

County of Santa Cruz Health Services Agency

Alcohol and Drug Program

**Literature Review: A Review of the Research on the
Treatment of Substance Use Disorders**

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PREPARED BY MARK STANFORD, PH.D.
SYNERGIA CONSULTING

Table of Contents

Introduction	3
Reducing Substance Abuse and Its Impact on the Community	4
How is Substance Abuse Defined After 30 years of Robust Scientific Study?	4
Principles of Drug Addiction Treatment: Research-based Findings	6
The Association Between Substance Abuse and Other Community Concerns	8
Cost Of Substance Abuse And The Economic Impact	8
Youth.....	10
Prevalence and Impact of Substance Use Disorders.....	10
Evidence-Based Practices and Principles of Effective Treatment	12
Public Safety and Criminal Justice	15
Prevalence and Impact of Substance Use Disorders.....	15
Evidence-Based Practices and Principles of Effective Treatment	15
Legally Mandated versus Voluntary Treatment.....	16
Principles of Drug Abuse Treatment for Criminal Justice Populations.....	17
Economic Benefits Of Treatment In Criminal Justice Populations	20
Unique Treatment Needs For Women In The Criminal Justice System	20
Unique Treatment Needs For Juveniles In The Criminal Justice System.....	21
Additional Resources.....	22
Substance Use and Mental Health	22
Prevalence and Impact of Substance Use Disorders.....	22
Evidence-Based Practices and Principles of Effective Treatment	24
Additional Resources.....	31
Substance Use and Physical Health	31
Prevalence and Impact of Substance Use Disorders.....	31
Evidence-Based Practices and Principles of Effective Treatment	33
Effectiveness and Cost Benefit of Integrated Primary Care and SUD Treatment	33
Additional Resources.....	34
Housing/Homelessness.....	34
Prevalence and Impact of Substance Use Disorders.....	34
Evidence-Based Practices And Principles Of Effective Treatment	36
Additional Resources.....	36
Child Welfare	36
Prevalence and Impact of Substance Use Disorders.....	36
Evidence-Based Practices and Principles of Effective Treatment	37
Additional Resources.....	38
Additional Resources for Evidence-based Research	38
References	39

Introduction

Drug abuse is a serious public health problem that affects almost every community and family in some way. Each year drug abuse causes millions of serious illnesses or injuries among Americans. Drug abuse also plays a role in many major social problems, such as drugged driving, violence, stress, and child abuse. Drug abuse can lead to homelessness, crime, and missed work or problems with keeping a job. It harms unborn babies and destroys families (National Institute on Drug Abuse [NIDA], 2012).

No one organization or system can address all of the substance use problems facing families and communities. Ensuring child safety and family health requires collaboration and partnership among families, professionals, agencies, organizations, and communities (SAMHSA, 2013). A growing body of field-tested research continues to demonstrate how a collaborative care approach through initiatives including the movement toward integrated care at the local, State and federal levels, is a new standard of care in the treatment of persons with substance use disorders (SUD). Collaborative care approaches are when the whole community understands the impact of SUD and takes an active role in prevention and treatment.

Effective collaboration requires that individuals, families, systems, and communities value differences and diverse perspectives, but seek to establish a common purpose that creates a shared vision for their community (Commonwealth of Massachusetts. The Massachusetts Family Recovery Collaborative, 2007).

Defining drug addiction as both a public health and public safety issue, the National Drug Control Strategy is the strategy created by the Office of National Drug Control Policy (ONDCP) with input from Federal, State, and local partners, and serves as a blueprint for action. The Strategy emphasizes and includes:

- Community-based prevention
- Integration of evidence-based treatment into the healthcare system
- Innovations in the criminal justice system.

Because nearly all Americans are impacted by the consequences of drug use, the Strategy is designed to be relevant. Whether it is a parent looking for information, a community member interested in treatment resources, a police officer or local elected official searching for new approaches to drug-related crimes, or someone who wants to know more about the Administration's drug policy, the National Drug Control Strategy is a useful resource for local planning efforts (ONDCP, 2012).

The Collaborative Alcohol and Other Drug Abuse (AODA) Service: *Identifying Cost Effective Models* project explored best practice or evidence-based models for the development of multi-agency shared services and training in substance abuse issues. The project reaffirmed the need for a comprehensive system redesign. The substance abuse, social, and justice service delivery systems typically operate independently from each other and from other community support systems (e.g. case management, housing, etc.). This research suggests two reasons why collaborative care is effective as an adjunct to substance abuse treatment. First, retention in treatment is associated with better outcomes, and a principal goal of substance abuse treatment is to keep clients engaged in treatment and moving toward recovery. Second, treatment may be more likely to succeed when other problems are addressed concurrently with substance abuse. Collaborative care focuses on the whole individual and stresses comprehensive assessment, service Alcohol and Drug Treatment and Intervention Services

planning, and service coordination throughout the community to address multiple aspects of a client's life (Center for Substance Abuse Treatment [CSAT], 2000).

Reducing Substance Abuse and Its Impact on the Community

Substance abuse in Santa Cruz County is a critical public health problem that affects the young and elderly, rich and poor, educated and uneducated, and professional and blue-collar workers. Identified by a recent health forum as a root cause of many community concerns, substance abuse is a recurring theme in the human service areas. Substance abuse imposes high costs on individuals, families, employers, taxpayers, and society. It continues to be a primary factor contributing to crime, reduced workforce productivity, and human suffering and loss (Manov in Pubic Safety Citizen Task Force meeting. City of Santa Cruz. 2013).

The review of the research literature below outlines the association between substance use disorders (SUD) and the various systems it affects. From this data, following the findings of the ONDCP, CSAT and other research on new innovations for SUD treatment, it is intended that the collaborative care approach can be expanded where the community can come together to better address the issue of SUD and develop and maintain a whole community response to the multiple issues related to substance abuse.

Collaborative approaches often involve interagency coalitions that usually focus on setting goals to improve results in populations where SUD impacts greatly. Generally, these populations include: children; youth; families; and neighborhoods across a broad range of dimensions of well-being. The associated areas most often involved in the lives of persons and families struggling with SUD include:

- Public safety, crime Prevention, Victimization and Criminal Justice
- Substance Use and Mental Health (co-occurring disorders)
- Substance Use and Physical Health
- Cost of Substance Abuse and Economic Impacts
- Housing/Homelessness
- Child Welfare.

How is Substance Abuse Defined After 30 years of Robust Scientific Study?

Overview

- Called *Substance Use Disorders* (SUDs), research has shown that substance abuse occurs along a continuum of severity from mild misuse, to problem use, dependence, and addiction.

- Addiction, the most severe form of SUDs, is a chronic and relapsing condition much like diabetes, hypertension, and asthma. Treatment success and relapse rates for SUDs mirror those of other chronic disorders.
- Addiction is a primary disease and not the result of other emotional or psychiatric problems.

Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death. (American Society of Addiction Medicine, 2011.)

The newest version of the Diagnostics and Statistics Manual, fifth edition (DSM-5), was released in May 2013. The DSM 5 explains that activation of the brain's reward system is central to problems arising from drug use. The brain's sensation of reward, as a result of taking drugs, may be so profound that an individual neglects other normal activities in favor of taking the drug. The DSM-5 also recognizes that people are not all automatically or equally vulnerable to developing substance related disorders, and that some individuals have lower levels of self-control. These may be brain-based, which predispose them to developing problems if exposed to drugs.

In order to be diagnosed with SUD a person must meet at least two of the 212 criteria for the diagnosis. A person meeting two or three of the criteria indicates mild SUD, meeting four or five criteria indicates moderate, and six or seven indicates severe (American Psychiatric Association, 2013). The criteria are:

- Continuing to use substances (including alcohol) despite negative personal consequences
- Repeatedly unable to carry out major obligations at work, school, or home due to substance use
- Recurrent substance use in physically hazardous situations
- Continued use despite persistent or recurring social or interpersonal problems caused or made worse by substance use
- Tolerance as defined by either a need for markedly increased amounts to achieve intoxication or desired effect, or markedly diminished effect with continued use of the same amount
- Withdrawal manifesting as either characteristic syndrome or the substance is used to avoid withdrawal
- Using greater amounts or using over a longer time period than intended
- Persistent desire or unsuccessful efforts to cut down or control use
- Spending a lot of time obtaining, using, or recovering from using alcohol and/or other drugs
- Stopping or reducing important social, occupational, or recreational activities due to substance use
- Consistent use despite acknowledgment of persistent or recurrent physical or psychological difficulties from using
- Craving or a strong desire to use (2013).

Principles of Drug Addiction Treatment: Research-based Findings

Table 1: PRINCIPLES OF DRUG ADDICTION TREATMENT: RESEARCH-BASED FINDINGS

Addiction is a complex but treatable disease that affects brain function and behavior.

Drugs of abuse, both legal and illegal substances, alter the brain's structure and function, resulting in changes that persist long after drug use has ceased. This may explain why drug abusers are at risk for relapse even after long periods of abstinence and despite the potentially devastating consequences.

No single treatment is appropriate for everyone.

Treatment varies depending on the type of drug and the characteristics of the patients. Matching treatment settings, dosages, interventions, and services to an individual's particular problems and needs is critical to his or her ultimate success in returning to productive functioning in the family, workplace, and society.

Treatment needs to be readily available.

Because drug-addicted individuals may be uncertain about entering treatment, taking advantage of available services the moment people are ready for treatment is critical. Potential patients can be lost if treatment is not immediately available or readily accessible. As with other chronic diseases, the earlier treatment is offered in the disease process, the greater the likelihood of positive outcomes.

Effective treatment attends to multiple needs of the individual, not just his or her drug abuse.

To be effective, treatment must address the individual's drug abuse and any associated medical, psychological, social, vocational, and legal problems. It is also important that treatment be appropriate to the individual's age, gender, ethnicity, and culture.

Remaining in treatment for an adequate period of time is critical.

The appropriate duration for an individual depends on the type and degree of the patient's symptoms and needs. Research indicates that most addicted individuals need at least three months in treatment to significantly reduce or stop their drug use and that the best outcomes occur with longer durations of treatment. Recovery from drug addiction is a long-term process and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to drug abuse can occur and should signal a need for treatment to be reinstated or adjusted. Because individuals often leave treatment prematurely, programs should include strategies to engage and keep patients in treatment.

Behavioral therapies—including individual, family, or group counseling—are the most commonly used forms of drug abuse treatment.

Behavioral therapies vary in their focus and may involve: addressing a patient's motivation to change,

providing incentives for abstinence, building skills to resist drug use, replacing drug-using activities with constructive and rewarding activities, improving problem-solving skills, and facilitating better interpersonal relationships. Also, participation in group therapy and other peer support programs during and following treatment can help maintain abstinence.

Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.

