SUBSTANCE ABUSE TREATMENT:
THE MINNESOTA UPDATE

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Chemical Health Division
Minnesota Department of Human Services

Minnesota Department of **Human Services**

I. WHAT IS ADDICTION?

Although the initial use of drugs and alcohol is a voluntary act, addiction, by definition is loss of control over drug and alcohol use. The sole focus of a life revolves around acquiring and using drugs once addiction takes over. Addiction is continued compulsive use of drugs and/or alcohol in spite of repeated negative consequences associated with their use (consequences in health, family, employment and relationships).

Addiction is a chronic disease with behavioral components that requires lifelong management and periodic professional services. If untreated, it can be fatal. It affects the functions of the brain in fundamental, sometimes long-lasting ways that can persist after discontinuation of drug use.

It is known as a disease of the brain because repeated exposure to drugs disrupts the interaction of critical brain structures that control behavior. Continued substance abuse leads to tolerance or the need for higher drug dosages to produce the same effect. This can also lead to addiction, which drives a person to seek out and take drugs compulsively in spite of negative consequences related to the use. Drug addiction destroys one's self-control and results in an inability to make sound decisions.

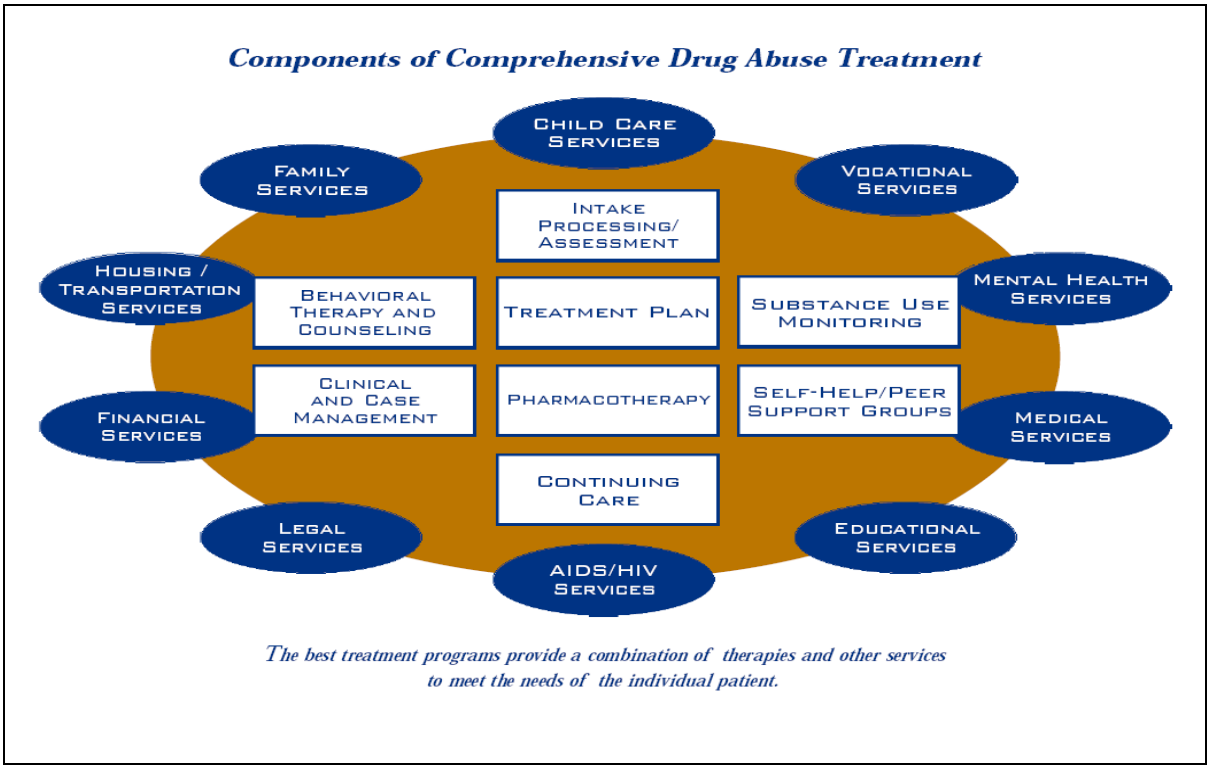
Why one person becomes addicted and another person does not is due to a combination of factors that involve both genetic predisposition and environment. Scientists estimate that genetic factors account for between 40 and 60 percent of a person's vulnerability to addiction. Adolescents and individuals with mental disorders are at greater risk of drug abuse and addiction than the general population. The earlier the age of onset of drug and alcohol use, the more likely the development of addiction in the course of one's lifetime. This is why delaying the onset of use is a primary goal of prevention.

II. WHAT IS ADDICTION TREATMENT?

Like other chronic diseases, addiction can be managed successfully. Treatment and ongoing support for a drug-free lifestyle help patients learn to counteract addiction's disruptive effects on the brain and behavior and regain control of their lives.

A. Components of treatment

Addiction to drugs and alcohol can be effectively treated but never goes away, much like diabetes or high blood pressure or asthma. To effectively manage chronic illnesses like these, patients need to change their behavior. Because dependency on alcohol and other drugs creates difficulties in one's physical, psychological, social and economic functioning, treatment must be designed to address all of these areas. Case management and referral to other medical, psychological and social services are crucial components of treatment for most patients.



SOURCE: National Institute on Drug Abuse.

B. Principles of addiction treatment

More than two decades of scientific research have yielded a set of fundamental principles that characterize effective drug abuse treatment. These principles are detailed in the research-based guide entitled *Principles of Drug Addiction Treatment: A Research-based Guide*, by the National Institute on Drug Abuse. They are summarized below.

- No single treatment is appropriate for all individuals. Matching treatment settings, interventions and services to each patient's problems and needs is critical.
- Treatment needs to be readily available. Treatment applicants can be lost if treatment is not immediately available or readily accessible.
- Effective treatment attends to multiple needs of the individual, not just his or her drug use. Treatment must address the individual's drug use and associated medical, psychological, social, vocational, and legal problems.
- Treatment needs to be flexible and to provide ongoing assessments of patient needs, which may change during the course of treatment.
- Remaining in treatment for an adequate period of time is critical for treatment effectiveness. The time depends on an individual's needs. For most patients, the threshold of significant improvement is reached at about three months in treatment. Additional treatment can produce further progress.
- Individual and/or group counseling and other behavioral therapies are critical components of effective treatment for addiction. In therapy, patients address motivation, build skills to resist drug use, replace drug-using activities with constructive and rewarding nondrug-

using activities, and improve problem-solving abilities. Behavioral therapy also facilitates interpersonal relationships.

