



U.S. DEPARTMENT
OF HEALTH AND
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Public Health Service
Substance Abuse and
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Center for Substance Abuse Treatment

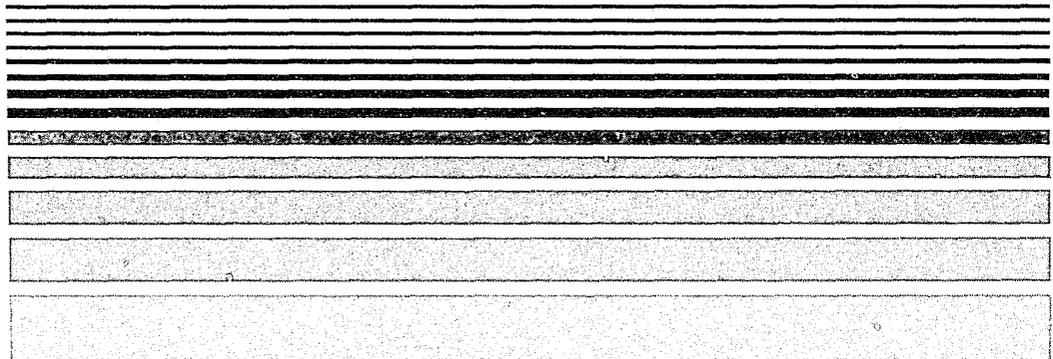
Treatment for Alcohol and Other Drug Abuse

Opportunities for Coordination

Technical Assistance Publication Series

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Public Health Service
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Center for Substance Abuse Treatment

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and Bert Pepper, M.D., and Jackie Massaro, C.S.W., of the Information Exchange. It was prepared under contract number 270-92-0007 from the Substance Abuse and Mental Health Services Administration (SAMHSA). Roberta Messalle of CSAT served as the Government project officer.

The opinions expressed herein are the views of the authors and do not necessarily reflect the official position of CSAT or any other part of the U.S. Department of Health and Human Services (DHHS).

DHHS Publication No.
(SMA) 94-2075
Printed 1994

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Foreword

The abuse of alcohol and other drugs (AOD) is undeniably linked with economic and personal adversities for both individuals and society. It is estimated that the annual national cost of substance abuse is more than \$144 billion. This includes related health and mental health care, social welfare, victim's losses, unemployment and lost productivity, and criminal justice system costs.

The immeasurable human suffering caused by chemical dependency is equally disturbing. Family dysfunction and violence, children affected by alcohol or other drugs before birth, homelessness and poverty, accidents, homicides, suicides, and crime are often rooted in the abuse of alcohol and other drugs.

The number of persons incarcerated in the United States has doubled since 1980, and much of the crime responsible for this increase is drug-driven. It is estimated that currently 80 percent of criminal offenders are substance abusers.

The rates of HIV/AIDS, tuberculosis, Hepatitis B, and other infectious diseases are growing among injection drug users, the homeless, prison populations, and others commonly involved with alcohol abuse or the use of illicit drugs. HIV disease and a variety of other illnesses that are related to substance abuse have affected this country's health care system enormously. In areas where there is the highest rate of injection drug use,

the spread of infectious diseases is rampant. This is straining the ability of medical facilities and health care professionals to meet the needs of patients. Health care costs in this country have increased at twice the rate of inflation since 1981. Medical costs are being driven even higher by the incidence of substance abuse-related infectious diseases.

Substance abuse is a chronic, progressive, relapsing disorder resulting in physical and psychological dependence on chemical substances. Much like other health disorders, it also *can be treated successfully*. Effective treatment of substance abuse disorders is essential for decreasing drug use and many of its accompanying problems. Alcohol and drug abuse treatment reduces chemical dependency and thus helps control both the spread and the associated costs of substance abuse-related diseases. Treatment also reduces criminal behavior and increases productive work and social functioning.

Considering both the human and the financial burden of substance abuse, treatment for addictive disorders is very cost-effective. Dollars spent for alcohol and other drug treatment not only save lives but conserve financial resources. Outpatient treatment of substance abusers costs only 1/10 as much as incarceration. For each dollar spent for substance abuse treatment services, more than \$11 are saved in social costs. For each person protected by AOD treatment from

contracting AIDS, a potential of \$75,000 in lifetime medical costs are saved.

Providing effective treatment services poses extraordinary challenges. Achieving positive results from treatment efforts is not automatic. Major changes during the past decade in treatment for alcohol and other drug addiction have resulted in improvements in treatment procedures, management of patients, and funding mechanisms. However, growing caseloads and limited resources place a tremendous strain on treatment programs.

The most constructive outcomes occur with coordination and collaboration among persons and systems with responsibility. Key decision makers from the state legislature, judiciary, and treatment field must communicate and work cooperatively, forging collaborative partnerships to achieve the most effective treatment system. Alcohol and drug abuse treatment professionals provide leadership and expertise for developing and delivering effective treatment programs. State legislative roles involve funding and policymaking, while State court personnel have a key role in referring individuals for treatment and monitoring their participation. All are essential elements in the quest to translate concern about the problems related to substance abuse into positive, concrete results.

Readers will find resource information in this document about the problem and consequences of

Foreword

substance abuse, the importance and effectiveness of assessment procedures, and current treatment modalities, as well as issues related to productive treatment programming. To achieve optimal treat-

ment programs, the role and value of collaboration among systems with responsibility for coordination also are stressed. State-level legislative, judicial, and treatment officials are encouraged to use the

information provided in this text as a resource in coordinating and developing treatment strategies based on state-of-the art practices and identified needs within their States.

Chapter 1—Who Needs Treatment: An Overview of Addiction and Its Treatment

Almost everyone has had experience with addictive psychoactive substances. Alcohol is a legal substance that is frequently used in social situations by people from all walks of life. Most people consume it occasionally and experience no adverse effects. Nevertheless, it can be addicting, and for those who reach this level of use, there are potential health and social consequences. In addition to alcohol, mood-altering drugs include a variety of illegal and legal substances that are highly addictive and often result in impaired physical, social, and psychological functioning of users.

Joseph A. Califano, Jr. (1992), president of the Columbia University Center on Addictions and Substance Abuse and former Secretary of the U.S. Department of Health, Education, and Welfare, reported the following estimates of the numbers of persons abusing alcohol and other drugs in the United States:

- approximately 18 million persons abuse or are addicted to alcohol;
- up to 1 million individuals use heroin;
- at least 2 million are addicted to cocaine or crack;
- 5.5 million get high on marijuana more than once a week; and

- 11 million persons abuse tranquilizers and other psychotropic drugs.

Because of the addictive properties of these substances, and the related physical, social, and psychological consequences they precipitate, treatment will be required for these individuals to recover from their addictions and achieve abstinence.

Those who have not had personal experiences using either socially acceptable or illicit drugs still may have been touched by the effects of these substances. Use and abuse of alcohol and other drugs has far-reaching effects. Family members, friends, co-workers, and others often are affected—sometimes tragically—by those who become involved in substance abuse.

In this chapter, the process of addiction—progressing from experimental and social use to dependency and addiction—will be examined. This process also includes recovery for many individuals who receive appropriate treatment interventions. Such recovery means a chance to return to productive roles in society that are not focused on procuring and using alcohol and other drugs at the expense of one's physical health and personal well-being. Recognized as a part of the disorder of addiction is its chronic and relapsing nature. Recovery from

addictive illness necessitates sobriety and abstinence, relapse prevention programs, and continuing supportive intervention for those who become dependent on mood-altering chemicals.

The majority of persons who use drugs or alcohol from time to time will not need treatment. Those who are not dependent or addicted may be able to decide to stop using chemicals. However, finding a social climate that is intolerant toward drug use will be important for them. The threat of social, legal, or employer sanctions often is significant enough to persuade them away from continued drug use (Office of National Drug Control Policy [ONDCP], 1990b).

Treatment is for those who cannot or will not stop their use of alcohol or drugs without the help of a specific program—usually those who have become physically or psychologically dependent on alcohol or drugs. Without some form of intervention, compulsive alcohol and drug users usually are unable to stop their use for more than a few days at a time. Despite the personal and family consequences, of which they are usually aware, addiction makes it virtually impossible for them to abstain from abusing alcohol or other drugs (ONDCP, 1990b). Their need for chemicals often forces them to deny the negative consequences they are experiencing.

For youth, the criteria for those needing treatment services is somewhat different. In addition to illicit street drugs, the use of alcohol is also illegal for persons under the age of 21 in most States. Thus, lawfully, any use of these substances by adolescents can be considered abuse. Use of substances is also of particular concern for adolescents who are still developing, physically, socially, and emotionally. For youth, the stance is often taken that if use of alcohol or other drugs are creating problems in one or more areas of functioning, then assessment and intervention services should be provided (McLellan & Dembo, 1992). This affords a positive opportunity to prevent progression to more serious chemical dependency for many young persons.

Treatment is an essential and cost-effective factor in stemming the tide of substance abuse. Without treatment that is appropriate for the specific needs of individuals, the economic and human costs associated with substance abuse will continue to escalate. Treatment is vital for those whose use of alcohol and other drugs has progressed to the stage of dependence or addiction. This chapter will present a description of the five critical elements necessary for a comprehensive treatment approach.

The Process of Addiction

No one begins using a mood-altering substance with the intention of becoming addicted to it. For example, the use of alcohol begins with the notion that it will be used only on social occasions, with certain friends, or for specific purposes. In some cases, it is possible to maintain that level of use.

However, for persons who have progressed to dependence on alcohol or other drugs, the sojourn has been difficult. Once past a certain point, there is no turning

back. Continuing the journey, with any expectation of health and well-being, will require substance abuse treatment.

Abstinence from alcohol and other drugs is typical for most people most of the time. Occasional use of psychoactive substances may begin because of curiosity or because of the influence of friends. Initial experimental use of mood-altering substances usually occurs during the adolescent years, most often between 12 and 15 years of age. The typical pattern is experimentation with tobacco and alcohol, followed by initial use of marijuana. As use continues, other illicit drugs that can be inhaled or ingested orally may be consumed. Use of more potent drugs, particu-

larly those requiring hypodermic administration, begins somewhat later. During this initial period, use of drugs is intermittent, and most people return to periods of complete abstinence during which they do not seek or consume drugs and experience no adverse consequences from their use (Institute of Medicine, 1990). See Table 1-A for a brief summary of the characteristics of experimental and social use of alcohol and other drugs.

The metabolic effects of alcohol and other drugs alter the individual's chemistry because psychoactive drugs mimic, displace, block, or deplete specific chemical messengers between nerve cells in the brain. Certain

Table 1-A.—Stage 1: Experimental and Social Use of Drugs and Alcohol

Frequency of use: Occasional, perhaps a few times monthly. Usually on weekends when at parties or with friends. May use when alone.

Sources of drugs/alcohol: Friends/peers primarily. Youth may use parents' alcohol.

Reasons for use:

- to satisfy curiosity;
- to acquiesce to peer pressure;
- to obtain social acceptance;
- to defy parental limits;
- to take a risk or seek a thrill;
- to appear grown up;
- to relieve boredom;
- to produce pleasurable feelings; and
- to diminish inhibitions in social situations.

Effects: At this stage the person will experience euphoria and return to a normal state after using. A small amount may cause intoxication. Feelings sought include:

- fun, excitement;
- thrill;
- belonging; and
- control.

Behavioral indicators:

- little noticeable change;
- some may lie about use or whereabouts;
- some may experience moderate hangovers; occasionally, there is evidence of use, such as a beer can or marijuana joint.

(Beschner, 1986; Institute of Medicine, 1990; Jaynes & Rugg, 1988; Macdonald, 1989; Nowinski, 1990).

areas of the brain control drives such as hunger, thirst, and sexual libido. When we are hungry we feel uncomfortable; when we eat, we feel satisfied—a positive reward. Psychoactive substances act upon the same areas of the brain and they can produce euphoria, an extremely pleasurable feeling, or cravings for the drug, an unpleasant feeling. With gradually increasing use of a substance, the cycle of euphoria and cravings results in dependence or addiction to the drug (Dackis & Gold, 1992; Institute of Medicine, 1990).

Problem use or abuse of alcohol or other drugs is the second stage in the process of addiction (see Table 1-B). The frequency of administration, as well as the amount of the drug used, increases. Use to the point of intoxication occurs often. The pleasurable, euphoric feelings produced with earlier use are still sought, but after the effects of the drug subside, pain, depression, and discomfort may occur. Unlike earlier stages of use, individuals progressing through this stage are likely to begin encountering consequences for use. These may include:

- work- or school-related difficulties;
- changes in friends;
- family problems;
- physical illnesses;
- weight loss and other physical problems;
- financial and legal complications; and
- personality and emotional changes.

If substance abuse continues, the individual may reach the stage of dependency/addiction. Dependency occurs when a drug user experiences physical or psychological distress upon discontinuing use of the drug. Addiction implies compulsive use, impaired control over using the substance, pre-

Table 1-B.—Stage 2: Abuse

Frequency of use: Regular; may use several times per week. May begin using during the day. May be using alone rather than with friends.

Sources: Friends; begins buying enough to be prepared. May sell drugs to keep a supply for personal use. May begin stealing to have money to buy drugs/alcohol.

Reasons for use:

- To manipulate emotions; to experience the pleasure the substances produce; to cope with stress and uncomfortable feelings such as pain, guilt, anxiety, and sadness; and to overcome feelings of inadequacy.
- Persons who progress to this stage of drug/alcohol involvement often experience depression or other uncomfortable feelings when not using. Substances are used to stay high or at least maintain normal feelings.

Effects:

- Euphoria is the desired feeling; may return to a normal state following use or may experience pain, depression and general discomfort. Intoxication begins to occur regularly, however.
- Feelings sought include:
 - pleasure;
 - relief from negative feelings, such as boredom, and anxiety; and
 - stress reduction.
- May begin to feel some guilt, fear, and shame.
- May have suicidal ideations/attempts. Tries to control use, but is unsuccessful. Feels shame and guilt. More of a substance is needed to produce the same effect.

Behavioral indicators:

- school or work performance and attendance may decline;
- mood swings;
- changes in personality;
- lying and conning;
- change in friendships—will have drug-using friends;
- decrease in extra-curricular activities;
- begins adopting drug culture appearance (clothing, grooming, hairstyles, jewelry);
- conflict with family members may be exacerbated;
- behavior may be more rebellious; and
- all interest is focused on procuring and using drugs/alcohol.

(Beschner, 1986; Institute of Medicine, 1990; Jaynes & Rugg, 1988; Macdonald, 1989; Nowinski, 1990)

occupation with obtaining and using the drug, and continued use despite adverse consequences (Morse & Flavin, 1992). Table 1-C summarizes the characteristics of this stage, including almost continuous use to avoid pain and depression. Dependent/addicted persons are unlikely to experience euphoria or other pleasant effects from the drug; continued adminis-

tration is needed to achieve a state of homeostasis—feeling “normal” or not having pain.

The physical, social, occupational, financial, legal, and psychological consequences continue in a downward spiral. Those who persist in drug use to this stage often begin using injectable drugs. On average, it may take from 5 to 10 years

Table 1-C.—Stage 3: Dependency/Addiction

Frequency of use: Daily use, continuous.

Sources:

- will use any means necessary to obtain and secure needed drugs/alcohol;
- will take serious risks; and
- will often engage in criminal behavior such as shoplifting and burglary.

Reasons for use:

- drugs/alcohol are needed to avoid pain and depression;
- many wish to escape the realities of daily living; and
- use is out of control.

Effects:

- person's normal state is pain or discomfort;
- drugs/alcohol help them feel normal; when the effects wear off, they again feel pain;
- they are unlikely to experience euphoria at this stage;
- they may experience suicidal thoughts or attempts;
- they often feel guilt, shame, and remorse;
- they may experience blackouts; and
- they may experience changing emotions, such as depression, aggression, irritation, and apathy.

Behavioral indicators:

- physical deterioration includes weight loss, health problems;
- appearance is poor;
- may experience memory loss, flashbacks, paranoia, volatile mood swings, and other mental problems;
- likely to drop out or be expelled from school or lose jobs;
- may be absent from home much of the time;
- possible overdoses; and
- lack of concern about being caught—focused only on procuring and using drugs/alcohol.

(Beschner, 1986; Institute of Medicine, 1990; Jaynes & Rugg, 1988; Macdonald, 1989; Nowinski, 1990)

order that most professionals believe can never be "cured." Return to earlier stages of controlled use is no longer possible.

However, treatment helps addicted individuals enter a stage of recovery during which they abstain from substance use and experience improved physical, social and psychological functioning. Because of relapse, the recovery process may be interrupted by periods of return to substance use. This requires attention to relapse prevention and continuing supportive therapeutic interventions. Many treatment modalities (such as methadone maintenance or Alcoholics Anonymous) are viewed as potentially lifelong commitments to maintain the recovery process. Chapter 9 will provide more information on relapse prevention programming.

Knowledge of the mechanisms of substance abuse and addiction has not advanced enough to provide a cogent understanding of the reasons some people manage their use of alcohol or drugs while others progress to a problem stage of abuse or addiction. It is likely that a combination of physiological, environmental, and psychological factors converge to exacerbate the problem for some individuals. (Theories concerning the causes of addiction will be discussed further in Chapter 3.) Although found among all socioeconomic groups, persons already plagued by poverty, disease, and unemployment are over-represented among those afflicted by chemical addiction.

Recovery

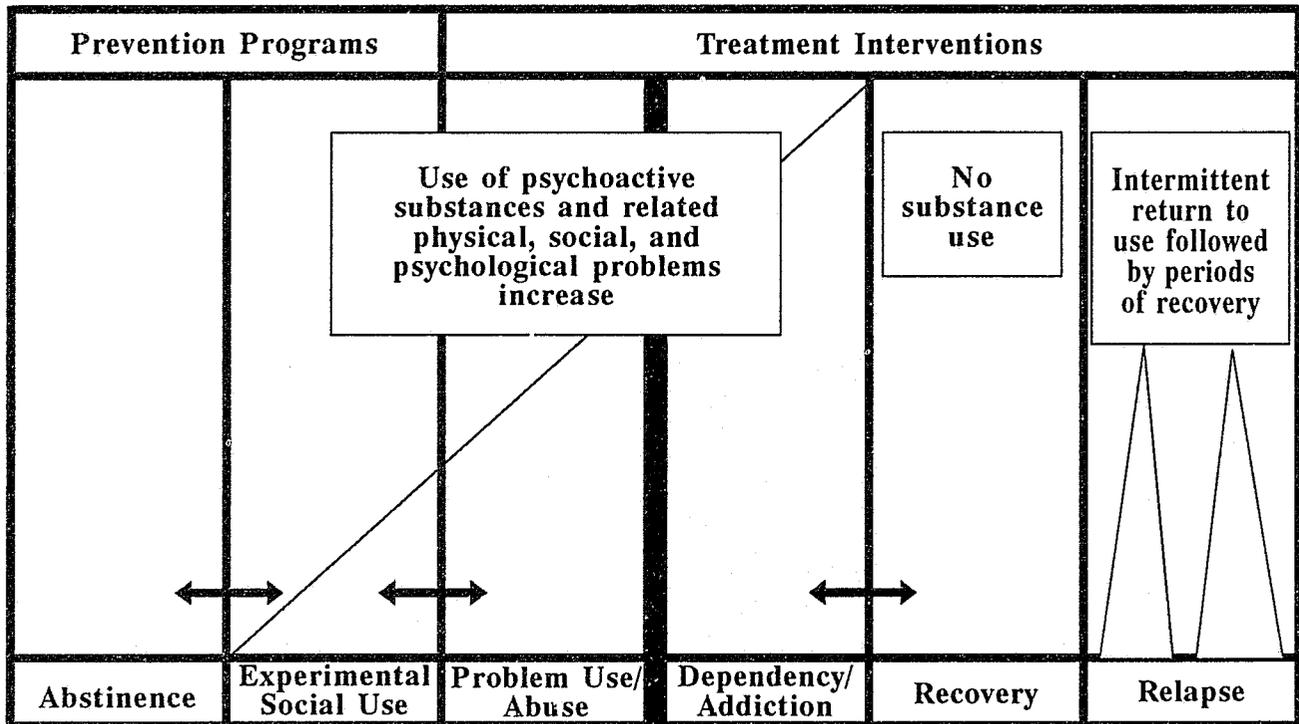
Research indicates that, while it is not a curable disorder, *treatment for substance abuse does work*. With treatment, substance-dependent persons enjoy healthy and productive lives. Instead of creating health

following the first experimental use of drugs until a person progresses to the stage of dependency/addiction. This means that many who initiate drug use in their early teens will be addicted by their late teens or early 20s. There are many personal and drug-related variables that can hasten or retard the process, but once dependent, obtaining and using a drug of choice is the focus of one's life (Institute of Medicine, 1990).

Figure 1-A graphically depicts the progression of drug use through the three stages of experimental/social use, problem

use/abuse, and dependency/addiction (Doweiko, 1990; Institute of Medicine, 1990). As the use of mood-altering chemicals progresses through these stages, related physical, social, and psychological problems increase. During earlier stages many people can manage their drug and alcohol use and may move back and forth from abstinence to problem use. Each stage entails some risk of progression to the next, but this course is not inevitable (Institute of Medicine, 1990). However, once the stage of dependency/addiction is reached, the individual has acquired a chronic relapsing dis-

Figure 1-A.—The Process of Addiction



(Sources: Doweiko, 1990; Institute of Medicine, 1990)

risks, committing crimes, and requiring public support, recovering individuals make positive contributions to society through their work and creativity. Recovery is the process of initiating and maintaining abstinence from alcohol or other drug use. It also involves making personal and interpersonal changes (Daley & Marlatt, 1992). Whether an individual is addicted to or abusing alcohol, illegal drugs, prescription drugs, or a combination of these, the most important goal is to discontinue the use of alcohol and/or drugs.

With relapse prevention programming and supportive treatment, recovery is a realizable goal. With improved treatment services and adequate resources, society also is protected from further consequences related to drugs and alcohol, including economic, social, health, and crime-related problems. Additional information on the consequences of

substance abuse is presented later in this chapter and in Chapter 2.

Five Critical Components of Effective Treatment

Treatment is an effective tool in reducing drug abuse and rehabilitating those affected by it. It is particularly important that treatment strategies incorporate the following five critical components to enhance effectiveness (Messalle, 1992).

1. *Assessment* uses diagnostic instruments and processes to determine an individual's needs and problems. It is an essential first step in determining the possible causes of addiction for the person and the most appropriate treatment

modality for his or her needs. More information on screening and assessment will be presented in Chapter 4.

2. *Patient-Treatment Matching* ensures that an individual receives the type of treatment corresponding with his or her personality, background, mental condition, and the extent and duration of substance abuse determined by the assessment. In Chapter 5, the importance of patient-treatment matching will be emphasized.
3. *Comprehensive services* include the range of services needed in addition to specific alcohol or drug treatment. The needs of addicted persons are often very complex, including health problems, financial and legal issues, psychological problems, and many others. Effective treatment must help people access the full extent of

additional services needed to make their lives whole.

4. *Relapse prevention* is important because addiction is a chronic and relapsing disorder. Relapse prevention strategies are based on assessing an individual's "triggers"—those situations, events, people, places, thoughts, and activities—that re-ignite the need for drugs. Strategies for coping with these when they occur are then developed. Relapse prevention will be reviewed in more detail in Chapter 9.
5. *Accountability* of treatment programs is crucial for determining the success of specific approaches and modalities. The need for the program, its integrity, and its results, including abstinence, social adjustment, and reduction of criminal behavior by those treated in the program, must be evaluated. More information on accountability and program evaluation is contained in Chapter 10.

Throughout this text a variety of terms will be used frequently to describe the problem of chemical addiction and those who are affected by it. To avoid misinterpretation or confusion, several of these words are defined in Table 1-D.

Extent of Substance Abuse

Although some promising reports indicate a decline in drug use in the general population, other data indicate less encouraging results. Unfortunately, there is no single measurement that provides a clear picture of alcohol and drug use and its complex interaction with individual and social problems. Many large-scale studies use

populations that are easily accessed, such as youth in high school or persons living at home who have telephones. However, these methods tend to overlook subgroups who are known to have high rates of substance abuse, such as those in prisons, homeless persons, and high school dropouts. Further, individuals may be reluctant to disclose alcohol and other drug use when they are questioned because they are concerned about potential punishment.

Estimated Drug Use Within the General Population

The *National Household Survey on Drug Abuse*, sponsored by the National Institute on Drug Abuse (NIDA), conducts interviews with a sample of Americans to reach estimates of the prevalence of use of a variety of drugs. This survey indicates that trends in drug use are showing declines. Similarly, the *High School Senior Survey*, also sponsored by NIDA, is conducted

Table 1-D.—A Brief Lexicon of Substance Abuse Terms

Abstinence: Refraining from the use of alcohol or other drugs (Ray & Ksir, 1987).

Addiction: A chronic, progressive, relapsing disorder characterized by compulsive use of one or more substances that results in physical, psychological, or social harm to the individual and continued use of the substance or substances despite this harm (Schnoll, 1986).

Alcoholism: A primary, chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. It is often progressive and fatal. It is characterized by impaired control over drinking, preoccupation with the drug alcohol, use of alcohol despite adverse consequences, and distortions in thinking, most notably denial. Each of these symptoms may be continuous or periodic (Morse & Flavin, 1992).

Dependence: A psychological and/or physical need for the drug. Withdrawal symptoms are experienced upon ceasing use of the drug (Schuckit, 1989).

Drug of abuse: Any substance that alters the mood, level of perception, or brain functioning. These substances include prescribed medications, alcohol, solvents, and illegal drugs (Schuckit, 1989).

Psychoactive substance: A chemical that alters mood and/or behavior. The principal effect is on the central nervous system (Ray & Ksir, 1987; Schnoll, 1986).

Relapse: The return to substance use after a period of abstinence (Schnoll, 1986).

Tolerance: The need for increasing doses of a substance to maintain its effects (Portenoy & Payne, 1992).

Withdrawal syndrome: A characteristic set of physical and psychological effects that occur when use of the drug is significantly decreased or stopped. There is a craving for the drug when one is abstinent, and these symptoms are relieved when the drug is again taken (Institute of Medicine, 1990; Schnoll, 1986).

annually on a sample of senior students in public and private high schools. The data from this study indicate that current, recent, and lifetime use of drugs by these students has declined steadily since peak levels were reached in the late 1970s and early 1980s. The survey also establishes that respondents' attitudes toward drugs are changing. Disapproval of drug use and the perceived harmfulness of drug use have increased (ONDCP, 1990a).

While these and other studies provide reason for optimism, there are some inherent problems. Those selected to take part in these studies are promised anonymity of their responses in return for their voluntary participation. However, it is likely that some decline because of fear of consequences for their behavior. National surveys also miss hard-to-reach subsections of the population. This includes youth and adults who are not living at home and are not attending school (e.g., school dropouts, incarcerated persons, the homeless). However, documented use of mood-altering substances is higher among such groups (ONDCP, 1990a).

Currently, estimates of the number of persons abusing or addicted to alcohol and other drugs range from 6.5 to 37.5 million. However, only about 300,000 of this number receive some form of treatment (Califano, 1992; Primm, 1992). It is estimated that nearly one-fifth of the population will experience substance abuse-related problems during their lifetimes. The use of illegal drugs in the United States has gradually increased from minimal levels in the 1940s and 1950s to 1985 levels at which approximately one-third of the population are thought to have used some drug(s) during their lifetimes (Frances & Miller, 1991).

Hospital Admissions Related to Drug Use

Between 1985 and 1988, while reported drug use was declining, the number of drug-related hospital admissions more than doubled (Frances & Miller, 1991). The Drug Abuse Warning Network (DAWN) examines the numbers and pattern of drug-related health emergencies and deaths in several cities. Cocaine-related emergency room cases increased 400 percent between 1985 and 1988. However, beginning in 1989, a gradual decline began. Deaths attributable to cocaine during the same period tripled. Corresponding patterns occurred with other illicit drugs during the same period; however, the increases in emergency room cases and deaths were not as dramatic with other drugs as they were with cocaine (ONDCP, 1990a).

Use of Drugs by Criminal Offenders

The Drug Use Forecasting Program (DUF) uses urinalysis to test a sample of arrestees in selected major cities around the country. Urine specimens are collected anonymously and voluntarily from both adult and juvenile arrestees. The DUF reports provide information about the criminal justice population that is under-represented in other drug surveys. The results indicate that the rate of drug use is as much as 10 times greater among those arrested for serious crimes than among the general population. Approximately three-quarters of arrestees committing crimes of burglary or robbery in 1989 tested positive for drugs, indicating a link between drugs and income-generating crimes. However, the data show that drug use is also prevalent among the majority of most other serious offenders (ONDCP, 1990a).

The association between drugs and crime can be made in at least three ways (Singer, 1992):

1. The criminal act of manufacturing or selling illegal drugs is undertaken for the extreme profits that can be made.
2. Some addicted persons engage in income-generating crimes to support their drug use habits. This includes crimes such as robbery, shoplifting, burglary, and prostitution.
3. Certain drugs increase aggressive or violent behavior in some individuals, resulting in violent crimes such as murder, manslaughter, rape, and other sexual assaults. Alcohol, cocaine, and phencyclidine (PCP) are particularly noted for this effect.

Availability of Drugs

The International Narcotics Strategy Report provides an assessment of current production levels of major drugs in foreign countries. A condition for financial assistance to these countries is their cooperation with the United States and their progress in the suppression of illicit drug production, trafficking, and money laundering. Information about law enforcement activities, crop control, drug abuse prevention, and anti-money laundering programs is part of the report for each country. In 1990, both encouragement and warning signs were noted. In Burma, cultivation of opium and refining of heroin increased. However, in some Latin American countries the production and export of cocaine, marijuana, and opiates declined (ONDCP, 1990a). Decreased supplies and increased prices of drugs may result in fewer persons beginning or continuing to use them. However, in some cases it may result in increased crime rates among those who are heavily dependent upon the drugs.

The National Narcotics Intelligence Consumers Committee Report also examines trends in drug availability and consumption. Cocaine continues to be widely available in the United States, although purity has declined and prices have increased according to recent reports. Heroin availability also increased during 1989. At that time, methamphetamine and MDMA ("Ecstasy") were readily obtainable and use remained high, while PCP use declined in major U.S. cities (ONDCP, 1990a).

These data indicate that drug use is a pervasive problem in American society, cutting across socioeconomic, racial, and ethnic lines. Persons responsible for decision making and coordination related to treatment services should be attuned to the heterogeneity of the population (Singer, 1992).

The Response to Substance Abuse

The incidence of substance abuse remains unacceptably high, and both substance abusers and other persons are adversely affected by this disease. New information about the effectiveness and economic benefits of providing treatment are emerging rapidly. Efforts to evaluate treatment have led the Office of National Drug Control Policy (1990b, p. 30) to state unequivocally, "We now know on the basis of more than two decades of research that drug treatment can work."

Various perspectives have viewed addiction as a matter of personal choice, as a medical illness, or as deviant, criminal behavior. Thus, responses to addicted persons have ranged from ignoring them to hospitalization to imprisonment.

The medical view of addiction understands that addicted persons have a treatable disease, much like other diseases, such as diabetes.

Addiction is a chronic disorder that is prone to relapse, even after significant periods of recovery. Thus, the individual needs treatment that is appropriate for

his or her particular needs and problems based on an assessment of the cause and course of the disease. The mission of treatment agencies focuses on helping individuals make positive changes.

**Table 1-E.—Center for Substance Abuse Treatment—
Model for Comprehensive Alcohol and Other Drug
Abuse Treatment**

A model treatment program includes:

- **Assessment**, to include a medical examination, drug use history, psychosocial evaluation, and, where warranted, a psychiatric evaluation, as well as a review of socioeconomic factors and eligibility for public health, welfare, employment, and educational assistance programs.
- **Same day intake**, to retain the patient's involvement and interest in treatment.
- **Documenting findings and treatment**, to enhance clinical case supervision.
- **Preventive and primary medical care**, provided on site.
- **Testing for infectious diseases**, at intake and at intervals throughout treatment, for infectious diseases, for example, hepatitis, retrovirus, tuberculosis, HIV/AIDS, syphilis, gonorrhea, and other sexually transmitted diseases.
- **Weekly random drug testing**, to ensure abstinence and compliance with treatment.
- **Pharmacotherapeutic interventions**, by qualified medical practitioners, as appropriate for those patients having mental health disorders, those addicted to heroin, and HIV-seropositive individuals.
- **Group counseling interventions**, to address the unique emotional, physical, and social problems of HIV/AIDS patients.
- **Basic substance abuse counseling**, including psychological counseling, psychiatric counseling, and family or collateral counseling provided by persons certified by State authorities to provide such services. Staff training and education are integral to a successful treatment program.
- **Practical life skills counseling**, including vocational and educational counseling and training, frequently available through linkages with specialized programs.
- **General health education**, including nutrition, sex and family planning, and HIV/AIDS counseling, with an emphasis on contraception counseling for adolescents and women.
- **Peer/support groups**, particularly for those who are HIV-positive or who have been victims of rape or sexual abuse.
- **Liaison services** with immigration, legal aid, and criminal justice system authorities.
- **Social and athletic activities**, to retrain patients' perceptions of social interaction.
- **Alternative housing** for homeless patients or for those whose living situations are conducive to maintaining the addictive lifestyle.
- **Relapse prevention**, which combines aftercare and support programs, such as Alcoholics Anonymous and Narcotics Anonymous, within an individualized plan to identify, stabilize, and control the stressors which trigger and bring about relapse to substance abuse.
- **Outcome evaluation**, to enable refinement and improvement of service delivery.

Treatment approaches have evolved in two basic categories:

1. Pharmacological modalities, which affect physiological processes (such as detoxification and methadone maintenance), and
2. Behavioral modalities, which influence behavior or learning processes.

These often are combined to produce a greater effect (NIDA, 1991).

The criminal view of addiction defines drug use as a criminal behavior. The focus of intervention in the criminal justice system is first to protect the health, safety, and welfare of the public, and then to rehabilitate offenders, if possible. Prison crowding and an overwhelming drain on community corrections resources have resulted from increasing numbers of drug-involved offenders. However, as caseloads continue to rise, it is difficult to see that this approach, at least without concomitant treatment, has positively affected the problem of substance abuse.

Conclusion

Substance addiction is a chronic, progressive, relapsing disorder affecting all citizens in one way or another. If not directly involved, many have family members with alcohol or other drug-related problems. Highways and places of employment are sometimes unsafe because of the effects of alcohol and drugs on motorists and co-workers. It is a devastating disease to individuals, families, and communities. The exorbitant financial toll includes increased health care costs and reduced productivity, as well as higher law enforcement costs, thefts, and destruction of property. With the

onset of HIV/AIDS and other infectious diseases for which transmission is directly or indirectly attributable to substance abuse factors, addiction is truly a deadly disease.

While prevention efforts are successful in lowering rates of substance abuse among some segments of the population, addiction is a pervasive problem among others. However, treatment is a cost-effective strategy for intervening to stop the cycle of destruction and despair. Treatment programs providing comprehensive services and attending to the continuing treatment needs of individuals are most beneficial. These programs include the five critical components of treatment—*comprehensive assessment, patient-treatment matching, comprehensive services, relapse prevention, and accountability.*

With coordination of efforts, appropriate application of resources, and a vision for a better future, great achievements in substance abuse treatment will occur.

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Chapter 2—The Relationship of Addiction to Crime, Health, and Other Social Problems

by
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Addiction to alcohol and other drugs (AOD) has grown to be a far-reaching problem in the United States. It not only has led to a greatly increased crime rate; it is closely associated with increased communicable diseases, mental illnesses, and an over-taxed social services system. This chapter takes a brief look at the issues, emphasizing a need to treat the substance abuser as a means of protecting the innocent.

Addiction and Crime

In 1972 the United States had a total of 196,000 jail and prison cells; by 1991 that number had risen to between 1.1 and 1.25 million, a 600 percent increase. A single State such as New York State increased its jail and prison population from 13,000 in 1970 to about 60,000 in 1992.

Despite the number of people in prisons, the streets are more dangerous than ever. Crime has not been checked although the United States incarcerates more people per capita than any other nation on the planet. It is critical that we begin to develop an

alternative to the status quo because this nation cannot afford to continue current rates of incarceration. Alternative sentencing coupled with mandatory treatment must be considered. Figure 2-A compares the numbers of incarcerated persons in American jails and prisons between 1970 and 1991.

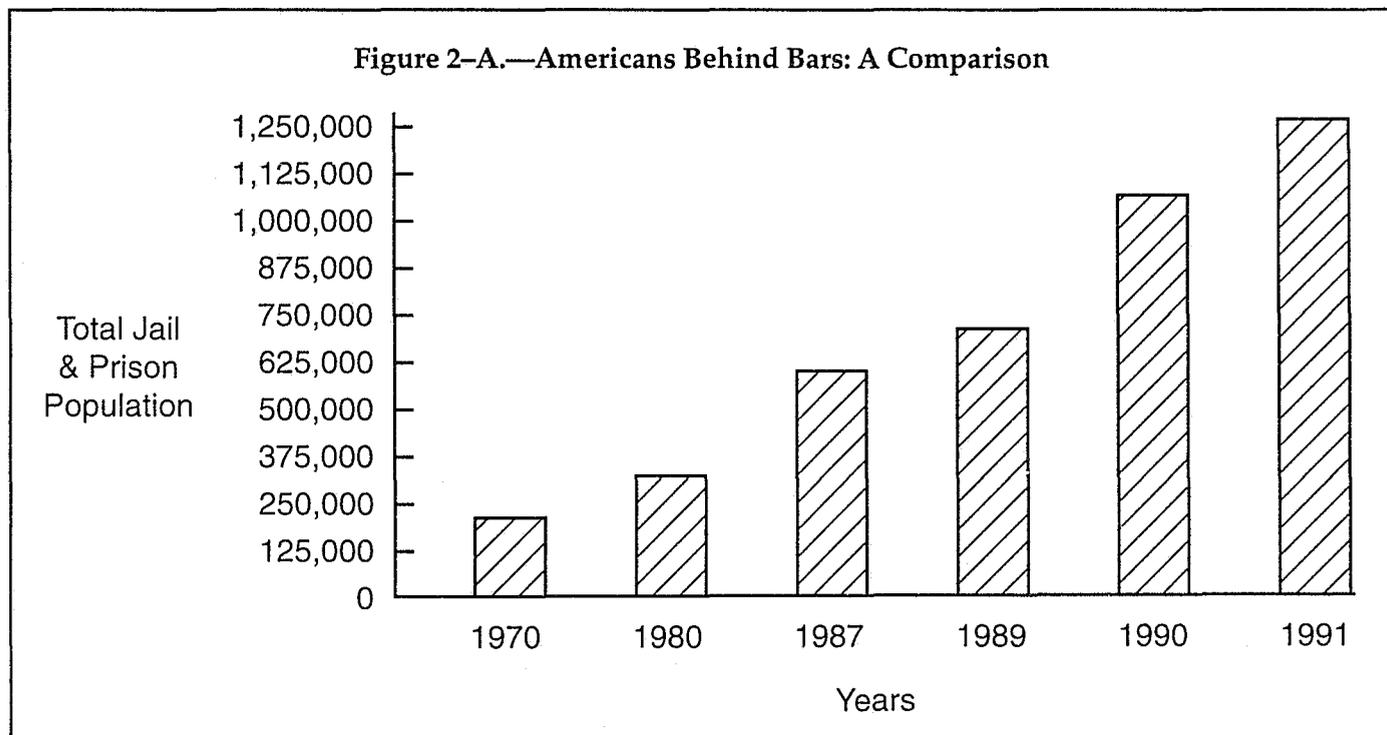
What is the relationship of drug use to crime? The statistics are shocking to the general public, but common knowledge to those in the criminal justice and substance abuse treatment fields. The criminal justice data presented in the following paragraphs and

Table 2-A reflect a dramatic correlational relationship between drug use and crime. With this knowledge, steps must be taken to identify drug users, treat the problems of chemical dependency, attend to environmental correlates of relapse (lack of job skills, employment, housing, family stresses, etc.) and prevent relapse through continuing care programs (including the use of self-help models). The task seems enormous and expensive, yet it pales when compared with the apparent failure and costs of current methods.

Table 2-A.—Facts

- Since 1972 there has been a 600% increase in jail and prison cells nationwide.
- An estimated 54% of individuals in prison populations have problems of alcohol and other drug abuse and dependence.
- An estimated 53% of individuals in community corrections have problems of alcohol and other drug abuse and dependence.
- An estimated 80% of individuals in the prison population, designated as "criminal" by society, can be diagnosed as having psychiatric disorders.
- An estimated 92% of these psychiatrically diagnosable individuals also meet criteria for alcohol or drug abuse/dependence.
- Mandated treatment does work.
- Innovative approaches to correctional treatment can work.
- An innovative approach to treatment in corrections requires system redesign and training to create integrated networks of care.

Figure 2-A.—Americans Behind Bars: A Comparison



Current research by the United States Department of Justice attempts to clarify the relationship between drug use and crime by surveying and/or performing drug testing on arrestees, probationers, and prison inmates at selected sites through random sampling. Surveys involve interviews, questionnaires, and other instrumentation. Drug testing is done by urinalysis.

Arrestees

The National Institute of Justice Drug Use Forecasting Program (DUF) measures recent drug use by arrestees. The data collected are also used to determine trends in drug use by this population (see Figures 2-B and 2-C for 1992 DUF data). Trained local staff obtain urine specimens and interview booked arrestees. Participation in the program is both anonymous and voluntary. Participation levels are high, with 90 percent of arrestees agreeing to interviews and 80 percent agreeing to urine testing. In order to obtain samples with sufficient distribution of arrest charges, drug charge and driving offense samples are limited in male

arrestees. Juvenile and female samples are not limited because they are fewer in number. Samples for male booked arrestees are taken at 24 sites in major cities across the United States, while samples for females are taken at 21 of those sites and samples for juveniles, at 11 sites.

Probationers

The Bureau of Justice Statistics surveyed felons on probation using a sample of one-quarter of felons sentenced to probation in 1986. The survey used State criminal history files and probation files. The sample was not nationally representative, yet is informative. This survey found that 53 percent of probationers had an identified drug abuse problem (22 percent occasional users, 31 percent frequent users).

The rearrest data for probationers who had been convicted of a drug offense were:

- 27 percent rearrested for drug offense
- 7 percent rearrested for violent offense

- 20 percent rearrested for property offense
- 5 percent rearrested for other offense

Treatment or drug testing:

- 38 percent of probationers were required to participate in treatment (9 percent required to participate in alcohol treatment)
- 48 percent of probationers were required to participate in drug testing
- 42 percent of probationers with known drug problems were not required to be tested for drugs

State Prisoners and Federal Prisoners

The Bureau of Justice Statistics survey data for 1986 were reported in *Drugs and Crime Facts, 1990* (U.S. Department of Justice, 1991).

State prisoners:

- 54 percent reported drug use at time of offense (1986)
- 52 percent reported use during month prior

Figure 2-B.—Drug Use by Female Booked Arrestees

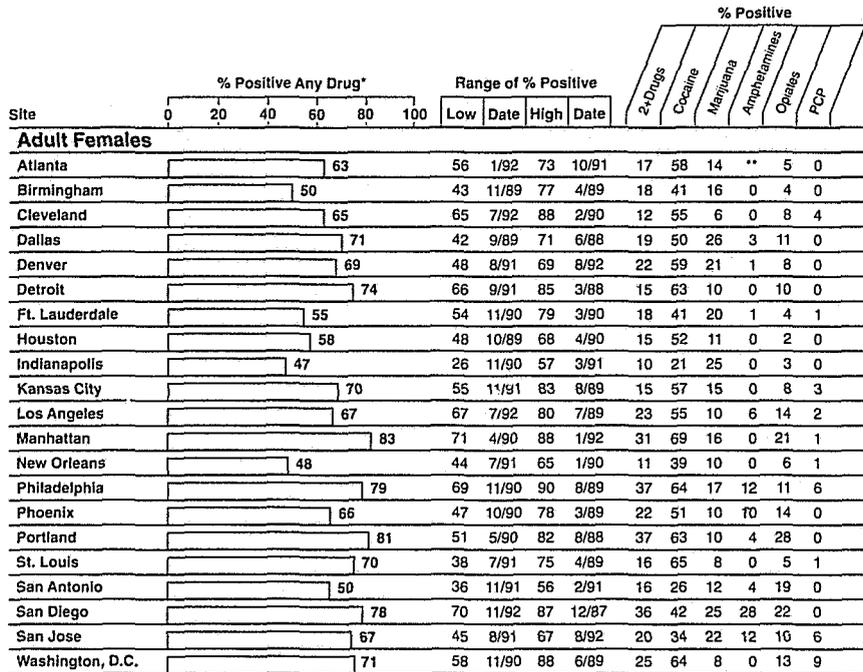
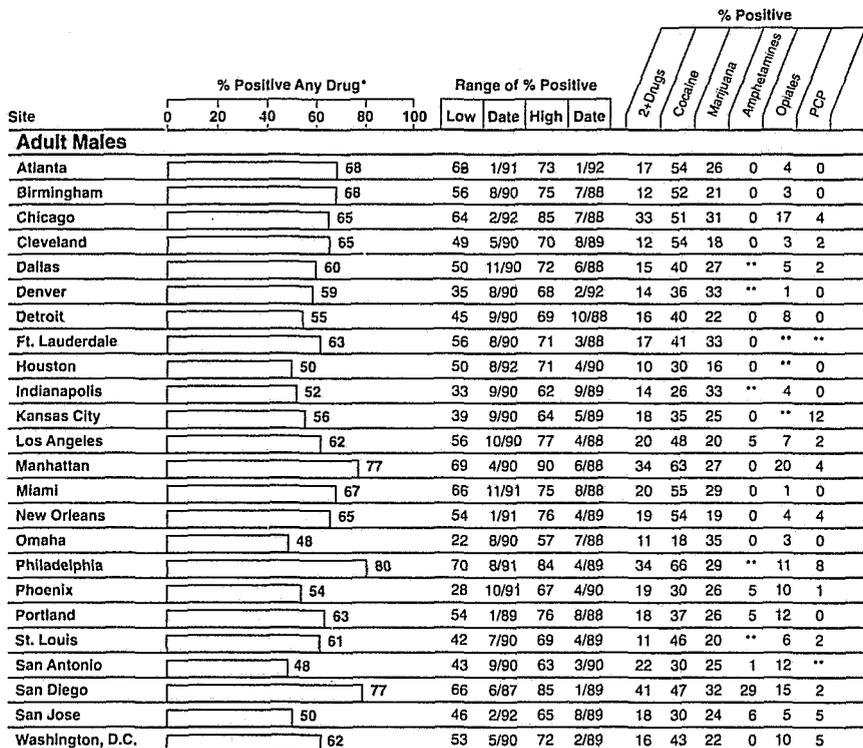


Figure 2-C.—Drug Use by Male Booked Arrestees



Source: National Institute of Justice/Drug Use Forecasting Program

Note: Positive by urinalysis, July through September 1992

* Drugs tested for include cocaine, opiates, PCP, marijuana, amphetamines, methadone, methaqualone, benzodiazepines, barbiturates, and propoxyphene.

** Less than 1%

- 43 percent reported daily use
- 46.8 percent of State prisoners were actively involved with illegal drugs either as users or by conviction on a drug charge

Violent offenders:

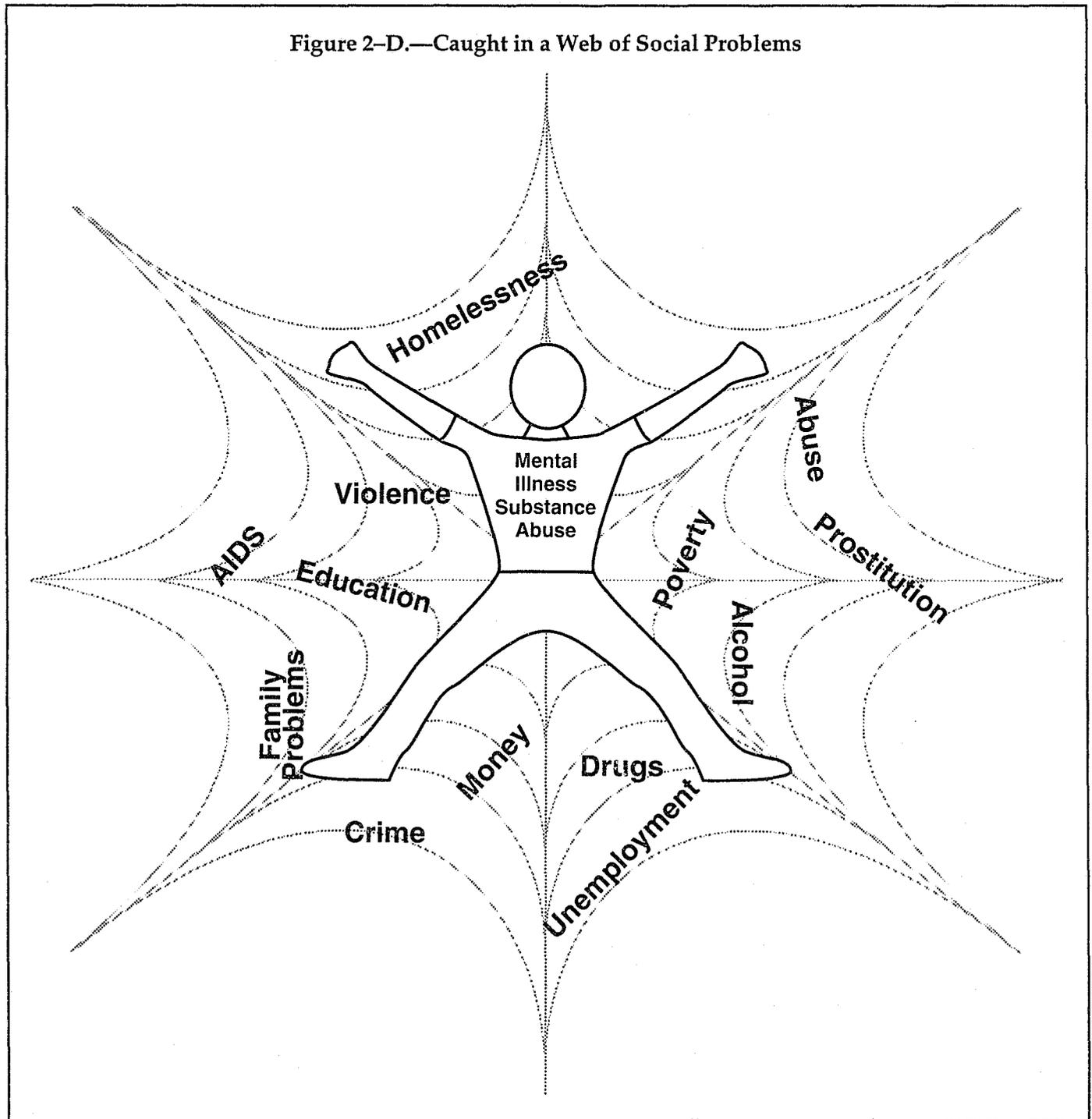
- 54 percent of violent offenders reported use at time of offense

- 30 percent of victims were perceived to be under the influence
- drug use was highest among those who victimized strangers
- manslaughter was the crime which most involved AOD by offender, victim, or both

Drug offenders and burglary:

- 50 percent of robbery, burglary, larceny, or drug offenders were daily drug users
- 40 percent reported use at time of offense (higher percentage than for other offenses)
- 58 percent of federal inmates (1991) were drug offenders

Figure 2-D.—Caught in a Web of Social Problems



- 26.1 percent of State inmates were drug offenders (with no known prior sentence to probation or incarceration)

Past dependency or treatment:

- 28 percent of State prisoners reported past drug dependency
- 30 percent reported participation in a drug treatment program at some time (half received most recent treatment while incarcerated)

Recidivism

Research shows that current prison populations are repeat offenders. The United States Department of Justice Profile of State Prison Inmates indicates that 80 percent of the current prison population are recidivists. This knowledge, coupled with the above stated correlates to AOD, clearly shows that incarceration alone is insufficient. Programs that couple treatment for AOD with sentencing can focus on the dual goals of:

1. abstinence from AOD, and
2. reduced recidivism to crime.

In addition, the individuals who populate the nation's prisons and probation or parole caseloads are caught in a web of social problems. These problems also contribute to high rates of recidivism and must be considered in a holistic approach.

Addiction and Health

Addiction to psychoactive drugs has profound effects on the brain and all other organ systems. These changes are caused by direct effects of drugs, the mode of drug ingestion or factors associated with the drug-using lifestyle. For example, heroin itself disrupts the normal patterns of mood; injection of

heroin with unsterile needles places the user at risk for developing AIDS, hepatitis and numerous other blood disorders, or infection of internal organs; heroin users are frequently malnourished, compromising the body's ability to ward off disease. It has long been known that alcohol and other drug users were at greater risk of health problems than nonusers. In recent years, however, drug users have become a critical link in the AIDS epidemic and the related resistant tuberculosis epidemic, placing innocent nonusers at risk of developing these potentially fatal communicable diseases.

Impact of AOD Use on the Immune System

Alcohol and other drugs can impair the body's natural defenses through a variety of factors:

- Alcohol's direct effects on immune function can compromise the immune system. The immune system is dependent upon vitamins, proteins, and other nutrients to function properly. Alcohol can inhibit the absorption and bio-availability of important nutrients leading to malnutrition.
- The liver is the organ responsible for making nutrients "bio-available" and for metabolizing toxins. Alcohol and some other drugs impair liver function. Liver dysfunction caused by AOD leads to malnutrition as well as increased exposure to toxic substances (for example, contaminants in street drugs).
- IV drug use can cause viral hepatitis, an infection of the liver; alcoholism causes cirrhosis, a scarring of the liver, as well as hepatitis.
- Malnutrition can also be a result of improper diet. Alcohol and other drug dependent people will often use resources (money) for drugs and eat poorly.

- Addicts do not seek proper medical care, fearing contact with legal authorities. As a social group, they are also inexperienced consumers of medical care. Lack of attention to minor medical problems can sometimes lead to major medical problems.
- Addiction sometimes results in poor hygiene; this can result in infection of minor cuts, dental disease, and urinary tract infection, among other problems.
- Prenatal AOD exposure has been clearly linked to the disruption of the normal development and maturation of the brain, heart, skeleton, and immune system. We know that most pregnant drug users are polydrug abusers, most commonly using alcohol, but perhaps using cocaine, marijuana, etc.
- Alcohol and other drugs can act as disinhibitors. When inhibitions are reduced, it is more likely that individuals will engage in high risk behaviors such as unprotected sex, use of multiple drugs (possibly including injectable drugs), or activities that can result in serious accident or injury.
- AOD can impair motor function, making simple activities into high risk activities (i.e., driving, standing on a subway platform, crossing busy streets, swimming, operating machinery). These accidents frequently place others at risk for injury as well.

AIDS

Intravenous drug use is a critical factor in the spread of AIDS. Intravenous drug users (IVDUs) represent the second highest population subgroup of AIDS victims.

The sharing of blood contaminated needles, syringes, and works (other instruments associated with IV drug use) is the conduit of the human immunodeficiency virus (HIV), which is responsible for AIDS. IVDUs share

equipment for many reasons, including convenience, lack of access to sterile equipment, and the social milieu of drug use.

In addition to the IVDUs, substance abuse-related AIDS cases also include individuals infected through sexual contact and children born to HIV infected mothers. Additional factors associating AOD use with HIV/AIDS include the following:

- cocaine is associated with increased sexual desire and may lead to unprotected sexual contact;
- the exchange of sex for drugs;
- prostitution for obtaining money for drugs;
- AOD can disinhibit resulting in high risk behaviors; and
- cocaine users often use heroin intravenously to mediate withdrawal.

Tuberculosis

Many continue to think of tuberculosis as a disease of the past. However, alcohol and other drug addiction is associated with a current resurgence in the number of cases reported in the past few years.

Tuberculosis (TB) is an infection caused by the bacterial organism *Mycobacterium tuberculosis*. An infected individual can spread the disease by coughing. The tiny bacteria become airborne and are small enough to be inhaled by another into the lungs. In order for an individual to become infected, prolonged or repeated exposure is usually necessary. The TB bacteria accumulate and multiply in the lung and then spread to the lymph nodes. The infection moves to other organs through the blood stream.

The spread of disease can be rapid in crowded housing, shelters, hospitals, prisons, or other institutions, since the disease is airborne. These settings are associated with

the lifestyle of AOD users. In addition, the compromising effects of AOD on the immune system place addicts at high risk for TB infection. Finally, IV drug use and sexual disinhibition place addicts at risk for HIV infection, a high risk factor for the development of active TB.

Treatment of TB with anti-tuberculosis drugs is usually effective, but addiction and alcoholism present complicating factors. For example, many addicts are reluctant to use the health care system, fearful of reprisal. Even when they do seek medical help and are diagnosed with TB, many are not compliant with treatment instructions. They do not take medication or get follow-up care. In addition, they continue to compromise their health through the use of alcohol and other drugs. These patterns in alcoholics and addicts have contributed to a new menace, multi-drug resistant (MDR) tuberculosis, a type of TB that does not respond to the usual anti-tuberculosis medical treatment.

Common tuberculosis and MDR tuberculosis are proving to be more contagious than previously believed, placing millions of non-addicted individuals at risk for a serious and possibly fatal disease.

HIV/AIDS and Tuberculosis

HIV infection weakens the body's immune system and increases the likelihood of the progression of latent TB infection to active TB. In fact, HIV infection is the highest risk factor associated with the development of active TB.

AIDS and Tuberculosis in Corrections

The war on drugs has led to an unprecedented number of individuals with multiple health problems populating the nation's prisons. Overcrowded conditions

in jails and prisons contribute to the spread of disease and portend a public health emergency. In jails and prisons nationwide, cells designed for one individual have been accommodating two and three individuals. A 1990 survey indicated that correctional institutions were operating well beyond capacity:

- State prisons by 18 percent to 29 percent over capacity;
- federal prisons by 51 percent over capacity; and
- jails by 104 percent over capacity.

(Source: American College of Physicians, National Commission on Correctional Care, and American Correctional Health Services Association, 1992.)

The incidence of AIDS is 14 times higher in State and federal correctional systems than in the general population, while the incidence of TB in persons with AIDS is almost 500 times that of the general population. In 1985, the Centers for Disease Control and Prevention estimated the incidence of TB among incarcerated persons to be three times the rate in the general population.

This higher incidence of AIDS and TB in corrections is due to the over-representation of persons with histories of high risk behavior, especially intravenous drug use. Mandatory sentencing for drug offenders, who also have high rates of HIV infection and tuberculosis, concentrates infected individuals in prisons and places enormous burdens on prison health care systems.

In many correctional institutions, health care is "demand driven." That is, medical attention is received at the request of the inmate, at sick call. When health care is requested rather than scheduled, infectious disease goes undetected and untreated. Disease

then spreads within the institution, straining existing medical services and creating undetermined costs for taxpayers. To complicate matters, individuals released from the institution carry the disease to the community.

The American College of Physicians, National Commission of Correctional Health Care, and American Correctional Health Services Association (1992) recommend a comprehensive assessment of health care needs in corrections. In addition, these organizations jointly outline the following needs in correctional health care:

- increased medical staffing of correctional institutions;
- implementation of primary care and prevention models of health care delivery;
- proactive health care which emphasizes screening, early disease detection and treatment, health promotion, and disease prevention;
- collaborative ventures with academic medical centers and public health services;
- reconsideration of mandatory sentencing laws for drug-related crime; and
- increased funding for AOD abuse/dependence treatment and AIDS prevention with this population.

Other Social Problems

Women, Children, and Families

Addiction impacts not only on the individual but his/her family. The problems of these individuals and families reverberate throughout the community, affecting numerous supportive social services. In 1988 the National Institute on Drug Abuse estimated

that some 5 million women of childbearing age used drugs. As a result, the number of children needing assistance and protection from governmental agencies has risen markedly.

Prenatal drug exposure:

- Eleven percent of pregnant women use drugs.
- The estimated number of drug-exposed infants born each year ranges from 100,000 to 375,000.
- Drug-exposed infants suffer from a wider range of medical problems needing more extensive and intensive care, with costs up to four times greater than non-drug-exposed infants.
- Long-term physical effects of prenatal drug exposure are likely to require continued expensive medical care.
- The number of *boarder* babies reported by hospitals nationwide has been growing: From 1986 to 1989 the following increases occurred in three large cities: New York City, 268 percent; Los Angeles, 342 percent; Chicago, 1735 percent.
- Four hospitals in major cities reported that 26 percent to 58 percent of drug-exposed infants were placed in foster care (1989).

Child abuse and neglect:

- The Massachusetts Department of Social Services reported that 64 percent of neglect and abuse investigations identified abuse of drugs and alcohol as an important factor.
- The percentage of foster care placements identified as children of substance abusing families were as follows: New York, 57 percent; San Antonio, 40 percent; Los Angeles, 90 percent.
- Hospital officials nationally indicate an increasing number of young children admitted for

problems that result from maltreatment from drug abusers.

Education:

- Drug-exposed infants are vulnerable to developmental problems that may affect learning; one researcher estimates that approximately half of these children will require special educational services.
- After birth, children of substance abusers are at risk of experiencing physical abuse, sexual abuse, neglect, or emotional trauma; these abuses often lead to a requirement for special educational services.

Women and crime/addiction:

- More than 1 in 3 women in jails were accused or convicted of drug offenses.
- Forty percent of female arrestees reported daily use; 38 percent were under the influence at time of arrest.
- Two-thirds of women in jail had children under age 18.
- 52,000 children under age 18 had mothers who were in jail (1989).

Treatment services for women:

- Very few treatment programs provide child care or adequate alternatives for women who seek treatment, creating a significant barrier for women who need help.
- Women fear the loss of their children to child protective services if they seek treatment. Horror stories in the media about the fate of some children in foster care increase this fear.
- Fear of criminal prosecution deters addicted women from seeking medical and drug treatment services.
- The House Select Committee on Children, Youth and Families indicated that two-thirds of major hospitals in 15 cities reported that there were no drug treatment programs available to pregnant women (Fink, 1990).

- The U.S. General Accounting Office report on drug-exposed infants (1990) indicates that hospital and social welfare officials in each of five major cities responded that drug treatment services for pregnant addicts were insufficient or inadequate to meet the demand for services.
- Addicted pregnant women were refused service by over half of 78 treatment programs surveyed in New York City; lack of necessary medical and other support services was cited as the primary reason.

Mental Illness and AOD Problems

In the late 1970s, mental health practitioners across the country were noting a "new" type of client, a young adult who was unresponsive to standard treatments. Treatment professionals noted that use of alcohol and other drugs was (a) exacerbating mental illness, (b) causing mental illness in some drug sensitive individuals, and (c) resulting in mental illness after prolonged addiction. New phrases came into use to describe the individual who suffered from mental/emotional disorders and AOD abuse/dependence, including: mentally ill chemical abuser (MICA), dual disordered (DD), or co-morbid patient. An already difficult problem of mental illness became even more complex with the abuse of drugs. Unfortunately, even occasional low-dose AOD use can make treatment of the mentally ill extremely difficult (Pepper & Ryglewicz, 1984).

This multi-problem individual, at the mercy of other social changes, creates stresses on numerous social services. The 1980s brought the tragedy of irresponsible deinstitutionalization; thousands of mentally ill individuals were removed from institutions and returned to the

community. Deinstitutionalization was not accompanied by sufficiently increased community services for the mentally ill and was coupled with a drug abuse epidemic. Now many individuals with severe personal and social handicaps are roaming the streets. They abuse drugs and alcohol; they become involved in crime; they become a danger to our communities. As a result, they have become a great burden on law enforcement and the criminal justice system.

Which comes first, mental/emotional disorders or drug/alcohol abuse? The pattern can develop from either starting point. A study by Regier and colleagues (1990) suggests that dual disorders are more prevalent among people in jail than in the general population. Data reported by the National Institute of Mental Health suggest that mental disorder is twice as likely to come first in individuals with dual disorders; that is, for every case of an individual who first abuses substances and then becomes mentally ill, there are two individuals who first have symptoms of mental illness and then abuse alcohol and/or other drugs (F. Goodwin, M.D., personal communication, 1992). Detailed prospective studies on the sequential development of criminality, mental illness, and substance abuse are not yet available.

Chiles and colleagues (1990) did a survey of sentenced prisoners at the time of classification in the State of Washington prison system. They found that 88 percent of the prisoners being classified met criteria for a substantial emotional or psychiatric disorder. Of that group, a full 92 percent also met criteria for alcohol/substance abuse or dependence. If these findings are generalized to the national prison population, an estimated 800,000 or more prisoners have coexisting psychiatric and sub-

stance abuse disorders, while lesser numbers suffer from a single disorder. *Today there are 10 times as many mentally ill and/or substance abusing persons in jails and prisons as there are in mental hospitals.*

The criminal justice system has become the recipient, via "trans-institutionalization," of hundreds of thousands of drug-addicted, mentally ill, and alcoholic persons whose criminal behavior is frequently secondary to their untreated mental illness or substance abuse disorders.

Seeking Solutions: Treatment Works!

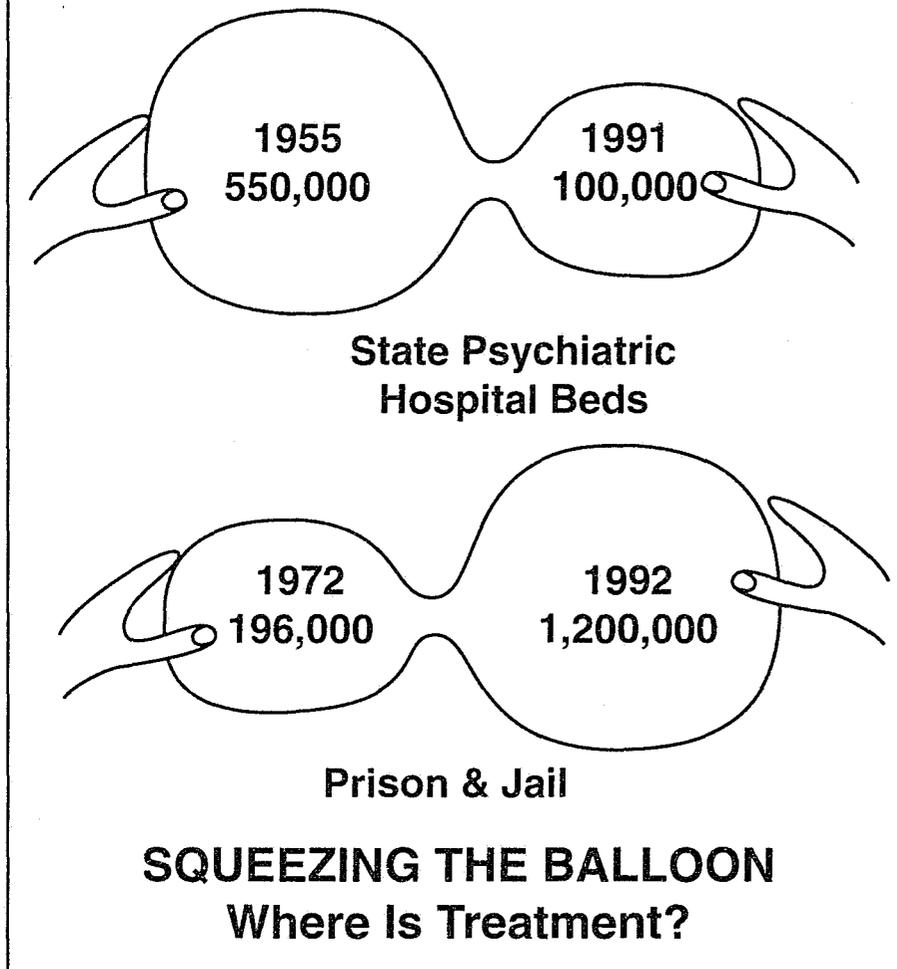
Prevailing Attitudes

The period from 1980 to 1990 was a decade to "get tough" on crime and to "wage a war" on drugs. Politicians won elections by promising to intensify law enforcement, to build more prisons, to rid the streets of so-called undesirables. Increasing drug crime penalties and interdiction became the simple solutions to drug abuse and crime. Attitudes towards treatment and rehabilitation for this population in the 80s flung far to the right, and the general attitude of the public was "treatment doesn't work."

The harsh attitude of the 80s was a sharp turn from the more liberal, treatment oriented approach prevalent during the 1960s and early 1970s. During the earlier period behavior was attributed largely to social/environmental factors to the near-exclusion of genetic factors. The criminal justice system tagged clinicians who were well-meaning but had little experience with prison populations as "do-gooders."

In the 90s, with a new understanding of AOD dependence as a biopsychosocial problem and

Figure 2-E.—Transinstitutionalization
in the United States



or mother of a number of un-parented or under-parented young children who are at high risk of becoming the next generation of adolescents and young adults in difficulty with alcohol and other drugs, the law, and society.

What Do We Know?

A comprehensive biopsychosocial approach to treatment and rehabilitation should be utilized. Services must attend to the broader needs of housing, education, vocational rehabilitation, and vocational opportunities; the multiple health care needs; and the more individualized needs of helping people connect with their extended families of origin, former mates, and children.

Relapse prevention is the key. Untreated alcohol/drug abuse portends relapse to mental/emotional disorders and criminal behavior; untreated mental/emotional disorders portend relapse to alcohol and drug use and criminal behavior. Unmet health care needs place the individual at risk for relapse and place others at risk for infectious disease. Persons released from jails and prisons without vocational/educational skills, housing, work opportunities, and other social services are likely to relapse in some way.

Combined treatment is essential. Individuals with dual disorders are unlikely to be successful when treatment is provided for only one of these disorders. Since the majority of persons in the prison population who have a mental health disorder also have a substance abuse disorder, programs for combined treatment are essential.

Mandated treatment does work; that is, it works about as well as voluntary treatment. There is a body of literature indicating the success rates for people mandated into mental health or substance abuse treatment are similar to those in voluntary treatment.

innovative treatment and relapse prevention approaches, the pendulum will need to swing toward the middle, to include treatment and rehabilitative services as well as incarceration. However, the errors of the 70s must not be repeated with fragmented approaches.

The 90s require linkages between agencies to develop integrated networks of services that can:

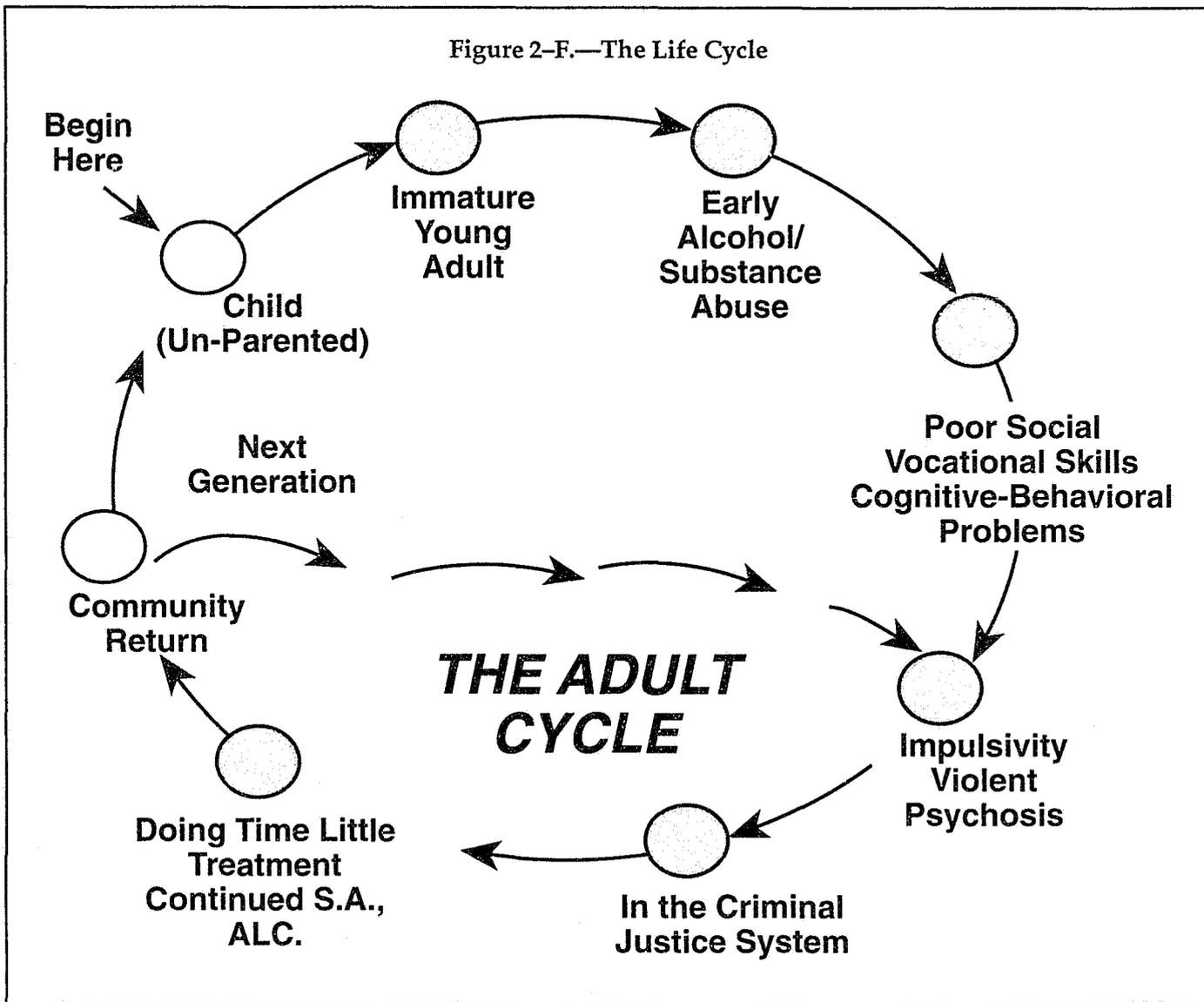
- match individuals to appropriate treatment services;
- divert AOD users from incarceration;
- follow them into the jails and prisons;

- incorporate case management; and
- be available in the community to protect against relapse after release.