For example, methadone, buprenorphine, and naltrexone (including a new long-acting formulation) are effective in helping individuals addicted to heroin or other opioids stabilize their lives and reduce their illicit drug use. Acamprosate, disulfiram, and naltrexone are medications approved for treating alcohol dependence. For persons addicted to nicotine, a nicotine replacement product (available as patches, gum, lozenges, or nasal spray) or an oral medication (such as bupropion or varenicline) can be an effective component of treatment when part of a comprehensive behavioral treatment program. These medications work in different ways, often to reduce or eliminate cravings, or to prevent triggering of the brain's reward center in response to a substance. That is, they stabilize the person's brain function, reduce the desire to be "high", and/or eliminate the perceived experience of being "high."

An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets his or her changing needs.

A patient may require varying combinations of services and treatment components during the course of treatment and recovery. In addition to counseling or psychotherapy, a patient may require medication, medical services, family therapy, parenting instruction, vocational rehabilitation, and/or social and legal services. For many patients, a continuing care approach provides the best results, with the treatment intensity varying according to a person's changing needs.

Many drug-addicted individuals also have other mental disorders.

Because drug abuse and addiction—both of which are mental disorders—often co-occur with other mental illnesses, patients presenting with one condition should be assessed for the other(s). And when these problems co-occur (i.e., dual-diagnosis), treatment should address both (or all), including the use of medications as appropriate.

Medically assisted detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse.

Although medically assisted detoxification can safely manage the acute physical symptoms of withdrawal and can, for some, pave the way for effective long-term addiction treatment, detoxification alone is rarely sufficient to help addicted individuals achieve long-term abstinence. Thus, patients should be encouraged to continue drug treatment following detoxification. Motivational enhancement and incentive strategies, begun at initial patient intake, can improve treatment engagement.

Treatment does not need to be voluntary to be effective.

Sanctions or enticements from family, employment settings, and/or the criminal justice system can significantly increase treatment entry, retention rates, and the ultimate success of drug treatment interventions.

Drug use during treatment must be monitored continuously, as lapses during treatment do occur.

Knowing their drug use is being monitored can be a powerful incentive for patients and can help them withstand urges to use drugs. Monitoring also provides an early indication of a return to drug use, signaling a possible need to adjust an individual's treatment plan to better meet his or her needs. Early recovery is often marked by periods of declining substance use accompanied by a spike in positive tests as a person faces crises or experiments with the possibility of return to controlled (i.e., "social") use. Positive test results need to be interpreted in the context of the person's overall progress toward stable recovery.

Treatment programs should test patients for the presence of HIV/AIDS, hepatitis B and C, tuberculosis, and other infectious diseases as well as provide targeted risk-reduction counseling, linking patients to treatment if necessary.

Typically, drug abuse treatment addresses some of the drug-related behaviors that put people at risk of infectious diseases. Targeted counseling focused on reducing infectious disease risk can help patients further reduce or avoid substance-related and other high-risk behaviors. Counseling can also help those who are already infected to manage their illness. Moreover, engaging in substance abuse treatment can facilitate adherence to other medical treatments. Substance abuse treatment facilities should provide onsite, rapid HIV testing rather than referrals to offsite testing—research shows that doing so increases the likelihood that patients will be tested and receive their test results. Treatment providers should also inform patients that highly active antiretroviral therapy (HAART) has proven effective in combating HIV, including among drug-abusing populations, and help link them to HIV treatment if they test positive.

(NIDA, 2012)

The Association Between Substance Abuse and Other Community Concerns

Cost Of Substance Abuse And The Economic Impact

There is a great paucity on nationwide data related to the cost benefit of substance use treatment. However, the limited research in some states suggests that there is a major benefit to substance use treatment. According to recent estimates, the total financial cost of drug use disorders to the United States

is estimated to be \$180 billion annually (Jordan, Grissom, Alonzo, Dietzen, & Sangsland, 2008; French, 2002).

Accessible and effective community-based alcohol and drug treatment is imperative to reduce society's financial burden from problems associated with drug use. As the U.S. economy faces unsustainable escalations in health care costs, we need to ensure needed substance use disorder (SUD) treatment and recovery programs help reduce health and societal costs (ONDCP, 2010).

Benefit Costs Comparisons

- Treatment has been shown to have a benefit-cost ratio of 7:1. The largest savings were due to reduced cost of crime and increased employer earnings (Ettner, Huang, Evans, Ash, Hardy, Jourabchi, & Hser, 2006).
- A study comparing the direct cost of treatment to monetary benefits to society determined that on average, costs were \$1,583 compared to a benefit of \$11,487 - a benefit-cost ratio of 7:1 (Ettner, et.al., 2006).
- In an analysis of methadone detoxification patients (n=102), authors observed that for every dollar spent on treatment, \$4.87 of health care costs were offset (Hartz, Meek, et al., 1999).
- In comparing cost offsets in Washington State of people in treatment to non-treated, researchers noted: lower medical costs (\$311/month); lower state hospital expenses (\$48/month); lower community psychiatric hospital costs (\$16/month); reduced likelihood of arrest by 16%; and reduced likelihood of felony convictions by 34% (Estee & Norlund, 2003).
- Every one dollar spent on addiction treatment saves seven dollars in crime and criminal justice costs. When researchers added savings related to health care, the savings-to-cost ratio was 12:1 (French, 2008; Jordan, Grissom, et al., 2008).

Health Care Utilization

- In a study examining nearly 150,000 Medicaid claims for beneficiaries in six states, authors determined that people with substance abuse disorders had significantly higher expenditures for health problems compared to others (Clark, Samnalie, et al., 2009.).
- In comparison of medical expenses for welfare clients in Washington State (n=3,235 treatment group and n=4,863 control) it was determined that substance abuse treatment was associated with a reduction in expenses of \$2,500 per year (Wickize, 2006.)
- In reviewing selected beneficiaries in Oregon's Medicaid program, researchers concluded that eliminating the substance abuse benefit led to increased medical expenditures (McConnell, Wallace, et al., 2008).
- A review of over 1,000 patients in a Sacramento chemical dependency program noted a substantial decline in hospital (35%), emergency room (39%), and total medical costs (26%) when compared to a control group (Ettner, 2006; Parthasarathy, Weisner, et al., 2001).
- A research investigation on medical costs concluded that health care costs are higher for families with a person who has a dependency problem than for other similar families (Ray, 2007; McConnell, 2008).

Employer Savings

The myth that substance abuse, dependence, and addiction are issues limited to those who are homeless or destitute is erroneous. The National Drug Control Strategy reports that over 73% of those who abuse substances are employed. In 2007, an estimated 60% of current illegal substance abusers were of working age. An estimated 13.8% of unemployed Americans were current drug users compared to 6% of the general population (ONCDP, 2010).

- An intake-to-follow-up assessment study of nearly 500 people treated at Kaiser Permanente’s Addiction Medicine program demonstrated significant reduction in missed work, conflict with coworkers, and tardiness. It also noted that employers break even on investing in chemical dependency treatment (Parthasarathy et al., 2001; Clark, 2009).

The benefits of treatment far outweigh the costs. Even beyond the enormous physical and psychological costs, treatment can save money by diminishing the huge financial consequences imposed on employers and taxpayers (SAMHSA, 2009).

The benefits of investing in early intervention and treatment for SUDs are substantial. Addiction, like other chronic diseases, can be managed successfully with appropriate access to quality treatment. Early intervention tools can be implemented in existing systems, such as primary care settings and hospitals, to allow quick responses to SUDs and provide care for greater numbers of people. The overarching goal of treatment is to help individuals achieve stable, long-term recovery and become productive members of society, and to eliminate the public health, public safety, and economic consequences associated with addiction (ONDCP, 2012).

Youth

Prevalence and Impact of Substance Use Disorders

People are most likely to begin abusing drugs including tobacco, alcohol, and illegal and prescription drugs—during adolescence and young adulthood (NIDA, 2014). By the time they are seniors, almost 70% of high school students will have tried alcohol, half will have taken an illegal drug, nearly 40% will have smoked a cigarette, and more than 20% will have used a prescription drug for a nonmedical purpose (Johnston, 2013). There are many reasons adolescents use these substances, including the desire for new experiences, an attempt to deal with problems or perform better in school, and simple peer pressure. Adolescents are “biologically wired” to seek new experiences and take risks, as well as to carve out their own identity. Trying drugs may fulfill all of these normal developmental drives, but in an unhealthy way that can have very serious long-term consequences.

Many factors influence whether an adolescent tries drugs, including the availability of drugs within the neighborhood, community, and school and whether the adolescent’s friends are using them. The family environment is also important: Violence, physical or emotional abuse, mental illness, or drug use in the household increase the likelihood an adolescent will use drugs. Finally, an adolescent’s inherited genetic

vulnerability; personality traits like poor impulse control or a high need for excitement; mental health conditions such as depression, anxiety, or ADHD; and beliefs such as that drugs are “cool” or harmless make it more likely that an adolescent will use drugs (Sussman, 2008).

The adolescent brain is often likened to a car with a fully functioning gas pedal (the reward system) but weak brakes (the prefrontal cortex). Teenagers are highly motivated to pursue pleasurable rewards and avoid pain, but their judgment and decision-making skills are still limited. This affects their ability to weigh risks accurately and make sound decisions, including decisions about using drugs. For these reasons, adolescents are a major target for prevention messages promoting healthy, drug-free behavior and giving young people encouragement and skills to avoid the temptations of experimenting with drugs (Robertson, 2003).

Most teens do not escalate from trying drugs to developing an addiction or other substance use disorder (SUD); however, even experimenting with drugs is a problem. Drug use can be part of a pattern of risky behavior including unsafe sex, driving while intoxicated, or other hazardous, unsupervised activities. And in cases when a teen does develop a pattern of repeated use, it can pose serious social and health risks, including:

- School failure
- Problems with family and other relationships
- Loss of interest in normal healthy activities
- Impaired memory
- Increased risk of contracting an infectious disease (like HIV or hepatitis C) via risky sexual behavior or sharing contaminated injection equipment
- Mental health problems—including SUDs of varying severity
- The very real risk of overdose death.

Not all young people are equally at risk for developing an addiction. Various factors including inherited genetic predispositions and adverse experiences in early life make trying drugs and developing a SUD more likely. Exposure to stress (such as emotional or physical abuse) in childhood primes the brain to be sensitive to stress and seek relief from it throughout life; this greatly increases the likelihood of subsequent drug abuse and of starting drug use early (Andersen, 2009). In fact, certain traits that put a person at risk for drug use, such as being impulsive or aggressive, manifest well before the first episode of drug use and may be addressed by prevention interventions during childhood (Robertson; David; and Rao, 2003). By the same token, a range of factors, such as parenting that is nurturing or a healthy school environment, may encourage healthy development and thereby lessen the risk of later drug use.