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

- Addicted or drug-abusing individuals with coexisting mental disorders should have both disorders treated in an integrated way. Because these disorders often occur in the same individual, patients presenting for one condition should be assessed and treated for the other.

- Medical detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug use. Medical detoxification manages the acute physical symptoms of withdrawal. For some individuals it is a precursor to effective drug addiction treatment.

- Treatment does not need to be voluntary to be effective. Sanctions or enticements in the family, employment setting, or criminal justice system can significantly increase treatment entry, retention, and success.

- Possible drug use during treatment must be monitored continuously. Monitoring a patient's drug and alcohol use during treatment, such as through urinalysis, can help the patient withstand urges to use drugs. Such monitoring also can provide early evidence of drug use so that treatment can be adjusted.

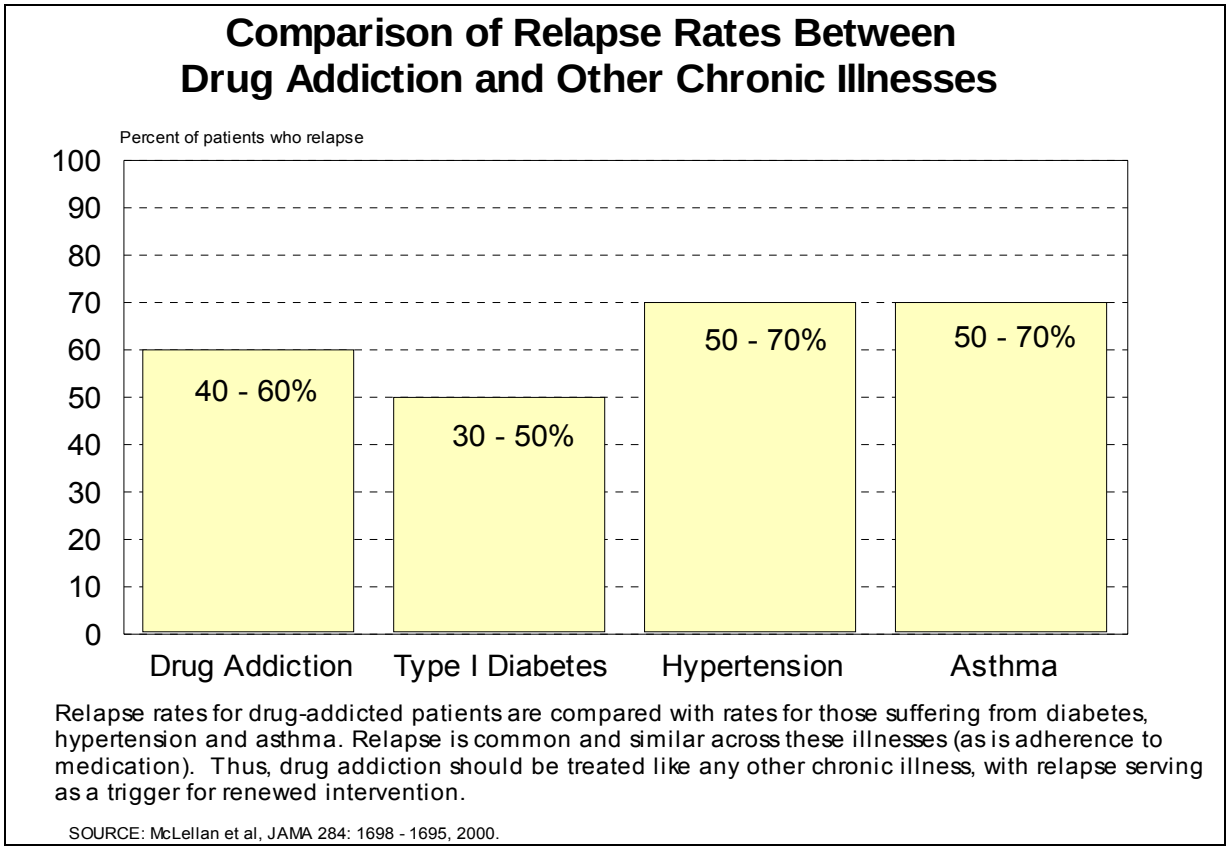
- Treatment programs should provide assessment for HIV/AIDS, hepatitis B and C, tuberculosis and other infectious diseases, and counseling to help patients modify or change behaviors that place them or others at risk of infection. Counseling can help patients avoid high-risk behavior and help people who are already infected manage their illness.

- Recovery from drug addiction can be a long-term process and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to drug use can occur during or after successful treatment episodes. Participation in self-help support programs during and following treatment often helps maintain abstinence.

SOURCE: Principles of Drug Addiction Treatment: A Research-based Guide (NCADI publication BKD347). Copies of the booklet can be obtained from the National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20847, 1-800-729-6686. Available online at www.drugabuse.gov/PODAT/PODATindex.html.

C. Effectiveness of addiction treatment

There is no single agreed upon, industry standard for measuring treatment effectiveness. Drug abuse treatment outcomes compare favorably to outcomes of treatment for other chronic relapsing diseases such as hypertension and diabetes. But drug abuse treatment frequently is held to a higher standard than other medical treatments. Addiction treatment is expected to address a wide array of services, beyond medical and psychological.



An examination of multiple treatment outcome studies generally indicates that 40 – 60 percent of addicts relapse and use mood altering chemicals at least once during the year following treatment. Compared with other chronic disorders, 30 – 50 percent of diabetics require additional treatment within a year of initial diagnosis. For asthmatics and people with hypertension 50 – 70 percent of patients do not adhere to medications one year post-diagnosis, and therefore require additional treatment.

III. Addiction Treatment Services in Minnesota

Chemical dependency treatment is an array of individualized services intended to help the patient understand the nature of addiction, cope with drug craving, develop skills to avoid relapse and get introduced to ongoing recovery-oriented activities and services. In addition to cognitive behavioral and/or other types of therapy delivered in individual and group settings, lectures, family involvement, assessment and integrated treatment of co-occurring mental health disorders, many treatment programs in Minnesota and nationally, also introduce patients to the concepts and traditions of Alcoholics Anonymous. Research indicates that participation in self-help support programs during and following treatment often helps maintain abstinence.

Substance abuse treatment may be based on one of several traditional approaches which emphasize different elements of the disease and the recovery process and include medical, social and behavioral models. There are also non-mainstream models such as traditional healing practices associated with specific cultural groups.

