The Costs and Effectiveness of Substance Use Disorder Programs in the State of Colorado

Report to
The General Assembly
House and Senate
Health and Human Services Committees

Submitted by
The Division of Behavioral Health
Colorado Department of Human Services

October 31, 2009

Addiction begins with casual use.

The consequences of alcohol misuse and illicit drugs are the single greatest drain on state budgets.

(Excerpt from Blueprint for the States: Policies to Improve the Ways States Organize and Deliver Alcohol and Drug Prevention and Treatment, Findings and Recommendations of a National Policy Panel, by Join Together, 2006)

Researchers say addiction may require lifelong management. Addiction shares many characteristics with other major chronic diseases such as hypertension, diabetes and asthma. For example:

- **Genetics play a role**
- **The medical impact on the body is significant**
- **Complications develop if the disease is untreated**
- **Self-care is critical to success**
- **Medication can help**

(Excerpt from McLellan, Thomas A., and David Lewis, Charles O'Brien, and Herbert Kleber. "Drug Dependence, a Chronic Medical Illness: Implications for Treatment, Insurance, and Outcome Evaluation." Journal of the American Medical Association (JAMA) 284, no.13 (October 4, 2000) 1689-1695.

Addiction fits the U.S. Centers for Disease Control and Prevention definition for chronic disorders. They are prolonged, lasting for at least 3 months, do not resolve spontaneously, and are rarely cured completely. Even so, addiction treatment is less available than treatment for other disease.

(Excerpt from Unforeseen Benefits: Addiction Treatment Reduces Health Care Costs, Closing the Addiction Treatment Gap, by Open Society Institute, July 2009.)

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EXECUTIVE SUMMARY

Substance use disorders in the State of Colorado are a significant health, social, public safety and economic problem. Prevention and treatment are crucial public safety measures.

- Substance use disorders continue to be a problem in Colorado, although rates of use have declined since 1979 because of prevention, treatment and enforcement.
- Prevention and treatment are effective in reducing the amount of substance use disorders in Colorado. A substance use disorder is a preventable behavior and addiction is a treatable disease.
- It is more economical to prevent or treat a substance use disorder than to deal with its impact on the individual or society.
- Resources to provide substance use disorder prevention and treatment are limited; the problem far outpaces the resources.
- Incarceration alone is an ineffective and costly way to control drugs.
- Treatment not only saves lives, it saves money.

Summary of Prevention Outcomes

- Decreases in 30-day alcohol and drug use for youth ages 12 to17 who received prevention services.
- Increases in perception of risk related to drinking alcohol, smoking tobacco and marijuana.
- Decrease in youth approval of alcohol use, indicating that youth attitudes against alcohol use were strengthened over the course of the prevention program.

Summary of Treatment Outcomes

- Clients and their addiction counselors work together to develop individualized treatment plans, which identify goals clients wish to obtain from their treatment. At time of discharge, counselors and clients assess progress made toward these goals. Sixty-one percent of clients discharged from substance abuse treatment had moderate to high achievement of treatment goals.
- Perhaps the most critical measure of substance abuse treatment success is the change in frequency of drug use from admission to discharge. In FY09, there was a decline from 48% to 19% (admission to discharge) in the proportion of all treatment clients reporting any substance use in the previous 30 days.
- Overall the severity of problems or issues with family, socialization, employment or school and medical or physical problems was reduced at discharge.
- Decreases in DUI/DWAI and other arrests.
- Decreases in medical hospital visits and medical emergency room visits. Clients with one or more psychiatric emergency room visits and one or more psychiatric hospital admissions in the prior 6 months decreased from admission to discharge.
- Slight improvements were noted in employment status and living situation at discharge.

INTRODUCTION

The Division of Behavioral Health (DBH), formerly the Alcohol and Drug Abuse Division (ADAD), of the Colorado Department of Human Services submits this report to the General Assembly House and Senate Committees on Health and Human Services in compliance with:

A) Colorado Revised Statute 25-1-210 as amended by House Bill 00-1297
"25-1-210. Reports. The division shall submit a report not later than November 1 of each year to the house and senate committees on health, environment, welfare, and institutions on the costs and effectiveness of alcohol and drug abuse programs in this state and on recommended legislation in the field of alcohol and drug abuse," and

B) Colorado Revised Statute 16-13-311 (a) (VII) (B) from SB 03-133
"The remaining amount (50% of the post-fee portion from sale of forfeited property) to the managed service organization contracting with the department of human services, alcohol and drug abuse division serving the judicial district where the forfeiture proceeding was prosecuted to fund detoxification and substance abuse treatment. Money appropriated to the managed service organization shall be in addition to, and shall not be used to supplant, other funding appropriated to the department of human services, alcohol and drug abuse division.

The alcohol and drug abuse division in the department of human services shall prepare an annual accounting report of moneys received by the managed service organization pursuant to section 16-13-311 (3) (a) (VII) (B), including revenues, expenditures, beginning and ending balances, and services provided. The alcohol and drug abuse division shall provide this information in its annual report pursuant to section 25-1-210, C.R.S."

OVERVIEW OF THE DIVISION OF BEHAVIORAL HEALTH

ADAD was established by state law in 1971 with the mission to develop, support and advocate for comprehensive services to reduce substance use disorders and promote healthy individuals, families and communities.

In March 2006, the Alcohol and Drug Abuse Division (ADAD) and the Division of Mental Health were consolidated into Behavioral Health Services within the Office of Behavioral Health and Housing in the Department of Human Services.

In August 2008, Behavioral Health Services was renamed the Division of Behavioral Health (DBH) and the staff of the former Division of Mental Health and the former Alcohol and Drug Abuse Division were physically located together at 3824 West Princeton Circle, Denver 80236. The mission of DBH is as follows:

> "We are dedicated to strengthening the health, resiliency, and recovery of Coloradans through quality and effective behavioral health prevention, intervention, and treatment."

The goals of the newly formed Division of Behavioral Health are:

1. To continually improve the quality of services for prevention, intervention, and treatment.
2. To advance collaboration among internal and external stakeholders.
3. To enhance knowledge, understanding, and awareness of behavioral health disorders.
4. To secure, preserve, and maximize resources.
5. To strengthen the system infrastructure and workforce.
6. To design, develop, and maintain a comprehensive evaluation and reporting system.

Duties of the former Alcohol and Drug Abuse Division that are carried out by staff who are now DBH staff include:

Treatment

- Monitoring Federal Block Grant-funded contracts with 4 designated managed service organizations (MSOs) that subcontract with 42 treatment providers (with 200 sites in 54 of Colorado's 64 counties) to provide alcohol and other drug treatment services with emphasis on the following populations of substance abusers:
    - Persons involuntarily committed by the courts, pursuant to 25-1-1101 C.R.S.;
    - Pregnant women of any age;
    - Adult and adolescent injecting drug users;
    - Adult and adolescent women with dependent children;
    - Adult and adolescent drug dependent persons who are infected with HIV;
    - Adult and adolescent drug dependent persons who are infected with TB.

- Writing and enforcing substance use disorder treatment rules for 306 treatment providers (including the 42 MSO-funded providers) who operate 707 treatment sites throughout Colorado.

- Licensing agencies to furnish treatment and specialized services of varying intensities and durations through a range of treatment levels of care including:
    - Residential non-hospital detoxification
    - Medically managed detoxification
    - Opioid medication assisted treatment (e.g., Methadone and Buprenorphine maintenance)
    - Therapeutic communities
    - Intensive and transitional residential treatment
    - Intensive and traditional outpatient treatment

  Categories of specialized treatment that DBH licenses include:
    - Gender-Specific Women's Treatment
    - Services to Child Welfare Clients
    - Medication Assisted Treatment for Opiate Dependence
    - Minors
    - Offender Education, Treatment and Adjunct Services
    - DUI, DWAI, BUI, and FUI Offender Education and Treatment
    - Treatment of Persons Involuntarily Committed to Treatment

- Investigating complaints and critical incidents involving licensed treatment providers.

- Managing the statewide involuntary commitment process for 170-210 persons a year who are legally committed to the Division by the court because they pose a danger and/or are incapacitated due to the abuse of alcohol or other drugs.

- Maintaining a central registry of clients in opioid medication assisted treatment programs to lower the risk for multiple enrollments and diversion of controlled substances. 2,012 patients were enrolled in the registry as of October 1, 2009.

- Developing and expanding specialized substance abuse services for pregnant women and women with dependent children to ensure that barriers to treatment services are identified and reduced or eliminated for these women, and to promote the implementation of essential ancillary services such as linkage to prenatal care, other medical and dental care, medical care for children, mental health care, childcare during treatment, transportation to medical appointments and treatment, etc.
    1. Special Connections – a partnership between DBH and the Department of Health Care Policy and Financing to provide specialized residential and specialized outpatient treatment and related services to Medicaid-eligible substance abusing pregnant women (between 250 and 330 clients per year). Services commence at anytime during a pregnancy and conclude 12 months after delivery.

    2. Specialized Women's Services – provides gender-specific treatment and services for substance-abusing women with dependent children and pregnant women not eligible for Medicaid.

- Overseeing the effectiveness of the Statewide Alcohol Drug Driving Safety Program (ADDS), including oversight of the education and treatment services delivered to Driving Under the Influence (DUI) and Driving While Ability Impaired (DWAI) offenders.

- Managing data for the ADDS Program, recording court evaluations and assessments and tracking client progress, status and completion of DUI education and/or treatment required in order for clients to fulfill court requirements and conditions for driver's license reinstatement with the Division of Motor Vehicles.

- Collaborating with the State Department of Corrections (DOC), the Department of Public Safety's Division of Criminal Justice, and the State Court Administrator's Office to improve effectiveness of supervision and treatment to offender populations.

- Overseeing the training of addiction counselors and supervisors by determining required curriculum content for certification and licensure, and approving instructors and content for required and elective courses.

Prevention

- Promoting an understanding that substance abuse can be prevented and supports an awareness that communities can take action to address this and related concerns.

- Promoting the implementation of effective, research-based prevention strategies and approaches that are implemented in an age, gender and culturally appropriate service delivery system.
- Establishing and maintaining linkages with State, federal, local, private and business/industry to reduce substance abuse in Colorado.
- Setting standards for quality substance abuse prevention services.
- Identifying research findings and best practices, and proactively shares this information with the community.
- Providing a range of services that include education, training, problem identification and referral, community and school-based strategies, information dissemination and environmental programs.
    - Coordinating statewide substance abuse prevention services with the Prevention Services Division, Interagency Prevention Systems Project at the Colorado Department of Public Health and Environment.
    - Sponsoring statewide prevention training opportunities
        - Training services for DBH contractors
        - Substance Abuse Prevention Specialist Training
        - Regional Prevention Summits.
    - Maintaining a comprehensive evaluation system for its prevention contractors called PEP (Prevention Evaluation Partners.) This evaluation system is shared across multiple agencies, and includes cross-discipline prevention evaluation approaches.

Presentations

In addition to the responsibilities listed above, DBH staff used every opportunity to educate others about substance use disorder treatment, prevention, prevalence and incidence. In fiscal year 2009 (FY09), staff spent numerous hours preparing and giving 30 presentations to over 5,000 individuals state- and nationwide.

State Statutory Authority

Title 12, Article 22, Part 3 C.R.S.*	Title 24, Article 1, Part 1 C.R.S.
Title 16, Article 11.5, Part 1 C.R.S.	Title 25, Article 1, Parts 2, 3 and 11 C.R.S.
Title 16, Article 11.9, Part 1 C.R.S.	Title 25.5, Article 4, Part 1 C.R.S.
Title 16, Article 13, Part 3 C.R.S.	Title 26, Article 1, Part 1 C.R.S.
Title 17, Article 2, Part 2 C.R.S.	Title 26, Article 2, Part 1 C.R.S.
Title 17, Article 27.1, Part 1 C.R.S.	Title 42, Article 2, Part 1 C.R.S.
Title 17, Article 27.9, Part 1 C.R.S.	Title 42, Article 3, Part 1, C.R.S.
Title 18, Article 1.3, Parts 2 and 3 C.R.S.	Title 42, Article 4, Part 13, C.R.S.
Title 18, Article 18, Part 3 C.R.S.*	Title 43, Article 4, Part 4, C.R.S.

*Authority derived from the Colorado Department of Human Services by executive delegation

THE CONTINUING PROBLEM: ALCOHOL AND SUBSTANCE USE DISORDERS IN COLORADO

Colorado Statistics

- Colorado ranks 19% higher than the national average in per capita consumption of beverage alcohol. Only 4 other states (Alaska, Delaware, Nevada and Wisconsin) rank higher in per capita consumption than Colorado.[1]
- Based on state estimates from averages of the 2006 and 2007 National Survey on Drug Use and Health (NSDUH), Colorado ranked 8th among the 50 states in illicit drug use other than marijuana in the past month, 6th in illicit drug dependence in the past year, 4th in cocaine use in the past year, and 3rd in alcohol dependence or abuse in the past year and in needing but not receiving treatment for illicit drug use in the past year.[2]
- According to the Colorado Bureau of Investigation in 2008 there were 29,022 adult DUI arrests and 455 juvenile DUI arrests in the State of Colorado. In 2007, there were 28,917 adult DUI arrests and 531 juvenile DUI arrests.[3]
- The alcohol impaired fatalities in Colorado totaled 173 in 2008. This represents 32% of total fatalities in the state. This is an increase from 2007 when there were 167 alcohol impaired fatalities representing 30%.[4]
- In FY 2009, there were 6,212 emergency room visits related to alcohol in Denver and 1,678 alcohol-related visits by youth under the age of 21.[5]
- In 2008, there were 916 calls to the Rocky Mountain Poison Control Center related to alcohol (a 6.8% increase from 2007), 373 related to stimulants and amphetamines, and 104 related to cocaine.[6]
- Seventy-six percent of injecting drug users are infected with Hepatitis C, a chronic and sometimes fatal disease of the liver.[7]
- In 2008, 750 Colorado residents died of drug related causes and 654 died of alcohol related causes.[8]
- Clients discharged from treatment, DUI and detoxification programs during FY09 had primary responsibility for 37,661 dependent children under the age of 18. [9]

Colorado Youth In Crisis

- The total number of admissions under the age of 18 for treatment, DUI and detoxification in FY09 was 2,854.[9] This number is based on total admissions, not unique clients. Thus, some individuals are admitted more than once during the fiscal year and therefore, are included in this number.
- Of the 2,854 total admits under the age of 18, 84% (2409) received treatment services, 11% (303) were discharged from DUI programs and 5% (142) received detoxification services.[9]
- In FY09 there were 1,936 individual clients under age 18 who were discharged from DUI, detoxification and treatment programs.[9] This comprised only 6.5 % of the estimated 30,000 (ages 12 - 17) adolescent substance abusers in Colorado.[10]

- Of these 1,936 discharged clients under the age of 18, 82% (1582) received treatment services, 12% (239) were discharged from DUI programs and 6% (115) received detoxification services.[9]
- Of the 1,582 youth discharged from treatment[9],
    - 39% were diagnosed as drug-dependent;
    - 54% were diagnosed with a mental health issue in addition to their substance abuse;
    - the primary drug used was marijuana, followed by alcohol;
    - 46% successfully discharged from treatment, 28% left treatment or were terminated,
- 60-80% of youth in the juvenile justice system have substance abuse issues.[10]

National and Colorado Reports on Youth and Substance Abuse

Monitoring the Future's 2008 study[11] found that, nationally, 72% of today's teens have consumed (more than just a few sips) alcohol by the end of high school, and 39% have done so by 8th grade. Fifty-five percent of 12th graders and 18% of 8th graders in 2008 reported having been drunk at least once. Moreover, 47% of America's secondary school students have tried an illicit drug by the time they finish high school, and the Northeastern and Western regions of the country historically have reported the highest proportions of students using any illicit drug.