Drug use at an early age is an important predictor of development of a SUD later. The majority of those who have a SUD started using before age 18 and developed their disorder by age 20 (Dennis, et al., 2002.). The likelihood of developing a SUD is greatest for those who begin use in their early teens. For example, 15.2% of people who start drinking by age 14 eventually develop alcohol abuse or dependence (as compared to just 2.1% of those who wait until they are 21 or older (*2012 National Survey on Drug Use and Health: Summary of National Findings*), and 25% of those who begin abusing prescription drugs at age 13 or younger develop a SUD at some time in their lives (McCabe, S.E, et al. 2007). Tobacco, alcohol, and

marijuana are the first addictive substances most people try. Data collected in 2012 found that nearly 13% of those with a SUD began using marijuana by the time they were 14 (*2012 National Survey on Drug Use and Health: Summary of National Findings*).

When SUDs occur in adolescence, they affect key developmental and social transitions, and they can interfere with normal brain maturation. These potentially lifelong consequences make addressing adolescent drug use an urgent matter. Chronic marijuana use in adolescence, for example, has been shown to lead to a loss of IQ that is not recovered even if the individual quits using in adulthood (Meier, M.H, Caspi, A. 2012). Impaired memory or thinking ability and other problems caused by drug use can derail a young person’s social and educational development and hold him or her back in life.

When SUDs are identified and treated in adolescence—especially if they are mild or moderate—they frequently give way to abstinence from drugs with no further problems. Relapse is a possibility, however, as it is with other chronic diseases like diabetes or asthma. Relapse should not be seen as a sign that treatment failed but as an occasion to engage in additional or different treatment. Averting and detecting relapse involves monitoring by the adolescent, parents, and teachers, as well as follow-up by treatment providers. Although recovery support programs are not a substitute for formal evidence-based treatment, they may help some adolescents maintain a positive and productive drug-free lifestyle that promotes meaningful and beneficial relationships and connections to family, peers, and the community both during treatment and after treatment ends. Whatever services or programs are used, an adolescent’s path to recovery will be strengthened by support from family members, non-drug-using peers, the school, and others in his or her life (NIDA, 2014).

Evidence-Based Practices and Principles of Effective Treatment

Table 2: EVIDENCE-BASED PRACTICES AND PRINCIPLES OF EFFECTIVE TREATMENT: YOUTH

Adolescent substance use needs to be identified and addressed as soon as possible.

Drugs can have long-lasting effects on the developing brain and may interfere with family, positive peer relationships, and school performance. Most adults who develop a substance use disorder (SUD) report having started drug use in adolescence or young adulthood, so it is important to identify and intervene in drug use early.

Adolescents can benefit from a drug abuse intervention even if they are not addicted to a drug.

SUDs range from problematic use to addiction and can be treated successfully at any stage, and at any age. For young people, any drug use (even if it seems like only “experimentation”), is cause for concern, as it exposes them to dangers from the drug and associated risky behaviors and may lead to more drug use in the future. Parents and other adults should monitor young people and not underestimate the significance of what may appear as isolated instances of drug taking.

Routine annual medical visits are an opportunity to ask adolescents about drug use.

Standardized screening tools are available to help pediatricians, dentists, emergency room doctors, psychiatrists, and other clinicians determine an adolescent’s level of involvement (if any) in tobacco, alcohol, and illicit and nonmedical prescription drug use. When an adolescent reports substance use, the health care provider can assess its severity and either provide an onsite brief intervention or refer the teen to a substance abuse treatment program.

Legal interventions and sanctions or family pressure may play an important role in getting adolescents to enter, stay in, and complete treatment.

Adolescents with SUDs rarely feel they need treatment and almost never seek it on their own. Research shows that treatment can work even if it is mandated or entered into unwillingly.

SUD treatment should be tailored to the unique needs of the adolescent.

Treatment planning begins with a comprehensive assessment to identify the person’s strengths and weaknesses to be addressed. Appropriate treatment considers an adolescent’s level of psychological development, gender, relations with family and peers, how well he or she is doing in school, the larger community, cultural and ethnic factors, and any special physical or behavioral issues.

Treatment should address the needs of the whole person, rather than just focusing on his or her drug use.

The best approach to treatment includes supporting the adolescent’s larger life needs, such as those related to medical, psychological, and social well-being, as well as housing, school, transportation, and legal services. Failing to address such needs simultaneously could sabotage the adolescent’s treatment success.

Behavioral therapies are effective in addressing adolescent drug use.

Behavioral therapies, delivered by trained clinicians, help an adolescent stay off drugs by strengthening his or her motivation to change. This can be done by providing incentives for abstinence, building skills to resist and refuse substances and deal with triggers or craving, replacing drug use with constructive and rewarding activities, improving problem-solving skills, and facilitating better interpersonal relationships.

Families and the community are important aspects of treatment.

The support of family members is important for an adolescent’s recovery. Several evidence-based interventions for adolescent drug abuse seek to strengthen family relationships by improving communication and improving family members’ ability to support abstinence from drugs. In addition, members of the community (such as school counselors, parents, peers, and mentors) can encourage young people who need help to get into treatment—and support them along the way.

Effectively treating SUDs in adolescents requires also identifying and treating any other mental health conditions they may have.

Adolescents who abuse drugs frequently also suffer from other conditions including depression, anxiety disorders, attention-deficit hyperactivity disorder (ADHD), oppositional defiant disorder, and conduct problems. Adolescents who abuse drugs, particularly those involved in the juvenile justice system, should be screened for other psychiatric disorders. Treatment for these problems should be integrated with the treatment for a SUD.

Sensitive issues such as violence and child abuse or risk of suicide should be identified and addressed.

Many adolescents who abuse drugs have a history of physical, emotional, and/or sexual abuse or other trauma. If abuse is suspected, referrals should be made to social and protective services, following local regulations and reporting requirements.

It is important to monitor drug use during treatment.

Adolescents recovering from SUDs may experience relapse, or a return to drug use. Triggers associated with relapse vary and can include mental stress and social situations linked with prior drug use. It is important to identify a return to drug use early before an undetected relapse progresses to more serious consequences. A relapse signals the need for more treatment or a need to adjust the individual's current treatment plan to better meet his or her needs.

Staying in treatment for an adequate period of time and continuity of care afterward are important.

The minimal length of drug treatment depends on the type and extent of the adolescent's problems, but studies show outcomes are better when a person stays in treatment for 3 months or more. Because relapses often occur, more than one episode of treatment may be necessary. Many adolescents also benefit from continuing care following treatment, including drug use monitoring, follow-up visits at home, and linking the family to other needed services.

Testing adolescents for sexually transmitted diseases like HIV, as well as hepatitis B and C, is an important part of drug treatment.

Adolescents who use drugs—whether injecting or non-injecting—are at an increased risk for diseases that are transmitted sexually as well as through the blood, including HIV and hepatitis B and C. All drugs of abuse alter judgment and decision making, increasing the likelihood that an adolescent will engage in unprotected sex and other high-risk behaviors including sharing contaminated drug injection equipment and unsafe tattooing and body piercing practices—potential routes of virus transmission. Substance use treatment can reduce this risk both by

reducing adolescents' drug use (and thus keeping them out of situations in which they are not thinking clearly) and by providing risk-reduction counseling to help them modify or change their high-risk behaviors.

Research-Based Principles of Adolescent Substance Use
Disorder Treatment (NIDA, 2014)

Public Safety and Criminal Justice

Prevalence and Impact of Substance Use Disorders

Drug abuse is implicated in at least three types of drug-related offenses: (1) offenses defined by drug possession or sales, (2) offenses directly related to drug abuse (e.g., stealing to get money for drugs), and (3) offenses related to a lifestyle that predisposes the drug abuser to engage in illegal activity, for example, through association with other offenders or with illicit markets, or with loitering and vagrancy associated with SUD-related homelessness. Individuals who use illicit drugs are more likely to commit crimes, and it is common for many offenses, including violent crimes, to be committed by individuals who had used drugs or alcohol prior to committing the crime, or who were using at the time of the offense.

According to 2008 statistics from the Department of Justice's (DOJ's) Bureau of Justice Statistics (BJS), the total correctional population is estimated to be 7.3 million, with more than 5 million individuals on probation or under parole supervision, and drug law violations accounting for the most common type of criminal offense (Glaze & Bonczar, 2009). In a survey of State and Federal prisoners, BJS estimated that about half of the prisoners met Diagnostic and Statistical Manual for Mental Disorders (DSM) criteria for drug abuse or dependence, and yet fewer than 20% who needed treatment received it (Chandler et al., 2009; Karberg & Mumola, 2006). Of those surveyed, 14.8% of State and 17.4% of Federal prisoners reported having received drug treatment since admission (Karberg & Mumola, 2006).

Juvenile justice systems also report high levels of drug abuse. In 2008, approximately 10% of the estimated 2.1 million juvenile arrests were for drug abuse or underage drinking violations (Puzzanchera, 2009). As many as two-thirds of detained juveniles may have a substance use disorder (SUD); female juveniles who enter the system generally have higher SUD rates than males (McClelland et al., 2004a).

Evidence-Based Practices and Principles of Effective Treatment

Although the past several decades have witnessed an increased interest in providing substance abuse treatment services for criminal justice offenders, only a small percentage of offenders has access to adequate services, especially in jails and community correctional facilities (Taxman et al., 2007; Sabol et al., 2010). Not only is there a gap in the availability of these services for offenders, but often there are few choices in the types of services provided. Treatment that is of insufficient quality and intensity or that is not well suited to the needs of offenders may not yield meaningful reductions in drug use and recidivism and are therefore an inefficient use of resources. Untreated substance abusing offenders are more likely

than treated offenders to relapse to drug abuse and return to criminal behavior. This can lead to re-arrest and re-incarceration, jeopardizing public health and public safety and taxing criminal justice system resources. Appropriate treatment is the most effective course for interrupting the drug abuse/criminal justice cycle for offenders with drug abuse problems.

One of the goals of treatment planning is to match evidence-based interventions to individual needs at each stage of drug treatment. Over time, various combinations of treatment services may be required. Evidence-based interventions include cognitive-behavioral therapy to help participants learn positive social and coping skills, contingency management approaches to reinforce positive behavioral change, and motivational enhancement to increase treatment engagement and retention. In those addicted to opioid drugs, agonist/partial agonist medications can also help normalize brain function, and antagonist medications can facilitate abstinence. For juvenile offenders, treatments incorporate the family and other aspects of the drug abuser's life. (NIDA, 2012)

Drug abuse treatment can be incorporated into criminal justice settings in a variety of ways. Examples include treatment in prison followed by community-based treatment after release; drug courts that blend judicial monitoring and sanctions with treatment by imposing treatment as a condition of probation; and treatment under parole or probation supervision. Drug abuse treatment can benefit from the cross-agency coordination and collaboration of criminal justice professionals, substance abuse treatment providers, and other social service agencies. By working together, the criminal justice and treatment systems can optimize resources to benefit the health, safety, and well-being of the individuals and communities they serve.