The Consolidated Chemical Dependency Treatment Fund (CCDTF) is a State-supervised, county-administered system for funding chemical dependency treatment for individuals who meet current Federal poverty guidelines. Following procedures and standards set by the State, counties set

provider services and rates by contract, assess persons applying for treatment assistance, and place people in specific treatment programs. Access to publicly funded treatment begins with a Rule 25 Assessment by the county human services agency or its agent. Treatment admissions funded by the CCDTF have also steadily increased in Minnesota since 2000.

Yet because untreated addiction contributes to criminal justice involvement, threatens public safety, and endangers children and communities, all at enormous public expense that far outweighs costs associated with the delivery of treatment services, increased placements in treatment are generally considered a positive trend. It has been estimated that every dollar spent on addiction treatment saves seven dollars in averted future social costs related to the consequences of untreated addiction.

There are roughly 300 licensed treatment programs in Minnesota. Addiction treatment is offered in a variety of settings. For CCDTF patients in 2006 this included: outpatient (45%); halfway house (19%); inpatient (17%); extended care (9%); methadone maintenance (4%); hospital-based (3%); and room and board (3%).

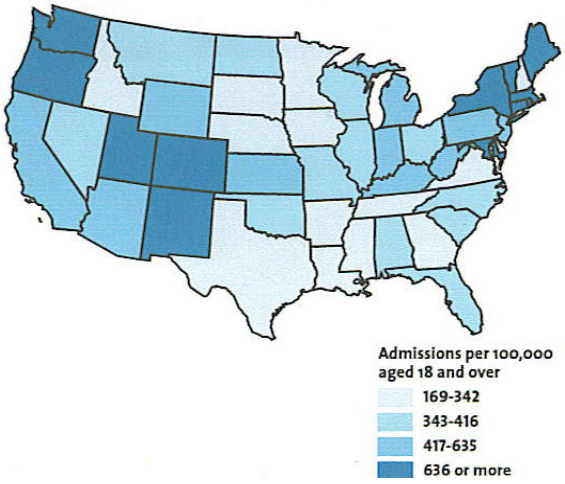
A. Treatment need

An estimated 387,600 adult Minnesotans (age 18 and above) were in need of chemical dependency treatment in 2005. Of that number, approximately 7% received treatment.

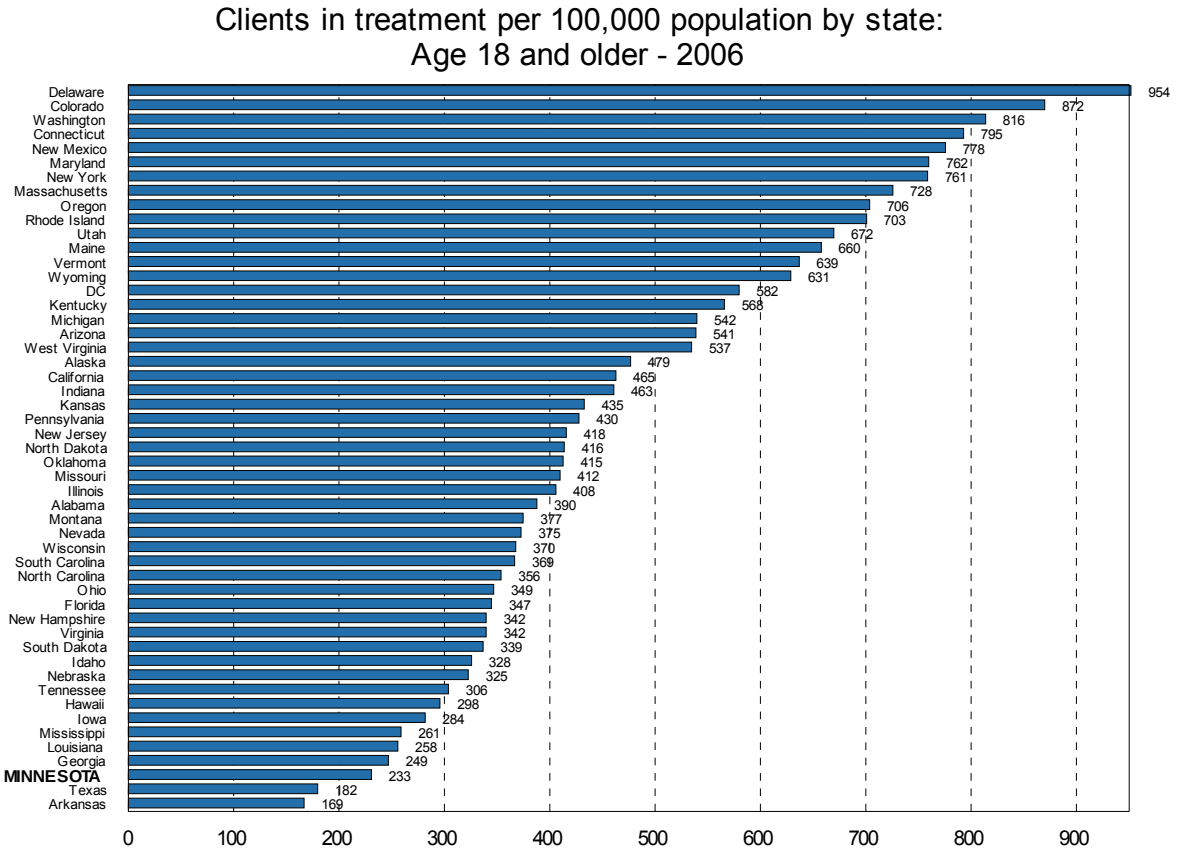
(SOURCE*: Estimating the need for Treatment for Substance Abuse Among Adults in Minnesota: 2004/2005 Treatment Needs Assessment Survey Final Report*; Eunkung Park, Ph.D.; Performance Measurement and Quality Improvement Division, Minnesota Department of Human Services, January, 2006).

Does Minnesota provide treatment services to more people than in other states? Clearly not. In fact, Minnesota ranks within the lowest group of states in terms of providing treatment services. See graphs below.