A 2005 Colorado survey[12] of 734 public high-school students found that:

- 42% had ever used marijuana, and 12% had done so before the age of 13.
- 23% had used marijuana more than once in the past 30 days.
- 11% had ever used cocaine and 4% had done so in the past month.
- 75% had ever drank alcoholic beverages and 49% had done so in the past month.
- 32% reported having 5 or more drinks of alcohol in a row.
- 29% of students reported that in the past month, they rode with a drinking driver and 11% said that they drove after drinking in the past month.

Another area of concern for today's youth is the growing use of prescription (Rx) and over-the-counter (OTC) drugs. In fact, the 20th annual national study of teen drug abuse by the Partnership for a Drug-Free America reported[13] that teen abuse of prescription and over-the-counter medicines remains a serious concern. Major findings included:

- nearly 1 in 5 teens surveyed had tried prescription medication to get high;
- 7% of teens reported using cough medicine to get high;
- 41% of teens surveyed see use of prescription drugs to get high as "much safer" than use of street drugs;
- 61% of teens report prescription drugs are easier to get than illegal drugs;
- 33% reported experimenting with marijuana in 2008, compared to 42% in 1998;
- 19% reported using inhalants to get high; and
- data reported significant and sustained declines in the number of teens using tobacco and/or alcohol.

Another report on Rx drug abuse[14] found that teens who abuse prescription drugs are:

- Twice as likely to use alcohol;
- 5 times as likely to use marijuana;

- 12 times likelier to use heroin;
- 15 times likelier to use Ecstasy; and
- 21 times likelier to use cocaine, compared to teens who do not abuse such drugs.

However, despite the findings that drug use is still widespread among today's teens, there is a growing body of empirical findings suggesting that drug use education and prevention efforts are working. The 2008 National Survey on Drug Use and Health[15] found that the national rates of current illicit drug (excluding tobacco and alcohol) use among 12 to 17 year olds remained stable from 2007 (9.5%) to 2008 (9.3%). Between 2002 and 2008, youth rates declined significantly for illicit drugs in general (from 11.6% in 2002 to 9.3% in 2008). The 2008 Partnership Attitude Tracking Study[13]also reported for the first time a major increase in the number of teens reporting "learning a lot" about the risks of drugs from their parents. This progress coincides with remarkable, sustained declines in several drugs of abuse.

Colorado/US Comparison

In 2008, an estimated 20.1 million Americans (8% of the total U.S. population aged 12 or older) were classified as current illicit drug users[15]. There were 6.2 million current users of prescription-type psychotherapeutic drugs taken non-medically. Just over fifty percent (52%) of Americans aged 12 or older were current drinkers. Of these self identified drinkers, 58.1 million (23%) were binge drinkers (defined as five or more drinks on one occasion) and 17.3 million (7%) were heavy drinkers as defined as binge drinking on five or more days in a month.[15]According to SAMHSA's 2007 Treatment Episode Data Set (TEDS), 74% of Colorado treatment clients, versus 41% of treatment clients nationwide, identified alcohol as their primary substance of abuse.[16]

In addition, according to averaged findings from the 2006-2007 NSDUH[2], Colorado ranked, among all 50 states for the 12 or older age group:

- 3rd for first-time marijuana use (12th in 2006);
- 3rd for persons needing but not getting treatment for illicit drug use (7th in 2006);
- 4th for cocaine use in past year (7th in 2006);
- 4th for illicit drug use in past month (7th in 2006);
- 6th for illicit drug dependence in past year (6th in 2006);
- 6th for marijuana use in past month (10th in 2006);
- 8th for marijuana use in past year (10th in 2006);
- 8th for illicit drug use other than marijuana in past month (10th in 2006);
- 9th for alcohol use in the past month (8th in 2006);
- 10th for alcohol dependence in the past year (9th in 2006); and
- 19th for non-medical use of pain relievers in past year (15th in 2006).

In addition, substance use epidemiology has documented that the lower the perception that use involves risk, the higher the probability of use, and Colorado was among five states with the lowest proportions who perceived smoking marijuana once a month as a great risk. Colorado was also among seven states with the lowest proportion of those aged 12 to 17 that perceived having five or more drinks once or twice a week as having great risk.[2]

Despite these worrisome findings, several studies have suggested that Colorado has been deficient in funding substance abuse treatment. Nationwide, $27 per U.S. resident is spent on publicly funded substance abuse treatment compared to $7.50 spent per resident in Colorado.[17]

Comparison of Colorado with Other Frontier States

It was mentioned earlier that the Western region of the country has historically reported the highest proportions of illicit drug use by high-school students. To take a closer look at Colorado and other western states, Colorado was compared to ten other states identified as "frontier" on 11 performance indicators.[18] The frontier states examined were Alaska, Arizona, Idaho, Montana, Nevada, New Mexico, North Dakota, South Dakota, Utah and Wyoming. Of these states, Colorado ranked:

- 1st in the rate of admissions for alcohol treatment (per 100,000 age 12 and up);
- 2nd only to Alaska in percent reporting use of any illicit drug;
- 3rd in percent reporting alcohol or drug dependence or abuse in past year;
- 3rd in percent needing but not receiving treatment for alcohol use;
- 4th in percent needing but not receiving treatment for illicit drug use;
- 4th in binge alcohol use; and
- 6th for alcohol-related traffic fatalities.

What This Problem Costs

The estimated cost of substance abuse in the U.S. exceeds $168 billion/year.[19] The White House Office of National Drug Control Policy found that between 1988 and 1995 drug users in America spent $57 billion buying illegal drugs, funds which would have otherwise supported legitimate spending or savings by the user.[20]

Beyond the cost of purchasing illegal drugs, substance abuse drives multiple indirect societal costs, including expenses related to criminal behavior, enforcement of drug laws, incarceration costs, cost due to lost productivity from incarceration or criminal careers, victimization, property damage, property loss from vehicular crashes, domestic violence, child welfare and foster care, illness and premature death, and health care.[20]

Coloradans are affected by the societal costs of substance abuse in many ways. The magnitude of public funds spent on the direct and indirect consequences of substance use and abuse is staggering[21] and dozens of Colorado public agencies play a part in controlling substance abuse or dealing with its consequences.

Regarding health-care costs, it is estimated that one-fourth of all people admitted to general hospitals have alcoholism and 30% of emergency room patients are problem drinkers or drug users. These individuals are seeking medical attention for alcohol or drug-related illness or injury, not for their addiction problem.[22] In addition, it is estimated that one emergency room visit costs $600 minimum and people with untreated alcoholism seek emergency room attention 60% more often than the rest of the population.[22] They are also nearly twice as likely to be hospitalized overnight, and stay in the hospital three days longer. In Colorado in 2006, there were 6,269 hospitalized inpatients with a diagnosis of "alcohol/drug use and alcohol/drug-induced organic mental problems," totaling to 30,967 patient days. The hospital charges for these patients added up to $88,853,475; a cost per case of $14,173.47.[21]

Potential costs for incarcerating substance abusers in Colorado have also been estimated. In FY08, there were 22,887 adult offenders and 208 youth offenders incarcerated in Colorado's Department of Corrections and 80% of court commitments were identified as needing substance abuse treatment.[23]

Based on daily prison costs of $78.96 for adult and $197.63 youth offenders[24] in FY08 the total cost per day for incarceration of substance abusers can be estimated at $1,445,726. Beyond those costs, incarcerated substance users demonstrated higher levels of need than non-substance users academically, vocationally and psychologically, and were more likely to be seriously mentally ill and/or developmentally challenged.

Another substance abuse related cost involves family violence. Among male alcoholics, 50 to 60% have been violent toward a female partner in the year before treatment and alcohol use is involved in 30% of child abuse cases.[25] Further, Fetal Alcohol Syndrome (FAS) is the leading preventable cause of birth defects and mental retardation in the nation. It is estimated that the total lifetime cost for a child born with FAS in 2000 would cost around $1.4 million[26]. Based on the 2007 number of live births in Colorado[27] (70,804) and a prevalence rate of 0.5 to 2.0 per 1000 births[28]. Colorado could have between 35 and 142 FAS births per year, an expenditure of $49 million to $199 million.

CLIENT DEMOGRAPHICS: AN OVERVIEW OF TREATMENT, DETOXIFICATION AND DUI CLIENTS

(Note: Numbers and percentages are rounded to the nearest whole number.)

Research has shown that the longer an individual stays in substance abuse treatment the better their outcome. A "return to treatment" in the addiction field is encouraged since any contact with treatment counselors supports a more positive long-term outcome and addiction is a chronic, relapsing disease that must be managed over the course of one's life. Thus, the number of discharges is expected to be greater than the number of unique individuals.

While certain sections of this report are based on the number of Drug/Alcohol Coordinated Data System (DACODS)[9] discharges for FY09 (n=98,914), the following demographic data are based on the number of clients (n=68,053).

Treatment Clients

Of 23,216 discharges from substance abuse treatment (excluding detox and DUI services) in FY09, 17,488 were unique clients.

Referral Source

Over half (54%) were treated in MSO-contracted outpatient services and 46% had been referred for treatment by the criminal justice system (not related to DUI). See Figure 1.

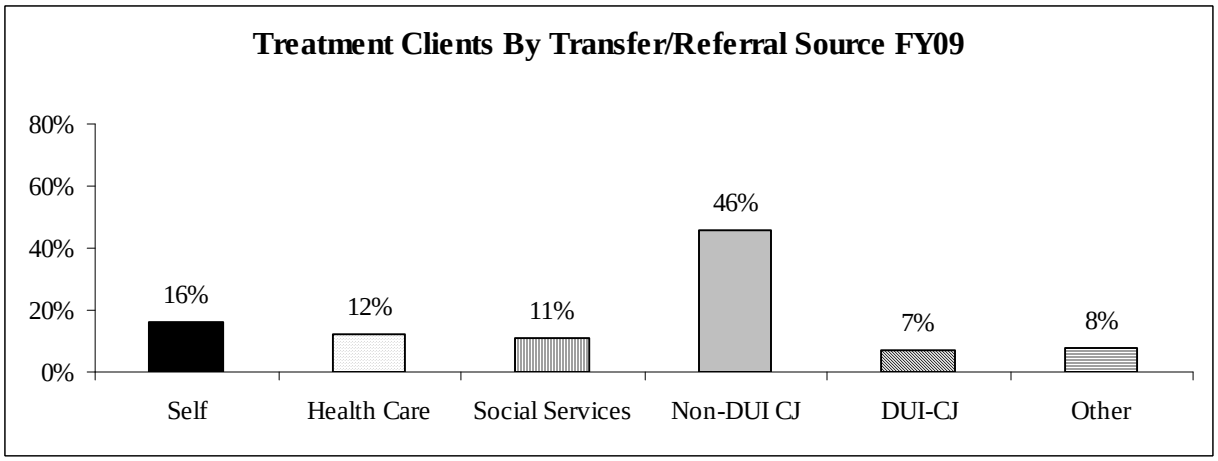


Figure 1: Treatment Clients By Transfer/Referral Source, FY09

Treatment clients were more likely to be single, White male adults between the ages of 18 and 45 with a median age of 30. The highest proportions were in treatment for alcohol, followed by marijuana and had 0-1 prior treatment episodes. They had, on average, been using their primary drug for 14.7 years and sixty-four percent reported starting use of their primary drug before the age of 18. They tended to be daily users of tobacco, 36% worked full-time and 70% achieved a high school education or higher. Thirty-five percent had dependent children for a total of 12,012 children dependent on clients in treatment.

Client Race/Ethnicity

The largest proportions of clients discharged from treatment in FY09 were White. Compared with the 2000 census figures for Colorado, Hispanics and American Indians were over-represented. Hispanics represented 17% and American Indians comprised 1% of Colorado's general population. In treatment, Hispanics made up 23%, and American Indians comprised 2% of the clientele. See Figure 2.

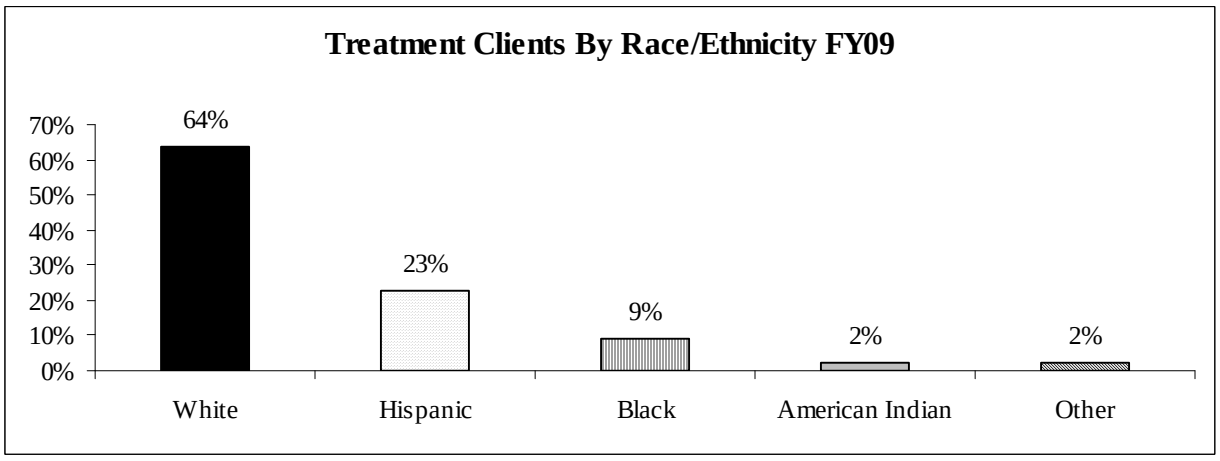


Figure 2: Treatment Clients By Race/Ethnicity, FY09

Primary Drug Type

Alcohol abuse is Colorado's number one problem, followed by marijuana and methamphetamine. See Figure 3.