Treatment Is Prevention

Comprehensive treatment and appropriate use of social services and supports not only stabilize the individual but serve as prevention strategies to curb crime, infectious disease, and continued alcohol and other drug abuse. Treatment is prevention in the sense that addressing the real problems of the AOD user can interrupt the vicious cycle of the immature, unsuccessful individual who becomes the father

Figure 2-F.—The Life Cycle



Short-term intensive treatment requires long-term follow-up titrated to the needs of the individual. In the criminal justice system, people released from prison with long-term community supervision and follow-up have greater success than those who have little or no follow-up. At present, community supervision is frequently inadequate because probation or parole officers have caseloads numbered in the hundreds. Inadequate follow-up is a key contributing factor to relapse.

Cognitive-behavioral deficits. The work of Dorothy Otnow Lewis, M.D., indicates that dually diag-

nosed individuals found in prison populations have a high incidence of minimal brain damage, cognitive behavioral deficits in functioning and neuropsychological impairments. Recent developments in diagnosis allow for identification of these problems more readily than in the past. Innovative rehabilitation techniques for discrete impairments show promising results and should be made available to individuals with dual disorders, including those in the criminal justice system.

Psychoeducation has been used successfully with individuals who have mental/emotional disorders

or dual disorders. This approach shows great promise as a component of comprehensive treatment.

Treatment as Part of a Network of Care

Individuals with alcohol and other drug problems are stressing the criminal justice, health care, and other social services systems. The ever-increasing number of full and expensive prison cells cannot provide an effective solution to social problems in this country.

Individuals in the criminal justice system have multiple problems, including drug addiction with coexisting medical problems and mental illness, that keep recidivism rates high. A comprehensive plan which begins at arrest, which realistically deals with public safety, which provides effective mechanisms to capture the

individual in a web of controlled, growth-oriented treatment is necessary. Research clearly shows that mandated treatment works, that new and effective techniques of treatment have been developed, and that systems of rehabilitation and relapse prevention in the community must be integrated and accessible to corrections.

In addition, substance abusers must be linked to other community resources to meet the needs that place them at risk of relapse. Job skills training, employment services, health care, and housing must not be neglected.

Criminal justice, mental health, public health, and chemical dependency professionals need to merge

Figure 2-G.—Caught in the Network of Care

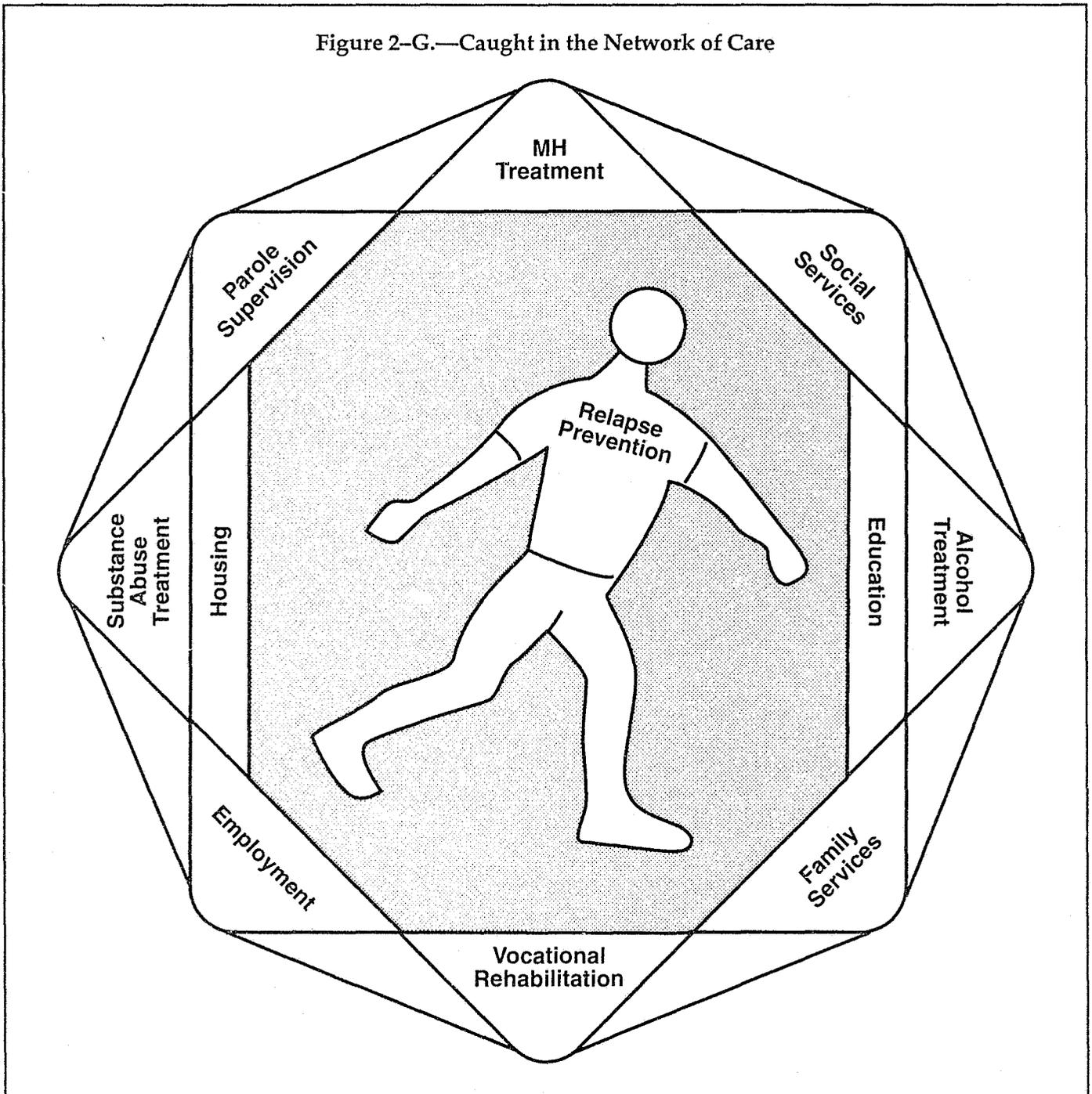


Table 2-B.—What Can Be Done?

- Cross training of professionals: chemical dependency, criminal justice, mental health and other social service providers.
- Comprehensive review of the local and State criminal justice systems, including community and institutional corrections, as a first step toward the creation of linkages with alcohol and other drug abuse treatment systems, systems of mental health, and health care systems.
- System redesign to redirect dollars away from mere confinement towards treatment and rehabilitation while maintaining community security.
- The criminal justice system must have access to existing treatment, health, and social services. These services should be modified to meet the needs of this client population and integrated into a network of care.
- Implementation in the criminal justice system of psychoeducation and prevention programs that focus on AOD, health, and relapse to crime.
- Implementation of specific programs which research studies have found to be effective.
- Piloting programs which have shown promise while conducting research to assess their effectiveness.

their valuable experience with new data on innovative approaches toward treatment and rehabilitation of the multi-problem individual. Criminal justice professionals need to understand the nature and goals of treatment and how treatment and rehabilitation can make the criminal justice system work better. Mental health and chemical dependency professionals must understand the nature of criminal behavior and the criminal justice system to which the client is linked. In each profession, a comprehensive plan must be understood by all branches and levels of service.

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Chapter 3—Causes of Addiction and Modalities for Treatment

For some persons substance abuse progresses from experimental or social use to dependency and addiction. Major consequences ensue for individuals, their families, and society. Addicted persons usually experience increasingly debilitating or dysfunctional physical, social, financial, and emotional effects. Treatment is essential for those who become chemically dependent and are unable to control their use of alcohol or other drugs.

As long as mood-altering, or psychoactive, substances have resulted in personal and social problems, people have tried to understand the causes of dependency and addiction. Two overriding questions abound (Gardner, 1992):

1. *What causes people to initiate and continue behaviors that are often very self-destructive?*
2. *How can these behaviors be changed or controlled to help the involved persons achieve better health and well-being?*

The way in which causes of addiction are understood helps determine the focus of assessment and treatment of substance abuse disorders. Treatment professionals and political and judicial decision makers must have an understanding of the causes of substance abuse and their implications for treatment and other interventions.

This chapter will briefly summarize several prevailing concepts

about the causes of substance abuse. The ways in which different perspectives influence treatment are reviewed, and a synopsis of major treatment modalities and techniques also is presented.

Causes of Alcohol and Drug Addiction

Many assumptions and beliefs about the causes of substance abuse have been espoused. As the amount of knowledge gained through research expands, some of these explanations have been discounted or proved false. For example, the moral model attributes the cause of drug and alcohol problems to moral weaknesses in the character of individuals. Proponents of this model believe change is possible only through personal motivation and efforts. While there is currently little support for the moral model within the drug treatment community (Singer, 1992), it is, unfortunately, still a widely held belief among significant segments of the general population.

Substance abuse, like other physical or mental disorders, is multifaceted and complex. Many viewpoints have been developed that appear to have validity in advancing an understanding of alcohol and other drug addictions. Most researchers and practitioners agree that a single comprehensive

understanding of addiction that applies to all persons and circumstances has not yet evolved. There are no "magic bullets" or miracle cures for substance abuse that can help an addicted person achieve sobriety without the structure, discipline, and personal resolve needed to help him or her remain drug-free. Similarly, in alcohol and other drug treatment modalities, "one size does not fit all." Rather, patient-treatment matching considers the characteristics of treatment programs and the personality, background, mental condition, and substance abuse patterns of individuals to realize the best fit and the greatest chance of successful treatment (Office of National Drug Control Policy [ONDCP], 1990).

Research has shown that certain factors correlate strongly with the early initiation of drug use. Hawkins, Lishner, Jenson, and Catalano (1987) reviewed research studies and found that among youth with histories of drug and alcohol involvement and delinquent behavior, these factors are proportionately more prevalent. A given youth may experience several of these problems and not become involved in delinquency or substance abuse. However, a combination of several of these factors is a stronger indicator of the possibility of such behavior (Hawkins et al., 1987). To emphasize the interrelatedness of factors associated with substance abuse, these findings are briefly

summarized in Table 3–A.

Biological, psychological and social factors are represented in this summary.

The quest by medical scientists to comprehend the complex phenomenon of substance abuse continues, and with each additional piece of knowledge, a better understanding develops. As research continues, it is likely that current knowledge and concepts will be expanded, modified, or rejected. Perhaps new hypotheses will be developed.

Concepts about the causes of addiction often are grouped in various categories because of their similarities and differences. In this text, some concepts that are currently considered valid will be labeled and discussed in four categories:

- biopsychosocial;
- medical;
- clinical; and
- social.

Major contributions to each of these areas will be summarized, and implications for treatment will be considered.

Biopsychosocial Model

As an understanding of addiction has evolved and knowledge has been gained through research, the complexity of the causes for and persistence of substance abuse has been compounded. It now appears that a constellation of factors can be correlated with initiation and continuation of chemical use and dependency. No single explanation appears adequate in most cases. Similarly, across the range of persons affected by substance abuse, there are wide variances in precipitating factors and motivations for continued use.

The *biopsychosocial model* has emerged to provide a broader, more holistic view of substance abuse and its treatment. It is the model that is most widely en-

dorsed by treatment researchers because it can most adequately explain the intricate nature of addiction. This model incorporates elements of all the other more narrowly focused models described later in this chapter.

Biological causes of substance abuse include a possible hereditary predisposition, especially for alcoholism. As research progresses, there also is evidence that use of chemical substances may actually alter brain chemistry. With habitual substance abuse, natural chemicals may no longer be produced in the brain, resulting in dependency on alcohol or other drugs to avoid discomfort. Substance abuse also may be initiated and continued because individuals experience emotional and psychological problems. Initially, chemicals can produce positive sensations that help counteract painful events and underlying problems. Alcohol and other drug use often begins in social situations. It is through social interactions that substance use often is learned and reinforced. Addiction also is often correlated with various social problems such as unemployment, poverty, racism, and family dysfunction.

Variables affecting substance use often interact with each other and cut across multiple levels. When assessing and intervening with an individual troubled by problems related to chemical dependency, the individual's uniqueness, level of functioning, and attraction toward and susceptibility to addictive behavior must be considered. Multiple measures of biological, psychological, and social functioning must be collected, integrated, and interpreted. Addiction, then, is impacted by physiological, social, behavioral, and environmental factors (Donovan & Marlatt, 1988).

The most important implication of the biopsychosocial model for

treatment is the realization that a single treatment approach is unlikely to be sufficient. Rather, as biological, psychological, and social needs are assessed, an integrated, comprehensive treatment response must be implemented to meet the entire range of needs of the individual. The first stage of this response requires a comprehensive assessment to determine the entire range of strengths, needs, and problems presented by the individual.

A biopsychosocial approach necessitates comprehensive services and appropriate patient-treatment matching. For individual patients, this often requires multidisciplinary teams of treatment professionals to provide the array of treatment and case management services needed. A continuum of treatment and supportive services is needed for adequately meeting the extent of needs presented by addicted persons. At community and State levels, an array of adequately funded treatment resources and coordination of policies and services are essential.

Medical/Biological Causes of Substance Abuse

From this perspective, drug addiction is seen as an illness comparable to other diseases, such as diabetes or Alzheimer's Disease. Alcohol or drug addiction is considered a chronic, progressive, relapsing, and potentially fatal disease. Although persons may choose whether or not to initiate the use of psychoactive substances, *alcohol or drug dependence is an involuntary result*. Common characteristics include impaired control over drinking or taking drugs, preoccupation with a substance of abuse, continued use despite adverse consequences, and distortions in thinking (Morse &

Table 3-A.—Family and Environmental Factors

Family Factors:

- **Parent and sibling drug use.** Parental and sibling alcoholism and use of illicit drugs increases the risk of alcoholism and drug abuse in offspring. Attitudes and early drinking behaviors appear to be shaped more by parents and relatives than by peers (Hawkins et al., 1987; Knott, 1986).
- **Poor and inconsistent family practices.** Children from families with lax supervision, excessively severe, or inconsistent disciplinary practices, and low communication and involvement between parents and children are at high risk for later delinquency and drug use (Hawkins et al., 1987). Lack of acceptance, closeness, warmth, and praise for good behavior also are family characteristics associated with adolescent substance abuse (Jaynes & Rugg, 1988).
- **Family conflict.** Children raised in families with high rates of conflict appear at risk for both delinquency and illicit drug use. It is the conflict, rather than the actual family structure (e.g., "broken home" or single parent family) that predicts delinquency and drug use (Hawkins et al., 1987).
- **Family social and economic deprivation.** Social isolation, poverty, poor living conditions, and low-status occupations are circumstances that appear to elevate the risk of delinquency and drug use (Hawkins et al., 1987).

School-Related Factors:

- **School failure.** School failure is a predictor of delinquency and drug use. Truancy, placement in special classes, and early dropout from school are factors associated with drug abuse (Hawkins et al., 1987).
- **Low degree of commitment to education and attachment to school.** This factor is sometimes called school bonding. Low commitment to school is related to drug use. Drug users are more likely than nonusers to be absent from school, to cut classes, and to perform poorly. Dropouts tend to have patterns of greater drug use (Hawkins et al., 1987).

Behavioral and Attitudinal Factors:

- **Early antisocial behavior.** Conduct problems in early elementary grades have been associated with continued delinquency and use of drugs in adolescence. Early delinquent behavior appears to predict early initiation of the use of illicit drugs; and early initiation of drug use increases the risk for regular use and the probability of involvement in crime (Hawkins et al., 1987).
- **Attitudes and beliefs.** Alienation from the dominant values of society, low religiosity, and rebelliousness are related to drug use. Adolescents who are problem drinkers tend to value independence and autonomy, be more tolerant of deviance, and place more importance on the positive than on the negative functions of drinking. They also tend to have lower expectations of achievement. Individuals with positive attitudes toward drug use are more likely to become substance users. Perceiving substance use as normal and widespread behavior is correlated with engaging in substance use. The initiation into use of any substance is preceded by values favorable to its use (Hawkins et al., 1987; Knott, 1986; Schinke, Botvin & Orlandi, 1991).

Environmental Factors:

- **Neighborhood attachment and community disorganization.** Disorganized communities, such as those with high population density, high neighborhood crime rates, and lack of informal social controls, have less ability to limit drug use among adolescents (Hawkins et al., 1987).
- **Peer factors.** Drug behavior and drug-related attitudes of peers are among the most potent predictors of drug involvement. Adolescents tend to increase use of drugs due to the influence of friends, and they also tend to choose friends who reinforce their own drug norms and behaviors (Hawkins et al., 1987). Adolescents who are problem drinkers usually do not feel their peer group and their parents are compatible, are more easily influenced by peers than by parents, and feel more pressure from peers for drinking and drug use (Knott, 1986).
- **Mobility.** Transitions (such as from elementary to middle school and from junior high to senior high school) and residential mobility are associated with high rates of drug initiation and frequency of use (Hawkins et al., 1987).

Constitutional and Personality Factors:

- **Constitutional factors.** These factors are often present from birth or early childhood and are thought to have neurological or physiological origins. Attention and cognitive deficits, such as low verbal ability and poor language and problem-solving skills, have been associated with delinquent behavior. There also is evidence of a constitutional predisposition toward alcoholism, suggesting that genetic factors may play a role in this area (Hawkins et al., 1987).
- **Personality factors.** Alienation, low motivation, sensation-seeking, willingness to take risks, and need for stimulation are associated with drug and alcohol use (Hawkins et al., 1987). Other characteristics associated with substance use include low self-esteem and self-confidence, need for social approval, high anxiety, low assertiveness, rebelliousness, low personal control, and low self-efficacy (Schinke, Botvin & Orlandi, 1991).

Physical and Sexual Abuse:

- This area of investigation is relatively recent. However, some studies have found a high correlation between physical and/or sexual abuse and drug use and/or other deviant behavior. It is postulated that child maltreatment leads adolescents to become disengaged from conventional norms and behaviors and to initiate patterns of deviant behaviors (Dembo et al., 1988). There also appears to be a high correlation between parents' abuse of drugs and alcohol and abuse and neglect of their children. These emotional wounds, in turn, increase the likelihood that youth will use substances to compensate for unmet emotional needs (Nowinski, 1990).

Flavin, 1992). The following medical/biological causes of substance abuse have evolved and are supported by some research findings.

Genetic Causes

Research into the biological causes of addiction has resulted in convincing evidence that there is a hereditary vulnerability to alcoholism. Alcohol-related disorders have been found in multiple generations of families and have been studied over time. It is believed that many people with a genetic predisposition to alcoholism will progress to dependency if they begin using alcohol. Although a similar assumption is often made about other drugs of abuse, research evidence is much more difficult to obtain. Mood-altering drugs produce various pharmacological effects. The use of drugs over time is often influenced by fads and availability. Thus, different generations of families may be exposed to different types of drugs, whereas use of alcohol has been consistent over several generations. This makes the multigenerational study of drug abuse more difficult than similar studies of alcoholism (Anthenelli & Schuckit, 1992).

Brain Reward Mechanisms

Certain areas of the brain, when stimulated, produce pleasurable feelings. Psychoactive substances are capable of acting on these brain mechanisms to produce these sensations. These pleasurable feelings become reinforcers that drive the continued use of the substances (Gardner, 1992).

Altered Brain Chemistry

Because of long-term use of alcohol or other drugs, the normal release of various types of natural chemicals in the brain that produce pleasurable sensations may be disrupted. Habitual substance abuse

can alter brain chemistry, requiring continued use of psychoactive substances to avoid discomfort created by brain chemistry imbalance (Hollandsworth, 1990; ONDCP, 1990; Serban, 1984).

Self-Medication

Some individuals who have psychiatric conditions, such as anxiety or depression, use psychoactive substances to alleviate the symptoms they experience. If their emotional discomfort is relieved by alcohol or other drugs, they may persist in using chemicals to continue achieving such results (Jaffe, 1992; Schinke, Botvin & Orlandi, 1991).

Concepts of the medical/biological causes of substance abuse influence treatment in two important ways. First, according to these concepts, *abstinence* is viewed as the only feasible way to avoid the negative consequences of substance abuse. If alcohol- or drug-dependent persons are unable to control their use of chemical substances (whether because of genetic factors, metabolic imbalance, or altered brain chemistry), they must refrain from any use of psychoactive substances. It is impossible for them to use any alcohol or other drugs without experiencing physical, social, and emotional effects.

Second, *pharmacotherapeutic interventions* have been developed or are being sought to meet the following needs (National Institute on Drug Abuse [NIDA], 1991):

- substitute for abused drugs and provide a more controllable form of addiction;
- block the effects of abused drugs;
- reduce cravings for drugs; and
- alleviate drug withdrawal symptoms and block the toxic effects of drugs.

Use of pharmacological modalities is regulated by the United States Food and Drug Administration (FDA). Programs providing this type of treatment must have medical staff who administer medications and supervise the program and patients. Pharmacotherapeutic interventions will be described more fully later in this chapter and in Chapter 8.

Methadone is a chemical substance used to replace abused narcotic drugs. Methadone prevents the physical withdrawal symptoms experienced by opiate addicts, does not deliver the mood-altering experience of opiates, and, therefore, allows dependent persons to focus on activities other than procuring and using heroin. It is also valuable in the treatment of infectious diseases and mental health problems. The incidence of HIV/AIDS and other infectious diseases (see Chapter 7) is escalating among drug-involved persons, especially injection drug users. Methadone treatment can help these persons control their use of illicit injection drugs and improve their general health. In so doing, they will reduce the probability of becoming infected. If they are already infected, cessation of illicit drug use will likely boost the functioning of their immune systems and delay the onset of AIDS.

All treatment modalities to be discussed in this document stress abstinence from all psychoactive substances. In some instances, pharmacotherapeutic interventions offer the best course of treatment for addictions. These treatment approaches often are coupled with behavioral or psychosocial interventions. More information on treatment modalities will be provided later in this chapter. Chapter 8 furnishes specific information about pharmacotherapeutic interventions.

Clinical Causes of Substance Abuse

Clinical or psychological causes of addiction focus on personal needs or personality traits of those abusing substances. They can be divided into two categories: (1) those emphasizing the rewards derived from the use of mood-altering drugs that tend to perpetuate their use, and (2) those stressing that substance abusers have different personalities from those who abstain (Goode, 1972).

Reinforcement Processes

People tend to seek rewards and minimize negative consequences through their behaviors. If past behaviors have brought a response that is perceived as reinforcing, persons tend to repeat those behaviors to obtain similar rewards. Drug use may be rewarded in several ways, as described in the following list.

- *Positive reinforcement.* Persons abusing drugs and alcohol have found their use rewarded and, therefore, continue use (Goode, 1972; Jaffe, 1992). Without a positive reward, substance abuse would not likely continue, according to this perspective. There are many types of positive rewards that may accrue to someone using psychoactive substances, including their pharmacological effects (e.g., euphoria), social rewards, peer acceptance and esteem (Jaffe, 1992; Shaffer, 1992).
- *Avoidance of pain.* Behaviors also may be motivated by a need to seek relief or avoid pain. If using alcohol or other drugs helps someone who is suffering (physically or emotionally), he or she is likely to use the substance again when experiencing the same distress, and a strategy for coping with pain or stress develops that is dependent on the use of alcohol and other drugs. Some

drugs produce painful withdrawal symptoms when use of them is discontinued. Persons dependent upon a drug may find that taking a dose will diminish their pain (Goode, 1972; Jaffe, 1992). Substance abuse also may be motivated by a desire for relief from pain, anger, anxiety or depression, and alleviation of boredom (Jaffe, 1992; Shaffer, 1992).

- *Drug cues.* Another aspect of reinforcement pertains to the anticipation of rewards. Certain stimuli can be associated with a drug and its rewards. These stimuli may act as triggers for drug seeking and use. Physiological responses, sometimes called cravings, may result from the introduction of a cue or stimulus. Cues vary from one individual to another, but may include being with specific people, engaging in particular activities, or going to certain places (Childress, Ehrman, Rohsenow, Robbins & O'Brien, 1992; Jaffe, 1992).

Personality Traits

The use of drugs is linked with emotional problems and personal inadequacies according to this school of thought. Substance abuse may provide the individual with an escape from the problems of life through euphoria and drug-induced indifference. Although such drug use may mask certain difficulties temporarily, the underlying problems are not solved, and addiction generates new, and often more serious, problems (Goode, 1972).

As a response to psychological suffering, substance abuse is sometimes viewed as an adaptive effort for survival. Associations have been found between drug use and psychological characteristics such as low self-esteem, low self-confidence, low self-satisfaction, need for social approval, high

anxiety, low assertiveness, greater rebelliousness, and self-regulatory deficiencies. The causes of these characteristics have been attributed variously to factors such as peer rejection, parental neglect, high achievement expectations, school failure, social and physical stigma, and poor coping ability, among others. Deviant activity, such as substance abuse, may be chosen by some as a way of achieving group acceptance, status, and membership or escaping the realities of rejection (Brehm & Khantzian, 1992; Goode, 1972; Schinke, Botvin & Orlandi, 1991). Some research indicates that Antisocial Personality Disorder and Borderline Personality Disorder may place persons at increased risk of substance abuse (Mirin & Weiss, 1991).

Based on the concept of reinforcement, behavioral treatment approaches often try to help individuals find significantly greater rewards from legitimate activities. Involvement in a variety of activities, depending on individual interests and abilities, may help some persons achieve greater peer acceptance and self-esteem. Substituting other activities to achieve feelings of happiness and well-being also are recommended. For example, some persons claim to get a "high" from running or other physical activities. Virtually all of the prevailing psychosocial treatment approaches emphasize helping chemically dependent persons learn new ways to structure their time and social relationships through drug-free activities.

Relapse prevention, a critical component of treatment, is closely tied to drug cues. Approaches are recommended for helping individuals control or change their reactions to drug cues. Avoiding people, places, and activities formerly associated with substance abuse is one example. Relapse prevention is a critical element of

any treatment approach. Chapter 9 will provide more information on relapse prevention.

Aversive conditioning is a technique that involves pairing a negative stimulus with drug cues. Some methods that have been tried include chemically or hypnotically induced nausea or electric shocks paired with the sight, taste, smell, or other reminders of specific substances. Another approach, sometimes called extinction or cue exposure, consists of presenting the drug cue repeatedly. However, in controlled settings, where this cue cannot be followed by alcohol or drug use, reaction to the stimulus is gradually reduced. Substance abusers also may receive skills training and cognitive behavioral counseling to provide them with tools to avoid relapsing to alcohol or other drug use (Childress et. al., 1992; Siegel, 1988).

A variety of therapeutic interventions may be implemented in addressing the personal and emotional problems thought to underlie substance abuse. Traditional mental health approaches may include building self-esteem, lowering anxiety, and resolving other distressful problems through individual, group, and family counseling.

Behavioral or psychosocial treatment approaches often are linked to a clinical understanding of addiction. These methods include self-help and individual, group, and family counseling. All rely heavily on changing the individual's self-concept and dealing with distressing situations and relationships thought to underlie substance abuse.

Social Causes of Substance Abuse

These perspectives focus on situations, social relations, or social structures related to substance abuse. Virtually any factor outside

the individual, such as peers, family, or the media, could be associated with social causes of addiction.

Social Learning

In group settings, individuals are exposed to persons who model certain behaviors, and they receive rewards or punishments for their own behaviors from group members. When one associates with groups that define drug use as desirable and whose members model drug-related behavior, drug use by the individual is learned and rewarded (Goode, 1972).

Subculture Perspectives

This viewpoint indicates that drug use is expected and encouraged in certain social circles, while it is discouraged, and even punished, in others. There is not a single drug subculture; rather, there are several of them. For example, there might be a drug subculture of white, high school youth, or young adult black males, and some drug subcultures are formed according to the drug of choice (e.g., groups for alcohol, marijuana, cocaine, or heroin users). Members of a subculture teach new members how to use a particular drug, supply the drug initially, and provide role models (Goode, 1972).

Socialization

According to this perspective, potential drug users are attracted to other drug-involved individuals and drug subculture groups because their own values and activities are compatible with those of persons who use drugs. The four main agents of socialization for adolescents are parents, peers, school, and the media. The greater the youth's affinity for drug use, the more likely he or she is to choose to participate with others having similar values and norms. Alienation from parents and friendship with drug-using peers

are especially strong factors in the socialization of youth into drug use (Goode, 1972).

Social Control

This approach claims that absence of the social control requiring conformity leads to drug abuse. Those more attached to conventional society are less likely to engage in behavior that violates societal values and norms. Socially detached persons will not feel the constraint of these norms and values (Goode, 1972).

Social, Economic, and Political Factors

Elements of unemployment, poverty, racism, sexism, family dissolution, and feelings of powerlessness and alienation are associated with the problem of substance abuse. Although not universal by any means, some persons consistently subjected to these conditions are drawn into drug activity to escape their painful life circumstances (Haddock & Beto, 1988; Lowinger, 1992).

One approach to treating substance abuse from the social perspective involves changing the substance abuser's environment and peer associations. The behavioral treatment approaches emphasize positive peer associations and pro-social lifestyles and activities. For example, therapeutic communities are based on group support and confrontation to help members learn new attitudes and behaviors toward drugs and other persons (NIDA, 1991). Self-help strategies similarly encourage drug-free activities and association with others in recovery.

Working to strengthen social values and norms that preclude drug dependency also is important. Our society generally is committed to eliminating pain, suffering, and discomfort (Serban, 1984). Millions of dollars are spent on advertising

products such as patent medicines, alcohol, and tobacco as "quick cures" for physical and emotional distress. Promoting and glamorizing the use of such substances contributes to an attitude that drinking and other drug use is acceptable and even desirable. Instant gratification is an underlying theme throughout most of American society.

Treatment strategies must consider more than just the individual affected by substance abuse. Considerations of economic, political, and social changes are also important concerns of treatment professionals and decision makers.

The Role of Detoxification

Detoxification is not a treatment modality, but is the necessary first step in the treatment process. Detoxification provides medical and supportive services needed to alleviate the short-term symptoms of physical withdrawal from chemical dependence, including physical discomfort and cravings, as well as mood changes (Institute of Medicine, 1990; ONDCP, 1990). Once symptoms of craving and withdrawal are controlled, treatment can begin.

The purpose of detoxification is to help the patient stabilize physically and psychologically until the body becomes free of drugs or the effects of alcohol. Within this broad goal there are several additional objectives that can be targeted. Promoting the health of the individual can be accomplished through measures to reduce and control seizures that occur with some drugs. It also includes screening for and treating infectious diseases and other medical problems. Drug education and relapse prevention pro-

gramming can begin during detoxification. Some attention may even be given to family, vocational, religious, and legal problems in some settings. It is also important that detoxification be used as an opportunity to recruit and prepare persons for appropriate longer-term treatment programs (Alling, 1992; Institute of Medicine, 1990; ONDCP, 1990).

There are three major categories of abused substances that often require detoxification: (1) alcohol and other central nervous system (CNS) depressants; (2) opiate drugs; and (3) cocaine. Some of the major considerations for each are described.

Alcohol Detoxification

Following withdrawal from alcohol, a dependent person may experience several symptoms, including:

- eating and sleep disturbances;
- tremors (involuntary trembling motion of the body);
- sweats;
- clouding of the sensorium;
- hallucinations;
- agitation;
- elevated temperature;
- change in pulse rate; and
- convulsions.

Some of these symptoms can be life-threatening (Alterman, O'Brien & McLellan, 1991). In addition, the potential for suicide must be considered. Because of the possibility of these extreme consequences, there should be clearly defined procedures to follow when an individual is experiencing alcohol detoxification. These should be implemented in a variety of settings, including jails, shelters, and other congregate living situations.

Alcohol detoxification is usually provided in a hospital setting for five days or less. Medical supervision is needed to provide medications, vitamin therapy, and,

in some cases, measures to correct water and electrolyte imbalances. Alcohol detoxification also may be provided in nonhospital settings, but the rates of successful completion have been much lower.

Patients who need medical or psychiatric care, have no housing, have coexisting drug dependence, are unemployed, or come to the initial visit intoxicated are less likely to succeed in outpatient treatment and are more likely to need hospitalization (Alterman, O'Brien & McLellan, 1991).

Medications that can be useful in the treatment of alcohol withdrawal include benzodiazepines and other CNS depressants such as barbiturates. Clonidine and beta blocking drugs may help decrease symptoms of tremor, fast heart rate, and hypertension (Schuckit, 1989).

Detoxification From Other CNS Depressants

This category includes sedative drugs (such as barbiturates), hypnotic drugs (such as methaqualone), and anxiolytics, used for the treatment of anxiety. These drugs have legitimate medical uses, but they are also subject to misuse. Signs of abuse and dependency include:

- gradually increasing use;
- periods of intoxication;
- functional impairment; and
- unsuccessful attempts to decrease or discontinue use.

Sudden discontinuation of these drugs may result in life-threatening withdrawal (Alling, 1992). Again, procedures should define steps to be taken to ensure the safety of individuals withdrawing from CNS depressants. Signs of withdrawal include (Alling, 1992):

- tremor (involuntary trembling);
- hyperreflexia (increased/heightedened sense of reflex);

- agitation;
- hypertension (high blood pressure);
- tachycardia (excessively rapid heart beat);
- insomnia;
- vomiting, nausea;
- diaphoresis (excessive perspiration);
- cognitive impairment (memory loss, decreased ability to concentrate);
- seizures;
- weakness;
- anorexia;
- irritability;
- anxiety, restlessness;
- headache;
- muscle aches;
- depression;
- tinnitus (buzzing, whistling, or ringing sound in the ears);
- depersonalization (a state of impersonality, not of one's usual character);
- paranoid delusions; and
- hypersensitivity to touch, light, and sound.

Detoxification from these drugs is achieved by gradually reducing the amount of the substance used or by substituting a similar acting drug and then gradually withdrawing it by decreasing the dosage. Phenobarbital is an often-used drug substitute for this purpose (Alling, 1992).

Detoxification From Opiate Drugs

Detoxification from opiate drugs is needed as an initial treatment for opiate dependence (usually heroin) when addicts are entering a drug-free rehabilitation program. Detoxification also may be implemented when a person who has been stabilized on methadone wishes to discontinue its use. According to recent regulations by the FDA, methadone can be used for detoxification for up to 180 days (Alterman, O'Brien & McLellan, 1991).

Some of the more common symptoms of opiate withdrawal include the following (Alling, 1992):

- increased blood pressure, pulse rate, and temperature;
- piloerection ("gooseflesh");
- increased pupil size;
- rhinorrhea (nasal drainage/mucus, can be excessive);
- lacrimation (excessive secretion of tears, heavy tearing);
- tremor;
- insomnia;
- vomiting, nausea;
- muscle aches;
- abdominal cramps;
- irritability;
- anorexia;
- weakness/tiredness;
- restlessness;
- headache;
- dizziness/lightheadedness;
- sneezing;
- hot or cold flashes; and
- drug craving.

The most common approach to detoxification from opiate drugs is the substitution of a longer-acting opioid, such as methadone, which blocks symptoms of withdrawal and drug cravings. The amount of methadone can then be gradually reduced. Combined with counseling services, methadone can help addicts quit using illicit drugs. It has reduced criminal behaviors associated with obtaining and taking illicit drugs. Vocational and educational services, coupled with cessation of illegal drug use, can help individuals lead more stable and productive lives. Clonidine is another drug that is used sometimes because it can block many of the signs and symptoms of opiate withdrawal. Acupuncture and electrostimulation of the central nervous system have also been used to alleviate withdrawal symptoms of opiate drugs. Reducing injection drug use and needle sharing among heroin addicts also diminishes the risk of contracting or spreading HIV and other

substance abuse-related infectious diseases (Alling, 1992; Alterman, O'Brien & McLellan, 1991; Centers for Disease Control, 1989; U.S. General Accounting Office, 1990).

Detoxification From Cocaine

Cocaine dependence results in a period of physical and mental instability upon discontinuation of use. The usual pattern of cocaine use involves "binges" or "runs" lasting from 12 to 36 hours during which the person consumes all the cocaine available. Following this are periods usually lasting several days during which no cocaine is used and detoxification occurs (Alterman, O'Brien & McLellan, 1991; Institute of Medicine, 1990). The effects of withdrawal include:

- irritability;
- weakness;
- reduced energy;
- hypersomnia (an excessive feeling of sleepiness, fatigue);
- depression;
- loss of concentration;
- diminished capacity to experience pleasure;
- increased appetite; and
- paranoid ideations.

In addition, the cocaine-dependent person will experience cravings for the drug, leading to another episode of bingeing on the drug (Alterman, O'Brien & McLellan, 1991; Institute of Medicine, 1990).

Detoxification efforts have focused on ways of managing withdrawal symptoms and cravings long enough to disrupt the cycle of bingeing and craving. Drugs that have been used to counteract cocaine withdrawal problems include:

- desipramine hydrochloride;
- amantadine;
- bromocriptine;
- flupenthixol decanoate; and
- buprenorphine.

These are usually administered on an outpatient basis and accompanied by counseling. However, for persons with concomitant psychiatric or medical problems (e.g., pregnancy, myocardial damage) inpatient care is recommended. Patient dropout rates for these treatments (especially outpatient programs) tend to be high, because it usually takes one to two weeks for the therapeutic effects of medications to begin (Alterman, O'Brien & McLellan, 1991; Institute of Medicine, 1990). In the interim, the cycle of craving and cocaine use may continue.

Addiction is considered a medical illness with related psychological and social dimensions. As reviewed in Chapter 1, substance abuse problems progress from experimental to addictive use for some people. This process occurs more quickly for some people than it does for others. Detoxification is *necessary* to prepare patients for the treatment process. It is particularly important for those who have become dependent on alcohol and other CNS depressants, opiate drugs, and cocaine. Until the body is free of the effects of the drugs and the distorted thoughts and feelings they produce, it is difficult for recovery to begin.

Studies have shown that rapid relapse is likely to follow detoxification unless patients become engaged in additional treatment and transition services. Persons completing a detoxification program without continuing treatment are no more likely to succeed in reducing future drug use than persons achieving unassisted withdrawal.

The use of methadone has been well researched, and its effectiveness as part of the detoxification process for opiate drugs has been

supported. However, many other drug treatments for alleviating withdrawal symptoms either have not been well researched or have resulted in contradictory findings. Thus, this is an area requiring additional medical research. As with any medical problem, when medications, such as methadone, Antabuse, and others, are used, supervision by a physician is required.

There also are varied findings regarding the preference of inpatient or outpatient care. Inpatient care is clearly necessary when the individual has associated psychiatric or medical problems. Because of the potential for life-threatening withdrawal symptoms, alcohol detoxification often takes place in a hospital or other medical facility. Patient retention in detoxification programs also has been significantly greater with inpatient programs compared to outpatient care. However, some research findings are emerging indicating that outpatient alcohol detoxification may be as beneficial in many cases and is much more cost-effective (Alterman, O'Brien & McLellan, 1991; Institute of Medicine, 1990).

The Institute of Medicine (1990) recommends that hospital-based drug detoxification be used only if medical complications occur or when appropriate residential or outpatient facilities are not available. The conditions for which hospital-based drug detoxification is recommended include:

- serious concurrent medical illness such as tuberculosis, pneumonia, or acute hepatitis;
- history of medical complications such as seizures in previous detoxification episodes;
- evidence of suicidal ideation;
- dependence on sedative-hypnotic drugs; and

- history of failure to complete earlier ambulatory or residential detoxification.

Treatment for Alcohol and Other Drug Problems

Some persons who *use* drugs do not need drug treatment. Many people can use alcohol and some illicit drugs without encountering adverse consequences. Some grow weary of a lifestyle in which the pursuit of drugs and managing the varied consequences of substance use predominates. Most people who have not progressed to the point of dependency or addiction are able to decide to stop using drugs and maintain this resolve. However, a social climate that is intolerant toward substance abuse and the risk of social, legal, or employer sanctions may be needed for them to make and maintain their decision to stop or limit their drug use (ONDCP, 1990).

For those who are dependent or addicted, treatment for substance abuse is crucial in controlling their substance abuse and improving their health and social functioning. Without treatment, substance abuse may ultimately be fatal because of the risk of overdose, related suicides and homicides, and infectious diseases and other assaults to one's health. Yet few voluntarily seek treatment. Cessation of drug use is very difficult and treatment programs can be demanding and intense (ONDCP, 1990).

However, for those who enter and remain in treatment, the news is often positive. Research indicates that treatment is effective and many drug- and alcohol-involved persons respond favorably to a diversity of treatment approaches (NIDA, 1991).

Major Treatment Modalities

There is no “magic bullet” for effectively treating persons with substance abuse problems. Different people respond to various approaches in diverse ways. The effects of various substances of abuse produce different symptoms and needs among users. As indicated earlier, there are diverse ways in which the causes and progression of drug and alcohol addiction may be understood. This makes it critically important that individuals be matched appropriately with the treatment program or modality that is most likely to attack the problems resulting in their particular needs; the most successful treatment is individualized. Many factors must be considered, including personality, background, mental condition, and drug use experience (ONDCP, 1990). More information on treatment matching will be provided in Chapter 5.

There are several ways to categorize treatment programs and modalities. In this text they will be grouped into two broad categories:

1. Those that are biologically based, including:
 - pharmacotherapeutic treatment
 - acupuncture
2. Those that are behaviorally or psychosocially based, including:
 - residential or inpatient treatment programs, such as:
 - inpatient hospitalization
 - therapeutic communities
 - outpatient nonmethadone treatment

Various treatment components and approaches are used in these treatment programs and modalities, including:

- self-help programs;

- individual counseling;
- group counseling/treatment;
- family therapy; and
- behavior modification.

After a summary of detoxification, the first step in treatment for drug-dependent persons, the remainder of this chapter will provide a brief description of each of the major treatment approaches commonly found in the United States. General information about each treatment method will be provided, realizing that approaches can vary markedly because of differences in settings, professional staff, and client characteristics. Available information about the effectiveness of each of these modalities also will be provided.

Pharmacotherapeutic Modalities

Substance abuse, by definition, is a chronic disease in which the use of psychoactive substances may result in both physical and psychological addiction. Thus, one treatment approach that has shown favorable outcomes is pharmacotherapy—the use of approved medications with medical supervision. The goals of pharmacotherapy include (Lowinson, Marion, Joseph & Dole, 1992):

- reduction in the use of illicit drugs or alcohol;
- reduction in criminal behavior; and
- improvement of social behavior and psychological well being.

A further goal is the urgent imperative to control and prevent the spread of substance abuse-related infectious diseases, such as HIV/AIDS and tuberculosis. For those already infected, treatment for alcohol and other drug addiction may stabilize their physical condition, boost the immune system, and delay or prevent the onset of serious illness.

More research has been conducted on drug therapies for opiate drugs and alcohol than on other categories of abused substances. There are four categories of pharmacological treatment for substance abuse. Each will be defined, followed by some examples of the more common pharmacotherapeutic agents. A more extensive discussion of pharmacotherapy can be found in Chapter 8.

Agonists

These drugs can be substituted for the drug of abuse to provide a more controllable form of addiction. The properties and actions of these drugs are similar to those of particular abused drugs. Using them alleviates many of the withdrawal symptoms often experienced by persons addicted to various psychoactive substances. Examples of drugs in this category include methadone, clonidine, and LAAM.

Methadone, a synthetic narcotic analgesic compound, is the most commonly used form of pharmacotherapy for opiate drugs. It is medically safe and has few side effects. It produces a stable drug level and is not behaviorally or subjectively intoxicating. It blocks the cravings for opiate drugs and does not produce euphoria, as heroin and other drugs do. The characteristics of methadone patients have changed considerably over the past decade because of increased rates of HIV infection among intravenous drug abusers, concomitant use of cocaine and crack, and homelessness. These changes have resulted in methadone programs' needs for enlarged and more sophisticated physical facilities, better trained staff, and more funding (Lowinson, Marion, Joseph & Dole, 1992).

Among the various pharmacotherapies, methadone maintenance has been studied most thoroughly.

Methadone maintenance is generally successful in meeting treatment goals. When appropriate doses of methadone are administered, heroin use decreases markedly. However, in some cases other drugs, such as cocaine and alcohol, continue to be used. A substantial reduction in criminal behavior has been documented by several studies, and this reduction increases with length of time in methadone treatment. Socially productive behavior, such as employment, education, or homemaking, has also been shown to improve with the length of time in treatment (Lowinson, Marion, Joseph & Dole, 1992).

Clonidine can partially suppress many withdrawal symptoms of opiates, alcohol, and tobacco. It is most effective for persons who are motivated and involved in their treatment program. It is not as useful in maintaining abstinence after withdrawal from opiate drugs has been achieved (Greenstein, Fudala & O'Brien, 1992; Thomason & Dilts, 1991).

LAAM (levo-alpha-acetylmethadol) is an experimental synthetic opiate that produces morphine-like effects. It is longer acting than methadone, allowing for doses to be administered only three times per week. It has not yet been approved in the United States for treatment of opiate dependence (Greenstein, Fudala, & O'Brien, 1992; Thomason & Dilts, 1991).

Antagonists

These drugs occupy the same receptor sites in the brain as specific drugs of abuse. However, they do not produce the same effects as the abused drugs, and they are non-addicting. Thus, when they are present, the effects of the abused drug are blocked because they cannot act on the brain in the usual way. Therefore, they do not produce the expected

mood-altering experiences. Antagonists may be used for persons who do not want to be maintained on drug substitutes (i.e., agonists, like methadone); they also are used, at times, for persons leaving other drug-free treatment programs and re-entering the community, to diminish their risk of relapse (Greenstein, Fudala & O'Brien, 1992).

Naltrexone is an opiate antagonist, but experimental use with alcohol addiction has also been initiated. It does not result in euphoria as do opiate drugs (Alterman, O'Brien & McLellan, 1991; Greenstein, Fudala & O'Brien, 1992; Wesson & Ling, 1991).

Buprenorphine is a mixed agonist-antagonist agent. It is long-acting and blocks the effects of other opiate drugs. It produces less physical dependence than methadone, but some withdrawal symptoms do occur with its use (Greenstein, Fudala & O'Brien, 1992; Thomason & Dilts, 1991).

Antidipsotropics

These drugs create adverse physical reactions when the person consumes the substance of abuse. These drugs are used to develop an aversion to the abused drug (Alterman, O'Brien & McLellan, 1991).

Antabuse (disulfiram) interferes with the metabolism of alcohol, causing unpleasant side effects when alcohol is ingested. Facial flushing, heart palpitations and a rapid heart rate, difficulty in breathing, nausea, vomiting, and possibly a serious drop in blood pressure are the major effects produced by the combination of alcohol and Antabuse. Paired with other treatment approaches, Antabuse has been successful in preventing relapse (Alterman, O'Brien & McLellan, 1991; Doweiko, 1990).

Psychotropic Medications

These control various symptoms associated with drug use and withdrawal. Antianxiety drugs, antipsychotics, antidepressants (for major depressions), and lithium have been tested. However, further research is needed on the effectiveness of these agents, as current research has produced conflicting results in some cases or has been inconclusive (Alterman, O'Brien & McLellan, 1991; Wesson & Ling, 1991).

Wesson and Ling (1991) conceptualize two categories of therapeutic medications. Those that help patients *stop abusing drugs* include medications that reduce acute drug withdrawal symptoms, medically maintain patients, decrease drug craving, and block the drugs' reinforcing effects. Methadone, clonidine, buprenorphine, LAAM, desipramine, bromocriptine, and naltrexone are included in this category. Medications that help *prevent relapse* are able to reduce prolonged withdrawal syndromes, decrease drug craving, alter the drug's reinforcing effects, treat underlying psychopathology, and treat drug-induced psychopathology. Included in this category are antidepressants, desipramine, bromocriptine, naltrexone, and disulfiram.

Most research and development of medications used in the treatment of addictive diseases has been fostered by the federal government. In treating most diseases, clinical trials of new medications usually are undertaken by pharmaceutical companies. However, these companies have been reluctant to associate their organizations and medications with drug addiction. This is, in part, due to the negative stereotypes of drug abusers. The number of persons who could benefit from a particular pharmacological treatment for addiction is also comparatively small. Thus, if

involved in developing medications for addictive disorders, the pharmaceutical industry would not realize the degree of profit or recover its investment for research and development to the extent desired. There is also concern that medications will be diverted for street use or will be used in combination with other illegal drugs. Pharmaceutical companies worry that the drugs or their companies will gain a bad reputation if this occurs (Wesson & Ling, 1991).

Acupuncture and Transcutaneous Electrical Nerve Stimulation

Acupuncture applies a treatment method developed in China and other Far Eastern countries to the problem of alcohol and drug addiction. Addiction represents an adaptation of the central nervous system's activity in response to chronic drug administration, resulting in withdrawal symptoms when drug use is discontinued. Acupuncture or transcutaneous electrical nerve stimulation can modulate central nervous system activity in those regions of the brain affected by substances of abuse (Katims, Ng & Lowinson, 1992). Therefore, acupuncture may serve as a useful adjunct to comprehensive treatment for addiction.

Acupuncture involves placing needles at strategic body points (usually the outer ear). The treatments generally last for 45 minutes and are administered daily for the first few weeks and then are decreased. It is most commonly used to help drug users detoxify. The effect is a reported reduction in withdrawal symptoms and the physical craving for drugs and alcohol. Ideally, acupuncture treatment is combined with a comprehensive treatment ap-

proach, including counseling, drug testing and other interventions. Two significant advantages of this approach, at least in some programs, are its low cost and lack of waiting lists. Transcutaneous electrical nerve stimulation produces similar results but uses a different technology. Both therapeutic techniques can provide physiologic relief without toxicity or the potential for abuse that may be inherent in the use of medications (Bullock, Umen, Culliton & Olander, 1987; Chan, 1991; Katims, Ng & Lowinson, 1992; Singer, 1992).

Although still considered experimental, some limited research results have indicated benefits to patients with this form of therapy. In one controlled study, a group of alcoholics receiving acupuncture had significant continued treatment effects at the end of a six-month period. The control group, which received "sham" acupuncture (needles were put near but not on specified acupuncture sites), expressed moderate to strong desires to abuse alcohol (Singer, 1992).

Residential or Inpatient Treatment Programs

Programs in which the individual lives in the facility while participating in treatment can be defined as inpatient or residential programs. Some detoxification programs as well as therapeutic communities, and hospital-based programs are in this category. These programs are most appropriate for individuals who have not been successful in outpatient settings, those who have a very serious substance abuse problem, those needing concomitant medical or psychiatric care or observation, and those without a stable social support system in the community. Inpatient programs are the most restrictive, structured, and protective types of programs (Doweiko, 1990).

Inpatient Hospital Treatment

Inpatient treatment programs may be located in hospitals or in specialized chemical dependency centers. Chemical dependency treatment, Minnesota Model, 28-day programs, or Hazelden-type treatment are terms that may be used to denote this type of treatment approach. Many of these programs are privately financed; thus, patients are usually employed persons (or have employed spouses or parents) with private insurance. The goal of treatment is abstinence from alcohol or other drugs (Institute of Medicine, 1990).

A variety of treatment techniques and strategies are usually employed in these programs, including the Twelve-Step model (the basis of Alcoholics Anonymous and other self-help programs), individual, group and family counseling, drug education, and medical management. Long-term aftercare and transitional services, especially for opiate addicts, are an important part of treatment, but many programs do not devote significant resources to them (Doweiko, 1990; Institute of Medicine, 1990). These programs may be especially appropriate for persons with concomitant psychiatric disorders, persons assessed to be suicidal, those addicted to more than one chemical, or persons with serious medical complications. Inpatient treatment provides comprehensive treatment services, constant support during the early stages of sobriety, and close supervision to prevent relapse and respond to medical emergencies. Most inpatient programs have a multidisciplinary staff team, representing a range of training and experience and capable of offering a variety of services (Doweiko, 1990).

Several studies have consistently found that chemical dependency (inpatient) treatment is more effective for persons with alcohol addiction than for those whose presenting problem is another drug addiction. Those addicted to more than one substance (polydrug users) have the poorest prognosis (Institute of Medicine, 1990).

Therapeutic Communities

Therapeutic communities are self-contained residential programs that emphasize self-help and rely heavily on ex-addicts as peer counselors, administrators, and role models. They provide a highly structured milieu, with program stages through which members must progress; this advancement is noted with special tasks and ceremonies. The stages progressively demand more responsibility and provide more freedom. Group encounter sessions often are confrontational, focusing on openness and honesty. Social and vocational skills also are taught.

The goals of therapeutic communities include (Institute of Medicine, 1990):

- habilitation or rehabilitation of the total individual;
- changing negative patterns of behavior, thinking, and feeling that predispose drug use; and
- development of a drug-free lifestyle.

Because of costs, availability, and insurance reimbursement, several adaptations of the therapeutic community model have been developed (Singer, 1992). These include:

- *Modified therapeutic communities, where stays last an average of six to nine months.* The goals of treatment are more limited, but the primary objective is to help residents achieve a drug-free state and acquire practical living

skills. This model is appropriate for persons with minimal social support systems (Singer, 1992).

- *Short-term therapeutic communities, where residents remain an average of three to six months.* The primary goal of this approach is to help persons attain a drug-free lifestyle; much less emphasis is placed on re-socialization. This model is appropriate for persons from a stable social and family environment (Singer, 1992).
- *Adolescent therapeutic communities for juveniles.* Modifications needed for youth include: increased supervision to prevent youth from leaving the program or engaging in antisocial behavior and negative peer activities; more recreational activities to promote leisure skill-building and prevent boredom; greater family involvement; academic education; increased staff-to-youth ratio; separation of youth by gender except for occasional program activities; and limiting the size of the program to 45 or fewer youth (Mullen, Arbitr & Glider, 1991).
- *Therapeutic communities in correctional facilities to begin the treatment process in jails and prisons.* These focus on socialization, positive value formation, and education. When released, inmates are referred to other treatment agencies in the community. This approach attempts to form a strong, positive, anti-drug culture; develop work teams; and provide referral and transitional services. Successful programs must have good working relationships between treatment and correctional personnel (Arbitr, 1988).

This modality has been considered appropriate for hard-core drug users involved in criminal activities. The treatment approach is not specific to any particular class of drugs. Individuals depen-

dent on any illicitly obtained drug or combination of drugs are accepted in therapeutic communities. Characteristically, participants in therapeutic communities have experienced problems with social adjustment to conventional family and occupational responsibilities because of drug seeking (and, in some cases, before initiating drug use). Therapeutic communities often are seen as a next step for persons who continue to relapse in less restrictive treatment settings (Institute of Medicine, 1990; Thomason & Dilts, 1991).

Because of these programs' use of confrontation and prohibition of psychotropic drugs, the use of therapeutic communities is *not* appropriate for individuals with psychopathology or with substance abuse-related neurological damage. For some persons, especially those who have low levels of self-esteem and impaired neurological functioning, the confrontational approach of the modality may be too intense (Singer, 1992).

The length of stay in traditional therapeutic communities ranges from 6 to 24 months (ONDCP, 1990). Research has shown that the longer clients remain in therapeutic communities, the more likely they are to have positive results. However, traditionally, dropout rates are high. Approximately 15 to 25 percent of those admitted to therapeutic communities complete the program and graduate. About 25 percent drop out within two weeks, and about 40 percent, by three months (Alterman, O'Brien & McLellan, 1991; Institute of Medicine, 1990).

One study found that early dropouts from long-term therapeutic communities had common psychosocial characteristics, including (O'Brien & Biase, 1992):

- low self-esteem and self-value;
- poor concept of self-identity;
- low self-acceptance;

- low evaluation of self-behaviors;
- low evaluation of physical attributes, health, and sexuality;
- low assessment of self-worth and self-adequacy;
- low evaluation of self in relation to family/friends and primary group;
- high levels of self-criticism and lack of adequate defenses; and
- a tendency to overemphasize negative features.

Evaluations of therapeutic communities demonstrate that they are cost-effective when compared with prisons. While persons are in the program, criminal activity is significantly reduced compared with pre- or post-treatment criminal activity. For those who complete the program, illicit drug use and criminal activities are diminished, while employment status improves (Institute of Medicine, 1990; Singer, 1992). Approximately 15 percent of therapeutic community graduates qualify to be trained for staff counseling positions. Of those, approximately half continue their employment for more than one year (O'Brien & Biase, 1992).

Some studies have reported that less severe criminal activity is correlated with longer retention in therapeutic community programs, while lower lifetime criminality has been correlated with better treatment outcomes. More positive treatment outcomes have also been noted with higher levels of education and lower levels of drug and alcohol use (Singer, 1992).

Outpatient Nonmethadone Treatment

Outpatient nonmethadone treatment programs involve trained professionals working with addicted persons to achieve and maintain abstinence while living in the community. Community

mental health centers, private clinics, and professional therapists in private practice are examples of settings in which outpatient treatment is offered. Outpatient treatment programs offer a range of services and treatment modalities, including pharmacotherapy, and individual, group, and family counseling. They often incorporate a Twelve-Step philosophy (Doweiko, 1990).

Outpatient treatment allows individuals to live at home, continue working, and be involved in family activities while receiving treatment. Outpatient treatment is usually less expensive than residential treatment alternatives. It also allows for longer-term support of the individual than is possible with inpatient programs (Doweiko, 1990).

Considerations for referring individuals to outpatient treatment programs include their motivation for treatment, ability to discontinue use of drugs or alcohol, social support system, employment situation, medical condition, psychiatric status, and past treatment history (Doweiko, 1990). Those who remain in outpatient (nonmethadone) treatment longer tend to have better outcomes than shorter-term clients. However, dropout rates are high (Institute of Medicine, 1990).

Combined Settings

Some treatment programs have been developed to attempt to capitalize on the advantages of both inpatient and outpatient treatment approaches. They provide elements from each type of setting, attempting to maximize benefits while reducing costs.

Two by Four Programs are two-phase approaches. The individual is hospitalized first for a short time (usually two weeks). This ensures complete detoxification. This is followed by outpatient treatment.

However, there is the option to return to inpatient care if he or she is unable to function in the less restrictive outpatient program (Doweiko, 1990).

Day or partial hospitalization involves treatment in the program during normal working hours, but the person returns home during the evening hours. The individual lives at home and has to assume more responsibility than would be the case in inpatient treatment. A prerequisite for this type of treatment is a supportive, stable family (Doweiko, 1990).

Halfway houses provide an intermediate step between inpatient treatment and independent living. It is a good alternative for persons who do not have a stable social support system. Halfway house programs generally have a small patient population, emphasize Twelve-Step programs, and have a minimum of rules and few professional staff members. Usually residents must find employment or work within the house (Doweiko, 1990).

As with other treatment programs, length of stay for some subgroups of residents has been correlated with successful treatment outcomes. Other evaluations of effectiveness have been contradictory, however (Doweiko, 1990).

Treatment Components

A variety of techniques are used in all the treatment modalities just presented. These include self-help or Twelve-Step approaches; individual, group, and family counseling; and behavior modification approaches. Each of these will be discussed briefly.

Self-Help Programs

Self-help or Twelve-Step organizations involve mutual help among peers experiencing similar

problems. With the development of the first Alcoholics Anonymous group in 1935, a long tradition of the use of self-help groups for substance abusers was launched. Self-help groups often meet in churches, community facilities, prisons, and other locations, but they generally claim no political or religious affiliation. Alcoholics Anonymous (AA) describes itself as a voluntary, self-run fellowship. Its membership is multiracial and there are no age, educational, or other requirements for members. It is nonprofessional and has no dues or outside funding sources. An important characteristic for many persons is its promise of anonymity, protecting the right to privacy of its members (Doweiko, 1990; Nace, 1992).

Members of AA believe that addiction is a disease that can never be cured. However, they maintain that progression of the disease can be arrested, and those in remission are *recovering* alcoholics (Doweiko, 1990). Groups function to reinforce social and cognitive behaviors that are incompatible with addictive behaviors. The Twelve Steps provide a concrete, tangible course of action (Galanter, Castaneda & Franco, 1991; Nace, 1992).

The primary goals of AA and similar self-help groups are to (Galanter, Castaneda & Franco, 1991):

- achieve total abstinence from alcohol or other drugs;
- effect changes in personal values and interpersonal behavior; and
- continue participation in the fellowship to both give and receive help from others with similar problems.

Self-help groups may be the only intervention used by some persons to end chemical dependency. However, self-help groups often are used in tandem with other treatment modalities, such as

residential or outpatient treatment programs.

Alcoholics Anonymous developed the Twelve-Step tradition that has been adopted and adapted by many other self-help groups. These steps consist of a series of cognitive, behavioral, and spiritual tasks, including (Doweiko, 1990):

- an admission of powerlessness;
- assessment of character defects;
- overcoming shortcomings that contributed to addiction, learning the tools of nondrug-centered living, and restructuring damaged relationships; and
- commitment to a higher power.

Often, experienced members act as “sponsors” to newer members, creating a person-to-person guidance system in times of crisis and creating bonds between members (Nace, 1992).

AA groups are autonomous and traditionally are open to all members. Some groups may be directed to special-interest groups, such as women, minority groups, gays, or physicians (Galanter, Castaneda, & Franco, 1991; Nace, 1992). There are several types of meetings (Nace, 1992).

- *Closed meetings* are for AA members or prospective members only.
- *Open meetings* are for non-alcoholics as well.
- *Speaker meetings* involve AA members who describe their experiences with alcohol and their recovery.
- *Discussion meetings* are those in which an AA member describes personal experiences and leads a discussion on a topic related to recovery.
- *Step meetings* (usually closed) consist of discussion of one of the Twelve Steps.

The self-help approach was first applied to drug addiction in the U.S. Public Health Service Hospital in Lexington, Kentucky, in 1947.

Narcotics Anonymous (NA) is modeled on the Alcoholics Anonymous concept, and although the two programs are not affiliated, they use the same Twelve-Step program. NA is a different organization with diverse jargon, style, substance, and social traditions. It is concerned with the problem of *addiction*, and members may have had experience with any or all of the entire range of abusable psychoactive substances. (Doweiko, 1990; Galanter, Castaneda & Franco, 1991; Gifford, 1989). *Thus, referrals to the two organizations should be made with care.* Alcoholics Anonymous focuses on alcohol dependence and behaviors, while Narcotics Anonymous focuses on drug addictions and uses drug-specific language and approaches. Narcotics Anonymous developed more recently and reflects the milieu of the late 1970s and 1980s, according to Gifford (1989). He believes this makes it a more applicable organization for the needs of many drug-involved persons.

Alcoholics Anonymous is now a world wide organization with groups in the United States and 114 other countries. Its membership is estimated at 1.5 million. Narcotics Anonymous is international as well, with groups in at least 36 countries. Estimates of its membership total approximately 250,000 (Galanter, Castaneda & Franco, 1991).

Although there is ample anecdotal testimony to the effectiveness of self-help organizations, especially Alcoholics Anonymous, there is little in the way of objective data to support these claims. However, opinions of many clinicians and individuals who have been helped by the approach strongly support it for the recovery for some substance abusers. Scientific research of these groups is very difficult because of the anonymity promised to members and self-selective

membership practices. It is difficult to arrange studies with appropriate sampling techniques, control groups, or experimental design (Galanter, Castaneda & Franco, 1991; Nace, 1992).

Emrick (1987) reviewed several studies of the outcomes for persons attending AA and found that, overall, 46.5 to 62 percent of active AA members had at least one year of continuous sobriety. Thirty-five to forty percent of subjects reported abstinence of less than one year. Twenty-six to forty percent were sober from one to five or six years, and 20 to 30 percent maintained abstinence five or six years or more.

Self-help or Twelve-Step programs may be useful adjuncts to treatment for alcohol and other drug abuse. Persons who attend AA and other treatment programs have a more favorable outcome in regard to drinking. Those who attend more than one meeting per week, have a sponsor and/or sponsor others, lead meetings, and work Steps 6 through 12 tend to have more favorable outcomes (Geller, 1992; Nace, 1992).

Individual Counseling

Individual counseling approaches assume a one-to-one encounter between a client and a counselor. Counselors are usually trained professionals, but they may be paraprofessional or peer counselors. The specific counseling approach or methods used in individual treatment of substance abusers come from modalities originally developed to treat other conditions. Regardless of the particular counseling model endorsed, there are some tasks or goals of individual treatment that usually are seen across all approaches, although the emphasis placed on each may vary. These include (Rounsaville & Carroll, 1992):

- helping the individual resolve to stop using psychoactive substances;

- teaching coping skills to help the person avoid relapse after achieving an initial period of abstinence;
- changing reinforcement contingencies;
- fostering management of painful feelings; and
- improving interpersonal functioning and enhancing social supports.

Substance abusers typically enter treatment with a goal of controlled use, especially of alcohol. Therapists help patients explore their motivation and set appropriate treatment goals, including a goal of abstinence. Identifying circumstances that increase the likelihood of resuming drug use and practicing strategies for coping with these high risk situations are other parts of the treatment process. For many substance abusers, drug use has been the entire focus of their lives. When it stops, they need help in filling their time and finding rewards that replace those derived from drug use. Many drug-involved persons have never achieved satisfactory adult relationships or vocational skills because drug abuse was initiated during adolescent or early adult years. Individual interventions can help them maintain their motivation during the processes of learning new skills and recovery. Individual therapy often includes techniques to elicit strong feelings and help the individual learn acceptable means of managing them within the protected environment of the therapeutic setting. For some persons who have emotional or anxiety disorders, combined treatment with medications and individual counseling may be appropriate. Encouraging the person to participate in self-help groups can provide a source of social support outside of individual counseling sessions (Rounsaville & Carroll, 1992).

Individual therapy provides privacy to those persons who are not willing to disclose their substance abuse publicly or fear that doing so may damage their careers and reputations. In individual treatment, the pace can be flexible to meet the needs of the individual. Compared to group therapy, much more time can be spent on issues that are unique to the individual involved. In situations where caseloads are not large enough to have appropriate groups, individual therapy is more practical and can begin immediately. Some patients have particular personality disorders that do not lend themselves to group involvement (Rounsaville & Carroll, 1992).

Individual therapy is more expensive than group therapy because of the one-to-one relationship of the therapist and patient. Involvement in group treatment approaches also can have the advantage of mutual support and modeling of coping strategies. Group members often provide external control for an individual, as they may be able to detect each other's attempts to conceal relapse or early warning signals that relapse is beginning (Rounsaville & Carroll, 1992).

Rounsaville and Carroll (1992) reviewed several empirical studies of individual treatment of drug abusers and reached the following conclusions:

- Most studies indicate that persons involved in individual treatment, either as a single modality or in combination with other approaches, do better than those in control groups (not receiving individual treatment).
- No specific type of individual treatment approach has been shown consistently to produce better results.
- Individual treatment is especially appropriate and effective for persons with other psychiatric problems.

Group Therapy

Group therapy is often combined with other treatment modalities to provide a structured, comprehensive treatment program for substance abusers. Washton (1992, p. 508) defines group therapy as:

... an assembly of chemically dependent patients, usually five to ten in number, who meet regularly (usually at least once a week) under the guidance of a professional leader (usually a professional therapist or addiction counselor) for the purpose of promoting abstinence from all mood-altering chemicals and recovery from addiction.

The treatment goals of group therapy may include (Washton, 1992):

- establishing abstinence;
- integration of the individual into the group;
- stabilization of individual functioning;
- relapse prevention; and
- identifying and working through long-standing problems that have been obscured or exacerbated by substance abuse.

Galanter, Castaneda, and Franco (1991) have identified several types of group approaches used with alcohol- and drug-involved persons. These include the following categories.

Exploratory groups explore and interpret members' feelings and help them develop greater ability to tolerate distressing feelings without resorting to mood-altering substances.

Supportive groups help addicted members tolerate abstinence and assist them in remaining drug- or alcohol-free by enabling them to draw on their own resources.

Interactional groups create an environment of safety, cohesion, and trust, where members engage in in-depth self-disclosure and affective expression.

Interpersonal problem-solving groups teach an approach to solving interpersonal problems, including recognizing that a problem exists, defining the problem, generating possible solutions, and selecting the best alternative.

Educational groups provide information on issues related to specific addictions, such as the natural course and medical consequences, implications of intravenous drug use, and availability of community resource. Methods used may include material such as videotapes, audio cassettes, or lectures followed by discussion.

Activity groups provide occupational and recreational means for socialization and self-expression.

Groups are often an especially important aspect of treatment for youth, as peer associations are particularly important during adolescence. Their developmental tasks include separating from family and forming their own identities. Peer groups have a significant effect on attitudes and behavior. This influence can be either positive or negative. Peer groups may be located in schools, community agencies, residential programs, and churches and on the streets (such as gangs). Four categories of peer group programs have been identified by Resnik and Gibbs (1988):

1. *Positive peer influence programs* emphasize group interaction and positive influence of the group on the individual member.
2. *Peer teaching programs* emphasize youth conveying information to their peers.
3. *Peer counseling, facilitating, and helping programs* focus on peers helping peers. Through these programs, youth who provide help develop a sense of responsibility. The "helper" often benefits more than the peer who is helped.

4. *Peer participation programs* create new roles for youth, giving them decision-making power and responsibility. These programs emphasize youth empowerment and accountability.

Despite the persistent use and popularity of group treatment approaches, few studies of effectiveness have been done. Some advantages of group therapy include its cost-effectiveness, allowing one professional to work with several different individuals at once; shared learning among group members; and the potential to work through problems from earlier stages of growth because group members may reflect characteristics of a member's family of origin (Doweiko, 1990).

Family Therapy

In many cases addictive disorders are multigenerational within families. A full assessment of the identified substance abuser and his or her family is important to determine the range of biopsychosocial factors influencing the person's addiction. Within family systems drug use behavior has a purpose, and it is important to assess this. Family therapy is usually not sufficient as the sole means of treatment for substance abuse. Rather, it is a valuable, and often essential, adjunct to other treatment modalities. The opportunity to observe the total family is always valuable in the diagnostic process (Doweiko, 1990; Kaufman, 1992).

There are three parts of the family system (often traversing three or more generations) that are important to include, if applicable and available. These include the substance abuser's family of origin, spouse, and children. At times it can be helpful to broaden the definition of family to include

significant others and employers (Kaufman, 1992).

The dysfunctional patterns manifested by families of substance abusers may include denial of the problem, scapegoating all family problems on the identified abuser, the use of guilt by the addict to coerce the family into supporting his or her habit, negative communication, and lack of consistent limit setting by parents. Children of alcoholics are more likely to develop emotional and psychosocial problems, including substance abuse. Adult children of alcoholics tend to have poor communication skills, difficulty expressing feelings, role and identity confusion, and problems with trust and intimacy. Approximately 30 percent of children from alcoholic families marry alcoholics. Alcoholic fathers are apt to abuse their children through violence, sexual seduction, or assault, and alcoholic mothers are more likely to neglect their children (Kaufman, 1992).

Family treatment priorities include persuading the family to work together to initiate detoxification of the identified person. Also important is helping the family initiate and support the person's involvement in an appropriate treatment program (e.g., Twelve Steps, therapeutic community, methadone maintenance). Family members may need to be coached by the therapist to confront the addicted person with care and concern. The family also may need to be educated about the deadly consequences of substance abuse, and they may need help in setting limits. Behavior techniques may be used to eliminate family members' responses that trigger drug use; in their place, methods of reinforcing positive behavior may need to be taught. Communication-centered therapy may be needed to teach people to state messages clearly

and correct discrepancies in communication among family members (Kaufman, 1992).

As juveniles are not yet independent, family interventions are especially important in addressing the basis of their drug and alcohol involvement. Some juveniles may not be living with their families of origin, but may be in adoptive families, foster family placements, or other family surrogate situations. Regardless of the definition of family used, involving those who are significant in the youth's life is important. Family interventions may include classes to help parents, siblings, and others understand substance abuse. Both educational and counseling interventions to improve coping and parenting skills may be beneficial (MacDonald, 1989).