Individuals with substance abuse problems who are involved in the criminal justice system frequently need community-based drug and alcohol abuse treatment and other services. To reduce the risk of relapse to illicit drugs and criminal recidivism, criminal justice agencies may need to establish collaborations with substance abuse treatment and other community-based service providers. Although there are many variations of inter-organizational relationships, the nature of these interagency collaborations among justice agencies and treatment providers has received little systematic study (Fletcher et al., 2009).

Legally Mandated versus Voluntary Treatment

Often, the criminal justice system can apply legal pressure to encourage offenders to participate in drug abuse treatment; or treatment can be mandated through a drug court or as a condition of pretrial release, probation, or parole. A large percentage of those admitted to drug abuse treatment cite legal pressure as an important reason for seeking treatment. Most studies suggest that outcomes for those who are legally pressured to enter treatment are as good as or better than outcomes for those who entered treatment without legal pressure. Individuals under legal pressure also tend to have higher attendance rates and remain in treatment for longer periods, which can also have a positive impact on treatment outcomes. Legal pressure can increase treatment attendance and improve retention (NIDA, 2012)

Principles of Drug Abuse Treatment for Criminal Justice Populations

Table 3: PRINCIPLES OF DRUG ABUSE TREATMENT FOR CRIMINAL JUSTICE POPULATIONS

Drug addiction is a brain disease that affects behavior.

Drug addiction has well-recognized cognitive, behavioral, and physiological characteristics that contribute to continued use of drugs despite the harmful consequences. Scientists have also found that chronic drug abuse alters the brain's anatomy and chemistry and that these changes can last for months or years after the individual has stopped using drugs. This transformation may help explain why addicted persons are at a high risk of relapse to drug abuse even after long periods of abstinence and why they persist in seeking drugs despite the consequences.

Recovery from drug addiction requires effective treatment, followed by management of the problem over time.

Drug addiction is a serious problem that can be treated and managed throughout its course. Effective drug abuse treatment engages participants in a therapeutic process, retains them in treatment for an appropriate length of time, and helps them learn to maintain abstinence. Multiple episodes of treatment may be required. Outcomes for drug abusing offenders in the community can be improved by monitoring drug use and by encouraging continued participation in treatment.

Treatment must last long enough to produce stable behavioral changes.

In treatment, the drug abuser is taught to break old patterns of thinking and behaving and to learn new skills for avoiding drug use and criminal behavior. Individuals with severe drug problems and co-occurring disorders typically need longer treatment (e.g., a minimum of 3 months) and more comprehensive services. Early in treatment, the drug abuser begins a therapeutic process of change. In later stages, he or she addresses other problems related to drug abuse and learns how to manage them as well.

Assessment is the first step in treatment.

A history of drug or alcohol use may suggest the need to conduct a comprehensive assessment to determine the nature and extent of an individual's drug problems, establish whether problems exist in other areas that may affect recovery, and enable the formulation of an appropriate treatment plan. Personality disorders and other mental health problems are prevalent in offender populations; therefore, comprehensive assessments should include mental health evaluations with treatment planning for these problems.

Tailoring services to fit the needs of the individual is an important part of effective drug abuse treatment for criminal justice populations.

Individuals differ in terms of age, gender, ethnicity and culture, problem severity, recovery stage, and level of supervision needed. Individuals also respond differently to different treatment approaches

and treatment providers. In general, drug treatment should address issues of motivation, problem solving, and skill-building for resisting drug use and criminal behavior. Lessons aimed at supplanting drug use and criminal activities with constructive activities and at understanding the consequences of one's behavior are also important to include. Tailored treatment interventions can facilitate the development of healthy interpersonal relationships and improve the participant's ability to interact with family, peers, and others in the community.

Drug use during treatment should be carefully monitored.

Individuals trying to recover from drug addiction may experience a relapse, or return to drug use. Triggers for drug relapse are varied; common ones include mental stress and associations with peers and social situations linked to drug use. An undetected relapse can progress to serious drug abuse, but detected use can present opportunities for therapeutic intervention. Monitoring drug use through urinalysis or other objective methods, as part of treatment or criminal justice supervision, provides a basis for assessing and providing feedback on the participant's treatment progress. It also provides opportunities to intervene to change unconstructive behavior—determining rewards and sanctions to facilitate change, and modifying treatment plans according to progress.

Treatment should target factors that are associated with criminal behavior.

“Criminal thinking” is a combination of attitudes and beliefs that support a criminal lifestyle and criminal behavior, such as feeling entitled to have things one's own way, feeling that one's criminal behavior is justified, failing to accept responsibility for one's actions, and consistently failing to anticipate or appreciate the consequences of one's behavior. This pattern of thinking often contributes to drug use and criminal behavior. Treatment that provides specific cognitive skills training to help individuals recognize errors in judgment that lead to drug abuse and criminal behavior may improve outcomes.

Criminal justice supervision should incorporate treatment planning for drug abusing offenders, and treatment providers should be aware of correctional supervision requirements.

The coordination of drug abuse treatment with correctional planning can encourage participation in drug abuse treatment and can help treatment providers incorporate correctional requirements as treatment goals. Treatment providers should collaborate with criminal justice staff to evaluate each individual's treatment plan and ensure that it meets correctional supervision requirements, as well as that person's changing needs, which may include housing and child care; medical, psychiatric, and social support services; and vocational and employment assistance. For offenders with drug abuse problems, planning should incorporate the transition to community-based treatment and links to appropriate post-release services to improve the success of drug treatment and re-entry. Abstinence requirements may necessitate a rapid clinical response, such as more counseling, targeted intervention, or increased medication, to prevent relapse. Ongoing coordination between treatment providers and courts or parole and probation officers is important in addressing the complex needs of these re-entering individuals.

Continuity of care is essential for drug abusers re-entering the community.

Offenders who complete prison-based treatment and continue with treatment in the community have the best outcomes. Continuing drug abuse treatment helps the recently released offender deal with problems that become relevant after release, such as learning to handle situations that could lead to relapse, learning how to live drug-free in the community, and developing a drug-free peer support network. Treatment in prison or jail can begin a process of therapeutic change, resulting in reduced drug use and criminal behavior post-incarceration. Continuing drug treatment in the community is essential to sustaining these gains.

A balance of rewards and sanctions encourages pro-social behavior and treatment participation.

When providing correctional supervision of individuals participating in drug abuse treatment, it is important to reinforce positive behavior. Nonmonetary “social reinforcers,” such as recognition for progress or sincere effort, can be effective, as can graduated sanctions that are consistent, predictable, and clear responses to noncompliant behavior. Generally, less punitive responses are used for early and less serious noncompliance, with increasingly severe sanctions issuing from continued problem behavior. Rewards and sanctions are most likely to have the desired effect when they are perceived as fair and when they swiftly follow the targeted behavior.

Offenders with co-occurring drug abuse and mental health problems often require an integrated treatment approach.

High rates of mental health problems are found both in offender populations and in those with substance abuse problems. Drug abuse treatment can sometimes address depression, anxiety, and other mental health problems. Personality, cognitive, and other serious mental disorders can be difficult to treat and may disrupt drug treatment. The presence of co-occurring disorders may require an integrated approach that combines drug abuse treatment with psychiatric treatment, including the use of medication. Individuals with either a substance abuse or mental health problem should be assessed for the presence of the other.

Medications are an important part of treatment for many drug abusing offenders.

Medicines such as methadone, buprenorphine, and extended-release naltrexone have been shown to reduce heroin use and should be made available to individuals who could benefit from them. For persons who have attempted but not succeeded at achieving stable, drug-free recovery, medication-assisted treatment with opioid substitution therapy (e.g., methadone, buprenorphine) may be warranted. Opioid substitution therapy can help a person eliminate their use of illicit drugs, avoid friends and health risks associated with use of illicit drugs, and attain a productive, non-criminal lifestyle that can facilitate long-term recovery. Effective use of medications can also be instrumental in enabling people with co-occurring mental health problems to function successfully in society. Behavioral strategies can increase adherence to medication regimens.

Treatment planning for drug abusing offenders who are living in or re-entering the community should

include strategies to prevent and treat serious, chronic medical conditions, such as HIV/AIDS, hepatitis B and C, and tuberculosis.

The rates of infectious diseases, such as hepatitis, tuberculosis, and HIV/AIDS, are higher in drug abusers, incarcerated offenders, and offenders under community supervision than in the general population. Infectious diseases affect not just the offender, but also the criminal justice system and the wider community. Consistent with Federal and State laws, drug-involved offenders should be offered testing for infectious diseases and receive counseling on their health status and on ways to modify risk behaviors. Probation and parole officers who monitor offenders with serious medical conditions should link them with appropriate health care services, encourage compliance with medical treatment, and re-establish their eligibility for public health services (e.g., Medicaid, county health departments) before release from prison or jail. (NIDA, 2012)

Economic Benefits Of Treatment In Criminal Justice Populations

The largest economic benefit of treatment is seen in avoided costs of crime (incarceration and victimization costs). In 2007, it was estimated that the cost to society of drug abuse was \$193 billion (National Drug Intelligence Center [NDIC], 2011), a substantial portion of which—\$113 billion—is associated with drug-related crime, including criminal justice system costs and costs borne by victims of crime. The cost of treating drug abuse (including health costs, hospitalizations, and government specialty treatment) was estimated to be \$14.6 billion, a fraction of these overall societal costs (NDIC, 2011). Drug abuse treatment is cost effective in reducing drug use and bringing about related savings in health care. Treatment also consistently has been shown to reduce the costs associated with lost productivity, crime, and incarceration across various settings and populations. Providing methadone treatment to opioid-addicted prisoners prior to their release, for example, not only helps to reduce drug use but also avoids the much higher imprisonment costs for drug-related crime.

Even greater economic benefits result from treating offenders with co-occurring mental health problems and SUDs. Residential prison treatment is more cost effective if offenders attend treatment post release, according to research (Martin et al., 1999; Butzin et al., 2006). Drug courts also convey positive economic benefits, including participant-earned wages, avoided incarceration, and future crime costs.

Unique Treatment Needs For Women In The Criminal Justice System

Although women are incarcerated at far lower rates than men, the number and percentage of incarcerated women have grown substantially in recent years. Between 2000 and 2008, the number of men in prisons and jails grew by only 5%, while the number of incarcerated women grew by about 15% (Sabol et al., 2010). Women in prison are likely to have a different set of problems and needs than men, presenting particular treatment challenges that may call for tailored approaches (Greenfield et al. 2007).

Incarcerated women in treatment are significantly more likely than incarcerated men to have severe substance abuse histories, co-occurring mental disorders, and high rates of past treatment for both; they also tend to have more physical health problems (Staton et al., 2003; Messina et al., 2006). Approximately

50% of female offenders are likely to have histories of physical or sexual abuse, and women are more likely than men to be victims of domestic violence. Past or current victimization can contribute to drug or alcohol abuse, depression, post-traumatic stress disorder, and criminal activity.