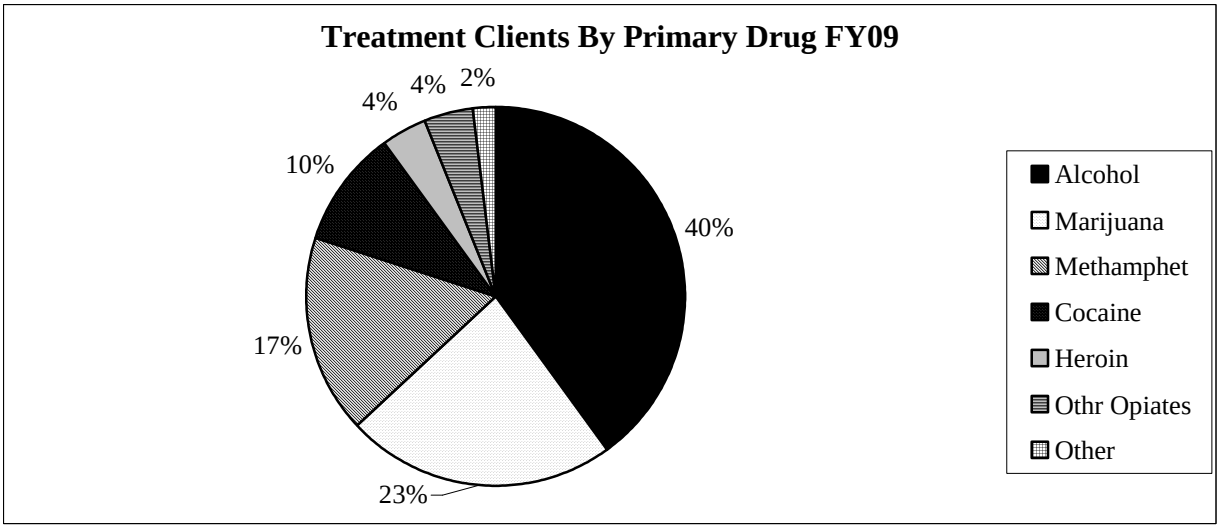
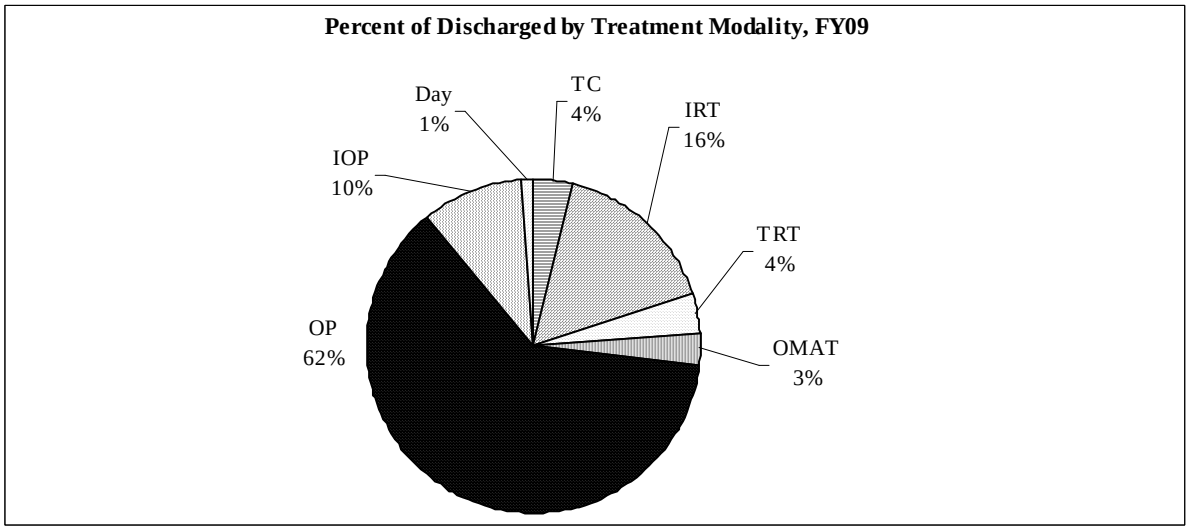


Figure 3: Treatment Clients By Primary Drug, FY09

Modality

Outpatient services comprised the most highly utilized modality for treatment clients, with 62% in traditional and 10% in intensive outpatient modalities. Twenty-eight percent of treatment clients were in some form of residential modality, including Therapeutic Community (TC), intensive, short-term intensive and transitional residential settings. See Figure 4.



OP=Traditional Outpatient; IOP=Intensive Outpatient; TC=Therapeutic Community
IRT=Intensive Residential; TRT=Transitional Residential; OMAT=Opioid Medication Assisted Treatment

Figure 4: Percent of Discharged Clients by Treatment Modality, FY09

Client Disability

Ten percent of treatment clients indicated they had one or more disabilities. Of the specified disabilities, psychiatric disorders were reported the most by clients in all three service types. Overall, the treatment (detox and DUI) clients indicating disabilities matches the 6% disability rate in the general Colorado population recorded by the Census 2000.

Prior Treatment Episodes
Of the FY09 discharges, 56% of treatment clients had at least one prior encounter and 3% had more than five.

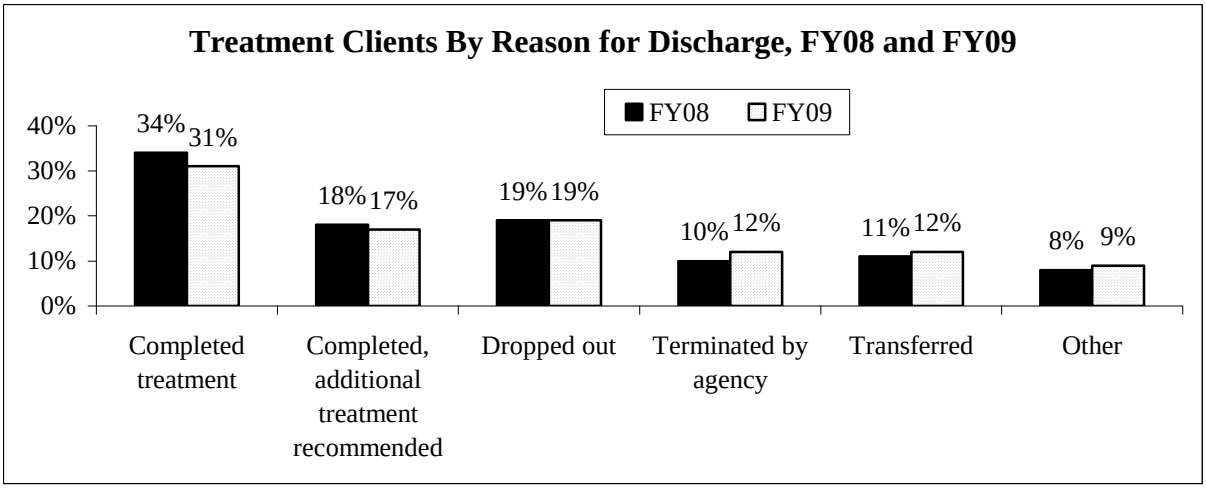
Length of Stay
Adolescent and adult length of stay (LOS) by modality was examined using both the median and average number of days. Both adolescent and adult detox LOS was less than one day. Therapeutic Community had, as expected, the longest stay with a median of 525 and a mean of 642. See Table 1 for comparisons of LOS broken down by treatment category/modality.

Table 1: Adolescent and Adult Length of Stay By Modality

Adolescent Length of Stay (LOS) in Days		
	Mean*	Median
Outpatient (OP)	107.76	78.0
Intensive Outpatient (IOP)	117.52	90.0
Intensive Residential Treatment (IRT)	41.25	22.0
Detox	0.81	0.0
DUI Level 1 Education	35.48	7.0
DUI Level 2 Education only	156.84	102.0
DUI Level 2 Therapy + Education	209.14	214.5
Adult Length of Stay (LOS) in Days		
	Mean*	Median
Outpatient (OP)	143.71	97.0
Intensive Outpatient (IOP)	97.76	52.0
Intensive Residential Treatment (IRT)	35.66	24.0
Transitional Residential Treatment (TRT)	76.33	52.0
Therapeutic Community (TC)	642.96	525.0
Detox	0.84	0.0
DUI Level 1 Education	43.15	7.0
DUI Level 2 Education only	141.60	96.0

*Avg. length of stay was calculated using date of admission and date of last contact for clients in treatment. Excluded from these calculations are: discharges coded as "Differential Assessments Only"

Reason for Discharge
Across treatment modalities, 31% of FY09 discharges completed their treatment with no further treatment recommended; 17% completed treatment at that agency with additional treatment recommended; 19% left against professional advice; 12% were terminated by the agency and 12% did not complete their treatment at the agency. Four percent of clients were incarcerated. See Figure 5.



Completed Treatment = Treatment completed, no further treatment recommended; Drop Out= Left against counselor advice/dropped out; Other includes incarcerations and deaths. Discharges coded as Differential Assessment Only were excluded from calculations.

Figure 5: Treatment Clients By Reason for Discharge, FY08 Compared with FY09

Detoxification Clients:

There were 51,850 discharges from detoxification services (excluding treatment and DUI services), 29,435 of which were unique clients. Detox clients were typically served (97%) in MSO-contracted residential non-medical detoxification units. Similar to those in treatment, clients in detox were also typically single, White male adults with no dependent children. They were slightly older than treatment clients with a median age of 34. Eighty percent achieved a 12th grade education or higher and 42% worked full-time. Nearly all (93%) were in detox for alcohol abuse, which they typically started using before the age of 18 (58%). Detox clients had been using their primary substance for an average of 18.7 years and more than half (54%) used tobacco daily. Unlike treatment clients, they generally (68%) had no prior treatment episodes. Twenty-nine percent had dependent children for a total of 15,430 children dependent on clients in detox.

Gender

The proportion of males discharged from detox comprised 78%. See Figure 6.

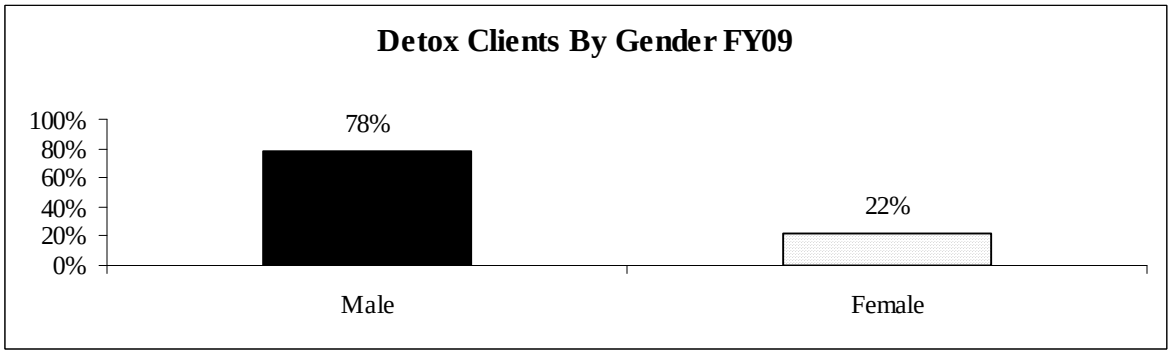


Figure 6: Detox Clients By Gender, FY09

Client Age

While 23% of clients in detox were within the 18-24 year old age category, less than 1% were under the age of 18. The low numbers of minors in detox may be due to the limited capacity of detox centers to comply with agency requirements that would permit them to accept younger clients. Moreover, police often transport intoxicated youth to their homes, emergency rooms, detention centers, etc., so these episodes are not captured in the data. See Figure 7.

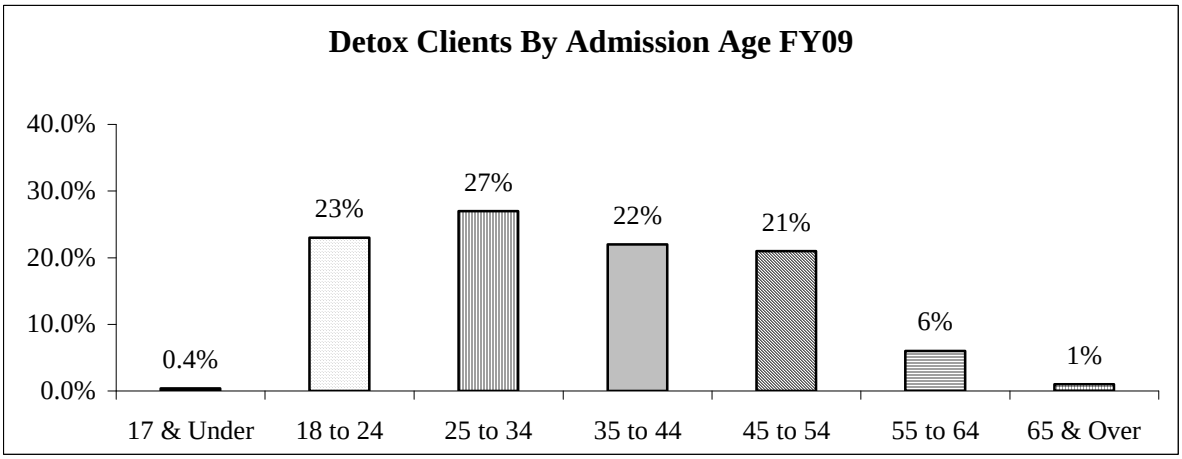


Figure 7: Detox Clients By Admission Age Category, FY09

Client Race/Ethnicity

The largest proportions of clients discharged from detox in FY09 were White. Compared with the 2000 census figures for Colorado, Hispanics and American Indians were over-represented. Hispanics represented 17% and American Indians comprised 1% of Colorado's general population. In detox, Hispanics made up 28%, and American Indians comprised 4% of the clientele. See Figure 8.

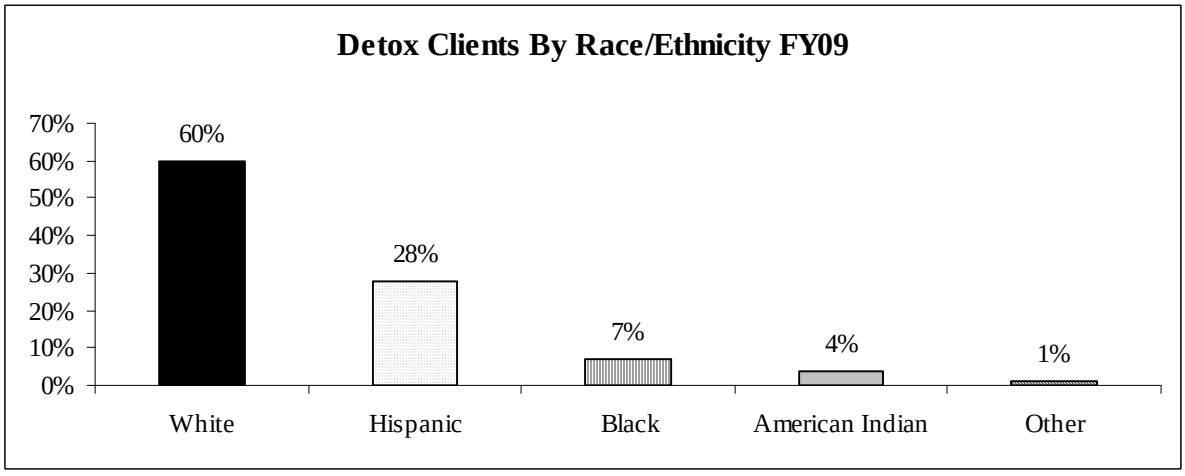


Figure 8: Detox Clients By Race/Ethnicity, FY09

Prior Treatment Episodes

Of the FY09 discharges, 32% of detox clients had one or more prior encounters and 9% had 3 or more. See Figure 9.