Clients in treatment per 100,000 population: Age 18 and older – 2006



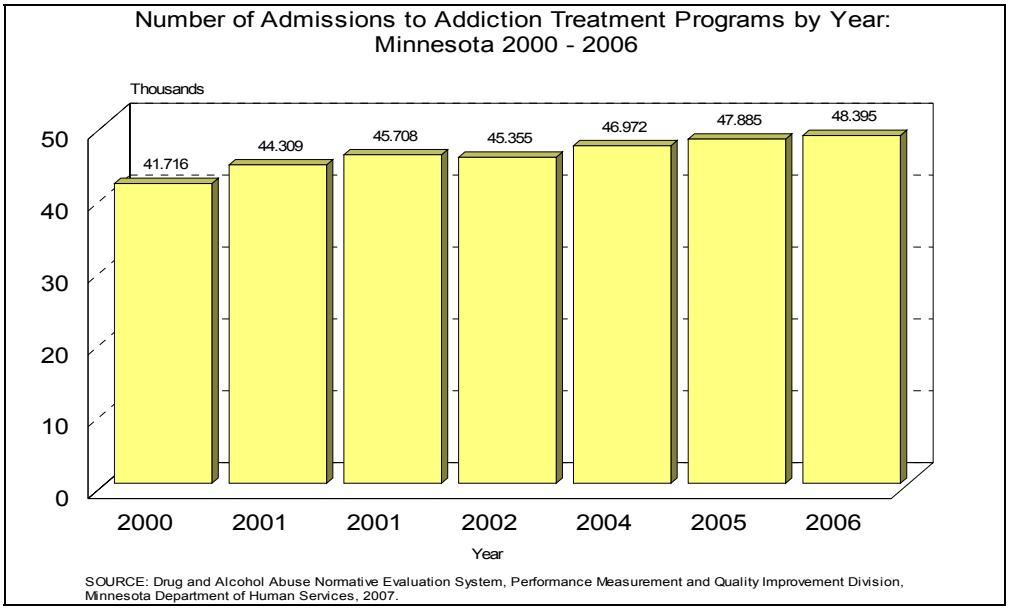
SOURCE: 2006 National Survey of Substance Abuse Treatment Services, Office of Applied Studies, Substance Abuse and Mental Health Services Administration, 2007.



SOURCE: 2006 National Survey of Substance Abuse Treatment Services, Office of Applied Studies, Substance Abuse and Mental Health Services Administration, 2007.

B. Treatment trends

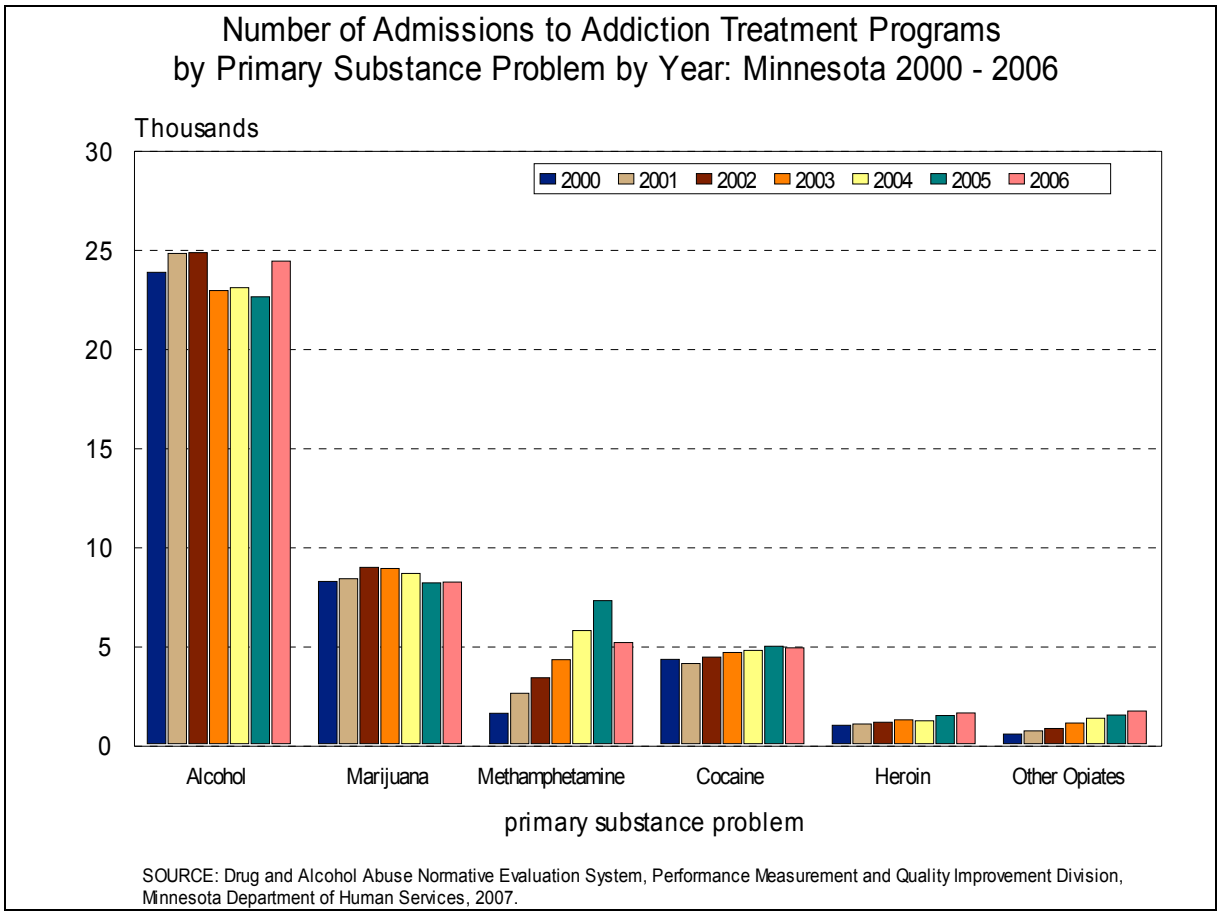
The nature of addiction is such that people often seek help only in response to major pressure from their employers, loved ones, or the criminal justice system. Many addicts and alcoholics have exhausted themselves financially, have lost employment, homes and families by the time this happens, and hence the reliance on the public system for the delivery of treatment services. Admissions to addiction treatment programs in Minnesota have increased since 2000.



SOURCE: Drug and Alcohol Abuse Normative Evaluation System, Performance Measurement and Quality Improvement Division, Minnesota Department of Human Services, 2007.

C. Drug abuse trends

Since 1997 Minnesota has experienced heightened consequences related to the growing abuse and manufacture of methamphetamine (meth) throughout the State. The increase in statewide treatment admissions with meth as the primary substance problem is noted below.