Although continuing research efforts are needed, available data do support the efficacy of family therapy interventions. Adolescents involved in family therapy have been shown to have half the recidivism rate of those not receiving this service. There is also evidence that family therapy improves adolescent retention in residential treatment programs. Family treatment has also been favorably correlated with days free of methadone, illegal opiates, and marijuana. McCrady et al. (1986) found that alcoholic persons who received treatment with their spouses, including both alcohol-related interventions and marital therapy, were more compliant, decreased their drinking more rapidly, and relapsed more slowly than study participants who received only alcohol-focused treatment with their spouses. They also maintained better marital satisfaction and were more likely to stay in treatment than persons receiving treatment with minimal spouse involvement. In general, family involvement enhances assessment and intervention and

increases motivation in treatment (Kaufman, 1992).

Behavior Modification

Behavior modification is often incorporated in various treatment modalities. Behavior modification increases rewards for positive, pro-social behavior. Rewards may include praise, attention, activities, and material items. For negative or antisocial behavior, responses that are unpleasant or withhold rewards may help to extinguish the unwanted behavior. Programs that gradually give participants increased freedom as they show responsibility are using positive rewards. Some programs have levels, steps, or phases that participants must earn through appropriate behavior. With each advancement there are rewards of privileges, increased freedom, and decreased supervision.

Aversive Conditioning

Aversive conditioning is an example of providing negative rewards to extinguish unwanted behaviors. Unpleasant stimuli, such as chemically or hypnotically induced nausea or paralysis, electrical shock, and noxious imagery, are paired with the sight, smell, and taste of the abused drug. When the person has contact with the abused substance, the same response is triggered and he or she experiences repulsion instead of craving or the desire to use the drug (Childress, Ehrman, Rohsenow, Robbins & O'Brien, 1992; Goodwin, 1992).

Programs using this approach have claimed high rates of success. However, research studies often have been flawed, and follow-up studies have found inconsistent results. Additional studies are underway to assess the usefulness of this approach (Childress, Ehrman, Rohsenow, Robbins & O'Brien, 1992; Goodwin, 1992).

Conclusion

In this chapter both the causes of substance abuse and current treatment approaches have been reviewed. One's point of reference concerning the causes of addiction often influences decisions about treatment practices.

Addiction to alcohol and other drugs is multifaceted. For most people there is not a single cause of addiction; rather, there is a complex set of biological, social, and psychological influences that contribute to the initiation of substance use and progression to addiction. The combination of causal factors is unique for each person. Treatment programs also have particular philosophies about addiction. Thus, a comprehensive assessment is required to identify the causes of each individual's addiction and plan for appropriate patient-treatment matching. Treatment is likely to be more effective when program philosophies are considered in comparison to an individual's specific needs and characteristics. The next chapter, Screening and Assessment, and Chapter 5 on patient-treatment matching will address these topics in greater detail.

Substance abuse treatment occurs in a variety of settings under the auspices of various agencies and organizations. Both the treatment modality and the treatment setting are important considerations. Some individuals will be more successful with the restrictions of a residential setting while others may do well in outpatient treatment. Pharmacotherapy has been proven effective for treating some drug addiction problems. Other chapters will describe more fully some of the treatment modalities summarized in this chapter.

Relapse prevention programming, another critical element of treatment, has been emphasized through the information provided about treat-

ment effectiveness of each modality. Rates of relapse for most current treatment modalities are high, and increased attention to relapse prevention is needed to mitigate this trend. This topic will be discussed further in Chapter 9. Finally, the meager evaluation studies of many treatment modalities emphasize the need for continuing research and greater program *accountability*, the fifth critical element. More information about this area is provided in Chapter 10.

In the continuing quest to discover ways to change the behavior of drug-involved persons and help them achieve better health and well-being, current approaches can be improved and new approaches should be sought to enhance drug abuse treatment. Coordination among all systems that interact to provide and promote treatment is of vital importance. Treatment providers and local, State, and federal decision makers can have a significant impact on the future role of treatment. Solutions to many of the problems related to alcohol and drug addiction are possible, and treatment is an important part of the response.

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Chapter 4—Screening and Assessment

Assessment is one of the five critical elements of effective substance abuse treatment. It is the first stage of intervention with persons who are chemically dependent. A comprehensive appraisal of the individual's alcohol or drug problem, and how it affects his or her health and functioning, is vital for selecting treatment resources that best meet his or her needs. Assessment includes a determination of many factors, including:

- the severity of the problem;
- possible influences that have perpetuated chemical use, culminating in addiction;
- related difficulties; and
- the individual's perceptions of and attitude toward treatment.

This chapter will provide information about the purpose of assessment, as well as screening and assessment processes, methods, and instruments.

The Center for Substance Abuse Treatment has developed additional documents related to assessment to which the reader may refer for more information. These include the following.

- Screening and Assessment of Alcohol and Other Drug (AOD) Abusers in the Criminal Justice System, a Treatment Improvement Protocol (TIP), containing the recommendations of a Consensus Panel chaired by James Inciardi, Ph.D.
- *Screening and Assessment of Alcohol- and Other Drug (AOD)-*

Abusing Adolescents, TIP 3, by Tom McLellan, Ph.D., and Richard Dembo, Ph.D. (1992).

- *Criminal Justice Treatment Planning Chart* (Center for Substance Abuse Treatment, 1993a).
- *Juvenile Justice Treatment Planning Chart* (Center for Substance Abuse Treatment, 1993b).

The Purpose of Assessment

Screening, assessment, and diagnosis are important in the treatment of any illness. Consider two people who go to a doctor with pain in their left arm. A variety of medical problems could result in such pain, including cardiovascular disease, a broken bone, arthritis, an infected wound, or cancer of the bone marrow, among others. Each of these conditions would call for a different type of treatment, ranging from the possibility of taking aspirin and doing some exercises for mild arthritis to possible surgery for severe heart disease or aggressive chemotherapy for cancer. If the physician prescribed the same treatment for both patients, without assessing and diagnosing the problem carefully, the odds of the treatment being appropriate for the problem would be minimal.

Instead, the doctor will ask each patient questions about how and when the pain started, how intense it is, the exact location of the pain, and other physical symptoms. He

or she also will examine each patient and may request some medical tests. It may be necessary to have a specialist conduct part of the medical evaluation because of his or her greater expertise in a particular field. For example, a radiologist might be consulted to read x-rays of the affected area. Before determining the treatment needed for each person, the physician will review and analyze all of the information gathered. Once a diagnosis has been made, the doctor may provide the treatment needed or may refer either or both of the patients to a specialist who is more knowledgeable about treatment of the specific problem. Often, the doctor will ask the patient to return for a follow-up visit so that the accuracy of the diagnosis and the effectiveness of the treatment can be evaluated.

If the prescribed treatment has not alleviated the pain, additional tests may be done to further assess the cause of the problem. If the treatment has resulted in improvement or recovery from the problem, the physician will document that the diagnosis was accurate and the treatment was effective. This information will be useful if the doctor sees the same patient again for a similar problem. If another patient presents with the same symptoms and, after assessment, the diagnosis is the same, it is likely that the same course of treatment will be used again. However, if another patient with pain in the arm is diagnosed differently, the treatment prescribed

is likely to be very different from that for another patient with the same presenting problem.

The Purpose of Assessment for Substance Abuse

There are at least five objectives for conducting appropriate and comprehensive assessments of persons with substance abuse problems or chemical dependency (McLellan & Dembo, 1992):

1. Identify those who are experiencing problems related to substance abuse and/or have progressed to the stage of addiction.
2. Assess the full spectrum of problems for which treatment may be needed.
3. Plan appropriate interventions.
4. Involve appropriate family members or significant others, as needed, in the individual's treatment.
5. Evaluate the effectiveness of the interventions that are implemented.

Why Is Assessment Important?

The assessment of persons with alcohol or drug problems is very much like the diagnosis of other disorders. Assessment is one of the five critical elements of effective treatment, and it is the first stage of the treatment process.

The assessment process includes gathering information from a variety of sources. These sources may include the patient's own statements, previous records, and significant others. When the information is collected, it is reviewed and evaluated by a trained professional. The infor-

mation and the treatment professional's interpretation of it are then used to develop plans for treatment.

A variety of instruments have been developed as *tools* for the assessment process. There is a list of some currently available assessment instruments at the end of this chapter. Assessment instruments should be evaluated for validity (Do they measure what they say they measure?) and reliability (Do they consistently provide the same results?). When assessment instruments are used, it is important to ascertain that research has been conducted to determine their validity and reliability on populations similar to those on whom the instrument will be used. For example, an instrument might be a valid and reliable assessment tool for white adult males, but it may not necessarily be useful for assessing adolescent females.

Without a comprehensive assessment, there is a risk of treating the wrong set of problems or failing to provide any intervention for some problems. The general disorder of chemical addiction is very global. An assessment that delineates causative influences, types of substances abused, and related health, social, and behavioral factors is necessary for appropriate patient-treatment matching. The treatment of an adolescent who has an alcohol problem is markedly different from the treatment of an adult addicted to opiate drugs.

Each person with a substance abuse problem is likely to have a unique constellation of symptoms and factors. Several areas must be included in a comprehensive assessment, including:

- physical development and medical problems (including both general health conditions and possible infectious diseases such as HIV, tuberculosis, hepatitis,

and sexually transmitted diseases);

- history of drug use and any prior treatment received;
- psychosocial problems (either precipitating chemical use or resulting from the abuse of drugs or alcohol), such as family and peer relationships, school or vocational difficulties, and legal and financial problems;
- psychiatric disorders; and
- current socioeconomic status and eligibility for various programs.

Who Should Be Assessed?

Substance abuse is not a selective illness; it is found among all segments of the population. People of either gender, from all age cohorts, racial and ethnic groups, and socioeconomic strata, are subject to the destructive impact of alcohol and other drug abuse and addiction. Thus, the identification of those who have a substance abuse disorder requires attentiveness and sensitivity to the range of complex indicators that might signal the need for assessment and possible treatment. There are many clues that can alert health professionals, educators, employers, family members, criminal and juvenile justice system personnel, and others that the use of alcohol or other drugs is a problem for an individual. For example:

- a physician might become suspicious of frequent injuries, liver damage, weight changes, certain diseases, and a variety of other physical symptoms for which one explanation could be substance abuse;
- a teacher or employer might be alerted by changes in performance or attendance at school or on the job;

- family members, significant others, and peers might become concerned over changes in mood, friendship patterns, and relationships; or
- criminal and juvenile justice personnel might infer associations between substance use and criminal or delinquent behavior such as income-generating crimes (e.g., thefts, prostitution), violent crimes, and drug-related crimes (e.g., possession, sales of controlled substances).

When these or other problems become apparent it is vital that the person be evaluated and referred for appropriate treatment, if needed. A thorough assessment for substance abuse is important because it can identify not only chemical dependency, but other medical, psychosocial, or psychiatric problems that may underlie the symptoms. Even if problems are not caused by substance abuse, it is just as vital that the person receives other appropriate interventions, such as primary health care or human services.

A Comprehensive Assessment Process

A comprehensive assessment consists of five consecutive stages as depicted in Figure 4-A (McLellan & Dembo, 1992; Tarter, Ott & Mezzich, 1991). Each part of this process will be discussed briefly in the following sections.

Recognition of Risk Factors

There is often a precipitating event that brings alcohol or drug-involved persons to the attention of those concerned about them. An automobile accident or DUI arrest, being fired from a job, an arrest for shoplifting, or a head injury from a fall might all result from the effects of alcohol or other drugs. On the other hand, the indicators of problem drinking or drug abuse might be pieced together over time. For example, a teacher might notice a steady decline in a student's grades and school attendance or an employer might notice changes in productivity. A parent or spouse might notice that an individual's habits, grooming, and disposition have changed, and there may be increasing tensions and difficulties in the person's relationships.

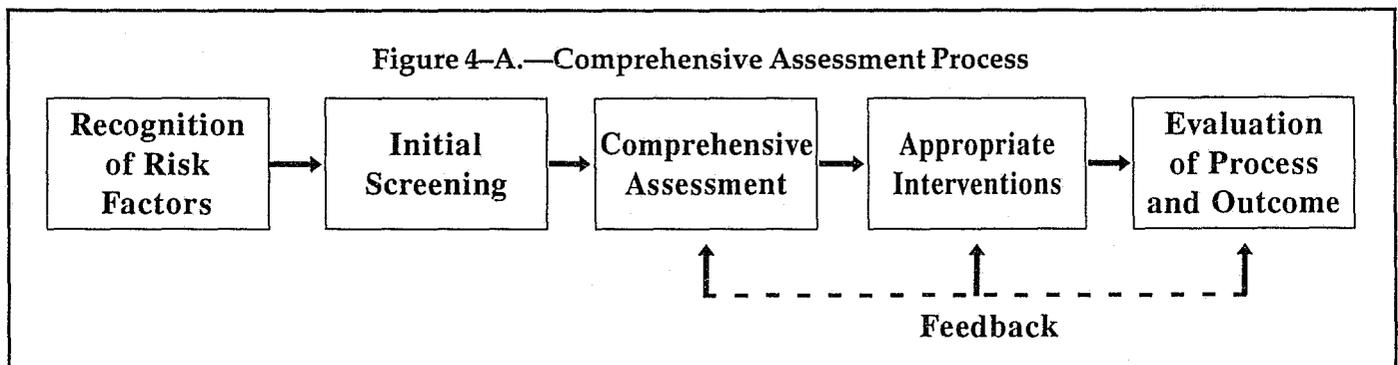
These signs often are consistent with substance abuse. All too often, however, no action is taken until the disease has progressed to the point of full addiction which is irreversible, but treatable. Declining social functioning and increasing involvement with the criminal or juvenile justice system are typical indicators of substance abuse. The consequences to the person's health and personal functioning can be devastating. As pointed out in Chapter 1, it is estimated that approximately

6.5 million Americans are addicted to chemicals, but only about 300,000 persons are receiving treatment (Primm, 1992).

Education and coordination are very important for this stage of the assessment process. Health care providers, mental health professionals, educators, employers, criminal and juvenile justice personnel, and many others must know how to recognize factors that may be associated with substance abuse. It is also important that they conduct, or refer the person for, an initial screening to determine whether or not alcohol or drug use is a likely cause of the problems noticed.

Throughout the assessment and treatment process, coordination, collaboration, and communication among all responsible individuals and organizations is vital. At the State level, planners, legislators, funding sources, and other factions must recognize and underscore the importance of comprehensive assessments. This can be done by mandating that assessments be conducted and providing sufficient resources to accomplish this goal. State level decision makers also may provide guidelines related to appropriate assessment processes, techniques and instruments.

Community coordination is also critical. Agencies and professionals representing health and mental health care, education, the courts, and many other interests need to evaluate the problem of substance



abuse in the community and the resources available for intervening. If not already in place, the services and funding needed to provide comprehensive assessments should be developed. The return on such an investment can be extremely valuable in both human and economic terms. Comprehensive assessment will facilitate more appropriate patient-treatment matching, more efficient use of scarce treatment resources, and more positive treatment outcomes. It is also important that agencies and professionals have open communication, are aware of the services available, and understand how to make referrals for assessment services.

Within agencies, such as hospitals, school systems, and the like, coordination of assessment and other substance abuse services is also important. For example, many persons are treated in hospitals for illnesses or injuries related to alcohol or drug abuse, but they never receive a comprehensive substance abuse assessment or needed treatment. Ways of coordinating services to ensure that all personnel are alert to risk factors and follow through with appropriate screening and referrals for assessment should be developed.

Initial Screening¹

Screening refers to brief procedures used to determine the presence of a problem, substantiate that there is reason for concern, or identify the need for further evaluation. Screening may occur in several community and correctional settings. Private physicians, public health clinics, hospitals, mental health programs, and educational programs are among those that might screen individuals for substance abuse. Within the criminal and juvenile justice systems, screening should occur

throughout the individual's contact. It should begin upon entry into the system and continue until release. This may include screening at points such as diversion, detention, pretrial, presentencing, sentencing, probation, incarceration, parole or aftercare, and revocation hearings. Both the *Criminal Justice Treatment Planning Chart* (Center for Substance Abuse Treatment [CSAT], 1993a) and the *Juvenile Justice Treatment Planning Chart* (CSAT, 1993b) indicate multiple points throughout each system at which screening and assessment for substance abuse should be conducted.

Screening Interviews and Instruments

Interview techniques and screening instruments may be designed to attempt to get alcohol- or drug-involved persons to reveal information about their substance abuse. These self-reports can be helpful in determining whether there is a need for further assessment and intervention. Screening interviews and instruments may be developed by a given agency, or they may be obtained from other sources providing them as a service or for profit.

Screening interviews might include a few brief questions asked during intake procedures that query the individual about the use of alcohol or other drugs. Screening instruments include brief tests (usually self-administered) that individuals take to provide information about their abuse of substances. In both cases, the alcohol- or drug-involved person is asked to give a self-report of his or her substance abuse.

Denial is a common facet of substance abuse disorders, as individuals (and often other significant persons in their lives) tend to minimize both the nature and the amount of their drug or alcohol use. Often, persons in

denial actually convince themselves that substance abuse is not a serious problem, though objective indicators suggest serious consequences (American Academy of Pediatrics, 1988; Miller, 1991). Persons who are drug-involved are more likely to be truthful about their use in settings they perceive as nonthreatening. Thus, reports from persons in treatment often are more credible than those from individuals in the criminal justice system. Assurance of confidentiality is an important factor that enhances self-reporting, while potential of prosecution and other sanctions is likely to diminish disclosures. While screening interviews and instruments may not give a true picture of drug and alcohol use in all cases, there are some persons who will be truthful. Coupled with other screening methods, such as chemical tests, these measures help distinguish users from nonusers (Nurco, Hanlon & Kinlock, 1990).

Drug Recognition Techniques

Drug recognition techniques are a systematic and standardized evaluation process to detect observable signs and symptoms of drug use. These include, among others, indicators such as dilated or constricted pupils, abnormal eye movements, elevated or lowered vital signs, muscle rigidity, and observation of behavioral indicators of drug use, such as speech, affect, and appearance. All the areas evaluated in these procedures are observable physical reactions to specific types of drugs. The three key elements in the drug recognition process are:

1. verifying that the person's physical responses deviate from normal;
2. ruling out a non-drug-related cause of the deviation; and

3. using diagnostic procedures to determine the category or combination of drugs that is likely to cause the impairment.

These techniques originally were developed by the Los Angeles Police Department as a result of frequent encounters with impaired drivers. However, when tested for blood alcohol levels, these motorists did not have high enough concentrations of alcohol to result in the impairments the officers observed. In response to this problem, drug recognition techniques were developed to help officers identify drug-impaired drivers. Subsequently, personnel at the Orange County, California, Probation Department applied drug recognition techniques to their clients and have used their findings to expand the period for detecting drug use. The techniques are based on documented medical findings about the effects of alcohol and various drugs of abuse on the body. (See American Psychiatric Association, 1987; Ellenhorn & Barceloux, 1988; Giannini & Slaby, 1989; Gilman & Goodman, 1985; Grinspoon & Bakalar, 1990; Julien, 1992; O'Brien & Cohen, 1984; Schuckit, 1989.)

Drug recognition techniques can be very useful in identifying persons who are under the influence of alcohol or illegal substances or who have used drugs recently. They may be used appropriately at many points of contact with individuals. Based on evaluations conducted in several settings, trained personnel are capable of accurately detecting current or recent drug use with these techniques with high degrees of accuracy.

Drug recognition techniques are cost-effective. Although initial staff training can be costly, the techniques require only a few pieces of equipment and few continuing costs. They provide immediate

information about current or recent drug use, and they are minimally intrusive. They rely on observations of body parts and functions that are visible to anyone at any time, rather than the collection of body fluids and the observation of bodily functions that are considered private. The techniques also are systematic and standardized, and they collect information about several observable signs and symptoms that are reliable indicators of drug use.

With drug recognition techniques, categories of drugs can be detected, but specific drugs cannot be determined. For example, it is possible to conclude that someone has used a central nervous system (CNS) stimulant, but it would not be possible to decide whether it was cocaine or amphetamines. Not all drugs are equally detectable with these techniques. Some categories of drugs cause pronounced physical symptoms while others provide few observable clues. Chemical testing is needed to determine more specific information about the types of drugs used. This is especially true when an individual is abusing more than one drug. If the person denies use, or if court actions or sanctions are to be taken, toxicological evidence may be necessary. However, drug recognition techniques are a good screening device before chemical testing. Sometimes, when confronted by the findings of a drug recognition expert, individuals may acknowledge their drug use and cooperate with the treatment process more readily. The techniques also can be used to rule out the presence of certain categories of drugs, thereby reducing the costs of testing for all possible substances.

Chemical Testing

Chemical testing is the most accurate method of determining current or recent drug use. Chemical testing can delineate the specific

drug or drugs being used, but it cannot replace the assessment process to diagnose the addictive disorder. Many addicted persons use more than one mood-altering substance. It is especially common for alcohol to be used in combination with other drugs. Proper determination of the specific drugs being used is crucial in the patient-treatment matching process. The abuse of differing substances often requires varied treatment approaches. When multiple substances are being abused, it is important to combine appropriate treatment modalities and components.

Scientific methods of chemical testing include:

- breath analysis;
- saliva tests;
- urinalysis;
- blood analysis; and
- hair analysis.

Additional methods are being developed and investigated, such as the analysis of perspiration.

Currently breath analysis, saliva tests, and urinalysis are the most practical, accurate, and cost-effective methods of chemical testing available, especially for the criminal justice system and many community agencies. Blood analysis is sometimes used in medical settings, but is much more costly. Breath analysis and saliva tests are used to detect alcohol consumption, while urinalysis is employed to detect other drugs of abuse.

These tests can accurately reveal drugs in the system, but the time frame for detection is limited. Alcohol is eliminated from the body within a few hours of ingestion. Other drugs remain in the system longer, but detection limits can range from a few hours to about 30 days. Thus, chemical testing is dependable for identifying frequent users, but less frequent users of some drugs may

test negative despite continuing use. Urinalysis cannot determine when drugs were actually ingested, nor can the level of intoxication be identified, as it can be with breath analysis for alcohol. In addition to identifying drug use, chemical testing can be a useful monitoring device and therapeutic agent in treatment when used with other interventions. As addiction is a chronic relapsing condition, chemical testing is a therapeutic tool to help prevent relapse.

Chemical testing is a highly reliable method of determining alcohol or drug use, but it also is a more intrusive process—especially urinalysis. To prevent adulteration of urine samples, the collection of specimens should be observed.

Selection of urinalysis methodologies also is important. For initial tests, immunoassays are generally used. All immunoassay tests operate in basically the same way, but differ from one manufacturer to another in the chemical “tag” used to identify the drug.

Specimens for testing may be sent to laboratories for analysis; however, reliable products are available for on-site testing in agencies. Whether using laboratory or on-site testing, agencies need to have well-defined chemical testing policies that delineate procedures, including the following areas:

- specimen collection;
- chain of custody (e.g., handling, documentation, storage, transportation);
- cutoff levels for initial and confirmation tests;
- scheduling of tests and selection of persons to be tested;
- quality assurance and quality control;
- safety procedures;
- interventions/treatment referrals; and
- other applications of findings, such as legal actions.

Gas chromatography/mass spectrometry (GC/MS) is considered the “gold standard” in urinalysis. It is highly accurate and is the only method of urinalysis that reliably produces quantitative results. It is frequently used as a confirmation method if initial immunoassay tests produce positive results.

Technological Innovations

New developments in drug detection technologies are currently being researched. The National Institute of Corrections (NIC) and the National Aeronautics and Space Administration (NASA) have formed a partnership to explore ways in which space-age technology can benefit the corrections community. The VIPER (Visual Identification of Pupillary Eye Responses) Project is developing an instrument called the optical funduscope which can evaluate the eye, pupil, and retina. This instrument can measure involuntary eye movements associated with drug use impairment, like those used with drug recognition techniques discussed previously. The VIPER Project is currently working with private companies to develop the instrument (Jackson, 1992).

A second development, called the Telemetered Drug Use Detection system, is evaluating the feasibility of a drug detection device worn on the wrist. Through analysis of perspiration, the device could detect drug use and send results to a central control station. This technology combines position identification (similar to electronic monitoring), chemical and biological processes, and microcommunications and signaling. It is a noninvasive method of chemical testing for drug use (Jackson, 1992).

Other Sources of Information

The screening processes already described in this section are those which attempt to obtain information directly from the person believed to be using drugs or alcohol. It also may be important to collect data from other sources during the screening process. Among others, this may include obtaining facts from family members, teachers, and employers; reviewing available records (e.g., health, psychosocial, legal); and considering the observations made by professionals.

Advantages and Disadvantages of Screening Methods

Drug recognition techniques and chemical testing methods can provide reliable information on current or recent drug use. However, self-reports through interviews and tests are the only screening devices that will provide information about alcohol and drug use over time. The accuracy of self-reports relies upon the motivation of the individual to disclose drug use. Chemical testing is the most expensive of the three methods but provides the most scientifically valid information. Chemical testing also is the most intrusive of the three methods, requiring observed specimen collection procedures to ensure accurate results.

Key Issues in Screening for Alcohol and Drug Involvement

There are several considerations in selecting screening methods and instruments and conducting screening procedures. These should be deliberated carefully by those who will be endorsing or conducting screenings. Table 4-A

Table 4-A.—Key Considerations in Screening for Alcohol and Drug Abuse

- Screening should be conducted on persons recognized to be at risk, in a variety of settings, by a range of professionals.
- There should be collaboration among agencies and professionals on screening processes, techniques, and instruments.
- All instruments and processes should be sensitive to racial, cultural, socioeconomic, and gender-related concerns.
- Initial screening procedures should be brief.
- Information should be gathered from various sources.

provides a summary of key areas (McLellan & Dembo, 1992).

Screening should detect specific indicators of substance abuse, such as health factors, educational or job-related problems, relationship difficulties, or financial and legal consequences of substance abuse.

If screening procedures indicate that substance abuse or dependency is probable, the person should be referred for a more comprehensive assessment.

Comprehensive Assessment

Screening is useful in differentiating persons who are alcohol- or drug-involved from those who are abstainers or whose use is limited and is not creating any problems for them. *Assessment*, on the other hand, indicates a process to determine the nature and complexity of the individual's spectrum of drug abuse and related problems (McLellan & Dembo, 1992). A comprehensive assessment uses extensive procedures that evaluate the severity of the substance abuse problem, elicit information about cofactors, and assist in developing treatment and follow-up recommendations. In addition to assessing substance abuse *per se*, a comprehensive assessment will probe related problem areas, such as (McLellan

& Dembo, 1992; Tarter, Ott & Mezzich, 1991):

- medical status and problems (including both general health conditions and infectious diseases such as HIV, tuberculosis, hepatitis, and sexually transmitted diseases);
- psychological status and possible psychiatric disorders;
- social functioning;
- family and peer relations;
- educational and job performance;
- criminal or delinquent behaviors and legal problems; and
- socioeconomic status and problems.

There are three basic steps in the assessment process (McLellan & Dembo, 1992):

1. Information
2. Data analysis
3. Treatment plan development

Each of these will be discussed in the following sections.

Information Gathering

There are three sources of information that can be helpful in conducting a comprehensive assessment:

1. Existing information
2. Individual and collateral interviews
3. Testing instruments

Investigation of existing information. Table 4-B contains several

categories of information that may already be available about an individual. Confidentiality requirements, to protect the privacy of individuals, require the person to sign a release of information form before much of the information listed in Table 4-B can be requested.

Self-reports, interviews, and collateral contacts. Interviews with individuals are much more extensive than the self-reports that were described as a method for screening. The interview can reveal valuable information about the person, to complement other information and obtain an accurate evaluation of problems. An assessment interview also may be the foundation for a positive, trusting working relationship during future interventions.

As with screenings, collateral interviews involve gathering information from other persons who are, or have been, associated with the person being assessed. Collateral sources should be asked to provide descriptive information rather than to form judgments about the person. As with patient interviews, information received is not always accurate. Possible collateral sources include family members, peers, teachers, employers, and others who might have helpful information.

Information gathering may involve one professional obtaining information in all areas. However, when particular areas raise concern, an interviewer or case manager may request consultation from other professionals. For example, if an individual discloses that he or she is bothered by certain physical symptoms, and the assessor is not a physician, a referral should be made for a medical examination. Similarly, it might be necessary to obtain psychological or psychiatric evaluations if it is determined that in-depth assessments in these areas

Table 4-B.—Information From Existing Sources

- **Drug history.** Health and mental health treatment agencies and criminal or juvenile justice agencies may have records containing information about previous drug-related treatment or charges. These records also may contain some information about the age at which substance use was initiated, the type of chemicals used, the frequency and amount of alcohol or drugs used, and other important data.
- **Medical history and current status.** This will provide information about medical treatment for substance abuse, medical conditions, substance abuse-related infectious diseases, medical emergencies that may have been related to substance abuse, current prescribed medications, recent illnesses or injuries, and possible family history of substance abuse.
- **Mental health history and current status.** This information may identify past or current emotional, psychological or psychiatric problems and previous treatment for substance abuse.
- **Criminal or delinquency history.** Criminal or juvenile justice records may provide information about prior offenses and drug involvement at the time of prior arrests and a history of offenses that may be related to income-generating crimes or expressive behaviors associated with the effects of certain types of drugs. It also may be important to obtain information on any current legal problems, of either a criminal or civil nature.
- **Educational history and current status.** This may include information about enrollment in or completion of education programs, attendance records, identified learning disabilities, and behavior problems at school. This information may be important for both juvenile and adult offenders.
- **Employment history and current status.** This may include current and previous employment, attendance problems, and reasons for termination.

are needed and the person conducting the assessment is from a different discipline. *A multidisciplinary assessment team is recommended for obtaining the range of information needed for comprehensive assessment and treatment planning.*

Interviews should be adapted to the age and culture of the patient. Cognitive abilities can affect the interview process; thus, the interviewer must be aware of the patient's cognitive ability level and try to structure the interview accordingly. Language may present another barrier in the assessment process. If the individual being assessed is not fluent in the same language as the interviewer, an experienced interpreter who is familiar with the patient's culture and the interview questions should be used (McLellan & Dembo, 1992).

Some of the information to be probed during interviews with the individual and collateral sources

will include, but is not limited to, the following areas. Often, these overlap with information gathered from existing records.

Testing instruments.² Testing instruments can include:

- standardized interviews,
- structured interviews; and/or
- self-administered tests.

These techniques have been developed to assess individuals in multiple areas (e.g., personality, aggressive tendencies, social skills, stress factors, risk for substance abuse, intellectual capacity). Most of the instruments have been formulated and standardized through a systematic research and validation process.

An advantage of using standardized instruments is that information regarding their reliability and validity may be available. If an instrument has high *validity*, it will accurately measure what it intends to measure. An instrument that has high *reliability*

will produce stable results; the test's outcome will not be significantly influenced by fluctuating or extraneous factors (such as a person's mood or the time of day). The instrument should be *normed*, or validated, with a population similar to those with whom it will be used. For example, an instrument used with adolescents should be normed on other adolescents. An instrument to be used with criminal offenders should have been normed on other offender populations. However, even when the credibility of these tests has been proved, test outcomes may be affected by other factors, including:

- attempts by individuals using them to "slant" the outcome by deliberately answering questions incorrectly;
- ability of individuals to read and understand the test items;
- motivation of persons to take the test seriously; and
- cultural sensitivity of the test.

The assessment process is likely to be most helpful and informative when a variety of techniques are used. Testing instruments are a *tool* to guide decision-making efforts. As with all other techniques, the limitations of these tests must be realized. Staff members who are given the responsibility of administering and interpreting them should be fully trained.

Standardized and Structured Interviews. The *standardized interview* differs from the *structured interview* in that it limits the interviewer to a prescribed style and list of questions. Using the standardized interview, the interviewer is restricted from freely probing beyond conflicting or superficial answers, sometimes considered a disadvantage of this technique. An advantage is that this interview may be more credible than the structured interview, an important consideration when results are used to support significant

Table 4-C.—Areas of Assessment Through Patient and Collateral Interviews

- **Drug history and current patterns of use:** When did alcohol or other drug use begin? What types of alcohol or other drugs does the individual currently use? Does the person use over-the-counter medications, prescription drugs, tobacco, and caffeine? How frequently are the substances used and in what quantity?
- **Substance abuse treatment history:** Has the individual ever received treatment for substance abuse? If so, what type of treatment (inpatient, outpatient, methadone maintenance, Twelve-Step programs, etc.)? Were these treatment experiences considered successful or unsuccessful and why? Has the person been sober and experienced relapse, or has s/he never attained recovery?
- **Medical history and current status:** What symptoms are currently reported by the patient? Are there indicators of infectious and/or sexually transmitted diseases? Has the individual been tested for HIV and other infectious diseases? Are there indicators of risk for HIV or other diseases for which testing should be done? What kind of health care has been received in the past? The causes and effects of various illnesses and traumas should be explored.
- **Mental status and mental health history:** Is the individual orientated to person, place, and time? Does s/he have the ability to concentrate on the interview process? Are there indicators of impaired cognitive abilities? What is the appropriateness of responses during the interview? Is the person's affect (emotional response) appropriate for the situation? Are there indicators from collateral sources of inappropriate behavior or responses by the person? Is there evidence of extreme mood states, suicidal potential, or possibility of violence? Is the individual able to control impulses? Have there been previous psychological or psychiatric evaluations or treatment?
- **Personal status:** What are this person's critical life events? Who constitute his/her peer group? Does the individual indicate psychosocial problems that might lead to substance abuse? Does the person demonstrate appropriate social, interpersonal, self-management, and stress management skills? What is the individual's level of self-esteem? What are the person's leisure time interests? What are his/her socioeconomic level and housing and neighborhood situation?
- **Family history and current relationships:** Who does the individual consider his/her family to be; is it a traditional or nontraditional family constellation? What role does the individual play within the family? Are there indicators of a history of physical or sexual abuse or neglect? Do other family members have a history of substance abuse, health problems or chronic illnesses, psychiatric disorders, or criminal behavior? What is the family's cultural, racial, and socioeconomic background? What are the strengths of the family and are they invested in helping the individual? Have there been foster family or other out-of-home placements?
- **Positive support systems:** Does the person have hobbies, interests, and talents? Who are his/her positive peers or family members?
- **Crime or delinquency:** Have there been previous arrests and/or involvement in the criminal or juvenile justice system? Has the person been involved in criminal or delinquent activity but not been apprehended? Is there evidence of gang involvement? Is the person currently under the supervision of the justice system? What is the person's attitude about criminal or delinquent behavior?
- **Education:** How much formal education has the person completed? What is the individual's functional educational level? Is there evidence of a learning disability? Has s/he received any special education services? If currently in school, what is the person's academic performance and attendance pattern?
- **Employment:** What is the individual's current employment status? What employment training has been received? What jobs have been held in the past and why has the person left these jobs? If currently employed, are there problems with performance or attendance?
- **Readiness for treatment:** Does the patient accept or deny a need for treatment? Are there other barriers to treatment?
- **Resources and responsibilities:** What is the individual's socioeconomic status? Is the person receiving services from other agencies, or might s/he be eligible for services?

(Doweiko, 1990; McLellan & Dembo, 1992; Tarter, Ott & Mezzich, 1991)

decisions (e.g., treatment referrals or legal actions).

Minimal training is usually required to administer standardized interviews. To administer structured interviews, interviewers must have knowledge and experience in working with similar populations, as well as expertise in interviewing. The goal of this interview is to obtain as much information as possible about the person. Therefore, the interviewer is *expected* to probe beyond superficial or conflicting answers. Structured interviews usually take more time to administer and interpret than standardized interviews.

Self-Administered Tests. Usually, less staff skill is required with *self-administered tests* than with structured or standardized interviews. On the other hand, these tests require some motivation and reading ability on the part of the individual being assessed. Many instruments are written at the fourth or fifth grade reading level. Moreover, self-administered tests are only credible if the person is willing to answer the questions honestly. However, written tests can be helpful for those who have difficulty speaking directly about themselves. These instruments provide an indirect and, for some, less threatening method of self-disclosing information. They also prevent interviewer bias and, like other standardized instruments, can be scored and quantified. Reliability and validity measures usually are available as well.

Data Analysis

Once information is gathered, it is interpreted for use in decision making. During this phase, professional service providers determine the severity of the person's alcohol or drug problem, possible contributing factors, and his or her readiness for intervention.

The professional conducting or managing the assessment process

will use all of the collected data to arrive at an opinion about the individual's substance abuse problem. The question to be answered is: Do the data indicate that the person is addicted to or dependent on one or more chemicals, an abuser of chemicals, or not adversely affected by occasional use of drugs and/or alcohol? (Doweiko, 1990).

The analysis must encompass the range of problems, strengths and sources of support available to the person. It also should address factors that have contributed to or are related to alcohol and other drug abuse (McLellan & Dembo, 1992).

Treatment Plan Development

The findings from the assessment process and monitoring of treatment should be documented to enhance clinical case supervision. The data derived from the screening and assessment processes form the basis of a treatment plan. This plan must recognize the unique constellation of problems and other factors that have been identified for the individual. The treatment plan will recommend a course of action that attempts to address the patient's unique needs. Implementation of the plan will involve providing or referring the person to appropriate treatment programs and monitoring his or her progress. A single treatment modality or a combination of services may be needed. The treatment plan should be comprehensive, containing information about the following categories:

- the identified problems to be addressed;
- the goals and objectives of the treatment process (e.g., to help the individual abstain from use of drugs, to help the patient resolve underlying self-esteem problems, to help the person achieve full employment);

- the resources to be applied (i.e., treatment programs, funding, other services, etc.);
- the persons responsible for various actions (e.g., making referrals, attending treatment sessions, follow-up reports);
- the time frame within which certain activities should occur; and
- the expected benefits for the person who will participate in the treatment experience.

Appropriate Interventions

Based on the recommendations made in the treatment plan, appropriately matched treatment interventions should be provided to the drug-involved individual. This may include:

- preventive and primary medical care;
- testing for infectious diseases;
- random drug testing;
- pharmacotherapeutic interventions;
- group counseling interventions
- substance abuse counseling;
- life skills counseling;
- general health education;
- peer/support groups
- liaison services;
- social and athletic activities;
- alternative housing; and
- relapse prevention.

These may be provided on either an outpatient or an inpatient/residential basis depending on the needs of the person. More information on these interventions and services will be given in later chapters.

Evaluation of Process and Outcome

As with the example of the treatment of arm pain at the

beginning of this chapter, the assessment and intervention process includes evaluation of the process and outcomes. Process evaluation indicates whether or not the appropriate procedures were used. Were the needed assessment procedures performed and did they result in a timely and appropriate treatment plan? Did the individual attend the treatment programs and services recommended in the treatment plan? Were the services that were promised delivered?

The outcome evaluation will examine whether or not the individual benefitted from the assessment and the interventions. It will indicate whether or not the assessments were accurate in correctly defining the problem and matching the person with appropriate treatment resources. If so, and if the patient is cooperative, there should be indicators of improvement or recovery when follow-up evaluations are conducted. If not, it will be necessary to use the feedback information to initiate additional assessment procedures or change the treatment plan. Outcome evaluation also may indicate problems in service delivery. Chapter 10 will provide more information on program evaluation.

Process and outcome evaluation data also may provide documentation of service needs. Although assessments may indicate needs for specific services, often they do not exist in particular communities, they are not affordable for all persons who need them, or there is not sufficient room in programs for new referrals. These data are extremely important for community and State decision makers who must determine program priorities and funding resources.

Assessment Instruments

There are standardized testing instruments available to assess

individuals in a variety of areas. When selecting these instruments, consideration should first be given to the areas to be assessed, and options should be limited to instruments that are designed to address those areas. The following factors should then be considered in reviewing the various instruments:

- ease of use;
- expertise and time required of staff to administer and score test;
- training required to administer and score the instrument, and whether or not such training is available;
- possibility of bias (cultural or in administration of the test);
- validity (Have studies proved that it accurately measures what it was intended to measure?);
- reliability (Have studies shown that if the test were repeated with the same person, the results would be the same?);
- credibility of test among members of the judiciary and treatment professionals;
- adaptation of test to management information system input and retrieval;
- whether the test has been normed with a population similar to the client group;
- availability of test in languages other than English;
- motivation level, verbal and reading skills required of persons to be assessed;
- propensity for test to be manipulated; and
- average cost per test.

Sources of Assessment Instruments

Proprietary instruments are developed and copyrighted by individuals or organizations. There is usually a cost for their use. Some instruments are developed by local agencies. They often are program-specific and may or may not be useful in other settings. Often they

have not been validated to determine their accuracy. Many agencies are willing to share such instruments without a charge. Instruments developed by federal agencies are in the public domain and may be used without a fee. Validity and reliability studies for them are documented (National Task Force on Correctional Substance Abuse Strategies, 1991).

Brief information about several available assessment instruments (both interviews and self-administered) is included at the end of this chapter. The instruments included in this list do not represent an exhaustive exploration of such instruments, nor does incorporation in this list represent an endorsement of particular instruments. Rather these are offered as a compilation of those instruments located through literature review. Because the needs of various agencies and systems vary, service providers and decision makers should examine an array of instruments and select those best suited to their particular needs.

Conclusion

Assessment is the beginning of the treatment process. It is a critical element of treatment, for without comprehensive assessment, appropriate patient-treatment matching is not possible. Just as it would be inappropriate to treat arthritis with chemotherapy intended for cancer patients, it is similarly unsuitable to provide a drug-involved adolescent with treatment intended for an adult male alcoholic. Thus, scarce treatment resources may not be used wisely if patients are not assessed carefully before treatment plans are formulated. Comprehensive assessment improves the overall cost-effectiveness of providing treatment.

Assessment is important in the coordination of services, as well. Valuable information can be gained so that the most appropriate services for individuals are delivered at the community level.

Aggregated information is also beneficial for State and local decision makers needing to determine priorities, set standards, and allocate funding according to the areas of greatest need.

In the next chapter more information will be provided about patient-treatment matching, an important outcome of assessment.

Substance Abuse Assessment Instruments

<u>Instrument Name</u>	<u>Description</u>	<u>Cost</u>	<u>Contact/Source</u>
Adolescent Drinking Index	This is a 24-item paper and pencil test self-report rating scale intended to measure the severity of drinking problems. Completion time is about 5 minutes; youth need fifth grade reading skills (Hoshino, 1992; McLellan & Dembo, 1992).	\$47.00 for manual and 25 test booklets	Psychological Assessment Resources, Inc. P.O. Box 998 Odessa, FL 33556 1-800-331-TEST
Adolescent Drinking Inventory	This is a 25-question self-report instrument to screen adolescents. It focuses on drinking-related loss of control and social, psychological and physical symptoms of alcohol problems (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 1990).	25 manuals for \$47.00	Psychological Assessment Resources, Inc. P.O. Box 998 Odessa, FL 33556 1-800-331-TEST
Adolescent Drug Involvement Scale	Paper and pencil drug abuse screening instrument adapted from the Adolescent Involvement Scal (Hoshino, 1992).	No charge	D. Paul Moberg Center for Health Policy and Program Evaluation 433 West Washington Ave., Suite 500 Madison, WI 53703
Alcohol Dependence Scale (ADS)	This is a 25-item multiple-choice questionnaire to assess the Alcohol Dependence Syndrome. It is derived from the Alcohol Use Inventory. It yields an index of severity of alcohol dependence (Crist & Milby, 1990; NIAAA, 1990).	\$6.50 per instrument in packages of 25; users guide, \$14.50; both, \$15.00	Addiction Research Foundation 33 Russell St. Toronto, Ontario M5S-2S1, Canada (800) 661-1111
Alcohol Expectancy Questionnaire	Used to gauge high risk circumstances that may lead to alcohol use (NIAAA, 1991).	No charge	Dr. Mark Goldman Alcohol and Drug Abuse Research Institute Department of Psychology BEH 339 University of South Florida Tampa, FL 33620 (813) 974-6963
American Drug and Alcohol Survey (ADAS)	This is a 57-item self-report instrument. It requires 20 to 25 minutes to complete. It develops a typology of 9 styles of use of drugs that are listed in order of increasing severity of drug involvement (McLellan & Dembo, 1992).	\$1.00 per test	RMBSI, Inc. 2100 W. Drake Rd., Suite 144 Fort Collins, CO 80526 1-800-447-6354

Substance Abuse Assessment Instruments (continued)

<u>Instrument Name</u>	<u>Description</u>	<u>Cost</u>	<u>Contact/Source</u>
Assessment of Chemical Health Inventory (ACHI)	This 128-item self-administered instrument assesses the nature and extent of substance abuse and associated psychosocial problems and facilitates communication between treatment providers. It can be taken and scored on a computer. There is also a paper and pencil format. It screens for random, inattentive, or inconsistent test-taking behavior and for defensiveness, exaggeration, or social desirability tendencies. The test requires a sixth grade reading level and takes 15 to 25 minutes to complete. Scoring is done by computer in 2 to 4 minutes (McLellan & Dembo, 1992).	\$287.50 for 50 sets of tests, includes tests, user manual, and floppy disk	Recovery Software, Inc. 7401 Metro Blvd., Suite 445 Minneapolis, MN 55439 (612) 831-5835
CAGE Questionnaire	A self-report screening instrument consisting of 4 yes-no questions. Requires approximately 1 minute to complete (NIAAA, 1990).		J.A. Ewing (1984, October 12), "Detecting Alcoholism: The CAGE Questionnaire" (<i>Journal of the American Medical Association</i> , 252[14], 1905-1907; see p. 1906)
Chemical Dependency Assessment Profile (CDAP)	This is a 235-item multiple-choice and true-false self-report instrument to assess alcohol and other drug use and chemical dependency problems. Can be administered by computer or in paper and pencil format. A computerized report can be generated (McLellan & Dembo, 1992).	\$22.00 for 20 test forms; \$295.00 for computer software	Multi-Health Systems (MHS) Publishers 908 Niagara Falls Blvd. North Tonawanda, NY 14120 1-800-456-3003
Comprehensive Addiction Severity Index for Adolescents (CASI-A)	This structured interview was designed to evaluate drug and alcohol use and psychosocial severity in adolescent populations in a variety of settings. It is administered by an assessor to the youth and takes approximately 45 to 60 minutes. A computerized scoring technique takes about 45 minutes to enter and 10 minutes to score (Schaefer, 1992).	No charge	Kathleen Meyers Penn/V.A. Center for Studies of Addiction PVAMC Bldg. 7 University & Woodland Aves. Philadelphia, PA 19104 (215) 823-5809
Comprehensive Drinker Profile (CDP)	This is an 88-item structured interview questionnaire. It is designed to provide a history of drinking practices and problems. It incorporates the Michigan Alcoholism Screening Test. It requires from 1 to 2 hours to administer (Crist & Milby, 1990).	25 interview forms for \$63.00	Psychological Assessment Resources P.O. Box 998 Odessa, FL 33556 1-800-331-TEST

Substance Abuse Assessment Instruments (continued)

<u>Instrument Name</u>	<u>Description</u>	<u>Cost</u>	<u>Contact/Source</u>
Drug Abuse Screening Test	There is both an adult and an adolescent version. It is a 20-item paper and pencil questionnaire which yields a quantitative index of degree of problems related to drug use/abuse. It takes approximately 5 minutes to complete. A self-report or interview format may be used (Hoshino, 1992; McLellan & Dembo, 1992).	100 tests for \$5.50	Addiction Research Foundation 33 Russell St. Toronto, Ontario M5S-2S1, Canada 1-800-661-1111
Drug Offender Profile Evaluation/Referral Strategies (DOPERS)	Assesses suspected drug-involved adult probationers. Helps determine specific supervision and treatment recommendations. It is an interview format that takes approximately 25 minutes to complete. A 2 1/2 day training session is required to use the instrument (Singer, 1992).	Training required	Bob Lynch Texas Department of Criminal Justice Community Justice Assistance Division 8100 Cameron Rd., Bldg. B, Suite 600 Austin, TX 78754 (512) 835-7745
Drug Use Screening Inventory (DUSI)	This 149-item instrument evaluates adolescent drug use and the youth's health, psychiatric, and psychosocial problems, identifies problem areas, and quantitatively monitors treatment progress and outcome. It consists of a Personal History Form, Drug Use Screening Instrument, and demographic, medical, and treatment/prevention summary plan. A sixth grade reading level is needed and completion takes 20 to 40 minutes. Scoring takes 15 to 20 minutes (McLellan & Dembo, 1992).	Questionnaires: \$3.00 each; DUSI computer system: \$495.00; Opscan forms and scoring of 25 tests: \$75.00	Ralph E. Tarter, Ph.D. Department of Psychiatry University of Pittsburgh School of Medicine 3811 O'Hara St. Pittsburgh, PA 15213 (412) 624-1070 <i>Distributed by:</i> The Gordian Group P.O. Box 1587 Hartsville, SC 29550 (803) 383-2201
Inventory of Drinking Situations	Used to identify emotional, cognitive, and social factors that may precipitate drinking (NIAAA, 1991).	Set of 25 instruments, \$14.75; users guide, \$13.50; both, \$25.00; software: 50 instruments, \$140.00; 200 instruments, \$450.00	Addiction Research Foundation 33 Russell St. Toronto, Ontario M5S-2S1, Canada (800) 661-1111

Substance Abuse Assessment Instruments (continued)

<u>Instrument Name</u>	<u>Description</u>	<u>Cost</u>	<u>Contact/Source</u>
Juvenile Automated Substance Abuse Evaluation (JASAE)	This is a computer-assisted instrument for assessing alcohol and other drug use behavior in adolescents. It is suggested for use with follow-up interviews to provide focus and conserve the amount of time necessary to conduct the interview. It is a 102-item self-administered questionnaire written at the fifth grade level. It can be given individually or in groups. Available in English and Spanish and on audio tape for those with reading difficulties. Personnel key responses into a computer. Administration takes approximately 20 minutes. Keying in responses takes 5 minutes (Schaefer, 1992).	\$4.50 per evaluation	ADE, Inc. P.O. Box 660 Clarkston, MI 48347 1-800-334-1918
MACH Drug Involvement Scale (MDI)	This is a standardized interview in computer format that can be self-administered. It takes about 30 minutes to administer and results are generated immediately. The MDI scale is used to identify adolescent drug involvement. It is available in English and Swedish (Schaefer, 1992).	Average \$5.00 per administration; unlimited administrations \$100 per month	Minnesota Assessment of Chemical Health 110709 Kings Lane Chaska, MN 55318 (612) 887-0332
Michigan Alcoholism Screening Test (MAST)	Quantifies the severity of alcohol problems for adults, using a 24-item self-administered questionnaire calling for "yes" and "no" responses (Crist & Milby, 1990; Doweiko, 1990; Tarter, Ott & Mezzich, 1991).	\$25.00	Melvin L. Selzer, M.D. 4016 Third Ave. San Diego, CA 92103 (619) 299-4043
Offender Profile Index (OPI)	This is an interview format that can be completed in approximately 30 minutes. It is designed to be used with suspected drug-involved adult defendants/offenders to determine specific drug intervention disposition (Singer, 1992).	\$10.00	Robert Anderson Director of Criminal Justice Programs National Association of State Alcohol and Drug Abuse Directors 444 North Capitol Street, NW. Suite 642 Washington, DC 20001 (202) 783-6868

Substance Abuse Assessment Instruments (continued)

<u>Instrument Name</u>	<u>Description</u>	<u>Cost</u>	<u>Contact/Source</u>
Personal Experience Inventory (PEI)	This two-part instrument is designed to assess the extent of psychological and behavioral issues with alcohol and drug problems; assess psychosocial risk factors associated with teenage chemical involvement; evaluate response bias or invalid responding; screen for the presence of problems other than substance abuse; and aid in determining appropriateness of inpatient or outpatient treatment. A sixth grade reading level is needed to take the self-administered assessment which takes 45 to 60 minutes (McLellan & Dembo, 1992). The 147-item questionnaire is available in pencil and paper and computerized versions. A French translation is available in audio (Schaefer, 1992).	PEI Kit (manual and 5 test report forms) is \$135.00	Western Psychological Services 12031 Wilshire Blvd. Los Angeles, CA 90025 (310) 478-2061
Personal Experience Screening Questionnaire (PESQ)	This is a self-report screening questionnaire for use with adolescents suspected of abusing alcohol or other drugs. It is a 40-item questionnaire. It requires a fourth grade reading level and can be administered to individuals or in groups. It takes about 10 minutes to administer and score it. Available in English and French (Schaefer, 1992).	PESQ Kit (manual and 25 tests) is \$70.00	Western Psychological Services 12031 Wilshire Blvd. Los Angeles, CA 90025 (310) 478-2061
Prevention Intervention Management and Evaluation System (PMES)	Items related to both alcohol and other drug problems constitute this 150-item instrument designed to assess substance abuse and other life problems of adolescents; assist in treatment planning; and provide follow-up assessment and evaluation data on treatment outcome. There is a Client Intake Form and the Information Form on Family, Friends, and Self. It requires a sixth grade reading level and takes approximately 1 hour to administer and 10 to 15 minutes to score (McLellan & Dembo, 1992).	No charge	D. Dwayne Simpson, Ph.D. Institute of Behavioral Research P. O. Box 32880 Texas Christian University Fort Worth, TX 76129 (817) 921-7226

Substance Abuse Assessment Instruments (continued)

<u>Instrument Name</u>	<u>Description</u>	<u>Cost</u>	<u>Contact/Source</u>
Problem Oriented Screening Instrument for Teenagers (POSIT)	The POSIT provides a brief screening of adolescents for treatment and other service needs. It is intended to identify troubled youths and can be used in a variety of settings. It is useful for developing treatment and referral plans. It is a 139-item self-administered questionnaire designed for use with youth 12 to 19 years old. It is available in English and Spanish. It requires a sixth grade reading level (McLellan & Dembo, 1992).	No charge	Elizabeth Rahdert, Ph.D. National Institute on Drug Abuse 5600 Fishers Lane, Rm. 10A-30 Rockville, MD 20857 (301) 443-4060 <i>Or available from:</i> NCADI (301) 468-2600 in Maryland 1-800-729-6686 elsewhere
Problem Severity Index (PSI)	This is a structured interview developed to identify, document, and respond to drug/alcohol abuse as well as problems in other important areas of functioning among adolescents entering the juvenile court system. Administration takes 45 to 60 minutes (Schaefer, 1992).	No charge; training is required	Jim Boylan Juvenile Court Judges Commission P.O. Box 3222 Harrisburg, PA 17105 (717) 787-6910
Quantitative Inventory of Alcohol Disorders (QIAD)	Each item on this 22-item self-report instrument is rated on a 5-point scale. It takes 10 to 12 minutes to complete. It assesses the severity of alcohol problems during the month before administration of the test (McLellan & Dembo, 1992).	Not marketed	T.D. Ridley & S.T. Kordinak (1988), "Reliability and Validity of the Quantitative Inventory of Alcohol Disorders (QIAD) and the Veracity of Self-Report by Alcoholics" (<i>American Journal of Drugs and Alcohol Abuse</i> , 14[2], 263-292; see pp. 279-287)
Self-Administered Alcoholism Screening Test (SAAST)	This is a 34-item questionnaire or interview with a yes-no format. There is also an abbreviated 9-item version. Considered useful for screening medical patients for alcoholism (NIAAA, 1990).		W.M. Swenson & R.M. Morse (1975), "The Use of a Self-Administered Alcoholism Screening Test (SAAST) in a Medical Center" (<i>Mayo Clinic Proceedings</i> , 50[4], 204-208; see pp. 207-208)
Short Michigan Alcohol Screening Test (SMAST)	This is a 13-item questionnaire to identify alcohol problems. It reviews an individual's drinking habits, history, and alcohol-related problems. Takes approximately 15 minutes to complete and requires a seventh grade reading level (Singer, 1992).		M.L. Selzer, A. Vinokur & L. van Rooijen (1975), "A Self-Administered Short Michigan Alcoholism Screening Test (SMAST)" (<i>Journal of Studies on Alcohol</i> , 36[1], 117-126; see p. 124)

Substance Abuse Assessment Instruments (continued)

<u>Instrument Name</u>	<u>Description</u>	<u>Cost</u>	<u>Contact/Source</u>
Substance Abuse Questionnaire (SAQ)	This computerized self-administered instrument targets adult probationers. It assesses risks and needs and presents treatment recommendations. It takes 25 minutes to complete. Requires computer and is available in English or Spanish.	\$5.00 per test	Herman Lindeman 2601 N. Third St., Suite 108 Phoenix, AZ 85004 (602) 234-2888
Substance Abuse Relapse Assessment (SARA)	This is a structured interview developed for use by substance abuse treatment professionals to help recovering individuals recognize signs of and avoid relapse. Used mostly with adult populations. Contains 41 questions administered in paper and pencil format. Takes approximately 60 minutes to complete. The results are interpreted individually by the assessor (Schaefer, 1992).	No charge	Roger Peters Florida Mental Health Institute Dept. of Mental Health Law and Policy University of South Florida 13301 Bruce B. Downs Blvd. Tampa, FL 33612-3899 (813) 974-4510
Substance Abuse Subtle Screening Inventory (SASSI)—Adult or Adolescent Version	This is a 52-item self-administered true-false questionnaire. Many items appear to be unrelated to substance abuse, but items allow clients to self-report negative consequences of substance use. May be administered in booklet or computer form. Can be given to individuals or groups. Requires about a third grade reading level. Requires 10 to 15 minutes to complete and about 1 minute to score (Schaefer, 1992).	Starter kit with 25 tests, manual, scoring key: \$75.00; additional tests: less than \$2.00 each	SASSI Institute P.O. Box 5069 Bloomington, IN 47407 1-800-726-0526
T-ACE Questionnaire	This instrument is designed to identify pregnant women who consume quantities of alcohol that potentially can damage the fetus. It takes approximately 1 minute to complete and incorporates three items of the CAGE Questionnaire. In addition, it assesses alcohol tolerance (NIAAA, 1990).		R.J. Sokol, S.S. Martier & J.W. Ager (1989), "The T-ACE Questions: Practical Prenatal Detection" (<i>American Journal of Obstetrics and Gynecology</i> , 160[4], 863-870; see p. 865)
TASC, Inc. Illinois	Interview format that takes 90 to 120 minutes to complete. It assesses need, motivation, and level of treatment for drug-involved offender populations. Should be performed by a trained clinician (Singer, 1992).	Contact agency for more information	Melody Heaps, Eve Weinberg TASC, Inc. 1500 N. Halstead Chicago, IL 60622 (312) 787-0208

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Endnotes

1. Portions of this section were adapted from Assessment Instruments and Techniques (Chapter 11) and Drug Recognition Techniques (Chapter 12) in *Identifying and Intervening with Drug-Involved Youth*, written by Ann H. Crowe and Pamela Schaefer, American Probation and Parole Association.

2. Information in this section was adapted from Assessment Instruments and Techniques (Chapter 11) in *Identifying and Intervening with Drug-Involved Youth*, written by Pamela Schaefer, American Probation and Parole Association.

Chapter 5—The Importance of Patient-Treatment Matching

The consequences of alcohol and other drug addictions include individual losses of income, jobs, educational opportunities, health, family relationships and self-esteem because of dysfunctional social behavior related to substance abuse. Societal costs include lost productivity because of work-related accidents and absenteeism, rising health care expenditures, the price of criminal victimization and responses by the criminal justice system, and the human suffering of drug-exposed infants, family violence, and other accidents.

There are no “quick fixes” or “magic bullets” to solve the problem of addictive disorders. Research indicates that treatment can be successful with drug- and alcohol-involved persons. However, different people respond to various approaches in diverse ways, making individualized *treatment matching* an essential component of intervention. In this chapter, considerations for matching patients with the most advantageous treatment regimen will be explored.

Alcohol and other drug addiction is a chronic, progressive, relapsing disorder. It is caused by interrelated biopsychosocial influences. Assessment is one of the five critical areas of treatment, and it is the first step in the treatment process. Comprehensive assessment is essential in determining an individual’s particular constellation of strengths, problems, and

needs. An effective treatment plan can be developed only after a thorough assessment has been completed.

When a patient has a physical illness, diagnostic assessments are performed to determine the specific cause of the malady. Then, the most appropriate treatment is provided. For example, if a patient goes to a physician with a cough, several types of assessments are performed until the physician thinks the cause of the complaint has been found. Among the possible causes for a cough could be a simple cold, irritation from smoking or other inhaled substances, whooping cough, tuberculosis, and lung cancer. The physician will select different courses of treatment for each of these ailments. The correct treatment for the diagnosed cause of the cough must be selected. Applying chemotherapy to a cold or prescribing cough syrup for lung cancer is clearly inappropriate. Similarly, selecting the most appropriate form of treatment for a substance abuse problem is crucial.

There are at least three important reasons why effective patient-treatment matching is essential.

- *Improved success.* When individuals receive the treatment that is most appropriate for their needs, they are more likely to respond positively, remain in treatment longer, and begin recovery.
- *Programmatic efficiency.* No program can meet the needs of every individual. Instead,

patient-treatment matching helps channel persons with specific problems to the most appropriate program for them. This results in more effective use of scarce treatment resources. If patients are not matched with the appropriate treatment for their assessed needs, the treatment resource will be misused, and other persons who might benefit from that particular treatment approach may be excluded from entering the program because of limited program space.

- *Financial savings.* When individuals receive appropriate treatment and enter recovery, there are financial savings. Money is saved because of lower health care, crime-related, and other costs associated with substance abuse. The ultimate cost of treatment also may be lowered. If people are treated by methods that are effective for them, the funding for that treatment will be spent wisely; if appropriate patient-treatment matching does not occur, money will be spent imprudently.

Patient-treatment matching is not an exact science; it might be necessary to adjust the treatment plan following periodic re-assessment of the individual’s progress in treatment or when a relapse occurs. Much has been learned, but additional research is needed to maximize the benefits of selecting the most appropriate treatment approach for various individuals.

An Overview of Patient-Treatment Matching Considerations

Various studies about patient and program ingredients related to successful treatment of alcoholism have been conducted. These are summarized in Table 5-A. There are wide variations among the elements of various treatment programs. While the factors reported here can provide general guidance, much more information must be gained from the assessment of individuals and from evaluation of agency programs. This table also demonstrates that there are many areas about which sufficient research knowledge has not been gained. There are many other questions about patients and programs that need further evaluation (McLellan & Alterman, 1991).

The type and duration of drug use, treatment history, and other patient characteristics also can be matched with certain drug treatment methods. The Office of National Drug Control Policy has developed a model (Table 5-B) for matching drug use to treatment methods (Office of National Drug Control Policy [ONDCP], 1990).

Referral of individuals to various treatment programs must attempt to make the best possible fit between the patient's and the program's characteristics. Unfortunately, the state of the art is imperfect, and there is still much to learn about the precise combination of factors that ensure positive treatment outcomes. Nevertheless, existing information, and the experience of practitioners with patients and treatment modalities, can facilitate appropriate treatment matching. Such practices are ultimately most likely to keep patients engaged in the treatment process to achieve recovery, and to

Table 5-A.—Patient and Program Factors for Treatment Matching for Alcohol Dependence

<u>Patient Factors</u>	<u>Program Factors</u>
Low alcohol dependence and high social supports	Brief treatments that are informative/instructional, anonymous, confidential; for some, controlled drinking may be an appropriate goal
Low alcohol dependence, high social supports, and low psychiatric problem severity	Traditional outpatient programs
Mid to high alcohol dependence, mid to high social supports, low to medium psychiatric problem severity	Traditional inpatient programs
High social stability, married, not depressed	Antidipsotropic medication (e.g., Antabuse)
Conceptual abilities, high self-image	Group therapy
Depressed, not antisocial personality	Individual therapy
Likely to encounter environmental risks	Relapse prevention
Authoritarian/religious, conforming, not depressed	Alcoholics Anonymous

(Source: McLellan & Alterman, 1991)

be cost-effective (Allo, Mintzes, Nischan & Brook, 1988).

Goals of Treatment

There are three levels at which goal setting for treatment is important: the individual level; the program level; and the community, State, or societal level. The focus of this chapter will be primarily on individual treatment goals. However, mention of the other two levels will be made, and further discussion will be provided in later chapters.

Individual Treatment Goals

Before attempting treatment with substance abusing patients, professionals must assess their

needs and problems and establish goals for treatment. Without doing so, both the patient and professional run the risk of being sidetracked during the process and missing their objectives. Just as the assessed needs and problems of each person develop into a unique configuration for that individual, the treatment goals and plans also must be distinctive and realistic. The goals become the guide by which the rest of the treatment plan is directed, implemented, and evaluated.

Among the possible goals that may be appropriate for individuals entering treatment are the following (Institute of Medicine, 1990; Schuckit, 1989; Vuchinich, Tucker & Harllee, 1988):

- *End substance abuse.* Recovery is the process of initiating and

Table 5-B.—Treatment Matching Model for Drug Use

<u>Type of Drug Use</u>	<u>Treatment Methods</u>
First treatment experiences for frequent cocaine or other drug use; treatment follow-up	Outpatient (nonmethadone) treatment or partial hospitalization
Long-term heroin addiction	Methadone maintenance or therapeutic community
Extended drug use with criminal history; addicted pregnant women	Therapeutic community or structured residential treatment
Outpatient treatment failures; addicts with serious psychiatric/medical problems	Inpatient, partial hospitalization, or structured residential treatment

(Source: ONDCP, 1990)

maintaining abstinence from alcohol or other drug use. It also involves making personal and interpersonal changes (Daley & Marlatt, 1992). Whether an individual is addicted to or abusing alcohol, illegal drugs, prescription drugs, or a combination of these, the most important goal is to discontinue the use of alcohol and/or drugs. In some cases, it may be a feasible aim for a person to control his or her alcohol consumption or the use of prescribed medicines. However, most chemically dependent persons will have difficulty with this, and many will find they must adopt a goal of abstinence if they are to enter recovery.

- *Improve health.* Chemically addicted persons typically have concomitant health problems. These vary widely, and some illnesses are closely associated with the use of specific substances. (See Chapter 7 on substance abuse-related infectious diseases.) In some cases, health problems may have preceded the initiation of substance abuse.
 - *Medical care.* Appropriate medical attention should be a high priority for many patients. It is especially important that patients who are pregnant, at

risk for HIV disease, or exhibiting symptoms of severe illnesses, such as pain and convulsions, receive immediate medical attention.

- *General health.* Overall improvement of health includes helping the individual develop positive health practices. This may include a regular and enriched diet, vitamin supplements, sufficient sleep, and regular exercise. Routine and corrective dental care may be needed, as well.
- *Risk reduction.* Patients need education and assistance in ending specific practices that place themselves at risk for diseases. Drug injection practices, as well as unsafe sexual behaviors, are associated with the transmission of HIV (the causative agent of AIDS) and other infectious diseases. The spread of tuberculosis also is increasing rapidly among drug-involved persons. Substance abuse-related infectious diseases will be discussed in more detail in Chapter 7.
- *Treat psychiatric disorders and psychological problems.* Long-term use of several substances of abuse, including alcohol, can result in neurological damage, as

well as other psychiatric and emotional problems. Brain impairments can affect a person's mental and physical abilities and emotional control. Other psychiatric disorders, such as manic depression, antisocial personality, or schizophrenia, may be present before the development of chemical addiction. Emotional, psychological, and psychiatric disorders may interfere with treatment efforts. Treatment providers should recognize the indicators of these problems and provide or refer patients for evaluation and treatment.

- *Meet employment and educational needs.* School performance and attendance problems are highly correlated with substance abuse among young people. For adults, addiction often affects employment, sometimes resulting in under- or unemployment. Treatment not only needs to help individuals resume patterns of productive employment or educational involvement, it also may be necessary to address deficits that have accrued during the period of substance abuse and addiction. Youth may need remedial education services; both youth and adults may need vocational training and other skill development related to seeking and maintaining appropriate employment.
- *Reduce criminal behavior and resolve legal problems.* There is a strong possibility that many persons who are chemically dependent also may be involved in illegal activities. This may include income-generating crimes (e.g., shoplifting, burglaries, prostitution), expressive crimes (e.g., assault, homicide), and drug-related charges (e.g., drug possession, drug sales). Treatment for substance abuse has been linked with decreases in the

amount of criminal activity in which an individual engages. Whether individuals are within the criminal justice system or not, many will be facing legal problems. In some cases these may be related to civil matters, such as divorce, child custody, and other suits. Those who are aliens to this country may need to resolve issues related to their immigration status. All of these persons may need help in understanding the complex legal system. They also may need the services of an attorney to represent their interests. However, they may be unable to locate or pay for such help. Therefore, an important goal is to help the person understand and resolve legal problems so his or her attention can be more firmly focused on the substance abuse treatment.

- *Improve personal circumstances:*
 - *Personal values.* Through treatment, the individual's beliefs and attitudes in various spheres should be examined. Exposure to other viewpoints and discussion of problems that may have resulted from previous perspectives can be helpful in bringing values about work, family, and the law more closely in concert with those of society.
 - *Coping skills.* Substance abuse is often a result of inadequate coping skills, or the inability to function satisfactorily in the environment. The coping skills needed often include stress management, decision making, assertiveness, parenting skills, financial management, personal care (e.g., nutrition and physical hygiene), and many others. The lack of these coping mechanisms may interfere with progress in treatment programs.

- *Basic needs.* Many persons with serious alcohol or drug dependencies may not be able to meet even their basic subsistence needs for shelter, food, and clothing. Providing assistance in these areas will, again, help center attention more clearly on the individual's treatment goals. It is also important that individuals learn skills to help them achieve greater control, independence, and autonomy in these areas in the future.
- *Positive social support systems.* Formal and informal support systems are vital to every person. These support systems are composed of family members, friends, co-workers, churches, and social organizations, among others. They help persons with basic needs and personal care, provide a sense of belonging, and afford opportunities for emotional expression. For many chemically dependent persons, previous social relationships have been lost, were never formed, or were part of the substance abuse problem or environment. Thus, it is important to help them develop positive, trusting relationships within and outside the treatment setting.

Program Goals

Treatment program goals often will be closely aligned with individual treatment goals. Agencies and organizations will have goals to provide specific services that are effective and cost-efficient. Retention of individuals in treatment, and preventing relapse, may be additional program goals. Recruitment and training of qualified staff may be other areas for goal setting. Program evaluation and improvement are additional considerations for goal development at the program level. Program goals will be

discussed more thoroughly in Chapter 10, on program evaluation.

Social Goals

At the community, State, and national levels, there are several goals for effectively treating, and thereby reducing, substance abuse. These include, but are not limited to, the following:

- *Reduction in the health consequences of substance abuse.* Decreasing the incidence of substance abuse is directly related to slowing the spread of HIV/AIDS and other infectious diseases related to chemical dependency. Reductions in chemical dependency also may affect the numbers of accident, homicide, and suicide victims. Another important goal in treating substance abusing women is reducing the number of infants born with drug dependence or other impairments resulting from exposure to alcohol and other drugs.
- *Reduction in crimes related to alcohol and other drugs.* Treatment of chemical dependency is associated with diminished criminal activity, especially income-generating and violent crimes that may be directly related to the drugs taken. Decreasing demand for drugs also diminishes the substantial profits that can be gained from the manufacture and sale of illegal drugs. These, in turn, result in lower criminal justice system costs related to drug and alcohol crimes, including costs for arrests, processing, court services, and supervision or incarceration.
- *Improved productivity.* Persons who are not dependent on drugs are more likely to be able to maintain employment, take care of their own financial needs, and pay taxes.

These goals, among others, underscore the fact that substance abuse *treatment is cost-effective*. It can result in savings in health care costs related to infectious diseases, accidents, and deaths. The expense of providing criminal justice services or incarceration, and the losses suffered by victims of crimes, can be diminished. With more productive citizens who are recovering from chemical dependency, the need for welfare expenditures, health, and other maintenance costs can be reduced.

Patient-Treatment Matching

Each patient's personality, background, and mental condition and the duration, extent, and type of drug use must be considered when selecting a treatment program or approach (ONDCP, 1990). A comprehensive assessment and setting individualized, realistic goals for treatment are the essential first steps for effective patient-treatment matching. An analysis of program resources and characteristics is also important in the patient-treatment matching process. Both individual and program factors to be considered in treatment matching will be discussed.

Program Factors

Several program factors that must be considered for treatment matching are discussed in this section.

Availability and Accessibility of a Variety of Treatment Modalities

Within communities and regions a range of treatment options should be available. These should encompass the various types of substance abuse occurring in the area (e.g., alcoholism, heroin addiction, cocaine abuse), as well as

differences in patient characteristics (e.g., age, gender, racial or ethnic group identification, socioeconomic level). Thus, a service *network* of different programs providing a multifaceted continuum of care to facilitate referrals and movement of patients to the most appropriate program is needed (Allo, Mintzes, Nischan & Brook, 1988; McLellan & Alterman, 1991).

In some cases, one agency may be able to provide several treatment services; however, typically, various treatment modalities are the province of separate agencies. Effective case management for patients, and linkages with various agencies, will ensure that individuals have access to the most appropriate type of program to meet their needs (Allo, Mintzes, Nischan & Brook, 1988).

Program Characteristics

The stated purpose of the program and the patients for which it was developed is important. Some programs are designed to treat only those addicted to a specific drug. Other programs are geared to meet the needs of a particular demographic group, such as adolescents, women, or Hispanics. Program characteristics, such as cost, location, and referral network, also largely determine the eligibility and type of patients for whom a particular program is appropriate (McLellan & Alterman, 1991).