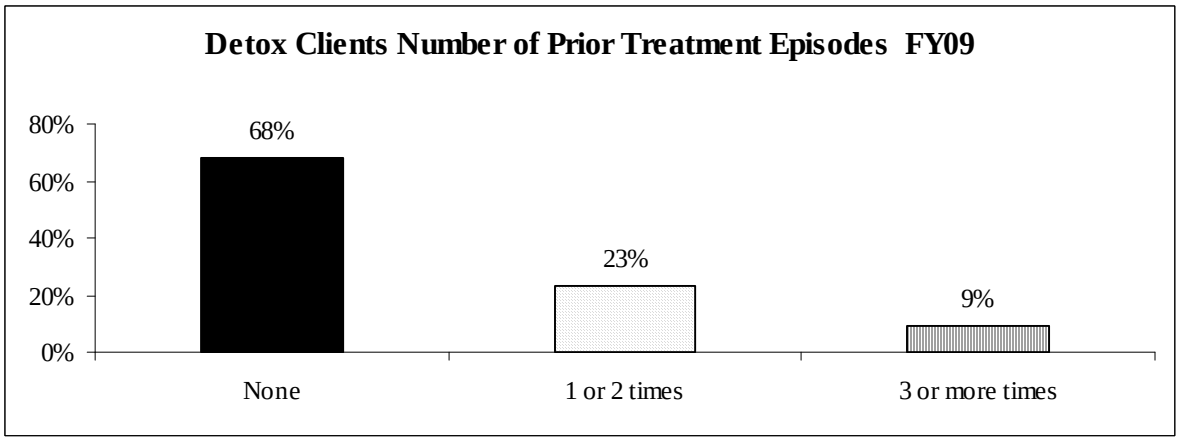


Figure 9: Detox Clients Number of Prior Treatment Episodes, FY09

DUI Clients:

There were 23,216 discharges from DUI (excluding other treatment and detox services) and 21,130 unique clients, who also tended to be single, White male adults with no dependent children. Their median age was 30 and this group was more likely to have a 12th grade education or higher (83%) and work full-time (69%). Ninety-five percent received their DUI's for being under the influence of alcohol. These clients started using their primary substance before the age of 18 (58%) and had been using for an average of 16.0 years. Forty-eight percent used tobacco daily and 62% had no prior treatment episodes. Thirty-two percent of DUI clients were responsible for children for a total of 12,853 children dependent upon DUI clients. Eighteen percent of DUI clients were treated in clinics overseen by MSOs.

Gender

The proportion of males discharged from DUI was 77%. See Figure 10.

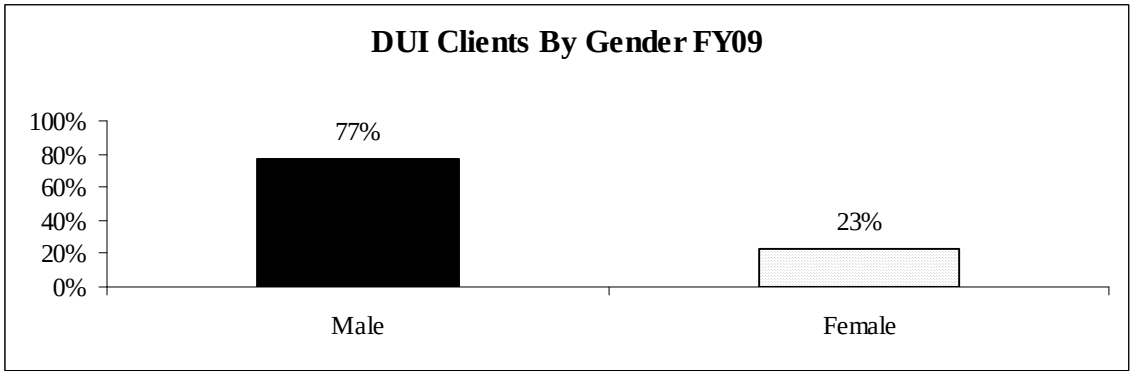


Figure 10: DUI Clients By Gender, FY09

Client Age

Thirty-two percent of DUI clients were within the 25 to 34 age group and 28% were within the 18 to 24 year age group. See Figure 11.

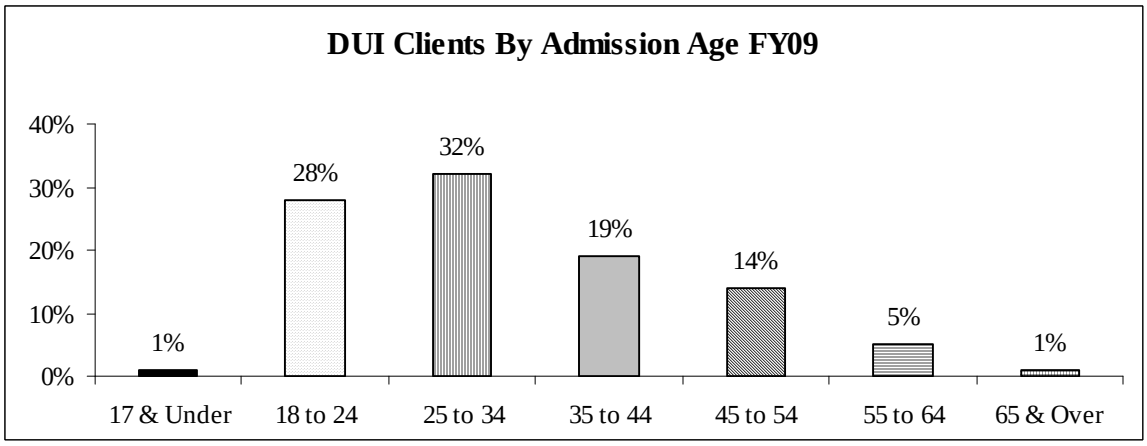


Figure 11: DUI Clients By Admission Age Category, FY09

Client Race/Ethnicity

The largest proportions of clients discharged from DUI in FY09 were White. Compared with the 2000 census figures for Colorado, Hispanics were over-represented in all three service categories. Hispanics represented 17% of Colorado's general population. For DUI clients, Hispanics made up 24%. See Figure 12.

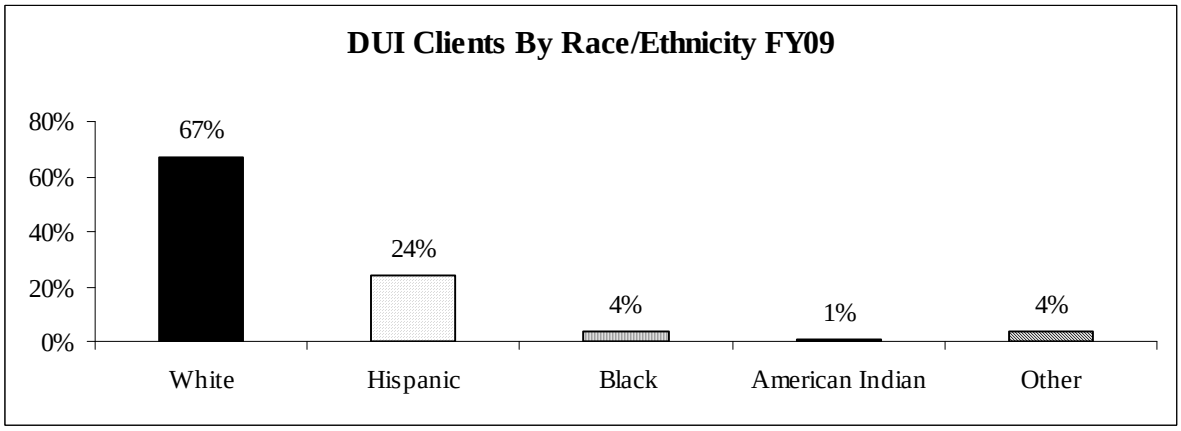


Figure 12: DUI Clients By Race/Ethnicity, FY09

Prior Treatment Episodes

Of the FY09 discharges, 38% of DUI clients had one or more prior encounters and 1% of DUI clients had more than five.

BARRIERS TO TREATMENT

Number of Years Between First Use and Treatment – Client Readiness

Addiction is a chronic disease and it frequently takes years for personal recognition of the need for treatment to occur. The graph below shows that for treatment and detox modalities, those with alcohol as their primary drug take the longest time to enter treatment. Time to enter treatment was calculated as the number of years from reported first use to first treatment episode and was based only on clients who reported having no previous treatment episodes. Overall, clients in treatment averaged 12.9 years (median=10 years) from first use of their primary drug

until they entered treatment. Detox clients averaged 14.7 years (with a median of 13 years) from first use to first treatment. See Figure 13.

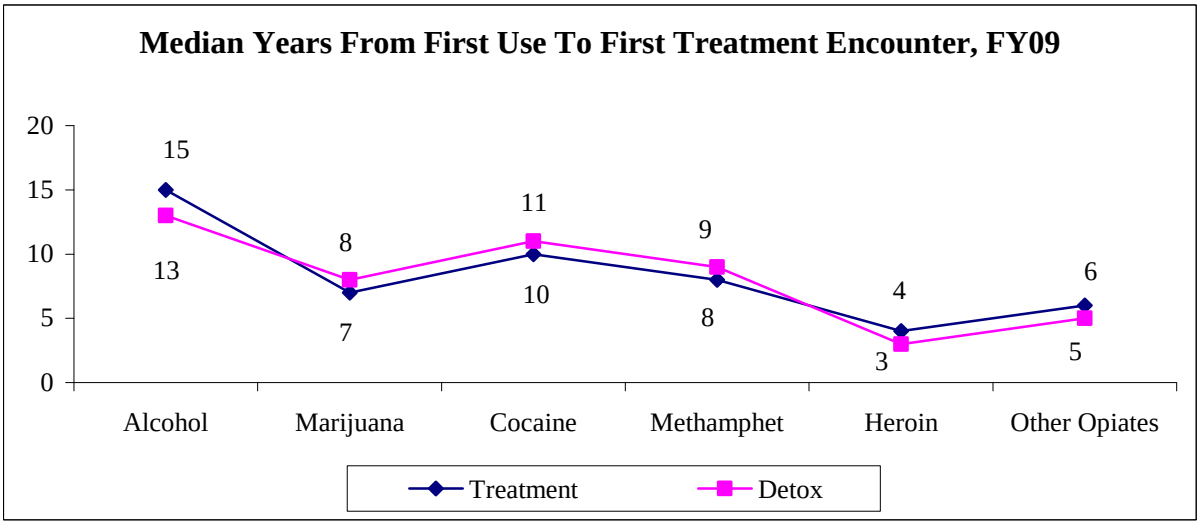


Figure 13: Median Years from First Use to First Treatment Encounter, FY09

Public Barriers

- Public stigma and a negative perception of the field affect both clients and providers.
- Many fear personal loss if others (such as employers) find out about their need for or being in treatment.
- Many have greater fears of discovery while in treatment than while abusing substances.
- Few individuals in recovery are willing to share their experiences, resulting in largely silent and invisible advocates.
- Many still view addiction as a poor moral choice in which an individual voluntarily engages, rather than a chronic, relapsing disease of the brain, similar to diabetes or high blood pressure, which requires extended care.
- Public tolerance of substance use is influenced by a multi-billion dollar liquor industry with huge advertising budgets that glamorize drinking.

Economic Barriers

- Insurance coverage is limited or non-existent for substance abuse prevention and treatment.
- Many who could benefit from treatment services also have other pressing needs, such as mental health care, medical care, housing, education and job training, employment assistance, legal assistance, etc.[19]
- Youth learn quickly that they can make more money dealing drugs than they can in legitimate employment.
- Addiction counselors and staff are chronically underpaid, creating high staff turnover and disrupting established counselor-client rapport.

- Public policy frequently supports incarceration over treatment, limiting funding to support prevention and treatment.
- Poverty and the perception that one cannot afford treatment frequently delays health seeking behavior.

Physical Barriers

- Service locations may be geographically challenging to reach (e.g., mountain passes in winter).
- Limited transportation options frequently exist in rural areas.
- Intensive forms of treatment, such as, residential services are not available in all parts of the state.

Individual Barriers

- Clients often do not believe they have a problem that requires treatment. This denial may prevent or delay them from seeking treatment.
- There may be cultural reasons as well as a shortage of local, culturally responsive treatment settings that prevent or delay individuals from seeking treatment.
- Additional barriers to women include greater stigma and risk of losing their children.

THE BENEFITS OF SUBSTANCE ABUSE TREATMENT AND PREVENTION

The Economic Benefits of Drug Treatment: A Critical Review of the Evidence for Policy Makers (2005)[20] cites nearly two decades of research finding that:

- substance abuse treatment achieves clinically significant reductions in substance use and crime, and improvements in personal health and social function for many clients;
- treatment effects include significant gains to both the client and to society;
- available cost-benefit studies consistently found that economic benefits exceed treatment costs;
- treatment benefits include reduced criminal behavior and health care costs and increased employment;
- specific treatment approaches are more cost-effective than others, e.g., outpatient vs. inpatient treatment, although the latter may be more effective for high-risk clients;
- residential prison treatment is cost-effective only in conjunction with post-release aftercare services; and
- long-term benefits of treatment are probably understated, and more studies are needed to determine the long-term impact of treatment.

In addition, studies conducted in Colorado, California, Ohio, Oregon and New York have demonstrated that substance abuse treatment results in tax dollar savings, decreased criminal activity, and improved health and employment rates. Specific findings follow.