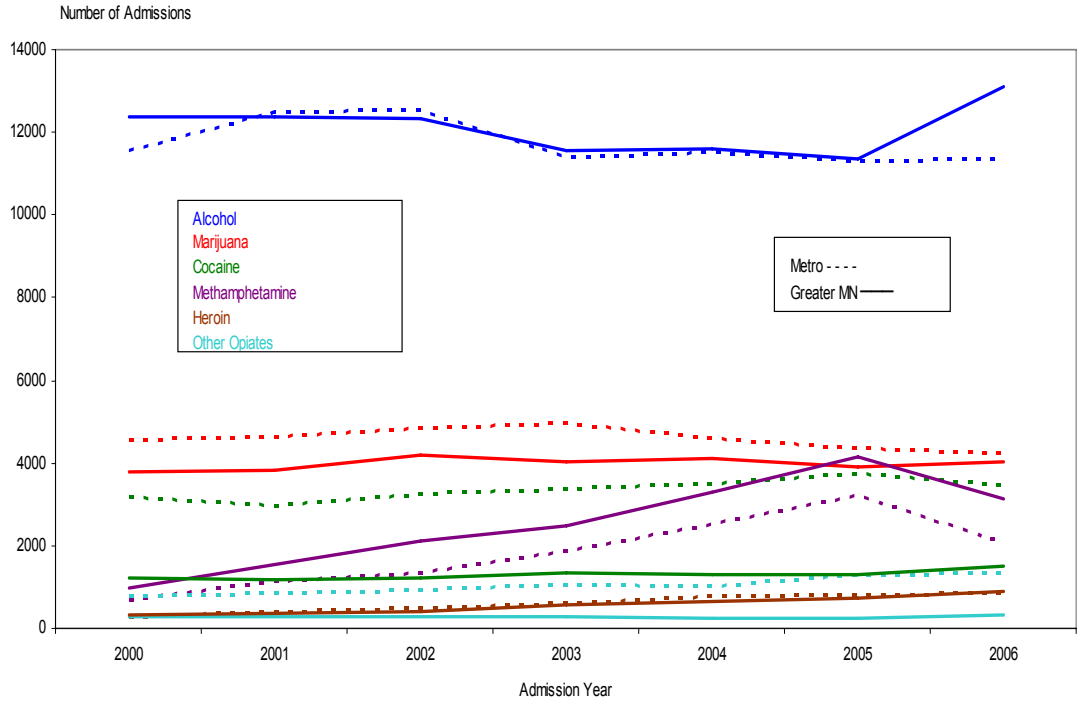


This trend has also been characterized by variations across urban areas compared with more sparsely populated areas. Note the differences below in metro vs. non-metro areas of the state.

In 2006 the number of meth treatment admissions in the state declined dramatically. The number of clandestine meth labs in Minnesota also declined. In the Twin Cities metro area hospital emergency department episodes related declined, as well as the number of meth-related deaths.

These declines in methamphetamine-related indicators were attributed to a variety of factors including the state law restricting the sale of over-the-counter cold products containing pseudoephedrine; constant and concerted pressure from local, State and Federal law enforcement agencies; and heightened public awareness and community mobilization about methamphetamine abuse and its far-reaching, negative effects on the safety and quality of community life.

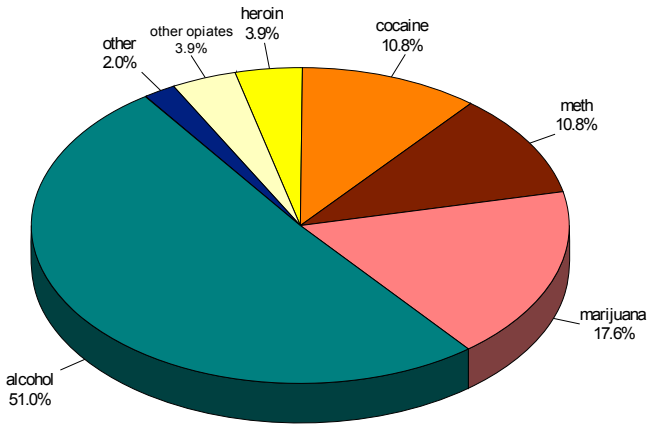
Addiction Treatment Admissions by Geographic Area by Primary Drug by Year: Minnesota 2000 - 2006



SOURCE: Drug and Alcohol Abuse Normative Evaluation System, Performance Measurement and Quality Improvement Division, Minnesota Department of Human Services, 2007.

In 2006 methamphetamine admissions and cocaine admissions each accounted for 10.8 percent of total treatment admissions in Minnesota.

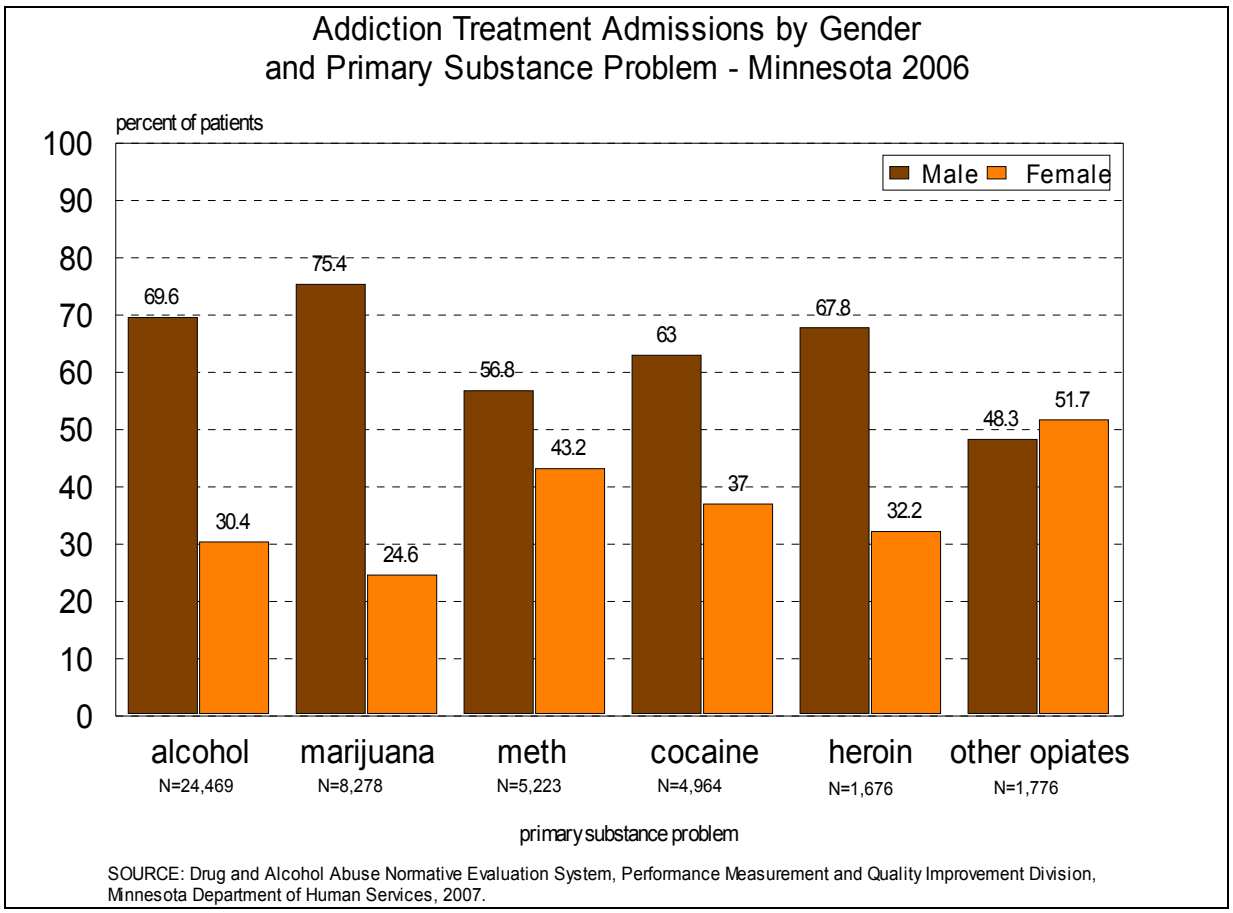
Addiction Treatment Admissions by Primary Substance Problem - Minnesota 2006