Treatment programs serving both men and women can provide effective treatment for their female patients. However, gender specific programs may be more effective for female offenders, particularly those with histories of trauma and abuse (Pelissier et al., 2003). Female offenders are more likely to need medical and mental health services, child care services, and assistance in finding housing and employment. Following a comprehensive assessment, women with mental health disorders should receive appropriate treatment and case management, including victim services as needed. For female offenders with children, parental responsibilities can conflict with their ability to participate in drug treatment. Regaining or retaining custody of their children can also motivate mothers to participate in treatment. Treatment programs may improve retention by offering child care services and parenting classes.

Unique Treatment Needs For Juveniles In The Criminal Justice System

The U.S. Department of Justice's Office of Justice Programs reports a high rate of drug use among juvenile detainees. One study, for example, found that 77% of criminal justice-involved youth reported substance use (mainly marijuana) in the past 6 months, and nearly half of male and female juvenile detainees had a SUD (McClelland et al., 2004a; McClelland et al., 2004b).

Juveniles entering the criminal justice system can bring a number of serious problems with them—substance abuse, academic failure, emotional disturbances, physical health issues, family problems, and a history of physical or sexual abuse. Girls make up nearly one-third of juvenile arrests, a high percentage of whom report some form of emotional, physical, or sexual abuse.

Effectively addressing these problems requires their gaining access to comprehensive assessment, treatment, case management, and support services appropriate for their age and developmental stage. Assessment is particularly important, because not all adolescents who have used drugs need treatment. For those who do, there are several points in the juvenile justice continuum where treatment has been integrated, including juvenile drug courts, community-based supervision, juvenile detention, and community re-entry.

Families play an important role in the recovery of substance abusing juveniles, but this influence can be either positive or negative. Parental substance abuse or criminal involvement, physical or sexual abuse by family members, and lack of parental involvement or supervision are all risk factors for adolescent substance abuse and delinquent behavior. Thus, the effective treatment of juvenile substance abusers often requires a family-based treatment model that targets family functioning and the increased involvement of family members. Effective adolescent treatment approaches include multisystemic therapy, multidimensional family therapy, and functional family therapy. These interventions show promise in strengthening families and decreasing juvenile substance abuse and delinquent behavior.

Effective treatment of juvenile substance abusers often requires a family-based and

collaborative care approach (Prendergast et al., 2002; Butzin et al., 2006; Kinlock et al., 2009).

Collaborative comprehensive treatment for justice-involved persons is of proven effectiveness. Treatment is an effective intervention for drug abusers, including those who are involved with the criminal justice system. However, the effectiveness of drug treatment depends on both the individual and the program, and on whether interventions and treatment services are available and appropriate for the individual's needs. To alter attitudes, beliefs, and behaviors that support drug use, the drug abuser must engage in a therapeutic change process, which may include medications to help prevent relapse. Longitudinal outcome studies find that those who participate in community-based drug abuse treatment programs commit fewer crimes than those who do not participate (Butzin et al., 2006; Kinlock et al., 2009).

Additional Resources

- Bureau of Justice Statistics (BJS) Statistics on Drugs and Crime: <http://www.bjs.gov/content/dcf/contents.cfm>
- Center for Substance Abuse Treatment (CSAT), SAMHSA: <http://beta.samhsa.gov/about-us>
- Federal Bureau of Prisons (BOP) Substance Abuse Treatment: <http://www.bop.gov/inmates/>
- National Criminal Justice Reference Service (NCJRS): <https://www.ncjrs.gov/>
- National Institute on Alcohol Abuse and Alcoholism (NIAAA): <http://www.niaaa.nih.gov/>
- National Institute of Corrections (NIC): <http://nicic.gov/>
- National Institute of Justice (NIJ): <http://www.nij.gov/Pages/welcome.aspx>
- National Institute of Mental Health (NIMH): <http://www.nimh.nih.gov/index.shtml>
- Office of Applied Studies (OAS), SAMHSA: <http://www.samhsa.gov/data/>
- Office of Justice Programs (OJP): <http://ojp.gov/>
- The Office of Juvenile Justice and Delinquency Prevention (OJJDP): <http://www.ojjdp.gov/>

Substance Use and Mental Health

Prevalence and Impact of Substance Use Disorders

Dual diagnosis is a term used to describe people with mental illness who have coexisting problems with drugs and/or alcohol (another term is co-occurring disorder (COD)). The relationship between the two is complex, and the treatment of people with co-occurring substance abuse (or substance dependence) and mental illness is more complicated than the treatment of either condition alone. This is, unfortunately, a common situation—many people with mental illness have ongoing substance abuse problems, and many people who abuse drugs and alcohol also experience mental illness. Certain groups of people with mental illness (e.g., males, individuals of lower socioeconomic status, military veterans and people with more general medical illnesses) are at increased risk of abusing drugs such as marijuana, opiates, cocaine and other stimulants, and alcohol. Recent scientific studies have suggested that nearly one-third of people with all mental illnesses and approximately one-half of people with severe mental illnesses (including bipolar disorder and schizophrenia) also experience substance abuse. Conversely, more than one-third of all

alcohol abusers and more than one-half of all drug abusers are also battling a mental illness (Duckworth, Freedman, 2013).

More than half of people who have drug problems also have a mental health problem, such as:

- Depression, which makes them feel very sad and tired
- Anxiety, which makes them feel nervous, worried, and afraid
- Bipolar disorder, which makes their moods change back and forth. They might be full of energy, excited, or even angry, then feel sad, tired, and hopeless
- ADHD (attention-deficit/hyperactivity disorder), which makes it hard to pay attention, sit still, and not act out
- Antisocial personality disorder, which makes it hard to have good relationships and care about other people's feelings. (National Council for Behavioral Health, 2014)

Persons with mental health problems like these are twice as likely to also have drug problems. This is partly because drug abuse and mental health problems affect the same parts of the brain. If someone feels really bad, they might try to make it better by abusing drugs. Unfortunately, that doesn't usually work for very long. Instead they may become addicted to drugs, and then feel even worse than before. The drug problem can make the mental health problem worse. And the mental health problem can make the drug problem worse. Someone with both types of problems may need treatment for both in order to get better (Alegria, et al., 2010; Trull et al., 2010).

Drug addiction is a disease of the brain that frequently occurs with other mental disorders. In fact, as many as 6 in 10 people with an illicit substance use disorder (SUD) also suffer from another mental illness; and rates are similar for users of licit drugs—i.e., tobacco and alcohol. For these individuals, one condition becomes more difficult to treat successfully as an additional condition is intertwined. Thus, people entering treatment either for a SUD or for another mental disorder should be assessed for the co-occurrence of the other condition. Research indicates that treating both (or multiple) illnesses simultaneously in an integrated fashion is generally the best treatment approach for these patients (NIDA, 2012).

Over 40% of persons with an addictive disorder have a co-occurring mental disorder (i.e., substance abuse disorder and a mental illness at the same time). Over 80% of the time mental disorders precede substance abuse by five to ten years. Thirty-seven percent of people who have a mental health disorder are also affected with an alcohol disorder. Of those with a drug disorder, the co-morbidity rate was 53% (SAMHSA, 2012).

In a 2002 Substance Abuse and Mental Health Services Administration presentation to Congress on the prevention and treatment of co-occurring substance abuse disorders and mental health, the following data was reported:

- Patients in psychiatric hospitals have a 39.6% prevalence rate for substance abuse. People with a lifetime mental disorder are twice as likely to have an alcohol disorder and four times as likely to have a drug disorder compared to the general population.

- Of the 1.3% of the population who have schizophrenia, 47% meet the criteria for alcohol or other drug abuse.
- Of people with an antisocial personality disorder, 83.6% meet the criteria for alcohol or other drug abuse; the percentage for persons with mood disorders is 32.
- For persons with bipolar disorder, the rate is 60.7%. Ninety percent of inmates with mental disorders have an addiction disorder
- Dual diagnosis occurs in 28-50% of the mental health target population.
- Children and adolescents diagnosed with attention deficit hyperactivity disorders (ADHD) appear to be at special risk to abuse substances.

According to the Center for Substance Abuse Treatment (2011), people with serious mental disorders die much younger than the general population and many are in dire need of medical intervention.

- People with serious mental illness treated by the public mental health system die on the average 25 years earlier than the general population. They live to 51, on average, compared with 76 for Americans overall. According to the data, they are 3.4 times more likely to die of heart disease; 6.6 times more likely to die of pneumonia and influenza; and 5 times more likely to die of other respiratory ailments.
- Sixty percent of premature deaths in persons with schizophrenia were due to medical conditions such as pulmonary, infectious and cardiovascular diseases.
- Seven of the ten leading causes of death (heart disease, cancer, stroke, chronic lower respiratory disease, accidents, diabetes and suicide) have a psychological and/or behavioral component.
- Based on analyzed insurance claims over a six year period, persons with bipolar disorder were significantly more likely to have medical co-morbidity, including three or more chronic conditions (41% versus 12%) compared with controls.

Evidence-Based Practices and Principles of Effective Treatment

After 20 years of development and research, dual diagnosis services for clients with severe mental illness are emerging as an evidence-based practice. Effective dual diagnosis programs combine mental health and substance abuse interventions that are tailored for the complex needs of clients with comorbid disorders. Current approaches to implementing dual diagnosis programs involve organizational and financing changes at the policy level, clarity of program mission with structural changes to support dual diagnosis services, training and supervision for clinicians, and dissemination of accurate information to consumers and families to support understanding, demand, and advocacy (Drake, Minkoff K, et al. 2001).

From Substance Abuse Treatment for Persons With Co-Occurring Disorders

Treatment Improvement Protocol (TIP) Series, No. 42 Center for Substance Abuse Treatment. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2005. Report No.: (SMA) 05-3922. Available at: <http://www.samhsa.gov/>

In the late 1970s, practitioners began to recognize that the presence of substance abuse in combination with mental disorders had profound and troubling implications for treatment outcomes. This growing awareness has culminated in today's emphasis on the need to recognize and address the interrelationship Alcohol and Drug Treatment and Intervention Services

of these disorders through new approaches and appropriate adaptations of traditional treatment. In the decades from the 1970s to the present, substance abuse treatment programs typically reported that 50 to 75% of their clients had COD, while corresponding mental-health settings cited proportions of 20 to 50%. During the same period of time, a body of knowledge has evolved that clarifies the treatment challenges presented by the combination of substance use and mental disorders and illuminates the likelihood of poorer outcomes for such clients in the absence of targeted treatment efforts.

The treatment and research communities have not been passive in the face of this challenge. Innovative strategies have emerged and been tested, and the treatment population has been defined more precisely. Findings have shown that many substance abuse treatment clients with less serious mental disorders do well with traditional substance abuse treatment methods, while those with more serious mental disorders need intervention modifications and additions to enhance treatment effectiveness and, in most instances, to result in successful treatment outcomes.