Tax Dollars

- $7 is saved for every dollar spent on alcohol and drug abuse treatment programs.[29]
- Investment in prevention/treatment programs produces significant cost savings in other publicly funded programs.
- Every $1 spent on school-based drug prevention results in a cost savings of $5.50.[30]
- Iowa State University researchers have conservatively estimated that the prevention of a single case of adult alcohol abuse produces an average savings of $119,633 in avoided costs to society.[31]
- The Office of National Drug Control Policy (ONDCP) has documented a direct correlation between increases in drug prevention investments and decreases in the prevalence of use/abuse. Programs show cost-benefit ratios in the range of 8:1 to 15:1 in reduced costs in crime, school and work absenteeism, as well as reduced need for and costs of substance abuse treatment.[20]
- In Washington State, Medicaid medical cost savings averaged $4500 per person for those in alcohol and drug treatment.[32]
- In Oregon, treatment resulted in a $5.60 savings in social programs for every dollar spent on treatment and a 50% reduction in child welfare cases.[33]
- Six months in treatment in New York State produced tax savings of $143 million.[34]
- Clients on welfare declined 11% nationwide and homelessness dropped 43% nationwide.[35]
- Inpatient mental health visits decreased 28% nationwide.[35]

Criminal Activity

- Colorado noted a 97% decrease in arrests for all offense categories following treatment.[36]
- Colorado reported 46% of clients who had treatment completely abstained from alcohol or drugs.[36]
- Criminal activity decreased 80% nationwide.[35]
- Those persons not completing DUI education/treatment were 44% more likely to be re-arrested for an alcohol related driving offense than those who completed treatment (10.4% versus 7.2% respectively).[37]

Health

- Ohio noted a 58% decrease in hospital admissions and a 67% decrease in emergency room utilization.[38]
- Treatment reduces hospital admissions by 1/3 and improves many primary health areas.[29]
- In 1992, five treatment types cost California $200 million, but saved approximately $1.5 billion.[29]

Employment

- Colorado noted a 67% increase in employment following treatment.[39]

- Employment increased 19% nationwide following treatment.[40]
- Every dollar spent on Employee Assistance Programs saves businesses between $8 and $20.[40]
- Ohio noted a 97% decrease in on-the-job injuries.[38]

PREVENTION AND TREATMENT OUTCOMES

Prevention Services for FY 08-09

Services are delivered in multiple ways. *Direct Services* are more intensive and focus on individuals with multiple risk factors (e.g., Selected, and Indicated Populations), while *Indirect Services* focus on Universal Strategies aimed at the community at-large.

Total Served: 675,458
Total Served by Gender: Female 342,462 (51%); Male 332,996 (49%)
Total Served by DIRECT Services: 89,704
Total Served by INDIRECT Services: 585,748
Total DIRECT Services: 13,645
Total INDIRECT Services: 908

Prevention Outcomes FY 08-09

1. Statistically significant decreases ($p<.05$) were noted in 30 day use of alcohol, smokeless tobacco, and LSD/hallucinogens for surveyed youth ages 12 to 17 who had received prevention services.
    - For those participants who used a given substance at pre-test, statistically significant decreases ($p<.05$) were noted in 30 day use of that substance for cigarettes, alcohol, smokeless tobacco, marijuana, and other drug use (LSD/hallucinogens, amphetamines, crack, and cocaine).
2. Statistically significant ($p<.05$) changes were noted in:
    - An increase in participants' perception of risk related to having five or more drinks of alcohol once or twice a week, smoking one or more packs of cigarettes per day, and smoking marijuana once or twice a week.
    - A decrease in approval of alcohol use, indicating that youth attitudes against alcohol use were strengthened over the course of the program.

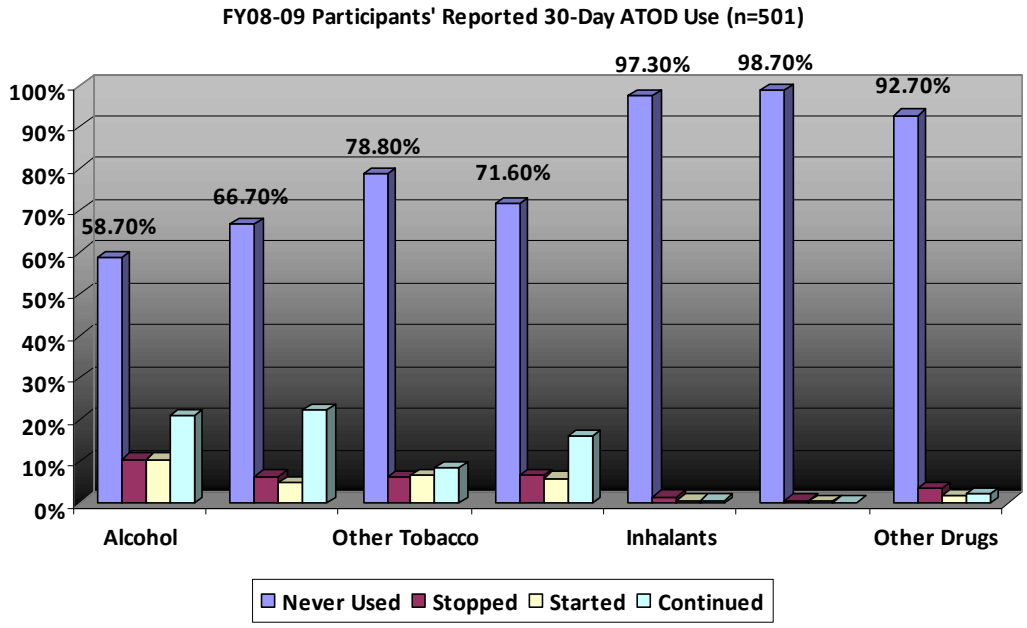


Figure 14: FY 08-09 Participants' Reported 30-Day ATOD Use

Table 2: FY 08-09 Participants Reported 30 Day Substance Use

30 - Day Use (n = 501)	Never Used	Stopped	Started	Continued
Alcohol	58.70%	10.30%	10.30%	20.80%
Cigarettes	66.70%	6.40%	4.70%	22.30%
Other Tobacco	78.80%	6.10%	6.70%	8.40%
Marijuana	71.60%	6.50%	6.00%	15.90%
Inhalants	97.30%	1.50%	0.60%	0.60%
Methamphetamines	98.70%	0.60%	0.40%	0.20%
Other Drugs	92.70%	3.60%	1.70%	2.10%

Treatment Outcomes FY 08-09, Admission to Discharge Change

Discharges from treatment modalities excluding Differential Assessments Only were used to calculate change from admission to discharge. Detox was excluded because its primary goal is to provide a safe, short-term environment in which the client may detoxify and then be referred to treatment. DUI was excluded because it focuses primarily on reducing the practice of driving while intoxicated, rather than reducing substance abuse exclusively. Based on these exclusions, the total number of discharges, not individuals, used to calculate outcome data was 20,246.

Progress towards Treatment Goals

During the treatment process, addiction counselors partner with their clients to develop individualized treatment plans. These plans identify goals clients wish to attain from their treatment. At time of discharge, counselors and clients assess progress made toward these goals.

In FY09, 61% of all treatment clients had made moderate to high progress toward their goals. See Figure 15.

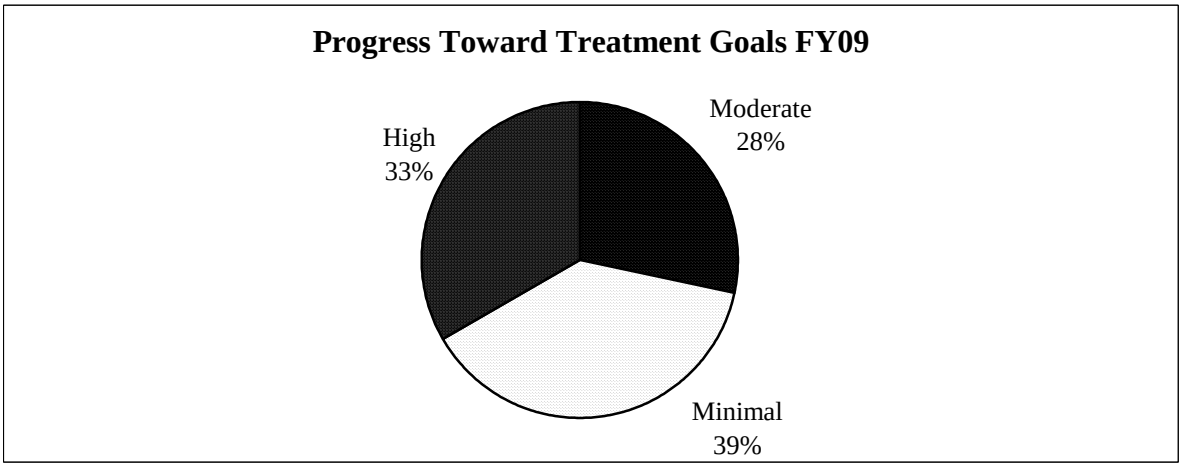


Figure15: Progress Towards Treatment Goals, FY09

Use of Primary Drug at Admission and at Discharge

Perhaps the most critical measure of substance abuse treatment success is the change in frequency of drug use from admission to discharge. In FY09, there was a decline from 48% to 19% (admission to discharge) in the proportion of all treatment clients reporting any substance use in the previous 30 days. These results were similar to those from FY08.

Since outpatient treatment clients have more opportunity to engage in substance use than residential treatment clients, we also conduct an analysis of drug use frequency restricted to outpatient treatment clients (n=14,047). Figure 16 shows that in FY09, the proportion of outpatient clients who reported any use of their primary substance decreased from 39% at admission to 17% at discharge.

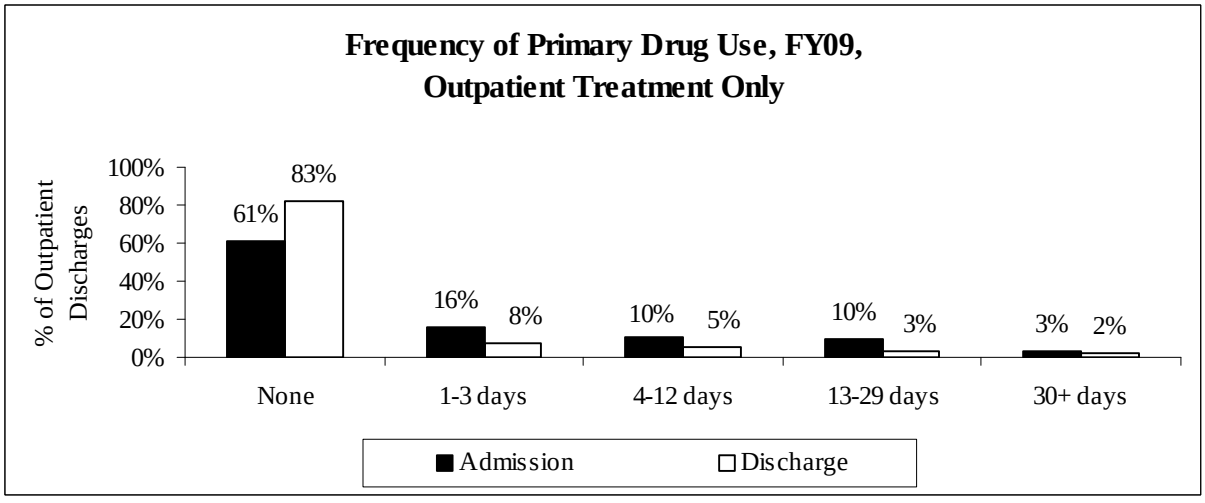


Figure 16: Frequency of Primary Drug Use, FY09, for Outpatient Treatment

Mental Health Status

During FY09, 44% of clients in substance abuse treatment (all modalities) were assessed as having a current mental health issues at admission. This proportion remained relatively the same

at discharge. Although, 60% of youth discharges (n=131) and 53% of women discharges (n=899) in residential treatment programs have reported a higher prevalence of mental health issues at admission than the general population.

Family Issues/Problems

Counselors assess the severity of several of the client's issues or problems at both admission and discharge, using terms defined in the DACODS User Manual. The percentage of clients with no family issues remained the same, those with slight family issues at admission increased at discharge, and those with moderate and severe family issues decreased at discharge. See Figure 17.

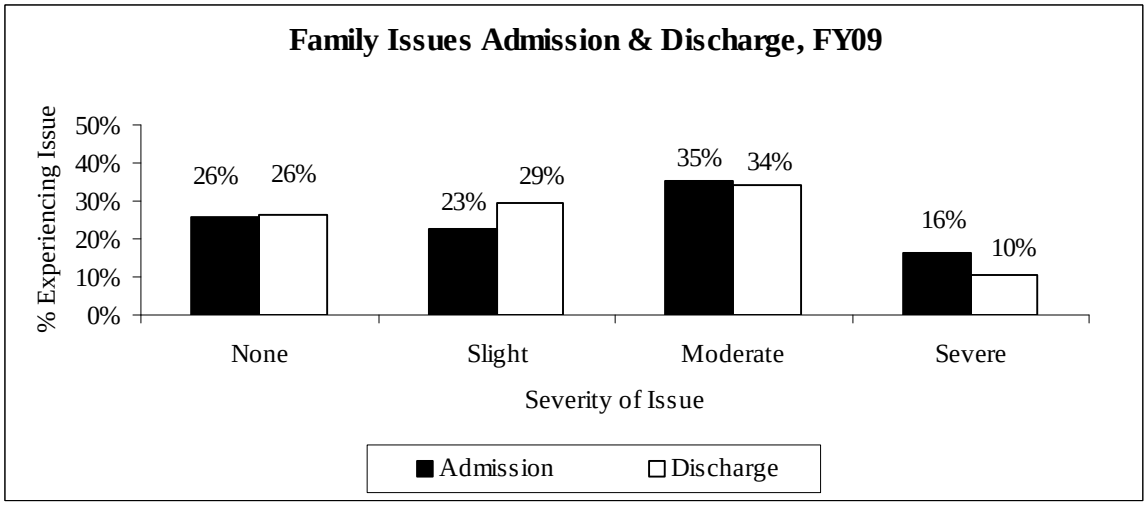


Figure 17: Family Issues/Problems from Admission to Discharge, FY09

Socialization Issues

The percentage of clients reporting no or slight socialization issues or problems at admission increased at discharge, and those with moderate to severe problems at admission decreased at discharge. Socialization is defined as the ability and social skills to form relationships with others. See Figure 18.

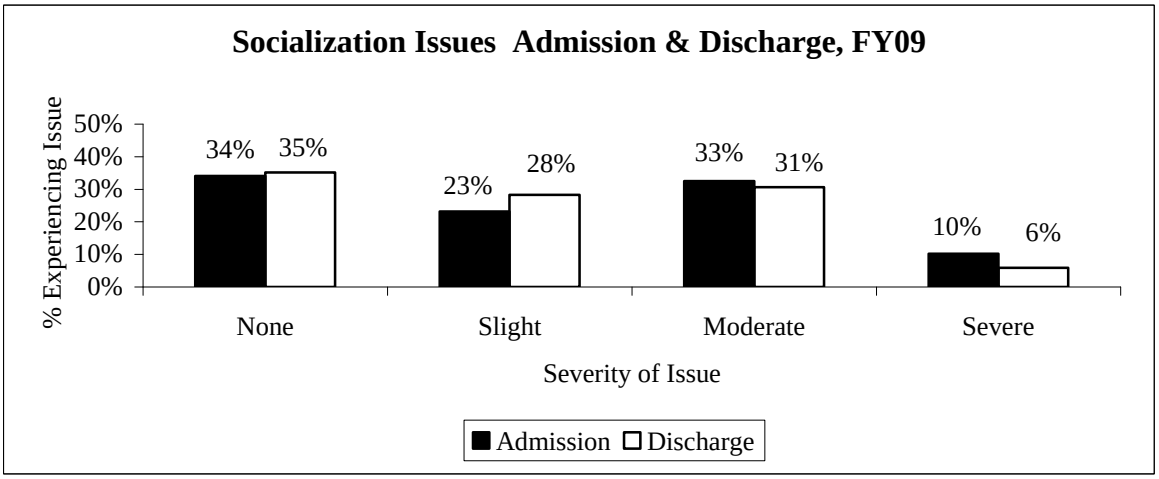


Figure 18: Socialization Issues/Problems from Admission to Discharge, FY09

Education/Employment Issues

The proportion of clients without education or employment problems at discharge increased, as did those with slight problems. The number with moderate or severe problems decreased at discharge. See Figure 19.