SOURCE: Drug and Alcohol Abuse Normative Evaluation System, Performance Measurement and Quality Improvement Division, Minnesota Department of Human Services, 2007. Total N = 47,159.

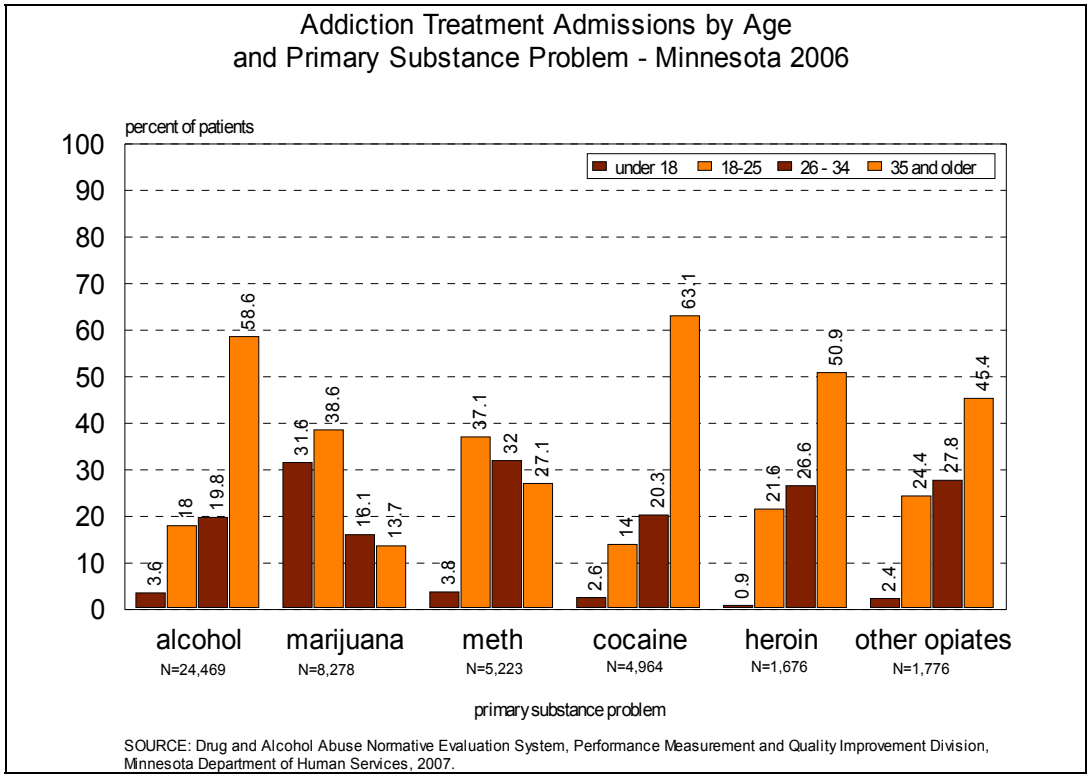
D. Patient characteristics

There are differences shown below regarding the primary substance of abuse for patients entering addiction treatment programs. A higher percentage of females than males enter treatment reporting other opiates (51.7 percent are female vs. 48.3 percent male). For all other admissions the percentage who are male exceed the percentage who are female.