The Quadrants of Care, developed by the National Association of State Alcohol and Drug Abuse Directors (NASADAD) and the National Association of State Mental Health Program Directors (NASMHPD), is a useful classification of *service coordination by severity* in the context of substance abuse and mental health settings. The NASADAD-NASMHPD four-quadrant framework provides a structure for fostering consultation, collaboration, and integration among drug abuse and mental health treatment systems and providers to deliver appropriate care to every client with COD. The four categories of COD are:

- Quadrant I Less severe mental disorder/less severe substance disorder
- Quadrant II More severe mental disorder/less severe substance disorder
- Quadrant III Less severe mental disorder/more severe substance disorder
- Quadrant IV More severe mental disorder/more severe substance disorder.

The American Society of Addiction Medicine (ASAM) also has developed a *client* placement system to facilitate effective treatment. The ASAM Patient Placement Criteria (ASAM PPC-2R) describe three types of substance abuse programs for people with COD: addiction only services, dual diagnosis capable, and dual diagnosis enhanced.

The integration of substance abuse treatment and mental health services for persons with COD has become a major treatment initiative. Integrated treatment coordinates substance abuse and mental health interventions to treat the whole person more effectively; the term refers broadly to any mechanism by which treatment interventions for COD are combined within a primary treatment relationship or service setting. As such, integrated treatment reflects the longstanding concern within substance abuse treatment programs for treating the whole person, and recognizes the importance of ensuring that entry into any *one* system can provide access to *all* needed systems.

As developed in the substance abuse treatment field, the recovery perspective acknowledges that recovery is a long-term process of internal change in which progress occurs in stages, an understanding critical to treatment planning. In preparing a treatment plan, the clinician should recognize that treatment takes place in different settings (e.g., residential and outpatient) over time, and that much of the recovery process typically occurs outside of, or following, treatment (e.g., through participation in mutual self-help

groups). Practitioners often divide treatment into phases, usually including engagement, stabilization, primary treatment, and continuing care (also known as aftercare). Use of these phases enables the clinician (whether within the substance abuse or mental health treatment system) to apply coherent, stepwise approaches in developing and using treatment protocols.

There are key elements of programming for COD in substance abuse treatment agencies. While the needs and functioning of substance abuse treatment are accentuated, the elements described have relevance for mental health agencies and other service systems that seek to coordinate mental health and substance abuse services for their clients who need both.

Treatment planning begins with screening and assessment. The *screening process* is designed to identify those clients seeking substance abuse treatment who show signs of mental health problems that warrant further attention. Easy-to-use screening instruments will accomplish this purpose and can be administered by counseling staff with minimal preparation.

A *basic assessment* consists of gathering information that will provide evidence of COD and mental and SUD diagnoses; assess problem areas, disabilities, and strengths; assess readiness for change; and gather data to guide decisions regarding the necessary level of care. Intake information consists of the following categories and items:

- *Background* is described by obtaining data on family; relevant cultural, linguistic, gender, and sexual orientation issues; trauma history; marital status; legal involvement and financial situation; health; education; housing status; strengths and resources; and employment.
- *Substance use* is established by age of first use, primary drugs used, patterns of drug use (including information related to diagnostic criteria for abuse or dependence), and past or current treatment. It is important to identify periods of abstinence of 30 days or longer to isolate the mental health symptoms, treatment, and disability expressed during these abstinent periods.
- *Psychiatric problems* are elaborated by determining both family and client histories of psychiatric problems (including diagnosis, hospitalization, and other treatments), current diagnoses and symptoms, and medications and medication adherence. It is important to identify past periods of mental health stability, determine past successful treatment for mental disorders, and discover the nature of SUD issues arising during these stable periods. Identification of any current treatment providers enables vitally important information sharing and cooperation.
- *Integrated assessment* identifies the interactions among the symptoms of mental disorders and substance use, as well as the interactions of the symptoms of SUDs and mental health symptoms. Integrated assessment also considers how all the interactions relate to treatment experiences, especially stages of change, periods of stability, and periods of crisis.

Diagnosis is an important part of the assessment process. Key information about substance abuse and particular mental disorders is distilled, and appropriate counselor actions and approaches are recommended for the substance abuse treatment client who manifests symptoms of one or more of these mental disorders. The consensus panel recognizes that addiction counselors are not expected to diagnose mental disorders. The limited aims of providing this material are to increase substance abuse treatment

counselors' familiarity with mental disorder terminology and criteria and to provide advice on how to proceed with clients who demonstrate the symptoms of these disorders.

The use of proper *medication* is an essential program element, helping clients to stabilize and control their symptoms, thereby increasing their receptivity to other treatment. Pharmacological advances over the past few decades have produced more effective psychiatric medications with fewer side effects. With the support of better medication regimens, many people with serious mental disorders who once would have been institutionalized, or who would have been too unstable for substance abuse treatment, have been able to participate in treatment, make progress, and lead more productive lives. To meet the needs of this population, the substance abuse treatment counselor needs better understanding of the signs and symptoms of mental disorders and access to medical support. The counselor's role is first to provide the prescribing physician with an accurate description of the client's behavior and symptoms, which ensures that proper medication is chosen, and then to assist the client in adhering to the medication regimen. The substance abuse counselor and program can, and often do, employ peers or the peer community to help and support individual efforts to follow prescription instructions.

Several other features complete the list of essential components of treatment for COD, including *enhanced staffing* that incorporates professional mental health specialists, psychiatric consultation, or an onsite psychiatrist (for assessment, diagnosis, and medication); *psychoeducational classes* (e.g., mental disorders and substance abuse, relapse prevention) that provide increased awareness about the disorders and their symptoms; onsite *double trouble groups* to discuss the interrelated problems of mental and SUDs, which will help to identify triggers for relapse; and participation in community-based *dual recovery mutual self-help groups*, which afford an understanding, supportive environment and a safe forum for discussing medication, mental health, and substance abuse issues.

Treatment providers are advised to view clients with COD and their treatment in the context of their culture, ethnicity, geographic area, socioeconomic status, gender, age, sexual orientation, religion, spirituality, and any physical or cognitive disabilities. The provider especially needs to appreciate the distinctive ways in which a client's culture may view disease or disorder, including COD. Using a model of disease familiar and culturally relevant to the client can help communication and facilitate treatment. In addition to the essential elements described above, several well-developed and successful strategies from the substance abuse field are being adapted for COD.

Motivational Interviewing (MI) is a client-centered, directive method for enhancing intrinsic motivation to change (by exploring and resolving ambivalence) that has proven effective in helping clients clarify goals and commit to change. MI has been modified to meet the special circumstances of clients with COD, with promising results from initial studies to improve client engagement in treatment.

Contingency Management (CM) maintains that the form or frequency of behavior can be altered through the introduction of a planned and organized system of positive and negative consequences. It should be noted that many counselors and programs employ CM principles informally by rewarding or praising particular behaviors and accomplishments. Similarly, CM principles are applied formally (but not necessarily identified as such) whenever the attainment of a level or privilege is contingent on meeting

certain behavioral criteria. Demonstration of the efficacy of CM principles for clients with COD is still needed.

Cognitive-Behavioral Therapy (CBT) is a general therapeutic approach that seeks to modify negative or self-defeating thoughts and behaviors, and is aimed at achieving change in both. CBT uses the client's cognitive distortions as the basis for prescribing activities to promote change. Distortions in thinking are likely to be more severe with people with COD who are, by definition, in need of increased coping skills. CBT has proven useful in developing these coping skills in a variety of clients with COD.

Relapse Prevention (RP) has proven to be a particularly useful substance abuse treatment strategy and it appears adaptable to clients with COD. The goal of RP is to develop the client's ability to recognize cues and to intervene in the relapse process, so lapses occur less frequently and with less severity. RP endeavors to anticipate likely problems, and then helps clients to apply various tactics for avoiding lapses to substance use. Indeed, one form of RP treatment, Relapse Prevention Therapy, has been specifically adapted to provide integrated treatment of COD, with promising results from some initial studies.

Because outpatient treatment programs are widely available and serve the greatest number of clients, it is imperative that these programs use the best available treatment models to reach the greatest possible number of persons with COD. In addition to the essential elements and the strategies described above, two outpatient models from the mental health field have been valuable for outpatient clients with both substance use and serious mental disorders: Assertive Community Treatment (ACT) and Intensive Case Management (ICM).

ACT programs, historically designed for clients with serious mental illness, employ extensive outreach activities, active and continuing engagement with clients, and a high intensity of services. ACT emphasizes multidisciplinary teams and shared decision-making. When working with clients who have COD, the goals of the ACT model are to engage them in helping relationships, assist them in meeting basic needs (e.g., housing), stabilize them in the community, and ensure that they receive direct and integrated substance abuse treatment and mental health services. Randomized trials with clients having serious mental and SUDs have demonstrated better outcomes on many variables for ACT compared to standard case management programs.

The goals of ICM are to engage individuals in a trusting relationship, assist in meeting their basic needs (e.g., housing), and help them access and use brokered services in the community. The fundamental element of ICM is a low caseload per case manager, which translates into more intensive and consistent services for each client. ICM has proven useful for clients with serious mental illness and co-occurring SUDs. (The consensus panel notes that direct translation of ACT and ICM models from the mental health settings in which they were developed to substance abuse settings is not self-evident. These initiatives likely must be modified and evaluated for application in such settings.)

Residential treatment for substance abuse occurs in a variety of settings, including long- (12 months or more) and short-term residential treatment facilities, criminal justice institutions, and halfway houses. In

many substance abuse treatment settings, psychological disturbances have been observed in an increasing proportion of clients over time; as a result, important initiatives have been developed to meet their needs.

The Modified Therapeutic Community (MTC) is a promising residential model from the substance abuse field for those with substance use and serious mental disorders. The MTC adapts the principles and methods of the therapeutic community to the circumstances of the client, making three key alterations: increased flexibility, more individualized treatment, and reduced intensity. The latter point refers especially to the conversion of the traditional encounter group to a conflict resolution group, which is highly structured, guided, of very low emotional intensity, and geared toward achieving self-understanding and behavior change. The MTC retains the central feature of TC treatment; a culture is established in which clients learn through mutual self-help and affiliation with the peer community to foster change in themselves and others. A series of studies has established better outcomes and benefit cost of the MTC model compared to standard services. A need for more verification of the MTC approach remains.

Because acute and primary care settings encounter chronic physical diseases in combination with substance use and mental disorders, treatment models appropriate to medical settings are emerging. In these and other settings, it is particularly important that administrators assess organizational readiness for change prior to implementing a plan of integrated care. The considerable differences between the medical and social service cultures should not be minimized or ignored; rather, opportunities should be provided for relationship and team building.