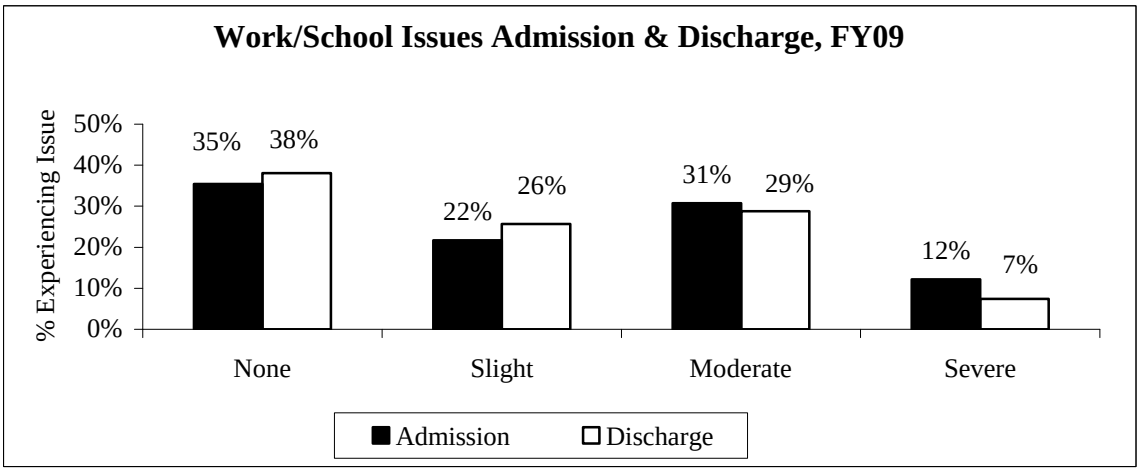


Figure 19: Work/School Issues/Problems from Admission to Discharge, FY09

Medical/Physical Issues

The proportion of clients without medical/physical problems at discharge increased from admission to discharge, as did those with slight problems. The proportion of clients with moderate or severe problems decreased at discharge. See Figure 20.

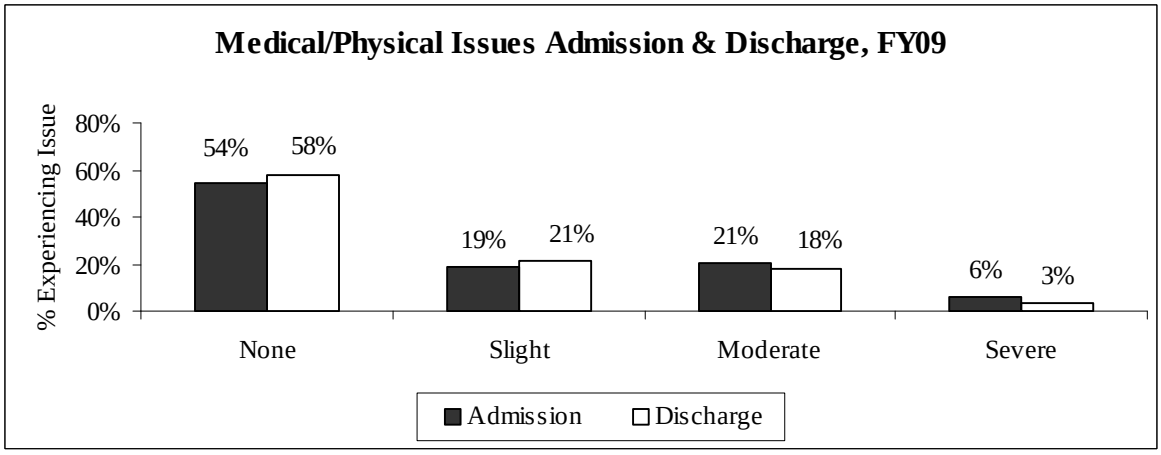
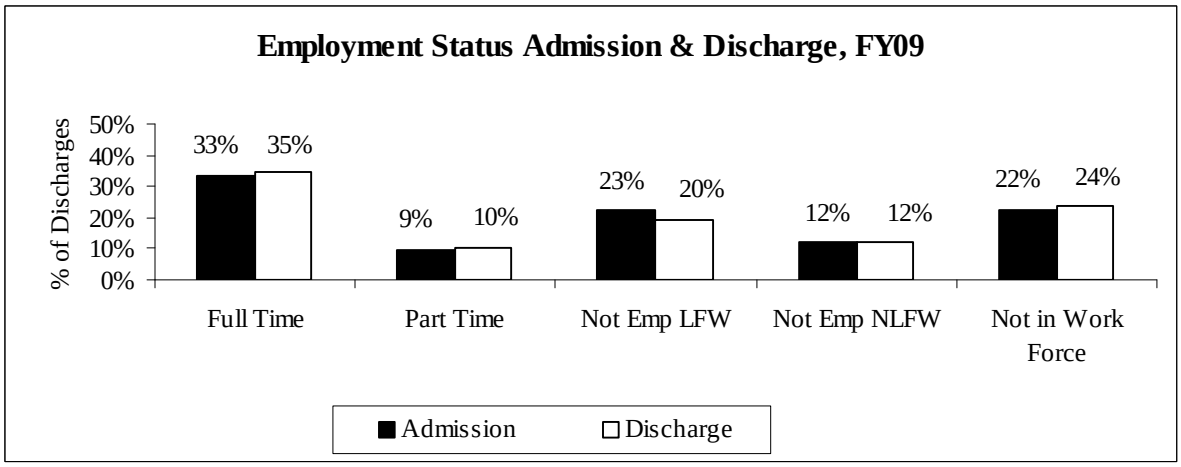


Figure 20: Medical/Physical Issues/Problems from Admission to Discharge, FY09

Employment Status and Living Situation

Slight increases occurred from admission to discharge in the proportions of clients working full-time and living independently. See Figure 21 and Figure 22.



Not Emp LFW = Not Employed, Looking for Work; Not Emp NLFW = Not Employed, Not Looking for Work

Figure 21: Employment Status from Admission to Discharge, FY09

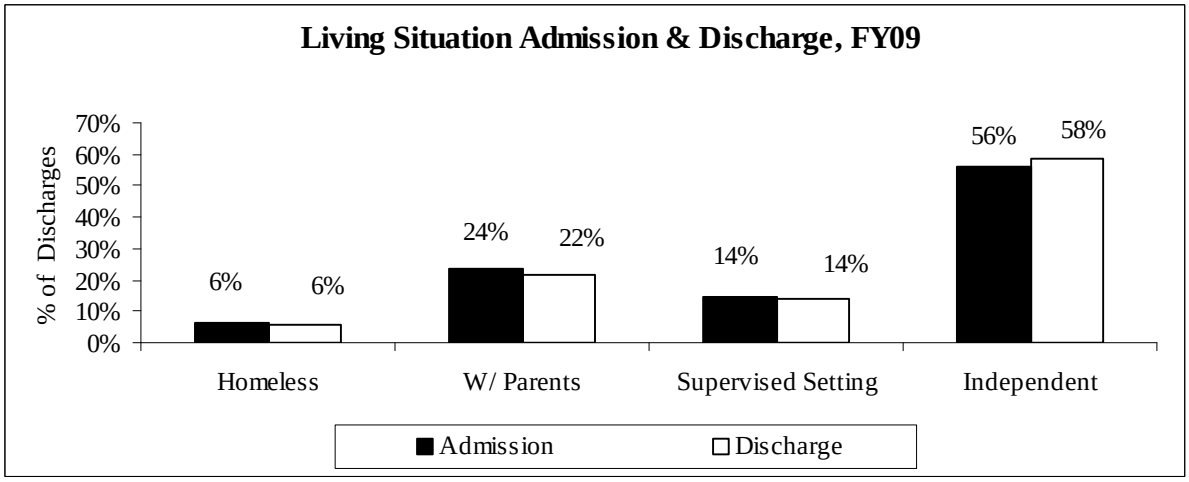


Figure 22: Living Situation from Admission to Discharge, FY09

Arrests, Emergency Room and Hospital Admissions

From admission to discharge from treatment, decreases were noted in DUI/DWAI and Other arrests, medical hospital visits and medical emergency room visits. Clients with one or more psychiatric emergency room visits and one or more psychiatric hospital admissions in the prior 6 months decreased from admission to discharge. See Table 3.

Table 3: Proportions of Clients at Admission and Discharge with Arrests, Emergency Room (ER) Visits or Hospital Admissions, FY09

Outcome Measure	Admission (%)	Discharge[1] (%)
DUI/DWAI Arrests in the last 30 days prior to . . .		
None	95.3	99.3
1-2	4.3	0.7
3+	0.4	0.0
Other Arrests in the last 30 days prior to . . .		
None	90.8	95.8
1-2	8.3	4.0
3+	0.9	0.2
Medical ER visits during 6 months prior to . . .		
None	73.1	80.2
1-2	18.3	9.3
3+	4.7	2.4
Medical Hospital Admissions during 6 months prior to. .		
None	86.1	86.4
1-2	8.5	4.8
3+	1.5	0.9
Psychiatric ER visits during 6 months prior to . . .		
None	92.4	89.9
1-2	3.7	2.2
3+	0.4	0.1
Psychiatric Hospital Admission 6 months prior to . . .		
None	92.7	90.1
1-2	3.5	2.1
3+	0.3	0.1

SERVICE COSTS

The Division pays approximately 53.8% of service costs rendered by the designated Managed Service Organizations and their subcontractors.

Table 4: Average Cost Per Client By Year for Treatment Services funded by DBH

Year	DBH's* Average Cost/Client	Total** Average Cost/Client
2009	$893	$1,661
2008	$809	$1,543
2007	$774	$1,509
2006	$759	$1,497
2005	$721	$1,948

Note: Detoxification services and costs are excluded; *Data were generated from DBH's funding database, using number of clients treated with DBH monies; **Data reflects all clients funded by DBH and by self-pay or insurance.

[1] Discharge variable for arrest data=DUI/DWAI Arrests and Other Arrests during treatment or in the past 30 days of treatment

RESOURCES FY 08-09

Staffing: DBH pays for 34 FTEs in the Colorado Department of Human Services.

DBH Revenue and Expenses for FY 08-09

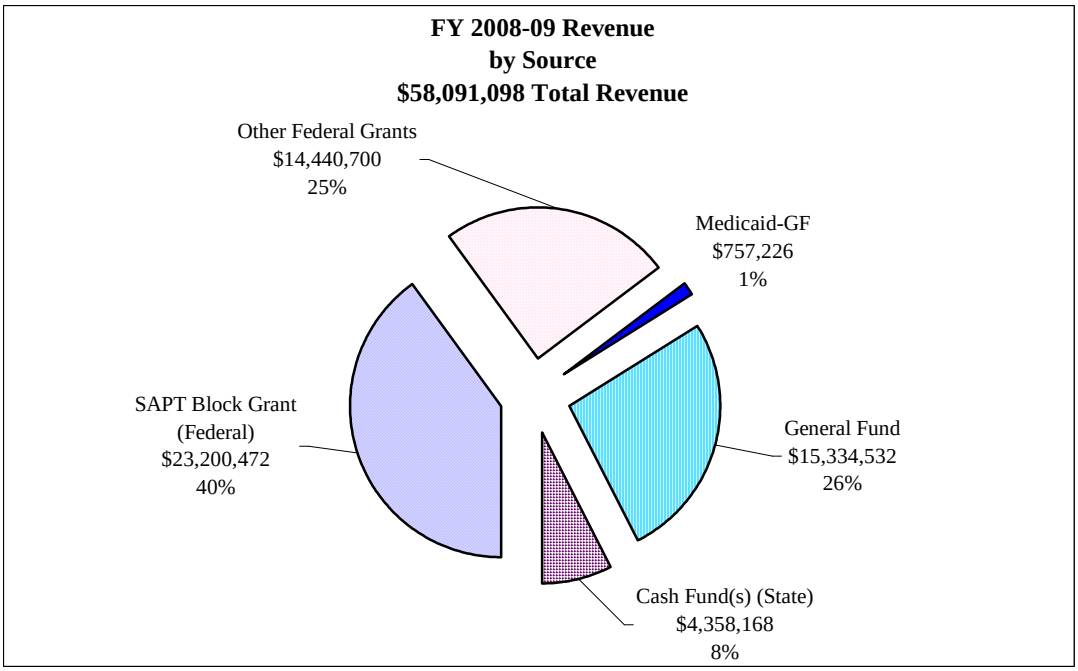


Figure 23: FY08-09 Revenue by Source

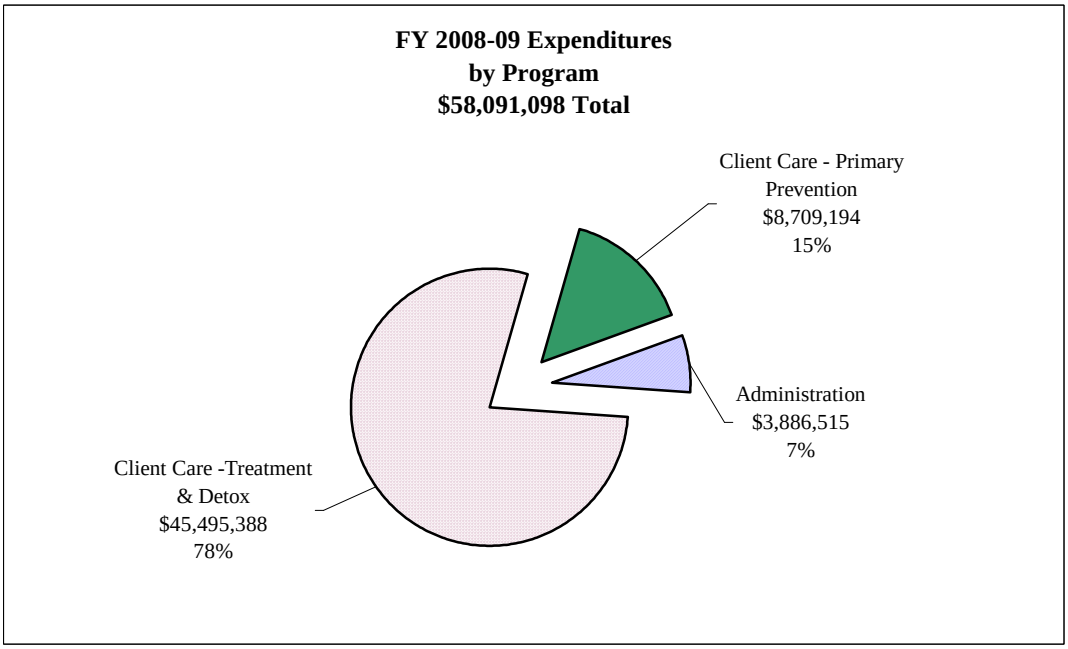


Figure 24: FY08-09 Expenditures by Program

The next three charts demonstrate:

1) DBH's funding history for substance abuse treatment, from fiscal years 2005 through 2009;
2) the proportion of different funding sources; and
3) history of DBH's General Fund dollars.