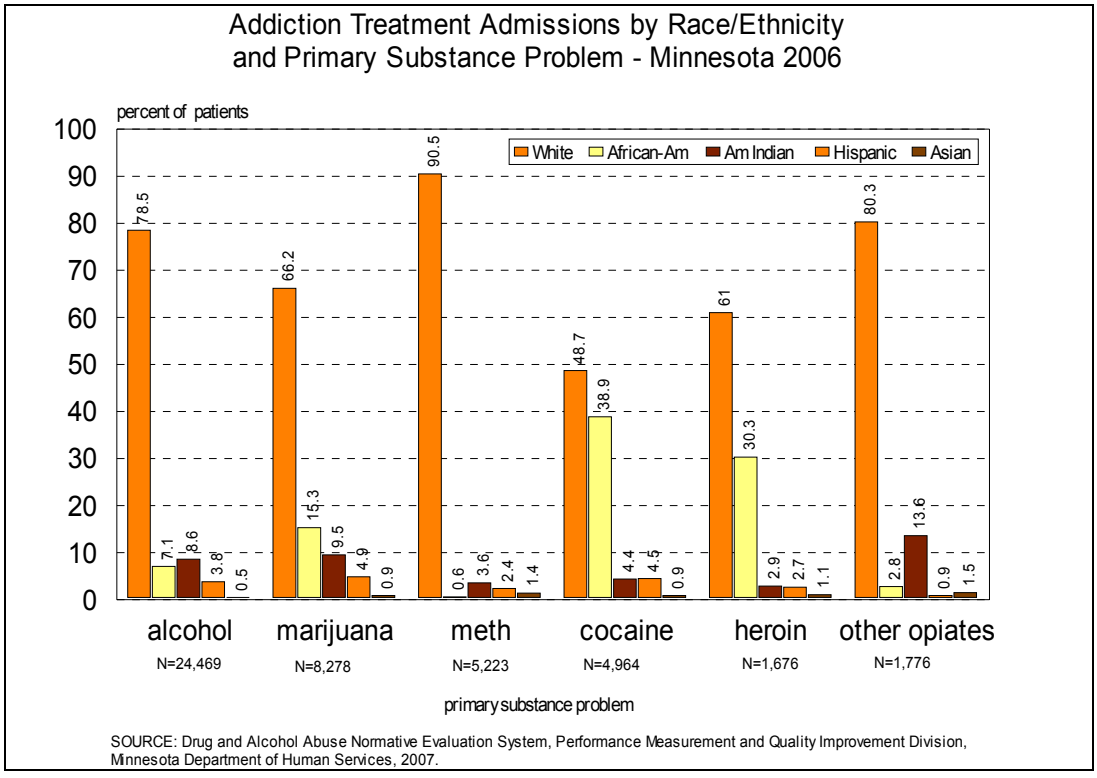


SOURCE: Drug and Alcohol Abuse Normative Evaluation System, Performance Measurement and Quality Improvement Division, Minnesota Department of Human Services, 2007.

In terms of age differences, the most notable trend concerns the youthfulness of patients reporting marijuana as the primary substance problem. Of these patients 31.6 percent are under the age of 18 and 38.6 percent are between the age of 18 and 25. In contrast, for those patients who report cocaine as the primary substance problem, 63.1 percent are age 35 or older.



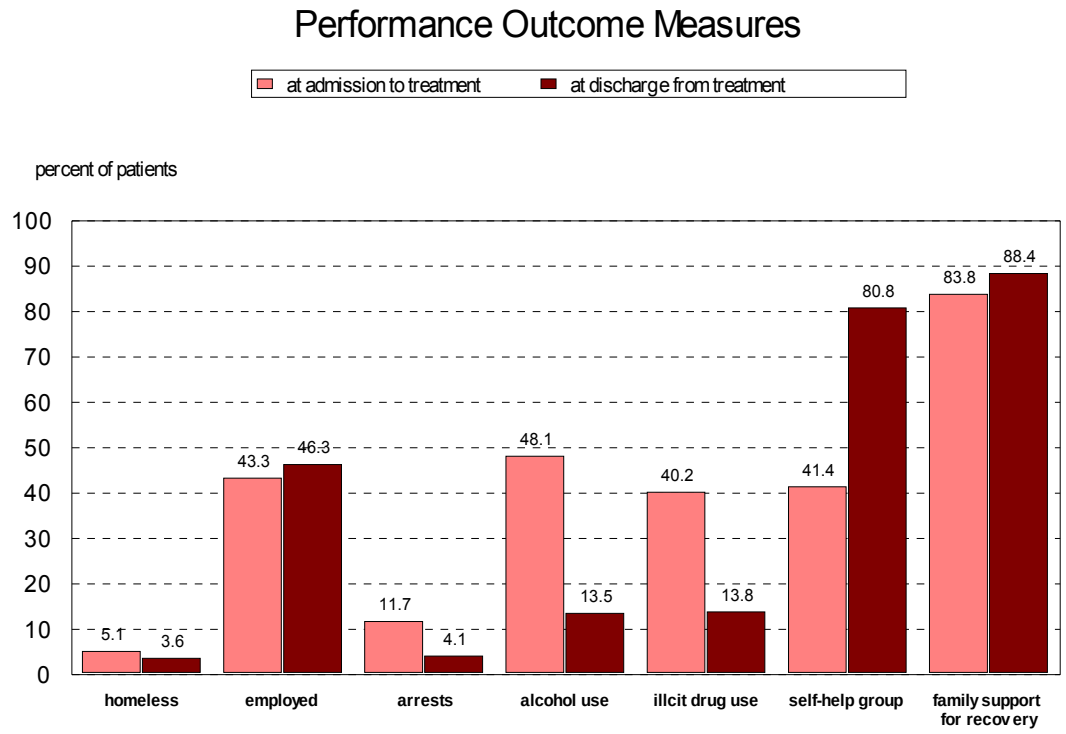
Regarding race/ethnicity patterns among patients receiving addiction treatment services in Minnesota, Whites are disproportionately represented among patients who report meth as the primary substance problem, and African Americans among those who report cocaine.



E. Performance outcome measures

In conjunction with national efforts, the Department of Human Services data collection and management programs support the efficient creation and dissemination of addiction treatment program performance outcome measures.

These measures attempt to capture meaningful, real life outcomes for people who are striving to attain and sustain recovery, and participate fully in their communities in the wake of receiving treatment for an active addiction to drugs or alcohol. These and other measures are captured by the Drug and Alcohol Normative Evaluation System (DAANES), the primary data collection system of the Department of Human Services used in monitoring the nature, extent, and effectiveness of substance abuse treatment services in Minnesota.



SOURCE: Drug and Alcohol Abuse Normative Evaluation System, Performance Measurement and Quality Improvement Division, Minnesota Department of Human Services, 2007. Based on roughly 19,000 statewide treatment admissions between January and June 2007 with discharges as of November 1, 2007. All categories are in reference to past 30 days. Employed includes employed or student. Self-help group refers to participation in AA or similar self-help group that supports recovery. Family suppor for recovery refers to interaction with family members who are supportive of recovery.

In addition to the measures above, Minnesota treatment providers licensed under state Rule 31 must report severity scores in each of six patient functioning dimensions. These scores are based on an assessment of the severity of patients' problems in each dimension upon admission and discharge from treatment services. The dimensions are:

- **Intoxication/withdrawal:** This dimension ranges from patients who exhibit no intoxication or withdrawal symptoms, to those with symptoms so severe that the patients are a threat to self or others.
- **Biomedical**: Ranges from patients who are fully functional to those with severe physical problems or conditions that require immediate medical intervention.
- **Emotional, behavioral, cognitive**: Ranges from patients with good coping skills and impulse control, to those with such severe emotional or behavioral symptoms that the patients are unable to participate in treatment.