Program Proficiency

It is not only important that programs exist; they also must be run properly and must accomplish what they say they will accomplish. Programs must be able to demonstrate that treatment is delivered in the intended manner, quantity, and intensity, and that the outcome with a majority of patients is positive (McLellan & Alterman, 1991).

Basic Elements of Treatment

There are some common ingredients that should be included in all treatment approaches. Basic human needs for food, rest, medical care, and other essentials should be met through the program or referral to other resources. Programs should hold patients accountable for their behavior, including attendance, punctuality, and abstinence from use of chemicals. Frequent drug tests, and consequences for use, are advisable. Accountability measures encourage chemically dependent persons to make responsible, age-appropriate decisions. Consequences and accountability measures do not mean harsh punishment for first-time or minor rules infractions. Rather, programs should incorporate an array of possible responses appropriate for various situations. These might range from verbal confrontation and counseling, loss of a privilege, or increased supervision to more restrictive or rigorous reactions to repeated or more serious program violations. Programs should attempt to instill in participants basic ideas of trust, respect, honesty, and responsibility (ONDCP, 1990). Treatment programs need to provide a consistent structure to help patients, whose lifestyles have been chaotic, adjust and conform to the rules and realities of life (Nurco, Hanlon & Kinlock, 1990).

Staff Competency and Attitudes

There should be enough staff members to meet the needs of the patients in the program. They also should be experienced and trained in providing the services for which they are responsible. Staff must be firm and provide strong leadership, while showing compassion and modeling positive personal characteristics (ONDCP, 1990). Staff attitudes also are an important program factor. Permissive

attitudes among staff may result in viewing society or outside forces as responsible for one's addiction. Thus, neither the staff nor the person in treatment is confronted with taking responsibility for actions to change behaviors and attitudes during treatment (Nurco, Hanlon & Kinlock, 1990). Rather, attitudes that require responsibility and accountability may be more productive.

Patient Factors

Successful treatment outcomes largely depend on the accuracy of assessment, the development of realistic goals, and the appropriateness of the match between the individual and the treatment program. There are several individual patient factors that should be considered.

Readiness and Motivation for Treatment

Drug use is fraught with difficulties, including illnesses, withdrawal effects, financial burdens, threat of legal problems, and the potential of death. At the same time, use of drugs may produce pleasurable effects and relief from anxiety, depression, or boredom. Discontinuing the use of many substances can result in painful physical and psychological withdrawal symptoms. Many substance abusers have developed networks of friends among other chemically dependent persons. They may have replaced persons from their support system, who would encourage them to recover, with persons who motivate or support continued addiction. Thus, there is often ambivalence on the part of chemically dependent persons about discontinuing their substance abuse (Nurco, Hanlon, & Kinlock, 1990).

Individuals facing a crisis as a result of substance abuse must receive appropriate services regardless of whether or not they intend

to discontinue their use of alcohol or other drugs. This may include emergency medical care, detoxification, temporary shelter, and similar types of services. However, once they have been stabilized, they may or may not be ready to enter a treatment program. Such crises may enhance treatability; thus, it is important that service providers take advantage of these opportunities and actively prepare and recruit patients for treatment (Allo, Mintzes, Nischan & Brook, 1988). Although one never wants to "give up" on the possibility of helping someone, when treatment programs have limited space for participants, it may be most cost-effective to assess the individual's goals and determine whether or not s/he is ready to make a serious attempt at recovery.

Treatment programs that facilitate interpersonal, vocational, and economic gains and maintain pressures to remain engaged in treatment are likely to be more effective. Besides the efforts of staff to motivate patients to remain in treatment, programs can encourage family members to encourage patients and, when appropriate, keep legal authorities apprised of the person's participation in treatment (Nurco, Hanlon & Kinlock, 1990).

Drug Use Pattern

Some treatment programs are specifically aimed at treating addiction to one type of substance. For example, methadone maintenance is limited to treatment for heroin addiction. However, many chemically dependent individuals have a history of abusing more than one type of substance. When selecting the most appropriate treatment program, consideration must be given to the type(s) of substances abused and the effectiveness of the particular program in treating persons with such addiction(s). Persons with serious polydrug problems

may benefit from residential or inpatient treatment initially (Hubbard, 1992; Nurco, Hanlon & Kinlock, 1990).

Pharmacologic Therapy

The physiological nature of addiction to some drugs makes pharmacological treatment a preferred option for some persons. Heroin addiction is particularly amenable to treatment with methadone, which is a synthetic form of opiate that provides a more manageable form of addiction. Medications that block the effects of abused chemicals or cause adverse reactions in patients may also be good adjuncts to treatment for some persons. These may be helpful in the treatment of heroin, alcohol or other central nervous system (CNS) depressants, and cocaine addiction. In Chapter 8 various pharmacotherapeutic treatments, and the recommendations for using them, will be discussed.

Some addicts also have psychiatric conditions. If possible, these should be treated with non-pharmacologic approaches. However, for some, medications (e.g., antidepressants, lithium) will be needed and may be more likely to help the individual remain in treatment for drug abuse (Nurco, Hanlon & Kinlock, 1990).

Presence and Severity of Psychological Problems

The way substance abusers respond to treatment approaches may be affected by the presence and severity of psychological problems. For example, one study found that persons with severe psychological problems did not respond well to confrontation and the prohibition of psychotropic drugs that are characteristics of therapeutic communities (Nurco, Hanlon & Kinlock, 1990). When assessment findings indicate that individuals have a concurrent psychiatric illness, they should be

placed in a treatment program that will address both the addictive and the mental disorder. If such programs are not available within a single agency, services that can each treat a respective problem, but will work collaboratively to provide the patient with comprehensive, consistent care, must be found. More information on addicted persons with psychiatric disorders is provided in Chapter 6.

Ethnic and Gender Considerations

Drug abusers from different ethnic and gender groups have different problems, requiring diverse treatment approaches. Differences may include variations in current and past behavior and in the need for treatment. For example, one study found that Hispanic males were most frequently unemployed and undereducated compared with other groups in the study, including black and white males and females. This finding suggests they need a wide range of services, including vocational rehabilitation and interventions to control illicit drug use and crime. Residential drug treatment may be the most appropriate option. White males, on the other hand, had the highest occupational status and education. However, they tended to be polydrug abusers and were more likely to use illicit non-narcotic drugs and commit crime while in treatment. Thus, a highly structured program with careful monitoring of crime and drug use would be indicated (Nurco, Hanlon & Kinlock, 1990).

The ethnic composition of persons in a treatment agency has been found to influence treatment success. In one study, members of particular ethnic groups remained in outpatient treatment significantly longer if more than three-quarters of the treatment program patients were from the same ethnic group. Majority/minority status

was less important to the success of patients in residential and methadone maintenance programs. It has also been suggested that the ethnic representation of staff should be similar to that of patients in a program (Nurco, Hanlon & Kinlock, 1990).

Rehabilitation vs. Habilitation

Persons with vocational and interpersonal skills may be helped by just stopping the use of illicit drugs and making concomitant lifestyle changes. However, for those who began using drugs at an early age and did not develop necessary skills, additional help is needed. Therapeutic communities often provide work and skill development for these individuals (Nurco, Hanlon & Kinlock, 1990).

Lifestyle Changes

Severing contact with drug-using peers contributes to the success of treatment. Programs need to help patients avoid contact with active drug users, learn to use leisure time in different ways, and cope with the anxiety associated with adjusting to living drug-free (Nurco, Hanlon & Kinlock, 1990). When contact with drug-using associates cannot be severed in community-based treatment, separation from the drug-using environment through residential change or treatment may be necessary.

Family Involvement

Family involvement in the treatment process is very important, especially for adolescents. An effective program needs to be able to develop working relationships with family members and gain their cooperation (Nurco, Hanlon & Kinlock, 1990). For those patients with available family members (i.e., parents, spouse, children, significant others), it is important to include them in the treatment program.

Comprehensive Services

The variety of patient factors just described indicate the need for a comprehensive array of treatment programs and auxiliary services to meet the range of needs presented. The type of substance being abused and individual patterns of substance abuse will require different models of treatment. Ethnic and gender differences, psychological problems, and motivation and readiness for treatment are among the individual characteristics that require different treatment programs.

Any effective substance abuse treatment system must provide a comprehensive continuum of programs and services. This will include a wide range of substance abuse treatment modalities and services. In addition, treatment programs will be linked with related services, such as health care, education, and housing programs, to ensure that patients can obtain help with associated physical, social, and psychological problems.

Effective treatment matching can occur only when needed services are provided. This requires systems coordination and communication at both the local and the State levels.

Conclusion

A comprehensive assessment of the addictive disorder is the first step in developing a treatment plan that matches optimal treatment programs and services with the identified patient characteristics and needs. Although more research is needed, the chapter reviewed significant findings about selecting appropriate programs for particular types of problems.

Patient-treatment matching considers individual characteristics and differences, as well as program

features. Program proficiency and staff competency and attitudes are important areas to assess. A comprehensive array of services is needed to meet a variety of patient needs. Individual motivation, drug use patterns, psychological problems, and ethnic and gender variables are part of the equation for treatment matching.

Patient-treatment matching is an essential element of effective treatment for alcohol or other drug addiction. Collaboration among various parts of the treatment system at the local level is crucial to achieve effective treatment matching. In turn, effective matching of treatment resources to the addicted individual offers improved treatment success, programmatic efficiency, and financial savings. Similarly, coordination is needed among decision makers at the State level to ensure that needed programs are available and appropriately funded.

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Chapter 6—Special Populations

At one time the United States was called a “melting pot,” as citizens were molded and adapted to the “American way of life.” However, more recently cultural pluralism and diversity are concepts being stressed to promote the co-existence of various cultural groups, all of which may simultaneously maintain some of their distinctive characteristics. Despite such beliefs, there are still conflicts between ethnic and cultural groups, and there is disequilibrium in the power, prestige, and resources available to different groups. These have a tremendous impact on disadvantaged persons who also may be alcohol- and/or drug-involved. It is difficult to separate socioeconomic, ethnic, gender, and other variables that influence some members of these populations. They often experience multiple jeopardies, including minority status, poverty, physical and mental challenges, age, lifestyles, and other factors.

Persons who are disadvantaged and disenfranchised have been called “hidden populations” (Lambert & Wiebel, 1990, p. 1). They include groups such as the homeless, chronically mentally ill, high school dropouts, criminal and juvenile offenders, prostitutes, gang members, runaways, and others. Although most people are aware of these citizens, often, less personal and research knowledge is available about them. They frequently are omitted from nationally representative surveys because they are not living in typical

homes, are not attending school, or do not want to cooperate with interviews. However, many members of these groups are at greater risk of alcohol and drug abuse, and related diseases, than the general population. Thus, those who may be in the greatest need of treatment have been studied the least (Lambert & Wiebel, 1990).

Despite civil and human rights efforts, the United States remains a country in which members of ethnic minority and other disadvantaged groups are often subject to prejudicial treatment. Some of the life experiences that are different for these various people include language, religion, family relationships, and community norms. Minority groups and other special populations are disproportionately represented among the economically disadvantaged. They are more likely to live in urban centers that have higher crime rates, poorer schools, substandard housing, and few employment opportunities. Because of these disadvantages, many of these group members have required social and financial assistance. Often the bureaucratic structure required to administer these programs results in processes that can be demeaning and uncaring and can foster dependency. This, and past injustices, may result in some persons having difficulty accepting and cooperating with representatives of a different culture (Sweet, 1989).

Difference in language, whether a foreign language or an English dialect, can set apart ethnic populations from the mainstream culture

and create communication difficulties (Sweet, 1989). These obstacles increase stress and interfere with psychosocial functioning. Educational opportunities also have not always been equitable with all population groups. Thus, in some instances, services are needed to overcome previous deficiencies as well as to intervene with problems of chemical addiction and dependence.

Despite many struggles, ethnic group members, and other special populations, often display remarkable strengths. In some instances, there are powerful religious beliefs that help sustain members through trying experiences. Family relationships and values may be different, and extended family members and non-related individuals may form supportive bonds that are not typical of Anglo-American groups (Sweet, 1989).

Social attitudes toward users of alcohol and drugs affect concepts and practices of diagnosis and treatment. As the acceptability of alcohol and drug use shifts from one social class to another, attitudes change toward both the substances and the users. For example, before World War II marijuana use was confined to the very wealthy, the underworld classes, and the entertainment profession. After the war, it was increasingly associated with urban ghetto populations who were also noted for use of heroin and cocaine. It was considered very harmful when used predominantly by this population. However, as it became widely used by middle class Americans during the 1960s and 1970s, it was perceived as

relatively less harmful and more socially acceptable. Only in recent years has the concern for marijuana use, especially among adolescents, re-emerged (Institute of Medicine 1990; Roffman & George, 1988; Weiss & Millman, 1991).

Individuals, both patients and services providers, are shaped by their social milieu, background, education, and many other factors. They approach a treatment setting and therapeutic experience with varied behaviors and attitudes toward persons who are different from them. Georgetown University (1989) developed information describing a continuum of cultural competence which characterizes various possible responses to persons from cultures other than one's own. These include:

- *Cultural destructiveness*: These are attitudes, policies, and practices that are destructive to other cultures and their members.
- *Cultural incapacity*: Systems or agencies lack the capacity to help, but they are not intentionally destructive to another culture.
- *Cultural blindness*: Agencies and professionals attempt to treat all people as though they are alike. One's color or culture does not make any difference; services are so culturally neutral that they are not relevant to most of the participants.
- *Cultural pre-competence*: At this stage, individuals or agencies realize they have weaknesses in their cultural competence and attempt to improve. There is a risk that minimal movement or token changes may be accepted as sufficient.
- *Cultural competence*: At this level, others are accepted and respected for their differences. One continually strives to expand cultural knowledge through consultation with people of different cultural groups. In program settings, staff

who are committed to their particular culture are hired; staff are supported and assisted to become comfortable working in cross-cultural situations; and there is a commitment to policies that enhance different clients and services.

- *Cultural proficiency*: Different cultures are held in high esteem. Program staff conduct research and publish findings. New therapeutic approaches appropriate for particular cultures are developed. Specialists in cultural competency practice may be hired. Agencies and staff advocate for culturally competent practice and work to improve relationships among cultures throughout the system and society.

There are several special groups of patients with unique characteristics and needs to consider when attempting to match them with the most appropriate treatment options. In some cases, there may be treatment programs exclusively focused on the needs of a particular group of patients, such as women or adolescents. In other cases there may be more subtle program differences, such as staffing patterns or facilities, that make one service preferable to another for certain groups of patients.

Ethnic and racial minorities, as well as many other special populations, encounter significant barriers to obtaining treatment for alcohol and other drug problems. A few of the most prevalent ones include (Office for Substance Abuse Prevention [OSAP], 1990a):

- *Funding*: Many lack insurance or personal funds to pay for treatment. For inpatient programs, those who are employed face the loss of income for themselves or their family during treatment.
- *Availability*: Affordable programs often have long waiting lists.

- *Child care*: Persons with custodial care of young children need assistance for their care during treatment. Many fear the loss of custody of their children if they seek inpatient treatment.
- *Cultural barriers*: This includes the lack of sensitivity to issues of special populations on the part of some treatment professionals from the mainstream culture.

In this chapter, summary information will be provided about several population groups of special concern in the treatment of substance abuse. Where possible, information related to the incidence of chemical dependency and treatment considerations are provided. Other factors also will be discussed.

Medically Ill Populations

The transmission or development of some diseases can be directly linked to the use of alcohol and other drugs. In some cases chemical substances that often are abused are used for medical treatment of emotional and physical illnesses. Other persons with chronic debilitating and painful illnesses or disabilities sometimes resort to alcohol and other drugs for self-medication.

Infectious Diseases

Acquired Immune Deficiency Syndrome (AIDS) has accentuated the role of drug use in the transmission of infectious diseases. The human immunodeficiency virus (HIV) attacks the body's immune system and allows diseases to progress that would not cause illness for a person with a healthy immune system. HIV is spread through exchanges of body fluids in three ways:

- sexual activity;
- blood contact; and

- from a mother to her infant *in utero*, during delivery or through breast milk.

Although blood contact has included transfusions and blood products in the past, the United States' blood supply is now tested and treated to eliminate virtually all these methods of transmission. However, injection drug use accounts for a growing number of AIDS cases. Injection drug users, and their sexual partners, are the second largest group of persons who have contracted AIDS. They accounted for more than 33 percent of all AIDS cases reported to the Centers for Disease Control and Prevention (CDCP) through September 1993. Injection drug use, or sex with an injecting drug user, was a risk factor for 29 percent of AIDS cases among adult and adolescent males.

Drug use plays a more significant role in adult and adolescent female AIDS cases. Forty-nine percent of female AIDS cases resulted from injection drug use by women. An additional 20 percent of cases were attributed to sex with infected partners who use injection drugs. Thus, 69 percent of female AIDS cases are related to drug use. In addition, 56 percent of children with AIDS (under the age of 13) had mothers who injected drugs or whose sexual partners were injection drug users (CDCP, 1993).

Official statistics of AIDS cases include only those whose disease has progressed to the point that they have symptoms of certain opportunistic diseases or cancers. Thus, those who may be infected with HIV but whose symptoms are not pronounced are not included in the numbers reported by the CDCP. Predicted trends in AIDS cases indicated a probable growth in the proportion of cases attributable to drug use. Drug-

involved persons often do not have access to medical attention or may choose not to use such care. It is also likely that the number of cases of drug-related HIV disease is under-reported.

When syringes are used for injecting drugs, a small amount of blood is drawn into the needle. This remains in the equipment after the drug is injected. Frequently, injection drug users share injection paraphernalia. Sometimes this is done because they do not have money to purchase new needles. In some cases, it is illegal to purchase syringes without a medical prescription. Sharing "works" also is considered a form of social bonding among some drug users. Injectable drugs are sometimes available in incarceration facilities, but injection equipment is scarce. Thus, needle sharing is practiced among injection drug users in prison when they can get drugs. When equipment is shared, there is an opportunity for small amounts of blood from an infected person remaining in a syringe to be injected into the person using the needle next.

Heroin is the most commonly injected drug; however, other drugs, including cocaine, methamphetamine, and anabolic steroids, sometimes are injected. Besides the injection of drugs, alcohol and drug use also may contribute to the spread of HIV disease because substances may inhibit judgment, resulting in unsafe sexual activities and drug use practices.

The incidence of tuberculosis, another infectious disease that is associated with both substance abuse and HIV infection, has increased markedly since the mid-1980s. Tuberculosis is transmitted when droplets containing *Mycobacterium tuberculosis* are expelled by an infected individual (i.e., through

coughing) and are inhaled by another person. In healthy individuals the disease may be inactive, although the person may react positively to a test for the disease. However, with the immune deficiency associated with HIV disease, the disease may be re-activated and become much more serious because of the compromised immune system (Novick, 1992).

Homelessness, malnutrition, alcoholism, and substance abuse also are associated with increased rates of tuberculosis. A combination of factors is responsible for the epidemic among these populations, including (Novick, 1992):

- crowded and unhealthy living conditions in which the disease agent can easily be transmitted from infected to uninfected persons;
- poor general health that compromises the immune system; and
- lack of compliance with treatment regimens for the disease.

A new strain of tuberculosis has recently been detected which is resistant to the medications formerly used successfully to treat the disease. This strain is making treatment of the disease and prevention of transmission to uninfected populations much more difficult.

Poor nutrition, poor general health, stress, and lack of medical care are common conditions among substance abusers. These factors may compromise the immune system, making chemically dependent persons more susceptible to Hepatitis B, sexually transmitted diseases, and other infectious illnesses, in addition to HIV and tuberculosis. More information will be provided in Chapter 7, Substance Abuse-Related Infectious Diseases.

Persons With Mental Disorders

Mentally Ill Populations

Persons who have coexisting psychopathology and substance abuse or dependence are sometimes termed *dually diagnosed*. Treatment of these individuals is complex because of the multiple potential combinations of the two types of disorders and the possible interactions between the two problems (Beeder & Millman, 1992; Walker, 1992a).

Estimates of the prevalence of individuals with both psychiatric and substance abuse disorders vary. Studies have found that more than half of people who abuse drugs (other than alcohol) have at least one coexisting mental illness. Slightly over one-third of alcohol abusers have at least one mental disorder. Approximately 29 percent of persons with diagnosed mental illness, on the other hand, have a lifetime history of either drug abuse or drug dependence. Among those in substance abuse treatment programs, the rate of overlapping disorders is roughly 50 to 65 percent. This is significantly higher than rates found in the general population (Beeder & Millman, 1992; Rovner, nd).

Several characteristics of individuals with both substance abuse and personality disorders include the following (Walker, 1992a):

- inflexible, maladaptive responses to stressful circumstances;
- significant impairments in loving, working, and relating;
- impulsivity;
- inability to accommodate other people's needs;
- boundary problems, such as getting others to solve their problems; and
- a history of pervasive anger and resentment.

Often those with both substance abuse and mental disorders lack basic resources, including income, food, and housing. They also frequently suffer from a high incidence of untreated health problems, such as dental conditions, hypertension, diabetes, and tuberculosis. In treatment, the dually diagnosed require a large amount of services and the effects of their disorders can be very frustrating to their care-givers (Buckley & Bigelow, 1992).

Persons with attention deficit disorders or minimal brain dysfunction usually are diagnosed as children and continue to have some level of brain dysfunction as they grow up. It has been found that they often use illicit drugs and alcohol for self-medication to alleviate their symptoms (Beeder & Millman, 1992).

The highest rates of dually diagnosed individuals occur in prison populations. The rate among prison populations is roughly four times that found in the general population (Rovner, nd). An estimated 80 percent of the prison population can be diagnosed with psychiatric as well as substance abuse disorders. This represents a dramatic rise in the number of mentally ill offenders in prison and may be attributed to both systems and individual characteristics, including (Chiles, Von Cleve, Jemelka & Trupin, 1990; Jemelka, Trupin & Chiles, 1989; Pepper & Massaro, 1992):

- a decline in the number of psychiatric hospital beds available;
- decreased community mental health care and other support;
- rigid criteria for civil commitment;
- the concomitant use of illicit drugs by persons with mental disorders;
- failure of individuals to continue in treatment; and

- sometimes violent behavior on the part of dually diagnosed individuals.

Dually diagnosed persons are particularly vulnerable to arrest because few community placements are available for them. They tend to fail more frequently in treatment and present more problems than other patient groups (Abram & Teplin, 1991). They also have higher rates of violence, murder, and suicide (Albert, 1990).

In responding to the treatment needs of dually diagnosed patients, whether they are in the community or in the prison population, there are several program characteristics that are recommended, including the following (Abram & Teplin, 1991; Pepper & Massaro, 1992; Walker, 1992b):

- Crisis intervention services are needed to provide detoxification and psychiatric stabilization.
- Identification of dually diagnosed persons is critical. Among those in prison populations, diversion or referral to the mental health system is recommended. This may require improved linkages between criminal justice agencies and community mental health and substance abuse treatment programs.
- A network of community treatment agencies to address the needs of the dually diagnosed is needed. Extensive case management services are key for effective programs. A vast number of service elements needed by each patient must be integrated.
- Combined treatment for both disorders is considered essential. Treating one disorder without attending to the other is likely to be unsuccessful.
- A comprehensive approach to treatment is required, including services to meet basic needs of housing, education, vocational

rehabilitation, and vocational opportunities. People also need help with family relationship issues.

- Rehabilitation techniques that address both thought processes and behavioral problems are needed because of the high incidence of minimal brain damage and other neuropsychological impairments.
- Long-term residential treatment in a therapeutic community is effective for some dually diagnosed individuals.
- Relapse prevention programming is vital.
- Continuing care after inpatient treatment and community supervision for those released from incarceration facilities is vital for helping persons maintain recovery.

Dually diagnosed individuals require special attention to their treatment needs. Many experience multiple perils in addition to psychiatric disorders and substance abuse, including HIV and other diseases, homelessness, and increased likelihood of involvement with the criminal justice system. Coordination and collaboration among service systems and decision makers is especially important to meet the complex needs of these patients. To be effective, their treatment must be comprehensive and long-term. However, when recovery is achieved and maintained through effective relapse prevention programming, it is more cost-effective than continued incarceration.

Developmentally Disabled Persons

Developmentally disabled persons have limited abilities to process information, think, and reason because of mental or physical impairments that occur during their developmental years (before

age 22). The disabilities result in limitations in three or more areas of life activity, such as (Resource Center on Substance Abuse Prevention and Disability, nd):

- self-care;
- receptive and expressive language;
- self-direction;
- learning
- mobility;
- capacity for independent living; and
- economic self-sufficiency.

Persons with developmental disabilities are capable of learning, but it takes longer and must be more concrete (Glow, 1989).

Socially, developmentally disabled persons often are isolated without close friends and support systems. They tend to be manipulated easily and have difficulty learning from previous experiences. If they use alcohol or other drugs, it is likely to be for the same reasons as other persons do—to socialize, to overcome loneliness, to be accepted, and perhaps to self-medicate for feelings of anxiety or depression. The extent of substance abuse among this population is not well-documented (Glow, 1989). Limited mental abilities also sometimes contribute to poor judgment by developmentally disabled persons. In some cases, others take advantage of their naiveté. At times, this leads to involvement in criminal activities and results in their entry in the criminal justice system.

For developmentally disabled persons with a substance abuse problem, appropriate treatment matching may be challenging because of their difficulty in understanding and processing information. Twelve-Step programs require verbal skills and motivation that may be lacking for some persons. Emotions Anonymous is a self-help program for developmen-

tally disabled persons. Modeled on Alcoholics Anonymous, it also incorporates educational and relaxation techniques. Group problem solving, individual goal setting, and social reinforcement are included in the program (Glow, 1989).

More research is needed about this special population group. The extent of substance abuse problems and the most appropriate treatment approaches need further exploration. Treatment providers and decision makers need to collaborate especially closely to consider the needs of this group of persons who may not be able to advocate effectively for themselves.

Ethnic and Racial Minority Populations

Various racial and ethnic groups have different patterns of drug abuse. Black and Hispanic substance abusers tend to use heroin and cocaine more than white addicts; whites tend to abuse a greater variety of substances. The results of some studies have led to the hypothesis that whites tend to use drugs more as a result of emotional problems or deviance than do minority group members (Nurco, Hanlon & Kinlock, 1990).

African Americans, Hispanics and Native Americans are over-represented in the correctional system. Among a sample of inmates in the Bureau of Prisons facilities reported in 1991, the following rates of substance abuse problem were found for various groups:

• Native Americans	78.9%
• Hispanics	60.2%
• Blacks	54.3%
• Whites	49.3%
• Asians	11.1%

(Murray, 1991).

Native Americans

The Native American population consists of approximately 1.4 million persons, including American Indians and Alaskan Aleuts and Eskimos (Hill, 1989). Native Americans are no more homogeneous than Hispanics or Asian Americans. As a special population group, Native Americans are diverse, incorporating an array of tribal and cultural groups with differing values and customs. There is also considerable variation in the settings in which Native Americans live. Some live in urban areas while others reside on somewhat isolated reservations. Some studies include representative groups of all Native Americans, while others focus solely on American Indians, a specific tribe, or a particular locality. These factors influence the rates and types of alcohol and drug addiction found among Native Americans. Treatment approaches must be sensitive to the particular cultural heritage of persons entering programs.

There is a significant problem of substance abuse among Native Americans in the United States. Both male and female Indian youth use virtually every type of drug with greater frequency than non-Indian youth, including alcohol, marijuana, and inhalants. The age at first involvement with alcohol is younger for Indian youths and the frequency and amount of drinking are greater. Well established during adolescence, these trends continue into young adulthood. One study found a higher level of drug involvement among American Indian college students than all other student groups (OSAP, 1990c).

While alcohol and marijuana use are very common among Native American youth, inhalant use is almost twice as high as among all other youth ages 12 to 17. Use of

inhalants peaks during the early and middle teens and then tapers off in later years as the availability of marijuana, alcohol, and other substances increases (OSAP, 1990c).

The serious consequences of inhalants make this trend alarming. The results of inhalant use may be as grave as severe physical harm or death. Use of inhalants can result in organic brain damage, a condition that can be very severe, and possibly permanent. The inhaled vapors can cause fatty brain tissue literally to melt (Texas Commission on Alcohol and Drug Abuse, 1991). Various inhaled substances can cause coma or convulsions. Other risks include respiratory depression, cardiac arrhythmia, and irreversible damage to the kidneys, liver, and bone marrow. The sniffing of gasoline has caused lead poisoning, which can have lasting adverse effects on an individual's physical and emotional development.

It is theorized that these high rates of substance abuse among Native Americans are related to socioeconomic conditions including poverty, prejudice, and lack of economic, educational, and social opportunities. Family influences also are conjectured to play a significant role in early use of substances (OSAP, 1990c).

In recent years, drug use has declined among Indian youth as it has with other youth populations in the country, especially among those who were light users. However, rates for heavy users have tended to remain high (OSAP, 1990c).

Formal studies among Native American populations are somewhat limited, and most have been conducted on reservations rather than in community settings. Some research has suggested that intervention efforts need to be aimed at enhancing the health of Native American families. Successful programs have included key ele-

ments of community ownership, agency collaboration, and tribal determination (OSAP, 1990c).

Asian and Pacific Islander Americans

Asian Americans include a diverse population of people from Japan, China, Korea, India, the Philippines, Vietnam, and other Asian countries. This collection of people is one of the fastest growing minority populations in the United States (OSAP, 1990b).

Statistical evidence of alcohol and other drug use among Asian Americans is generally low compared with other subgroups of the population. However, substance abuse may be greater than survey reports indicate, as Asian Americans tend to handle problems within the family and community. They are not as likely to use public treatment services, as there is a stigma attached to seeking professional help in their culture (OSAP, 1990b).

Overall, Asian Americans have fewer alcohol-related problems than any other major ethnic group. However, there are indications that the use of alcohol and other drugs may be increasing. Traditionally, drinking takes place in controlled settings; rarely do they drink alone. However, drinking patterns among various groups of Asian Americans differ greatly (OSAP, 1990b).

Chinese Americans accept drinking among the elderly for health reasons. Chinese American youth are more likely to use Quaaludes than other ethnic groups. However, they have lower rates for using heroin, PCP, amphetamines, and Valium (OSAP, 1990b).

Hispanic/Latino Populations

Hispanic/Latino populations in the United States include Mexican Americans, Puerto Ricans, Cuban Americans, El Salvadorans,

Nicaraguans, persons from the Dominican Republic, and immigrants from other Central and South American countries. Spanish speaking people are not homogeneous. Rather, those from each country bring with them distinctive habits, customs, values, and cultural traditions (OSAP, 1990d).

Hispanics/Latinos constitute the second largest minority group in the United States population. Currently, they represent about 8 percent of our total population, but if trends continue, they will be the largest minority group in the early twenty-first century. Drug abuse among Hispanic/Latino youth has been significantly associated with high school dropout rates (OSAP, 1990d).

Hispanic/Latino youth appear to use alcohol at a rate similar to that of Anglo youth. Boys are more likely to begin drinking at a younger age and to drink more than girls. For other drugs, the level of use among Hispanic/Latino youth is comparable to, or slightly less than, that of Anglo youth. Hispanic/Latino youth aged 12 to 17 are more likely than Anglo or African American youth to have used cocaine (OSAP, 1990d).

Specific recommendations for treatment planning include (OSAP, 1990d):

- targeting the whole family and religious leaders because of the strong ties and influences these entities have;
- developing materials and programs in Spanish and making them culturally appropriate; and
- targeting efforts through community leaders and organizations to increase the acceptability of programs.

African Americans

Among high school students, African American youth have lower levels of reported drug and alcohol use compared to other

groups. Surveys also indicate that African American youth begin the use of alcohol and other drugs at later ages than the general population. However, the rate of substance abuse among African American school dropouts is not clear (OSAP, 1990a).

Yet, alcohol and other drug use is a leading health and social problem for African Americans. Among adult populations, African American women tend to abstain from alcohol use at higher rates than white women. For African American and white men the patterns are more similar. When alcohol-related health problems are examined, such as cirrhosis of the liver and certain types of cancer, there is a greater prevalence among African American men than among white men (OSAP, 1990a).

Although African Americans are more likely to abstain from using alcohol, studies have found that those who do use are also more likely to use other drugs concomitantly. The relative availability of illegal drugs in the inner city may play a role in drug use among African American youth. Other factors may include alcohol advertising targeted at African American consumers, the wealth displayed by local drug dealers, and media attention given to alcohol and drug use among African American entertainers and sports figures (OSAP, 1990a).

The relationship between alcohol use among African American youth and crime is well-documented. Delinquent behavior appears to begin before drug use. However, those who use alcohol are more likely to engage in delinquent behavior than those who do not drink. Cocaine use, which is on the rise in some African American neighborhoods, appears to be associated with higher crime rates. Researchers have found that drug-using African Americans primarily

tend to victimize members of their own community (OSAP, 1990a).

Rural AOD Abusers

Treatment of AOD abusers in rural settings presents a variety of special issues and problems:

- Rural treatment programs may be more expensive to administer than metropolitan programs. Although fewer persons may need a particular program or service, the cost of operation may be similar because comparable staff, facilities, and supplies are needed. This results in higher per-patient treatment costs.
- Treatment may not be as accessible due to the distance patients and program staff must travel to meet.
- Programs may not have a buy-in from the community or community agencies. In some rural communities, there may be a stigma related to alcohol and other drug addiction that is not as noticeable in urban areas. Persons needing treatment may be more visible than they would be in a more populated area; therefore, there may be more concern about confidentiality on the part of those needing treatment. The importance of treatment may not be understood or supported as well as in metropolitan areas with greater resources.
- There may be a lack of trained and experienced staff in the area of AOD issues. Rural areas may have a difficult time attracting and holding such professionals. Limited resources mean professionals in many agencies must perform a variety of tasks. Individuals in education and health care may not have sufficient time or expertise to devote specifically to drug issues (United States General Accounting Office [GAO], 1990).

These findings are substantiated by three reports, conducted by

Edwards and Egbert-Edwards (1988) and the U.S. Department of Health, Education, and Welfare (1977 and 1978).

The GAO conducted a study of several issues related to substance abuse in rural areas in preparing a report for Congress. The GAO (1990) found that:

- Alcohol is by far the most widely abused drug in rural areas.
- Prevalence rates for some drugs (such as cocaine) appear to be lower in rural than nonrural areas. Prevalence rates for other drugs (such as inhalants) may be higher in rural areas than elsewhere.
- Total substance abuse (alcohol abuse plus other drug abuse) rates in rural States are about as high as in nonrural States.

It is clear that treatment has a vital role to play in rural areas, as it does in metropolitan, urban areas.

Homeless and Indigent Persons

Several studies have assessed the rate of drug and alcohol disorders among homeless populations. Although methodological, geographical, and definitional differences among the studies yield varied results, those with alcohol problems range from 2 percent to 86 percent while those with drug problems range from 2 percent to 70 percent. Tenable estimates of the prevalence of alcohol abuse among homeless persons range from 30 percent to 40 percent. Similarly, drug abuse is considered to affect approximately 10 percent to 15 percent of the homeless population (McCarty, Argeriou, Huebner & Lubran, 1991, p. 1139). Dually diagnosed homeless persons with severe mental illness and substance use disorders comprise 10 percent to 20 percent of the homeless

population (Drake, Osher & Wallach, 1991, p. 1149).

Families with young children are among the fastest growing segments of the homeless population. Today's homeless cohort also contains a much higher proportion of single women than in the past. Blacks and Hispanics are over-represented among the homeless, compared with their numbers in the general population. About half to three-fourths of homeless adults have an alcohol, drug, or mental disorder. As a group, the homeless are one of the most disadvantaged and under-served groups in our society. One study found that 64 percent of severely mentally ill, substance abusing, homeless people are likely to have spent time in jail. For some, jail is a secure, structured facility for sometimes difficult-to-manage persons whose needs are not met elsewhere (Buckley & Bigelow, 1992; Fischer & Breakey, 1991; Levine & Huebner, 1991; McCarty et al., 1991).

Other indigent persons have similar problems. They may have an address, but housing may be substandard. Ethnic minority populations, women, and children are over-represented among those living in poverty. Those who are poor, whether homeless or not, are affected by the multiple risks experienced by other special population groups. These often include minority status, socio-cultural disadvantages, stigma and discrimination, lack of access to health and mental health services, inadequate education, involvement in the criminal justice system, and lack of employment opportunities.

The use of alcohol and other drugs may be a reaction to the exigencies of their lives—a way of escaping from or coping with daily problems. For some, substance abuse represents a response to life situations, while for others it has precipitated a downward spiral of quality of life and opportunities.

Lack of financial resources compounds the problem of treatment for substance abuse. Without insurance or other means of payment, many are not eligible for treatment programs. In some cases, homeless and other indigent persons also do not qualify for publicly supported programs. Bureaucratic procedures and technicalities, such as needing to provide a home address, may get in the way of accessing services. Concomitantly, many have a distrust of public programs and professional service providers and will not actively seek help. Programs need to be proactive in reaching out to such individuals and to be sensitive to their cultural values and perceptions about seeking help. In some cases, para-professional outreach workers have been effective in making initial contacts with these persons and helping them negotiate complex service systems.

Prostitutes

The use of some drugs is consistent with income-generating crimes, including prostitution, because the drugs are addictive and expensive (Nurco, Harlon & Kinlock, 1990). Although more commonly associated with females, prostitution is an activity engaged in by both genders. Fewer research findings are available about male prostitution, but some writers contend that patterns and problems related to homosexual prostitution are similar to those of heterosexual prostitution (Verbraeck, 1988). Two recent studies have provided more information about male prostitutes.

In one investigation, 211 male street prostitutes were interviewed. Results indicated that daily use of multiple substances was normative among the respondents. Economic dependence on prostitution and use of drugs and alcohol were

correlated. The subjects' use of substances increased significantly while they were engaged in acts of prostitution. Psychological distress and conflicts about sexual orientation also exacerbated their use of substances (Morse, Simon, Baus, Balson & Osofsky, 1992).

A second study examined high risk sex and drug use among 446 male street youth, ages 14 to 23 years, in Hollywood, California. Prostitution activity was most common among older gay identified males. Their most predominant risk factors for HIV transmission included inconsistent condom use, high risk sexual behaviors, large numbers of sexual partners, intravenous drug use, and the use of drugs and alcohol during all sex (Pennbridge, Freese & Mackenzie, 1992).

Winick (1992) differentiates between "higher-status" and "lower-status" female prostitutes, indicating that for the former (e.g., call girls), prostitution usually precedes addiction, while for the latter (e.g., streetwalkers), addiction often occurs first. Pimps may maintain control of their prostitutes by controlling their supply of heroin. When pimps are addicted, they may use their prostitutes' earnings for their own supply of drugs. Often, the same individuals control both the prostitution and the drug sales in a particular area (Winick, 1992).

It is estimated that 125,000 to 200,000 male and female youth become involved in prostitution each year. Many, although not all, of these adolescents are runaway or homeless youth. Approximately 1 million teenagers run away from home annually. There is no typical runaway or homeless youth. However, many are the casualties of dysfunctional families and are escaping stressful environments, including physical or sexual abuse, chemically dependent parents,

family crises such as divorce or death, and school problems. Many of these youth have emotional problems, as well. They often begin their illegal activities with shoplifting and petty thefts before moving into drug use, prostitution, and drug trafficking. It is estimated that homeless youth participate in street prostitution to support themselves and their drug habits at more than 100 times the rate of other youth (Haffner, 1987; Hersch, 1988; Johnson, 1988; Joseph, 1992).

There are multiple hazards associated with prostitution. For females, there is the possibility of pregnancy and associated risks. Arrest, criminal prosecution, and sanctions are also dangers associated with prostitution.

Although some studies indicate that prostitutes do not constitute a special risk category for HIV disease, there are certain subgroups of prostitutes who are at increased risk. These include those with lower educational levels; those who do not use condoms; those engaged in drug use, especially injecting drugs; and those who are homeless (Joseph, 1992; Shaw & Paleo, 1986; Winick, 1992).

There are several patterns of violence among prostitutes using drugs. Drugs may result in violence when use by prostitutes has a negative effect on their attitudes and they become irritable and hostile while using. Aggression, anxiety, suspicion, and fear associated with cocaine use are reasons for violence. Coming down from a cocaine high sometimes results in violence toward customers. Drug use also can lead to victimization of the prostitute by a customer because of clouded thinking. Systemic violence refers to aggressive patterns of interaction within the system of drug use and drug distribution. Some prostitution-related violence occurs from encounters between prostitutes and

their pimps over territory and non-drug-related business. Other episodes of violence involve the income-generating needs of drug-involved prostitutes (Sterk & Elifson, 1990)

There is a clear connection between drug use and prostitution. Persons with a history of prostitution may need special consideration for treatment. Previous experiences, including rape and incest, must be dealt with in treatment. Intervention programs also may need to help these patients develop a healthy sense of sexuality (Winick, 1992).

Women

Women with alcohol and other drug dependencies have been understudied and have not received adequate treatment services. Most of the research on alcohol and drug abuse has been done on male populations, and only recently are studies also beginning to focus on women. Similarly, treatment programs have overwhelmingly been directed toward males; even when females have been included, their special needs often have been overlooked. One recent study confirmed that female alcoholics are likely to delay seeking treatment until their symptoms are severe compared with similar males. Women alcoholics also tended, more often than males, to enter treatment in mental health centers and other health care settings instead of in alcohol-specific treatment programs (Weisner & Schmidt, 1992). The unique problems of women needing substance abuse treatment include issues related to co-dependency, incest, abuse, victimization, sexuality, and problems with significant others. They also are likely to have special medical needs, including gynecological problems (Mitchell, nd).

Blume (1992) summarizes some of the differences in chemical dependency in women when compared with men:

- Alcoholic women begin drinking later than males, on average. However, one study found that women tended to begin using cocaine at earlier ages than other mood-altering substances.
- There are physiological differences in the way alcohol is absorbed and the amount of body water between men and women. Women can consume less of a substance than men and still experience comparable effects.
- Women who enter addiction treatment are more likely to have an alcoholic or addicted male partner or to be divorced or separated.
- A particular, stressful event is often cited by women as the beginning of problem drinking or drug use. Many report being victims of childhood sexual abuse or having a history of sexual assault.
- Chemically dependent women are more likely to have a co-existing psychiatric problem, especially depression.
- Chemically dependent females report a greater history of suicide attempts than males. Alcoholic women were found to attempt suicide four times more frequently than other women.
- Health and family problems more often motivate chemically dependent women to enter treatment. Men are more often influenced by job and legal problems.
- Although women drink and use illegal drugs less frequently than men, they are more likely to use prescribed psychoactive drugs.

Women have a complex array of personal, social, psychological, and cultural issues that accompany their substance abuse. They fre-

quently have the responsibility of caring for children. Many are single parents, with concerns about the care and placement of children; the associated costs are often at the forefront of treatment decisions. Pregnancy is another important issue. There are significant risks to infants born to drug-involved mothers. In addition, treatment programs often do not want to incur the risks and liabilities associated with pregnant and parenting patients.

Many women have co-dependent relationships with men or significant others who are also drug-involved. In such relationships, each person needs and uses the other, often in ways that are unhealthy. Women generally have more limited incomes because of deficient employment and educational skills, and they are often economically dependent on their partners. They also may be emotionally dependent, making escape from drug-involvement even more difficult. Thus, they often do not have options for treatment programs requiring private insurance or other non-public sources of payment (Weisner & Schmidt, 1992). Typically, drug-involved women have low self-esteem and lack assertiveness skills, making it difficult for them to manage the complex treatment and assistance network (Mitchell, nd). Many also lack access to transportation.

Pregnant Addicts

It is estimated that about 11 percent of pregnant women may use illicit substances. Substance abuse during pregnancy increases the risk of problems for both the mother and the fetus or newborn. Cocaine use may result in malformations, growth abnormalities, and behavior problems. Neurologic abnormalities in children have also been linked to cocaine use by fathers. Cocaine has been found to decrease the count and

movement, while increasing abnormalities, of sperm (Yazigi, Odem & Polakoski, 1991; Zellman, Jacobson, DuPlessis & DiMatteo, nd).

Use of marijuana during pregnancy represents a significant risk to the fetus. Marijuana crosses the membrane that envelops the fetus. Babies may develop abnormal nervous systems, and they may be smaller than non-exposed infants. Marijuana also is secreted in breast milk and can be toxic to a nursing infant. Some marijuana-exposed infants show signs of withdrawal, including convulsions (Cohen, 1985).

Fetal Alcohol Syndrome (FAS) consists of an array of problems that are highly correlated with alcohol use during pregnancy. Mental handicaps and hyperactivity resulting in learning, attention, memory, and problem-solving difficulties are among the most debilitating aspects of prenatal alcohol exposure. In addition, infants exposed to alcohol *in utero* are likely to be smaller and have characteristic facial features (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 1991).

In a survey of all 50 States and the District of Columbia, it was found that no State currently has enacted legislation to test pregnant women for the use of illicit drugs (Adirim & Gupta, 1991). Goldsmith (1990) advocates mandatory treatment of drug-involved pregnant women although there are arguments against legal interventions with these addicts. Goldsmith argues that consuming illegal substances is an unlawful act that can result in harm to the infant and society. The costs associated with treatment of drug-exposed children diminish the resources available to all children. The most powerful pressure for bringing drug abusing women into treatment is the threat of legal sanctions. However, some fear that such measures will deter

drug dependent women from seeking needed prenatal health care.

Treatment of pregnant women for substance abuse is crucial, but it can be difficult. There are some situations in which withdrawal from drugs, especially opiates, is dangerous to the fetus. Occasionally, it may be necessary to maintain a woman's addiction until after the birth (Mitchell, nd). See Chapter 8 for additional information.

There is a need for significantly expanded prevention and treatment capacity for pregnant and postpartum women and their children. These women have specialized treatment needs. They need prenatal care and improved nutrition, as well as child care and financial support. Identification and treatment of infectious diseases in both women and their infants is another important element of treatment. Treatment strategies must be developed that are culturally sensitive and appropriate for women from various minority and ethnic cultures. Other important considerations for treatment include drug-free housing, transportation, and skill development opportunities (Mitchell, nd).

Recommended considerations for treatment of women, especially substance using pregnant women, include the following (Mitchell, nd):

- Gender-specific services must be provided in a non-judgmental environment. Services should respond to women's needs regarding reproductive health, sexuality, relationships, and sexual and physical abuse.
- Comprehensive treatment for substance use should be available on demand.
- Service components should include:
 - vocational services
 - educational services

- inpatient drug treatment and drug-free transitional housing for women and children
- transportation
- child care and baby-sitting services
- comprehensive medical services
- financial support
- Service providers need continuing training and technical assistance and need to engage in collaborative efforts to ensure comprehensive programs.

Infants and Children

It is estimated that of every 1,000 babies born in the United States, between one and three have Fetal Alcohol Syndrome. Many more will be affected by alcohol *in utero* but do not have all the characteristics that define Fetal Alcohol Syndrome (Office for Substance Abuse Prevention, 1989). The primary traits of Fetal Alcohol Syndrome, as mentioned previously, include mental retardation, growth deficiency, and characteristic facial features. Even in children without these pronounced characteristics, indicators of prenatal exposure to alcohol may include problems such as lower IQs, aggression, hyperactivity, and sleep disorders (Chiang & Lee, 1985).

It is estimated that between 554,000 and 739,000 infants are exposed prenatally to illegal drugs each year (Finnegan & Kandall, 1992, p. 628). In New York City, it is estimated that 80 of every 10,000 children born are addicted to chemicals (Doweiko, 1990). *In utero* exposure increases risks of premature births, still births and subsequent mortality, low birth weight, small head circumference, deformities, Sudden Infant Death Syndrome, and neurological damage, among others. These infants often require extensive care and may continue to present health

and behavioral problems throughout childhood (Finnegan & Kandall, 1992).

HIV infection is another risk for infants of drug-involved parents. Transmission of HIV is documented between mother and infant, either *in utero*, during delivery, or through breast milk. Mothers may be infected because of their own drug use or through heterosexual activity with HIV infected, drug-involved sexual partners. Although not all babies born to HIV infected mothers will develop AIDS, approximately 50 percent will. Whether or not a child develops AIDS, he or she is likely to experience difficulties because of the parents' infection. Often, HIV infected parents will die of AIDS, leaving young children to be cared for. For children who are infected with HIV, the medical care they need can be very expensive and, at times, painful. Often such children need alternative placements when parents and relatives cannot provide care for them, such as foster homes and special health care facilities.

Excessive use of alcohol or other drugs by parents also may affect the quality of care they are able to provide for their children, whether or not there has been *in utero* exposure to drugs and alcohol. Child abuse and neglect cases often have a substance abuse factor involved. Judges in these situations face difficult decisions concerning the protection of the children versus family preservation. The availability of treatment options and the willingness of parents to obtain treatment is often an important element in that judgment.

Juveniles

Although drug use in the general population of adolescents attending school and living at home has declined in recent years, there is

sufficient justification to be concerned about youth. Dropouts constitute an estimated 15 to 20 percent of youth the age of high school seniors, and these youth tend to be at high risk for substance use and delinquency (Schinke, Botvin & Orlandi, 1991).

Youth who become involved in delinquent behaviors and the use of drugs and alcohol come from all social strata, both large and small communities, and healthy as well as dysfunctional families. They may be gifted or limited in intellectual abilities, have few or many talents, and vary markedly in personality. There is no easy predictor of delinquency or substance abuse.

Indeed, research indicates that a complex array of cognitive, psychological, attitudinal, social, personality, pharmacological, and developmental factors foster initiation of adolescent drug use (Schinke, Botvin & Orlandi, 1991). Some of the characteristics that are typical of adolescent development appear to increase the chances that some youth will at least begin the process of experimenting and taking risks with drugs, alcohol, and illegal behaviors. Young people are establishing their identity and independence. As a part of this process, they need to explore different behaviors and values. Experimentation and opposition to adult norms and values, within limits, is typical adolescent behavior. For some youth, however, these behaviors plunge them into a world of activities that can become very dangerous. The pleasure, thrill, or excitement may be so stimulating that they continue to seek it. For some, the acts of rebellion against parents or society are particularly satisfying. Others acquiesce to peer influences from youth who offer friendship and acceptance to those who will engage in similar activities.

Young people often feel invincible and invulnerable. They have

difficulty understanding that they are not exceptions to the rules of drug use and delinquency. There is a tendency for youth to believe that they can somehow engage in certain behaviors but escape their negative consequences. Because of their limited future time perspective they tend to see themselves as always being as they now are: young, strong, and in control. Many cannot believe the negative impact of drug and alcohol use will affect them, even if they are acquainted with others in such distress.

There are a variety of problems that are affecting a significant portion of today's youth. The society in which today's youth find themselves is more violent and alienating than in the past. Family violence and abuse of children are increasing rapidly, or at least they are being reported much more frequently. However, reported incidents of abuse probably represent only a small proportion of the violence and abuse that is actually occurring, as these problems tend to be highly protected family "secrets." Physical and sexual abuse interfere with adolescent development and make it difficult for youth to achieve optimal physical and psychosocial maturation.

Cultural violence also is increasing. The problem of youth gangs and the violence they perpetrate is of grave concern. Many youth are carrying weapons, even to school. Substance abuse has grown remarkably among the adolescent population, and youth are beginning involvement at earlier ages than ever before. Drug involvement has many negative effects on youth, one of which is increased violence. Another form of violence is self-inflicted. The rate of adolescent suicides has been climbing steadily, as some youth find their current situations intolerable.

Adolescent males are particularly

vulnerable to violence, including homicide.

The number of runaway, thrown-away, and homeless youth is growing. These young people, who subsist on the streets by their wits, fortitude, and sometimes criminal activities, are at great risk for physical and psychosocial developmental problems. Their likelihood of encountering substance abuse, prostitution, delinquency, malnutrition, and disease is multiplied exponentially. Many youth run away or are pushed out of families that are abusive or so dysfunctional they cannot meet the needs that the youth present. With time, homeless youth will lose the potential for continuing their education or obtaining productive employment.

Adolescent sexual activity has increased rapidly, resulting in approximately 1 million teenage pregnancies annually. Through sexual behavior, youth are also placing themselves at risk for sexually transmitted diseases, some of which are deadly. Youth must be informed at earlier ages about sexuality and appropriate precautions.

These pressures on youth may be both the cause and the effect of characteristic adolescent development. Adolescents tend to feel invulnerable, often believing that bad things will not happen to them. Feelings of immortality and invincibility also are common. Impulsiveness is yet another common trait. These patterns lead to risk-taking behaviors, some of which have devastating results. Once certain thresholds are crossed, youth are unable to go back. They continue a downward spiral of more serious involvement in activities that further jeopardize their health and future well-being.

There are several reasons youth who enter the juvenile justice system are often involved with drugs. First, drugs cause individuals

to engage in risky, destructive, and even violent behavior. In some cases, youth are so dependent on the drug that they will do anything to obtain it. They therefore commit income-generating crimes such as theft, drug trafficking, or prostitution. Moreover, these youth often come into contact with other juveniles or adults who are involved in drug use and crime. Such influential individuals in their lives may help steer them toward delinquent behavior. While drug use may contribute to a juvenile's tendency toward delinquency, it is also true that many juveniles are involved in delinquency before they begin using drugs. A direct cause-effect relationship between drugs and delinquency has not been substantiated.

The problem of adolescent substance abuse affects all systems dedicated to serving youth, as well as every community in the nation. Many look to the juvenile justice system for answers. Some believe there should be tougher penalties for drug and alcohol offenses. Some advocate diversion of youth to drug education and treatment programs—a more rehabilitative approach. A balance is probably more reasonable than the adoption of either extreme.

As with other special populations, alcohol- and drug-involved youth need treatment programs that are sensitive to their needs and appropriate for their developmental stage. Assessment is the first critical phase of treatment. The multiple assessment approach, including interviews, observations, specialized testing, and written reports, is recommended for obtaining the most valuable information for informed treatment planning (McLellan & Dembo, 1992). Treatment programs for youth should not merely duplicate programs that have been successful with adult groups. They need to be formu-

lated with particular attention to adolescent developmental levels, family situations, educational needs, and many other factors. Appropriate interventions for youth may include (McLellan & Dembo, 1992):

- school-based prevention;
- drug education classes;
- outpatient treatment;
- partial hospitalization; and
- residential treatment.

Elderly Persons

The most common substance abuse problems for older persons include alcohol abuse and the abuse or misuse of prescription drugs. The rate of alcohol use among senior adults is generally lower than within the general population. Yet approximately 10 percent of elderly males and 2 percent of elderly females are heavy or problem drinkers (Williams, 1984).

Older persons have a decreased tolerance for alcohol that may cause adverse effects on the central nervous system, heart and circulation, liver, gastrointestinal tract, and kidneys. Some elderly persons experience sleep disturbances and have difficulty handling stress. The combined effects of aging and alcohol use affect the body's resilience, including physical, emotional, and psychological components (Williams, 1984).

There are normal changes in the central nervous system of older persons, including increased reaction time and confusion. Alcohol, a central nervous system (CNS) depressant, exacerbates these problems and can result in decreased intellectual functioning (Williams, 1984).

The elderly consume more medication than any other age group. There are special risks

related to these medications. Older persons living alone may make errors in taking medications (Williams, 1984). Frequently, senior adults are being treated by different medical specialists for a variety of problems. Simultaneous use of certain drugs may be contraindicated; however, older persons may not tell their physicians about other medications they are taking. Interaction of alcohol with other drugs also may result in serious consequences for older persons.

Normal metabolic changes in aging may result in the body's inability to excrete drugs at the same rate as younger persons. Thus, it is possible to build up toxic amounts of drugs when older persons take the same doses of some drugs as younger adults. Some physicians have not received special training about the medical needs of older patients and are not as aware of medication management issues as is desirable.

Many older persons face personal losses and social problems in the aging process. Incomes are often limited, while inflation raises the costs of most basic needs. Medical costs often increase for older persons as various chronic illnesses are common among the elderly. Many older persons have very supportive and caring families; however, some elderly citizens are victims of loneliness, neglect, and abuse. Many of these problems may result in older persons turning to alcohol for comfort or escape. Medication compliance is another difficult issue. Various factors can contribute to inappropriate use of drugs, including poor vision and short-term memory impairments. Purposeful misuse may include exchanging prescribed medications with friends or consuming more than the prescribed amount.

Physically Challenged Individuals

Physically challenged persons include those with numerous disabilities such as motor abilities, visual impairments, speech and hearing difficulties, and many others. In addition to the physical difficulties these persons encounter, they frequently have other problems. Their disabilities often place them at risk of socioeconomic deprivation. They may be excluded from, or unable to participate in, training and job opportunities that would allow them to earn more sufficient incomes. Also, some may have high medical expenses because of costly treatments, medications, equipment, and prostheses.

In addition to these problems, physically challenged persons continue to deal with prejudices and stigmas. These range from outright discrimination in jobs and facilities to more subtle staring and avoidance by others.

Because of physical and emotional pain, some physically challenged persons are at risk of alcohol and other drug abuse. In some cases, this may be an attempt to self-medicate to overcome physical or emotional pain with alcohol or other illicit drugs. Concomitantly, compliance with prescribed medication regimens may be an issue for some individuals. Many drugs of abuse also have legitimate medical uses, and in some cases it is the responsibility of the patient to administer these correctly.

Conclusion

The United States is composed of many diverse groups. Alcohol, drug abuse, and related diseases often afflict members of disadvantaged groups at rates that are higher than those for majority

group members. Socioeconomic status, ethnicity, gender, and several other variables are related to certain patterns of substance abuse.

A variety of treatment options that are age- and gender-appropriate, culturally sensitive, and relevant for specific socioeconomic groups are needed in every community and region. This is an essential aspect of patient-treatment matching. Comprehensive treatment services are vital, as most chemically dependent persons have multiple problems and needs.

Culturally sensitive and thorough assessments are the first essential element of treatment. Appropriate treatment matching will be the most cost-effective approach to the problems of substance abuse. If patients' needs are not adequately assessed and met in the treatment setting, they will not remain in treatment and progress to recovery. That not only wastes the money used for their treatment, but deprives others from using those treatment spaces.

Major consideration must be given to systems coordination and collaboration and communication among service providers to achieve effective treatment matching. A network of well-run programs that use a variety of treatment approaches and serve various patient populations is needed. Allocating resources and establishing priorities are major considerations for State and local leaders.

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Chapter 7—Substance Abuse-Related Infectious Diseases

Persons who abuse alcohol and other drugs are at greater risk of health consequences. These include problems such as malnutrition, damage to various systems of the body, risks of accidental deaths and suicide, brain impairments, and infectious diseases. In this chapter, several illnesses related to substance abuse will be discussed. Implications for management and prevention also will be presented.

Why There Is Concern for Substance Abuse-Related Diseases

The medical needs of alcohol- and drug-involved persons can be highly complex and usually require a multidisciplinary approach. The medical complications, as well as underlying substance abuse and related psychosocial problems, must be carefully assessed and treated. Substance abusers, like all patients, are entitled to the highest standards of medical care (Novick, 1992). It is not possible to examine adequately substance abuse treatment without exploring the issue of related health effects. There are both individual and societal consequences that must be considered.

Concerns for Individuals

Substance abusers are more prone to a variety of diseases and medical complications than similar persons in the general population. They experience health problems more frequently than others, and their illnesses are often more severe.

Treatment goals and interventions that emphasize correcting medical problems are important to the prognosis of patients. Improved health, in tandem with substance abuse recovery, has the potential of returning individuals to productive functioning.

Societal Concerns

A variety of diseases is dramatically linked to substance abuse. With the advent of Acquired Immune Deficiency Syndrome (AIDS), this correlation has been underscored. The transmission of the human immunodeficiency virus (HIV), the causative agent of AIDS, is related to substance abuse in three ways. First, there is direct transmission when needles are shared between infected and non-infected individuals allowing blood-to-blood contact to occur. Second, persons who have acquired HIV through needle sharing may further transmit the disease to their sexual partners. Third, women who become infected through using injected drugs or having sex with infected drug users may infect their infants *in utero*, during delivery, or through breast milk.

HIV is a highly infectious organism when coupled with certain risk behaviors. There is not yet a preventive vaccine or cure for those who become infected. Once HIV disease progresses to AIDS it appears to be universally fatal.

The spread of other infectious diseases, such as tuberculosis, has been associated with HIV disease and substance abuse. In addition to threatening the health and recovery of substance abusing persons, such diseases impact general community health, as well. Some infectious diseases, like tuberculosis and syphilis, which will be discussed later in the chapter, had been very effectively controlled with modern medical practices. However, they are again on the rise and are reaching epidemic proportions in some areas.

HIV disease, other infectious diseases, and a variety of illnesses, often exacerbated by alcohol or other drug use, have dramatically affected this country's health care system. Especially in areas where there is a high incidence of injection drug use, the spread of infectious diseases is rampant. This is stretching the capacity of health care programs. Medical costs, already at phenomenally high levels, threaten to be pushed even higher by the incidence of these infectious diseases.

Effective treatment of substance abuse disorders is viewed as essential in controlling both the spread and the associated costs of substance abuse-related diseases.

Alcohol and drug abuse treatment does reduce chemical dependency. Considering both the human and the financial burden of substance abuse-related diseases, treatment for addictive disorders and other medical illnesses can be very cost-effective.

Substance Abuse and Medical Illnesses

Rates of Substance Abuse-Related Illnesses

The incidence of health-related problems is always higher among substance abusers than among similar persons in the general population. Lifestyle is one predisposing factor, frequently including malnutrition, crowded and substandard living conditions, and general personal neglect. Alcohol and other drugs are also responsible for compromising the immune system, making users more susceptible to a variety of infectious diseases and other health complications. Many drugs, especially injected drugs, may be mixed with contaminated substances when they are sold on the street, thus increasing the likelihood of infections (Crane, 1991).

There was a dramatic decline in deaths from infection among addicts in New York City between the 1950s and the mid-1970s. In approximately 20 years, the rate of drug-related deaths due to infections declined from 27.1 percent in the 1950s to 5 percent in 1974. However, AIDS in New York City was responsible for a 124 percent increase in drug-related deaths between 1980 and 1984, while the purported number of addicts in the city remained more or less constant. This substantial increase in deaths included those directly

caused by AIDS-related illnesses, as well as other infections in which suppression of the immune system by HIV makes persons more susceptible to infectious organisms (Crane, 1991).

The incidence and types of infectious diseases affecting substance abusers varies according to several factors. The types of drugs used and the way they are ingested varies by geographic areas. Thus, in areas where drugs are frequently injected, rates of infections are likely to be higher. The duration of addiction also may influence the types of related infectious diseases. There also are some reported gender differences, probably related to the preferred routes of drug administration. Female injection drug users more often inject drugs subcutaneously (under the skin) which is related to a higher incidence of fatal tetanus and infections at the site of the injection. On the other hand, male addicts more frequently inject drugs intravenously (into a vein), with which other infections are associated (Crane, 1991).

Substance Abuse-Related Health Consequences

There are many physical and medical consequences of alcohol and drug abuse. These are often inter-related and complex. However, three principal types of health problems will be reviewed briefly. The remainder of the chapter will focus on the last of these— infectious diseases.

The Physical Effects of Alcohol and Other Drugs

Malnutrition is a common occurrence among substance abusers. The first priority for addicted individuals is to obtain and use alcohol or other drugs. Thus, money needed for food may be diverted for drug use. Appetite

may be decreased by substance abuse, particularly when certain drugs are used, such as stimulants. Alcohol and other drugs may interfere with the absorption of food from the digestive system to the rest of the body, resulting in vitamin deficiencies.

One of the functions of the liver is the removal of toxic substances from the blood. In the liver, alcohol and some other drugs, are transformed into water soluble substances. These are then eliminated from the body through urine and feces. Alcohol, cocaine and inhalants are frequently associated with damage to the liver and various liver diseases.

Many other body systems may be damaged by alcohol or specific drugs. Excessive use of alcohol, central nervous system (CNS) stimulant drugs, marijuana, and inhalants may cause brain damage. The heart may be affected by cocaine or opiate drugs. Alcohol affects the digestive system, and smoked drugs (e.g., tobacco, marijuana, cocaine) injure the lungs. Alcohol, marijuana, and cocaine are known to affect hormones and reproductive health in both men and women.

Accidental Injuries and Death

Traffic accidents caused by alcohol- or drug-impaired drivers are a significant concern because of their human and economic impact. Use of alcohol and other drugs by public transportation workers jeopardizes public safety. News accounts have heightened awareness of substance abuse by truck drivers, train engineers, bus drivers, and airplane pilots. Many deaths and serious injuries have resulted from such incidents.

Other types of accidents also may be related to substance abuse, including falls and other injuries sustained by persons who are inebriated. Hallucinogens and PCP sometimes cause panic reactions or

violent behaviors resulting in injuries or death.

While many addicted persons assert their ability to control their alcohol and other drug use, they also may realize the potential for overdose and death. Opiate overdoses may result in death. Alcohol poisoning is sometimes fatal, particularly for youth whose bodies have less water content to dilute the alcohol. Cocaine has resulted in cardiac arrest for some users. Inhalants pose a risk of death from suffocation because they often are ingested from airtight bags placed over the head.

Suicide risk is increased with drug use. Emotional problems that might result in suicide attempts or completions include depression, psychoses, and panic reactions. There is also a correlation between substance abuse and homicides. Certain drugs, such as alcohol, amphetamines, and PCP, may lead to assaultive behaviors in some users. Drug trafficking and gang-related activities also are frequently violent, posing risks of impairment or death to both users and bystanders.

Infectious Diseases

Substance abuse-related infectious diseases are frequently associated with injection drug use. However, they are not limited to those administering drugs in this manner. The sources of microorganisms that cause infectious illnesses include the environment, other drug users, and the addicted person's lifestyle (Crane, 1991).

Practices may differ according to the type of drug being used and customs among particular groups of injection drug users. However, typically, when heroin is used, it is mixed with water in a spoon or bottle cap (called a "cooker") and heated over a flame. Heating helps dissolve the powdered form of heroin in water so it can be injected. As a source of clean water is

not always available, toilet water, saliva, or other sources of contaminated water might be used. A lighter, matches, or candle flame often are used to heat the mixture; this may not generate enough heat to kill toxic substances in the drug solution. Cocaine and some oral medications are mixed with water if they are to be injected. However, unlike heroin, they do not necessarily have to be heated to dissolve them. The drug mixture is then drawn into the syringe. When injected into a vein, some blood is first drawn from the vein into the syringe. Then the drug is injected. Small amounts of the user's blood may remain in the needle or syringe (Crane, 1991; Karan, Haller & Schnoll, 1991).

These practices place the needle user at increased risk of infections. The water used to mix the drug may be contaminated; injection drug users rarely cleanse the skin around the area of the puncture; and the particular drug used also may have been mixed by the seller with non-sterile substances. In addition, injection drug users frequently share the same drug paraphernalia. It is estimated that 68 to 80 percent of addicts engage in needle sharing (Crane, 1991).

Sharing injection equipment is sometimes attributed to friendship bonds among users. They may share needles (and the small amounts of blood left in them by previous users) as a bonding ritual. However, needles and other equipment are often shared by anonymous users, as well. New needles and syringes cannot be sold without a prescription in many States. Thus, they are usually scarce for those wanting them to inject illegal drugs. Sometimes syringes are hidden in public rest rooms or other places. Addicted persons are able to find and use these "public works" without knowing the previous users. "Shooting galleries," usually

vacant apartments or buildings in which dealers sell drugs, also rent the equipment to drug users. After needles are used, they are returned to the dealer and rented to subsequent users (Crane, 1991). Bloodborne pathogens are easily transmitted from one injection drug user to another through shared equipment.

Although injection drug use is most commonly associated with heroin, it can occur with several other substances of abuse. With recent widespread cocaine use in some areas, high rates of infections have also been noted. The euphoria associated with cocaine use is of very short duration. Cocaine is often used in binges during which the person will administer it frequently until the supply is exhausted. If it is being injected, this may result in multiple needle administrations in a very short period, increasing the likelihood of infection. Cocaine also can be ingested nasally. It is a caustic substance that can damage mucous membranes in the nose. Parts of the nasal passage that filter out foreign substances may be destroyed, leading to a higher probability of infection (Crane, 1991).

Lifestyle factors contributing to infectious diseases among addicted persons include crowded and unhealthy living conditions and unsafe sexual activities. Airborne diseases, such as tuberculosis, can be transmitted from infected to non-infected persons in poorly ventilated living environments. Unprotected sex is a common route of transmission of bloodborne pathogens such as HIV, hepatitis, and other sexually transmitted diseases. Malnutrition, tobacco use, and dental neglect, while not the direct cause of infectious disease transmission, often contribute to susceptibility to and severity of infections. Similarly, the effect of alcohol and other drugs on the body's immune system may

increase the likelihood that, once an infectious organism enters the body, illness will develop.

Infectious Diseases Associated With Substance Abuse

The prevention and treatment of substance abuse-related infectious diseases is critical for the benefit of chemically dependent persons, as well as society. The personal toll of such diseases as AIDS, tuberculosis and hepatitis is devastating. Recent epidemics also have critically affected the nation's health care system and threaten its future. The burden of these infectious diseases is manifested in higher health care

costs, personnel shortages, and other demands on scarce resources. Significant resources have been channeled toward research and treatment of these illnesses, stretching the capacity of the system to meet other needs effectively.

Four infectious diseases most commonly associated with substance abuse will be described in greater detail. A brief explanation of several other infectious diseases also will be provided in this section.

HIV/AIDS

The AIDS epidemic has highlighted the relationship between injection drug use and infectious diseases. Injection drug use is the second most common risk behavior associated with HIV transmission, and the proportion of AIDS cases that are attributed to this route of transmission is increasing steadily.

Among women with AIDS, the majority of cases are linked to injection drug use. Women also may become infected because of their own drug-use behaviors or through sexual contact with male injection drug users. Women who engage in prostitution to support their drug use are potential vectors for heterosexual transmission, as well. Infected women, in turn, may infect their infants because of the exchange of body fluids *in utero*, during delivery, or by breast feeding. Injection drug use is also the most pivotal factor in AIDS cases reported among ethnic/racial minorities (Brown, 1991; Des Jarlais, Friedman, Woods & Milliken, 1992; Selwyn, 1992). The numbers of cases attributed to injection drug use as of December 1992 are listed in Table 7-A.

Table 7-A.—Cases of AIDS Related to Injection Drug Use

Exposure Category	White	Black	Hispanic	Other	Total	% of Total
Men who inject drugs	8,895	21,100	13,613	92	43,700	7.2%
Women who inject drugs	2,901	7,860	2,784	54	13,599	5.4%
Men who have sex with men and inject drugs	9,044	4,407	2,334	97	15,882	6.3%
Men who have sex with women who inject drugs	616	1,522	438	9	2,585	1.0%
Women who have sex with men who inject drugs	1,139	2,979	1,735	28	5,881	2.3%
Children under 13 whose mothers injected drugs	257	1,001	429	8	1,695	0.7%
Children under 13 whose mothers had sex with men who inject drugs	106	331	280	3	720	0.3%
TOTALS	<u>22,958</u>	<u>39,200</u>	<u>21,613</u>	<u>291</u>	<u>84,062</u>	<u>33.2%</u>

Explanations:

- The numbers of cases reported in this table include only those who have met the case definition for AIDS. Those infected with HIV but not having one of the AIDS defining illnesses are not included.
- The categories of men and women include all adolescents aged 13 and over and adults with AIDS.
- The percentage of total cases is based on 253,448 total adolescent, adult and pediatric cases reported through December 1992.

Source: Centers for Disease Control. *HIV/AIDS Surveillance Report*. February 1993.

The natural course of HIV disease begins when the virus is transmitted from an infected person. Casual transmission, through typical daily activities, is not a method of infection. The virus does not appear to be viable outside the body. However, exposure to body fluids through unprotected sex, sharing of unsterile injection equipment, and infection of an unborn baby by an infected mother are the most common routes of transmission. Only a few documented cases have

occurred through job-related exposures, such as a health care worker accidentally being exposed to the blood of an infected patient.

Soon after the virus has infected the body, some people experience a brief illness, similar to the flu. Others have no early symptoms, and some people continue in good health for several years. The average time from infection to development of AIDS is between 7 and 10 years (Selwyn, 1992). The virus attacks the cells of the body's immune system and gradually

destroys them. This makes infected persons susceptible to many disease organisms that a healthy, functioning immune system would easily combat. Some people experience symptoms related to HIV disease that are not considered diagnostic symptoms of AIDS. These include diarrhea, fevers, fatigue, and many other complications that can be very distressing, and, in some cases, incapacitating.

AIDS is diagnosed only when specific illnesses are manifested. These include certain cancers and opportunistic infections that occur with the presence of HIV. The specific illnesses used to define AIDS were changed as of January 1, 1993. Table 7-B lists these AIDS-defining illnesses.