Within the general population of persons with COD, the needs of a number of specific subgroups can best be met through specially adapted or designed programs. These include persons with *specific disorders* (such as bipolar disorder) and *groups with unique requirements* (such as women, the homeless, and clients in the criminal justice system). The two categories often overlap; for example, a number of recovery models are emerging for women with SUDs who are survivors of trauma, many of whom have posttraumatic stress disorder. There are a number of promising approaches to treatment for particular client groups, while recognizing that further development is needed, both of disorder-specific interventions and of interventions targeted to the needs of specific populations.

Returning to life in the community after residential placement is a major undertaking for clients with COD, and relapse is an ever-present danger. Discharge planning is important to maintain gains achieved through residential or outpatient treatment. Depending on program and community resources, a number of continuing care (aftercare) options may be available for clients with COD who are leaving treatment. These options include mutual self-help groups, relapse prevention groups, continued individual counseling, psychiatric services (especially important for clients who will continue to require medication), and ICM to continue monitoring and support. A carefully developed discharge plan, produced in collaboration with the client, will identify and relate client needs to community resources, ensuring the supports needed to sustain the progress achieved in treatment.

During the past decade, dual recovery mutual self-help approaches have been developed for individuals affected by COD and are becoming an important vehicle for providing continued support in the community. These approaches apply a broad spectrum of personal responsibility and peer support

principles, often employing 12-Step methods that provide a planned regimen of change. The clinician can help clients locate a suitable group, find a sponsor (ideally one who also has COD and is at a late stage of recovery), and become comfortable in the role of group member.

Continuity of care refers to coordination of care as clients move across different service systems and is characterized by three features: *consistency* among primary treatment activities and ancillary services, *seamless transitions* across levels of care (e.g., from residential to outpatient treatment), and *coordination* of present with past treatment episodes. Because both substance use and mental disorders typically are long-term chronic disorders, continuity of care is critical; the challenge in any system of care is to institute mechanisms to ensure that all individuals with COD experience the benefits of continuity of care.

The Center for Substance Abuse Treatment's expert consensus panel on co-occurring disorders (2005) recognizes that the role of the client (the consumer) with COD in the design of, and advocacy for, improved services should continue to expand. The consensus panel recommends that program design and development activities of agencies serving clients with COD continue to incorporate consumer and advocacy groups. These groups help to further the refinement and responsiveness of the treatment program, thus enhancing clients' self-esteem and investment in their own treatment.

All good treatment depends on a trained staff. The consensus panel underscores the importance of creating a supportive environment for staff and encouraging continued *professional development*, including skills acquisition, values clarification, and competency attainment. An organizational commitment to staff development is necessary to implement programs successfully and to maintain a motivated and effective staff. It is essential to provide consistently high-quality and supportive supervision, favorable tuition reimbursement and release time policies, appropriate pay and health/retirement benefits, helpful personnel policies that bolster staff well-being, and incentives or rewards for work-related achievements. Together, these elements help create the infrastructure needed for quality service.

Integrated dual diagnosis treatment (IDDT) Integrated dual diagnosis treatment (IDDT) is an evidence-based model that addresses a person's substance use in the context of the treatment of their mental illness. IDDT involves a set of core principles and a combination of clinical and rehabilitative interventions that address all aspects of a person's life. Within IDDT, both disorders are addressed at the same time with close collaboration between a multidisciplinary team, or by a single provider, trained and competent in co-occurring disorders. Treatment by providers in different locations may be considered integrated if there is very close collaboration, such as shared treatment planning. IDDT seeks to treat the whole person instead of looking only at one issue at a time. Mental illnesses and SUDs are seen as intertwined, not separate.

The evidence-based model of IDDT is based on multiple controlled studies indicating improved outcomes for individuals with severe mental illness and a co-occurring substance abuse disorder when all elements of the model are maintained. People with other diagnoses, such as anxiety disorders, personality disorder or affective disorders, with a co-occurring SUD, may benefit from IDDT; however the model is designed for persons with severe mental illness with fluctuating symptoms from acute to stable.

IDDT was designed to assist persons with both a severe mental illness and a serious

substance abuse problem. In IDDT, counselors, clinicians or multidisciplinary teams provide integrated treatment to support recovery from co-occurring mental illness and SUDs. They use specific listening and counseling skills to guide individuals' awareness of how mental and SUDs interact and to foster hopefulness and motivation for recovery. They use cognitive behavioral techniques to assist individuals who are working to reduce or eliminate substance use or who want to prevent relapse and maintain recovery from both disorders. IDDT is considered an evidence-based practice because research shows that individuals who receive it recover better from both their illnesses: they have fewer hospitalizations and relapses, fewer criminal justice problems and more housing stability (SAMHSA, 2012).

Additional Resources

- The Dual Diagnosis Capability in Addiction Treatment (DDCAT) is a program-level assessment used to inform addiction treatment agencies and others about a program's ability to provide co-occurring services: <http://www.samhsa.gov/co-occurring/ddcat/>
- Minkoff K, Comprehensive, Continuous, Integrated System of Care Model Description. The Comprehensive, Continuous, Integrated System of Care (CCISC) model for providing services to treat co-occurring disorders is designed to improve treatment capacity in systems of care. This summary describes the four basic characteristics of the CCISC model, its eight principles of treatment, and its 12 steps for implementation: <http://www.samhsa.gov/co-occurring/topics/healthcare-integration/ccisc-model.aspx>
- SAMHSA. Integrated Treatment for Co-Occurring Disorders Evidence-Based Practice (EBP) Kit. Provides practice principles, benchmark measures, and suggestions from successful programs for integrating co-occurring disorder treatment at mental health agencies: <http://www.samhsa.gov/co-occurring/topics/healthcare-integration/codi-kit.aspx>, and <http://store.samhsa.gov/shin/content/SMA08-4367/HowtoUseEBPKITS-ITC.pdf>

Substance Use and Physical Health

Prevalence and Impact of Substance Use Disorders

Alcohol and drug addiction cost American society \$193 billion annually, according to a 2011 White House Office of Drug Control Policy report (U.S. Department of Justice, 2011). In addition to the crime, violence, and loss of productivity associated with drug use, individuals living with a substance abuse disorder often have one or more physical health problems such as lung disease, hepatitis, HIV/AIDS, cardiovascular disease, and cancer and mental disorders such as depression, anxiety, bipolar disorder, and schizophrenia (Mertens, et al., 2003). In fact, research has indicated that persons with substance abuse disorders have:

- Nine times greater risk of congestive heart failure
- 12 times greater risk of liver cirrhosis
- 12 times the risk of developing pneumonia.

When persons with addictions have co-occurring physical illnesses, they may require medical care that is not traditionally available in, or linked to, specialty substance abuse care. The high quality treatment needed by individuals with addictions requires a team of different professionals that includes both specialty substance abuse providers and primary care providers

The integration of primary and addiction care can help address these often interrelated physical illnesses by ensuring higher quality care. In fact, clinical trials have demonstrated that when someone has a substance abuse problem and one or more nonsubstance-related disorders, integrated care can be more effective than traditional treatment delivery (i.e., separate, siloed primary care and substance abuse programs) in terms of clinical outcome and cost (Parthasarathy, 2003). It results in better health outcomes for individuals, in contrast to back-and-forth referrals between behavioral health and primary care offices that result in up to 80% of individuals not receiving care (Oslin et al., 2006).

Substance abuse disorders can also complicate the management of other chronic disorders. For example, a number of researchers have found that people with HIV/AIDS who reported alcohol and drug use were more likely to be non-adherent to antiretroviral treatment (Power et al, 2003; Lehavot et al., 2011; Hinkin, 2007). Other researchers reported that substance abuse disorders, depression, and medical comorbidities relate to poor adherence to medications to treat type 2 diabetes (Kreyenbuhl et al., 2010). Yet, many individuals served in specialty substance abuse settings do not have a primary care provider.

The integration of physical health and addictions care can also help negate barriers to primary care, as providing primary care to individuals with addictions enhances their recovery from substance abuse. In fact, two or more primary care visits in a 6-month period has shown to improve abstinence by 50% in individuals with substance abuse disorders, and those with medical conditions related to substance abuse are three times more likely to achieve remission over 5 years. Regular health and addictions care for people with substance abuse disorders also decreased hospitalizations by up to 30%. Lastly, substance use screening and services improve the general health of individuals with co-occurring substance use and physical health conditions and reduces overall costs to the healthcare system (Saiz et al., 2004).

There are over 72 medical conditions that have risk factors attributable to substance abuse. In addition, alcohol and drug related deaths and accidents, spreading of infectious diseases, drug-related medical emergencies, and HIV/AIDS play a significant role in the health of our community (Blount et al., 2003; Butler et al., 2008; Dickinson et al., 2010).

According to the National Council for Behavioral Health (2012), health care visits often have psychosocial drivers. Mental health problems can stem from physical ones. Integrated care allows for the whole person to be treated, not just a part.

- Seventy percent of all health care visits are generated by psychosocial factors.
- Primary care is the de facto mental health and addictive disorder service for 70% of the Population.
- Medical outcome studies reveal that depression results in more functional impairment than chronic diseases such as diabetes, arthritis and angina. And, 70% of depression is secondary to substance use disorders.

Primary care is the health mainstay of the underserved from diverse cultures

- California's health care clinic population is 53% Latino, 30% non-Latino White, 6% Black, 6% Asian/Pacific Islander, and 2% American Indian. A total of 47% have limited or no English proficiency.
- 2.1 million community clinic patients are below 200% of the federal poverty level. (California Mental Health Services Authority [CalMHSA], 2012)

Evidence-Based Practices and Principles of Effective Treatment

The core principles of effective integrated behavioral health care include a patient-centered care team providing evidence-based treatments for a defined population of patients using a measurement-based treat-to-target approach.

Principles of Care

- **Patient-Centered Care:** Primary care and behavioral health providers collaborate effectively using shared care plans.
- **Population-Based Care:** Care team shares a defined group of patients tracked in a registry. Practices track and reach out to patients who are not improving and mental/substance use health specialists provide caseload-focused consultation, not just ad-hoc advice.
- **Measurement-Based Treatment to Target:** Each patient's treatment plan clearly articulates personal goals and clinical outcomes that are routinely measured; treatments are adjusted if patients are not improving as expected.
- **Evidence-Based Care:** Patients are offered treatments for which there is credible research evidence to support their efficacy in treating the target condition.
- **Accountable Care:** Providers are accountable and reimbursed for quality care and outcomes.

Effectiveness and Cost Benefit of Integrated Primary Care and SUD Treatment

Addressing the psychosocial aspects of medical care often results in lower overall health costs.

- Patients who receive care for depression in primary care clinics with routine mental health integrated teams and care processes were 54% less likely to use high-order emergency department services.
- Adding integrated services in one study added \$250 per patient to overall costs, but saved approximately \$500 in additional medical costs.
- When family physicians worked collaboratively with mental health professionals to treat persons on short-term mental health disability leave, their patients returned to work at higher rates than those treated by physicians alone.
- An integrated primary care model for homeless individuals and injection-drug users in Santa Clara County found that emergency and urgent care visit rates decreased from 3.8 visits in the 18 months prior to the clinic's opening to 0.8 visits in the first 18 months of the clinic's operation.