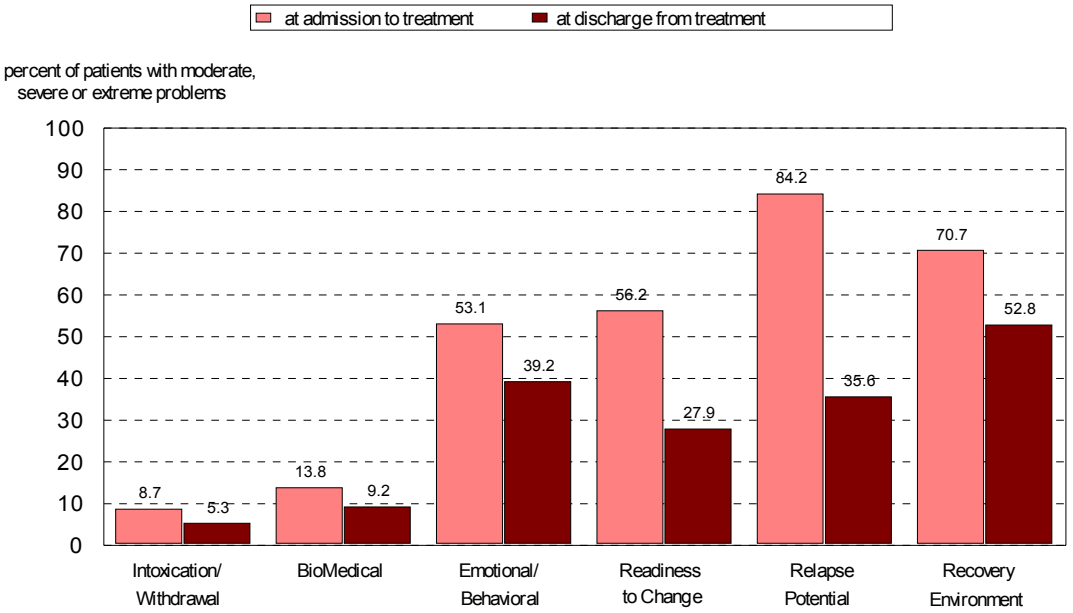
- **Readiness for change**: Ranges from patients who admit problems, are cooperative, motivated and committed to change, to patients who are unwilling to explore changes, are in total denial of illness, and dangerously oppositional to the extent that they are an imminent threat of harm to self and others.

- **Relapse, continued use:** Ranges from patients who recognize risk and are able to manage potential problems, to those who have no understanding of relapse issues and display high vulnerability for further substance use disorders.

- **Recovery environment**: Ranges from patients engaged in structured, meaningful activity with significant others and family and a living environment that is supportive to recovery, to patients who have a chronically or actively antagonistic significant others, family or peer group and dangerous living environments that are harmful to long-term, drug-free recovery.

The severity levels within each dimension range from 0 (no problem) to 4 (severe problem).

Chemical Health Severity Ratings by Dimension



SOURCE: Drug and Alcohol Abuse Normative Evaluation System, Performance Measurement and Quality Improvement Division, Minnesota Department of Human Services, 2007. Based on over 19,000 statewide treatment admissions between January and June 2007 with discharges as of November 1, 2007.

As illustrated by these data, Minnesota treatment programs significantly reduce the severity of problems for addicted patients in a number of life areas.

IV. 2008 OUTLOOK

A. Uniformity in chemical health assessments

The 2006 report of the Office of the Legislative Auditor found wide variation across counties in terms of providing publicly-funded treatment.

To improve and update the uniformity of chemical health assessments for public patients, in practice and application, the Chemical Health Division has promulgated with broad public input from providers and counties, a revision of Rule 25, the Rule that establishes criteria under which a person can qualify for services under the CCDTF. For the first time since its inception in 1987, a uniform assessment instrument and interview guide will be required of all placing authorities throughout the State. Multiple training workshops will precede the July 1, 2008 new Rule 25 implementation date.

The new Rule 25 assessment will apply a state-of-the-art matrix that presents four levels of severity across six patient dimensions. The dimensions are: 1) Intoxication/withdrawal 2) Biomedical 3) Emotional, behavioral, cognitive 4) Readiness for change 5) Relapse, continued use, and 6) Recovery environment. The severity levels within each dimension range from 0 (no problem) to 4 (severe problems).

B. County accountability and oversight

The 2006 report of the Office of the Legislative Auditor found a lack of DHS oversight of county practices to ensure that clients are placed in appropriate treatment. To address this concern, DHS is developing a web-based data instrument that will be required of all CCDTF assessors. By collecting client severity scores at assessment and dates of request for assessment, actual assessment, and client placement in treatment, DHS will have the necessary tools to effectively monitor county practices and to ensure that the timelines set forth in the New Rule 25 have been adequately met. The new Rule 25 requires that an assessment interview take place within twenty days of request and that the assessment be completed and treatment authorized within ten days thereafter. DHS will also continue to monitor county practices through training and ongoing site visits.

C. Monitoring county obligations to pay for treatment costs

As part of the Department's 2008 formal assessment of public funding of addiction treatment services, alternate funding models will be examined. Special attention will be paid to designing a system that disallows current practices which compromise patient placements, and/or have a chilling effect upon the counties' obligations to pay.

D. Developing and disseminating performance outcome measures

The 2006 report of the Office of the Legislative Auditor found that very limited provider-specific information was available about treatment services and best-practices in Minnesota. The Department of Human Services will issue a statewide annual report on treatment performance outcome measures, starting with this report. In addition, DHS will continue to monitor those on a regular basis, as well as trends in patients' functioning according to the severity scores across the six patient dimensions. In 2008 these scores will be collected at assessment, treatment intake, and discharge. Further, through its website and other appropriate venues, DHS will make program-specific performance outcome measures available online. These efforts will better inform both county placing authorities and consumers about the performance outcomes of the State's various addiction treatment programs.

E. Screening, brief intervention and referral to treatment (SBIRT)

SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders. Primary care centers, hospital emergency rooms, trauma centers, and other community settings provide opportunities for early intervention with at-risk substance users before more severe consequences occur.

- Screening quickly assesses the severity of substance use and identifies the appropriate level of treatment.
- Brief intervention focuses on increasing insight and awareness regarding substance use and motivation toward behavioral change.
- Referral to treatment provides those identified as needing more extensive treatment with access to speciality care.

A key aspect of SBIRT is the integration and coordination of screening and treatment components into a system of services. This system links a community's specialized treatment programs with a network of early intervention and referral activities that are conducted in medical and social service settings.

SBIRT research has shown that large numbers of individuals at risk of developing serious alcohol or other drug problems may be identified through primary care screening. Interventions such as SBIRT have been found to:

- Decrease the frequency and severity of drug and alcohol use,
- Reduce the risk of trauma, and
- Increase the percentage of patients who enter specialized substance abuse treatment.

In addition to decreases in substance abuse, screening and brief interventions have also been associated with fewer hospital days and fewer emergency department visits. Cost-benefit analyses and cost-effectiveness analyses have demonstrated net-cost savings from these interventions.

The Chemical Health Division will facilitate a Minnesota application for Substance Abuse and Mental Health Services funds for SBIRT implementation in Minnesota in 2008.