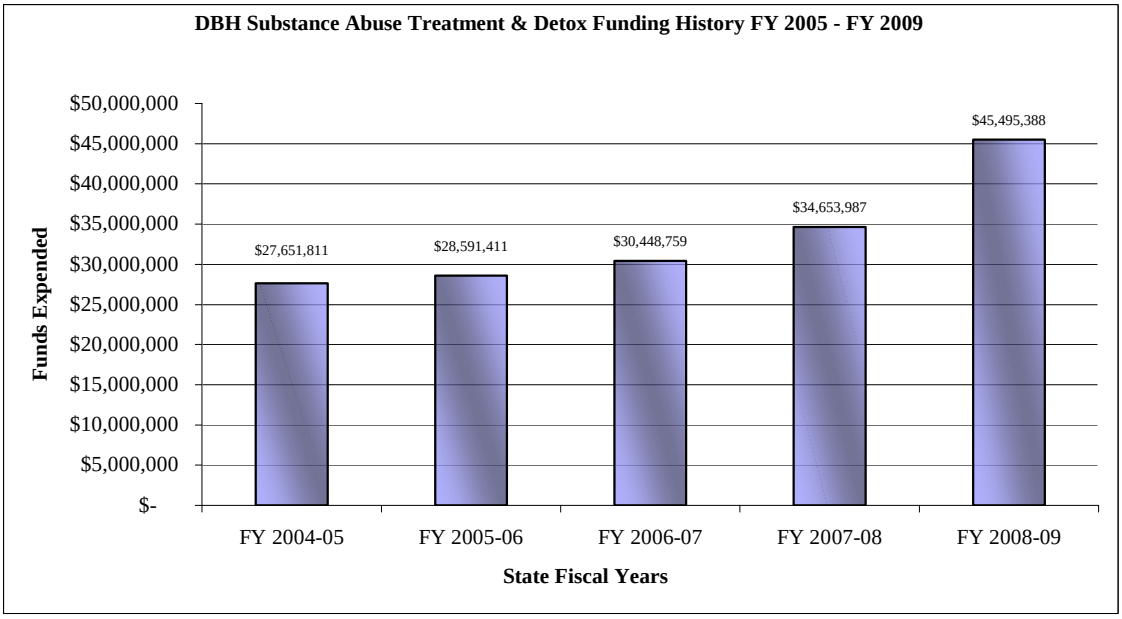


Figure 25: DBH Substance Abuse Treatment & Detox Funding History: FY05–FY09

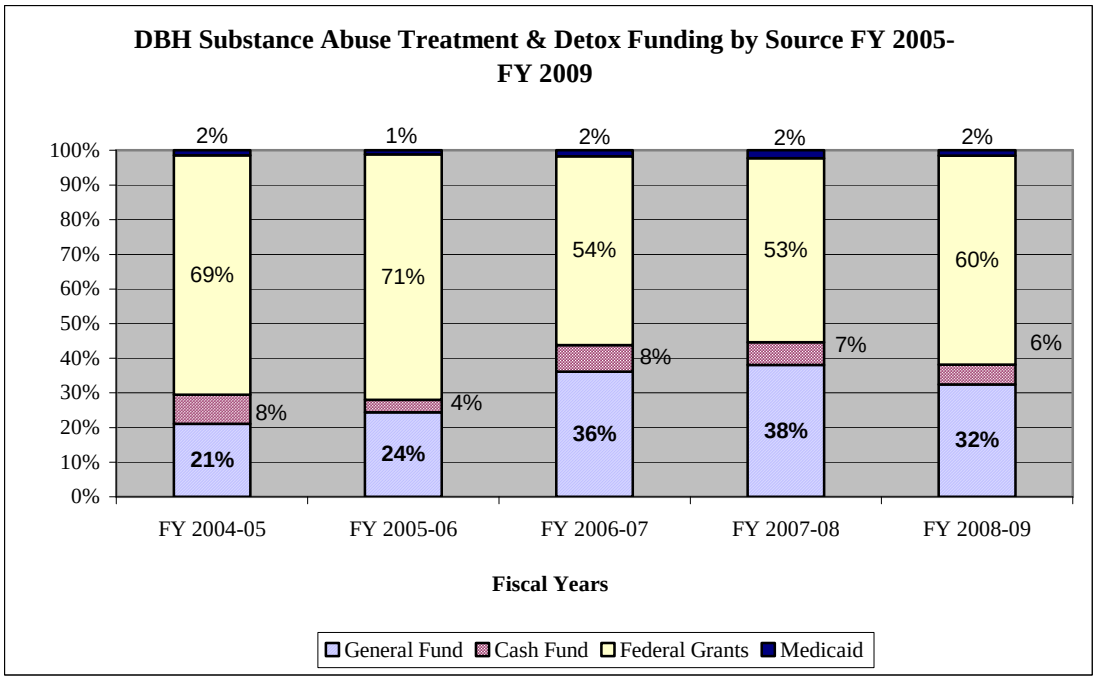


Figure 26: DBH Substance Abuse Treatment Funding Proportions: FY05–FY09

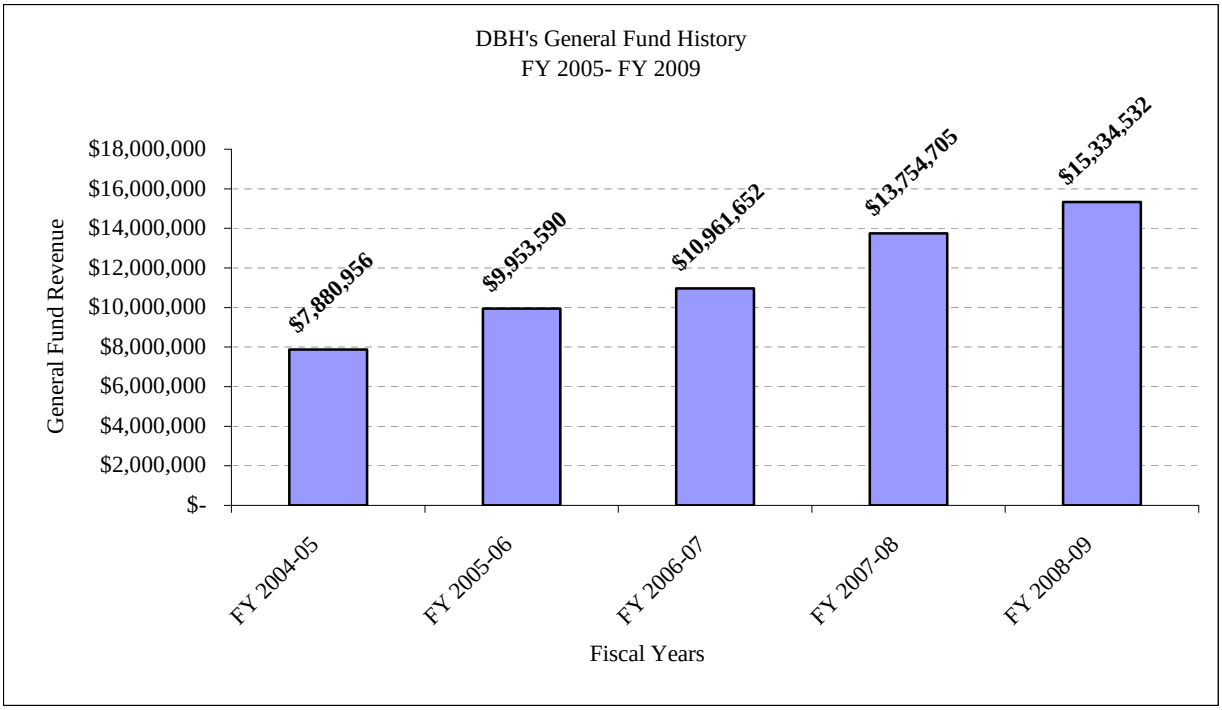


Figure 27: DBH General Fund: FY09–FY09

Tracking Civil Forfeiture (SB 03-133) for FY 08-09

As legislated by SB03-133, the designated Managed Service Organizations (MSOs) allocate monies to substance abuse treatment and detoxification programs in the Judicial Districts in which forfeiture proceedings were prosecuted. These monies are in addition to the appropriated funds through the Department of Human Services, DBH and the MSOs. The following table details the reporting of civil forfeiture funds for fiscal year 2009 by three Colorado MSOs, as required by SB03-133. The fourth MSO, Boulder County Public Health Department, did not receive any funds from civil forfeiture.

Table 5: Civil Forfeiture for FY08-09

MSO Provider / Description	Signal	West Slope	Connect Care	Total All
Beginning Balance	$ 361,325	$ 37,641	$ 369,002	**$ 767,968**
Distribution	$ (566,061)	$ (30,588)	$ (89,863)	**$ (686,512)**
Forfeiture Funds Received	$ 453,300	$ 12,053	$ 166,817	**$ 632,170**
Ending Balance	$ 248,564	$ 19,106	$ 445,956	**$ 713,626**

Summary:

Signal expended $566,061 of forfeiture funds during the year. Of this, $492,474 was spent on treatment and detoxification services and $73,584 was allocated to administrative costs (13% of total funds distributed). West Slope Casa (Judicial District #21) reported expenditures of $30,588 for client services during the year from forfeiture funds. Connect Care (Judicial District #4) reported $89,863 in expenditures during the year from forfeiture funds. In total, an additional

$632,170 in forfeiture revenues were collected in fiscal year 2009. This amount represents a 17% increase from the previous year.

TREATMENT AND SERVICE GAPS

According to the 2006-2007 NSDUH[2], Colorado ranks second (sixth in the 2005-2006 report, fourth in 2004-2005 report) among states nationwide in the proportion of persons 12 & older needing but not getting treatment for alcohol use in the past year and first (seventh in the 2005-2006 report, fifth in 2004-2005 report) among all states in the proportion of persons 12 & older needing but not getting treatment for illicit drug use in the past year.

According to the 2009 Colorado "Population in Need"[41] study of substance abuse prevalence, service utilization, and unmet need for Coloradans living at or below 300% of the Federal Poverty Level:

- 79,948 disadvantaged adults have a substance use disorder and, of these, only 30,897 (39%) received treatment.
- 61% (49,051/79,948 adults) of those abusing or dependent on substances are not in a treatment program (includes co-occurring disorder (COD));
- Available data indicate that as much as 62% of Colorado's disadvantaged children and adolescents (ages 0-17 years) with serious emotional disturbance (SED) (including COD) receive needed treatment for alcohol and/or drug abuse, however this is likely an inflated estimate for substance use disorder treatment due to the lack of national substance abuse data on these specific age groups;
- The Colorado behavioral health authority estimates that as much as 67,576 disadvantaged individuals (adults and children combined) went without needed substance use disorder treatment in 2007.
- Based upon the average 2007 per client treatment cost (the public portion) of $774, to address the unmet needs of the disadvantaged population would likely cost an additional 52.3 million dollars.

Three multi-year studies on treatment gaps and daily management of the substance abuse issues in Colorado have identified several populations that, even if treatment were widely available, would require special effort to recruit and retain in treatment. These include:

- all substance abusing adolescents, especially pregnant female adolescent substance abusers, particularly those who are Latinas;
- pregnant substance abusing females;
- women substance abusers who have dependent children;
- the elderly who abuse prescription medications;
- persons who are homeless; and
- substance abusers in the southeastern part of Colorado, since studies indicate this is a high area of need.

Pregnant Women in Substance Abuse Treatment in Colorado

The following is based on the Special Connections Annual Report for July 1, 2008-June 30, 2009 that will be available December 31, 2009.

Special Connections is a collaboration between DBH and the Department of Health Care Policy and Financing to provide Medicaid prenatal care and substance abuse treatment services for pregnant women in Colorado. To be eligible for enrollment in Special Connections women must be at high risk for poor birth outcomes due to substance abuse or dependence, eligible for Medicaid and willing to receive prenatal care during pregnancy.

Special Connections' goals are to:

- produce a healthy infant;
- reduce or stop the substance using behavior of the pregnant woman during and after the pregnancy;
- promote and assure a safe child-rearing environment for the newborn and other children; and
- maintain the family unit.

The full extent of the effects of prenatal drug exposure on a child is not known, however studies show that various drugs of abuse result in premature birth, miscarriage, low birth weight and a variety of behavioral and cognitive problems.[42] The average cost to the Colorado taxpayer of one low birth weight baby was $6,362 in the year 2000.[43]

Overall national prevalence data regarding substance use by pregnant women indicates that 11.6% [44] used alcohol during their pregnancies, 17.3% [45] used tobacco, 6% [46] used prescription drugs non-medically, and 4.3% used illicit or illegal drugs.

Of 70,804 babies born in Colorado (to women age 15-44) in 2007, it is estimated that

- 8,213 were exposed to alcohol in utero;
- 12,237 were exposed to tobacco in utero;
- 4,248 were exposed to the non-medical use of prescription medications and
- 3,044 were exposed to an illicit substance e.g. heroin, cocaine etc.

In 2009, the Special Connections program admitted 190 pregnant women to treatment, to whom 75 babies have been born. Eight of these babies were of low birth weight (under 5 pounds, 8 ounces), and the remaining 67 (89%) were of normal birth weight.

Colorado's substance use disorder treatment providers delivered services to a total of 394 pregnant women. This number constitutes approximately 4.7% of the number of pregnant women estimated to be using alcohol, prescription drugs or illicit drugs (8,213) in fiscal year 2009.

SPECIAL ISSUES/REPORTS

Methamphetamine In Colorado

Methamphetamine use has been a problem in Colorado for several years, impacting many communities and burdening a broad spectrum of community services, including law enforcement, public safety, corrections, child welfare, social services, environmental clean-up and medical and mental health care. According to the June 2009 Patterns and Trends in Drug Abuse: Denver and Colorado[47] report, excluding alcohol, methamphetamine ranked second behind marijuana in statewide treatment admissions and third in Denver area treatment admissions behind marijuana and cocaine. In 2008, the statewide methamphetamine new user proportion declined to 13.4 percent (17.8% in 2007), the lowest percentage in the eight year time period. Similarly, in Denver, the proportion of new users in treatment decreased from 17.6 percent in 2007 to 10.8 percent in 2008. Statewide, the average age of onset for methamphetamine use reported in 2008 first-time admissions was 21.7 (median=19.0), and for Denver, 21.2 (median=19.0). The average age of onset for treatment admission for methamphetamine has ranged between 20 and 23 statewide since 2000 (median age ranged from 18-20). Since 2002, meth laboratory closures have declined steadily, interestingly the quantity of meth seized in law enforcement raids had been rising from 2003 (14.8 kgs) to 2006 (50.3 kgs), but declined sharply in 2007 (8kgs). However, in 2008 methamphetamine seizures increased to 26.4 kgs. Despite the increase in methamphetamine seizures from 2007 to 2008, meth lab seizures continued to decline in Colorado from 345 in 2003 to only 33 in 2008.

