTH INSURANCE PROGRAM (SCHIP)

The State Children's Health Insurance Program (SCHIP) provides low-cost health insurance for children of low-income families who are not eligible for Medicaid and covers substance abuse treatment for children and adolescents in many states. States may provide SCHIP benefits under their existing Medicaid programs or design a separate children's health insurance program. If the program is part of Medicaid, the substance abuse treatment benefits mirror those under Medicaid. CMS has promulgated a set of rules to ensure that coverage meets minimum standards for states that opt to design a program. More information is available from CMS at www.cms.gov/schip.

TRICARE

TRICARE is a regionally managed health care program for active duty and retired members of the uniformed services, their families, and survivors. TRICARE supplements the health care resources of the Army, Navy, and Air Force with a network of civilian health care professionals. It consists of TRICARE Prime (in which military treatment facilities are the principal source of health care), TRICARE Extra (a preferred-provider option), and TRICARE Standard (a fee-for-service option that replaced the program formerly known as CHAMPUS). TRICARE Extra and Standard benefits include treatment for substance use disorders, subject to preauthorization requirements. TRICARE is run by managed care contractors, each of whom may have different authorization procedures. More information is available from www.tricare.osd.mil.

INDIAN HEALTH SERVICE

The Indian Health Service (IHS), an agency in the U.S. Department of Health and Human Services, operates a comprehensive health service delivery system for Native Americans and Alaska Natives. The majority of IHS funds are appropriated for Native Americans who live on or near reservations, although Congress has also authorized programs that provide some access to care for those living in urban areas. IHS services are provided directly and through tribally contracted and operated health programs and via services purchased from private providers. The IHS behavioral health program supports substance use disorder prevention, treatment, and rehabilitation services for individuals and their families. More information is available from www.ihs.gov/MedicalPrograms/Alcohol/index.asp.

U.S. DEPARTMENT OF VETERANS AFFAIRS

The U.S. Department of Veterans Affairs provides the Civilian Health and Medical Program of the U.S. Department of Veterans Affairs to eligible beneficiaries. Medically necessary substance abuse treatment is a covered benefit, but is limited to three lifetime substance use disorder treatment periods. More information is available from www.va.gov/hac/forbeneficiaries/champva/champva.asp.

JUSTICE SYSTEMS

State and juvenile and criminal justice systems use funds to purchase substance abuse treatment services. State corrections systems may provide funds for treatment of offenders who are returning to the community through parole offices, halfway houses, or residential correctional facilities. Community corrections systems may include a system of pre-sentence diversion or parole services, including drug courts, that may mandate substance abuse treatment in lieu of incarceration. Community drug courts may send low-risk, nonviolent offenders to substance abuse treatment in lieu of incarceration.

BYRNE FORMULA GRANT PROGRAM

The Bureau of Justice Assistance (BJA), part the U.S. Department of Justice, is authorized by Congress under the Edward Byrne Memorial State and Local Law Enforcement Assistance Program

to award grants to states to improve the functioning of the criminal justice system. The program places emphasis on violent crimes and serious offenders, and the enforcement of state and local laws that establish offenses similar to those in the Federal Controlled Substances Act. The Drug Court Grant Program in the BJA administers financial and technical assistance and training to state, local, and tribal governments and jurisdictions to develop and implement drug treatment courts. Grants may be used for the rehabilitation of offenders who violate state and local laws. One of the twenty-nine Byrne Formula Grant purposes is used to provide programs that identify and meet the treatment needs of adult and juvenile offenders who have substance dependency disorders. However, the availability of Byrne Formula Grant funds depends on annual congressional appropriations; decreases have been proposed in recent years. Information is available from www.ojp.usdoj.gov/BJA and www.ojp.usdoj.gov/BJA/grant/byrne.html.

Other Federal Resources

Funding for substance abuse treatment, which may include detoxification services, may also be available through arrangements with agencies funded by the U.S. Departments of Labor, Housing and Urban Development (HUD), and Education (ED). Some federal sources for substance abuse treatment funding under these programs may prohibit use of funds for medical services. However, services performed by counselors, technicians, social workers, and psychologists (who are not members of the medical professions) as well as services that are not provided in a hospital or clinic (including twenty-four-hour care programs) may be considered non-medical. The determination of what constitutes medical treatment under some federal programs may be determined by states.

Education

Local public schools can be a source of funding for assessments. However, they rarely pay for ongoing treatment. Some services may be reimbursable under the special entitlements for children who are disabled. Outpatient treatment programs have been successful at locating counseling services in schools rent free.

Welfare-to-Work (WtW) program

The Department of Labor (DOL) provides funding for non-medical substance abuse treatment services through the Welfare-to-Work program. WtW funds can be used for substance abuse treatment if they are not medical, otherwise not available to the recipient, or are provided after placement in a job readiness or employment activity in concert with the WtW work first approach. Substance abuse treatment services that are not considered medical include interventions and services provided by non-medical professionals (e.g., counselors, social workers, psychologists, and counselors) in non-hospital and non-clinic settings including twenty-four hour programs. Information is available from www.doleta.gov.