The case definition of AIDS has changed over the course of the epidemic because more has been learned about the natural progression of the disease. It does not affect all persons in the same way. For example, injection drug users are less likely to develop Kaposi's sarcoma which is often seen among homosexual/bisexual men with AIDS. On the other hand, injection drug users have frequently developed a variety of infectious diseases other than the specific opportunistic illnesses that formerly limited the diagnosis of AIDS. Bacterial infections, such as pneumonia, endocarditis (an infection of the heart valves), and others, occur more commonly in HIV-infected drug users, and they also may be more severe among this population. Tuberculosis also is frequently associated with HIV disease in injection drug users (Selwyn, 1992). More information about this disease will be provided in the next section of this chapter. Thus, with the new definition of AIDS, a significant increase in diagnosed cases of AIDS was noted. This more inclusive definition will be helpful in the treatment of persons with HIV disease, as

Table 7-B.—Conditions Included in the 1993 AIDS Surveillance Case Definition

- Candidiasis (a yeast infection) of bronchi, trachea, or lungs
- Candidiasis, esophageal (yeast infection of the esophagus)
- Cervical cancer, invasive* (for women)
- Coccidioidomycosis, disseminated or extrapulmonary (a fungal infection of the lungs that can spread to the skin, bones, and brain)
- Cryptococcosis, extrapulmonary (a fungal infection)
- Cryptosporidiosis, chronic intestinal—1 month's duration (an infection of the intestines with parasitic protozoa that causes diarrhea, weight loss, fever and abdominal pain)
- Cytomegalovirus disease (a herpes virus infection)—other than liver, spleen, or nodes
- Cytomegalovirus retinitis—with loss of vision
- Encephalopathy, HIV-related (disease or disorder of the brain, often degenerative)
- Herpes simplex: chronic ulcer(s) (a viral disease)—1 month's duration; or bronchitis, pneumonitis, or esophagitis
- Histoplasmosis, disseminated or extrapulmonary (a disease of the lungs caused by a parasitic fungus)
- Isosporiasis, chronic intestinal—1 month's duration (a protozoan infection of the intestines)
- Kaposi's sarcoma (malignant skin tumors)
- Lymphoma (tumors of the lymph nodes), Burkitt's (or equivalent term)
- Lymphoma, primary, of brain
- *Mycobacterium* (a fungal bacterium) *avium* complex or *M. kansasii*, disseminated or extrapulmonary
- *Mycobacterium tuberculosis*, any site (pulmonary* or extrapulmonary)
- *Mycobacterium*, other species or unidentified species, disseminated or extrapulmonary
- *Pneumocystis carinii* pneumonia (inflammation of the lung tissue)
- Pneumonia, recurrent*
- Progressive multifocal leukoencephalopathy (a degenerative, often fatal, disease of the white matter of the brain)
- *Salmonella* septicemia, recurrent (a bacterial infection in the bloodstream)
- Toxoplasmosis of brain (an infection with a protozoan parasite)
- Wasting syndrome due to HIV

* Added in the 1993 expansion of the AIDS surveillance case definition.

Source: Centers for Disease Control and Prevention. 1993 revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. *MMWR* 1992; 41 (No. RR-17), p. 15.

they will qualify for medical and other benefits that previously were limited to those meeting a more restricted case definition.

Injection of drugs presents a risk of HIV exposure because of the sharing of unsterile injection equipment. Small amounts of blood left in the equipment may contain the virus and transmit it to the next user. The risk of infection can be virtually eliminated if the equipment is cleaned with bleach and rinsed between uses. However, this precaution often is not practiced regularly. The frequency of injection also increases the risk of exposure. Thus, cocaine injection may be more likely to result in HIV exposure than heroin use. Cocaine users tend to binge, using the drug almost continuously while the supply lasts. Because the euphoria experienced from cocaine is short, there may be multiple injections in a very short span of time. The frequency of injection may increase the number of times the equipment is shared and it may decrease the likelihood that it will be cleaned between injections (Des Jarlais et al., 1992).

HIV-infected drug users are prone to a variety of psychosocial stresses. Common emotional reactions include (Crowe, 1990):

- denial;
- anxiety;
- fear;
- anger;
- depression; and
- grief.

The risk of suicide attempts or completions among persons with AIDS is substantially higher than for the general population.

Prejudice and stigma are often experienced by persons with HIV disease, including injection drug users. Coupled with this, many experience other social problems

related to the following (Crowe, 1990):

- inadequate housing;
- lack of social support systems;
- need for financial assistance;
- legal problems;
- termination of or inability to find employment; and
- problems and concerns for child care and child custody, especially among infected women.

Obtaining medical care is another difficulty for many HIV-infected drug users. Both the availability and funding of appropriate health care may be significant issues.

Treatment Recommendations

Drug abuse treatment is effective in preventing HIV infection among many individuals using injected drugs. Outpatient methadone maintenance programs that are effective in reducing injection drug use are one important form of treatment. However, the escalation of the HIV/AIDS epidemic among injection drug users may not be stopped soon given the realities of the present drug treatment system. The present system is capable of providing treatment to approximately 15 to 20 percent of those using drugs. Considerable time and expense is required to expand treatment resources to more adequately meet the current need. Concomitantly, many injection drug users are not motivated to enter treatment. As addiction is a chronic, relapsing disorder, periodic return to drug use for some recovering individuals is a reality. Thus, improvements in the treatment system would likely help in reducing HIV transmission. However, such change includes many practical issues related to funding, locating HIV-infected persons, recruiting and retaining them in treatment programs, and

maintaining confidentiality (Des Jarlais et al., 1992).

Effective programs need to include ways of convincing injection drug users in a local area that AIDS is a threat to them. Ways of changing behaviors, including drug abuse treatment, must be available. Education about safer injection practices (i.e., sterilizing injection equipment) is also recommended. Some States are considering needle exchange programs in which addicts may receive sterile needles and syringes in addition to education. Finally, new behaviors must be effectively reinforced through peer approval and new social norms regarding injection drug use (Des Jarlais et al., 1992; Schleifer, Delaney, Tross & Keller, 1991).

Batki and London (1991) recommend that HIV-infected drug users, especially those with psychiatric problems, be provided with multidisciplinary interventions involving drug abuse counselors, social workers, psychotherapists and physicians. Six levels of intervention are suggested:

- Level 1: Provision of concrete forms of practical, material assistance and support
- Level 2: Provision of helpful information to reduce patients' feelings of helplessness (this may include information about HIV disease, drug use, prevention practices, services and resources and a variety of other areas)
- Level 3: Self-help groups to reduce isolation
- Level 4: Supportive psychotherapy
- Level 5: Psychiatric medications if psychotherapy alone is not adequate

Level 6: Residential treatment, if needed to protect patients from hurting themselves or others or to support patients who cannot provide for basic self-care needs

Programs must be cognizant of and effectively address staff concerns when treating HIV-infected persons. Fear of infection, confidentiality dilemmas and the emotional stress of treating patients with poor prognoses, are some of the issues to be confronted. Programs should develop clear guidelines, apply infection control policies, provide training, and institute staff support groups to alleviate some of the problems experienced by staff working with HIV-infected persons (Sorensen & Batki, 1992).

Program challenges include compliance with both State and federal regulations for program operation, which occasionally are contradictory. Maintaining sufficient levels of program funding is another obstacle programs often face. Community opposition to programs and staff retention and continuing competency are also administrative challenges (Brown, 1991).

In summary, the continuing spread of HIV disease and AIDS is a growing concern for society. Injection drug use and related factors are increasingly recognized as a causal factor in disease transmission. Both the human suffering and societal costs of HIV disease are devastating. Drug abuse treatment can be effective in preventing the continuing escalation of cases of infection. However, many issues and problems must be addressed to provide the level of services needed. Services must be comprehensive and matched to patient needs. Relapse prevention programming is essential. With these elements, treatment can be a cost-effective response to the problem of HIV infection.

Tuberculosis

Tuberculosis (TB) is re-emerging as a serious infectious disease in the United States. Until the mid-1980s, the incidence of TB had declined dramatically and was no longer considered a major health threat. However, since 1985, case rates have climbed steadily, with an increase of 16 percent between 1985 and 1990. In some of the poorest areas of the nation, TB rates surpass those of the poorest countries in the world (Cowley, Leonard & Hager, 1992; Department of Health and Human Services [DHHS], 1992).

Mycobacterium tuberculosis (MTb) is the infectious organism that causes TB. It is transmitted when an infected person coughs up droplets of respiratory secretions containing MTb. These are inhaled by non-infected persons in the same environment. The organisms multiply in the lungs and then are transferred into the bloodstream. This circulation may lead to infection in any organ of the body; however, the lungs are the most common site of TB infections. Most people experience few, if any, symptoms with initial infection. The disease then becomes dormant, and most people may continue to be infected but asymptomatic. However, in some persons the disease may be reactivated, often because the immune system is weakened by HIV disease and/or substance abuse. Symptoms of acute, active infection include (Barthwell & Gilbert, 1993; Novick, 1992):

- fatigue;
- fever;
- weight loss;
- cough;
- pleuritic chest pains (pleurisy is inflammation of the membranes enclosing the lungs); and
- hemoptysis (spitting up blood from the lungs or bronchial tubes).

TB is indisputably linked with both substance abuse and HIV infection. Alcoholism and injection drug use are associated with TB because of malnutrition, damage to the immune system, poor compliance with treatment regimens, and poor socioeconomic situations often accompanying chemical dependency. TB often precedes other opportunistic diseases associated with HIV infection. This suggests that TB may be reactivated in HIV-infected persons with less damage to the immune system than is the case with other infections. Indeed, in some cases, a diagnosis with TB is the first indicator that a person may also be HIV infected. Thus, anyone with TB who has not received HIV testing should be encouraged to do so. Homeless persons are also at high risk for exposure to MTb because of crowded shelter conditions, malnutrition and alcoholism. Many Black and Hispanic individuals also are at increased risk of exposure because of socioeconomic factors. In 1989, 67 percent of reported TB cases were in racial and ethnic minorities; more than 80 percent of childhood cases of TB are in minority populations. Persons in correctional facilities and nursing homes are also at increased risk for contracting TB. Crowded conditions in jails and prisons are partially linked to mandatory minimum sentences for possessing and selling drugs (Barthwell & Gilbert, 1993; Boodman, 1992; DHHS, 1992; Novick, 1992).

TB infection can be detected by an easily administered skin test. If there is a positive result, more extensive, confirmatory x-ray and microbiological tests should be conducted. TB is a very treatable infection, but it requires taking multiple anti-TB drugs for a minimum of six to nine months. For those who are infected, preventive treatment may avert reactivation of the disease (Barthwell & Gilbert, 1993).

Unfortunately, a strain of TB that is resistant to the therapies presently available for treatment is becoming more prevalent. Called multidrug-resistant tuberculosis (MDR TB), it is very difficult to treat, and the cost of treatment may be greater than 10 times the cost of traditional therapy (DHHS, 1992). MDR TB is also much more dangerous. Even with intensive treatment, it is 50 to 80 percent fatal (Cowley, Leonard & Hager, 1992). In a nationwide survey conducted by the Centers for Disease Control and Prevention in 1991, 14.9 percent of cases tested had organisms resistant to at least one anti-tuberculosis drug. An additional 3.3 percent of cases were resistant to both of the major drugs currently used to treat TB (National MDR-TB Task Force, 1992).

Treatment Recommendations

The Center for Substance Abuse Treatment (CSAT—formerly Office of Treatment Improvement) developed a Treatment Improvement Protocol in 1991 specifically related to TB and other infectious diseases. Entitled *Screening for Infectious Diseases Among Substance Abusers*, it outlines specific procedures that should be undertaken by substance abuse treatment programs. Treatment program personnel and decision makers should review the entire document. The following summarizes the major recommendations of this protocol (Barthwell & Gilbert, 1993):

- All persons entering substance abuse treatment programs should be screened for TB by a tuberculin skin test and a medical history.
 - Drug treatment patients with negative TB tests should be re-tested at least yearly or more often.
 - Persons with positive indicators of TB infections should receive a chest x-ray.
 - A confirmatory microbiological test should be performed on anyone with a positive skin test and chest x-ray.
 - Those who are infected but do not have active TB should receive preventive treatment for 6 to 12 months; HIV-positive persons may need preventive treatment for a longer period.
 - Persons with active TB must receive treatment and close medical follow-up.
 - It is recommended that the administration of drug therapy for TB be directly observed to increase compliance.
 - All new cases of active TB must be reported to local or State health departments.
 - To minimize the possibility of disease transmission, program facilities should provide adequate ventilation in areas where persons with possible or proven TB congregate.
 - Health care personnel are at risk of TB infection and should be tested every 6 to 12 months, or more often if they have been exposed to active TB.
 - Informed consent of patients and staff should be obtained before screening and treatment are administered.
 - Programs must comply with confidentiality requirements.
 - Health education should be provided when possible.
- In addition, Novick (1992) suggests that program staff should maintain supportive, interested, and nonjudgmental attitudes. Flexible schedules also are helpful in assuring compliance with treatment. Again, comprehensive services are needed, including drug and alcohol treatment, medical care, and social services.

Sexually Transmitted Diseases

Sexually Transmitted Diseases (STDs) also had declined in the

United States but have begun to increase again. Drug abuse, particularly injection drug use and crack cocaine, have been associated with STDs. Use of crack may result in high levels of sexual activity, infrequent use of condoms, and the exchange of sexual favors for the drug. Prostitution is a common denominator in both drug use and STD transmission (Novick, 1992).

HIV, which has already been reviewed, can be transmitted through sexual activities. Other STDs include the following.

- *Syphilis*. Caused by a spirochete that enters the body through a mucous membrane, syphilis can be very serious if not treated. The first stage of the disease is characterized by a sore at the point of contact. After several months, if untreated, the person may develop a rash and flu-like symptoms. The third stage of untreated syphilis may cause extensive damage to the body or death. Syphilis can be diagnosed with a blood test and treated with antibiotics. If untreated, syphilis can be transmitted from a pregnant woman to her fetus (*Family Health and Medical Guide*, 1989).
- *Gonorrhea*. A bacterium transmitted from an infected person to another is the cause of gonorrhea. Eighty percent of infected women and 10 to 20 percent of infected men will be asymptomatic. For those with symptoms, women may experience vaginal discharge, painful urination and low abdominal pain. Men may have painful urination with an intermittent or continuous discharge from the penis. If infection has occurred in the throat or anus, a sore throat or anal discharge may be noted. Gonorrhea can be treated with antibiotics. If untreated, it can result in damage to the reproductive system. Infected women may transmit the infection to the baby's eyes, which can result in

blindness if not treated (*Family Health and Medical Guide*, 1989).

- *Chlamydia*. Chlamydia is caused by a virus-like organism that is transmitted through sexual contact. After an incubation period, a blister forms on the genital area. The infection then spreads to the lymph nodes. The rectum may become inflamed and fistulas may form. Joint pain, skin eruptions and conjunctivitis also may be caused by chlamydia. It can be treated effectively with antibiotics (*Family Health and Medical Guide*, 1989).
- *Herpes*. Herpes Type II is an infectious virus found in the genital area and transmitted by sexual contact. Painful blisters occur at the point of contact. The sores may recur periodically and may be precipitated by stress, emotional upset, fatigue, illness, and other factors. Transmission takes place through direct contact with a herpes sore. Once infected, herpes is a lifelong condition, as there is no cure for it, although there is a drug that helps control it. Thus, prevention by avoiding contact with persons who have active lesions is important (*Family Health and Medical Guide*, 1989).
- *Venereal warts*. Venereal warts are caused by a virus and produce bumps in the genital area. Treatment may include an ointment to kill the virus, freezing and removing the warts, or surgical removal. If untreated, they will spread and become larger (*Family Health and Medical Guide*, 1989).
- *Chancroid*. Caused by a bacterium, chancroid is highly contagious. A small pimple first appears on the skin of the external genital organs. It will enlarge and finally break, leaving a painful pus-filled ulcer. A skin test can diagnose the illness and antibiotics are used in its

treatment (*Family Health and Medical Guide*, 1989).

STDs that cause genital ulcerations make the sexual transmission of HIV infection highly efficient. Substance abusing pregnant women risk transmitting certain STDs to their infants if untreated. Lack of prenatal care is an important factor. The proper use of condoms and application of spermicides can prevent transmission of STDs (Novick, 1992). Treatment programs should include education about STDs and their prevention.

Hepatitis

Hepatitis, and resulting liver damage, are common among injection drug users. There are four different, but similar, hepatitis viruses.

- *Hepatitis A (HAV)*. HAV is spread through the fecal-oral route and is linked with poor sanitation, overcrowding, and fecal contamination of food or water. Among substance abusers, possible explanations for the transmission of HAV include tasting the drug to assess its quality; direct contamination with fecal material during cultivation or smuggling of the drug; and poor personal hygiene and living conditions of some drug-involved persons (Novick, 1992).
- *Hepatitis B (HBV)*. Transmission of HBV occurs through exposure to the blood of an infected person. Many injection drug users contract HBV in the same way that HIV infection occurs through sharing of unsterilized injection equipment. An infected person also may transmit the disease through sexual contact. HBV can cause liver damage and may even result in death (Novick, 1992).
- *Hepatitis C (HCV)*. The major agent, HCV has been identified

just recently; thus, more research on it is needed. It is estimated that 70 to 92 percent of injection drug users have the HCV virus (Novick, 1992).

- *Hepatitis D (HDV)*. This strain of the virus has been endemic in the Mediterranean and parts of Asia, Africa, and South America. However, it has now spread to the United States. It can be transmitted with HBV (Novick, 1992).

There is a vaccine for HBV which also will prevent HDV. It is given over a period of several months, and for that reason, some drug users do not comply with receiving the entire amount of the vaccine. Staff members of drug treatment programs should be informed about hepatitis and offered the vaccine (Novick, 1992).

Other Infectious Diseases

There are several other infectious diseases that are commonly associated with substance abuse. The following brief descriptions are provided.

Infective Endocarditis

Infective endocarditis is a microbial infection of the heart valves. As there is a high incidence of serious complications and mortality with the disease, persons with symptoms should be assessed carefully. High fevers, chills, pleuritic chest pain and shortness of breath are common symptoms. It can be treated with antibiotics administered intravenously for four to six weeks (Novick, 1992).

Pneumonia

Pneumonia is a common complication among substance abusers. Many contributing factors include cigarette smoking, which impairs lung functioning, and malnutrition and trauma, which may interfere with breathing and cough mechanisms. Seizures and depressed gag reflexes resulting from alcohol or

drug use may allow fluids to enter the lungs. Symptoms include fever, cough, chest pain, and shortness of breath (Novick, 1992).

Skin and Soft Tissue

Infections

Skin and soft tissue infections are very common among injection drug users. Pain and swelling are initial symptoms that may progress to gangrene if untreated. Treatment ranges from localized medication to antibiotics and surgical interventions, depending upon the seriousness of the infection (Novick, 1992).

Infected False Aneurysms

Infected aneurysms may result from damage to peripheral arteries during unsuccessful attempts to inject drugs. Infected aneurysms can cause the involved artery to rupture, possibly leading to death. A false aneurysm is a swollen, infected area within the vessel wall, as contrasted with other aneurysms caused by swelling at a weak point in the artery wall. Swelling and pain in the groin area, accompanied by fever and chills, may be associated with attempts to inject drugs in the thigh (Novick, 1992).

Substance Abuse Treatment Consideration

There is a high incidence of infectious diseases and other medical illnesses associated with substance abuse. These add to the distress of persons who are chemically dependent. Concomitantly, they present formidable challenges to the health care delivery system. Treatment programs are in a pivotal position to impact both the problem of substance abuse and associated infectious diseases. One of

the five critical areas of substance abuse treatment is comprehensive services. Appropriate screening and management of health complications is a vital part of these services. A multidisciplinary approach is important. Substance abuse treatment programs may provide a health care component or manage this part of patients' care through referral to other providers. In either case, there should be continuity of care across the spectrum of each individual's needs.

Screening and Diagnosis

Infectious disease screening is imperative. If the treatment program has a health care component or is linked with a medical facility, it should be less difficult to coordinate such screenings and monitor individuals who need to be assessed. If these are not a part of, or an adjunct to the program, effective and efficient referral mechanisms should be in place.

During a program's comprehensive assessment process, health history should be explored with each person. In addition to personal health experience and symptoms, current knowledge of the seriousness of a disease and its prevalence in specific localities should be the basis for considering screening (Barthwell & Gilbert, 1993).

Diseases that should be considered for priority in health screening include (Barthwell & Gilbert, 1993):

- human immunodeficiency virus (HIV);
- tuberculosis (TB);
- sexually transmitted diseases (STDs); and
- hepatitis viruses.

For each of these, as well as other diseases, there are established medical protocols that should be followed. Programs should develop policies and procedures for providing appropriate health

screening services for each patient. Decision makers at the local and State levels may need to consider the incidence of various diseases and recommend or mandate that health screening for these disorders be included for persons entering substance abuse treatment.

Medical Care and Management of Infected Persons

There are two considerations in providing care to persons with infectious diseases:

1. prevention and
2. treatment.

A person with an infectious disease not only has potentially severe medical problems, but also is capable of infecting others.

Prevention

Programs must focus on preventing the spread of various infectious diseases and take appropriate steps to minimize that possibility. Patient education about particular diseases and how they are acquired is imperative, but not sufficient, to allay further transmission. Changing behaviors also requires convincing individuals the disease is a real threat, providing the means for changing the behavior, and reinforcing new behaviors (Des Jarlais et al., 1992).

Many people deny their own vulnerability to a particular illness, though there is strong evidence to the contrary. Not only must the potential danger to the individual in treatment be stressed, but the possibility of infection of significant others is also an essential message to convey. Behaviors that place individuals at risk of disease transmission include sharing injection equipment, unprotected sex, pregnancy, and in the case of tuberculosis, inhaling disease organisms. Thus, the means for changing behaviors will vary according to

the particular illness being considered. However, there is a definite link between these diseases and substance abuse, particularly injection drug use. Therefore, entering and remaining in treatment to stop chemical dependency is crucial. Providing and teaching people to use condoms during sex is another important element for behavior change. With tuberculosis, having an infected person cover the mouth and nose when coughing and sneezing, and providing adequate ventilation of living and work areas, are important (Barthwell & Gilbert, 1993). Peer approval and development of new social norms for a behavior are important in maintaining new behaviors to diminish risks (Des Jarlais et al., 1992).

Treatment

Treatment protocols for different infectious diseases will vary. Attention to health issues should be included in the treatment plan for all persons entering substance abuse treatment. Lack of attention to these problems may trigger relapse, as good emotional and physical health are important for long-term recovery (Barthwell & Gilbert, 1993).

Compliance with treatment regimens may be a problem with some patients. Programs may need to consider directly observed therapy (i.e., administration of medications), when possible. Some medications will interact with others the individual is taking and may reduce their effectiveness or cause unpleasant side effects (Barthwell & Gilbert, 1993). These problems should be followed closely by medical personnel, and adjustment should be made when necessary. Advising patients in advance of the effects that are commonly experienced can help them tolerate these changes. Special attention should be given to pregnant women who are

chemically addicted and have infectious diseases. Both the woman's health and that of the fetus must be considered. Effective treatment, in some cases, can reduce the risk to the fetus. Thus, appropriate medical intervention with this group of persons is especially important.

Effective case management, communication, and coordination among providers of substance abuse and other medical treatment is critical. As the needs of patients in substance abuse treatment are often complex, providing a range of services is often very important. Many need material resources, medical and psychiatric care, and legal assistance, in addition to substance abuse treatment. Ideally, the availability of these services in one place can help patients access needed services and follow through on the resolution of various problems. This is not possible for many treatment programs, but at the very least, there should be working agreements with other community agencies to provide needed services. Substance abuse treatment program case managers should monitor the individual and the assorted service providers to make sure needs are being met. Often, basic services, such as transportation, may be a critical element determining whether or not an individual will keep medical and other appointments and comply with various treatment regimens.

Legal and Ethical Issues

Discrimination

The Americans with Disabilities Act (ADA) prohibits discrimination in public accommodations against persons with handicapping conditions (Barthwell & Gilbert, 1993). Persons with AIDS, as well as those with impaired mobility, vision, and hearing and other disabilities, are covered under this Act. Many persons with AIDS, substance abuse problems, and other

disabilities have experienced significant discrimination in the areas of housing, employment, and even medical treatment and other services. Staff of substance abuse treatment programs need to position themselves to advocate for patients who are experiencing such discrimination. Decision makers at local and State levels may need to reinforce the intent of the ADA through planning and oversight efforts within their areas.

Patients' Rights

Informed consent is an important right of patients receiving screening and treatment for any purpose. Patients also have the right to refuse to be tested and treated for infectious diseases. They should not be denied services solely because of that refusal. Informed consent and respect for patients' rights is an inherent part of the therapeutic process. If a helping relationship is to be developed, there must be open communication and a clear delineation of mutual expectations (Barthwell & Gilbert, 1993).

Confidentiality

Confidentiality is essential in substance abuse and other medical treatment. Both federal and State confidentiality laws must be considered by programs. The issue of contact tracing and partner notification interfaces with confidentiality concerns. In some cases there is a duty to warn others that they may have been exposed to an infectious disease. Chapter 11 will address issues of confidentiality and other legal/ethical concerns in greater detail.

Program Staff Considerations

Program staff working in substance abuse treatment programs with patients with infectious diseases will have some special needs. There is often fear, or an

actual risk, of transmission of some diseases. Tuberculosis, an airborne disease, is highly contagious in crowded, poorly ventilated areas. On the other hand, contracting HIV from patients is only a risk if body fluids are exchanged. Efforts should be made to make working conditions as positive and healthful for staff as possible, to reduce fears about infection. Clear procedures for infection control, training, and support groups are recommended for addressing staff concerns (Sorensen & Batki, 1992). These must be recognized as essential program components by administrators and local and State decision makers. Often funding cuts are proposed in areas such as training and other staff services and benefits. While financial issues are paramount, ultimately excessive turnover of staff whose needs go unmet may be more costly.

Administrative Considerations

Federal and State regulations affect program policies and procedures. On occasion, these regulations may counter each other, leaving administrators in a dilemma about complying with each (Brown, 1991). Effective coordination and communication among the program, State, and federal levels with responsibilities in these areas are essential. Local and State decision makers should assess such problems and attempt to reconcile differences for the benefit of programs and, ultimately, the persons they serve.

Funding issues are of paramount concern to program administrators. Levels of funding, as well as many other factors, directly impact the quality of care that can be provided to patients. Funding considerations often influence the number and types of services provided, the

number of individuals that can be served, and the staffing patterns of a program. At the decision-making level, funding patterns should be examined and equitable allocation of resources should be ensured for all programs. Ultimately, the patients are the persons most affected by such decisions.

Adequate facilities for substance abuse and other medical treatment programs are vital. However, there is often community resistance to developing substance abuse treatment programs. Lack of appropriate facilities in suitable locations may limit a program's ability to provide or link with comprehensive medical, social, and legal services for patients. Where opposition to program development is high, local and State decision makers may have to use appropriate measures to overcome it (Primm, 1992).

Staff shortages are another area of administrative concern. Staff turnover in treatment programs is high because of burnout, lower pay scales, and lack of respect for their work from the public. Staff shortages and turnover interfere with effective service delivery (Brown, 1991; Primm, 1992). The need to recruit and retain well-trained staff is a continual issue for program administrators and local and State decision makers.

Treatment in Criminal Justice Settings

Crowded correctional facilities are the norm today, and this condition exacerbates the problem of infectious diseases. Not only is there greater likelihood of disease transmission, but prisoners tend to be sicker and have more complex medical and social problems. If these needs are not adequately addressed, public health may be jeopardized when these persons are released and return to their homes and communities (Boodman, 1992).

Future Directions for Research and Treatment

It will be increasingly important that substance abuse treatment programs incorporate program components and integrate services to deal with the problems presented by infectious diseases. Comprehensive on-site services, including medical screening and treatment may be a valuable direction for many programs to take. Many will need to implement prevention and treatment of health care problems in the treatment plan for individuals. Multi-disciplinary approaches are an important part of program design (Batki & London, 1991).

Another area for examination for future programs is the modification of various treatment approaches to make them more accessible and appropriate for infected persons, particularly those with HIV. Self-help groups and therapeutic communities, among others, may be able to play greater roles in reducing drug abuse and preventing the spread of infectious diseases (Batki & London, 1991).

Because of the recent cocaine epidemic, more effort is needed to develop effective treatments for these substance abusers. The interface of cocaine abuse and infectious diseases merits further study and specific attention to the substance abuse and medical treatment of these individuals (Batki & London, 1991).

Conclusion

Infectious diseases and their relationship to substance abuse have added an urgency to the field of substance abuse treatment. It is essential for the health of persons with chemical dependency

problems, as well as public health, that infectious diseases be diagnosed and treated at the earliest possible juncture. Therefore, substance abuse treatment programs must provide or refer patients for screening and treatment of these diseases. Comprehensive services, including material resources, medical treatment, social services, and legal assistance must be a part of the thorough assessment and treatment plan provided for all persons in substance abuse treatment.

Local and State decision makers should recognize the critical connection between substance abuse and infectious diseases. This makes the development, coordination and funding of effective substance abuse treatment programs even more vital. When considering the cost of medical care and the lost productivity of those who are victims of infectious diseases, the cost-effectiveness of substance abuse treatment is further underscored.

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Chapter 8—Pharmacotherapies for Alcohol and Drug Dependence

by
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This brief overview of pharmacotherapies for alcohol and drug dependence will address three major issues: (1) FDA approved pharmacotherapies; (2) new pharmacotherapies under development; and (3) recommendations for appropriate use of existing and developing pharmacotherapies, particularly for patients in the criminal justice system. Four medications are now specifically approved by the FDA for use with substance dependent patients: methadone, LAAM (levor-alpha-acetyl-methadol), naltrexone, and disulfiram. Methadone, LAAM, and naltrexone are used for opioid dependence, while disulfiram is for alcohol dependence.¹

All of these are medical treatments that might be provided in residential as well as outpatient programs. A newly developed agent for opioid dependence is buprenorphine. A new form of naltrexone is being developed for injection use so that it would need to be given every several weeks rather than several times per week. Naltrexone is also showing

promise for reducing alcohol dependence. No pharmacotherapies are specifically approved for cocaine dependence, but a number of antidepressant medications are showing promise as treatments, and an active research effort is developing a cocaine blocker.

While specific guidelines apply to each of these medications, a critical component with any maintenance medication is concurrent psychosocial rehabilitation with appropriate monitoring of medication compliance and any continued illicit drug or alcohol abuse. Biochemical monitoring of illicit drug use through urine testing and of alcohol use through breathalyzer is an essential component of any pharmacotherapy program. Simply handing out these medications by monthly prescriptions or even by daily dispensing without these ancillary treatment components has been repeatedly demonstrated to fail in reducing alcohol and illicit drug abuse. No "magic bullets" exist for substance dependence, and these medications require a comprehensive treatment context.

Acute Detoxification Versus Maintenance Treatment

In understanding the role of pharmacotherapies for substance dependence, it is important to distinguish between medications for acute detoxification and those for maintenance treatment. Acute detoxification can be medically serious and associated with life threatening complications that may require inpatient treatment, but maintenance treatments are designed for outpatients with the aim of preventing relapse to drug dependence. Many important pharmacological advances have been made in the acute detoxification of alcoholics and of opioid addicts. New medications such as carbamazepine for alcoholics have increased the safety and decreased the discomfort of detoxification. Other detoxification medications such as clonidine for opioid

dependence have significantly reduced the duration of the detoxification from three weeks to as little as three days, and made these detoxifications more readily accessible to the general medical practitioner.

Maintenance treatments generally have no role in inpatient or longer term residential treatment except in special cases such as methadone maintenance of pregnant heroin addicts. Because opiate detoxification in these patients may lead to spontaneous abortion, methadone maintenance assures greater medical safety for both the mother and the fetus. The risks from opiate withdrawal in the newborn baby of methadone treated women are minimal, and many newborns will not experience significant withdrawal symptoms. Those who have withdrawal can be well treated with existing medications, and methadone has no deleterious effects on fetal growth or development.

Methadone and LAAM Maintenance

Methadone maintenance is an important pharmacotherapy for heroin dependent patients. When used in an adequate dose of over 65 mg. daily and for a duration of at least two years in the context of a psychosocial rehabilitation program, methadone is clearly our most effective therapy for heroin addicts. Using once daily dosing, methadone relieves opiate withdrawal symptoms and, by a mechanism called cross tolerance, prevents heroin addicts from getting high from illicit heroin. Within methadone programs there have been problems with polydrug abuse, particularly cocaine abuse and alcohol abuse, as well as with potential misuse of methadone

when take home bottles are given. In order to address this problem of misuse, LAAM was developed to enable patients to come in three times a week without needing to give them take home medication. For the problem of polydrug abuse, several new treatments have been developed. For example, disulfiram, an alcohol blocker, can be helpful when used in conjunction with methadone for alcoholic opiate addicts.

Methadone's role in preventing the spread of AIDS among intravenous drug users can not be underestimated. Areas having high incidence of injection drug use, the most common route of administration for heroin addicts, need to encourage methadone maintenance programs. The cost for medically treating an individual with AIDS is estimated at \$100,000. Methadone maintenance costs approximately \$6.00 per day, or \$2,190.00 per year. Cost benefits alone are substantial; reduction in the transmission of the AIDS virus is equally impressive. In one recent study, the rates of new AIDS infections were four times higher in those heroin addicts on the street compared to similar former addicts who received treatment in methadone maintenance. It is estimated that \$75,000 is saved in lifetime medical costs for each AOD-abuser diverted out of the disease pool through treatment.

Overall, methadone programs have been extremely effective at improving employment and reducing crime as well as reducing heroin abuse and AIDS transmission. It should be noted that some individuals may always require some dosage of methadone. However, the cost benefits far outweigh the necessity of long term methadone maintenance. Studies that analyzed cost benefits of methadone maintenance for opiate abusers have found a benefit/cost ratio of \$4.4 to every dollar expended for methadone

maintenance. The estimated ratio of benefits from reduced crime to costs of treatment was 1.7 to 1 for men over a two year period. The Treatment Outcome Prospective Study (TOPS) conducted in the late 1970s and early 1980s showed that the benefits justified the costs of methadone maintenance by:

- reductions in heroin use;
- reductions in criminal activity; and
- improved employment status.

The investment in public treatment is recovered substantially during the period when the heroin users are in treatment.

Naltrexone

The other major medication available for heroin dependence is naltrexone, a blocker of opiates. Two important problems with naltrexone have been that heroin addicts must be detoxified from opiates before naltrexone can be started, and it requires continued patient compliance after detoxification. Detoxification has been greatly improved using clonidine plus naltrexone, and it has been shortened from about two weeks to as little as three days. One setting in which patient compliance problems have been significantly reduced is the criminal justice population. With these patients, continued three times a week ingestion of naltrexone can be made a condition of probation or parole or made part of a work release program. If these patients miss taking the medication, they are promptly returned to prison. With this contingency, heroin addicts do extremely well at remaining opiate free since naltrexone completely blocks the effect of heroin. An additional development has been an injectable form of naltrexone, which can be given as infrequently as once a

month, rather than needing three times per week oral dosing.

Disulfiram (Antabuse)

Another available medication is disulfiram (antabuse) for alcoholism. This medication makes people sick if they use alcohol while taking it. Because patients have to take disulfiram every day, compliance with this aversive medication is its major limitation. If they take disulfiram regularly, patients are unlikely to abuse alcohol because they will get sick. Disulfiram has been used particularly effectively with alcoholic opiate addicts who are maintained on methadone because they can take both the methadone and disulfiram together, and methadone compliance is very good. In other settings, observed daily ingestion of disulfiram can occur at places of employment or through treatment programs tied to probation, parole, or work release.

Secondary Pharmacotherapies

Cocaine and stimulant abuse are major problems for which effective pharmacotherapies have yet to be developed. Several studies have demonstrated that antidepressant medications and some medications used for treating Parkinson's disease may also be helpful in reducing cocaine dependence. These medications are neither substitution agents such as methadone nor blocking agents such as

naltrexone, but reducing craving for cocaine thereby reduces a patient's cocaine abuse. Current research is developing a blocking agent for cocaine similar to naltrexone in order to reduce cocaine's reinforcing properties. However, the mainstay of treatment for cocaine abuse remains psychotherapeutic treatments in conjunction with regular urine monitoring for cocaine.

Conclusion

In summary, medications can have a significant role in the treatment of substance abusers, particularly opioid addicts and alcoholics. The most widely used medication for opioid addicts is methadone; it has excellent treatment retention and substantially reduces illicit heroin use. In addition, psychosocial rehabilitation with these methadone patients can reduce crime, increase employment, improve psychological functioning, and stabilize health, particularly in patients infected with the AIDS virus. A blocker treatment, naltrexone, is also available for heroin addicts, but there has been a significant issue with compliance in the general heroin addict population. However, naltrexone can have a substantial role in work release or other criminal justice programs where compliance can be regularly monitored and enforced. This need for monitoring also may be reduced by depot forms of naltrexone, where once monthly injections will be sufficient for complete blockade. Finally, disulfiram can be very helpful in alcoholics, although monitoring compliance is a key

issue, since daily ingestion is needed. With all substance abusers, polydrug abuse of cocaine in addition to alcohol or heroin remains a significant problem. While no blocking agents have yet been developed for cocaine, progress has been made in using antidepressants and other medications to reduce cocaine craving and thereby reduce cocaine abuse in motivated subjects.

It is vital to use all avenues of treatment in providing assistance to substance abusers. This includes those that are not traditionally approved of by the public and/or criminal justice system. Methadone maintenance, naltrexone, and disulfiram do assist some substance abusers in developing drug-free existences. Reducing drug use through pharmacological therapies diminishes the spread of infectious diseases, including AIDS and tuberculosis; reduces the level of criminal activity for those receiving pharmacological therapy; improves the rate of employment for individuals on pharmacological therapy, making them tax-paying, contributors to society; and reduces the intake of illegal drugs, thereby impacting the demand for substances of abuse. Pharmacotherapeutic interventions have their special niche for use with substance abusers; more importantly, they have application and use with the appropriate substance abusers involved with the justice system.

Endnote

1. LAAM was approved by the FDA for use with opioid-dependent patients in July 1993 and is expected to be available in most States by the end of 1994.

Chapter 9—Relapse Prevention

Addiction is a chronic relapsing disorder, thereby making the prevention of relapse one of the critical elements of effective treatment for alcohol and other drug (AOD) abuse. Studies have shown that 54 percent of all alcohol and other drug abuse patients can be expected to relapse, and that 61 percent of that number will have multiple periods of relapse. It is not unusual for addicts to relapse within one month following treatment, nor is it unusual for addicts to relapse 12 months after treatment; 47 percent will relapse within the first year after treatment (Simpson, Joe & Lehman 1986). Although relapse is a symptom of addiction, it is preventable. A key factor in preventing relapse is improved social adjustment (Joe et al. 1985a). The poor social adjustment by criminal offenders makes them especially prone to relapse and to associated criminal behavior.

Relapse prevention methodologies are critical to the success of substance abuse treatment. This chapter will examine the process of relapse, along with information about recognizing its "warning signs," or triggers, and the elements of relapse prevention treatment methodologies.

Understanding Relapse

Relapse does not occur within a vacuum. There are many contribut-

ing factors, as well as identifiable evidence and warning signs which indicate that a patient may be in danger of returning to substance abuse. Relapse can be understood as not only the actual return to the pattern of substance abuse, but also as the process during which indicators appear prior to the patient's resumption of substance use (Daley, 1987).

Relapse, however, is not an automatic sentence to a lifetime of substance abuse for an individual. Studies of lifelong patterns of recovery and relapse indicate that approximately one-third of patients achieve permanent abstinence through their first serious attempt at recovery. Another third have brief relapse episodes which eventually result in long-term abstinence. An additional one-third have chronic relapses which result in eventual recovery from chemical addiction (Gorski, Kelley & Havens, 1993).

Because relapse is a common occurrence during the process of substance abuse recovery, it is imperative that it be examined carefully. Treating the disease of AOD abuse is not possible without a thorough understanding of the role that relapse prevention plays.

Whether or not treatment and criminal justice personnel provide initial treatment services, these personnel have a significant opportunity and responsibility to intervene with recovering persons when they recognize signs of relapse. Some of the skills required include assessment, education, confrontation of denial, brokering of

community resources, and building support systems.

In order for relapse prevention to be successful, effective systems coordination is necessary. This involves coordination and communication between various agencies and systems. Community treatment programs must work cooperatively to ensure that relapse prevention programming is an integral part of treatment for all patients. State and community decision makers need to recognize that relapse prevention is a critical component of the treatment process, and consider and coordinate policy and funding decisions with this in mind. When it is treated as such, with comprehensive efforts on the parts of all involved agencies and systems, treatment dollars are spent most effectively.

Several situations may lead to relapse, such as social and peer pressure or anxiety and depression. Studies have indicated that the highest proportion of high-risk situations for alcoholics involve interpersonal negative emotional states, while the highest proportion of high-risk situations reported by heroin addicts involves social pressure. (Marlatt & Gordon, 1985).

Contributing Factors

An understanding of some of the personal factors which may contribute to substance abuse relapse is useful in any discussion of

relapse prevention. These may include (Peters, 1993):

- inadequate skills to deal with social pressure to use substances;
- frequent exposure to “high-risk situations” that have led to drug or alcohol use in the past;
- physical or psychological reminders of past drug or alcohol use (e.g., drug paraphernalia, drug-using friends, money);
- inadequate skills to deal with interpersonal conflict or negative emotions;
- desires to test personal control over drug or alcohol use; and
- recurrent thoughts or physical desires to use drugs or alcohol.

Drug and alcohol addiction is a chronic and relapsing condition. Recovery requires changes in attitudes, behaviors, and values. Because of these issues, recovery is not a static condition; it is an ongoing process. Relapse occurs when attitudes and behaviors revert to ones similar to those exhibited when the person was actively using drugs or alcohol. Although relapse can occur at any time, it is more likely earlier in the recovery process. At this stage, habits and attitudes needed for continued sobriety, skills required to replace substance use, and identity with positive peers are not firmly entrenched (Nowinski, 1990).

Categories of Patients

According to Gorski & Miller (1986), chemically addicted individuals can be categorized according to their recovery and relapse history. Patients are: prone to recovery; briefly prone to relapse; or chronically prone to relapse. Individuals who are relapse-prone can be further divided into three subgroups:

- *Transition patients.* Transition patients do not accept or

recognize that they are suffering from chemical addiction, even though their substance abuse may have created obvious adverse consequences. This usually results from the patient’s inability to accurately perceive reality, due to chemical interference.

- *Unstabilized relapse-prone patients.* Unstabilized patients have not been taught skills to identify their addiction. In such cases, treatment fails to provide these patients with the necessary skills to interrupt the process and disease of addiction. As a result, they are unable to adhere to a recovery program requiring abstinence, treatment, and lifestyle change.
- *Stabilized relapse-prone patients.* Stabilized patients recognize and are aware of their chemical addiction, that abstinence is necessary for recovery, and that an ongoing recovery program may be required to maintain sobriety. Despite their efforts, however, these individuals develop dysfunctional symptoms which ultimately lead them back to AOD abuse.

It has been estimated that 40 to 60 percent of persons who are recovering from chemical dependency relapse at least once following their first *serious* attempt at treatment. Studies have shown that offenders who are actively using drugs are involved in approximately three to five times the number of crime days as non-drug users; thus, relapse tends to accelerate the level of subsequent criminal activity (Bell, 1990; Peters, 1993).

It is often thought that most relapse-prone persons are not motivated to recover. This is particularly common for those working with individuals in the criminal justice system, where relapse to drug use coincides with a return to criminal activity. Clini-

cal experience, however, does not support this perception. In one study of relapse-prone patients at a national relapse prevention center in Maryland, over 80 percent of the patients had a history of cognizance of their addiction, as well as motivation to follow recovery recommendations. In spite of this, the individuals were unable to maintain abstinence on their own (Gorski et al., 1993).

Adolescent Risk

Adolescents are at particularly high risk for relapse because of their developmental stage. Many typical adolescent issues include physical and emotional changes which exacerbate relapse tendencies. Chemical dependency may have delayed normal development, making it difficult for recovering youth to function in age-appropriate ways. This produces discomfort in the all-important social milieu of youth. Some may return to substance use as a way of managing these uncomfortable feelings (Bell, 1990).

Bell (1990) also indicates there are *predisposing factors* and *precipitating events* that may result in relapse for adolescents. *Predisposing factors* place youth (and adults, as well) at increased risk and include elements such as:

- learning disabilities;
- dual or multiple diagnosis;
- high stress personalities;
- inadequate coping skills;
- lack of a support system;
- dysfunctional families; and
- lack of impulse control.

Precipitating factors are upsetting events that interfere with adolescents’ abilities to work through recovery. Examples of these include:

- divorce or separation of parents;
- moving away from old friends;

- changing schools;
- loss or death of family members; and
- breakup of relationship with boyfriend or girlfriend.

Precipitating events for adults might include loss of job, loss of significant others, and similar events.

Relapse prevention emphasizes teaching recovering persons to recognize and manage relapse warning signs. Peters (1993) offers some suggestions for relapse prevention among criminal offenders. While these are specific for populations of incarcerated adults, many of the recommendations could be applied to youth in various parts of the juvenile justice system. The program approaches he suggests include:

- *Assessment of past relapses.* This approach involves development of an individualized description of the sequence of events leading to relapse. This should include structured programs providing education and opportunities for rehearsal of coping skills. Relapse prevention should be provided well before an individual's expected release from a program to allow time for building relapse prevention skills.
- *Strategies to aid community re-entry.* Persons who have been removed from the community need assistance with the transition and help in establishing contact with needed treatment services. Frequent monitoring for drug use also may be important.
- *Court-ordered treatment.* Follow-up community treatment may be stipulated by the court as a condition of probation or after-care. Requiring substance abusers to participate in relapse prevention programs can aid in successful recovery. Community supervision can provide needed incentives to sustain the recovery process until internal motivation can be strengthened through

peer support, confrontation, and other methods. Court-ordered treatment is effective in preventing relapse for persons who are unlikely to attend treatment on their own.

Principles and Procedures of Relapse Prevention

Gorski et al. (1993) have isolated a number of principles underlying relapse prevention therapy. They include:

- *Self-regulation and stabilization.* As the patient's capacity to self-regulate thinking, feeling, memory, judgment, and behavior increases, the risk of relapse will decrease. Self-regulation can be achieved through stabilization. Stabilization may include:
 - detoxification from alcohol and other drugs;
 - recuperation from the effects of stress that preceded the chemical use;
 - resolution of immediate interpersonal and situational crises that threaten sobriety; or
 - establishment of a daily structure including proper diet, exercise, stress management, and regular contact with both treatment personnel and self-help groups.

The risk of relapse is highest during this period of stabilization.
- *Integration and self-assessment.* As understanding and acceptance increases, the risk of relapse will decrease. During this phase, it is important to explore the presenting problems which may have led to relapse in the past, and which might trigger future relapse.
- *Understanding and relapse education.* An understanding of

the general factors which cause relapse will aid patients in relapse prevention. Basic information provided in this phase should include, but not be limited to:

- medical, clinical, and social models of addictive disease;
- developmental model of recovery;
- common "stuck points" in recovery;
- complicating factors in relapse;
- identification of warning signs;
- management strategies for relapse warning signs; and
- planning for effective recovery.

It should be noted that many relapse-prone patients may have memory problems associated with the chemical abuse, which may impede the learning process and retention of educational information.

- *Self-knowledge and identification warning signs.* This process teaches patients to identify the sequence of problems that has led from stable recovery to chemical use in the past, and then to synthesize those steps into future circumstances that could cause relapse.
- *Coping skills and warning sign management.* This process involves teaching relapse-prone patients how to manage or cope with their warning signs as they occur.
- *Change and recovery planning.* Recovery planning involves the development of a schedule of recovery activities that will help patients recognize and manage warning signs as they occur in sobriety.
- *Awareness and inventory training.* Inventory training teaches relapse-prone patients to do daily inventories that monitor compliance with their recovery program and check for the development of relapse warning signs.

- *Significant others and involvement of others.* Relapse-prone individuals need the help of others during the process of recovery. Treatment should ensure that others (e.g., family members, 12-step sponsors, supportive peers) are involved in the recovery.
- *Maintenance and relapse prevention plan updating.* Ongoing outpatient treatment is necessary for effective relapse prevention. Even highly effective short-term inpatient or primary outpatient programs will be unable to interrupt long-term relapse cycles without the ongoing reinforcement of some type of outpatient therapy. A relapse prevention plan update session may involve:
 - a review of the original assessment, warning sign list, management strategies, and recovery plan;
 - an update of the assessment by adding as an addendum any documents that are significant to the patient's progress or problems since the previous update;
 - a revision of the relapse warning sign list to incorporate new warning signs that have developed since the previous update;
 - the development of management strategies for the newly identified warning signs; and
 - a revision of the recovery program to add recovery activities, to address the new

warning signs, and to eliminate activities that are no longer needed.

Conclusion

Chemical addiction is a disease, and, like many diseases, there is always the possibility of relapse. The process of AOD abuse is complex, and is impacted by social, clinical, and medical factors. The solutions to the problem of chemical addiction are multifaceted. Treatment strategies benefit from a relapse prevention component in virtually every case. It is a definite means of stretching the effectiveness of State treatment dollars. In order for relapse prevention to work, agencies and systems must cooperate and communicate in their search for the best means of successfully intervening with substance abusing patients.

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Chapter 10—Evaluation

Evaluation is a word that has considerable variations in meaning depending upon the context in which it is applied. In its most general use, it includes gathering and analyzing information concerning an individual, program, group of programs, or other entities. There is usually a standard, whether explicit or implicit, against which the evaluation data are compared and judgments are made (Weiss, 1972).

Evaluation is important for a variety of reasons. Some of these include (Schinke, Botvin & Orlandi, 1991):

- determining whether or not program objectives or individual treatment goals have been met;
- planning and making decisions about individuals or program elements based on appraisals of achievements compared to goals and objectives;
- monitoring standards of performance;
- generalizing the effectiveness of a program or program component to other populations;
- fostering program and individual accountability; and
- promoting positive awareness of treatment effectiveness.

Substance abuse professionals frequently evaluate (formally or informally) the progress their patients are making in the treatment process. Based on these assessments, they may continue the treatment as planned, modify the treatment plan and services, or

terminate the treatment because goals have been achieved or there is no progress being made.

Evaluation information about one or more programs is often helpful to program administrators, referral sources, funding agencies, policymakers, and advocates. Evaluation may focus on the design of programs, the way in which they are conducted, and both short- and long-term outcomes. It also may examine the cost-efficiency of programs compared to their effectiveness (Schinke, Botvin & Orlandi, 1991).

It is clear that substance abuse treatment does work for many individuals. When treatment objectives are achieved, chemical dependency treatment is cost-effective compared with the frequently incurred alternatives of lost productivity, increased health care costs, and criminal justice services. However, there are variations in the effectiveness of different programs. Thus, to make informed decisions about policies and funding at local and State levels, decision makers must take a careful look at the evaluation of programs.

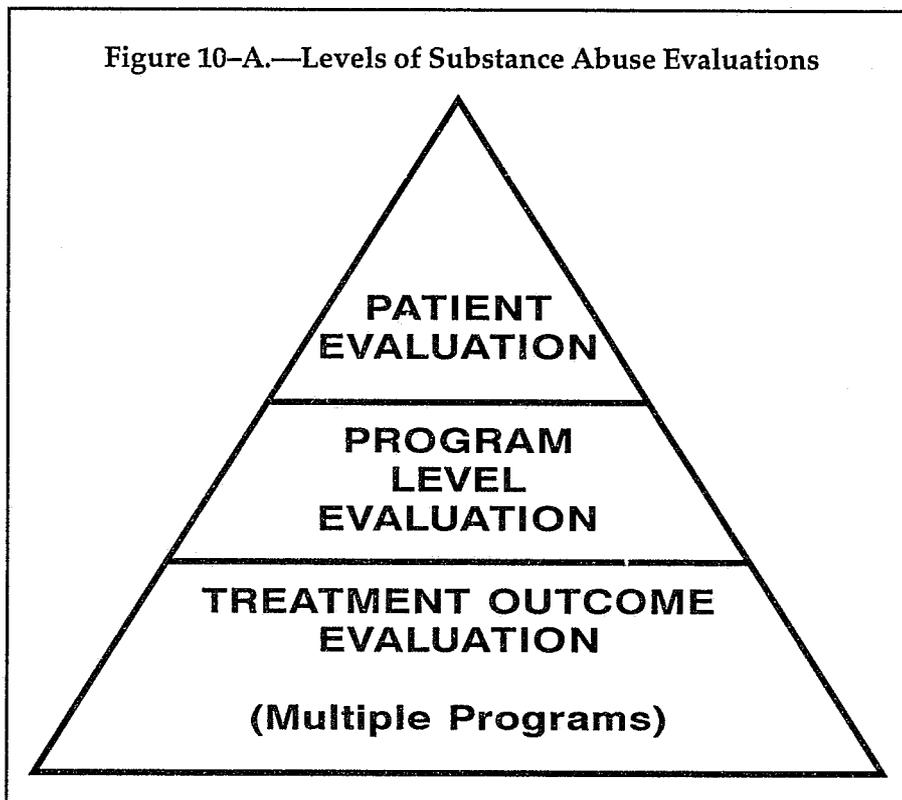
In this chapter, three levels of substance abuse evaluation, as depicted in Figure 10-A, will be summarized. Treatment outcome evaluations look at information from many programs to determine the effectiveness of various treatment modalities. The findings from several treatment outcome studies will be reviewed. Program-level evaluation is essential for accountability, making informed decisions,

and modifying program elements. This is crucial for ensuring that programs are both effective and proficient in meeting program objectives. Finally, evaluation of an individual's progress during treatment provides similar advantages. It assesses individual accountability and allows the patient, direct treatment providers, and others with an appropriate concern to make necessary decisions about the continuation of the treatment. The benefits of performing evaluations at each of these levels, and the possible applications of results will be highlighted.

Treatment Outcome Evaluations

Treatment outcome evaluations are conducted to inform practitioners and decision makers about the efficacy of various treatment modalities and program components. The general findings from such evaluations indicate that substance abuse treatment does work for significant numbers of patients. However, conclusions cannot be made that all treatment approaches work equally well for all individuals; nor can it be stated that every alcohol- or drug-involved person will derive any benefit from treatment. Many of the treatment effectiveness studies to date have focused on narrow population groups—usually males. It cannot necessarily be generalized

Figure 10-A.—Levels of Substance Abuse Evaluations



that similar programs would be equally effective for women, adolescents, or other special population groups. Many studies also have been limited to one type of substance abuse, such as heroin or alcohol. Again, whether or not a particular modality would produce similar results for persons abusing different substances or those with polysubstance abuse problems cannot be determined without additional research.

Two large studies have focused on populations of narcotic-involved offenders. The Drug Abuse Reporting Program (DARP) measured treatment outcomes on 44,000 patients admitted to 52 treatment programs from 1969 through 1973. The types of programs included in the study were outpatient detoxification, methadone maintenance, therapeutic communities, and drug-free outpatient. A comparison group consisted of persons interviewed and scheduled for treatment who did not show up at the program.

Treatment outcome measures included drug use, productive activity, alcohol use, and criminality. Some general findings from this study include the following (Hubbard, 1992; Institute of Medicine, 1990; Tims, Fletcher & Hubbard, 1991):

- Drug use declined dramatically between pre-treatment and post-treatment measurements and continued to diminish during the three years following treatment. Post-treatment measures, compared with pre-treatment, indicated substantially less use of opiate drugs and nonopiod drugs, including cocaine. However, there was some increase noted in the use of alcohol and marijuana.
- The most favorable outcomes for male opiate addicts were associated with methadone maintenance, therapeutic communities, and outpatient drug-free treatment. Detoxification alone was found to be considerably less effective.

- Criminal behavior resulting in arrests or incarceration declined following treatment.
- Employment levels six months after treatment were substantially higher than pre-treatment levels.
- Patients remaining in treatment at least three months showed better outcomes. The longer they remained in treatment, the better the outcome on average.

The Treatment Outcome Prospective Study (TOPS) collected data on 10,000 patients in 40 methadone, residential, and outpatient drug-free treatment programs between 1979 and 1981. The sample population for this study was predominately young adult males. However, women made up 30 percent of the sample, youth under age 21 comprised 25 percent of the study group from residential and outpatient drug-free programs, and racial/ethnic minority group members were included. The study measured drug use, alcohol consumption, mental health, criminal behavior, and economic productivity (Hubbard, 1992).

A composite portrait of those included in the study suggests that on average, they began regular drug use at age 16 but did not enter treatment for the first time until age 24. There was an average of five treatment admissions among the sample. Most had been treated in more than one type of treatment program. About 20 percent had also been treated for alcohol problems, and approximately 25 percent had received previous mental health treatment (Hubbard, 1992).

Some findings from this study include the following (Hubbard, 1992; Institute of Medicine, 1990):

- Patients remaining in treatment for at least three months exhibited more positive treatment outcomes. However, the major changes in behavior were seen

only among those who stayed in treatment for more than a year. Those who remained in methadone or residential treatment for one year or more showed significant decreases in heroin use following treatment.

- Although decline in heroin, cocaine, and psychotherapeutic drug use was noted, especially for those remaining in treatment longer than three months, marijuana and heavy alcohol use tended to continue after treatment.
- After treatment, persons in the TOPS sample indicated substantial decreases in indicators of depression.
- Individuals from the criminal justice system under legal pressure to participate in treatment did as well or better than those who voluntarily took part.
- Involvement in the criminal justice system also helped retain persons in treatment, and more substantial changes in behavior during treatment were noted for individuals referred from criminal justice agencies.
- The criminal justice system tended to refer fewer persons to methadone programs, and it was found that individuals coming from the criminal justice system to drug-free programs received fewer services than other persons in the same programs.
- Outpatient programs had the poorest retention rates. Forty-one percent of patients dropped out within the first four weeks and only 18 percent eventually completed treatment.
- Contrary to the positive findings about employment rates by the DARP study, TOPS researchers found that the level of employment six months after treatment was slightly lower for all program types. This may, in part, reflect economic conditions during the respective periods

in which the studies were conducted.

- Reports of illegal activities decreased after treatment in all modalities. The most significant change occurred with those in residential programs.

Another major study of treatment effectiveness is currently in progress. The Drug Abuse Treatment Outcome Study (DATOS) is collecting data between 1991 and 1993. Fifty programs, both publicly and privately funded, including detoxification, methadone maintenance, therapeutic communities, drug-free outpatient, and chemical dependency units are being studied. Approximately 20,000 persons are included in the study sample. Emphasis is being placed on the process of treatment and client change measures during treatment (Tims, Fletcher & Hubbard, 1991).

One national study of alcohol treatment also was conducted in the 1970s. A sample of 593 patients were followed at 18 and 48 months after treatment. At four years after treatment, 21 percent of treatment participants had been abstinent for at least one year before the study was conducted. Both outpatient and inpatient alcohol treatment showed similar results (Hubbard, 1992).

While these studies provide significant information about treatment outcomes, they have some limitations. More information is needed about the comparative effects of different treatment approaches and the benefits of particular treatment components. Both treatment services and the types and needs of patient populations have changed since these earlier studies were conducted. Much additional research is needed on patient differences and how treatment variations respond to diverse needs. The complex process of individual change and

the treatment factors that foster this require additional study, as well (Hubbard, 1992).

Despite the need for further evaluation, several points about treatment effectiveness can be made in summary. Overall, treatment is effective, and its benefits outweigh the costs of providing treatment. Generally, the more time spent in treatment, the better the treatment outcome. Individuals who are legally mandated to participate in treatment do as well or better than those who seek treatment on their own. Frequency of drug use and criminal behavior have shown decreases during treatment. Persons whose values and behaviors are more consistent with the majority of society have more favorable treatment outcomes. Persons with severe psychopathology and persons with histories of extensive criminal activity tend to have poorer treatment outcomes. Treatment effectiveness varies within modalities and among programs because of differences in staff, clinical competence, and experience (Hubbard, 1992; Singer, 1992).

Program Evaluation and Accountability

Program evaluation is vital for a variety of reasons. Accountability is one of the five critical areas of substance abuse treatment. Both programs and patients must be held accountable for how they conduct themselves and the results of their efforts. Program evaluation helps determine whether or not a particular agency is performing the intended services and how effective they are in achieving treatment goals. This information is essential for judges and other agencies who need to refer persons to treatment.

Another important reason for programs to be evaluated is to provide information to the administrators and staff about the effectiveness of the program. This information can be supportive of program elements that are working effectively, or it can provide the data needed to make informed decisions about program change. Positive evaluation results can be used to bolster community support and elicit funding for a program. Both program procedures and outcomes are monitored by decision makers and funding agencies. Evaluation information documents the effectiveness of programs.

Needs Assessments

Needs assessment is an important prelude to program evaluation and accountability. Needs assessment activities should be undertaken before programs start and periodically after they are operating to ensure that they are appropriately oriented to the specific needs manifested in the community. Once treatment programs are started, inertia tends to keep them moving in the same direction if new information is not provided. For example, drug use trends change over time, but a program that has been addressing the problem of heroin use may not adapt to the problem of cocaine dependency or polysubstance abuse unless this need is clearly documented. Needs assessments at the community or State level help determine how resources should best be allocated. Other reasons for conducting needs assessments include (Kimmel, 1993):

- generating information for advocacy purposes;
- responding to external mandates, such as government agencies and other funding sources;
- justifying decisions that have already been made; and

- verifying information received through other sources.

A primary purpose of needs assessment is to determine the size and nature of the substance abuse problem in a given area (e.g., community, State). This will include collecting data such as (Kimmel, 1993):

- the total population of the area;
- the number of persons who use alcohol and other drugs;
- of those, the group at risk of substance abuse or addiction;
- those exhibiting serious problems of substance abuse and chemical dependency;
- those currently receiving treatment;
- those requiring publicly funded treatment services; and
- those who may not be expected to benefit from treatment.

It also may be important to estimate the impact of substance abuse on the community or State. For example, a needs assessment might involve gathering factual information about the number of alcohol- or drug-involved persons and the estimated costs of lost productivity, accidents, health care, and criminal justice services. Another aspect of needs assessment is development of an inventory of available services and funding sources for treatment.

Developing information about needs can be costly and time consuming, but so can funding of services that do not meet needs effectively. There are a variety of methods for conducting needs assessments including both quantitative and qualitative data collection.

Assessment of needs and resources is important to both the development of new programs and the continuation of existing ones. To adequately evaluate programs, information about needs and resources is important for comparison.

Formative Evaluation

Formative (sometimes called process) evaluation reviews program procedures. This type of evaluation measures the integrity of a program and is used to modify program practices. It provides documentation that the program is being operated as planned. Formative evaluation results are helpful to a variety of persons:

- Program administrators and staff can use the data to make decisions about continuing or changing certain aspects of services.
- Outside monitors can document that appropriate services meeting acceptable standards are being provided.
- Funding sources can be shown that money is being spent appropriately.
- Those referring patients to the program can consider its ability to consistently deliver appropriate services.

Summative Evaluation

Summative (sometimes called outcome) evaluation documents a program's effectiveness or ineffectiveness in reaching its intended goals. Summative evaluations will measure such areas as changes in participants' attitudes and behaviors regarding substance abuse and changes in areas such as academic or work performance and attendance (Schinke, Botvin & Orlandi, 1991).

The goal of treatment is that chemically addicted persons stop using alcohol or other drugs and continue their abstinence after completing treatment. Treatment is "deemed successful when, three to five years after treatment, a former

addict is no longer using drugs" (Office of National Drug Control Policy [ONDCP], 1990, p. 22). Concomitant goals may include improved health, employment, relationships, and family functioning.

Outcome evaluation should not be viewed as an either/or alternative—either a program is totally successful or a complete failure. Most programs will have degrees of success, and it is extremely unlikely that a program will be able to accomplish all the treatment goals of every patient. Rather, program evaluation should examine programs along a continuum from high to low success rates. Often, a great deal can be learned by further exploration of the types of patients who are succeeding or failing in the program or particular service elements that appear to be more or less effective. For example, does a particular counseling approach or group technique result in more frequent successes? Is the program likely to be more successful with alcohol- rather than drug-dependent persons? How many persons are admitted to the program and what are the dropout and completion rates? Such indicators can be used to modify programs to increase effectiveness.

The results of summative evaluations are also useful to program personnel in making decisions about continuing or modifying services. Both funding sources and policymakers need information about the outcome of programs to make informed decisions.

The Evaluation Process

There are five basic components to an evaluation design. Agencies that are able to demonstrate development of these elements will

be more likely to collect useful evaluation data.

Program Objectives

Objectives should be clear, specific, measurable, and practical in order to guide the evaluation effort. A time frame for achieving each objective is also important. It is vital that the agency's program mission and the objectives be in agreement, so that the program is not working at cross purposes with the overall agency's intent. Agencies should provide clearly written program objectives that address both program procedures and intended outcomes.

Management Information System

A management information system allows for the collection and retrieval of information as efficiently as possible. Computerized systems are capable of producing these results with increased ease, speed, organizational efficiency, and convenience. Computers also reduce the need for filing space and excessive paperwork. However, some agencies may not be able to use computer systems because of funding, lack of trained personnel, or other constraints. Manual systems can produce the same results for management information, but may be more labor intensive. Agencies should be able to describe how they will collect, store, retrieve, and compile data for the evaluation process.

Evaluation Method(s)

Various methods of evaluation are appropriate for different purposes. Three general evaluation designs are summarized below. These do not represent all that can be developed.

Descriptive Studies. Descriptive evaluations do not provide explanations of results, explore causal factors, or make predictions. They

merely describe a particular process or finding. Both quantitative and qualitative data may be used in descriptive studies. Quantitative data are obtained by counting categories, such as the number of persons entering treatment, the number of staff in the program, the number of hours of services provided, and the number of lapses to drinking or drug use reported by patients. These data may be arranged to show certain patterns, such as rank order, intervals between certain items within a category, or the ratio between specific measures. Qualitative data can be collected through reviews of patient records, interviews with staff or patients, open ended questions on surveys, and similar means. Typical ways of collecting data for descriptive studies include survey questionnaires, records reviews, meetings, observations, and structured interviews (Schinke, Botvin & Orlandi, 1991).

Before and After Studies. Sometimes called pretest/posttest, these studies attempt to show changes that have occurred during the course of treatment. Data are collected before the program or particular intervention is begun and at other intervals throughout the process and/or at its conclusion. For example, assessment information may be collected on a person entering treatment, including the frequency with which alcohol or other drugs are used and various problems that result from substance abuse, such as family arguments, days of work missed, vehicle accidents, arrests, and medical problems. This same information may be collected periodically during the course of treatment and at the conclusion of treatment. This information can be aggregated for all patients and used to indicate that services were delivered as planned and that changes occurred with patients. It is not, however, possible to state

conclusively from these studies that all changes were the result of the treatment program, because other factors also can intervene with patients. For example, family counseling, loss or change of jobs, suspension of driving privileges, changes in the way alcohol and drug cases are handled by law enforcement, and other such factors could affect the data that are collected during or after treatment. To provide a better picture of the effects of treatment, data should be collected at intervals following discharge from the program. Many individuals make significant changes during treatment but relapse quickly upon release.

Experimental Studies. Experimental studies compare a group of persons receiving treatment to a control group that is similar in size and characteristics but does not receive the same treatment. They compare the effects that occur both with and without the program in order to examine possible causal relationships. These studies are much more difficult and expensive to conduct, and they are not practical for all agencies. However, they are likely to produce the most convincing evidence of the effectiveness of a particular treatment program.

Evaluation Procedures

Agencies should have standard operating policies and procedures for collecting, recording, organizing, and processing the data. The methods of collecting information should be specified, such as interviews, surveys, self-reports, observations, and records reviews. Staff must understand what information is to be collected, when it is to be collected, and from whom. Data are often collected on paper by designated staff and then recorded in the management information system by different staff. Data files (whether computerized or manual) should be organized to facilitate reference to and retrieval of the data

when needed. Data processing involves compiling, analyzing and interpreting the data to provide useful information to others in the most comprehensible manner possible. It is important that those processing the data remain objective and explore the range of possible conclusions that can be drawn from a particular set of findings. Often uncomplicated procedures, such as finding frequencies, ranges, percentages, and averages is sufficient for program evaluation. However, more complex statistical procedures, such as regression, multiple analysis of covariance, and discriminant analysis may provide a more definitive explanation of the relationship between treatment services and outcomes.

Reporting and Using Results

Programs should develop reports of the data produced through evaluation processes. These will be most useful if they are prepared in an understandable way without using professional jargon. Reports may be written or verbal and should be shared both within and outside the agency. It is also vitally important that there be evidence that program personnel attempt to use evaluation findings to make appropriate program changes. Policymakers and funding sources may wish to inquire about previous evaluation findings and program modifications that have resulted from these.

Confidentiality

While all aspects of the evaluation process are important, agencies also need to safeguard the confidentiality of patients. Often, identifying codes are used, rather than patients' names. All aspects of the process—collecting, recording, organizing, processing, and report-

ing data—should ensure the privacy of patients.

Patient Evaluation and Accountability

Closely linked to program evaluation is patient evaluation. The criterion for successful substance abuse treatment is continuing abstinence from alcohol or other drugs three to five years after treatment (ONDCP, 1990). Additional indicators of successful completion of treatment include the alleviation of related problems such as health, employment, financial status, relationships, and illegal behaviors.

However, as with program evaluation, it may be helpful to view treatment outcomes for substance abuse along a continuum. Between the extremes of treatment success and treatment failure are a range of possible outcomes. Those who decrease the use of substances but do not stop using them altogether cannot be considered as total treatment successes. Neither can an occasional lapse of drinking or drug use be viewed as a treatment failure. In addition to changes in consumption of alcohol or drugs, other outcome dimensions should be considered, including improvements in physical and emotional health, interpersonal relationships, vocational functioning, and criminal behavior (Hoffman, Harrison & Streed, 1991). Any change that diminishes the negative effects of alcohol and other drug use on the individual and society is at least a partial success.

Accountability is an important aspect of patient treatment success. Accountability involves delineating clear expectations for the behavior of patients in treatment. When these are met the individual should be rewarded. Rewards may include praise, privileges, and material items. However, if

expectations are not met, consequences are warranted. Patients should be held accountable for showing up and being on time for treatment sessions. In residential settings, patients may be held responsible for performing daily chores and other duties. Urine testing is another form of accountability. Regular, random urine tests to determine whether or not drugs are being used, and appropriate sanctions for positive tests, will help patients acquire the self-control needed to succeed in treatment. Accountability measures in treatment are vital in helping individuals make responsible choices, including decisions about their alcohol or other drug use (ONDCP, 1990).

Evaluation of patients can be accomplished through a variety of means. A thorough assessment as described in Chapter 3 is important in developing the treatment plan. During the course of treatment, assessment should be ongoing in order to determine if additional problems exist or there is a change in the status of areas assessed earlier. Both should be documented. Positive changes, such as decreasing or stopping the use of substances, improved health, employment or academic stability, improved family relations, and the like, can indicate treatment progress. Concomitantly, the lack of improvement in some areas may indicate that the treatment plan needs to be modified to more nearly meet the needs of the patient.

Formal and informal evaluation procedures should be used intermittently during the course of treatment and following discharge. Informal procedures might include conversations between patients and program staff, observations of patient interactions and behaviors,

and self-reports by patients. Assessment forms, questionnaires, structured interviews, and reviews of various records (e.g., treatment program, medical, legal) would be more formal evaluation procedures. Ongoing documentation should be made of individual patient success or problems in treatment.

Conclusion

Accountability is one of the five critical areas of substance abuse treatment. Program and patient evaluation is important for documenting program accountability. Programs need to furnish the services they say they will provide and in a manner that is consistent with currently acceptable treatment standards. They also should demonstrate that the services are effective in helping patients stop abusing alcohol and other drugs. Further, they must be able to accomplish these tasks in a manner that is cost-effective. Program costs should be within a reasonable proximity of similar programs providing corresponding services and achieving comparable outcomes.

The information gained from evaluations is valuable to persons making referrals for treatment. It is also vital for decision makers and funding agencies. Program personnel must use evaluation results to make appropriate modifications in treatment programs.

Systems coordination is essential in the area of program evaluation and accountability, just as in other areas. Treatment providers, policymakers, and funding sources must work collaboratively toward improving evaluation processes and treatment outcomes. Suggestions for coordination will be provided in Chapter 12.

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Chapter 11—Confidentiality

Addiction to alcohol and other drugs presents a serious health problem. Not only is chemical dependency itself taking a toll on the health and well-being of hundreds of thousands of citizens, but related health problems, including AIDS and HIV disease, other infectious diseases, vehicular accidents, homicides, and suicides are among the many serious consequences of substance abuse. Addiction is truly a public health crisis that is affecting the welfare of many individuals and families and is resulting in enormous costs for treatment, related health care, and criminal justice interventions.

Therefore, providing treatment to help addicted persons recover is vital. The physical and psychological properties of many mood-altering substances are so overwhelming that, for many individuals, they clearly compete with the positive rewards attained through treatment. Thus, efforts to attract and retain patients in treatment until they can achieve stable recovery are crucial.