- During the year studied, Kaiser Permanente realized a \$173 savings per member per month for those participating in an integrated medical care program for substance use related medical conditions versus usual care (Institute of Medicine, 2013).

Additional Resources

- SAMHSA-HRSA Center for Integrated Health Solutions (CIHS):
http://www.thenationalcouncil.org/wpcontent/uploads/2013/05/13_May_CIHS_Innovations-1.pdf
- Substance Abuse and Mental Health Services Administration. Integrated Care Models:
<http://www.integration.samhsa.gov/research>.
- Agency for Healthcare Research and Quality (AHRQ) for integrating behavioral health and primary care and functions as both a coordinating center and a national resource for people committed to delivering comprehensive integrated healthcare: <http://integrationacademy.ahrq.gov/>
- AIMS Center faculty and staff at the University of Washington: <http://uwaims.org/programs.html>
- Partners in Health Interagency Toolkit. Integrated Behavioral Health Project (IBHP):
<http://www.IBHP.org>
- Screening, Brief Intervention and Referral to Treatment (SBIRT):
<http://www.samhsa.gov/prevention/sbirt/>

Housing/Homelessness

Prevalence and Impact of Substance Use Disorders

A common stereotype of the homeless population is that they are all alcoholics or drug abusers. The truth is that a high percentage of homeless people do struggle with substance abuse, but addictions should be viewed as illnesses and require a great deal of treatment, counseling, and support to overcome. Substance abuse is both a cause and a result of homelessness, often arising after people lose their housing (National Health Care for the Homeless Council, 2007).

- Nearly two-thirds of persons receiving services from homeless assistance programs in the U.S. have had either alcohol abuse or drug abuse problems in their lifetime (Fisher, 2009).
- Over half of single, homeless adults need substance abuse treatment (Library Index. “The Health of the Homeless – Substance Abuse,” 2009).
- Thirty to forty percent of the homeless population abuse alcohol and 10-20% abuse drugs as compared to 13.5% alcohol abuse and 6% drug abuse in the general population (National Health Care for the Homeless Council. “Addiction, Mental Health and Homelessness. 2007; Fisher, 2009).
- An undetermined number of youth are homeless as a result of family rejection/abandonment or their family's inability to provide a home due to mental illness or substance abuse (NSDUH, 2008).

The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates that 38% of homeless people were dependent on alcohol and 26% abused other drugs (SAMHSA, 2010). Alcohol abuse is more common in older generations, while drug abuse is more common in homeless youth and young

adults (Didenko & Pankratz, 2007). Substance abuse is much more common among homeless people than in the general population. According to the 2006 National Household Survey on Drug Use and Health (NSDUH), 15% of people above the age of 12 reported using drugs within the past year and only 8% reported using drugs within the past month.

Substance abuse is often a cause of homelessness. Addictive disorders disrupt relationships with family and friends and often cause people to lose their jobs. For people who are already struggling to pay their bills, the onset or exacerbation of an addiction may cause them to lose their housing. A 2008 survey by the United States Conference of Mayors asked 25 cities for their top three causes of homelessness. Substance abuse was the single largest cause of homelessness for single adults (reported by 68% of cities). Substance abuse was also mentioned by 12% of cities as one of the top three causes of homelessness for families. According to Didenko and Pankratz (2007), two-thirds of homeless people report that drugs and/or alcohol were a major reason for their becoming homeless. In many situations, however, substance abuse is a result of homelessness rather than a cause. People who are homeless often turn to drugs and alcohol to cope with their situations. They use substances in an attempt to attain temporary relief from their problems. In reality, however, substance dependence only exacerbates their problems and decreases their ability to achieve employment stability and get off the streets. Additionally, some people may view drug and alcohol use as necessary to be accepted among the homeless community (Didenko & Pankratz, 2007).

Breaking an addiction is difficult for anyone, especially for substance abusers who are homeless. To begin with, motivation to stop using substances may be poor. For many homeless people, survival is more important than personal growth and development, and finding food and shelter take a higher priority than drug counseling. Many homeless people have also become estranged from their families and friends. Without a social support network, recovering from a substance addiction is very difficult. Even if they do break their addictions, homeless people may have difficulty remaining sober while living on the streets where substances are so widely used (Fisher & Roget, 2009). Unfortunately, many treatment programs focus on abstinence only programming, which is less effective than harm-reduction strategies and does not address the possibility of relapse (National Health Care for the Homeless Council, 2007).

For many homeless people, substance abuse co-occurs with mental illness. Often, people with untreated mental illnesses use street drugs as an inappropriate form of self-medication. Homeless people with both substance disorders and mental illness experience additional obstacles to recovery, such as increased risk for violence and victimization and frequent cycling between the streets, jails, and emergency rooms (Fisher & Roget, 2009). Sadly, these people are often unable to find treatment facilities that will help them. Many programs for homeless people with mental illnesses do not accept people with substance use disorders, and many programs for homeless substance abusers do not treat people with mental illnesses. In addition, some people with co-occurring disorders are not capable of living in the group settings that are typical of most housing and treatment programs for the homeless.

Evidence-Based Practices And Principles Of Effective Treatment

Since substance abuse is both a cause and a result of homelessness, the two issues need to be addressed simultaneously. According to Didenko and Pankratz (2007), stable housing during and after treatment decreases the risk of relapse. Substance abuse treatment on its own is inadequate and needs to be combined with supported housing opportunities. In addition to housing, supported housing programs offer services such as mental health treatment, physical health care, education and employment opportunities, peer support, and daily living and money management skills training.

Successful supported housing programs include outreach and engagement workers, a variety of flexible treatment options to choose from, and services to help people reintegrate into their communities (National Mental Health Association, 2006). Supported housing programs that include substance abuse services would help homeless people treat their addictions and re-establish residential stability.

Homelessness often translates directly into a relapse issue. Housing is critical - programs which provide housing have consistently lower drop-out rates – but housing alone is not a sufficient solution. Some programs, for example, have provided housing supports on a continuum model, with intensity of services reflecting degree of client independence (SAMHSA, 2010).

The need for targeted programs specifically for homeless women, youth and adolescents has been well-documented. Studies of programs targeted for homeless women have consistently concluded that they result in more positive outcomes, especially in terms of program retention. Treatment approaches must take their unique issues into account, such as experiences with physical and sexual abuse and with motherhood. This is particularly important for dually-diagnosed homeless women, and the research provides specific methods for doing this (Zerger, 2002; National Health Care for the Homeless Council, 2007).

Additional Resources

- SAMHSA Homelessness Resource Center: <http://homeless.samhsa.gov/>
- National Coalition for the Homeless: <http://www.nationalhomeless.org>

Child Welfare

Prevalence and Impact of Substance Use Disorders

There is little question that substance abuse is a major issue confronting families involved with child welfare services. Alcohol and drug abuse is associated with more severe child abuse and neglect and is indicated in a large percentage of neglect-related child fatalities. Research indicates that up to 80% of child abuse and neglect cases involve SUD by a custodial parent or guardian (Young et al., 2007). Continued substance use disorder (SUD) by a custodial parent is associated with longer out-of-home placements for dependent children and higher rates of child revictimization and terminations of parental rights (TPR)

(Brook & McDonald, 2009; Connell et al., 2007; Smith et al., 2007). The good news is that parents who complete treatment for their SUD are significantly more likely to be reunified with their children, and their children spend considerably fewer days in out-of-home foster care (Green et al., 2007; Smith, 2003).

Evidence-Based Practices and Principles of Effective Treatment

Meeting the needs of families involved with the child welfare system because of a substance abuse issue remains a challenge for child welfare practitioners. In order to improve services to these families, there has been an increasing focus on improving collaboration between child welfare, treatment providers, and the court systems. Results indicate that collaboration has at least three major functions: building shared value systems, improving communication, and providing a "team" of support. Each of these leads to different kinds of benefits for families as well as providers and has different implications for building successful collaborative intervention (Young, 2002; National Association of Public Child Welfare Administrators, 2002).

Research shows that a collaborative process functions to provide a variety of supports to parents, and has an important impact on systems as well. For example, parents benefit directly in terms of increased psychological and emotional support. Successful collaboration, and in particular, consistent, coordinated communication from providers to parents, helps to ensure that parents are not overwhelmed by the multiple demands and requirements of their case plans. Having a "team of support" also helps parents by increasing the likelihood that at least one member of the team is available to the parent, by improving the chances that at least one of the team members will build a positive relationship with the parent, and, perhaps most importantly, by sending a message that the systems really are working together to help the parent succeed in making progress (National Association of Public Child Welfare Administrators, 2002).

Child welfare systems have developed service integration models that incorporate both substance abuse and child welfare services. Research outcomes on the effectiveness of service integration with an emphasis on intensive case management to link substance abuse and child welfare services indicate that families were significantly more likely to achieve family reunification than were families in the not enrolled in substance abuse treatment services (Ryan et al., 2006; Liman, 2003).

Successful collaboration between Child Welfare systems and substance abuse services can improve the efficiency with which the systems are able to meet the needs of families, a critical issue given the complexity of child welfare cases involving substance abuse and the relatively short time frame allowed by law. Collaboration can also improve the overall effectiveness of services, for example, by moving parents toward a greater state of "readiness to change" through provision of ample emotional, psychological, and tangible support. In short, collaboration makes systems work better (Feig, 1998; Ingram, 1996; Semidei, 2001).

Finally, according to the National Association of Drug Court Professional (NADCP), research has demonstrated convincing evidence that Family Drug Courts can produce clinically meaningful benefits and better outcomes than traditional family reunification services for substance-abusing parents. These positive benefits do not appear to be limited to low-severity or uncomplicated cases and indeed may be

larger for parents presenting with more serious clinical histories and other negative risk factors for failure in standard treatment programs (Marlowe, 2012).

Additional Resources

- National Center on Substance Abuse and Child Welfare (NCSAW) works to develop knowledge and provide technical assistance to federal, state and local agencies to improve outcomes for families with SUDs in the child welfare and family court systems:
<http://www.ncsacw.samhsa.gov/resources/default.aspx>
- Child Welfare Information Gateway:
<https://www.childwelfare.gov/systemwide/substance/resources.cfm>

Additional Resources for Evidence-based Research

- National Registry of Evidence Based Programs and Practices:
<http://www.nrepp.samhsa.gov/ViewAll.aspx>
- Agency for Healthcare Research and Quality (AHRQ):
<http://www.guideline.gov/search/search.aspx?term=substance+use+disorders>
- AHRQ – Innovations and Quality Tools:
http://www.innovations.ahrq.gov/innovations_qualitytools.aspx?categoryID=54805&taxonomyID=10348
- NIDA Clinical Toolbox: <http://www.nidatoolbox.org/>

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