Temporary Assistance to Needy Families (TANF)

Under the Temporary Assistance to Needy Families (TANF) programs, each state receives a Federal block grant to fund treatment for eligible unemployed persons and their children, primarily women with dependent children. Services that overcome barriers to employment (e.g., substance abuse treatment) are eligible for formula grants, with one-quarter of the funds allocated to local communities through a competitive grant process. Funding channels vary by state. Funds may be directed through Private Industry Councils, Workforce Investment Boards, Workforce Development Boards, and similar bodies at state and community levels. TANF funds cannot be used for medical services, but states have considerable latitude in determining which services are deemed medical and have used TANF funds to support the following substance abuse treatment services: screening and assessment,

detoxification, outpatient treatment, non-hospital residential treatment, case management, education and prevention, housing, employment services, and monitoring. Even if TANF funds are unavailable for substance abuse treatment, clients may be able to access assistance for employment training, child care, and other support. More information on TANF is available from www.acf.hhs.gov/programs/ofa.

Social Service Block Grant

Under Title XX of the Social Security Act, the Administration for Children and Families provides a block grant to each State to supply social services. Funds may not be used for medical services, with the exception of initial detoxification of an individual who has an alcohol or drug dependent disorder. Information is available from www.acf.hhs.gov/programs/ocs/ssbg.

Public Housing

HUD funds substance abuse treatment for public housing residents under the Public Housing Drug Elimination Program. HUD awards grants to public housing authorities, tribes, or tribally designated housing entities to fund treatment. Funds are channeled to local public housing authorities, which contract with service providers. In addition, special housing programs are available for people who are homeless and have substance use disorders. Information is available at www.hud.gov and www.hud.gov/grants/index.cfm.

Vocational Rehabilitation

Federal ED funds support services that help people with disabilities participate in the workforce. Treatment of substance use disorders is eligible for funding. Funds are channeled to the state agencies responsible for vocational rehabilitation. Information can be found at www.ed.gov.

Children's Protective Services

Title IV of the Social Security Act provides funding for foster care and services to prevent child abuse and neglect. Eligible services include substance abuse treatment for parents who are ordered by a court to obtain treatment and are at risk of losing custody of their children. Furthermore, children in foster care must receive treatment, if needed, as they are a mandatory eligibility group. Information is available from www.acf.hhs.gov/programs/cb/index.htm.

Ryan White

The Federal Ryan White Comprehensive AIDS Resources Emergency (CARE) Act, enacted in 1990, provides health care for people with HIV disease who lack health insurance and financial resources. Under Title I of the Ryan White CARE Act, which provides emergency assistance to Eligible Metropolitan Areas that are most severely affected by the HIV/AIDS epidemic, funds are available for substance abuse treatment. Information on this program that serves over a half a million people a year is available from www.hab.hrsa.gov/programs.htm and www.hab.hrsa.gov.

APPENDIX J: NATIONAL STANDARDS FOR CULTURALLY AND LINGUISTICALLY APPROPRIATE SERVICES (CLAS)

1. Health care organizations should ensure that patients/consumers receive from all staff members effective, understandable, and respectful care that is provided in a manner compatible with their cultural health belief and practices and preferred language.
2. Health care organizations should implement strategies to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area.
3. Health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.
4. Health care organizations must offer and provide language assistance services, including bilingual staff and interpreter services, at no cost to each patient/consumer with limited English proficiency at all points of contact, in a timely manner during all hours of operation.
5. Health care organizations must provide to patients/consumers in their preferred language both verbal offers and written notices informing them of their right to receive language assistance services.
6. Health care organizations must assure the competence of language assistance provided to limited English proficient patients/consumers by interpreters and bilingual staff. Family and friends should not be used to provide interpretation services (except on request by the patient/ consumer).
7. Health care organizations must make available easily understood patient-related materials and post signage in the languages of the commonly encountered groups and/or groups represented in the service area.
8. Health care organizations should develop, implement, and promote a written strategic plan that outlines clear goals, policies, operational plans, and management accountability/oversight mechanisms to provide culturally and linguistically appropriate services.
9. Health care organizations should conduct initial and ongoing organizational self-assessments of CLAS-related activities and are encouraged to integrate cultural and linguistic competence-related measures into their internal audits, performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations.
10. Health care organizations should ensure that data on the individual patient's/consumer's race, ethnicity, and spoken and written language are collected in health records, integrated into the organization's management information systems, and periodically updated.
11. Health care organizations should maintain a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.
12. Health care organizations should develop participatory, collaborative partnerships with communities and utilize a variety of formal and informal mechanisms to facilitate community and patient/ consumer involvement in designing and implementing CLAS-related activities.
13. Health care organizations should ensure that conflict and grievance resolution processes are culturally and linguistically sensitive and capable of identifying, preventing, and resolving cross-cultural conflicts or complaints by patients/consumers.
14. Health care organizations are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards and to provide public notice in their communities about the availability of this information.

(Federal Register 65(247), 80865–80879)