Coupled with this need is the reality that addicted persons tend to be devalued and subjected to discrimination in many ways in the United States. Although lung cancer that results from cigarette smoking is similar to substance abuse in that the affected individuals have voluntarily engaged in behavior that has become addictive and caused health problems, the two types of diseases are frequently viewed very differently by

the public. Prejudicial feelings toward substance abusers often result in stigma and discriminatory treatment.

To promote entry into treatment and continuation through recovery, it is important to safeguard the legal rights of substance abusers. There are many legal and ethical issues surrounding the problem of chemical addiction and its treatment. In this chapter confidentiality will be the primary focus. However, a few other legal/ethical issues, especially access and equality, also will be addressed briefly.

Confidentiality of Alcohol and Drug Abuse Patients¹

General Provisions

The privacy of persons receiving alcohol and drug abuse prevention and treatment services is protected by federal laws. The legal citation for these laws is 42 U.S.C. §§290dd-3 and ee-3. The regulations directing the implementation of these statutes were issued in 1975 and revised in 1987. They are found in the Code of Federal Regulations: 42 C.F.R. Part 2. A copy of these regulations begins on page 129 of this chapter.

Many States also have confidentiality laws that apply to substance abuse treatment. These may afford individuals even greater privacy than the federal law. However, State laws may not be less stringent than federal laws. If they are, the

federal law (or the more rigorous one) prevails. Violation of the regulations may result in fines up to \$500 for a first offense and up to \$5,000 for subsequent offenses.

The federal confidentiality law applies to all programs providing alcohol or drug abuse diagnosis, treatment, or referral for treatment that are federally assisted. Included are the following:

- programs receiving any type of federal funding;
- programs receiving tax exemption status through the Internal Revenue Service;
- programs authorized to conduct business by the federal government, such as those licensed to provide methadone or those certified as Medicare providers; and
- programs conducted directly by the federal government or State or local governments that receive federal funds.

The primary intent of the confidentiality law is to prevent disclosure of information—both written records and verbal information—that would identify a person as a patient receiving alcohol or drug treatment. This protection is even extended to those who have applied, but were not admitted to the program for treatment, and to former patients and deceased patients. Not only are programs prohibited from disclosing information, except under certain conditions to be discussed later, but they also are not allowed to verify information that is already known by the person making an inquiry.

Patients are entitled to notification of the federal confidentiality laws and regulations. Programs should provide a written summary of these provisions upon admission. The written summary should include:

- information about the circumstances in which disclosure can be made without the patient's consent;
- a statement that violations of the regulations may be reported as a crime;
- a warning that committing or threatening a crime on the program's premises or against program staff can result in release of information;
- notification that the program must report suspected child abuse or neglect; and
- reference to the federal law and regulations.

Programs must keep patient records in a secure room, a locked file cabinet or other similarly protected places. There should be written procedures concerning who has access to patient records. A single staff member, often the director, should be designated to handle inquiries and requests for information about patients.

Exceptions to the General Confidentiality Conditions

Under certain conditions, programs may disclose information about persons receiving or applying for substance abuse treatment. These are described in the following sections.

Patient Consent

Patients may sign a consent form allowing for the release of information. However, consent forms must contain specific information, including the following:

- program name;
- person or individual to receive the information;

- patient's name;
- purpose or need for the disclosure;
- the specific amount and kind of information to be released;
- a statement that the patient may revoke the consent at any time;
- date, event, or condition upon which the consent will expire;
- signature of the patient; and
- date upon which the consent is signed.

Only information that is necessary to accomplish the purpose stated in the form may be released. Even if a properly-signed consent form is in force, programs are allowed discretion about disclosing information, unless the form is accompanied by a subpoena or court order. It is usually necessary for patients to sign separate consent forms for each type of disclosure and for each person or organization to whom information is to be released. However, if similar information will be released to the same person/organization during the period the consent form is valid, signing a form for each release is not required. This might occur with funding sources requiring verification of treatment provided over the course of a person's enrollment in a treatment program. On the other hand, if a different type of information is requested by the same person/organization, a new consent form would be required.

Patients may revoke their consent at any time, either verbally or in writing. This does not require the program to retrieve information disclosed when the consent form was valid. If a patient revokes a consent form permitting disclosure of information to a third-party payer, the program still may bill the payer for any services provided during the time the consent form was valid. However, after revocation of consent, the program may not release information to third-party payment sources. If services continue to be provided,

the program risks not receiving reimbursement.

The expiration date of consent forms should be at a time that is reasonably necessary to achieve the purpose for which they are signed. Rather than a specific date, consent forms may expire when a certain event or condition occurs. For example, if information is released to a physician the patient will see one time, the consent form may indicate that it is valid until the patient's appointment with the doctor. On the other hand, a consent form to provide verification of enrollment in the treatment program for an employer, who has placed the person on probation pending treatment, may be in effect until the end of the probationary period.

State laws are relied upon to determine the definition of minors and whether or not the consent of a parent (or guardian or other person legally responsible for the minor) is required for them to obtain substance abuse treatment. The regulations concerning consent for release of information follow State laws: *If State law requires parental consent for treatment, then consent of both the minor patient and the parent (or guardian) must be obtained to disclose information.* However, regardless of the requirement for parental consent, programs must always obtain the minor's consent for disclosure. The parent's signature alone is not sufficient.

In States requiring parental approval for the treatment of minors, programs must obtain the minor's consent before contacting a parent/guardian to obtain his or her permission for treatment. However, if the program director determines that certain conditions exist, s/he may contact the parent/guardian without the minor's consent. In such cases, all of the following conditions must be present:

- the minor is not capable of making a rational choice because

- of extreme youth or mental or physical impairment;
- the situation presents a threat to the life or physical well-being of the youth or another person; and
- the risk may be reduced by communicating relevant facts to the minor's parent/guardian.

If these conditions are not present, the program personnel must inform the minor of his or her right to refuse consent to communicate with a parent/guardian. However, the program cannot provide services without such communication and parental consent. If State law does not require parental permission for treatment, programs still may withhold services from minors who will not authorize a disclosure so the program can obtain financial reimbursement for treatment, as long as this does not violate a State or local law.

Similarly, for adult patients who have been adjudicated incompetent, consent for disclosure may be made by the person's guardian or authorized representative. In situations in which a person has not been adjudicated incompetent but the program director determines that his or her present medical condition interferes with the ability to understand and take effective action, the director may authorize disclosure without patient consent only to obtain payment for services from a third-party payment source.

For deceased patients, disclosure may be authorized by the executor or administrator of his/her estate, spouse, or a family member. Without such consent, programs may make limited disclosures to comply with State or federal laws concerning collection of vital statistics or to respond to inquiries into the cause of death.

Any time a program releases information about a patient, it must be accompanied by a written statement indicating that the infor-

mation is protected by federal law and the recipient cannot make further disclosure unless permitted by the regulations.

At times, patients may consent to disclosure of information to employers. Often, this can be limited to verification of treatment status or a general evaluation of progress. The program should limit disclosure to only information that is related to the particular employment situation.

Persons may be required to participate in treatment as a condition of probation or parole, sentence, dismissal of charges, release from incarceration, or other criminal justice dispositions. These patients also are entitled to protection of confidentiality, but some special qualifications apply concerning the duration and revocability of consent. A sample consent form for release of information for a criminal justice system referral is shown on the next page.

Whenever a person moves from one phase of the criminal justice system to another, a substantial change in status occurs. Until such a change occurs, consent forms cannot be revoked. Criminal justice system consent forms can be irrevocable so that individuals who agree to treatment in lieu of prosecution or punishment can be monitored. However, the irrevocability of consent ends with the final disposition of the criminal proceedings. Information obtained by criminal justice agencies can be used only with respect to a particular criminal proceeding. It may be advisable for judges or criminal justice agencies to require that the individual sign the necessary consent forms before referral to a treatment program. If not, and the program is unable to obtain the individual's consent for disclosure, it may be prevented from providing information to the criminal justice agency that referred the

patient to the program. Treatment programs are allowed to apprise criminal justice agencies, without obtaining patient consent, if a person referred for treatment by such agencies fails to apply for or receive services from the program.

Because of the potential for abuse of methadone, these programs must take precautions that patients are not enrolled in multiple programs. Patients can be required to sign a consent form before they enter treatment to release information to a central registry. If the registry receives information about the same person in more than one program, each program may be notified so the problem can be resolved. Such consent remains in effect as long as the patient is enrolled in the program.

With a proper consent form, programs may release information to a patient's attorney. However, the program may use discretion to limit its response. Some programs may be concerned about potential law suits, but if they refuse to disclose information, attorneys may subpoena the records.

Internal Communications

Information about a patient may be shared among staff within a program *only if there is a legitimate need for them to know it*. When there is a need for internal communications, information that is shared *always should be specifically related to the provision of substance abuse services being delivered*.

When a program is part of a larger organization, such as a general hospital, community mental health center, or school, necessary information may be disclosed to other departments, such as central billing or medical records. However, any information that is not necessary to other departments should not be disclosed.

Table 11-A.—Consent for the Release of Confidential Information: Criminal Justice System Referral

I, _____, hereby consent to communication between
(Name of defendant)

_____ and _____
(treatment program) (Court, probation, parole, and/or other referring agency)

The purpose of and need for the disclosure is to inform the criminal justice agency(ies) listed above of my attendance and progress in treatment. The extent of information to be disclosed is my diagnosis, information about my attendance or lack of attendance at treatment sessions, my cooperation with the treatment program, prognosis, and _____

I understand that this consent will remain in effect and cannot be revoked by me until:

_____ there has been a formal and effective termination or revocation of my release from confinement, probation, or parole, or other proceeding under which I was mandated into treatment, or
_____ (other time when consent can be revoked and/or expires)

I also understand that any disclosure made is bound by Part 2 of Title 42 of the Code of Federal Regulations governing confidentiality of alcohol and drug abuse patient records and that recipients of this information may redisclose it only in connection with their official duties.

(Date) _____ (Signature of defendant/patient)

_____ (Signature of parent, guardian or authorized representative if required)

Source: *Confidentiality: A Guide to the Federal Laws and Regulations*. New York: Legal Action Center, 1991.

Disclosures Without Identification of Patients

Programs may release information that does not identify an individual as a substance abuser or verify someone else's identification of a patient. Reports of aggregate data about a program's participants may be provided. Individual information may be communicated in a manner that does not disclose that the person has a substance abuse problem. For example, the program may disclose that a person is a patient in a larger organization (e.g., general hospital, community mental health center, school) without acknowledging that s/he has a substance abuse problem. Information may be disclosed anonymously without identifying either the individual's status as a substance abuse patient

or the name of the program. Finally, an individual's case history may be reported anonymously, provided information about the patient and the agency are disguised sufficiently that the person's identity cannot be determined by a reader.

Medical Emergencies

In a situation that poses an immediate threat to the health of the patient or any other individual, and requires immediate medical intervention, such as a dangerous drug overdose or an attempted suicide, necessary information may be disclosed to medical personnel. Such a disclosure must be documented in the patient's records, including the name and affiliation of the person receiving the information, the name of the person making the disclosure, the date and

time of the disclosure, and the nature of the emergency. Programs should ask participants in advance to indicate a person to be notified in the event of an emergency, and the patient should be asked to sign a consent form allowing the program to notify the named person if an emergency should arise. Even without patient consent, information may be disclosed to the federal Food and Drug Administration if an error has been made in packaging or manufacturing a drug used in substance abuse treatment and this may endanger the health of patients.

Court Orders

State and federal courts may issue orders authorizing programs to release information that otherwise would be unlawful. However, certain procedures are required

when such court orders are issued. A subpoena, search warrant or arrest warrant alone is not sufficient to permit a program to make a disclosure. First, a program and a patient whose records are sought must be given notice that an application for the court order has been made. The program and the individual must have an opportunity to make an oral or written statement to the court about the application. If the purpose of the court order is to investigate or prosecute a patient, it is only necessary to notify the program.

Before an order is issued, there must be a finding of "good cause" for the disclosure. If the public interest and need for disclosure outweigh possible adverse effects to the individual, the doctor-patient relationship, and the program's services, the order may be issued. Information that is essential for the purpose of the court order is all that may be released. Only persons who need the information may receive it. A court order may require disclosure of confidential communications if one of the following conditions exist:

- disclosure is necessary to protect against a threat to life or of serious bodily injury;
- disclosure is required to investigate or prosecute an extremely serious crime; or
- disclosure is necessary in a proceeding in which the patient has already provided evidence about confidential communications.

Before a court order can be issued to release patient information for a criminal investigation or prosecution, five criteria must be met. These are:

1. the crime is extremely serious (e.g., threatening to cause death or serious injury);
2. the records sought will probably contain information

that is significant to the investigation or prosecution of the crime;

3. there is no other feasible way to acquire the information;
4. the public interest in disclosure outweighs any harm to the patient, doctor-patient relationship, and the agency's ability to provide services; and
5. the program has an opportunity to be represented by independent counsel when law enforcement personnel seek the order.

Subpoenas may require a person to appear to give testimony or to bring documents to a hearing. Although they may be signed by a judge or other legal officials, subpoenas are not the type of court order required by the confidentiality regulations. Thus, federal confidentiality laws and regulations prohibit treatment programs from responding to subpoenas by disclosing information concerning current or former patients. However, if the person about whom the information is requested signs a proper consent form authorizing the release, the program may do so. If a court order is issued after giving the program and patient an opportunity to be heard, and after making a good cause determination, treatment programs may respond to subpoenas.

Search warrants, similarly, may not be used to allow law enforcement officers to enter the program's facilities. However, arrest warrants do permit law enforcement personnel to search for a particular patient who has committed or threatened a crime on the premises of the program or against program personnel. Unless the arrest warrant is accompanied by a court order, the program may not cooperate with a search for a patient who committed a crime elsewhere.

Crimes at the Program or Against Program Staff

A program may report, or seek assistance from law enforcement agencies, when a patient commits or threatens to commit a crime on the program's premises or against program personnel. Information that may be disclosed includes the suspect's name, address, last known whereabouts, and status as a patient in the program.

Information a patient may divulge about crimes or threats to persons away from the program present special dilemmas. In some States therapists are liable if they fail to warn someone that a patient has threatened to harm him or her. At the same time, the federal regulations, which override State laws, prohibit disclosures that identify substance abuse patients unless they are made pursuant to a court order or without identifying the patient. Such circumstances require knowledge of the applicable State and federal laws and a balancing of moral and legal obligations. If possible, the best solution may be for the program to try to make the warning in a manner that does not identify the individual as a substance abuser.

Research and Audits

Researchers may obtain patient-identifying information if certain precautions are applied. The research protocol must ensure that information will be securely stored and not redisclosed except as allowable under the federal regulations. Confidentiality safeguards must be approved by an independent body of three or more persons. Researchers are strictly prohibited from redisclosing patient information. Reports of the research must not identify a patient, directly or indirectly.

Government agencies, third-party payers and peer review organizations may need to review

program records without patient consent to conduct an audit or evaluation. Those persons involved in such activities must agree in writing that they will not redisclose patient identifying information unless it is pursuant to a court order to investigate or prosecute the program (not a patient). A government agency that is overseeing a Medicare or Medicaid audit or evaluation also may receive patient information.

Child Abuse Reports

All States have laws requiring reporting of suspected child abuse and neglect. Substance abuse treatment programs must comply with these mandatory reporting laws. This applies, however, only to initial reports of abuse or neglect, and not to requests for additional information or records. Even if the initial report results in civil or criminal investigations or proceedings, patient files may not be disclosed without a proper court order or the person's consent. Reports must be made when there is a danger of harm to a child, but the mere presence of a substance abuse problem on the part of a parent is not reportable.

Qualified Service Organization Agreement

A service organization is a person or agency providing services to the program. Examples include data processing, dosage preparation, laboratory analyses, vocational counseling, accounting, and other professional services. A qualified service organization agreement (QSOA) is a written agreement, between two parties only, acknowledging that the service organization is fully bound by the confidentiality regulations when dealing with information about patients from the program. It further must promise to resist efforts to obtain access to information about patients, except as

permitted by the regulations. A sample form for a qualified service organization agreement is provided on the following page.

Confidentiality and Other Diseases

Doctor-patient privilege is an accepted practice in medical treatment. In most cases, medical personnel are ethically bound not to divulge information about their patients' medical conditions. However, confidentiality requirements for most medical situations are not nearly as stringent as those that apply to substance abuse treatment programs. For example, generally, physicians are not restricted from acknowledging that an individual is a patient, as is the case with substance abuse treatment.

For substance abuse treatment programs, there are some special considerations when patients have specific diseases. The medical emergency exception to confidentiality does not apply to reporting the results of venereal disease tests to public health officials, as this does not present an immediate medical danger. Thus, these diseases are not reportable by substance abuse treatment programs (Legal Action Center, 1991).

There are some special considerations related to HIV disease, which is also a highly stigmatized illness requiring strict patient confidentiality. All States mandate that cases of AIDS be reported to public health authorities who subsequently report them to the federal Centers for Disease Control and Prevention. Some States also require that positive tests for HIV be reported. Sometimes information is used for tracing and contacting persons who might have been exposed to HIV by the

patient, constituting a "duty to warn." This may pose conflicting legal obligations for programs to report such information and maintain patient confidentiality. In some cases, anonymous reports can be made using codes rather than patient names. It also may be possible to get patient consent to make mandated reports. Some programs enter into qualified service organization agreements, and the necessary information is reported by a laboratory or medical care provider without identifying the individual as a recipient of substance abuse treatment. In the event that substance abuse treatment records must be released with patient consent or by a court order, programs may need to take precautions not to reveal HIV status inadvertently. Such release of information about HIV status to insurers, employers, and others could have serious ramifications for the infected individual. Ways to avoid unnecessary release of HIV information include maintaining a separate medical file which is not released, releasing the file without the HIV-related information, or having the individual sign a consent form authorizing the release of HIV-related information (Legal Action Center, 1991).

Discrimination and Access to Services

Another piece of federal legislation has special implications for substance abuse treatment. The Americans with Disabilities Act (ADA) ensures equal access to employment, goods, and services for disabled persons. The definition of individuals with disabilities includes those who are dependent on alcohol and other drugs and persons with HIV disease (O'Toole, 1992).

Table 11-B.—Qualified Service Organization Agreement

The _____ Service Center ("the Center") and
 (name of organization)
 the _____ ("the Program")
 (name of the program)

hereby enter into a qualified service organization agreement, whereby the Center agrees to provide

 (nature of services to be provided)

Furthermore, the Center:

- (1) acknowledges that in receiving, storing, processing, or otherwise dealing with any information from the Program about the patients in the Program, it is fully bound by the provisions of the federal regulations governing Confidentiality of Alcohol and Drug Abuse Patient Records, 42 CFR Part 2; and
- (2) undertakes to resist in judicial proceedings any effort to obtain access to information pertaining to patients otherwise than as expressly provided for in the federal confidentiality regulations, 42 CFR Part 2.

Executed this _____ day of _____, 199_____.

 President
 [name] Service Center
 [address]

 Program Director
 [Name of the Program]
 [address]

The ADA prohibits discrimination in employment practices and requires all employers with 15 or more employees to implement the law. Job applications, hiring, firing, advancement, compensation, training, and other aspects of employment are covered. Anyone who meets the skill, experience, education, or other requirements of a job must be considered qualified, even if reasonable accommodations are required for him or her to perform the job. Thus, a recovering substance abuser may not be asked on applications or in interviews to reveal his or her chemical dependency. However, testing for illegal drug use is allowable under the ADA. The results of drug tests can be used to make employment decisions; persons currently engaged in using illicit drugs are not protected (O'Toole, 1992).

Treatment programs may have to make modifications in facilities and activities to accommodate

physically disabled individuals. This is true even if programs receive no federal funding (O'Toole, 1992).

HIV-positive individuals are protected by the ADA. It is unlawful to refuse medical and other services to HIV-infected persons. Thus, treatment programs may not exclude patients because of their HIV status. Confidentiality of HIV status is also protected under the ADA. This protection extends to spouses, family members, caretakers, and other who associate with the person, as they also have been the victims of discrimination related to HIV/AIDS. (O'Toole, 1992).

Conclusion

Confidentiality is considered important for attracting alcohol- and drug-dependent persons to treatment. Legal safeguards may be

important in many other areas, as well, to protect the privacy, due process, and equal protection rights of individuals affected by addiction.

State and local decision makers may need to give thoughtful consideration to their specific responsibilities in light of these legal requirements. Legislators may need to examine State laws and regulations to determine their compliance with federal statutes. Generally, the more stringent of the two must be observed. Thus, passing State laws that require less than federal laws has no benefit. An area for special consideration for legislatures is the requirement for parental consent for minors to receive substance abuse treatment. Such laws may result in youth being unable to received needed treatment at earlier stages in their substance abuse history because they do not want their parents informed.

Judicial personnel will often be confronted with the possible consequences of issuing court orders to obtain substance abuse treatment records. If such measures might result in discouraging a person from continuing in treatment, they may be counterproductive in the long run. Working with other law enforcement personnel to understand confidentiality requirements of treatment programs also is necessary. They may perceive treatment personnel as uncooperative when they are only obeying legal requirements.

Coordination and collaboration among legislative, judicial, and treatment systems is vital to ensure the greatest likelihood of successful interventions with chemically dependent persons. In the next chapter, specific suggestions about systems coordination are provided.

References

Legal Action Center (1991).
Confidentiality: A guide to the federal laws and regulations. New York: Author.

O'Toole, P. (1992, November / December). Access and equality: The Americans with Disabilities Act. *The Counselor*, 29-31.

Endnote

1. Information in this section is summarized from *Confidentiality: A Guide to the Federal laws and regulations* (1991). New York: Legal Action Center.

FEDERAL REGISTER/Vol. 52, No. 110/Tuesday, June 9, 1987/Rules and Regulations

DEPARTMENT OF HEALTH
AND HUMAN SERVICES

Public Health Service

42 CFR Part 2

Confidentiality of Alcohol and
Drug Abuse Patient Records

AGENCY: Alcohol, Drug Abuse, and
Mental Health Administration, PHS,
HHS.

ACTION: Final rule.

SUMMARY: This rule makes editorial and substantive changes in the "Confidentiality of Alcohol and Drug Abuse Patient Records" regulations. These changes are an outgrowth of the Department's commitment to make its regulations more understandable and less burdensome. The Final Rule clarifies and shortens the regulations and eases the burden of compliance.

EFFECTIVE DATE: August 10, 1987.

FOR FURTHER INFORMATION
CONTACT:

Judith T. Galloway (301) 443-3200.

SUPPLEMENTARY INFORMATION: The "Confidentiality of Alcohol and Drug Abuse Patient Records" regulations, 42 CFR Part 2, implement two Federal statutory provisions applicable to alcohol abuse patient records (42 U.S.C. 290dd-3) and drug abuse patient records (42 U.S.C. 290ee-3).

The regulations were originally promulgated in 1975 (40 FR 27802). In 1980 the Department invited public comment on 15 substantive issues arising out of its experience interpreting and implementing the regulations (45 FR 53). More than 450 public responses to that invitation were received and taken into consideration in the preparation of a 1983 Notice of Proposed Rulemaking (48 FR 38758). Approximately 150 comments were received in response to the Notice of Proposed Rulemaking and were taken into

consideration in the preparation of this Final Rule.

The proposed rule made both editorial and substantive changes in the regulations and shortened them by half. This Final Rule adopts most of those changes, with some significant substantive modifications and relatively few editorial and clarifying alterations.

Synopsis of Substantive
Provisions

The Confidentiality of Alcohol and Drug Abuse Patient Record regulations (42 CFR Part 2) cover any program that is specialized to the extent that it holds itself out as providing and provides alcohol or drug abuse diagnosis, treatment, or referral for treatment and which is federally assisted, directly or indirectly (§ 2.12 (a) and (b)).

The regulations prohibit disclosure or use of patient records ("records" meaning any information whether recorded or not) unless permitted by the regulations (§ 2.13). They do not prohibit giving a patient access to his or her own records (§ 2.23). However, the regulations alone do not compel disclosure in any case (§ 2.3(b)).

The prohibition on disclosure applies to information obtained by the program which would identify a patient as an alcohol or drug abuser (§ 2.12(a)(1)). The restriction on use of information to investigate or to bring criminal charges against a patient applied to any alcohol or drug abuse information obtained by the program (§ 2.12(a)(2)).

Any disclosure permitted under the regulations must be limited to that information which is necessary to carry out the purpose of the disclosure (§ 2.13).

The regulations permit disclosure of information if the patient consents in writing in accordance with § 2.31. Any information disclosed with the patient's consent must be accompanied by a statement which prohibits further disclosure unless the consent expressly permits further

disclosures or the redisclosure is otherwise permitted by the regulations (§ 2.32). Special rules govern disclosures with the patient's consent for the purpose of preventing multiple enrollments (§ 2.34) and for criminal justice referrals (§ 2.35).

The regulations permit disclosure without patient consent if the disclosure is to medical personnel to meet any individual's bona fide medical emergency (§ 2.51) or to qualified personnel for research (§ 2.52), audit, or program evaluation (§ 2.53). Qualified personnel may not include patient identifying information in any report or otherwise disclose patient identities except back to the program which was the source of the information (§ 2.52(b) and 2.53(d)).

The regulations permit disclosure pursuant to a court order after the court has made a finding that "good cause" exists. A court order may authorize disclosure for noncriminal purposes (§ 2.64); for the purpose of investigating or prosecuting a patient if the crime involved is extremely serious (§ 2.65); for the purpose of investigating or prosecuting a program or a person holding the records (§ 2.66); and for the purpose of placing an undercover agent or informant to criminally investigate employees or agents of the program (§ 2.67).

A court order may not authorize disclosure of confidential communications unless disclosure is necessary to protect against an existing threat to life or serious bodily injury of another person; to investigate or prosecute an extremely serious crime; or if the patient brings the matter up in any legal proceedings (§ 2.63).

A court order may not authorize qualified personnel who received information without patient consent for the purpose of conducting research, audit, or program evaluation, to disclose that information or to use it to conduct any criminal investigation or prosecution of a patient (§ 2.62). Information obtained under

a court order to investigate or prosecute a program or other person holding the records or to place an undercover agent or informant may not be used to conduct any investigation or prosecution of a patient or as the basis for a court order to criminally investigate or prosecute a patient (§ 2.66(d)(2) and § 2.67(e)).

These regulations do not apply to the Veteran's Administration, to exchanges within the Armed Forces or between the Armed Forces and the Veterans' Administration; to the reporting under State law of incidents of suspected child abuse and neglect to appropriate State or local authorities; to communications within a program or between a program and an entity having direct administrative control over the program; to communications between a program and a qualified service organization; and the disclosures to law enforcement officers concerning a patient's commission of (or threat to commit) crime at the program or against personnel of the program (§ 2.12(c)).

If a person is not now and never has been a patient, there is no patient record and the regulations do not apply (§ 2.13(c)(2)).

Any answer to a request for a disclosure of patient records which is not permitted must not affirmatively reveal that an identified individual has been or is an alcohol or drug patient. One way to make such an answer is to give a copy of the confidentiality regulations to the person who asked for the information along with general advice that the regulations restrict the disclosure of alcohol or drug abuse patient records and without identifying any person as an alcohol or drug abuse patient (§ 2.13(c)).

Each patient must be told about these confidentiality provisions and furnished a summary in writing (§ 2.22).

There is a criminal penalty for violating the regulations: not more than \$500 for a first offense and not more than \$5,000 for each subsequent offense. (§2.4).

COMPARISON WITH PROPOSED RULE

Subpart A—Introduction

Reports of Violations

Both the existing and proposed rules provide for the reporting of any violations of the regulations to the United States Attorney for the judicial district in which the violations occur, for reporting of violations on the part of methadone programs to the Regional Offices of the Food and Drug Administration, and for reporting violations by a Federal grantee or contractor to the Federal agency monitoring the grant or contract. (See §§ 2.7 and 2.5, respectively.)

Inasmuch as it is the Department of Justice which has ultimate and sole responsibility for prosecuting violations of these regulations, the Final Rule continues to provide for the reference of reports of any violations to the United States Attorney for the judicial district in which the violations occur.

It also continues to provide for the reference to the Regional Offices of the Food and Drug Administration of any reports of violations by a methadone program. As a regulatory agency, the Food and Drug Administration has both the organization and authority to respond to alleged violations.

The Final Rule no longer directs reports of violations by a Federal grantee or contractor to the Federal agency monitoring the grant or contract or, as in the proposed revision of the rules, violations by a Federal agency to the Federal agency responsible for the program. This change is made in recognition of the lack of investigative tools available to granting and contracting agencies and of the ultimate referral which must be made to the Department of Justice. Of course, if alleged violations come to the attention of the Department of Health and Human Services, they will be forwarded to an appropriate representative of the Department of Justice.

Subpart B—General Provisions

Specialized Programs

Like the proposed rule at § 2.12, the Final Rule is applicable to any alcohol and drug abuse information obtained by a federally assisted alcohol or drug abuse program. "Program" is defined in § 2.11 as a person which says it provides and which actually provides alcohol or drug abuse diagnosis, treatment, or referral for treatment. A program may provide other services in addition to alcohol and drug abuse services, for example mental health or psychiatric services, and nevertheless be an alcohol or drug abuse program within the meaning of these regulations so long as the entity is specialized by holding itself out to the community as providing diagnosis, treatment, or referral for treatment for alcohol and/or drug abuse.

If a facility is a provider of general medical care, it will not be viewed in whole or in part as a program unless it has either (1) an identified unit, i.e., a location that is set aside for the provision of alcohol or drug abuse diagnosis, treatment, or referral for treatment, or (2) it has personnel who are identified as providers of diagnosis, treatment, or referral for treatment and whose primary function is the provision of those alcohol or drug abuse services.

Regardless of whether an entire legal entity is a program or if a part of the entity is a program, the confidentiality protections cover alcohol or drug abuse patient records within any federally assisted program, as "program" is defined in these regulations.

Those comments opposed to limiting applicability of the regulations to "specialized" programs focused on the desirability of full and uniform applicability of confidentiality standards to any alcohol or drug abuse patient record irrespective of the type of facility delivering the services.

The Department takes the position that limiting applicability to specialized programs, i.e., to those

programs that hold themselves out as providing and which actually provide alcohol or drug abuse diagnosis, treatment, and referral for treatment, will simplify administration of the regulations without significantly affecting the incentive to seek treatment provided by the confidentiality protections. Applicability to specialized programs will lessen the adverse economic impact of the current regulations on a substantial number of facilities which provide alcohol and drug abuse care only as an incident to the provision of general medical care. We do not foresee that elimination of hospital emergency rooms and general medical or surgical wards from coverage will act as a significant deterrent to patients seeking assistance for alcohol and drug abuse.

While some commenters suggested that there will be an increased administrative burden for organizations operating both a specialized alcohol and/or drug abuse program and providing other health services, we view this as the same burden facing all general medical care facilities under the existing rule.

In many instances it is questionable whether applicability to general medical care facilities addresses the intent of Congress to enhance treatment incentives for alcohol and drug abuse inasmuch as many alcohol and/or drug abuse patients are treated in a general medical care facility not because they have made a decision to seek alcohol and drug abuse treatment but because they have suffered a trauma or have an acute condition with a primary diagnosis of other than alcohol or drug abuse.

In sum, we are not persuaded that the existing burden on general medical care facilities is warranted by the benefit to patients in that setting. Therefore, the Final Rule retains the language of the proposed rule at § 2.11 defining "program" and making the regulations applicable at § 2.12 to any information about alcohol and/or drug abuse patients which is obtained by a federally assisted alcohol or drug abuse program for the purpose of

treating, making a diagnosis for treatment, or making a referral for treatment of alcohol or drug abuse.

Communications between a Program and an Entity Having Direct Administrative Control

The existing regulations at § 2.11(p)(1) and the proposed rule at § 2.12(c)(3) exempt from the restrictions on disclosure communications of information within a program between or among personnel in connection with their duties or in connection with provision of patient care, respectively. The Department has previously interpreted the existing provision to mean that communications within a program may include communications to an administrative entity having direct control over the program.

The Final Rule has incorporated that legal opinion into the text by amending § 2.12(C)(3) to exempt from restrictions on disclosure "communications of information between or among personnel having a need for the information in connection with their duties that arise out of the provision of diagnosis treatment, or referral for treatment of alcohol or drug abuse" if the communications are within a program or between a program and an entity that has direct administrative control over the program. Paragraph (d) of that same section is accordingly amended to restrict any further disclosure by an administrative entity which receives information under § 2.12(c)(3).

Explanation of Applicability

The existing regulations are applicable to patient records maintained in connection with performance of any alcohol abuse or drug abuse prevention function which is federally assisted. Applicability is determined by the nature and purpose of the records, not the status or primary functional capacity of the recordkeeper. The definition of "alcohol abuse or drug abuse prevention function" includes specified activities "even when performed by an organization whose primary mission is in the field of law

enforcement or is unrelated to alcohol or drugs."

The proposed regulations and the Final Rule at § 2.12 make the regulations applicable to any information about alcohol and drug abuse patients which is obtained by a federally assisted alcohol or drug abuse program. A program is defined to be those persons or legal entities which hold themselves out as providing and which actually provide diagnosis, treatment, or referral for treatment for alcohol and/or drug abuse. Thus, there is a fundamental shift toward determining applicability on the basis of the function of the recordkeeper and away from making that decision based solely on the nature and purpose of the records.

No alcohol and drug abuse patient records, whether identified by the nature and purpose of the records or the function of the recordkeeper, are covered by these regulations unless the diagnosis, treatment, or referral for treatment with which the records are connected is federally assisted.

Several commenters pointed out that while the regulatory language of the proposed rule on its face applies the rule to information about alcohol and drug abuse patients in federally assisted programs, the explanation of the applicability provision at § 2.12(e)(2) obscures the otherwise forthright statement by an additional standard based on the type of Federal assistance going to the program, i.e., some patient records in a federally assisted program would be covered and others would not. Those who commented on this section urged that coverage distinctions under the explanation in § 2.12(e)(2) be omitted because they result in disparate treatment of patient records within an alcohol and/or drug abuse program based on the type of Federal assistance going to the program. Other commenters asserted that basing coverage on the type of assistance is inconsistent with the clear meaning of the applicability provision in the proposed and Final Rule.

The Final Rule revises the proposed explanatory material at § 2.12(e)(2) to show that all alcohol and drug abuse patient records

within a covered program are protected by the confidentiality provisions and that the record of an individual patient in an uncovered program, whose care is federally supported in some way which does not constitute Federal assistance to the program under § 2.12(b), is not afforded confidentiality protections. Thus, where a Federal payment is made to a program on behalf of an individual patient and that program is not otherwise federally assisted under § 2.12(b), the record of that individual will not be covered by the regulations. Although the Department expects them to be rare, it would be possible for such instances to occur. For example, if a Federal court places an individual in a for-profit program that is not certified under the Medicare program, that is not authorized to conduct methadone treatment, and is not otherwise federally assisted in any manner provided in § 2.12(b), the patient record of that individual would not be covered by the regulations even though the Federal court paid for the individual's treatment.

Comments to the proposed rule were persuasive that the type of assistance should not affect the scope of records covered within a covered program. When the determination of covered records was based on the purpose and nature of each record, it was consistent to view Federal assistance from the perspective of each individual record. However, when the determination of which records are covered is based on who is keeping the records, as in the proposed and Final Rule, it is consistent with the approach to view Federal assistance from the program level as applying to all alcohol and drug abuse patient records within the program.

Determining coverage based on Federal assistance to the program rather than to an individual represents a change in policy from the current regulations under which the Department views a Federal payment made on behalf of an individual as sufficient to cover that individual's record. However, any disadvantage in not covering individual records in those rare cases

which may occur is outweighed by the advantages of consistency and efficiency in management of the program as a result of all alcohol and drug abuse patient records in the program being subject to the same confidentiality provisions.

The Final Rule includes new material at § 2.12(e)(3) which briefly explains the types of information to which the restrictions are applicable, depending on whether a restriction is on disclosure or on use. A restriction on disclosure applies to any information which would identify a patient as an alcohol or drug abuser. The restriction on use of information to bring criminal charges or investigate a patient for a crime applies to any information obtained by the program for the purpose of diagnosis, treatment, or referral for treatment of alcohol or drug abuse.

Several commenters strongly urged the explicit inclusion of school-based education and prevention programs in the applicability of the regulations. School-based education and prevention activities may fall within the definition of a program if they provide alcohol or drug abuse diagnosis, treatment, or referral for treatment and if they hold themselves out as so doing. That is reflected in the Final Rule at § 2.12(e)(1) with the inclusion of "school-based programs" in the list of entities which may come under the regulations.

An example of how diagnosis affects coverage has been omitted at § 2.12(e)(3)(ii). It is omitted not because the example could never occur under the Final Rule, but because it is very unlikely that a "specialized" program, as program is defined under these regulations, would be treating a patient for a condition which is not related to alcohol or drug abuse such that the reference to a patient's alcohol or drug abuse history would not be related to the condition for which treatment is rendered. Inasmuch as the regulations only apply to programs, this example is more likely to confuse than provide guidance and for that reason has been taken out.

Notifying a Parent or Guardian of a Minor's Application for Treatment

The proposed rule at § 2.14 reorganized and revised but did not substantively amend the existing § 2.15 dealing with the subject of minor patients. Under both the existing and proposed rules, a minor patient's consent is generally required prior to notifying the minor's parent or guardian of his or her application for treatment. This is true even though without notification it is impossible to obtain parental consent in those cases where State law requires a parent, guardian, or other person to consent to alcohol or drug abuse treatment of a minor.

While this issue was not raised in the proposed rule, the Department has received several inquiries on it from the public since the proposed rule was published suggesting that in those States, where the parent's or guardian's consent is needed for the minor's treatment, the program should be free to notify the parent or guardian of the minor's application for treatment without constraint. The Department has considered this issue and decided to make no substantive changes in the existing section dealing with minor patients.

Although both the current rule and the proposed rule generally prohibit parental notification without the minor's consent, they also provide for an exception. Under this exception such notification would be permitted when, in the program director's judgment, the minor lacks the capacity to make a rational decision on the issue of notification, the situation poses a substantial threat to the physical wellbeing of the minor or any other person, and this threat may be alleviated by notifying the parent or guardian. Under this provision, the program director is vested with the authority to determine when the circumstances permitting parental notification arise. In discussing the Department's philosophy behind this provision, § 2.15-1(e) of the existing rule states: "It [this provision] is based upon the theory that where a person is actually as well as legally incapable of acting in his own interest, disclosures to a person who is legally responsible for him may be made to

the extent that the best interests of the patient clearly so require.”

While this exception would not permit parental notification without constraint, whenever the program director feels it is appropriate, the Department believes it does provide the program director with significant discretion and does permit parental notification in the most egregious cases where the “best interests of the patient clearly so require.” Accordingly, the Department has determined not to make any substantive changes in the manner in which the existing rule handles the issue of parental notification. However, proposed § 2.14 has been revised to clarify that no change in meaning is intended from the current rule.

Finally, it should be noted that this rule in no way compels a program to provide services to a minor without parental consent.

Separation of Clinical from Financial/Administrative Records

The current rules governing research, audit, or evaluation functions by a governmental agency at § 2.53 state that “programs should organize their records so that financial and administrative matters can be reviewed without disclosing clinical information and without disclosing patient identifying information except where necessary for audit verification.” The proposed rule transformed this hortatory provision for maintenance of financial/administrative records apart from clinical records into a requirement in § 2.16 dealing with security for written records.

Several commenters predicted that such a requirement will pose an extremely cumbersome burden on programs, perhaps tantamount to requiring maintenance of two systems of files. The Final Rule has adopted the recommendation of those commenters to drop this requirement, primarily on the basis of the potential administrative and recordkeeping problems it poses in the varied treatment settings to which these regulations are applicable.

While it is desirable to withhold clinical information from any

research, audit, or program evaluation function for which that clinical information is not absolutely essential, the Final Rule does not require recordkeeping practices designed to guarantee that outcome. The Final Rule does, of course, implement the statutory provisions which prohibits those who receive patient identifying information for the purpose of research, audits, or program evaluation from identifying, directly or indirectly, any individual patient in any report of such research, audit, or evaluation or otherwise disclosing patient identities in any manner (see §§ 2.52(b) and 2.53(d)).

Subpart C—Disclosures with Patient’s Consent

Notice to Patients

Like the proposed rule, the Final Rule at § 2.22 requires that notice be given to patients that Federal law and regulations protect the confidentiality of alcohol and drug abuse patient records. The response to this provision in the proposed rule reflects strong support for notifying patients of confidentiality protections, although many stressed that the notice should be simplified in order to be useful rather than confusing to the patient. Some of those who recommended against adoption of a notice provision did so on grounds that the notice as proposed is too complex. Therefore, in response to many who supported the notice provision and those who opposed it on grounds that it is too complex, the Final Rule substantially revises the elements which must be included in the written notice to each patient and accordingly rewrites the sample notice which a program may adopt at its option in fulfillment of the notice requirement.

Form of Written Consent

The proposed rule retains the requirements in § 2.31 of the existing regulations for written consent to disclosure of information which would identify an individual as an alcohol or drug abuser. There was a great deal of support among those who commented on this provision for the retention of the existing

elements of written consent on grounds that the present system is working well and that the elements which go to make up written consent are sufficiently detailed to assure an opportunity for a patient to make an informed consent to disclose patient identifying information. Others recommended a more generalized consent form.

The Final Rule retains all elements previously required for written consent, though in one instance it will permit a more general description of the required information. The first of the required elements of written consent in both the existing and proposed rule (§ 2.31 (a)(1)) asks for the name of the program which is to make the disclosure. The Final Rule will amend that element by calling for “(1) The specific name or general designation of the program or person permitted to make the disclosure.” This change will permit a patient to consent to disclosure from a category of facilities or from a single specified program. For example, a patient who chooses to authorize disclosure of all his or her records without the necessity of completing multiple consent forms or individually designating each program on a single consent form would consent to disclosure from all programs in which the patient has been enrolled as an alcohol or drug abuse patient. Or, a patient might narrow the scope of his or her consent to disclosure by permitting disclosure from all programs located in a specified city, from all programs operated by a named organization, or as now, the patient might limit consent to disclosure from a single named facility. (In this connection, the Department interprets the existing written consent requirements to permit consent to disclosure of information from many programs in one consent form by listing specifically each of those programs on the form.)

This change generalizes the consent form with respect to only one element without diminishing the potential for a patient’s making an informed consent to disclose patient identifying information. The patient is in position to be informed of any

programs in which he or she was previously enrolled and from which he or she is willing to have information disclosed.

With regard to deficient written consents, the Final Rule at § 2.31(c) reverts to language from the existing regulations rather than using the language of the proposed rule to express the idea that a disclosure may not be made on the basis of a written consent which does not contain all required elements in compliance with paragraph (a) of § 2.31. There was no intention in drafting the proposed rule to establish a different or more stringent standard than currently exists prohibiting disclosures without a conforming written consent. Because that was misunderstood by some, the Final Rule will not permit disclosures on the basis of a written consent which, "On its face substantially fails to conform to any of the requirements set forth in paragraph (a) of this section . . ."

Express Consent to Redisdisclosure Permitted

Both the existing and proposed rules at § 2.32 prohibit redisdisclosure by a person who receives information from patient records pursuant to the written consent of the patient and who has been notified that the information is protected by Federal rules precluding redisdisclosure except as permitted by those Federal rules. However, the statement of the prohibition on redisdisclosure at § 2.32 does not make evident the Department's interpretation that it is possible for a patient, at the same time consent to disclosure is given, to consent to redisdisclosure in accordance with the Federal rules. The Final Rule rewords the statement of prohibition on redisdisclosure and adds the phrase shown in quotes below to the second sentence as follows:

The Federal rules prohibit you from making any further disclosure of this information "unless further disclosure is expressly permitted by the" written consent of the person to whom it pertains or is otherwise permitted by 42 CFR Part 2.

The purpose of the added phrase is to acknowledge that redisdisclosure

of information may be expressly permitted in the patient's written consent to disclosure. For example, a patient may consent to disclose pertinent information to an employment agency and at the same time permit the employment agency to redisdisclose this information to potential employers, thus making unnecessary additional consent forms for redisdisclosures to individual employers. Similarly, a patient may consent to disclose pertinent information to an insurance company for the purpose of claiming benefits, and at the same time consent to redisdisclosure by that insurance company to another organization or company for the purpose of administering the contract under which benefits are claimed by or on behalf of the patient.

Patient Consent to Unrestricted Communications for the Purpose of Criminal Justice System Referrals

Most of those who commented on the revision of § 2.35 generally supported the proposed changes. However, two State commenters encouraged retention of language in the existing regulations which explicitly permits a patient to consent to "unrestricted communications." Otherwise, those commenters say, the revision will act as a deterrent to criminal justice system referrals.

Both the proposed and Final Rule omit most limitations on disclosures to which a patient may consent. The criteria for permitting release of information with patient consent under the Final Rule are: (1) A valid consent under § 2.31 and (2) a determination that the information disclosed is necessary to carry out the purpose for which the consent was given (§ 2.13(a)). Although special rules for disclosures in connection with criminal justice system referrals were retained, they do not restrict "how much and what kind of information" a patient may consent to have disclosed under § 2.31. Section 2.31(a)(5) places no restrictions on how much or what kind of information a patient may consent to have disclosed. That section simply requires that each written consent describe how much and what kind of information the

patient consents to have disclosed. A patient may consent to disclosure of any information concerning his or her participation in a program. In the case of a consent for the purpose of a criminal justice system referral, consent to disclose "any information concerning my participation in the program" pursuant to § 2.31(a)(5) would permit "unrestricted communications" from the program to appropriate persons within the criminal justice system to the same extent permitted by the existing rule. Therefore, the Final Rule does not substantively alter § 2.35 as proposed. (Paragraph (c) has been reworded for clarity.)

Subpart D—Disclosures Without Patient's Consent

Elimination of the Requirement to Verify Medical Personnel Status

The proposed regulations at § 2.51 implement the statutory provision which permits a disclosure "to medical personnel to the extent necessary to meet a bona fide medical emergency." The proposed rule added a requirement not contained in the existing § 2.51 that the program make a reasonable effort to verify that the recipient of the information is indeed medical personnel.

The Final Rule deletes the proposed verification requirement in response to comments from several sources that such a requirement is unnecessary, will cause delay, and could possibly impede emergency treatment. In view of those comments and our interest in easing the burden of compliance where possible, the Final Rule does not require verification of the "medical personnel" status of the recipient of information in the face of a medical emergency.

However, the statute permits disclosures only to medical personnel to meet a medical emergency and elimination of the verification requirement does not in any way expand upon the category of persons to whom a disclosure may be made to meet a medical emergency. Neither does elimination of the verification requirement affect the provision in the Final Rule at

§ 2.51(c) that a program document in the patient's records any disclosure which is made in the face of a medical emergency.

Assessment of Research Risks

The proposed regulations at § 2.52 modified and streamlined existing provisions in §§ 2.52 and 2.53 governing disclosures for scientific research. The proposal clarified that the determination of whether an individual is qualified to conduct scientific research would be left to the program director, and required that such qualified personnel have a research protocol which includes safeguards for storing patient identifying information and prohibits redisclosures except as allowed by these regulations.

The Final Rule adds an additional condition: The program director must ensure that a written statement is furnished by the researcher that the research protocol has been reviewed by an independent group of three or more individuals who found that the rights of patients would be adequately protected and that the potential benefits of the research outweigh any potential risks to patient confidentiality posed by the disclosure of records.

This revision was prompted by comment from both the public and private sectors that review of the research protocol for the purpose of ensuring the protection of human subjects participating in the research (in this case, the patients whose records are proposed for use in research) is imperative prior to permitting disclosure of patient identifying information for the conduct of scientific research. The requirement that researchers state in writing that the protocol has been reviewed for the protection of human subjects will provide an additional point of reference for the program director in determining whether to release patient identifying information for research purposes.

Researchers who receive support from the Department and many other Federal agencies are required under regulations for the protection of human subjects to obtain review of

their protocol from an "institutional review board (IRB)." Such boards generally are set up by the institution employing the researcher. Regulations require that IRBs be composed of persons with professional competence to review research, as well as persons who can judge sensitivity to community attitudes and ethical concerns. Documentation of review and approval by an IRB or by another group of at least three individuals, appropriately constituted to make judgements on issues concerning the protection of human subjects, would meet the new requirement in § 2.52(a)(3).

Audit and Evaluation Activities by Nongovernmental Entities

The proposed regulations at § 2.53 simplify and shorten the provisions on audit and evaluation activities and divide them into two categories: (1) Those activities that do not require copying or removal of patient records, and (2) those that require copying or removal of patient records. The proposed rule permits governmental agencies to conduct audit and evaluation activities in both categories. In addition, if no copying or removal of the records is involved, the program director may determine that other persons are "qualified personnel" for the purpose of conducting audit and evaluation activities. There is no provision for nongovernmental entities to perform any audit or evaluation activity if copying or removal of records is involved.

In response to the proposed rule the Department received comment that third party payers should be permitted to copy or remove records containing patient identifying information as is permitted by governmental agencies that finance or regulate alcohol or drug abuse programs.

Recognizing that private organizations, like governmental agencies, have a stake in the financial and programmatic integrity of treatment programs arising out of their financing of alcohol and drug abuse programs directly, out of peer

review responsibilities, and as third party payers, the Final Rule permits access to patient identifying information for audit and evaluation activities by private organizations in circumstances identical to the access afforded governmental agencies. Specifically, if a private organization provides financial assistance to a program, is a third-party payer covering patients in the program, or is a peer review organization performing a utilization or quality control review, the Final Rule permits the private organization to have access to patient identifying information for the purpose of participating in audit and evaluation activities to the same extent and under the same conditions as a governmental agency.

Audit and Evaluation of Medicare or Medicaid Programs

In response to specific questions which have come to the Department's attention and in recognition of the continued importance of the integrity of the Medicare and Medicaid programs to the delivery of alcohol and drug abuse services, the Final Rule includes a new paragraph (c) in § 2.53 which clarifies the audit and evaluation provisions as they pertain to Medicare or Medicaid.

Specifically, the new paragraph clarifies that the audit and evaluation function includes investigation for the purpose of administrative enforcement of any remedy imposed by law by any Federal, State, or local agency which has responsibility for oversight of the Medicare or Medicaid programs. The new paragraph makes explicit that the term "program" includes employees of or providers of medical services under an alcohol or drug abuse program. Finally, it clarifies that a peer review organization may communicate patient identifying information for the purpose of a Medicare or Medicaid audit or evaluation to the agency responsible for oversight of the Medicare or Medicaid program being evaluated or audited.

Subpart E—Court Orders Authorizing Disclosure and Use

Court-Ordered Disclosure of Confidential Communications

The existing regulations at § 2.63 limit a court order to "objective" data and prohibit court-ordered disclosure of "communications by a patient to personnel of the program." The proposed regulations delete the provision restricting a court order to objective data and precluding an order from reaching "communications by a patient to personnel of the program." Deletion of that provision provoked considerable discussion and concern on the part of a large number of persons, 85% of whom opposed allowing court-ordered disclosure of nonobjective data.

The Final Rule at § 2.63 restores protection for many "communications by a patient to personnel of the program" and information which is of a nonobjective nature, but it does not protect that information from court order in the face of an existing threat to a third party or in connection with an investigation or prosecution of an extremely serious crime.

Because the existing regulations seem to be dealing uniformly with two related but not necessarily identical types of information, i.e., "objective" data and "communications by a patient to personnel of the program," the Final Rule drops those terms in favor of the term "confidential communications," a term in use since 1975 in existing § 2.63-1. "Confidential communications" are the essence of those matters to be afforded protection and are as readily identified as "objective" data. Furthermore, protection of "confidential communications" is more relevant to maintaining patient trust in a program than is protection of "communications by a patient to personnel of the program," a term which does not distinguish between the innocuous and the highly sensitive communication.

Most comments in opposition to relaxing the court order limitations on confidential communications said that the potential for court-ordered disclosure of confidential communications will compromise the

therapeutic environment, may deter some alcohol and drug abusers from entering treatment, and will yield information which may be readily misinterpreted or abused.

While freedom to be absolutely candid in communicating with an alcohol or drug abuse program may have therapeutic benefits and may be an incentive to treatment, it is the position of the Department that those therapeutic benefits cannot take precedence over two circumstances which merit court-ordered disclosure of confidential communications.

The first of these is a circumstance in which the patient poses a threat to any third party. Existing rules do not permit a court to authorize disclosure of any communication by a patient to a program; for example, that the patient is abusing a child or has expressed an intention to kill or seriously harm another person. The balance between patient confidentiality and an existing threat posed by the patient to life or of serious bodily injury to another person must be weighted in favor of permitting a court to order disclosure of confidential communications which are necessary to protect against such an existing threat.

The second of these circumstances is one in which a patient's confidential communications to a program are necessary in connection with investigation or prosecution of an extremely serious crime, such as a crime which directly threatens loss of life or serious bodily injury. The Department takes the position that it is consistent with the intent of Congress and in the best interest of the Nation to permit the exercise of discretion by a court, within the context of the confidentiality law and regulations, to determine whether to authorize disclosure or use of confidential communications from a patient's treatment record in connection with such an investigation or prosecution.

Our aim is to strike a balance between absolute confidentiality for "confidential communications" on one side and on the other, to protect against any existing threat to life or serious bodily harm to others and to bring to justice those being investigated or prosecuted for an

extremely serious crime who may have inflicted such harm in the past. While many confidential communications will remain beyond the reach of a court order, revised § 2.63 of the Final Rule will permit a court to authorize disclosure of confidential communications if the disclosure is necessary to protect against an existing threat to life or serious bodily injury, if disclosure is necessary in connection with investigation or prosecution of an extremely serious crime, or, as in the existing rule if disclosure is in connection with a legal proceeding in which the patient himself/herself offers testimony or evidence concerning the confidential communications.

Open Hearing on Patient Request in Connection with a Court Order

Courts authorizing disclosure for noncriminal purposes are required at § 2.64(c) of the Final Rule to conduct any oral argument, review of evidence, or hearing in the judge's chambers or in some manner that ensures patient identifying information is not disclosed to anyone who is not a party to the proceeding, to a party holding the record, or to the patient. The existing rules provide that a patient may request an open hearing. The proposed rule did not provide for the patient to request an open hearing.

The existing and proposed rule provides that a patient may consent to use of his or her name rather than a fictitious name in any application for an order authorizing disclosure for noncriminal purposes. The existing rule requires "voluntary and intelligent" consent. The proposed rule ensures the quality of the consent by requiring that it be in writing and in compliance with § 2.31.

Upon reconsideration, the Department has reinstated the provision permitting a patient to consent to an open hearing in a noncriminal proceeding but with the same formality as is required by the proposed rule for a consent by the patient to use his or her name in an application for an order. Therefore, the Final Rule at § 2.64(c) requires that any hearing be held in such a

way as to maintain the patient's confidentiality "unless the patient requests an open hearing in a manner which meets the written consent requirements of these regulations."

Content of Court Order—Sealing of Record as an Example

The content of a court order authorizing disclosure for non-criminal purposes and any order for disclosure and use to investigate or prosecute a program or the person holding the records is limited at § 2.64(e) to essential information and limits disclosure to those persons who have a need for the information. In addition, the court is required to take such other measures as are necessary to limit disclosure to protect the patient, the physician-patient relationship, and the treatment services. We have included at § 2.64(e)(3) an example of one such measure which may be necessary: sealing the record of any proceeding for which disclosure of a patient's records has been ordered. It is the Department's experience that heightened awareness of this possibility by members of the treatment community and legal profession can limit dissemination of patient identifying information to those for whom the court determined "good cause" exists without turning all or a part of a patient's treatment record into public information. The Final Rule adds as an example of a measure which the court might take to protect the patient, the physician-patient relationship and the treatment service "sealing from public scrutiny the record of any proceeding for which disclosure of a patient's record has been ordered." A similar change has also been made in § 2.67(d)(4).

Extremely Serious Crime as a Criterion for a Court Order to Investigate or Prosecute a Patient

The proposed rule at § 2.64 purported to retain the existing standard with regard to court orders which may be issued for the purpose of investigating or prosecuting a patient; i.e., the standard that no court order may authorize disclosure and use of patient records for

investigation or prosecution of nonserious crimes. In an effort to clarify the nature of those crimes for which a court may order disclosure and use of patient records to investigate or prosecute the patient, the proposed rule dropped the term "extremely serious" crime in favor of a more specific functional definition of a crime which "causes or directly threatens loss of life or serious bodily injury." While the proposed rule purported to retain the existing standard, comments received from law enforcement agencies have contested that outcome, asserting that the criterion as proposed would be significantly narrowed. Arguing in favor of a broader standard, law enforcement interests advocated a more flexible criterion which would permit courts to weigh relevant factors on a case-by-case basis.

Inasmuch as the change in the proposed rule was intended to clarify—not to further limit—those crimes for which a court may authorize use of a patient's record to investigate or prosecute the patient, the Final Rule reinstates the existing language, "extremely serious." This broader criterion will permit more flexibility and discretion by the courts in deciding whether a crime is of a caliber which merits use of a patient's treatment record to investigate or prosecute the patient.

The Final Rule names as examples of "extremely serious" crimes homicide, rape, kidnapping, armed robbery, assault with a deadly weapon, and child abuse and neglect. Deleted from the list of proposed examples is "sale of illicit drugs."

Based on the view that most patients in drug abuse treatment are vulnerable to a charge of sale of illicit drugs, many commenters asked that "sale of illicit drugs" not be categorically named as an extremely serious crime. To do so, they asserted, would make almost all patients in drug rehabilitation or treatment programs vulnerable to investigation or prosecution by means of court-ordered use of their own treatment records.

While the Final Rule eliminates "sale of illicit drugs" as an example of an extremely serious crime, it does

not alter the authority of a court to find that under appropriate circumstances sale of an illicit drug is, in fact, an extremely serious crime, and it reflects a decision to leave any such determination up to a court of competent jurisdiction which is called upon to order the use of a patient's treatment records to prosecute the patient in view of any circumstances known to the court.

New Law To Permit Reporting of Child Abuse and Neglect

Section 106 of Pub. L 99-401, the Children's Justice and Assistance Act of 1986, amends sections 523(e) and 527(e) of the Public Health Service Act (42 U.S.C. 290dd-(3)(e) and 42 U.S.C. 290ee-3(e)) to permit the reporting of suspected child abuse and neglect to appropriate State or local authorities in accordance with State law. The amended sections of the Public Health Service Act provide:

The prohibitions of this section do not apply to the reporting under State law of incidents of suspected child abuse and neglect to the appropriate State or local authorities.

This newly enacted statutory exception to the restrictions on disclosure of information which would identify an alcohol or drug abuse patient provides a straightforward avenue for making reports of incidents of suspected child abuse and neglect in accordance with State law without resort to devices explained in the preamble to the proposed rule, i.e., obtaining a court order, reporting without identifying the patient as an alcohol or drug abuser, getting the patient's written consent, entering into a qualified service organization agreement, or reporting a medical emergency to medical personnel. While the potential still exists for using the devices described in the proposed rule, there is no foreseeable reason to use them to report suspected child abuse and neglect in view of the amendment.

Although the new law excepts reports of suspected child abuse and neglect from the statutory restrictions on disclosure and use, it does not affect the applicability of the

restrictions to the original alcohol and drug abuse patient record maintained by the program. Accordingly, if, following a report of suspected child abuse or neglect, the appropriate State authorities wish to subpoena patient records (or program personnel to testify about patient records) for civil or criminal proceedings relating to the child abuse or neglect, appropriate authorization would be required under the statutes and regulations. While written patient consent would suffice for a civil proceeding, it would be necessary to obtain an authorizing court order under paragraph (b)(2)(C) of the confidentiality statutes and § 2.65 of the regulations for use of the record to criminally investigate or prosecute a patient.

Editorial Changes

The Final Rule makes very few editorial or clarifying changes to the regulations as proposed.

Number, tense, punctuation, and sequential numbering are changed where appropriate. Definitions applicable only to prevention of multiple enrollments in detoxification and maintenance treatment programs are moved from the definitions section to § 2.34. Section 2.35(c) has been rewritten for clarity. A clarifying phrase or word is added to the definition of "patient identifying information" at § 2.11, to § 2.19(a)(1) and (b)(1) and to § 2.31(a)(8). The phrase "or other" has been added to § 2.53(c) because a court order under § 2.66 may be issued to investigate a program for criminal or administrative purposes. At § 2.65(d)(3) alternative language is adopted consistent with language used elsewhere to express a similar thought. At § 2.65 (d)(4) the term "program" is used in lieu of "person holding the records" inasmuch as none but a program will be providing services to patient.

Regulatory Procedures

Executive Order 12291

This is not a major rule under Executive Order 12291. Overall costs to general medical care facilities will be reduced as a result of the decision to apply the regulations only to

specialized alcohol and drug abuse treatment programs. Cost to covered programs will be reduced somewhat by simplification of the rules. The amendments do not have an annual effect on the economy of \$100 million or more or otherwise meet the criteria for a major rule under the Executive Order. Thus, no regulatory analysis is required.

Regulatory Flexibility Act

As a result of the decision to apply the regulations only to specialized alcohol and drug abuse treatment programs, the Final Rule will not have a significant economic impact on a substantial number of small entities. The regulations will no longer apply to general medical care providers which render alcohol or drug abuse services incident to their general medical care functions; thus, the number of small entities affected will be less than substantial. The economic impact will be less than significant because much of that impact arises from the cost of determining that the records of a general medical care patient are subject to the regulations and thereafter treating those records differently than all others in the general medical care facility. It is anticipated that programs covered by these rules will realize a small savings as a result of the simplification of the rules.

Information Collection Requirements

Information collection requirements in this Final Rule are:

- (1) Obtaining written patient consent (§ 2.31(a)).
- (2) Notifying each patient of confidentiality provisions (§ 2.22), and
- (3) Documenting any disclosure to meet a medical emergency (§ 2.51).

The information collection requirements contained in these final regulations have been approved by the Office of Management and Budget under section 3504(h) of the Paperwork Reduction Act of 1980 and have been assigned control number 0930-0099, approved for use through April 30, 1989.

List of Subjects in 42 CFR Part 2

Alcohol abuse, Alcoholism Confidentiality, Drug abuse, Health records, Privacy.

Dated: July 3, 1986.

Robert E. Windom,

Assistant Secretary for Health.

Approved: April 9, 1987.

Otis R. Bowen,

Secretary.

The amendments to 42 CFR Part 2 are hereby adopted as revised and set forth below:

PART 2—CONFIDENTIALITY OF ALCOHOL AND DRUG ABUSE PATIENT RECORDS

Subpart A—Introduction

Sec.

- 2.1 Statutory authority for confidentiality of drug abuse patient records.
- 2.2 Statutory authority for confidentiality of alcohol abuse patient records.
- 2.3 Purpose and effect.
- 2.4 Criminal penalty for violation.
- 2.5 Reports of violations.

Subpart B—General Provisions

- 2.11 Definitions.
- 2.12 Applicability.
- 2.13 Confidentiality restrictions.
- 2.14 Minor patients.
- 2.15 Incompetent and deceased patients.
- 2.16 Security for written records.
- 2.17 Undercover agents and information.
- 2.18 Restrictions on the use of identification cards.
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Authority: Sec. 408 of Pub. L. 92-255, 86 Stat. 79, as amended by

sec. 303 (a), (b) of Pub. L. 93-282, 83 Stat. 137,138; sec. 4(c)(5)(A) of Pub. L. 94-237, 90 Stat. 244; sec. 111(c)(3) of Pub. L. 94-581, 90 Stat. 2852; sec. 509 of Pub. L. 96-88, 93 Stat. 695; sec. 973(d) of Pub. L. 97-35, 95 Stat. 598; and transferred to sec. 527 of the Public Health Service Act by sec. 2(b)(16)(B) of Pub. L. 98-24, 97 Stat. 182 and as amended by sec. 106 of Pub. L. 99-401, 100 Stat. 907 (42 U.S.C. 290ee-3) and sec. 333 of Pub. L. 91-616, 84 Stat. 1853, as amended by sec. 122(a) of Pub. L. 93-282, 88 Stat. 131; and sec. 111(c)(4) of Pub. L. 94-581, 90 Stat. 2852 and transferred to sec. 523 of the Public Health Service Act by sec. 2(b)(13) of Pub. L. 98-24, 97 Stat. 181 and as amended by sec. 106 of Pub. L. 99-401, 100 Stat. 907 (42 U.S.C. 290dd-3).

Subpart A—Introduction

§ 2.1 Statutory authority for confidentiality of drug abuse patient records.

The restrictions of these regulations upon the disclosure and use of drug abuse patient records were initially authorized by section 408 of the Drug Abuse Prevention, Treatment, and Rehabilitation Act (21 U.S.C. 1175). That section as amended was transferred by Pub. L. 98-24 to section 527 of the Public Health Service Act which is codified at 42 U.S.C. 290ee-3. The amended statutory authority is set forth below:

Section 290ee-3. Confidentiality of patient records.

(a) Disclosure authorization

Records of the identity, diagnosis, prognosis, or treatment of any patient which are maintained in connection with the performance of any drug abuse prevention function conducted, regulated, or directly or indirectly assisted by any department or agency of the United States shall, except as provided in subsection (e) of this section, be confidential and be disclosed only for the purposes and under the circumstances expressly authorized under subsection (b) of this section.

(b) Purposes and circumstances of disclosure affecting consenting

patient and patient regardless of consent

(1) The content of any record referred to in subsection (a) of this section may be disclosed in accordance with the prior written consent of the patient with respect to whom such record is maintained, but only to such extent, under such circumstances, and for such purposes as may be allowed under regulations prescribed pursuant to subsection (g) of this section.

(2) Whether or not the patient, with respect to whom any given record referred to in subsection (a) of this section is maintained, gives his written consent, the content of such record may be disclosed as follows:

(A) To medical personnel to the extent necessary to meet a bona fide medical emergency.

(B) To qualified personnel for the purpose of conducting scientific research, management audits, financial audits, or program evaluation, but such personnel may not identify, directly or indirectly, any individual patient in any report of such research, audit, or evaluation, or otherwise disclose patient identities in any manner.

(C) If authorized by an appropriate order of a court of competent jurisdiction granted after application showing good cause therefor. In assessing good cause the court shall weigh the public interest and the need for disclosure against the injury to the patient, to the physician-patient relationship, and to the treatment services. Upon the granting of such order, the court, in determining the extent to which any disclosure of all or any part of any record is necessary, shall impose appropriate safeguards against unauthorized disclosure.

(c) Prohibition against use of record in making criminal charges or investigation of patient

Except as authorized by a court order granted under subsection (b)(2)(C) of this section, no record referred to in subsection (a) of this section may be used to initiate or substantiate any criminal charges against a patient or to conduct any investigation of a patient.

(d) Continuing prohibition against disclosure irrespective of status as patient

The prohibitions of this section continue to apply to records concerning any individual who has been a patient, irrespective of whether or when he ceases to be a patient.

(e) Armed Forces and Veterans' Administration; interchange of records; report of suspected child abuse and neglect to State or local authorities

The prohibitions of this section do not apply to any interchange of records:

(1) within the Armed Forces or within those components of the Veterans' Administration furnishing health care to veterans, or

(2) between such components and the Armed Forces.

The prohibitions of this section do not apply to the report in and under State law of incidents of suspected child abuse and neglect to the appropriate State or local authorities.

(f) Penalty for first and subsequent offenses

Any person who violates any provision of this section or any regulation issued pursuant to this section shall be fined not more than \$500 in the case of a first offense, and not more than \$5,000 in the case of each subsequent offense.

(g) Regulations; interagency consultations; definitions, safeguards, and procedures, including procedures and criteria for issuance and scope of orders

Except as provided in subsection (h) of this section, the Secretary, after consultation with the Administrator of Veterans' Affairs and the heads of other Federal departments and agencies substantially affected thereby, shall prescribe regulations to carry out the purposes of this section. These regulations may contain such definitions, and may provide for such safeguards and procedures, including procedures and criteria for the issuance and scope of orders under subsection (b)(2)(C) of this section, as in the judgment of the Secretary are necessary or proper to effectuate the

purposes of this section, to prevent circumvention or evasion thereof, or to facilitate compliance therewith. (Subsection (h) was superseded by section 111(c)(3) of Pub. L. 94-581. The responsibility of the Administrator of Veterans' Affairs to write regulations to provide for confidentiality of drug abuse patient records under Title 38 was moved from 21 U.S.C. 1175 to 38 U.S.C. 4134.)

§ 2.2 Statutory authority for confidentiality of alcohol abuse patient records.

The restrictions of these regulations upon the disclosure and use of alcohol abuse patient records were initially authorized by section 333 of the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970 (42 U.S.C. 4582). The section as amended was transferred by Pub. L. 98-24 to section 523 of the Public Health Service Act which is codified at 42 U.S.C. 290ee-3. The amended statutory authority is set forth below:

Section 290dd-3. Confidentiality of patient records

(a) Disclosure authorization

Records of the identity, diagnosis, prognosis, or treatment of any patient which are maintained in connection with the performance of any program or activity relating to alcoholism or alcohol abuse education, training, treatment, rehabilitation, or research, which is conducted, regulated, or directly or indirectly assisted by any department or agency of the United States shall, except as provided in subsection (e) of this section, be confidential and be disclosed only for the purposes and under the circumstances expressly authorized under subsection (b) of this section.

(b) Purposes and circumstances of disclosure affecting consenting patient and patient regardless of consent

(1) The content of any record referred to in subsection (a) of this section may be disclosed in accordance with the prior written consent of the patient with respect to whom such record is maintained, but only

to such extent, under such circumstances, and for such purposes as may be allowed under regulations prescribed pursuant to subsection (g) of this section.

(2) Whether or not the patient, with respect to whom any given record referred to in subsection (a) of this section is maintained, gives his written consent, the content of such record may be disclosed as follows:

(A) To medical personnel to the extent necessary to meet a bona fide medical emergency.

(B) To qualified personnel for the purpose of conducting scientific research, management audits, financial audits, or program evaluation, but such personnel may not identify, directly or indirectly, any individual patient in any report of such research, audit, or evaluation, or otherwise disclose patient identities in any manner.

(C) If authorized by an appropriate order of a court of competent jurisdiction granted after application showing good cause therefor. In assessing good cause the court shall weigh the public interest and the need for disclosure against the injury to the patient, to the physician-patient relationship, and to the treatment services. Upon the granting of such order, the court, in determining the extent to which any disclosure of all or any part of any record is necessary, shall impose appropriate safeguards against unauthorized disclosure.

(c) Prohibition against use of record in making criminal charges or investigation of patient

Except as authorized by a court order granted under subsection (b)(2)(C) of this section, no record referred to in subsection (a) of this section may be used to initiate or substantiate any criminal charges against a patient or to conduct any investigation of a patient.

(d) Continuing prohibition against disclosures irrespective of status as patient.

The prohibitions of this section continue to apply to records concerning any individual who has been a patient, irrespective of whether or when he ceases to be a patient.

(e) Armed Forces and Veterans' Administration; interchanges of record of suspected child abuse and neglect to State or local authorities.

The prohibitions of this section do not apply to any interchange of records—

- (1) within the Armed Forces or within those components of the Veterans' Administration furnishing health care to veterans, or
- (2) between such components and the Armed Forces.

The prohibitions of this section do not apply to the reporting under State law of incidents of suspected child abuse and neglect to the appropriate State or local authorities.

(f) Penalty for first and subsequent offenses

Any person who violates any provision of this section or any regulation issued pursuant to this section shall be fined not more than \$500 in the case of a first offense, and not more than \$5,000 in the case of each subsequent offense.

(g) Regulations of Secretary; definitions, safeguards, and procedures, including procedures and criteria for issuance and scope of orders

Except as provided in subsection (h) of this section, the Secretary shall prescribe regulations to carry out the purposes of this section. These regulations may contain such definitions, and may provide for such safeguards and procedures, including procedures and criteria for the issuance and scope of orders under subsection (b)(2)(C) of this section, as in the judgment of the Secretary are necessary or proper to effectuate the purposes of this section, to prevent circumvention or evasion thereof, or to facilitate compliance therewith.

(Subsection (h) was superseded by section 111(c)(4) of Pub. L. 94-581. The responsibility of the Administrator of Veterans' Affairs to write regulations to provide for confidentiality of alcohol abuse patient records under Title 38 was moved from 42 U.S.C. 4582 to 38 U.S.C. 4134).

§ 2.3 Purpose and effect

(a) *Purpose.* Under the statutory provisions quoted in §§ 2.1 and 2.2, these regulations impose restrictions upon the disclosure and use of alcohol and drug abuse patient records which are maintained in connection with the performance of any federally assisted alcohol and drug abuse program. The regulations specify:

- (1) Definitions, applicability, and general restrictions in Subpart B (definitions applicable to § 2.34 only appear in that section);
- (2) Disclosures which may be made with written patient consent and the form of the written consent in Subpart C;
- (3) Disclosures which may be made without written patient consent or an authorizing court order in Subpart D; and
- (4) Disclosures and uses of patient records which may be made with an authorizing court order and the procedures and criteria for the entry and scope of those orders in Subpart E.

(b) *Effect.* (1) These regulations prohibit the disclosure and use of patient records unless certain circumstances exist. If any circumstance exists under which disclosure is permitted, that circumstance acts to remove the prohibition on disclosure but it does not compel disclosure. Thus, the regulations do not require disclosure under any circumstances.

(2) These regulations are not intended to direct the manner in which substantive functions such as research, treatment, and evaluation are carried out. They are intended to insure that an alcohol or drug abuse patient in a federally assisted alcohol or drug abuse program is not made more vulnerable by reason of the availability of his or her patient record than an individual who has an alcohol or drug problem and who does not seek treatment.

(3) Because there is a criminal penalty (a fine—see 42 U.S.C. 290ee-3(f), 42 U.S.C. 290dd-3(f) and 42 CFR § 2.4) for violating the regulations, they are to be construed strictly in favor of the potential violator in the same manner as a criminal statute (see *M. Kraas &*

Brothers v. United States, 327 U.S. 614, 621-22, 66 S. Ct. 705, 707-08 (1946)).

§ 2.4 Criminal penalty for violation.

Under 42 U.S.C. 290ee-3(f) and 42 U.S.C. 290dd-3(f), any person who violates any provision of those statutes or these regulations shall be fined not more than \$500 in the case of a first offense, and not more than \$5,000 in the case of each subsequent offense.

§ 2.5 Report of violations.

(a) The report of any violation of these regulations may be directed to the United States Attorney for the judicial district in which the violation occurs.

(b) The report of any violation of these regulations by a methadone program may be directed to the Regional Offices of the Food and Drug Administration.

Subpart B—General Provisions

§ 2.11 Definitions.

For purposes of these regulations:

Alcohol abuse means the use of an alcoholic beverage which impairs the physical, mental, emotional, or social well-being of the user.

Drug abuse means the use of a psychoactive substance for other than medicinal purposes which impairs the physical, mental, emotional, or social well-being of the user.

Diagnosis means any reference to an individual's alcohol or drug abuse or to a condition which is identified as having been caused by that abuse which is made for the purpose of treatment or referral for treatment.

Disclose or disclosure means a communication of patient identifying information, the affirmative verification of another person's communication of patient identifying information, or the communication of any information from the record of a patient who has been identified.

Informant means an individual:

(a) Who is a patient or employee of a program or who becomes a patient or employee of a program at the request of a law enforcement agency or official; and

(b) Who at the request of a law enforcement agency or official observes one or more patients or

employees of the program for the purpose of reporting the information obtained to the law enforcement agency or official.

Patient means any individual who has applied for or been given diagnosis or treatment for alcohol or drug abuse at a federally assisted program and includes any individual who, after arrest on a criminal charge, is identified as an alcohol or drug abuser in order to determine that individual's eligibility to participate in a program.

Patient identifying information means the name, address, social security number, fingerprints, photograph, or similar information by which the identity of a patient can be determined with reasonable accuracy and speed either directly or by reference to other publicly available information. The term does not include a number assigned to a patient by a program, if that number does not consist of, or contain numbers (such as a social security or driver's license number) which could be used to identify a patient with reasonable accuracy and speed from sources external to the program.

Person means an individual, partnership, corporation, Federal, State or local government agency, or any other legal entity.

Program means a person which in whole or in part holds itself out as providing, and provides, alcohol or drug abuse diagnosis, treatment, or referral for treatment. For a general medical care facility or any part thereof to be a program, it must have:

(a) An identified unit which provides alcohol or drug abuse diagnosis, treatment, or referral for treatment or

(b) Medical personnel or other staff whose primary function is the provision of alcohol or drug abuse diagnosis, treatment, or referral for treatment and who are identified as such providers.

Program director means:

(a) In the case of a program which is an individual, that individual;

(b) In the case of a program which is an organization, the individual designated as director, managing director, or otherwise vested with

authority to act as chief executive of the organization.

Qualified service organization means a person which:

(a) Provides services to a program, such as data processing, bill collecting, dosage preparation, laboratory analyses, or legal, medical, accounting, or other professional services, or services to prevent or treat child abuse or neglect, including training on nutrition and child care and individual and group therapy, and

(b) Has entered into a written agreement with a program under which that person:

(1) Acknowledges that in receiving, storing, processing or otherwise dealing with any patient records from the programs, it is fully bound by these regulations; and

(2) If necessary, will resist in judicial proceedings any efforts to obtain access to patient records except as permitted by these regulations.

Records means any information, whether recorded or not, relating to a patient received or acquired by a federally assisted alcohol or drug program.

Third party payer means a person who pays, or agrees to pay, for diagnosis or treatment furnished to a patient on the basis of a contractual relationship with the patient or a member of his family or on the basis of the patient's eligibility for Federal, State, or local governmental benefits.

Treatment means the management and care of a patient suffering from alcohol or drug abuse, a condition which is identified as having been caused by that abuse, or both, in order to reduce or eliminate the adverse effects upon the patient.

Undercover agent means an officer of any Federal, State, or local law enforcement agency who enrolls in or becomes an employee of a program for the purpose of investigating a suspected violation of law or who pursues that purpose after enrolling or becoming employed for other purposes.

§ 2.12 Applicability.

(a) *General*—(1) *Restrictions on disclosure*. The restrictions on

disclosure in these regulations apply to any information whether or not recorded, which:

(i) Would identify a patient as an alcohol or drug abuser either directly, by reference to other publicly available information, or through verification of such an identification by another person; and

(ii) Is drug abuse information obtained by a federally assisted drug abuse program after March 20, 1972, or is alcohol abuse information obtained by a federally assisted alcohol abuse program after May 13, 1974 (or if obtained before the pertinent date, is maintained by a federally assisted alcohol or drug abuse program after that date as part of an ongoing treatment episode which extends past that date) for the purpose of treating alcohol or drug abuse making a diagnosis for that treatment, or making a referral for that treatment.

(2) *Restriction on use*. The restriction on use of information to initiate or substantiate any criminal charges against a patient or to conduct any criminal investigation of a patient (42 U.S.C. 290ee-3(c) 42 U.S.C. 290dd-3(c)) applies to any information whether or not recorded which is drug abuse information obtained by a federally assisted drug abuse program after March 20, 1972, or is alcohol abuse information obtained by a federally assisted alcohol abuse program after May 13, 1974 (or if obtained before the pertinent date, is maintained by a federally assisted alcohol or drug abuse program after that date as part of an ongoing treatment episode which extends past that date), for the purpose of treating alcohol or drug abuse, making a diagnosis for the treatment, or making a referral for the treatment.

(b) *Federal assistance*. An alcohol abuse or drug abuse program is considered to be federally assisted if:

(1) It is conducted in whole or in part, whether directly or by contract or otherwise by any department or agency of the United States (but see paragraphs (c)(1) and (c)(2) of this section relating to the Veterans'

Administration and the Armed Forces);

(2) It is being carried out under a license, certification, registration, or other authorization granted by any department or agency of the United States including but not limited to:

(i) Certification of provider status under the Medicare program,

(ii) Authorization to conduct methadone maintenance treatment (see 21 CFR 291.505); or

(iii) Registration to dispense a substance under the Controlled Substances Act to the extent the controlled substance is used in the treatment of alcohol or drug abuse;

(3) It is supported by funds provided by any department or agency of the United States by being:

(i) A recipient of Federal financial assistance in any form, including financial assistance which does not directly pay for the alcohol or drug abuse diagnosis, treatment, or referral activities; or

(ii) Conducted by a State or local government until which, through general or special revenue sharing or other forms of assistance, receives Federal funds which could be (but are not necessarily) spent for the alcohol or drug abuse program; or

(4) It is assisted by the Internal Revenue Service of the Department of the Treasury through the allowance of income tax deductions for contributions to the program or through the granting of tax exempt status to the program.

(c) *Exceptions*—(1) *Veterans' Administration*. These regulations do not apply to information on alcohol and drug abuse patients maintained in connection with the Veterans' Administration provisions of hospital care, nursing home care, domiciliary care, and medical services under Title 38, United States Code. Those records are governed by 38 U.S.C. 4132 and regulations issued under that authority by the Administrator of Veterans' Affairs.

(2) *Armed Forces*. These regulations apply to any information described in paragraph (a) of this section which was obtained by any component of the Armed Forces during a period when the patient was subject to the

Uniform Code of Military Justice except:

(i) Any interchange of that information within the Armed Forces; and

(ii) Any interchange of that information between the Armed Forces and those components of the Veterans' Administration furnishing health care to veterans.

(3) *Communication within a program or between a program and an entity having direct administrative control over that program*. The restrictions on disclosure in these regulations do not apply to communications of information between or among personnel having a need for the information in connection with their duties that arise out of the provision of diagnosis, treatment, or referral for treatment of alcohol or drug abuse if the communications are

(i) within a program or

(ii) between a program and an entity that has direct administrative control over the program.

(4) *Qualified Service Organizations*. The restrictions on disclosure in these regulations do not apply to communications between a program and a qualified service organization of information needed by the organization to provide services to the program.

(5) *Crimes on program premises or against program personnel*. The restrictions on disclosure and use in these regulations do not apply to communications from program personnel to law enforcement officers which—

(i) Are directly related to a patient's commission of a crime on the premises of the program or against program personnel or to a threat to commit such a crime; and

(ii) Are limited to the circumstances of the incident, including the patient status of the individual committing or threatening to commit the crime, that individual's name and address, and that individual's last known whereabouts.

(6) *Reports of suspected child abuse and neglect*. The restrictions on disclosure and use in these regulations do not apply to the reporting under State law of

incidents of suspected child abuse and neglect to the appropriate State or local authorities. However, the restrictions continue to apply to the original alcohol or drug abuse patient records maintained by the program including their disclosure and use for civil or criminal proceedings which may arise out of the report of suspected child abuse and neglect.

(d) *Applicability to recipients of information*—(1) *Restriction on use of information*. The restriction on the use of any information subject to these regulations to initiate or substantiate any criminal charges against a patient or to conduct any criminal investigation of a patient applies to any person who obtains that information from a federally assisted alcohol or drug abuse program, regardless of the status of the person obtaining the information or of whether the information was obtained in accordance with these regulations. This restriction on use bars, among other things, the introduction of that information as evidence in a criminal proceeding and any other use of the information to investigate or prosecute a patient with respect to a suspected crime. Information obtained by undercover agents or informants (see § 2.17) or through patient access (see § 2.23) is subject to the restriction on use.

(2) *Restrictions on disclosures—Third party payers, administrative entities, and others*. The restrictions on disclosure in these regulations apply to:

(i) Third party payers with regard to records disclosed to them by federally assisted alcohol or drug abuse programs;

(ii) Entities having direct administrative control over programs with regard to information communicated to them by the program under § 2.12(c)(3); and

(iii) Persons who receive patient records directly from a federally assisted alcohol or drug abuse program and who are notified of the restrictions on redisclosure of the records in accordance with § 2.32 of these regulations.

(e) *Explanation of applicability—*

(1) *Coverage.* These regulations cover any information (including information on referral and intake) about alcohol and drug abuse patients obtained by a program (as the terms “patient” and “program” are defined in § 2.11) if the program is federally assisted in any manner described in § 2.12(b). Coverage includes, but is not limited to, those treatment or rehabilitative programs, employee assistance programs, programs within general hospitals, school-based programs, and private practitioners who hold themselves out as providing, and provide alcohol or drug abuse diagnosis, treatment, or referral for treatment.

(2) *Federal assistance to program required.* If a patient’s alcohol or drug abuse diagnosis, treatment, or referral for treatment is not provided by a program which is federally conducted regulated or supported in a manner which constitutes Federal assistance under § 2.12(b) that patient’s record is not covered by these regulations. Thus, it is possible for an individual patient to benefit from Federal support and not be covered by the confidentiality regulations because the program in which the patient is enrolled is not federally assisted as defined in § 2.12(b). For example, if a Federal court placed an individual in a private for-profit program and made a payment to the program on behalf of that individual, that patient’s record would not be covered by these regulations unless the program itself received Federal assistance as defined by § 2.12(b).

(3) *Information to which restrictions are applicable.* Whether a restriction is on use or disclosure affects the type of information which may be available. The restrictions on disclosure apply to any information which would identify a patient as an alcohol or drug abuser. The restriction on use of information to bring criminal charges against a patient for a crime applies to any information obtained by the program for the purpose of diagnosis, treatment, or referral for treatment of alcohol or drug abuse. (Note that restrictions on use and disclosure apply to

recipients of information under § 2.12(d).)

(4) *How type of diagnosis affects coverage.* These regulations cover any record of a diagnosis identifying a patient as an alcohol or drug abuser which is prepared in connection with the treatment or referral for treatment of alcohol or drug abuse. A diagnosis prepared for the purpose of treatment or referral for treatment but which is not so used is covered by these regulations. The following are not covered by these regulations:

(i) diagnosis which is made solely for the purpose of providing evidence for use by law enforcement authorities; or

(ii) A diagnosis of drug overdose or alcohol intoxication which clearly shows that the individual involved is not an alcohol or drug abuser (e.g., involuntary ingestion of alcohol or drugs or reaction to a prescribed dosage of one or more drugs).

§ 2.13 Confidentiality restrictions.

(a) *General.* The patient records to which these regulations apply may be disclosed or used only as permitted by these regulations and may not otherwise be disclosed or used in any civil, criminal, administrative, or legislative proceedings conducted by any Federal, State, or local authority. Any disclosure made under these regulations must be limited to that information which is necessary to carry out the purpose of the disclosure.

(b) *Unconditional compliance required.* The restrictions on disclosure and use in these regulations apply whether the holder of the information believes that the person seeking the information already has it, has other means of obtaining it, is a law enforcement or other official, has obtained a subpoena, or asserts any other justification for a disclosure or use which is not permitted by these regulations.

(c) *Acknowledging the presence of patients: Responding to requests.*

(1) The presence of an identified patient in a facility or component of a facility which is publicly identified as a place where only alcohol or drug abuse diagnosis, treatment, or referral is provided may be acknowledged only if the patient’s written

consent is obtained in accordance with subpart C of these regulations or if an authorizing court order is entered in accordance with Subpart E of these regulations. The regulations permit acknowledgement of the presence of an identified patient in a facility or part of a facility if the facility is not publicly identified as only an alcohol or drug abuse diagnosis, treatment or referral facility, and if the acknowledgement does not reveal that the patient is an alcohol or drug abuser.

(2) Any answer to a request for a disclosure of patient records which is not permissible under these regulations must be made in a way that will not affirmatively reveal that an identified individual has been, or is being diagnosed or treated for alcohol or drug abuse. An inquiring party may be given a copy of these regulations and advised that they restrict the disclosure of alcohol or drug abuse patient records, but may not be told affirmatively that the regulations restrict the disclosure of the records of an identified patient. The regulations do not restrict a disclosure that an identified individual is not and never has been a patient.

§ 2.14 Minor patients.

(a) *Definition of minor.* As used in these regulations the term “minor” means a person who has not attained the age of majority specified in the applicable State law, or if no age of majority is specified in the applicable State law, the age of eighteen years.

(b) *State law not requiring parental consent to treatment.* If a minor patient acting alone has the legal capacity under the applicable State law to apply for and obtain alcohol or drug abuse treatment, any written consent for disclosure authorized under Subpart C of these regulations may be given only by the minor patient. This restriction includes, but is not limited to, any disclosure of patient identifying information to the parent or guardian of minor patient for the purpose of obtaining financial reimbursement. These regulations do not prohibit a program from refusing to provide treatment until the minor patient consents to the disclosure necessary to obtain reimbursement,

but refusal to provide treatment may be prohibited under a State or local law requiring the program to furnish the service irrespective of ability to pay.

(c) *State law requiring parental consent to treatment.* (1) Where State law requires consent of a parent, guardian, or other person for a minor to obtain alcohol or drug abuse treatment, any written consent for disclosure authorized under Subpart C of these regulations must be given by both the minor and his or her parent, guardian, or other person authorized under State law to act in the minors behalf.

(2) Where State law requires parental consent to treatment the fact of a minor's application for treatment may be communicated to the minor's parent, guardian, or other person authorized under State law to act in the minor's behalf only if

(i) The minor has given written consent to the disclosure in accordance with Subpart C of these regulations or

(ii) The minor lacks the capacity to make a rational choice regarding such consent as judged by the program director under paragraph (d) of this section.

(d) *Minor applicant for services lacks capacity for rational choice.* Facts relevant to reducing a threat to the life or physical well being of the applicant or any other individual may be disclosed to the parent, guardian, or other person authorized under State law to act in the minor's behalf if the program director judges that:

(1) A minor applicant for services lacks capacity because of extreme youth or mental or physical condition to make a rational decision on whether to consent to a disclosure under Subpart C of these regulations to his or her parent, guardian or other person authorized under State law to act in the minor's behalf, and

(2) The applicant's situation poses substantial threat to the life or physical well being of the applicant or any other individual which may be reduced by communicating relevant facts to the minor's parent, guardian, or other person authorized

under State law to act in the minor's behalf.

§ 2.15 Incompetent and deceased patients.

(a) *Incompetent patients other than minors—(1) Adjudication of incompetence.* In the case of a patient who has been adjudicated as lacking the capacity, for any reason other than insufficient age, to manage his or her own affairs, any consent which is required under these regulations may be given by the guardian or other person authorized under State law to act in the patient's behalf.

(2) *No adjudication of incompetency.* For any period for which the program director determines that a patient, other than a minor or one who has been adjudicated incompetent, suffers from a medical condition that prevents knowing or effective action on his or her own behalf, the program director may exercise the right of the patient to consent to a disclosure under Subpart C of these regulations for the sole purpose of obtaining payment for services from a third party payer.

(b) *Deceased patients—(1) Vital statistics.* These regulations do not restrict the disclosure of patient identifying information relating to the cause of death of a patient under laws requiring the collection of death or other vital statistics or permitting inquiry into the cause of death.

(2) *Consent by personal representative.* Any other disclosure of information identifying a deceased patient as an alcohol or drug abuser is subject to these regulations. If a written consent to the disclosure is required, that consent may be given by an executor, administrator, or other personal representative appointed under applicable State law. If there is no such appointment the consent may be given by the patient's spouse or, if none, by any responsible member of the patient's family.

§ 2.16 Security for written records.

(a) Written records which are subject to these regulations must be maintained in a secure room, locked file cabinet, safe or other similar container when not in use; and

(b) Each program shall adopt in writing procedures which regulate and control access to and use of written records which are subject to these regulations.

§ 2.17 Undercover agents and informants.

(a) *Restrictions on placement.* Except as specifically authorized by a court order granted under § 2.6 of these regulations, no program may knowingly employ, or enroll as a patient, any undercover agent or informant.

(b) *Restriction on use of information.* No information obtained by an undercover agent or informant, whether or not that undercover agent or informant is placed in a program pursuant to an authorizing court order, may be used to criminally investigate or prosecute any patient.

§ 2.18 Restrictions on the use of identification cards.

No person may require any patient to carry on his or her person while away from the program premises any card or other object which would identify the patient as an alcohol or drug abuser. This section does not prohibit a person from requiring patients to use or carry cards or other identification objects on the premises of a program.

§ 2.19 Disposition of records by discontinued programs.

(a) *General.* If a program discontinues operations or is taken over or acquired by another program, it must purge patient identifying information from its records or destroy the records unless—

(1) The patient who is the subject of the records gives written consent (meeting the requirements of § 2.31) to a transfer of the records to the acquiring program or to any other program designated in the consent (the manner of obtaining this consent must minimize the likelihood of a disclosure of patient identifying information to a third party); or

(2) There is a legal requirement that the records be kept for a period specified by law which does not expire until after the discontinuation or acquisition of the program.

(b) *Procedure where retention period required by law.* If paragraph (a)(2) of this section applies, the records must be:

(1) Sealed in envelopes or other containers labeled as follows: "Records of [insert name of program] required to be maintained under [insert citation to statute, regulation, court order or other legal authority requiring that records be kept] until a date not later than [insert appropriate date]"; and

(2) Held under the restrictions of these regulations by a responsible person who must, as soon as practicable after the end of the retention period specified on the label, destroy the records.

§ 2.20 Relationship to State laws.

The statutes authorizing these regulations (42 U.S.C. 290ee-3 and 42 U.S.C. 290dd-3) do not preempt the field of law which they cover to the exclusion of all State laws in that field. If a disclosure permitted under these regulations is prohibited under State law, neither these regulations nor the authorizing statutes may be construed to authorize any violation of that State law. However, no State law may either authorize or compel any disclosure prohibited by these regulations.

§ 2.21 Relationship to Federal statutes protecting research subjects against compulsory disclosure of their identity.

(a) *Research privilege description.* There may be concurrent coverage of patient identifying information by these regulations and by administrative action taken under Section 303 (a) of the Public Health Service Act (42 U.S.C. 242a (a) and the implementing regulations at 42 CFR Part 2a); or section 502 (c) of the Controlled Substances Act (21 U.S.C. 872(c) and the implementing regulations at 21 CFR 1316.21). These "research privilege" statutes confer on the Secretary of Health and Human Services and on the Attorney General, respectively, the power to authorize researchers conducting certain types of research to withhold from all persons not connected with the research the names and other identifying information concerning

individuals who are the subjects of the research.

(b) *Effect of concurrent coverage.* These regulations restrict the disclosure and use of information about patients and use of information about patients while administrative action taken under the research privilege statutes and implementing regulations protects a person engaged in applicable research from being compelled to disclose any identifying characteristics of the individuals who are the subjects of that research. The issuance under Subpart E of these regulations of a court order authorizing a disclosure of information about a patient does not affect an exercise of authority under these research privilege statutes. However, the research privilege granted under 21 CFR 291.505(g) to treatment programs using methadone for maintenance treatment does not protect from compulsory disclosure any information which is permitted to be disclosed under those regulations. Thus, if a court order entered in accordance with Subpart E of methadone maintenance treatment program to disclose certain information about its patients, that program may not invoke the research privilege under 21 CFR 291.505(g) as a defense to a subpoena for that information.

§ 2.22 Notice to patients of Federal confidentiality requirements.

(a) *Notice required.* At the time of admission or as soon thereafter as the patient is capable of rational communication, each program shall:

(1) Communicate to the patient that Federal law and regulations protect the confidentiality of alcohol and drug abuse patient records; and

(2) Give to the patient a summary in writing of the Federal law and regulations.

(b) *Required elements of written summary.* The written summary of the Federal law and regulations must include:

(1) A general description of the limited circumstances under which a program may acknowledge that an individual is present at a facility or disclose outside the program

information identifying a patient as an alcohol or drug abuser.

(2) A statement that violation of the Federal law and regulations by a program is a crime and that suspected violations may be reported to appropriate authorities in accordance with these regulations.

(3) A statement that information related to a patient's commission of a crime on the premises of the program or against personnel of the program is not protected.

(4) A statement that reports of suspected child abuse and neglect made under State law to appropriate State or local authorities are not protected.

(5) A citation to the Federal law and regulations.

(c) *Program options.* The program may devise its own notice or may use the sample notice in paragraph (d) to comply with the requirement to provide the patient with a summary in writing of the Federal law and regulations. In addition, the program may include in the written summary information concerning State law and any program policy not inconsistent with State and Federal law on the subject of confidentiality of alcohol and drug abuse patient records.

(d) *Sample notice.*

Confidentiality of Alcohol and Drug Abuse Patient Records

The confidentiality of alcohol and drug abuse patient records maintained by this program is protected by Federal law and regulations. Generally, the program may not say to a person outside the program that a patient attends the program, or disclose any information identifying a patient as an alcohol or drug abuser *Unless*:

(1) The patient consents in writing;

(2) The disclosure is allowed by a court order; or

(3) The disclosure is made to medical personnel in a medical emergency or to qualified personnel for research, audit, or program evaluation.

Violation of the Federal law and regulations by a program is a crime. Suspected violations may be reported to appropriate authorities in accordance with Federal regulations.

Federal law and regulations do not protect any information about a crime committed by a patient either at the program or against any person who works for the program or about any threat to commit such a crime.

Federal laws and regulations do not protect any information about suspected child abuse or neglect from being reported under State law to appropriate State or local authorities.

(See 42 U.S.C. 290dd-3 and 42 U.S.C. 290ee-3 for Federal laws and 42 CFR Part 2 for Federal regulations.)
(Approved by the Office of Management and Budget under Control No. 0930-0099.)

§ 2.23 Patient access and restrictions on use.

(a) *Patient access not prohibited.*
These regulations do not prohibit a program from giving a patient access to his or her own records, including the opportunity to inspect and copy any records that the program maintains about the patient. The program is not required to obtain a patient's written consent or other authorization under these regulations in order to provide such access to the patient.

(b) *Restriction on use of information.*
Information obtained by patient access to his or her patient record is subject to the restriction on use of his information to initiate or substantiate any criminal charges against the patient or to conduct any criminal investigation of the patient as provided for under § 2.12(d)(1).

Subpart C—Disclosures With Patient's Consent

§ 2.31 Form of written consent.

(a) *Required elements.* A written consent to a disclosure under these regulations must include:

- (1) The specific name or general designation of the program or person permitted to make the disclosure.
- (2) The name or title of the individual or the name of the organization to which disclosure is to be made.
- (3) The name of the patient.
- (4) The purpose of the disclosure.

(5) How much and what kind of information is to be disclosed.

(6) The signature of the patient and, when required for a patient who is a minor, the signature of a person authorized to give consent under § 2.14; or, when required for a patient who is incompetent or deceased, the signature of a person authorized to sign under § 2.15 in lieu of the patient.

(7) The date on which the consent is signed.

(8) A statement that the consent is subject to revocation at any time except to the extent that the program or person which is to make the disclosure has already acted in reliance on it. Acting in reliance includes the provision of treatment services in reliance on a valid consent to disclose information to a third party payer.

(9) The date, event, or condition upon which the consent will expire if not revoked before. This date, event, or condition must insure that the consent will last no longer than reasonably necessary to serve the purpose for which it is given.

(b) *Sample consent form.* The following form complies with paragraph (a) of this section, but other elements may be added.

1. I (name of patient) Request
 Authorize:

2. (name or general designation of program which is to make the disclosure)

3. To disclose: (kind and amount of information to be disclosed)

4. To: (name or title of the person or organization to which disclosure is to be made)

5. For (purpose of the disclosure)

6. Date (on which this consent is signed)

7. Signature of patient

8. Signature of parent or guardian (where required)

9. Signature of person authorized to sign in lieu of the patient (where required)

10. This consent is subject to revocation at any time except to the extent that the program which is to make the disclosure has already taken action in reliance on it. If not previously revoked, this consent will terminate upon: (specific date, event, or condition)

(c) *Expired, deficient, or false consent.*
A disclosure may not be made on the basis of a consent which:

- (1) Has expired;
- (2) On its face substantially fails to conform to any of the requirements set forth in paragraph (a) of this section;
- (3) Is known to have been revoked: or
- (4) Is known, or through a reasonable effort could be known, by the person holding the records to be materially false.

(Approved by the Office of Management and Budget under Control No. 0990-0099.)

§2.32 Prohibition on redisclosure.

(a) *Notice to accompany disclosure.*
Each disclosure made with the patient's written consent must be accompanied by the following written statement:

This information has been disclosed to you from records protected by Federal confidentiality rules (42 CFR Part 2). The Federal rules prohibit you from making any further disclosure of this information unless further disclosure is expressly permitted by the written consent of the person to whom it pertains or as otherwise permitted by 42 CFR Part 2. A general authorization for the release of medical or other information is NOT sufficient for this purpose. The Federal rules restrict any use of the information to criminally investigate or prosecute any alcohol or drug abuse patient.

§ 2.33 Disclosures permitted with written consent.

If a patient consents to a disclosure of his or her records under § 2.31, a program may disclose those records in accordance with that consent to any individual or organization

named in the consent, except that disclosures to central registries and in connection with criminal justice referrals must meet the requirements of § 2.34 and 2.35, respectively.

§ 2.34 Disclosures to prevent multiple enrollments in detoxification and maintenance treatment programs.

(a) *Definitions.* For purposes of this section:

Central registry means an organization which obtains from two or more member programs patient identifying information about individuals applying for maintenance treatment or detoxification treatment for the purpose of avoiding an individual's concurrent enrollment in more than one program.

Detoxification treatment means the dispensing of a narcotic drug in decreasing doses to an individual in order to reduce or eliminate adverse physiological or psychological effects incident to withdrawal from the sustained use of a narcotic drug.

Maintenance treatment means the dispensing of a narcotic drug in the treatment of an individual for dependence upon heroin or other morphine-like drugs.

Member program means a detoxification treatment or maintenance treatment program which reports patient identifying information to a central registry and which is in the same State that central registry or is not more than 125 miles from any border of the State in which the central registry is located.

(b) *Restrictions on disclosure.* A program may disclose patient records to a central registry or to any detoxification or maintenance treatment program not more than 200 miles away for the purpose of preventing the multiple enrollment of a patient only if:

(1) The disclosure is made when:

- (i) The patient is accepted for treatment;
- (ii) The type or dosage of the drug is changed; or
- (iii) The treatment is interrupted, resumed or terminated.

(2) The disclosure is limited to:

- (i) Patient identifying information;

(ii) Type and dosage of the drug; and

(iii) Relevant dates.

(3) The disclosure is made with the patient's written consent meeting the requirements of § 2.31, except that:

(i) The consent must list the name and address of each central registry and each known detoxification or maintenance treatment program to which a disclosure will be made; and

(ii) The consent may authorize a disclosure to any detoxification or maintenance treatment program established within 200 miles of the program after the consent is given without naming any such program.

(c) *Use of information limited to prevention of multiple enrollments.* A central registry and any detoxification or maintenance treatment program to which information is disclosed to prevent multiple enrollments may not redisclose or use patient identifying information for any purpose other than the prevention of multiple enrollments unless authorized by a court order under Subpart E of these regulations.

(d) *Permitted disclosure by a central registry to prevent a multiple enrollment.* When a member program asks a central registry if an identified patient is enrolled in another member program and the registry determines that the patient is so enrolled, the registry may disclose—

(1) The name, address, and telephone number of the member program(s) in which the patient is already enrolled to the inquiring member program, and;

(2) The name, address, and telephone number of the inquiring member program to the member program(s) in which the patient is already enrolled. The member programs may communicate as necessary to verify that no error has been made and to prevent or eliminate any multiple enrollment.

(e) *Permitted disclosure by a detoxification or maintenance treatment program to prevent a multiple enrollment.* A detoxification or maintenance treatment program which has received a disclosure under this section and has determined that the patient is already enrolled may communicate as necessary with the

program making the disclosure to verify that no error has been made and to prevent or eliminate any multiple enrollment.

§ 2.35 Disclosures to elements of the criminal justice system which have referred patients.

(a) A program may disclose information about a patient to those persons within the criminal justice system which have made participation in the program a condition of the disposition of any criminal proceedings against the patient or of the patient's parole or other release from custody if:

(1) The disclosure is made only to those individuals within the criminal justice system who have a need for the information in connection with their duty to monitor the patient's progress (e.g., a prosecuting attorney who is withholding charges against the patient, a court granting pretrial or post trial release, probation or parole officers responsible for supervision of the patient); and

(2) The patient has signed a written consent meeting the requirements of § 2.31 (except paragraph (a)(8) which is inconsistent with the revocation provisions of paragraph (c) of this section) and the requirements of paragraphs (b) and (c) of this section.

(b) *Duration of consent.* The written consent must state the period during which it remains in effect. This period must be reasonable, taking into account:

(1) The anticipated length of the treatment;

(2) The type of criminal proceeding involved, the need for the information in connection with the final disposition of that proceeding, and when the final disposition will occur; and

(3) Such other factors as the program, the patient, and the person(s) who will receive the disclosure consider pertinent.

(c) *Revocation of consent.* The written consent must state that it is revocable upon the passage of a specified amount of time or the occurrence of a specified, ascertainable event. The time or occurrence upon which consent becomes revocable

may be no later than the final disposition of the conditional release or other action in connection with which consent was given.

(d) *Restrictions on redisclosure and use.* A person who receives patient information under this section may redisclose and use it only to carry out that person's official duties with regard to the patient's conditional release or other action in connection with which the consent was given.

Subpart D—Disclosures Without Patient Consent

§ 2.51 Medical emergencies.

(a) *General Rule.* Under the procedures required by paragraph (c) of this section, patient identifying information may be disclosed to medical personnel who have a need for information about a patient for the purpose of treating a condition which poses an immediate threat to the health of any individual and which requires immediate medical intervention.

(b) *Special Rule.* Patient identifying information may be disclosed to medical personnel of the Food and Drug Administration (FDA) who assert a reason to believe that the health of any individual may be threatened by an error in the manufacture, labeling, or sale of a product under FDA jurisdiction, and that the information will be used for the exclusive purpose of notifying patients or their physicians of potential dangers.

(c) *Procedures.* Immediately following disclosure, the program shall document the disclosure in the patient's records, setting forth in writing:

- (1) The name of the medical personnel to whom disclosure was made and their affiliation with any health care facility;
- (2) The name of the individual making the disclosure;
- (3) The date and time of the disclosure; and
- (4) The nature of the emergency (or error, if the report was to FDA).

(Approved by the Office of Management and Budget under Control No. 0930-0099.)

§ 2.52 Research activities.

(a) Patient identifying information may be disclosed for the purpose of conducting scientific research if the program director makes a determination that the recipient of the patient identifying information:

- (1) Is qualified to conduct the research; and
- (2) Has a research protocol under which the patient identifying information:
 - (i) Will be maintained in accordance with the security requirements of § 2.16 of these regulations (or more stringent requirements); and
 - (ii) Will not be redisclosed except as permitted under paragraph (b) of this section.

(b) A person conducting research may disclose patient identifying information obtained under paragraph (a) of this section only back to the program from which that information was obtained and may not identify any individual patient in any report of that research or otherwise disclose patient identities.

§ 2.53 Audit and evaluation activities.

(a) *Records not copied or removed.* If patient records are not copied or removed, patient identifying information may be disclosed in the course of a review of records on program premises to any person who agrees in writing to comply with the limitations on redisclosure and use in paragraph (d) of this section and who:

- (1) Performs the audit or evaluation activity on behalf of:
 - (i) Any Federal, State, or local governmental agency which provides financial assistance to the program or is authorized by law to regulate its activities; or
 - (ii) Any private person which provides financial assistance to the program, which is a third party payer covering patients in the program, or which is a peer review organization performing a utilization or quality control review; or
- (2) Is determined by the program director to be qualified to conduct the audit or evaluation activities.

(b) *Copying or removal of records.* Records containing patient identify-

ing information may be copied or removed from program premises by any person who:

- (1) Agrees in writing to:
 - (i) Maintain the patient identifying information in accordance with the security requirements provided in § 2.16 of these regulations (or more stringent requirements);
 - (ii) Destroy all the patient identifying information upon completion of the audit or evaluation; and
 - (iii) Comply with the limitations on disclosure and use in paragraph (d) of this section; and
- (2) Performs the audit or evaluation activity on behalf of:
 - (i) Any Federal, State, or local governmental agency which provides financial assistance to the program or is authorized by law to regulate its activities; or
 - (ii) Any private person which provides financial assistance to the program, which is a third part payer covering patients in the program, or which is a peer review organization performing a utilization or quality control review.

(c) *Medicare or Medicaid audit or evaluation.* (1) For purposes of Medicare or Medicaid audit or evaluation under this section, audit or evaluation includes a civil or administrative investigation of the program by any Federal, State, or local agency responsible for oversight of the Medicare or Medicaid program and includes administrative enforcement, against the program by the agency, of any remedy authorized by law to be imposed as a result of the findings of the investigation.

(2) Consistent with the definition of program in § 2.11, program includes an employee of, or provider of medical services under, the program when the employee or provider is the subject of a civil investigation or administrative remedy, as those terms are used in paragraph (c)(1) of this section.

(3) If a disclosure to a person is authorized under this section for a Medicare or Medicaid audit or evaluation, including a civil investigation or administrative remedy, as those terms are used in paragraph (c)(1) of this section, then a peer review organization which obtains

the information under paragraph (a) or (b) may disclose the information to that person but only for purposes of Medicare or Medicaid audit or evaluation.

(4) The provisions of this paragraph do not authorize the agency, the program, or any other person to disclose or use patient identifying information obtained during the audit or evaluation for any purposes other than those necessary to complete the Medicare or Medicaid audit or evaluation activity as specified in this paragraph.

(d) *Limitations on disclosure and use.* Except as provided in paragraph (c) of this section, patient identifying information disclosed under this section may be disclosed only back to the program from which it was obtained and used only to carry out an audit or evaluation purpose or to investigate or prosecute criminal or other activities, as authorized by a court order entered under § 2.66 of these regulations.

Subpart E—Court Orders Authorizing Disclosure And Use

§ 2.61 Legal effect of order.

(a) *Effect.* An order of a court of competent jurisdiction entered under this subpart is a unique kind of court order. Its only purpose is to authorize a disclosure or use of patient information which would otherwise be prohibited by 42 U.S.C. 290ee-3, 42 U.S.C. 290dd-3 and these regulations. Such an order does not compel disclosure. A subpoena or a similar legal mandate must be issued in order to compel disclosure. This mandate may be entered at the same time as and accompany an authorizing court order entered under these regulations.

(b) *Examples.* (1) A person holding records subject to these regulations receives a subpoena for those records: a response to the subpoena is not permitted under the regulations unless an authorizing court order is entered. The person may not disclose the records in response to the subpoena unless a court of competent jurisdiction enters an authorizing order under these regulations.

(2) An authorizing court order is entered under these regulations, but

the person authorized does not want to make the disclosure. If there is no subpoena or other compulsory process or a subpoena for the records has expired or been quashed, that person may refuse to make the disclosure. Upon the entry of a valid subpoena or other compulsory process the person authorized to disclose must disclose, unless there is a valid legal defense to the process other than the confidentiality restrictions of these regulations.

§ 2.62 Order not applicable to records disclosed without consent to researchers, auditors and evaluators.

A court order under these regulations may not authorize qualified personnel, who have received patient identifying information without consent for the purpose of conducting research, audit or evaluation, to disclose that information or use it to conduct any criminal investigation or prosecution of a patient. However, a court order under § 2.66 may authorize disclosure and use of records to investigate or prosecute qualified personnel holding the records.

§ 2.63 Confidential communications.

(a) A court order under these regulations may authorize disclosure of confidential communications made by a patient to a program in the course of diagnosis, treatment, or referral for treatment only if:

(1) The disclosure is necessary to protect against an existing threat to life or of serious bodily injury, including circumstances which constitute suspected child abuse and neglect and verbal threats against third parties;

(2) The disclosure is necessary in connection with investigation or prosecution of an extremely serious crime, such as one which directly threatens loss of life or serious bodily injury, including homicide, rape, kidnapping, armed robbery, assault with a deadly weapon, or child abuse and neglect; or

(3) The disclosure is in connection with litigation or an administrative proceeding in which the patient offers testimony or other evidence pertaining to the content of the confidential communications.

§ 2.64 Procedures and criteria for orders authorizing disclosures for noncriminal purposes.

(a) *Application.* An order authorizing the disclosure of patient records for purposes other than criminal investigation or prosecution may be applied for by any person having a legally recognized interest in the disclosure which is sought. The application may be filed separately or as part of a pending civil action in which it appears that the patient records are needed to provide evidence. An application must use a fictitious name, such as John Doe, to refer to any patient and may not contain or otherwise disclose any patient identifying information unless the patient is the applicant or has given a written consent (meeting the requirements of these regulations) to disclosure or the court has ordered the record of the proceeding sealed from public scrutiny.

(b) *Notice.* The patient and the person holding the records from whom disclosure is sought must be given:

(1) Adequate notice in a manner which will not disclose patient identifying information to other persons: and

(2) An opportunity to file a written response to the application, or to appear in person, for the limited purpose of providing evidence on the statutory and regulatory criteria for the issuance of the court order.

(c) *Review of evidence: Conduct of hearing.* Any oral argument, review of evidence, or hearing on the application must be held in the judge's chambers or in some manner which ensures that patient identifying information is not disclosed to anyone other than a party to the proceeding, the patient, or the person holding the record, unless the patient requests an open hearing in a manner which meets the written consent requirements of these regulations. The proceeding may include an examination by the judge of the patient records referred to in the application.

(d) *Criteria for entry of order.* An order under this section may be entered only if the court determines that good cause exists. To make this

determination the court must find that:

- (1) Other ways of obtaining the information are not available or would not be effective; and
- (2) The public interest and need for the disclosure outweigh the potential injury to the patient, the physician-patient relationship and the treatment services.

(e) *Content of order.* An order authorizing a disclosure must:

- (1) Limit disclosure to those parts of the patient's record which are essential to fulfill the objective of the order;
- (2) Limit disclosure to those persons whose need for information is the basis for the order; and
- (3) Include such other measures as are necessary to limit disclosure for the protection of the patient, the physician-patient relationship and the treatment services; for example, sealing from public scrutiny the record of any proceeding for which disclosure of a patient's record has been ordered.

§ 2.65 Procedures and criteria for orders authorizing disclosure and use of records to criminally investigate or prosecute patients.

(a) *Application.* An order authorizing the disclosure or use of patient records to criminally investigate or prosecute a patient may be applied for by the person holding the records or by any person conducting investigative or prosecutorial activities with respect to the enforcement of criminal laws. The application may be filed separately, as part of an application for a subpoena or other compulsory process, or in a pending criminal action. An application must use a fictitious name such as John Doe, to refer to any patient and may not contain or otherwise disclose patient identifying information unless the court has ordered the record of the proceeding sealed from public scrutiny.

(b) *Notice and hearing.* Unless an order under § 2.66 is sought with an order under this section, the person holding the records must be given:

(1) Adequate notice (in a manner which will not disclose patient identifying information to third parties) of an application by a person performing a law enforcement function:

(2) An opportunity to appear and be heard for the limited purpose of providing evidence on the statutory and regulatory criteria for the issuance of the court order; and

(3) An opportunity to be represented by counsel independent of counsel for an applicant who is a person performing a law enforcement function.

(c) *Review of evidence: Conduct of hearings.* Any oral argument, review of evidence, or hearing on the application shall be held in the judge's chambers or in some other manner which ensures that patient identifying information is not disclosed to anyone other than a party to the proceedings, the patient, or the person holding the records. The proceeding may include an examination by the judge of the patient records referred to in the application.

(d) *Criteria.* A court may authorize the disclosure and use of patient records for the purpose of conducting a criminal investigation or prosecution of a patient only if the court finds that all of the following criteria are met:

(1) The crime involved is extremely serious, such as one which causes or directly threatens loss of life or serious bodily injury including homicide, rape, kidnapping, armed robbery, assault with a deadly weapon, and child abuse and neglect.

(2) There is a reasonable likelihood that the records will disclose information of substantial value in the investigation or prosecution.

(3) Other ways of obtaining the information are not available or would not be effective.

(4) The potential injury to the patient, to the physician-patient relationship, and to the ability of the program to provide services to other patients is outweighed by the public interest and the need for the disclosure.

(5) If the applicant is a person performing a law enforcement function that:

(i) The person holding the records has been afforded the opportunity to be represented by independent counsel; and

(ii) Any person holding the records which is an entity within Federal, State, or local government has in fact been represented by counsel independent of the applicant.

(e) *Content of order.* Any order authorizing a disclosure of use of patient records under this section must:

(1) Limit disclosure and use to those parts of the patient's record which are essential to fulfill the objective of the order;

(2) Limit disclosure to those law enforcement and prosecutorial officials who are responsible for, or are conducting, the investigation or prosecution, and limit their use of the records to investigation and prosecution of extremely serious crime or suspected crime specified in the application; and

(3) Include such other measures as are necessary to limit disclosure and use to the fulfillment on only that public interest and need found by the court.

§ 2.66 Procedures and criteria for orders authorizing disclosure and use of records to investigate or prosecute a program or the person holding the records.

(a) *Application.* (1) An order authorizing the disclosure or use of patient records to criminally or administratively investigate or prosecute a program or the person holding the records (or employees or agents of that program or person) may be applied for by any administrative, regulatory, supervisory, investigative, law enforcement, or prosecutorial agency having jurisdiction over the program's or person's activities.

(2) The application may be filed separately or as part of a pending civil or criminal action against a program or the person holding the records (or agents or employees of the program or person) in which it

appears that the patient records are needed to provide material evidence. The application must use a fictitious name, such as John Doe, to refer to any patient and may not contain or otherwise disclose any patient identifying information unless the court has ordered the record of the proceeding sealed from public scrutiny or the patient has given a written consent (meeting the requirements of § 2.31 of these regulations) to that disclosure.

(b) *Notice not required.* An application under this section may, in the discretion of the court, be granted without notice. Although no express notice is required to the program, to the person holding the records, or to any patient whose records are to be disclosed, upon implementation of an order so granted any of the above persons must be afforded an opportunity to seek revocation or amendment of that order, limited to the presentation of evidence on the statutory and regulatory criteria for the issuance of the court order.

(c) *Requirements for order.* An order under this section must be entered in accordance with, and comply with the requirements of, paragraphs (d) and (e) of § 2.64 of these regulations.

(d) *Limitations on disclosure and use of patient identifying information:*

(1) An order entered under this section must require the deletion of patient identifying information from any documents made available to the public.

(2) No information obtained under this section may be used to conduct any investigation or prosecution of a patient, or be used as the basis for an application for an order under § 2.65 of these regulations.

§ 2.67 Orders authorizing the use of undercover agents and informants to criminally investigate employees or agents of a program.

(a) *Application.* A court order authorizing the placement of an undercover agent or informant in a program as an employee or patient may be applied for by any law enforcement or prosecutorial agency which has reason to believe that employees or agents of the program are engaged in criminal misconduct.

(b) *Notice.* The program director must be given adequate notice of the application and an opportunity to appear and be heard (for the limited purpose of providing evidence on the statutory and regulatory criteria for the issuance of the court order), unless the application asserts a belief that: (1) The program director is involved in the criminal activities to be investigated by the undercover agent or informant; or (2) The program director will intentionally or unintentionally disclose the proposed placement of an undercover agent or informant to the employees or agents who are suspected of criminal activities.

(c) *Criteria.* An order under this section may be entered only if the court determines that good cause exists. To make this determination the court must find:

(1) There is reason to believe that an employee or agent of the program is engaged in criminal activity;

(2) Other ways of obtaining evidence of this criminal activity are not available or would not be effective; and

(3) The public interest and need for the placement of an undercover

agent or informant in the program outweigh the potential injury to patients of the program, physician-patient relationship and the treatment services.

(d) *Content of order.* An order authorizing the placement of an undercover agent or informant in a program must:

(1) Specifically authorize the placement of an undercover agent or an informant;

(2) Limit the total period of the placement to six months;

(3) Prohibit the undercover agent or informant from disclosing any patient identifying information obtained from the placement except as necessary to criminally investigate or prosecute employees or agents of the program; and

(4) Include any other measures which are appropriate to limit any potential disruption of the program by the placement and any potential for a real or apparent breach of patient confidentiality; for example, sealing from public scrutiny the record of any proceeding for which disclosure of a patient's record has been ordered.

(e) *Limitation on use of information.* No information obtained by an undercover agent or informant placed under this section may be used to criminally investigate or prosecute any patient or as the basis for an application for an order under § 2.65 of these regulations.

[FR Doc. 87-11785 Filed 6-5-87; 8:45 am]
BILLING CODE 4460-17-90

Chapter 12—Systems Coordination

Changing patterns in alcohol and other drug (AOD) involved individuals, patterns that may have developed over a lifetime, is a complex challenge. It is a challenge that calls for complex solutions. The effects of alcohol and other drug abuse on society as a whole are profound. AOD abuse creates a multitude of personal and financial burdens. The problem of AOD abuse absolutely defies a solution by an individual agency or program.

Forming a systemwide perspective is one of the first links to be constructed in any chain of solutions. Legislators, judicial officials, treatment personnel, and criminal justice professionals all have an impact on intervening with alcohol- and drug-involved persons. When tensions between agencies can be overcome, a “greater good” is achieved. Each professional within any system component has a job to do, but those responsibilities are still reconceived within a larger framework.

Although personnel from various system components may often have different, even opposing perspectives, the overriding goal is the same—to successfully intervene with AOD-abusing individuals. To achieve the most positive outcomes, communication and coordination are essential. When various agencies and sectors work together, much more is accomplished than if those same professionals acted alone, within a vacuum.

The Need for Coordination

Rates for both relapse and recidivism for AOD-involved offenders are high. AOD abuse is directly linked to criminal activity, in addition to illegal substance use, which is a crime in itself. Substance abuse may lead to income generating crimes to support an addiction, along with violent crimes which are an integral part of illegal drug trade.

Systems coordination is a necessary goal for effective intervention. As the National Institute of Corrections Task Force Report (1991) concluded, “Punishment alone is of questionable effectiveness, but treatment without strict expectations and consequences is also likely to be ineffective. Punishment and treatment should not be seen as alternatives, but as complementary.”

Drug and alcohol addiction are chronic, relapsing disorders that require treatment. Research indicates that treatment can be effective in helping many alcohol- and drug-involved individuals decrease or overcome their dependency and also discontinue criminal activities. Studies affirm that treatment outcomes are improved with sufficient time spent in treatment. Such results indicate the long-term cost-effectiveness of treatment, as it impedes the financial drain created by AOD-involved individuals, as well as increases the ultimate responsibility and productivity of such persons within societal

constructs. Treatment is most successful when there are *comprehensive* and *continuing* services; this collaborative approach can best be achieved through systems coordination. (See Figure 12-A for model.)

Coordination among systems is especially critical given the fact that treatment efforts are not, at this time, uniform and standardized. Lack of such standardization can lead to the duplication of effort and a reduction in maximum effectiveness of treatment if agencies and individuals do not communicate freely and collaborate. Coordination is the only means that treatment, health, and criminal justice agencies, as well as legislative and judicial personnel, have of ensuring effective service delivery.

The treatment system is complex. The mission of treatment agencies generally focuses on helping individuals effect positive change in their lives. Various treatment services may come under the auspices of the health care system; others are affiliated with mental health systems; still others function as independent, separate agencies. Funding sources, client referrals, staffing, facilities, and other aspects of treatment programs often vary markedly from agency to agency.

The criminal and juvenile justice systems (with which a high percentage of chemically dependent persons eventually have contact) are also complex, consisting of many agencies with specific and diverse purposes. The overall goals

of the system are to protect the public and to rehabilitate offenders. In many cases, clients may be served by more than one agency within the criminal justice system; often, however, information is not shared among the agencies to facilitate the most comprehensive and effective interventions.

It is easy to understand why coordination of services among these two systems is difficult. The mission, funding, administration, personnel, and even clientele are often diverse, both within each of the systems and between them.

In a comparable manner, the judicial and legislative branches of government have different perspectives and goals. Members of each body represent the needs of their constituents, but they have very different avenues for carrying out their tasks. Both legislators and judges, however, are faced with difficult decisions related to alcohol and other drugs. The legislative

and judicial branches of government are faced with the enormous human and fiscal costs of AOD abuse on a daily basis. It is necessary that legislators and judges collaborate and work together when dealing with this population. Improved communication and coordinated efforts will result in more effective outcomes than either entity could achieve separately.

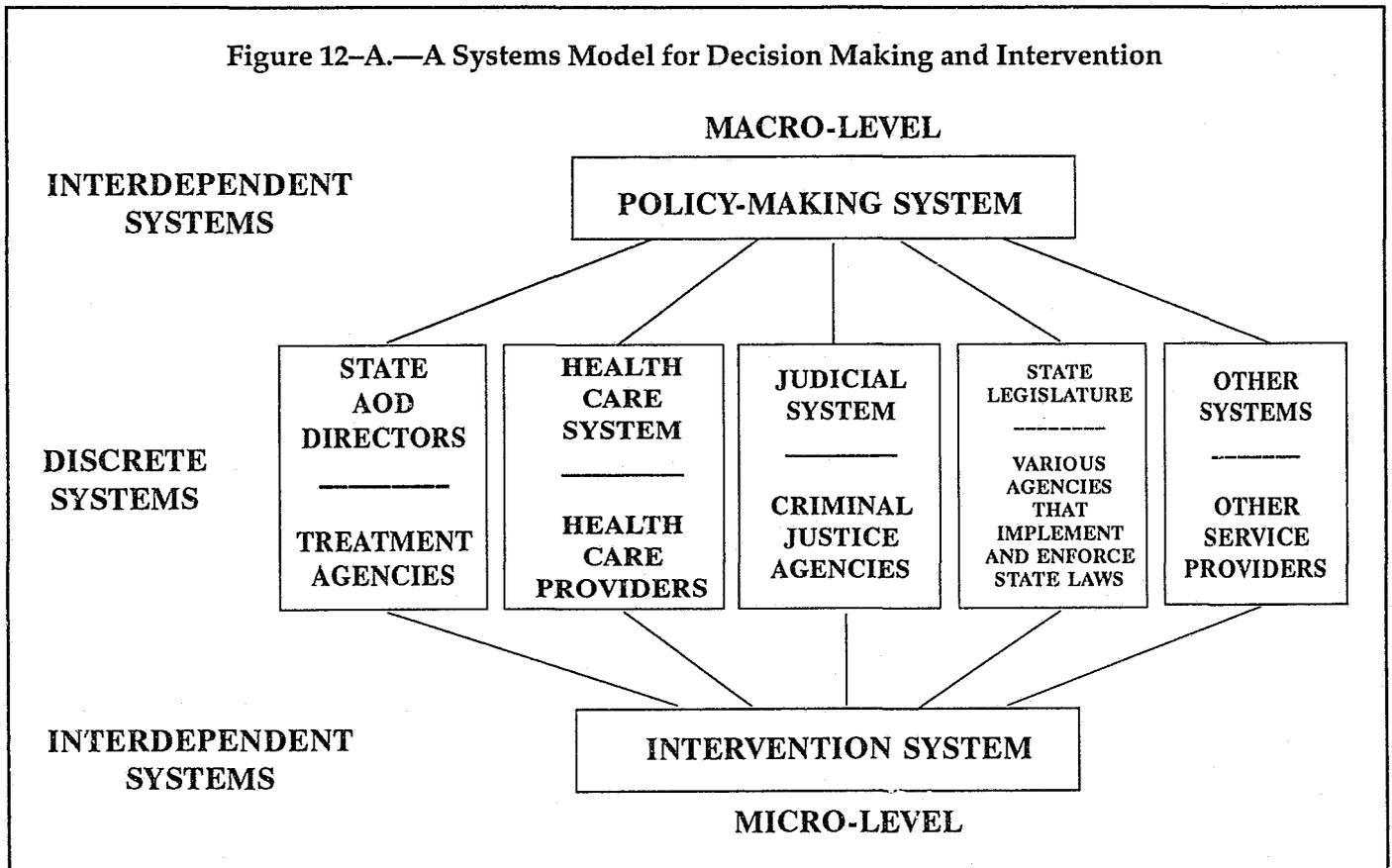
Roles

Effective coordination combines the strengths of various systems. For example:

- *Treatment/State AOD Directors*—Treatment programs foster growth and development of patients toward drug-free lifestyles and improved personal functioning. Treatment staff are responsible for effective assessments, which is the first step in

successfully intervening with AOD-involved persons. They are also responsible for developing effective case plans (in conjunction with medical staff/health agencies) which are part of the long-term process of intervention. State AOD Directors administer federal block grant funding and ensure that States comply with maintenance of effort requirements and necessary assurances. Without awareness of the need for this compliance, State policymakers run the risk of losing access to valuable funding.

- *Public Health Agencies*—Health agencies are involved in educating and assisting AOD-involved persons with the means for becoming drug free. They are also involved in providing primary health care and in educating AOD-involved individuals about the dangers of infectious diseases often spread through drug use.



(For a complete treatment of this issue, see Chapter 7, Substance Abuse Related Infectious Diseases.)

- *Legislatures*—Legislators appropriate funds for the development and consideration of needed treatment programs and case management systems to support them. An understanding of treatment can also lead to the development of policies which have a great impact on the ability to provide services to AOD-involved persons.
- *Judiciary*—Judges mandate that offenders participate in treatment and primary health care to control the spread of infectious diseases. They also have the authority to enforce that participation, ensuring that individuals are motivated to stay in treatment. This is significant in that length of time spent in treatment is directly correlated with the ultimate success of a treatment plan.
- *Criminal Justice*—Criminal justice agencies can refer clients to treatment programs and provide sanctions which mandate that AOD-involved offenders remain in such programs.

In the final analysis, AOD-involved patients and the public are better served by systems which coordinate their efforts to provide a continuum of treatment services. Areas where this can be accomplished include, but are not limited to the areas noted in Table 12-A.

While these examples are not exhaustive, they provide illustrations of possible ways in which all systems—treatment, health, judicial, and legislative—can collaborate for the most effective service delivery for AOD-involved persons.

All systems and their key players have a role in systems coordina-

Table 12-A.—Structural and Service Coordination

<u>Structural Coordination</u>	<u>Coordination of Services</u>
Goal development	Patient identification
Needs and resources assessment	Patient assessment and treatment case planning
Funding	Patient treatment matching and referral
Development of other resources (e.g., treatment programs, staff, facilities)	Treatment interventions (comprehensive and continuing)
Program evaluation	Monitoring and case reporting

tion. Often, agency personnel develop informal means of collaboration, as one staff member becomes familiar with the programs and service providers in another agency. These staff members, and sometimes their agencies, may work very closely to meet the needs of mutual patients because of such voluntary efforts.

Sometimes agency administrators voluntarily enter into working relationships and cooperative agreements to address needs and issues they hold in common. Such interagency agreements help agencies concur on a joint purpose and serve to clarify tasks, roles, and responsibilities of each agency.

Legislative, judicial, health, and treatment personnel can develop communication channels to promote a better understanding of the needs and issues each system faces. Such collaboration may be informal, as through telephone calls and informal meetings; or they may be official, as with hearings, formal reports, and recommendations. In some instances, inter-systems coordination is facilitated through sophisticated Management Information Systems (MIS) case management procedures.

Challenges for Alcohol and Drug Abuse Treatment

Accumulated research on the effectiveness of treatment for alcohol and other drug abuse documents the efficacy of treatment strategies in alleviating substance abuse disorders and their related consequences. Successful treatment will have economic, health, and human benefits for individuals and society. For example, intravenous drug use is increasingly indicated as the route of transmission of the Human Immunodeficiency Virus (HIV), the causative agent of AIDS. Effective drug abuse treatment positively impacts the economic and health care burden of this major public health crisis. The cost, both financial and human, of placing children of substance abusing women in foster care could be significantly diminished through appropriate treatment for addicted women of childbearing age (Primm, 1992).

Although much is already known about substance abuse treatment, additional research is

needed to increase and enhance treatment capabilities. Some identified areas for additional research include (Primm, 1992):

- improved pharmacologic agents for drug abuse treatment, including other chemical treatments to ease withdrawal, prevent craving, and block the effects of drugs;
- other ways that methadone can be used to help drug abusers (e.g., effectiveness in reducing risk of HIV transmission);
- new ways to keep drugs from entering the brain;
- improved nonpharmacologic treatment strategies;
- determination of the effects of drug abuse on the immune system, especially related to the efficiency of HIV transmission and to prevent asymptomatic HIV-infected intravenous drug users from progressing to symptomatic disease;
- discovery of exactly how HIV and other viral diseases are transmitted by intravenous drug users;
- exploration of the social and environmental pressures that stimulate renewed drug use among alcoholics and other drug-dependent persons after periods of abstinence and sobriety; and
- ways to improve retention in treatment.

Challenges for federal and State officials and the treatment community include the need to expand treatment capabilities and accessibility. Additional trained treatment personnel will be needed to accomplish this objective, and attention must be given to providing equitable salaries and reducing stress and burnout (Primm, 1992).

Drug abuse treatment also needs to be mainstreamed into the public health care delivery system and should become a part of hospital

and clinic care. Treatment centers need to provide comprehensive, community-based service delivery systems in one location where clients receive a full range of medical, social, and psychological services. Not only are more and better organized services needed, but attention must be focused on matching patients with the most appropriate treatment modality for their needs (Primm, 1992). More information on patient-treatment matching is provided in Chapter 5.

Implementing Systems Coordination

There are at least five elements needed for effective systems coordination.

1. Planning groups
2. Communication
3. Teamwork
4. Conflict management
5. Evaluation

Planning Groups and Power Clusters

The first step in achieving systems coordination is an interactive planning process. Until the principal players in two or more systems come together to discuss their similarities and differences, collaboration cannot be accomplished. Planning groups should work toward assessing needs and resources, establishing mutual goals, and defining operating procedures.

The outcome of these groups should be a clearly articulated statement of the reasons for working cooperatively and the plan for doing so. The planning group may need to organize communication mechanisms and develop the parameters for effective working

relationships. The planning group should also develop a strategy for evaluating the systems coordination efforts and making needed changes when indicated.

Dr. Daniel Ogden (1989) has discussed the formation of *power clusters* as the process by which many important policy shaping decisions are made. The "power cluster system" is an informal system of communication and decision making among people working in different areas revolving around the same issue. Ogden describes seven important patterns of behavior which drive the policy-making process.

1. Close personal and institutional ties develop among the participants in each cluster.
2. Participants rarely change power clusters.
3. People from all parts of each power cluster are driven by their own need to be effective and to become active participants in their power cluster communication network.
4. Policy decisions normally are made within each power cluster.
5. Each cluster has internal conflicts among competing interests.
6. Each power cluster develops its own internal, informal power structure.
7. The power clusters place great upward pressure on the budgets of federal, State, and even local governments.

Peggy Booth (in draft, 1993) discusses the need for "finding allies" in developing successful methods for intervening with AOD-involved persons. Key players must communicate and must be committed if resistance is to be overcome. For example, in the criminal justice system, the leadership must communicate their commitment to a program to everyone involved in

its implementation. Without this buy-in, programs run the risk of being undermined at any point in the continuum (Booth, in draft, 1993).

Communication and Information Sharing

The purposes of communication include sharing information, persuading others, clarifying and understanding, and decision making (Koehler and Sisco, 1981). Communications during the planning process and implementation of systems coordination efforts will serve all of these purposes. If communication is effective, coordination efforts are also likely to be effective. However, there are many barriers to effective communication. These may include (American Probation and Parole Association and National Association of State Alcohol and Drug Abuse Directors, 1992):

- misunderstanding respective roles;
- conflicting goals;
- confidentiality;
- control issues; and
- misconception of other professional perspectives.

These barriers are not insurmountable, however. In October 1989, the National Center for State Courts co-sponsored a conference called, "Legislative-Judicial Relations: Seeking a New Partnership." Conference participants discussed such issues as communication, cooperation in State governments, and intermediaries. Four attributes of successful communication between these two groups emerged over the course of the conference and can be generalized to many systems (Ridge, & Friesen, 1990):

- Familiarization with the roles, procedures, and organization of the other branch allows one branch to anticipate the effect of their actions on the other.

- Personal contact is important, because people are more likely to talk and listen to people they know.
- Permanence must be ensured by vesting responsibility for ongoing communication in an office or institution.
- Intermediaries can help communication when members of either branch feel they lack authorization to communicate.

Groups involved in collaborative efforts need to plan for effective communication. This may involve specifying mechanisms for communication, such as periodic meetings, reports, memoranda, and both formal and informal communication channels. Feedback is vital in communication loops. A process for periodic evaluation of communication is advisable.

Teamwork

In today's complex society, few tasks can be completed solely by one person or one agency. Forming alliances and sharing responsibilities are necessities. However, many people emphasize traditional values of independence and individuality. Sometimes personal values and preferences can be at odds with what is needed to accomplish the best outcomes for patients and the public.

The Center for Substance Abuse Treatment published a *Criminal Justice Treatment Planning Chart* (1993a) and a *Juvenile Justice Treatment Planning Chart* (1993b). These charts illustrate the numerous points in the criminal and juvenile justice systems where treatment and criminal/juvenile justice personnel may work as part of a team in providing services to AOD-involved individuals. There are many decision points in the criminal justice system where coordinated strategies for substance abuse assessment and treatment interventions may be

applied—pre-trial, jail, trial, sentencing, probation, corrections, and parole. In the juvenile justice system, the decision points where coordinated strategies for alcohol and other drug abuse treatment interventions may be applied include intake, social investigation, fact-finding hearing, adjudication, disposition, and aftercare.

Understanding the critical substance abuse treatment components is essential to the development of comprehensive substance abuse treatment plans within the criminal/juvenile justice system. Likewise, an understanding of the flow of the case-management process, from arrest to release, is essential for coordination and linkages between and among the treatment, health, and criminal/juvenile justice systems.

Conflict Management

Conflict is a fact of life. It is a natural mechanism, occurring on a daily basis. Conflict can be both constructive and destructive (Meyer, 1989). Constructive aspects of conflict include:

- opening issues to cooperative discussion;
- opportunity to solve a problem;
- improved understanding between individuals or groups;
- encouragement for people to grow;
- increased productivity;
- improved morale and self-esteem; and
- release of pent-up resentment, emotion, and anxiety.

Destructive aspects of conflict include:

- diversion of energy from important tasks and issues;
- barriers to cooperation, understanding, and action;
- decreased productivity;
- deepened differences;
- destroyed morale and self-esteem;

- nonproductive behavior like name calling; and
- prevention of healthy discussion of differences.

Appropriate conflict management strategies may depend on the situation and the context. Thomas (1976) has proposed five modes of handling conflict.

1. *Competing*. This involves pursuing one's own concerns at the other's expense—a win-lose approach. It is appropriate in emergencies, or when quick, decisive action is critical. It also is appropriate on issues that are vital to the welfare of the organization when one is sure s/he is right.
2. *Accommodating*. This strategy involves neglecting one's own concerns to satisfy the concerns of another. This is the opposite of competing and is a reversed win-lose approach. This is an appropriate strategy when one realizes one is wrong; when the issue is much more important to the other person; when maintaining good feelings is more important than the issue at hand; and when the other person is winning and continued resistance will damage one's cause.
3. *Avoiding*. In this approach, one pursues neither one's own concerns nor the other's. It is appropriate when an issue is not important enough to deal with; when the chances of satisfying one's concerns are very low; when a cooling off time is needed; and when time is needed to gather more information.
4. *Collaborating*. This style is the opposite of avoiding. Both parties work to find a solution that satisfies the concerns of both. It is appropriate when both sets of concerns are too important to be compromised;

when the objective is to learn and grow; when commitment can be gained by including others' needs in a decision; and when bad feelings are interfering with a relationship.

5. *Compromising*. The objective of this style is to find a mutually acceptable solution that partially satisfies both parties. It is appropriate as a backup when collaboration or competition fail to arrive at a mutually acceptable solution, under time pressures, and when opponents with equal power are strongly committed to mutually exclusive goals.

Deep and Sussman (1990) offer 10 guidelines for resolving conflicts.

- Listen to the other person's assertions.
- Ask questions to clarify the other person's position.
- Don't get angry. Accept the person's right to disagree with you.
- Communicate your position clearly and thoroughly.
- Focus on issues and behaviors rather than on emotions and personalities.
- Discuss the present.
- Focus on the future.
- Take responsibility for your role in the conflict.
- Summarize apparent needs and desires of both parties. Be creative in exploring options and in finding an equitable solution.
- Keep the lines of communication open. Agree to talk about problems more openly in the future.

These strategies are important to keep in mind as they apply directly to the coordination of effort among the various individuals and agencies who deal with AOD-involved individuals. Conflict is a fact of life; learning to manage and resolve those conflicts is an important step in being able to work together to achieve a unified goal. In this case,

the goal of effective service delivery to AOD-involved persons is well-served by a collaborative effort. Such an effort will inevitably be much smoother when all key players are familiar with the principles of conflict resolution.

Evaluation

No program or task is complete without an evaluation. Evaluation of systems coordination should ask the questions:

- *Is the process working effectively?*
- *Is it achieving the outcomes for which it was intended?*

In order to evaluate the process and outcomes, a group must start with clear goals and objectives. These determine what is to be evaluated. Although it is usually considered last, evaluation should occur throughout collaborative efforts.

Evaluation mechanisms can be built into teamwork. When teams meet, a small amount of time should be set aside during the meeting to evaluate the team's efforts. If communication is open and conflict management techniques have been employed, participants should be able to express their thoughts and feelings about the group process and the outcomes of the team's efforts.

Evaluations can be both formal and informal. The type described in the preceding paragraph is an example of informal evaluation. More formal evaluation approaches may include descriptive summaries of program accomplishments and problems. These often are based on quantitative data that is easily compiled. For example, coordinated service systems might want to collect information about the number of clients served, the number of contact hours, the types of interventions (e.g., recidivism rates, employment rates, drug-free days).

Before and after studies take measures before the implementation

of coordinated systems and again after they have been executed. For example, data could be compiled to look at the differences in waiting times for persons to enter treatment programs before and after development of working agreements between agencies. Indicators of effective feedback and communication between criminal/juvenile justice systems and treatment personnel is another area that could be measured before and after development of collaborative relationships.

For effective evaluation of systems coordination efforts, several processes need to be instituted. These include collecting data that is indicative of the question to be answered. If possible, a management information system is helpful. However, manual collection of such data is feasible. Collected data must then be organized and analyzed to determine the effectiveness of coordinating efforts. Finally, it is important to disseminate the results of evaluation efforts and take action based on the findings. If evaluation efforts indicate that the goals of collaboration have not been achieved, new approaches may need to be developed and implemented.

Effective evaluation yields positive results. It provides concrete evidence about the incidence of substance abuse, the need for funding, and many other tangible and intangible factors. This information can then be utilized in the effort to obtain more funding or additional staff, for example.

Resource Development

The need for interventions with alcohol- and drug-involved persons far exceeds the resources for meeting the demand. One way in which systems coordination efforts can be beneficial is in obtaining

and allocating these resources. Resources include funds, personnel, and information.

Funding

Funding frequently is cited as a pressing need in effective service delivery. Service systems often are stretched by increasing demands and decreasing funds. Funding also often determines the extent to which personnel, information, and other resources may be obtained.

Funding sources for alcohol and drug abuse interventions include federal, State, and local governments, and private sector funds. This section will contain a very brief overview of these funding options (Romig and Rasmussen, 1991).

Federal Funding

Grants. The following federal block grants transfer money to the States to purchase treatment services for AOD abusers:

- The newly configured *State Block Grant for Prevention and Treatment of Substance Abuse* (formerly the ADMS) Block Grants provide financial assistance to States and territories for substance abuse prevention, treatment, and rehabilitation programs and activities. It is administered by the Center for Substance Abuse Treatment.

Entitlement Programs. Federal income support and health care programs include services that can be used for substance abuse treatment and services. Oversight and administration for these programs is provided by the federal government.

- *Medicaid* is a joint program of federal and State governments. States have discretion to cover services such as alcohol and drug abuse treatment; services of State-licensed practitioners, such as psychologists, alcohol and drug counselors, and medical social workers; and outpatient alcohol and drug clinics.

- *Medicare* is public health insurance for persons age 65 and older and some disabled persons. Medicare benefits include payment for services related to alcohol and drug dependence and intoxication.
- *Supplemental Security Income (SSI)* provides income support to indigent, aged, blind, and disabled persons. If substance abuse is a significant factor in the eligibility of beneficiaries, the individual must agree to cooperate with a State-approved treatment plan.
- *Social Security Disability Insurance (SSDI)* provides income support for persons forced to retire because of a disability. A person cannot receive benefits solely because of a diagnosed substance abuse problem; there must be a concomitant physical or mental impairment.

Other Federal Programs. Various additional federal agencies and programs provide some funding related to substance abuse.

- *CHAMPUS (Civilian Health and Medical Program of the Uniformed Services)* provides health insurance coverage for military personnel and their dependents. Specific benefits include hospital care for detoxification, inpatient rehabilitation, and partial and outpatient care. This program is administered by the U.S. Armed Services.
- *Drug-Free Schools and Communities Program, aa. . .nistered by the U.S. Department of Education,* provides funds for anti-drug abuse education, prevention, early intervention, and rehabilitation referral programs.
- *The Public and Indian Housing Drug Elimination Grant Program* provides grants to public housing agencies to eliminate drug-related crime. It is administered under the U.S. Department of Housing and Urban Development.

- *Drug Control and System Improvement Grant Program* provides funds to carry out programs designed to enhance State and local drug control efforts and improve the functioning of the criminal justice system.
- *Early and Periodic Screening, Diagnosis, and Treatment for Children Aged 21 and Under* is a mandatory Medicaid benefit for all recipients under the age of 21. It was designed, in part, to address the needs of children who have manifested or who are at risk for mental health and substance abuse problems (Fox et al., 1993). This program is administered by Medicaid.

State and Local Funding

In some States and jurisdictions, State monies constitute the largest source of funds for substance abuse programs. State government sources of funds include:

- State general fund revenues;
- the State's portion of Medicaid funds designated for substance abuse services;
- taxes on products or services (e.g., alcoholic beverages, tobacco products, liquor licenses) designated for use by particular programs;
- seized assets derived from drug crimes used to support substance abuse treatment, prevention, and other services; and
- fines, fees, and assessments earmarked for substance abuse treatment.

Local sources of funds for substance abuse interventions may include:

- property tax revenues;
- sales taxes;
- local government fees for services; and
- court fines or assessments imposed on intoxicated drivers.

Private Sector Funding

Private sources of funding include the following:

- Insurance coverage includes AOD-related illness or trauma treated in a general hospital setting. Coverage for other services varies according to companies. States vary in the types and amounts of services that are mandated.
- Client fees are paid directly to service providers by the client. Some programs have sliding fee scales that adjust fees to the client's economic resources.
- Private foundations sometimes direct funds to specific program efforts. This funding often is time limited.
- Donations of cash and goods are received by some organizations from private companies or individuals.
- United Way and other charitable organizations may apportion funds to substance abuse treatment programs.

Personnel

Effective interventions hinge upon having sufficient qualified personnel. This applies to both the criminal/juvenile justice system and the treatment community. In both types of agencies staff resources are often stretched beyond their limits. Caseloads are high, and bureaucratic requirements for reports, records, and other tasks are often time-consuming.

Training is a vital aspect of preparing staff to provide quality treatment services. However, in times of diminishing resources, training is one of the first areas to be cut by agencies and States. Thus, personnel do not have resources for learning new techniques and renewing their knowledge and skills.

Treatment and criminal/juvenile justice personnel face inordinate

stress in their daily jobs, and attrition rates are high. Without sufficient supplies of newly trained workers, treatment programs can be jeopardized.

It is important for legislators to examine the availability of training opportunities for current and new treatment and criminal/juvenile justice staff. State colleges and universities, State agency training departments, and private companies may be good resources for developing and providing important training opportunities.

Information

Access to information is vital in maintaining appropriate interventions for alcohol and drug-involved persons. Legislative and judicial officials need to receive up-to-date information on treatment approaches, funding sources, training programs, and other resources. Similarly, practitioners must be kept apprised of the latest information on drugs of abuse, their effects on individuals, and productive intervention strategies.

Research is important for generating new information. Although many research efforts are funded by the federal government, State and private foundations are also a source of research funds. Agency evaluations are important sources of information about effective and ineffective treatment approaches. All agencies receiving external funds should be required to have an evaluation component and use the information generated to improve their programs and inform the field.

Federal Oversight and Responsibilities

An understanding of the key federal agencies which oversee and have responsibility for working

with AOD abuse on a national level is critical to any discussion of systems coordination.

The 1990 National Drug Control Strategy Report recommended the following policies and strategies (Primm, 1992, pp. 620–621):

- develop State service plans for the closer monitoring of the alcohol, drug abuse, and mental health block grant funds;
- increase the availability and quality of drug treatment services;
- improve and expand treatment services for the homeless, adolescents, the mentally ill, and people in public housing;
- improve and expand outreach and treatment services for pregnant women and drug-affected infants;
- expand treatment services in correctional institutions;
- enhance treatment research, including expanded data collection, medications development, and evaluation of current treatment methods;
- provide additional vocational counseling and aftercare for recovering addicts; and
- develop innovative approaches to drug treatment, including treatment campuses and special programs targeted for adolescents and pregnant women in conjunction with the Center for Substance Abuse Prevention.

The Center for Substance Abuse Treatment (CSAT) was created in 1990 as the Office for Treatment Improvement. CSAT's guiding philosophy is that:

"addiction is a chronic, relapsing disorder and that treatment is most successful when providers offer comprehensive therapeutic services, combined with readily accessible posttreatment aftercare" (Primm, 1992, p. 621).

CSAT's position is that there is no one uniform treatment approach that will be effective with

all persons. The appropriateness of a continuum of treatment and recovery services should be tailored according to such factors as the individual's gender, age, race, ethnicity, socioeconomic status, employment status, social status, life experience, and physiological and neurophysiological condition.

CSAT's vision for publicly funded addiction treatment and recovery services requires that the treatment and recovery infrastructure and individual community-based programs be empowered to:

- comprehensively assess the needs of individuals who request assistance;
- match individual needs with the interventions and recovery services that best suit their requirements, as well as the needs of their families and significant others;
- provide an appropriate array of specific treatment and recovery services along a sustained continuum of care for both the individual and his or her collaterals; and
- determine the outcome of specific treatment and recovery services

(CSAT, nd).

In order to help ensure that this empowerment occurs, CSAT collaborates with the Center for Substance Abuse Prevention and the Center for Mental Health Services in the Substance Abuse and Mental Health Services Administration (SAMHSA), the research institutes in the National Institutes of Health (NIH), the Centers for Disease Control, the Health Resources and Services Administration, the Indian Health Service, the Office of Minority Health, the U.S. Department of Labor, the Social Security Administration, the Health Care Financing Administration, and other agencies of the federal government; State

and sub-State health and human service agencies; and the public treatment and recovery program network. A problem occupying the scope that substance abuse does in this country will require such a comprehensive, collaborative effort among federal, State, local, public, and private organizations.

In 1981, under the Omnibus Budget Reconciliation Act all community-based categorical funding was consolidated to provide alcohol, drug, and mental health services. The role of National Institute on Drug Abuse (NIDA) was changed to only conducting research and educational functions. This money was given to States to use for alcohol, drug, and mental health treatment. Few restrictions or accountability measures were required. Federal support actually declined in constant dollars under the block grant system in the early- to mid-1980s. Some federal conditions were added later, such as requiring a 35 percent minimum expenditure each for drug and alcohol treatment. Much of the federal data collection system about treatment was discontinued as a result of this change in policy (Institute of Medicine, 1990).

Block Grants

The 1986 Anti-Drug Abuse Act added the alcohol and drug abuse treatment and rehabilitation (ADTR) block grant in addition to other funding increases. This Act dictated that determination of the allocation of funds to each State would be based on a combination of the size of the population and documented estimation of the need for treatment. It also set aside 1 percent of block grant funds for collecting evaluation data, requiring States to develop and submit plans for use of block grant funds, and evaluation of the impact of the additional treatment funds. Despite this, the federal office did not have authority to approve plans and

there was no accountability mechanism to determine whether the plan was followed (Institute of Medicine, 1990).

The 1988 Anti-Drug Abuse Act again increased federal appropriations and required that States allocate 20 percent of the substance abuse set aside for prevention activities, spend 20 percent of the total on women, and commit 10 percent of the drug portion to treating intravenous drug problems. In addition, Department of Health and Human Services (DHHS) was authorized to set aside 5 to 15 percent of the grant to collect data about treatment (Institute of Medicine, 1990).

Under the new reorganization law, the current alcohol, drug abuse, and mental health services block grants to the States are split into two separate block grants, one for mental health services and one for substance abuse services. The current block grant program is the Substance Abuse Prevention and Treatment (SAPT) block grant.

Block Grants Split

For FY 93, up to \$1.5 billion is authorized for substance abuse, to be administered by the Center for Substance Abuse Treatment. Under the new formula, a State must:

- use at least 35 percent each for alcohol services and drug abuse services;
- use at least 20 percent for primary prevention services;
- spend an additional 5 percent in FY 93 to increase services for pregnant women and women with dependent children over the FY 92 level; and in FY 94, a 5 percent increase above the FY 93 funding for women;
- ensure that intravenous drug abusers receive drug treatment within 14 days of requesting it, or within 120 days if "interim services"—such as counseling and/or testing for HIV—are

made available within 48 hours of the request for treatment;

- have a law on its books against the distribution or sale of tobacco products to minors under age 18; and
- require funded treatment programs to provide tuberculosis services or ensure that patients receive such service (ADAMHA Reorganization Act of 1992).

Responsibility for administering the block grants has now been placed under the Center for Substance Abuse Treatment. This provides for more stringent monitoring of the funds to improve federal management and State accountability. One way in which CSAT has assumed this responsibility has been the State Systems Development Plan (SSDP). Its goal is to (Primm, 1992):

- assess State treatment demand and capacity;
- develop Statewide treatment improvement plans;
- provide on-site performance monitoring and targeted technical assistance; and
- create a national database of current State treatment information.

The SSDP program will assist States in finding the most effective means to utilize SAPT funds to provide treatment that is effective in reducing drug abuse. In developing guidelines, CSAT can ensure that State programs have common procedures and goals. In identifying weaknesses through technical performance reviews of State drug treatment activities, CSAT will be able to improve performance by providing technical assistance. In assisting States in conducting needs assessments, better data can be obtained on the incidence and prevalence of substance abuse. Additional information can also then be provided to the Depart-

ment of Health and Human Services and federal policymakers on the delivery of drug treatment services. SSDP is critical in that it promotes accountability and allows for more effective sharing and dissemination of information.

State and Local Role

Working closely with the State Directors of Alcohol and Drug Treatment Services is also part of CSAT's approach to carrying out its responsibilities for the block grants. Each State has a designated office with a director to manage the block grant monies and other aspects of substance abuse treatment. The major responsibilities of these offices include:

- determining the proportion of the total grant that is appropriated to each type of treatment (alcohol, drug, mental health);
- allocating monies among programs and localities;
- maintaining or revising treatment protocols and other requirements;
- monitoring program performance;
- delivering technical assistance and training; and
- setting reimbursement rates.

To facilitate State efforts and coordination of treatment, CSAT has initiated several programs and products to accomplish its responsibilities.

- *Technical assistance* is provided, in part, through the Treatment Information Exchange, a series of conferences, on-site consultations, and documents to assist and coordinate State and local planning, financing, and management needs. In addition, manuals entitled Treatment Improvement Protocols (TIPs), will help States meet the standards of the latest treatment practices in various areas.

- *Target Cities Program* currently provides funds for demonstration projects in eight cities. The goal of these projects is to improve the delivery and quality of services, making them more attractive to those needing treatment. The projects are intended to serve as examples for other areas and programs.
- *Critical populations* are the focus of other CSAT initiatives because of their complex and varied needs. Among the groups targeted are: adolescents, racial and ethnic minorities, women of childbearing age and their children, people who are incarcerated, residents of public housing projects, homeless persons, rural populations, and those with a combination of drug addiction and alcohol addiction, physical health disorders, and mental health problems. Activities will include demonstration grants to: increase outreach; provide on-site primary medical and acute medical care; train staff; provide health education; offer life skills counseling, educational and vocational counseling, and enhanced aftercare; and provide psychological and psychiatric services.
- *Improving linkages with agencies and organizations* includes jointly sponsoring demonstration programs with other government agencies to integrate primary health care with substance abuse treatment programs. Linkage with medical, professional, and consumer organizations, designed to reduce the overlap of services and streamline referrals, will be initiated through a national coalition of primary health care and substance abuse health care systems to help Congress and the administration integrate and link these two health care groups. CSAT also will work with the National Association of

State Alcohol and Drug Abuse Directors (NASADAD) and the Association of State and Territorial Health Officers (ASTHO) to coordinate and enhance better treatment for persons with HIV/AIDS and other illnesses, including substance abuse and mental health.

- *The Criminal Justice Linkages Project* supports the Substance Abuse Prevention and Treatment Block Grant. It is a three-year project providing individualized technical assistance to 35 States in building coordinated State systems that link treatment, justice, and health agencies. Several prototypes of intersystems coordination between the courts and treatment field will be developed at diverse sites as part of this project.
- *Treatment of offender populations* provides funds for demonstration grants to provide treatment services to both adult and juvenile offenders. Included in CSAT's criminal justice programs are efforts to improve on-site drug treatment services in jails and prisons, expand procedures for diverting arrestees into treatment instead of incarceration, and coordinating all aspects of the criminal justice system related to drug treatment.

In its relatively short history the Center for Substance Abuse Treatment has positively focused efforts to improve and enhance treatment for substance abuse, particularly by working through the State Directors for Alcohol and Other Drug Treatment. It has attempted to enhance coordination and collaboration among all those concerned with improving substance abuse treatment. It has developed a model for comprehensive alcohol and other drug abuse treatment which is presented in Table 1-E, in Chapter 1. The components of this model are highlighted throughout

this document, as various aspects of treatment are examined.

Conclusion

If interventions with alcohol- and drug-involved persons are to be successful, all systems and individuals involved must recognize the importance of the need for coordination, collaboration, and communication.

Primm (1992, p. 624) identifies the following areas in which treatment improvement or expansion is needed in the future:

- prenatal and postnatal care for infants of substance abusing mothers;
- day-care centers, educational and recreational facilities for children, as well as counseling for youths;
- a full mixture of services for women, including counseling, medical and psychological assistance, vocational training, education, and legal assistance;
- a full range of services geared to the specific needs of minorities (i.e., blacks, Hispanics, Native Americans and Asian Americans);
- services for the homeless, including medical and psychiatric help and vocational, educational, economic, and legal support;
- expanded services for the prison populations, including counseling, drug testing, vocational, and educational help;
- more HIV counseling and education to all members of society;
- more HIV health care, both in- and outpatient; and
- greater outreach and linkage connections with all groups involved in primary health care.

The needs and the agenda for the future, thus, are very clear. The coordination of efforts among all those with responsibility for service delivery, funding or other

aspects of the problem is a key element in achieving these goals and a healthier, more productive nation.

Improved systems coordination can result in the most effective provision and delivery of services to AOD-involved individuals. It, therefore, needs to be a primary goal at the outset of any decision-making and policy-shaping process. When systems and agencies work together to deal with substance abusing individuals, there is an opportunity to effect societal change. "The common sense conclusions reached by legislators, high-ranking government bureaucrats, and influential public figures, without any special or technical knowledge of drug abuse, are likely to gain acceptance from other national social and political institutions" (Musto, 1987).

The long-term benefits of a coordinated approach have far-reaching implications. Such an approach provides all systems involved with an opportunity to achieve results in the most cost-effective manner possible; to reduce the spread of many diseases and infections associated with AOD abuse (e.g., HIV, STDs, TB); to reduce recidivism rates among AOD-involved offenders; and to effect positive human change among AOD-involved populations.

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Chapter 13—Coordination Among State Legislators and the Treatment Field: An Economical Approach

The Final Report from the White House Conference for a Drug-Free America states (1988): "Our forces are outmanned, outgunned and outspent . . . Our losses include children born addicted, and other children recruited to crime before their teens by drug lords who use them to build a business of terrible violence and tremendous profit. We have drug dealers on our street corners, in our offices, on our college campuses, and grade school playgrounds." This report was written in 1988, and unfortunately, those conclusions hold true today.

Examining the financial costs of AOD abuse painfully illustrates one aspect of the impact AOD abuse has on our society. Alcohol abuse, the mood-altering drug most frequently abused, costs Americans as much as \$85.8 billion each year in lost employment, reduced productivity, and increased health care costs. The cost of other drugs of abuse is estimated at \$58.3 billion (Rice et al., 1991a).

When Americans are spending \$144.1 billion a year due to AOD abuse, it is absolutely imperative that key players communicate and collaborate when looking for successful methods of dealing with this population. For such a

significant and expensive problem, it is clear that coordinated approaches to dealing with AOD abusers have the best chance for success.

State legislators have a vital role in enacting laws that protect members of society from harming each other, and which protect people from harming themselves. The ideas and principles which center around AOD treatment involve rehabilitation and reform. Through these concepts the goal of protection can certainly be advanced.

Armed with knowledge and accurate information about AOD abuse, legislators can ensure that the goals and objectives for the AOD population are advanced in a manner that is productive for a State's entire constituency. By knowing the State's mission and goals for the AOD population, legislation can be enacted which is compatible with these philosophies.

A continuum of sanctions and treatment needs to coexist and provide systemwide benefits. This can only occur if there is an atmosphere of communication and cooperation among systems. Treatment and criminal justice agencies, along with legislators, present a united front to AOD abusers when they send the message that this behavior is unacceptable.

Legislators are on the front lines for States who are trying to cope with shrinking budgets and severe economic problems. A cost-benefit analysis indicates that taxpayers enjoy a \$4 return for every \$1 spent on treatment programs (NIDA, 1991). For legislators, whose constituents are concerned with the "bottom line," coordination of efforts offers a positive return for a minimal investment.

The purpose of this chapter is to explore the best means for State legislators and the treatment field to coordinate their efforts in dealing with AOD-involved persons. Issues to be discussed include the role of legislators, the high costs of AOD abuse, the cost benefits of AOD treatment, and policy consideration issues.

Legislators' Role

Legislators have a valuable contribution to make in their use of foresight when handling issues as complex as AOD abuse. Such an issue stretches across economic and societal boundaries and impacts virtually every citizen in some capacity. Foresight is broadly defined as an effort "to address goals and emerging policy issues to provide a longer lead time in

decision-making" (Chi, 1991). Some of the principal reasons foresight can be particularly useful to State government include the following (Chi, 1991):

- It helps State leaders better anticipate changes in their social, economic, and physical environment.
- It can assist in the development of long-range goals.
- It can enhance communication and collaboration among the three branches of State government and the public.

Keeping this concept in mind can be very helpful in any discussion regarding the best ways to have an impact on AOD-involved persons. Legislators have demonstrated their ability to plan ahead; it is a skill that becomes honed as they design budgets, formulate legislation, and respond to the needs of their constituencies. This ability enables them to consider the many complexities of this issue, and to develop long-term and successful options for effectively dealing with this population. Only through educated foresight can decision-making bodies implement the important activities of coordination, allocation of funding, societal protection, and the realization of other worthwhile goals. Implementation of these activities will ultimately save States money, which is often the bottom line for many constituents.

Coordination

Legislators have a vital role in successfully dealing with AOD-involved persons. They have the opportunity to manage AOD issues and policies through such avenues as establishing Task Forces, or forming issues and coordination committees.

An example of a legislature which has made inroads in dealing with AOD issues is Colorado. The

legislature mandated that a committee be formed to develop a strategy for dealing with AOD-involved offenders. House Bill 91-1173 was signed into law May 29, 1991. This bill was formed with the goal of providing comprehensive and continuing services to AOD-involved offenders in the criminal justice system. A section on the standardizing of procedures with regard to substance abuse assessment is particularly innovative. Provisions include that the Judicial Department, the Department of Corrections, the Division of Criminal Justice of the Department of Public Safety, and the Department of Health shall cooperate to develop and implement measures which include the following (House Bill 91-1173, 1991):

- All persons convicted of a felony, a misdemeanor, or a petty offense will be evaluated for substance abuse during their presentence or probation investigations; the court will order the person to comply with the recommendations of this evaluation.
- A standardized method, which includes an initial screening test at the presentence phase, will be used to assess offenders for their substance use and their risk of criminality; this assessment is to result in objective recommendations for treatment.
- A complete and flexible continuum of intervention programs will be provided to educate and treat offenders who are incarcerated or placed on probation, parole, or in community corrections; this intervention is to be appropriate for meeting the individual's needs.
- Offenders are to receive systematic drug testing as individually appropriate.
- A system of fair, consistent, punitive sanctions will be applied to those offenders who

test positive for substance use after they have taken an initial urine test and been placed in an education or treatment program.

- All departments will cooperate jointly in developing a comprehensive plan to implement the legislation; these departments include the State's Judicial Department, Department of Corrections, State Board of Parole, Division of Criminal Justice in the Department of Public Safety, and the Alcohol and Drug Abuse Division of the Department of Health.
- A systemwide management information system (MIS) will be developed to assist in tracking individual offender assessment, drug testing, treatment, and intervention/sanction records across all sectors of the criminal justice system.
- A surcharge was created according to the level of felony classification, ranging from \$100 to \$3,000. Such fees are earmarked to implement the legislation.

(CSAT, 1993.)

Colorado is an excellent example of legislators' ability to mandate coordination, collaboration, and communication efforts. Many other State agencies take their cue from the legislature as to how to deal with a particular State problem, both formally and informally. Legislators are responsible for establishing a State's agenda and are able to take a leadership role in establishing AOD treatment and planning programs—both in the legislation that is developed (with the input from Task Forces and various committees) and in the public messages they send to their constituency.

Rhode Island and Washington also have made landmark strides in the areas of coordination. In Rhode Island, for example, the Office of Substance Abuse was created by

the governor after an extensive study had been conducted by the governor's drug program staff. Additional impetus was provided in response to the recommendations of a legislator's two year *Special Legislative Commission to Study the Feasibility and Need for a Separate Department of Substance Abuse*. The office was created by an executive order in September 1991, and was codified with the passage of House Bill 92-H8784 in July 1992. The creation of this office distinguishes Rhode Island as one of the first States to create a Cabinet level position for the Director of the effort against alcohol and other drugs. The efforts of the office are undertaken on two distinct levels: (1) policy formulation, planning, and coordination of the State system; and (2) provision of services to the community.

Recognizing the need to develop effective working relationships with other State and local government and private sector representatives who are directly concerned with AOD issues, Washington State has created the position of Special Projects Manager within its Division of Alcohol and Substance Abuse (DASA). The DASA Special Projects Manager has primary responsibility for public policy development, collaboration, and legislative coordination. The office also coordinates legislative monitoring and information. The Special Projects Manager is a regular member of the Washington Interagency Network (WIN).

WIN consists of representatives of 13 State agencies who have a stake in AOD issues. Agency representatives are middle managers with program knowledge, and with the capability to support cross-agency strategies and development of approaches. WIN meets monthly, except during legislative session when it meets weekly. The network's goals include informa-

tion sharing, development of coordinated responses to problems, and resolution of service barriers between entities. WIN member agencies include:

- Department of Community Development;
- Department of Corrections;
- Department of Health;
- Department of Licensing;
- Department of Social and Health Services;
 - Division of Alcohol and Substance Abuse
 - Division of Children and Family Services
 - Division of Juvenile Rehabilitation
 - Mental Health Division
- Employment Security Department;
- Liquor Control Board;
- Workforce Training and Education Coordinating Board;
- Office of the Superintendent of Public Instruction;
- Washington National Guard;
- Washington State Patrol;
- Washington Traffic Safety Commission; and
- Office of the Governor.

An example of another State which has taken the initiative in coordination of efforts is Alabama. The State is often lauded for having found innovative ways to deal with AOD-involved individuals within its prison system. About half of Alabama prisons have drug treatment programs in place. Merle Friesen, who initiated this program, says that Alabama has "exceeded all expectations of controlling drug use" (Wagar, 1992). He further stated that assaults have also dropped in prisons where drug treatment is available, thereby contributing to a solution for another common problem in correctional institutions. Only 1.3 percent of the prisoners who participate in Alabama's drug treatment program test positive for drugs; this figure is generally much

higher in other parts of the country (Wagar, 1992).

Such initiatives, particularly in the areas of implementing a system-wide MIS (critical to effective coordination), and finding creative ways to fund these programmatic changes represent a new way of looking at what can often be a daunting problem facing States. Referral of AOD-involved persons to a continuum of treatment modalities will ultimately save States money. Interrupting the cycle of substance abuse represents an opportunity to help AOD-involved individuals turn their lives around. Morris Thigpen, Alabama Corrections Commissioner, has said of inmates, for example, "If you don't really have some program directed at trying to solve the problems inmates bring with them when they are incarcerated, then you will turn them back out to society with the same problems" (Wagar, 1992). Given that more than half of all prisoners are drug addicts, and that more than two-thirds of them are behind bars for drug-related crimes, it is clear that dealing successfully with this population is an enormous opportunity to positively impact State budgets.

Legislators provide a valuable service to their constituencies when they recognize the importance of placing the needs of an individual component (i.e., the Judiciary, AOD treatment, AOD abusers) within the context of an overall system. This system is dependent on coordination, communication, and collaboration.

Allocation of Funding

A familiar anecdote recounts an interview with a famous bank robber. When asked why he robbed banks, his droll reply was, "because that's where the money is." Legislators control the purse strings, and that is where constituents are going to turn first for a

solution to the problem of AOD abuse.

Legislators establish the priorities for how States are going to spend their money. As such, their leadership enables States to provide adequate economic and human resources for a reasonable quality of life. Investing in efforts to coordinate with the treatment field, with the judiciary, with the criminal justice system, will pay dividends by saving money and lives over the long-term.

Costs of AOD Abuse

AOD abuse is an expensive problem for States. It is expensive in the costs that it generates on a societal, human level, and in terms of actual dollars that States are forced to spend in dealing with this problem.

Human Costs

AOD abuse has many social and human consequences. It contributes to injuries and fatalities at an almost unprecedented level; it is implicated in suicide, homelessness, mental illness, and involvement with the criminal justice system; and it negatively impacts family and employment structures. It has been integrally involved in the spread of HIV/AIDS. HIV (the virus linked to the cause of AIDS) can be directly transmitted through needle sharing and other high risk behavior; intravenous drug users may then transmit the disease to their sexual partners; women who have contracted HIV from needle sharing or from their IV drug-using partners may then infect their infants. Through the Medicaid program, the federal government and States provide some or all of the health care for over 40 percent of patients with AIDS. In 1992, State and federal Medicaid

programs spent approximately \$2.1 billion on AIDS-related health care (Wilensky, 1991).

- *Accidents.* Alcohol and drugs have been implicated in the four leading causes of accidents: motor vehicle collisions, falls, drownings, and burns and fires.
- *Suicide.* Recent studies in 1987 and 1988 indicate an association between alcohol, suicide, and firearms, particularly among youth suicides.
- *Trauma.* From 20 to 37 percent of all emergency room trauma cases involve alcohol.
- *Homelessness.* Between 20 and 45 percent of homeless people suffer from alcohol- and drug-related disorders. Some people may turn to AOD use because of their homeless situation, but many people are homeless *because* of their AOD use. Homeless AOD abusers are at increased risk of trauma, victimization, hypothermia, frostbite, and infection.
- *Mental health problems.* Alcoholics have a 50 percent chance of suffering from a mental disorder or drug problem in their lifetimes, and drug abusers have a 70 percent chance of having a mental disorder or alcohol problem.
- *Drug and family violence.* Of the current total prison population, approximately 62 percent used drugs regularly prior to arrest, and 22 percent were under the influence of a drug at the time of their offense. Although other factors may play a role in family violence, alcohol may also be linked to physical violence in a family.
- *Dysfunctional families.* Alcohol and drug abuse are very disruptive to families. AOD abuse may also create a propensity towards abuse in the children of AOD-involved parents. Children with an alcoholic parent are four times more likely than other

children to become alcoholics. Young people who then abuse alcohol and drugs are, in turn, more likely to drop out of school, get pregnant, or become delinquent.

(Romig and Rasmussen, 1991.)

Economic Costs

The total losses to the economy related to alcohol and drug abuse and mental illness for 1988 were estimated at \$273.3 billion. The estimate includes \$85.8 billion for alcohol abuse and \$58.3 billion for drug abuse. While quantifying the burden is difficult, translating it into economic terms is important to facilitate formulating policy about the use of resources and in making decisions (Rice, Kelman and Miller, 1991a). Total costs include those associated with decreased economic productivity, unemployment, increased health and social welfare costs, law enforcement, and associated costs of criminal trafficking in drugs.

Health Care Costs

In an Alcohol and Health Report to Congress (1990), studies confirmed that 4 percent—1.1 million of 27.4 million—of short-stay hospital discharges among persons 14 years and older involve an alcohol-related diagnosis, of which 54 percent had an alcohol-related problem as the primary diagnosis. Diseases and medical disorders associated with the consumption of alcohol include liver problems (ninth leading cause of death in 1986); gastrointestinal disorders; cardiovascular system problems; nutritional and metabolic disorders; immune system problems; cancer; endocrine and reproductive problems; and neurologic disorders.

Injection drug users account for 1.2 million persons. The Presidential Commission on the HIV epidemic has reported that only

250,000 drug abusers and 148,000 intravenous drug abusers are in treatment at a given time, meaning that only approximately 10 percent of the nation's IV drug users are being treated, which has serious implications for the AIDS epidemic (NASADAD, 1990). Injection drug users account for more than 20 percent of people infected with AIDS. Care for a person with AIDS can cost as much as \$100,000 per year. Many people with AIDS are poor, homeless, and lack traditional family and community supports, relying instead upon public services for assistance (Rua, 1990).

Tuberculosis (TB) rates have increased 16 percent between 1985 and 1990 (Cowley, Leonard & Hager, 1992). There is a proven link between TB and both substance abuse and HIV infection. Alcoholism and intravenous drug use's causative association with TB includes malnutrition, damage to the immune system, poor compliance with treatment regimens, and the poverty which often accompanies AOD abuse.

Alcohol produces defects in fetuses. Treatment of Fetal Alcohol Syndrome was estimated to be one-third of a billion dollars a year in 1988 (*Alcohol and Health*, 1990).

Mental Health Care Costs

A close relationship exists between mental disorders and alcohol and drug problems. One study showed that one in three adults with a mental disorder will have an alcohol or drug abuse problem at some point (Alcohol, Drug Abuse, and Mental Health Administration, 1992).

The 1988 estimate for the economic costs of mental illness was \$129.3 billion (Rice, Kelman & Miller, 1991). This includes direct costs, such as personal health care (including hospital and nursing home care, physician and other professional services, and prescription drugs), as well as indirect costs

such as the value of time spent to care for family members with a mental illness.

Criminal Costs

The costs to society of crime estimated to be due to drug abuse amounts to \$32.5 billion annually. This includes expenditures for police protection, private legal defense, and property destruction, as well as the value of productivity losses for those who engage in crime as a career, as a result of heroin or cocaine addiction, and for people incarcerated in prison as a result of conviction of a drug-related crime (Rice, Kelman & Miller, 1991b). The costs to victims related to AOD-involved offenders is also high, encompassing loss of property and often treatment associated with the trauma of victimization.

Morbidity

Drug abuse morbidity costs, that is, the value of reduced or lost productivity, amounts to \$6 billion. A timing model was developed in the estimation of impairment rates (percent of income loss) that was applied to average incomes, including an imputed value of house-keeping services, by age and sex (Rice, Kelman & Miller, 1991b).

Social Welfare

Social welfare costs are difficult to compute as the effects of AOD abuse are so far-reaching in this area. Many AOD abusers are in lower income brackets and are eligible for Medicaid benefits, both pertaining to the treatment of addiction and the treatment of the many illnesses associated with AOD abuse. Persons with AIDS (many of whom are intravenous drug abusers) are having a tremendous impact on emergency room services and various public health programs. Aid to Families with Dependent Children is also impacted by the cycle and patterns of pov-

erty and AOD abuse which often go hand-in-hand. States end up with the responsibility of providing health care to the medically indigent. This population is often largely comprised of persons with AOD-involvement.

Cost Benefits of AOD Treatment

Treatment offers States the possibility of dealing effectively with the problem of AOD abuse. It is estimated that for every \$1 invested in treatment programs, tax-paying citizens enjoy a \$4 return in the reduction of drug-related costs (NIDA, 1991). Savings are measured in the decrease of drug-related crime, criminal justice costs, and theft. Increased workplace productivity, while significant, is not calculated in this figure (Hubbard, 1989). Coordinated efforts between legislators and the field of treatment provides a chance to positively impact the cycle of AOD abuse.

Treatment is also a much less costly means of dealing with AOD-involved persons than prison. Outpatient treatment ultimately costs citizens only one-tenth as much as incarceration (NIDA, 1991).

Coordination and Systems Building

Coordination and systems building provides the best means for States to get the most for their money. When systems communicate, there is less chance for a duplication of effort and an opportunity to make a fragmented system whole. For example, State AOD Directors can provide legislators with valuable information about treatment. They can help States ensure that they are complying with maintenance of effort requirements, as well as all

the necessary assurances required by the program. States are eligible for federal financial assistance, but certain conditions apply to, for example, block grant funding. If a State does not comply (through matching funds or other requirements) the money is returned to the federal "pool" and is lost to that State. Legislators who are well-informed about the requirements for their States ensure fiscal responsibility on behalf of their constituents.

When systems collaborate, a comprehensive assessment can follow an AOD abuser throughout the entire system. Such an effort promotes patient-treatment matching, allows a workable continuum which best meets a patient's needs, and provides a means for holding the patient and the involved system(s) accountable. CSAT is working with cities, counties, and States to develop and implement an automated system of case management. Assessment data is translated into treatment plans and related to the courts for their use in referrals, prosecution, and corrections.

Cost-Effective Allocation of Resources

As referenced previously, studies show that a \$1 investment in treatment programs saves taxpayers \$4 in drug-related cost reductions (NIDA, 1991). Treatment provides States with a long-range opportunity to save money. When AOD use is stopped, or interrupted for significant periods of time, the patient has a chance to contribute to society both socially and economically. These financial dividends should not be underestimated. Cessation of AOD use also interrupts the economic drain (e.g., medical, employment, welfare) these patients pose to society.

Treatment also reduces and interrupts patterns of crime, and

reduces the rate of recidivism. This results in substantial savings to the criminal justice system. When the costs of crimes attributable to AOD abuse is \$32.5 billion, an opportunity to reduce recidivism results in significant savings.

Prevention of the spread of HIV/AIDS is a vital component of treatment. Reducing intravenous drug use alone is an effective means of slowing the spread of HIV. Coupling that with education and information campaigns as a part of the treatment process has great promise in preventing the spread of HIV/AIDS. When costs for treating an AIDS-infected individual can be as high as \$100,000 a year, it is vital that education and prevention be a vital part of the campaign to combat this epidemic.

Policy Consideration Issues

In responding to the needs of citizens, legislators spend a great deal of time carefully evaluating the wisest allocation of State resources. Statistics indicate (NASADAD, 1990) that prevention and treatment save money in the long-term. Interdicting the supply of drugs is a very expensive endeavor, and the payoffs have not been commensurate with this level of expenditure. The process of pyramiding, for example, has turned into a cottage industry that is very difficult to eliminate with traditional, law enforcement methods.

A book called *Getting Started in the Illicit Drug Business* explains the process:

When a client comes to you short five dollars for a gram or pays for it with several one and five dollar bills . . . he is scraping to get his money together. This will be your first sales representative . . . When he comes for a gram, pull out an eighth of an ounce which is three and a half

grams and put a half gram of cut on it for him . . . You have handed him an amount of cocaine he can sell for four hundred dollars.

(Long, 1988.)

Morgan (1992) likens this process to the at-home marketing of cosmetics or kitchen wares. The newly franchised dealer will sell to two or three buyers, make money, and have cocaine for his personal use. The high price of the commodity means the small volume user may become a small volume dealer and recruit other users. States would have to spend a veritable fortune (and they are) to combat this one area of drug trade alone. In addition, merely interdicting the drug supply does not address abuse/addiction issues in any way.

Treatment, on the other hand, reduces the demand for drugs. It is even successful for individuals with the most serious addiction problems. After treatment, recovering addicts are less likely to be involved in crime and more likely to be employed; as employees, they pay more taxes and use fewer social services, helping reduce the overall business tax burden (Rua, 1990).

Manning (1992) has cited at least nine errors in the conventional reasoning about the deterrent effects of police action:

1. The choice to use drugs (i.e., violate the law and risk arrest) depends on collective ties to kin, friends, and the social network within which dealing and use occurs. The cost of losing these ties far exceeds the risk entailed in the threat of arrest.
2. Choices involving the risk of being arrested assume that the target group of individuals foresees a future with a greater stake in conformity than the present. It "overvalues" the

- future when compared with the past and present.
3. The idea that choices are patterned by an awareness of the risk of being arrested assumes that the law is applied in a specific, fair, and just manner and with equal probability to all violators of drug laws. *There is little evidence of this.*
 4. The notion that the threat of arrest deters use assumes that such a threat will be applied to a single, reducible pool of violators (a "target population") who understand and know of the variations in their negatively evaluated risks and who change their behavior.
 5. The argument assumes that the number (not even the base rate) of arrests indicates an alteration in the underlying social processes that produce the rate rather than being, for example, an artifact of case production or arrest practices of officers.
 6. The above assumes that rational choices to deal or use are made on the basis of knowledge, forethought, and a shared agreement among the target group about the consequences of these choices. However, it would appear that fear of arrest is not nearly so worrisome as the fear of violence that is associated with drug dealing.
 7. This set of assumptions presumes that a *base arrest rate* (or number of arrests) indicates a deterrent effect in and of itself, although the logic by which this process works, the socioinfrastructure, is not explicated. *It is not clear why and how crackdowns work—if and when they do—to reduce crime.*
 8. This view does not take into consideration the nature and structure of the particular drug market to be attacked.

9. No data demonstrate that changes in the rates of arrest for crimes are related to the arrests for drug offenses.

Recommendations on Reallocations

Reallocating a State's resources into prevention, treatment, and related research provides a means of dealing, in a comprehensive fashion, with AOD issues. It also provides States with a means of finding solutions to these problems. There are many areas for a legislature to allocate funding which could have a substantial impact:

- *Identify what works and how those strategies connect*—Funding could be well spent on evaluating existing treatment programs so that successful aspects could be identified and replicated. An evaluation of treatment performance yields usable results both in the areas of what works and what does not. Research also presents States with an opportunity to identify new treatment methods which opens up whole new possibilities for success in dealing with the complex problems of AOD abuse.
- *Improve/remedy deficiencies in existing treatment systems*—Legislators could restore funding to treatment programs that have lost or been denied funding; allocate resources for the purpose of repairing deficiencies in the quality of treatment services and management; prevent treatment programs from collapsing; and expand services for individuals involved in the criminal/juvenile justice system (particularly in areas designed to reduce recidivism).
- *Address economic and social factors contributing to AOD abuse*—AOD abuse does not occur in a vacuum, but rather within a complex societal network. Many

factors contribute to the process of abuse and addiction. States need to formulate comprehensive programs which create jobs and provide safe and adequate housing, as well as support better schools and education programs, youth programs, and community support systems. Such a comprehensive approach allows States to begin the process of interrupting the cycle of poverty, illness, and AOD abuse which are so inextricably related.

- *Expand treatment capacity*—An expanded treatment capacity could provide States with a better opportunity to deal with special populations (e.g., pregnant AOD-involved patients), individuals at-risk for or with HIV/AIDS, and many other individuals in need of treatment.

Conclusion

Legislators will be key to any solution to the overwhelming problem of AOD abuse. They have the opportunity to take a leadership role in studying this issue; promoting and mandating systems coordination among treatment, health, and criminal justice personnel; and allocating funding to ensure that resources are expended in the most efficient manner.

Insightful leadership is aware of the cost-effectiveness of spending State dollars on treatment. The direct and indirect dividends include reduction in the demand for drugs, decreased morbidity, control of the spread of infectious disease, eventual reduced AOD-related health costs, and reductions in crime.

Developing a strategy which will provide a continuum of treatment services to AOD-involved persons is critical. A coordinated and collaborative effort will save States money in terms of lives saved. When individuals can control their

substance abuse, their return to productivity contributes to society rather than creating a drain of resources. Assisting individuals in regaining their health and eliminating their AOD dependency is an effective means for leaders to respond to their citizenry.

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Chapter 14—State Courts Coordinating With the State Treatment Field

The impact of substance abuse on the criminal and juvenile justice systems throughout the country is profound. The United States now incarcerates more persons on a per capita basis than any other country in the world, and the caseloads for community corrections agencies have soared. Often, income-generating crimes and violent offenses are directly associated with substance abuse. Many alcohol- and drug-related law violations have been criminalized, and mandatory sentences have been prescribed. Thus, courts have become backlogged, and jails and prisons often are filled beyond capacity. McGarry (1993) of the National Intermediate Sanctions Project States:

... the intervention of the criminal justice system seems to have little or no effect on re-offending: the same offenders reappear time after time. Judges in particular feel that their hands are tied in these cases. In some jurisdictions, the sentencing laws require a mandatory minimum term of incarceration, while, in others, judges must sentence offenders to a term of meaningless (in their eyes) supervision through probation. Neither response seems to affect behavior. At the same time, the costs of prison, jail, and probation are draining the

coffers of State and local governments at a growing rate.

An American health care crisis also looms in the wake of the AIDS epidemic. The number of persons infected with HIV is increasing most rapidly among those who inject illicit drugs. Other infectious diseases, such as Hepatitis B and tuberculosis, also can be fatal and are increasingly prevalent among substance abusers. In addition, babies born to substance abusing mothers present significant medical challenges and are requiring more extensive and expensive medical treatment. Many criminal offenders, whether incarcerated or on community supervision, need both substance abuse treatment and advanced medical care because of the infectious diseases so common among chemically dependent persons.

Courts are faced with difficult decisions at both the individual offender level and at the community and State levels. Appropriate sentencing and sanctioning choices, family court and child placement issues, the availability of substance abuse treatment and appropriate medical care, and economic considerations are among the concerns courts must consider. This chapter explores issues and challenges facing State courts and proposes critical areas around which coordination with the treatment field is vital.

The Impact of Substance Abuse on the Courts

Approximately 1.2 million persons are incarcerated in the United States. The majority of these inmates are male. However, the number of women in prison tripled over the past decade, while the overall prison population doubled. Ethnic minority persons are over represented in the criminal justice system. African Americans, who comprise 12 percent of the U.S. population, make up 47 percent of the prison and jail populations. Hispanic persons constitute 9.6 percent of the prison population and 14 percent of those in jails, while they represent only seven percent of the total U.S. population (American College of Physicians, National Commission on Correctional Health Care & American Correctional Health Services Association, 1992).

Much of the increase in correctional facility populations is directly associated with substance abuse and related crimes. While overall arrest rates rose 72.7 percent between 1981 and 1990, arrests for drug-related violations rose 125.9 percent. In addition to increased arrests, mandatory and fixed term sentences for certain drug-related crimes in some States also has contributed to the growing

criminal justice system. By 1989, one third of women and twenty percent of men in local jails were being held on drug charges. Fifty-four percent of federal prisoners in 1990 were drug offenders (American College of Physicians et al., 1992).

The juvenile justice system is no exception to these alarming statistics. A study conducted by the National Center for Juvenile Justice reviewed nearly 300,000 court records of drug and alcohol cases. These were drawn from 841 juvenile courts in 17 States between 1985 and 1988. During that four year period, in the courts studied, juvenile drug case rates (cases per 1,000 youth at risk) increased nearly 12 percent. The alcohol case rate increased by eight percent. The study also found disparities in the case rates for alcohol and drug use by ethnicity. While the drug case rate for white youth decreased 15 percent, the drug case rate for nonwhite youth increased 88 percent from 1985 through 1988. However, the alcohol case rate for white youth was nearly four times the nonwhite rate (Sickmund, 1991).

Challenges Facing State Courts

Under present policies, the challenges facing State courts may become even more troublesome. Some of the most prevalent concerns related to substance abuse that are confronting State courts include:

- increasing numbers of cases;
- bottlenecks and delays in processing cases through courts;
- limited court resources for meeting greater demands;
- high costs to the courts and the entire criminal justice system for providing needed services and facilities;

- civil and family/domestic cases; and
- the need to collaborate with the treatment field to expand the use of treatment resources for alcohol and drug-involved persons.

Courts and criminal justice systems are handling larger caseloads because of current concerns about the effects of alcohol and other drugs on individuals and society. In many instances, more forceful laws related to drug and alcohol offenses have been passed, and they are being vigorously enforced. For example, the onset of the crack epidemic in 1985 resulted in a 150 percent increase in felony drug arrests in New York State by 1991 (Wachtler, 1991).

The expanding case rates have caused overloads in many courts resulting in bottlenecks for the timely processing of cases by the judiciary. These delays, in conjunction with limited jail and prison space, interfere with individuals' rights to a speedy trial. They also undermine the deterrent effects of the criminal justice system and result in feelings of frustration and disrespect for the law (Supreme Court, State of New Jersey, Task Force on Drugs and the Courts).

While increasing numbers of offenders with substance abuse-related problems are well-documented, of equal importance are the corresponding constraints on resources at the disposal of the judiciary. Court resources have not kept up with the rise in caseloads. Court cases have doubled and even tripled in some jurisdictions, but increases in judicial personnel and other resources have been modest to nonexistent.

Almost one-third of all criminal justice expenses in 1985 were related to alcohol, drug abuse, and mental health problems (Rice, Kelman, Miller & Dunmeyer, 1990). An average annual increase of

13 percent per year in State prison populations is expected to result in an overall growth of more than 68 percent in incarcerated individuals by 1994. It costs an average of \$25,000 per year to incarcerate each inmate in a State prison. Coupled with building new prisons required to relieve crowded conditions, this means States are facing unprecedented expenditures in the future (American College of Physicians et al., 1992). Resources to deal with growing populations and spiraling costs are finite. Members of State systems will be forced to set priorities and make the best use of limited funds. In many situations, effective, coordinated use of substance abuse treatment can result in savings for incarceration and other criminal justice costs.

Another consequence of increased drug caseloads is the pressure placed on civil dockets and family/domestic relations court dockets. Judges, courtrooms, court staff, and other resources sometimes are directed to handle criminal cases to the detriment of the other business of the courts (American Judicature Society [AJS], 1990).

In addition to this displacement, substance abuse has had a direct impact on civil and family or domestic courts. Substance abuse compounds family violence and interferes with the capacity of parents to provide adequate care for their children. The consequences often include neglect, abuse and abandonment of children. These children may suffer both physical and emotional trauma that requires lengthy and expensive treatment. Courts face difficult decisions about removing children from their homes, visitations, reuniting families, termination of parental rights, and adoptions.

Adult domestic partners also may experience physical or financial neglect, abuse, and

abandonment at the hands of alcohol- or drug-involved partners. It is often difficult for women in abusive relationships to obtain protection until they are seriously battered or press charges against their partners. If they are financially or emotionally dependent on their partners, deciding to do the latter can be both difficult and precarious.

Substance abuse compounds pregnancy for women and places a greater risk on the unborn child. Combining substance abuse and pregnancy increases the potential for medical complications for a woman. For example, with cocaine use, potential consequences during pregnancy include maternal hypertension, spontaneous abortion, hemorrhage from the placenta, premature rupture of membranes, and premature onset of labor, among others (Bandstra, 1990). In addition, pregnant women with substance abuse disorders also encounter barriers to receiving treatment, including the following (U. S. General Accounting Office, 1991):

- lack of available treatment for pregnant women and mothers with young children, including free or publicly funded drug treatment;
- lack of programs that are appropriate for the unique needs of drug-abusing pregnant women and mothers, including child care services and prenatal care;
- lack of accessible public transportation to reach treatment programs;
- negative attitudes and behaviors of health care providers toward pregnant women who abuse substances;
- personal barriers to treatment, including the wish to deny the pregnancy and inadequate knowledge of drugs and their effects;

- the threat of prosecution for child abuse that may result in incarceration and losing custody of their children; and
- limited outreach and referral services to help women locate and use appropriate existing services.

Treating infants for drug withdrawal is painful for the newborn and often requires expensive procedures and intensive care. Effects of alcohol or drug exposure may accompany these children throughout life, decreasing their potential for a happy, productive life. Low birthweight, premature delivery, deformities, retardation, and behavioral problems are examples of some of the consequences of prenatal exposure. Such infants may be difficult to care for, and as they become older they may have problems concentrating and bonding with adults appropriately. Hyperactivity, emotional lability, impulsivity, and lack of physical coordination are problems for many of these children. Learning problems, lower I.Q.s, and poor verbal skills often are noted as well (Larsen & Horowitz, 1992).

In addition, children born to mothers infected with HIV are at risk of contracting the virus. If this occurs, they will require medical care and other assistance that is often beyond the means of family members to provide. As parents become very ill or die from AIDS complications, courts sometimes must decide about the care and placement of affected children.

The Importance of Systems Coordination

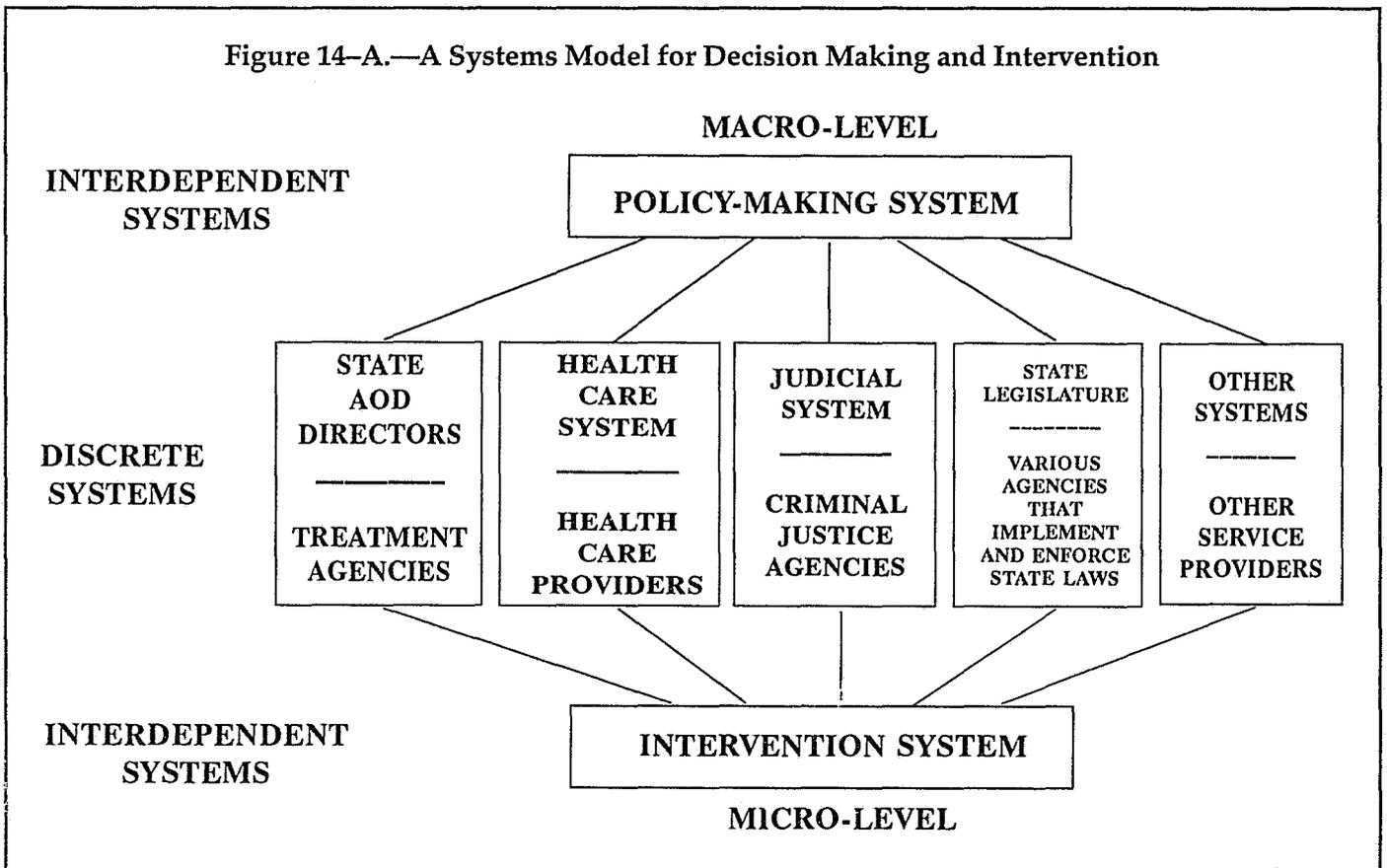
State courts are a part of larger systems at two levels. At minimum, State substance abuse agency directors, health care sys-

tem representatives, judicial system delegates, and legislative leaders (and perhaps others) must work in concert, at a macro level, to achieve effective policy decisions. At the community or individual (micro) level, the same systems must interact effectively to provide appropriate interventions for alcohol- and drug-involved persons. See Figure 14-A for a graphic depiction of these two systems levels. Discrete systems include substance abuse treatment, health care, judicial and criminal justice, State legislative and enforcement agencies, and other systems, such as social welfare and its service delivery agencies. Each of these systems has unique characteristics, funding mechanisms, and responsibilities. However, at the policy-making and intervention levels they are very interdependent. What affects one system impacts each of the others. Concurrently, the individual needing treatment usually requires services from a variety of systems. Coordination of these efforts can minimize duplication of efforts or gaps in needed services (Downes & Shaening, 1993; Hafemeister, 1991; McGarry, 1993).

Members of each of the discrete systems have various perspectives on needs and desired outcomes. When these systems join at the micro or macro level, there may be conflicts and tensions about expectations and goals. However, coordination within these interdependent systems allows the key players to achieve a fresh understanding of how their respective roles and systems impact, and are affected by, the larger systems. When common purposes and specific functions are identified and integrated, more can be accomplished than through any individual effort (Downes & Shaening, 1993).

Communication among systems is also vital to understand the

Figure 14-A.—A Systems Model for Decision Making and Intervention



philosophies of each. The major goal of treatment providers is to help individuals make changes needed to achieve abstinence. While the criminal and juvenile justice systems share this purpose, they also have a public protection duty. Although these differences are inherent in the respective systems, frequent communication and collaboration can facilitate a better understanding of each party and respect for, if not total agreement with, each point of view.

Developing partnerships among key players in the treatment and justice systems, on behalf of drug-involved persons, is vital. Several important elements of such an alliance include the following (Downes & Shaening, 1993; McGarry, 1993):

- interagency policies clarifying responsibilities for designing and delivering treatment;

- the development of realistic treatment and performance outcomes for persons who are under the supervision of both the treatment and criminal justice systems;
- feedback mechanisms to the judiciary about the progress of individuals;
- feedback to all involved parties about the general performance of the system;
- collaborative efforts to address the health-related needs of persons in the justice system;
- opportunities for sharing about mutual expectations and interdependencies among personnel from discrete systems who are interacting in interdependent systems; and
- development of effective strategies for case management coordination among various agencies with responsibilities for interventions.

With evidence heavily weighted toward the effectiveness of treatment for alcohol and other drug abuse problems, State court officials are increasingly aware of the need to refer individuals for treatment. Both the financial and human economies resulting from treatment are well worth the investment in treatment services. These include decreased substance abuse, lower rates of criminal behavior, potential savings in health care and justice system costs, and increased productivity.

In addition to the State substance abuse agency that provides State-level planning, coordination, program monitoring, and allocation of financial resources, the treatment community includes diverse treatment programs that can be accessed for persons needing intervention, (Hafemeister, 1991). Both substance abuse treatment and medical care often are

needed in tandem by persons who come to the attention of State courts. Health care professionals, as well as substance abuse treatment professionals from other disciplines (e.g., psychology, social work), have state-of-the-art information and expertise about assessment and treatment of substance abuse problems. Through collaborative efforts, their knowledge and skills can be shared to increase the effectiveness of interventions for persons in the justice system.

This important role of treatment requires coordination and collaboration between the judicial (both criminal and juvenile justice) system and the treatment field. Effective communication, planning, and sharing of expertise is vital for realistic treatment matching and case management of individuals involved in both the treatment and justice systems. Without active coordination efforts, the possibility of untoward results spirals. Such ramifications may include (but are not limited to):

- wasting valuable treatment resources through inappropriate referrals or ineffective treatment programs;
- losing patients (both figuratively and literally) from treatment when accountability and case management procedures are not coordinated;
- higher relapse and recidivism rates if comprehensive services are not provided or if neither system consistently follows clients during and after the treatment experience;
- both fragmentation and duplication of services; and
- continuing need for interventions because treatment goals are not achieved.

Because treatment resources are limited, the treatment field and the courts must work closely to identify treatment resources and make

the best use of expertise that is available. Once identified, coordination for the effective use of limited resources is a vital task for both treatment and the courts.

Integration between treatment and judicial structures is necessary for accountability of both individuals and organizations. Relapse prevention is a vital shared role between the treatment field and the criminal/juvenile justice system. Monitoring, through case management and aftercare, is similarly a responsibility that must be carefully considered and coordinated between the two systems.

The Changing Role of the Courts

The fundamental task of the courts is to make decisions about the culpability of persons involved in a particular case based on the information provided. Also within the purview of the courts is the determination of consequences, including various sanctions and other requirements imposed for criminal activities. Similarly, decisions in civil and domestic court cases may define and limit the roles, responsibilities, and freedom of persons not necessarily charged with a criminal offense. Such individuals may be at risk of harming themselves or others or of being harmed by someone because judgment is clouded by chemical dependency.

The array of options for sentencing has expanded greatly as innovative programs have developed within the spectrum of the criminal and juvenile justice systems. In some cases, discretion has been taken away from judges by legislation that requires mandatory sentences. Concomitantly, as treatment has become more sophisticated and complex, judges and court staff increasingly must seek expertise

from those who specialize in this field. The expert knowledge and skills of treatment professionals can be invaluable in developing individualized treatment recommendations, creating an effective continuum of care, and providing comprehensive services to meet individual needs.

These changes require much greater coordination and collaboration with substance abuse treatment agencies than was necessary in the past. Areas in which collaboration may be particularly valuable include (but are not limited to):

- identification and assessment of individuals with alcohol and other drug abuse problems;
- selection of the most appropriate treatment approaches and programs to which referrals may be made, and consideration of other sanctioning options that can be effective complements to treatment;
- arrangements for a comprehensive array of services to meet the entire spectrum of the needs manifested by a substance abuser;
- consideration of relapse prevention interventions that may be provided by both treatment and criminal/juvenile justice personnel;
- coordination of efforts to hold substance abusers accountable for their own recovery, including attendance at treatment, cooperation with treatment tasks, and remaining drug free (as indicated by random urinalysis); and
- provision of appropriate rewards or consequences for behaviors.

Referral to treatment programs and sentencing sanctions can be integrated for alcohol- or drug-involved offenders by all justice agencies. A thorough case management process can monitor the compliance and progress of individuals through treatment and

various other services needed. Contingencies can be used to encourage participation. However, such endeavors require frequent communication, coordination, and collaboration between court and treatment personnel.

An important part of coordination between the judicial and treatment systems is sharing information. One area in which this should occur includes individual client/patient information (keeping in mind confidentiality considerations) which is vital to both systems. If a person is to be helped to the greatest extent possible, a team effort among involved parties will be the most productive approach. State-of-the-art management information systems (MIS) can significantly enhance efforts to coordinate services and share information. When data are combined in a single MIS, those needing access to current information can obtain it more readily. For example, if a judge needs updated assessment information and recommendations before imposing sentencing and sanctions, it is much more efficient and cost effective to obtain all available data through one system, rather than spending time collecting individual reports from several sources.

Information about the abilities and constraints of both the courts and treatment field also need to be shared. Where possible, increasing referrals for treatment, as an alternative to adjudication or incarceration, is likely to be the most productive and cost-effective response. For example, it is estimated that the cost of successfully treating alcohol problems would be approximately one-tenth of what the disease currently costs society. Other reports indicate that the median total yearly cost per patient for drug abuse treatment was \$4,600. This can be contrasted with an annual cost of \$25,000 per

inmate in New York State prisons in 1990 (Singer, 1992).

Coordination Between the Courts and Treatment Around Five Critical Elements

At every stage of the criminal and juvenile justice systems, identifying persons with alcohol or other drug problems is essential. Drug testing, drug recognition techniques, and brief screening instruments (discussed in Chapter 4) may be helpful in identifying those in need of further assessment for substance abuse treatment. The *Criminal Justice Treatment Planning Chart* (Center for Substance Abuse Treatment [CSAT], 1993a) and the *Juvenile Justice Treatment Planning Chart* (CSAT, 1993b) show the various junctures within each system at which drug testing and other screenings are appropriate. For the criminal justice system, the major points of intervention are:

- Pre-trial hearings, including supervision of persons on release or in jail;
- pre-sentence investigations and hearings, including provisions for release, jail, or diversion programs;
- trial/sentencing resulting in probation or incarceration; and
- parole.

Similarly, the juvenile justice system affords opportunity for identification of alcohol- and drug-involved youth at the following points:

- intake/arrest leading to either an informal adjustment or filing of a petition;

- the social investigation, fact-finding hearing, and adjudication;
- case disposition, which may include community supervision or commitment to a residential program; and
- aftercare.

It is vital for the courts and criminal justice system to be vigilant concerning indicators of substance abuse. Institutionalizing screening procedures will ensure that fewer problems are overlooked. Having data available on a system-wide MIS increases the efficiency and effectiveness with which information is accessed to assist in identifying those who potentially need treatment.

Assessment

Assessment is the first critical area of substance abuse intervention. Thorough assessments, as discussed in Chapter 4, are used to determine the nature and complexity of the individual's problems. Comprehensive assessments evaluate the severity of substance abuse problems, identify cofactors, and develop treatment recommendations. Without a comprehensive assessment, referrals for treatment may be inappropriate and treatment resources may be misused.

Trained substance abuse and health professionals should conduct and interpret the findings of assessments. Such findings and recommendations should be communicated in a way that is understandable to non-treatment professionals. The court has an essential role in directing persons to the assessment process and using the resulting information and recommendations to decide about sentencing, sanctions, and referral for treatment.

Before members of the judiciary make dispositions, complete assess-

ment information and recommendations are required. This assists in the appraisal of:

- risk for release;
- decisions concerning diversion;
- various levels of community supervision or incarceration required;
- community reintegration following incarceration; and
- the need for health care related to infectious diseases.

Recommendations for treatment, with supporting data from assessments, should be used in case disposition, including treatment referrals, sentencing, and conditions of supervision and release. Although thorough assessments may be time-consuming and require additional expenditures, they are ultimately cost-effective.

Assessment and treatment referral recommendations should be viewed as an ongoing, or several-stage process. For example, if an individual is referred by the court for intensive treatment services in lieu of incarceration, the court will need to obtain information about his or her progress and status upon completion of the program. At that time, a new (or revised) assessment report may be needed to identify continuing problems and outline ongoing or changing treatment needs. For example, case management and continuing care are essential following inpatient treatment. In addition, referral to self help groups such as Alcoholics and Narcotics Anonymous (AA and NA) and various other services may be needed. Assessment should be viewed as a *process* rather than a time-limited event.

Mechanisms, such as state-of-the-art management information systems, can ensure that assessment results follow individuals through the various components of the system. This helps eliminate

redundancy and control costs for conducting assessments.

Coordination and collaboration between the judiciary and treatment may include such considerations as which instruments and processes used in an assessment are considered valid and acceptable by scientific and legal standards. Negotiating the most efficient and cost-effective procedures for referring persons for assessment, sharing needed information, monitoring cases, and returning recommendations in a timely manner are other considerations for communication and coordination between courts and treatment agencies. Joint decisions may include concurring on the nature and purpose for assessments, designating persons to be responsible for various tasks, developing mutually agreed upon policies and procedures, and defining desired outcomes. Each entity can look to the other for expertise and for consistent application when such decisions have been made in tandem.

Patient-Treatment Matching

The importance of patient-treatment matching was discussed in Chapter 5. Effective matching increases the likelihood that individuals will receive the treatment services that are most appropriate for their needs. Thus, the chances of responding positively, remaining in treatment longer, and beginning recovery are enhanced. Effective treatment matching offers a greater chance of treatment success.

Matching is also important for fiscal management. As treatment resources are scarce, it is imperative that their use be maximized by making the most appropriate refer-

als. Funds may be misused and other persons may be denied treatment if individuals are inappropriately placed in treatment programs. Generally, it is most prudent to begin with the least restrictive treatment setting that is likely to meet the individual's needs. Outpatient treatment is less expensive than inpatient programs and can be very effective for many individuals. Thus, beginning with less costly and less restrictive programs is advisable; if necessary, the treatment plan can be modified to provide more intensive programs if the initial approach is not effective.

Coordination between the courts and treatment is important in accomplishing the following tasks.

- The range of treatment resources available in the community should be identified.
- The characteristics of programs and the persons and problems with whom they are most successful should be delineated.
- The information to be shared between agencies and how this can be done without breaching confidentiality can be outlined.
- The mechanisms of the referral process should be specified with appropriate time frames and communication requirements for each system.
- Case management responsibilities for each entity should be spelled out to avoid duplication of efforts or lapses in monitoring substance abusers.
- Appropriate funding mechanisms and responsibilities should be identified.

Busy court and treatment personnel may need to find efficient ways to communicate and collaborate on these and other issues. The absence of cooperative efforts often are even more time consuming and costly than the initial investment of resources required for effective coordination.

Comprehensive Services

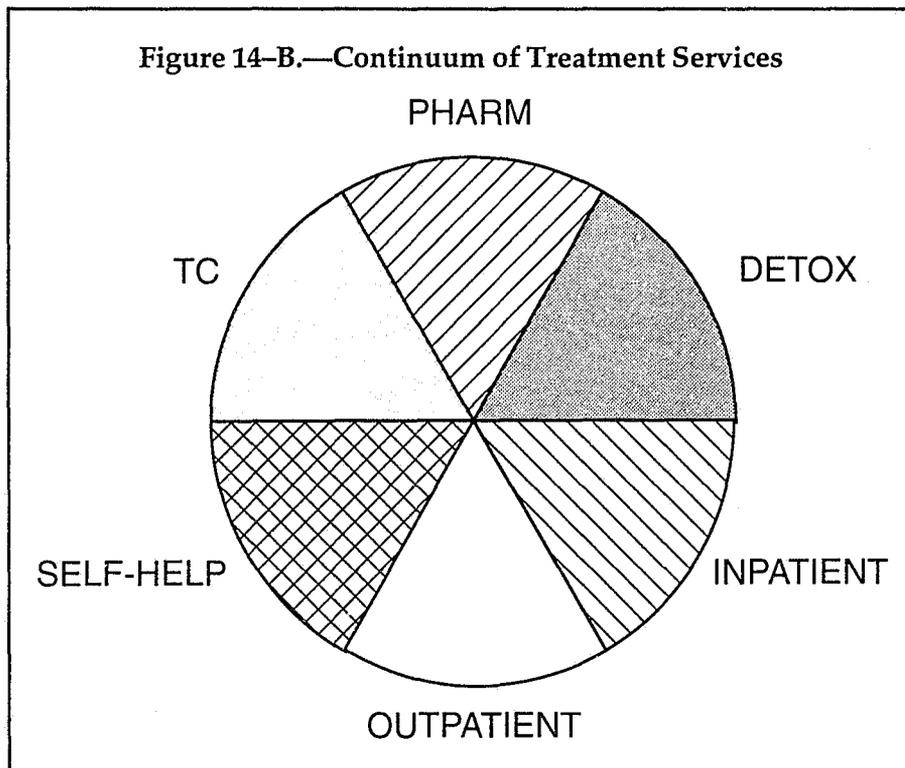
Most persons with substance abuse problems face a variety of additional challenges and need an array of services. A continuum of treatment programs might include, but not be limited to, the following. These were reviewed in Chapter 3:

- Detoxification (and readiness for treatment);
- Assessment;
- Pharmacotherapeutic Interventions;
- Outpatient Drug Free Programs;
- Inpatient Treatment;
- Therapeutic Communities;
- Self-Help Support Programs; and
- Relapse Prevention.

Figure 14-B shows this continuum in a circle, indicating that movement can occur at the connecting points between any of the services.

Within these programs, various services might be included, such as group, individual and family counseling, behavior modification, acupuncture, and many others. Particular individuals will need different combinations of treatment programs and services to achieve and maintain recovery. For example, one individual might begin treatment with detoxification, followed by pharmacotherapeutic interventions providing group and individual counseling, followed by a self-help group. Another person might begin the treatment experience with outpatient treatment, find that a period of inpatient treatment is needed, and then continue with a follow-up outpatient program and a self-help group. The possible combinations are limitless and *depend upon the assessed needs of individual patients*. There is no particular order in which they must occur; rather the most appropriate combination of services needs to be identified and selected.

Figure 14-B.—Continuum of Treatment Services



In addition to primary treatment for substance abuse, most patients will need ancillary services to address health and psychosocial problems. These services may include, but are not limited to, the following:

- Health Education;
- Preventive Health Care;
- Assessment and Testing for Infectious Diseases;
- Medical Treatment;
- Vocational Training and Counseling;
- Educational Services;
- Referral for Legal Aid and Immigration Services;
- Social and Athletic Activities;
- Housing Services;
- Income Maintenance;
- Counseling for Personal and Relationship Problems; and
- Peer/Support Groups.

Again, each person's needs must be assessed and a constellation of services appropriate for his or her needs should be provided. These needs may change over time; as some problems are addressed and

resolved, other issues may become more important.

Further, within the criminal and juvenile justice systems there also are continuums of care. These are reflected in the *Criminal Justice Treatment Planning Chart* (CSAT, 1993a) and the *Juvenile Justice Treatment Planning Chart* (CSAT, 1993b). Each reflects the general movement of offenders or youth through the system. Possible options for both criminal/juvenile justice interventions and substance abuse treatment responses are indicated at each point for which courts provide supervision.

Meeting the comprehensive needs of persons involved in the criminal or juvenile justice systems requires extensive coordination between these systems and treatment. All persons involved must remain focused on the goal of providing comprehensive, quality interventions. This will require interactive planning and closely coordinated delivery of both treatment and sanctions. Without adequate communication and collaboration,

there is a greater risk that a person's needs will not be thoroughly addressed and treatment will not be effective. Such coordination also promotes both patient and organizational accountability.

Relapse Prevention

Relapse prevention is another of the five critical elements of substance abuse treatment. In Chapter 1 the process of addiction was reviewed. As it is a chronic, relapsing disorder, many persons require multiple episodes of treatment in pursuit of recovery. A key element of effective treatment is relapse prevention: methods of helping patients anticipate and cope with situations that result in relapse. Information on relapse and relapse prevention was provided in Chapter 9.

Relapse prevention programming in both treatment services and criminal and juvenile justice agencies is important because it helps chemically dependent persons achieve and sustain abstinence. Relapse prevention, much like health promotion for other chronic diseases, emphasizes and reinforces long-term behavioral changes. As patients experience increased levels of success in coping with addiction, they are more likely to manage subsequent cravings and social pressures without relapsing to substance use. Relapse prevention is yet another way of promoting accountability of alcohol- and drug-involved individuals because they are taught specific ways of handling situations that, for them, trigger relapse.

Relapse prevention efforts increase periods of abstinence or decrease the duration of episodes of substance use after treatment and save treatment dollars by decreasing the need for additional

treatment services. Thus, more persons ultimately can access scarce treatment resources.

Court and treatment personnel may need to receive joint training in relapse prevention techniques and collaborate on policies that determine whether or not participation in relapse prevention programs is to be mandatory. Relapse prevention must be a part of the continuum of treatment services and sanctions provided through both the treatment and the criminal/juvenile justice systems. To do this effectively, coordination is imperative.

Accountability

Accountability is the last of the five critical elements of treatment. Accountability applies to both individuals and organizations. Court and treatment personnel are concerned about providing cost-effective, quality treatment services that ultimately impact the problem of substance abuse. Only through evaluating treatment services and using the information generated to modify programs, where needed, can quality be maintained and improved. Effective evaluation begins early in program development; it is not a procedure tacked on at the end of service provision. As plans for services and coordination activities are developed, an overriding question should be the way in which they will be evaluated to determine their effectiveness.

Both the courts and the treatment community have a vested interest in knowing that treatment services are effective. Evaluation of services is also useful in identifying gaps in services, within both the treatment system and the criminal and juvenile justice systems. Recurring problems often can be directly attributed to the lack of specific programs and services. Such information, provided to decision

makers, may be used to obtain additional resources and implement new programs.

Successful evaluation efforts require considerable coordination among systems. Lack of communication and collaboration can result in inadequate accountability, because insufficient information is available. This is an area in which management information systems tailored to the needs of the justice and treatment systems can be invaluable. Such systems are cost effective because they readily supply data on program services.

Similarly, coordination is required at the individual patient level, as well as the systems level, to insure accountability. As with program and systems evaluations, planning for evaluation of patient progress and compliance must begin early. Collaborative efforts are needed to develop treatment plans and sanctioning strategies based on assessment information. Specific measures for holding patients accountable for attending and participating in treatment and remaining drug-free (as indicated by random urinalysis) should be included in the treatment and sanctioning plans. Accountability requires regular communication among treatment and criminal/juvenile justice staff to monitor compliance with the various aspects of the plan.

Conclusion

Both the treatment and judicial systems are concerned for and have a responsibility to see that alcohol- and drug-involved persons receive appropriate treatment. Treatment is successful and cost effective, and it has been shown to decrease criminal activity, while increasing productivity.

Coordination of services is essential, especially in the five critical areas of treatment: assessment,

patient-matched referrals, comprehensive service delivery, relapse prevention, and accountability. Leukefeld (1991) suggests the following roles of the treatment and criminal/juvenile justice systems for working collaboratively and improving treatment.

- The criminal justice system provides an environment for identifying potential substance abusers.
- Probation and parole (as well as other court-ordered sanctions) can enhance behavioral contingencies to keep substance abusers in treatment and reduce drug use.
- Treatment can be enhanced by establishing working relationships between substance abuse treatment programs and criminal/juvenile justice agencies.
- Treatment with legal coercion, combined with compulsory community follow up to monitor against relapse, can produce somewhat better outcomes.
- Court referral to substance abuse treatment generally increases the length of time persons remain in treatment.
- Linking substance abuse treatment and the criminal/juvenile justice system can help disrupt the addiction life cycle and decrease alcohol and other drug abuse.

The communication and collaboration needed to achieve coordinated service delivery is required at several levels. At the State level, various systems must consider policies and funding alternatives needed to meet the demand for treatment services. At local levels, agencies need to identify gaps and develop practices for cooperative working arrangements. Finally, at the agency level, mechanisms should be in place for coordination between the courts and treatment to identify persons needing substance abuse treatment and to ensure that the five critical elements of treatment are adequately provided.

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DHHS Publication No. (SMA) 94-2075
Substance Abuse and Mental Health Services Administration
Printed 1994

SAMHSA