Local law enforcement officials report that most methamphetamine is produced and supplied by Mexican drug trafficking organizations (DTO's). The Denver Drug Enforcement Administration (DEA) states that methamphetamine remains among the highest investigative priorities. Large loads are transported from Mexico, Texas, Arizona and California to Colorado. From Colorado, much of the methamphetamine is redistributed throughout the United States.

Many local clinicians and outreach workers say that methamphetamine users are still out there. However, considerable prevention efforts and media attention have led to a growth in the methamphetamine stigma, which in combination with reduced supply, has some methamphetamine users switching to other drugs.

Methamphetamine Task Force. House Bill 06-1145, mandating the formation of the Colorado State Methamphetamine Task Force (SMTF), was passed in FY06. The SMTF is the state's largest coordinated, comprehensive approach to address methamphetamine (meth) abuse in Colorado and aims to assist local communities in curbing meth abuse. The SMTF is responsible for reviewing best practices from across the state and country for implementation and has a specific focus on protecting drug endangered children. The SMTF will also evaluate the progress of the state's current efforts to prevent and treat meth abuse and evaluate approaches to increase public awareness of the drug's production, distribution and abuse.

In July 2007, the SMTF partnered with the Colorado Drug Endangered Children (DEC). This partnership provides a link to policy makers in the state giving Colorado DEC leverage and credibility while working with communities. At the same time, Colorado DEC members and partnerships in the field represent the grassroots movement, and provide an accurate

representation of the needs of local communities to policy makers. The SMTF also has a strategic plan commonly referred to as the Colorado Blueprint. At the core of the Colorado Blueprint is a four part continuous course of action involving policy, implementation, practice and science. In this respect, evidence and practice informs implementation, as well as, legislative and policy improvements.

General Demographics. During calendar year 2008, 16% of Colorado treatment admissions and 11% of Denver treatment admissions were for clients who reported their primary drug as methamphetamine. Meth users were more likely to be male, between the ages of 25 and 34, White, never married, have a high school education or higher and 41% have one or more dependent children. Fifty percent of Meth users were living independently, 34% worked full-time and 38% were unemployed or laid off. Meth users were likely to be referred into the treatment system by social services (11.5%) or non-DUI criminal justice (59%). Meth-using clients were likely to have had prior treatment episodes and be enrolled in outpatient treatment. They were likely to use tobacco products and be poly-substance users with drug dependency. Clients with meth as their primary drug were less likely to report using it in the 30 days prior to treatment admission. This finding probably relates to two issues: 1) non-meth users most likely reported alcohol, a legal substance, as their primary drug; and 2) most meth users were referred into treatment by the criminal justice system, indicating a supervised setting prior to admission.

Improving Treatment for Persons with Co-occurring Substance Use and Mental Health Disorders
A recent examination of clients with co-occurring mental health and substance abuse issues analyzed 20,246 discharges from treatment occurred during FY09. Of those discharges, 8,823 (44%) indicated having mental health issues at admission[9].

Overall, treatment demographics for FY09 co-occurring clients are similar to those of FY08. Small variations in demographic patterns were noted between the 8,823 co-occurring clients and 11,423 discharged clients without co-occurring disorders at admission. These variations indicated that co-occurring clients were slightly more likely to:

- be female;
- be under 18 years of age;
- be White;
- be educated beyond high school.
- have had prior treatment episodes;
- have been placed in more intensive treatment modalities;
- have used tobacco products daily;
- have moderate to severe problems with family, socialization, work or school and physical health;
- have used their primary drug within 30 days of admission and during treatment;
- have visited psychiatric and medical emergency rooms; and
- have been admitted to psychiatric and medical hospitals.

Similar to FY08, FY09 co-occurring clients were less likely to be employed, married, have dependent children, or be referred into treatment by the criminal justice system.

Regarding treatment outcomes, clients with co-occurring disorders were less likely to have completed treatment with no further treatment recommended and achieved high progress towards treatment goals.

As with the general treatment population, co-occurring clients had overall positive treatment outcomes. However, because they had more severe issues to address at time of admission to treatment, they were also more likely to be assessed with those issues at discharge.

House Joint Resolution 1050

In 2007, a task force was created for the study of behavioral health funding and treatment (House Joint Resolution 07-1050). The purpose of the task force was to study mental health and substance abuse services in order to coordinate state agency efforts, stream line services provided, and maximize federal and other funding sources.[48] The report made the following recommendations that have since been considered by the Governor's newly formed Behavioral Health Cabinet. With the exception of creating a Behavioral Health Commission, the Behavioral Health Cabinet and its working group of Behavioral Health Coordinating Council members, support the general concepts and work done by the 1050 Task Force.

- Establish a Behavioral Health Commission with leadership from the three branches of state government, adult and youth consumers and families, providers, and communities. The Commission's charge would be to implement the 1050 Task Force's and its own recommendations and provide oversight and support to Colorado's vision for an integrated behavioral health system.
- Develop and implement a set of shared outcomes across key systems to enable joint accountability
- Align service areas across systems
- Expand the use of joint auditing across systems, which could include fiscal and/or programmatic audits.
- Develop and implement a multi-year joint budget and strategic planning process across departments to support long term and cross-system needs.
- Develop an integrated behavioral health fiscal policies, rules, and regulations that align with integrated behavioral health service delivery.
- Support financing reform to maximize and efficiently utilize funds to support an integrated behavioral health system.
- Use electronic cross-system data collection, sharing, and evaluation, including an electronic health record and shared screening tools, assessments, and evaluations.
- Adopt consistent cross-system standards for cultural competency/responsiveness and for adult, youth, and child consumer and family involvement
- Develop strategies for an integrated behavioral health system.

Colorado Behavioral Health Transformation Transfer Initiative

As an outgrowth of the statutorily established Behavioral Health (HJR-1050) Task Force, this year DBH has been intricately involved in the Colorado Behavioral Health Transformation Transfer Initiative. Funded by a grant from the Center for Mental Health Services of SAMHSA, the goals are:

1. Develop a process for sustained, ongoing involvement of consumers, families, and other stakeholders for an ongoing, authoritative collaborative body.
2. Establish a transformation structure to support the work of the Collaborative Body and implement at least two of the recommendations of the HJR-1050 Task Force.
3. Secure ongoing funding, as well as staff and necessary supports, to institutionalize, sustain, and achieve true behavioral health system transformation.

The work is being carried out by four implementation groups: criminal justice, continuum of care, under 21 population, and sustainability, based on the level of interest for the priorities identified. A Behavioral Health Council Planning Retreat was held August 18 and 19. At that time, the group identified the following as future indicators of the group's success:

1. Use family advocacy, wraparound service coordination
2. Create seamless effective services across systems
3. Shift responsibility to consumers from providers
4. People get better – State agencies are collaborative and non-bureaucratic
5. Invest in recovery at all levels of intervention, prevention and treatment
6. Improve quality of life and decrease cost
7. Make a real difference for people
8. Focus on prevention, intervention, treatment and recovery (all four included)
9. Streamline systems and processes to improve people's lives
10. Make the system so family and culturally inclusive that these concepts are not distinguishable
11. Streamline systems and processes to increase access, affordability and quality of care
12. Decrease BH disparities for communities of color across the state
13. People get as much or as little as they need in culturally respectful way
14. Create a family-driven system
15. Facilitate interagency case management
16. Address addiction and mental health in context of overall health
17. Make system access and user friendly
18. Use strength-based methods and approaches across all systems
19. Use shared measures across system tracked over time
20. All services, wrapped around, meeting all individual needs
21. Create one statutory section for behavioral health

SPECIAL PROJECTS

Prevention

Prevention Leadership Council (PLC)

DBH continues to participate in the Prevention Leadership Council (PLC)(C.R.S. 25-20.5), an ongoing collaboration among state agencies aimed at implementing a seamless interagency approach to the delivery of state and federally funded prevention programs.

Colorado is the first state in the nation to have a multi-agency, cross-discipline prevention evaluation system. Five state agencies that fund prevention services are now using this system. A web-based resource and indicator database, ASPIRE, has been developed primarily for communities to use. Communities can readily see data regarding their county or community pertinent to prevention issues as well as what prevention resources are currently being received by their county or community.

Prevention Summits

DBH assisted with the PLC to host a Statewide Prevention summit in September 2008. Prevention coalitions, prevention providers and DBH Prevention Contractors participated. The focus of the summit was to improve relationships and communication among and between local and state prevention partners and initiatives; strategize to expand the role of prevention within the continuum of services across the lifespan and outline potential structures for regional prevention learning communities. The PLC is responsible for implementing C.R.S. 25-20.5-102, The Prevention, Intervention and Treatment Services for Children and Youth Act.

Community Level Development Study formerly called the Diffusion Consortium Project

Colorado continues to participate in the University of Washington's study along with six other states. In Colorado, an experimental community has been chosen to study the prevention of youth substance abuse through the development and funding of the Communities That Care operating system. Outcomes compared with a similar control community that is not implementing that system of training and technical assistance shows a decrease in substance use in the control communities. Prevention staff participate in regularly scheduled conference calls, annual meetings and in the Advisory Committee that provides assistance to 12 community action plans in the seven states to ensure both the experimental and control communities participate in student surveys.

Persistent Drunk Driving (PDD) and Law Enforcement Assistance Funds (LEAF)

PDD education funds support programs intended to deter persistent drunk driving or to educate the public on the dangers of persistent drunk driving, with particular emphasis on young drivers. Sixteen Colorado counties were served, based on their juvenile-alcohol and DUI related arrest rates. Thirteen counties received $25,000 each and three counties received start-up funds of $7,500 for a total allocation of $347,500.

The LEAF funds occur through a legislative surcharge that focused on drunk and drugged driving convictions to help pay for enforcement, laboratory charges and prevention. In FY08-09 Judicial allocated $250,000 of the surcharge dollars to establish community-based impaired driving prevention programs for these mandated populations: the general population; teachers of youth; health professionals; and law enforcement.

<u>PDD and LEAF Prevention Services for FY08-09</u>
Total Served: 347,498
Total Served by Gender: Female 172,688 (50%); Male 174,810 (50%)
Total Served by DIRECT Services: 72,835

Total Served by INDIRECT Services: 274,663
Total DIRECT Services: 1,483
Total INDIRECT Services: 205

The following results are a combination of PDD and LEAF funded contracts. In FY08-09:

- 230 youth, average age 15.90, from eight organizations, received evidence-based curricula. They were 62.4% male, 59.6% white, and 21.7% Hispanic/Latino.
- Statistically significant decreases ($p<.05$) were noted in 30 day use of alcohol, smokeless tobacco, and LSD/hallucinogens for surveyed youth at pre- and post-test. For those participants who used a given substance at pre-test, statistically significant decreases ($p<.05$) from pretest to posttest were noted in 30 day use of that substance for cigarettes, alcohol, and marijuana.
- Pre/post survey data also indicated statistically significant changes from pretest to posttest where youth demonstrated significantly greater attitudes against alcohol use ($p<.05$).

SYNAR and Funding Impact

The federal block grant requires Colorado maintain enforcement activities to reduce underage access to tobacco. Non-compliance (exceeding a predetermined sales rate of 20% to youth) with SYNAR will result in a penalty of 40% of the Block Grant (approximately $9.5 million for Colorado). DBH works closely with the Department of Revenue and the Department of Public Health and Environment to conduct enforcement activities. Current compliance checks and analyses show that Colorado meets all Synar requirements. The non-compliance rate for 2009 was 13%

Capacity Development

DBH formed a workgroup of representatives from state agencies that provide prevention services to address standards and competencies for coordinated capacity development (previously called workforce development). This task falls under the purview of the Prevention Leadership Council (PLC). The goal is to develop a research-based process that assures the availability of quality training and technical assistance to the prevention workforce in Colorado. In FY07 this planning group completed a tool and process for assessing the application of the Uniform Minimum Standards. This tool, called the Uniform Minimum Standards Assessment Tool, is intended to be standard across agencies and be used to determine training and technical assistance needs. The tool was piloted in Spring 07 and piloting will continue in FY09.

Prevention Peer Review

DBH and the Colorado Association of Alcohol and Drug Service Providers (CAADSP) developed a prevention peer review process to promote continuous quality improvement of prevention programs. This process is based on research, literature and past experience.

Higher Education Initiatives

DBH continued to increase its efforts to address underage drinking in higher education by collaborating with the Coalition of Campus Alcohol and Drug Educators (CADE) and the federally funded Center for College Health and Safety's Higher Education Center for Alcohol and Drug Prevention. In FY08 ADAD continued its funding of the BACCHUS Network to provide state coordination services for CADE. This contract provides training, resources, information and support for campus professionals responsible for alcohol and drug prevention and health promotions at two and four year institutions of higher education in Colorado. CADE created a subcommittee that focuses on the special needs of two-year colleges. CADE is also consulting with Colorado Prevention Partners communities (see below) on how to involve higher education representatives in local planning efforts.

Strategic Prevention Framework, State Incentive Grant (SPF SIG)

Colorado is one of twenty states awarded the SPF SIG on September 30, 2004. The SPF SIG is funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Prevention (CSAP) and brings approximately $2,350,000 to Colorado each year for five years. It is based on interagency collaboration and DBH is the fiscal agency for the Governor's office. The SPF SIG, known in Colorado as "Colorado Prevention Partners" or "CPP," is designed to build capacity and infrastructure at State and community levels, reduce substance abuse-related problems in communities and prevent the onset and reduce the progression of substance abuse, including underage drinking. In the first year of the grant a state epidemiological and outcomes workgroup (SEOW) conducted an assessment of highest need areas in Colorado. A CPP Advisory Council used these data to prioritize areas as potential funding sites and partners, selecting a diversity of urban, rural and frontier communities. In the second year of the grant (2005-2006), 13 counties and one tribal community were notified of the opportunity to participate in CPP and 13 of the sites received funding for start-up and pre-planning activities. All sites attended regional and state orientation and training. In the third year of the grant (2006-2007) funded communities began work in the Strategic Prevention Framework, conducting needs & resource assessment activities, building local capacity, developing strategic plans and implementing evidence-based programs, policies and practices. Program implementation and evaluation began in FY08 and continued in the final year of funding. During the final no-cost extension year, Communities will complete and implement sustainability plans.

<u>Treatment</u>

The Interagency Advisory Committee on Adult and Juvenile Correctional Treatment

(IACAJCT) continues to work collaboratively to improve the supervision and treatment of offenders. Four sub-committees of cross-agency staff: Juvenile and Adult, Screening and Assessment, Treatment, and Research work on the following projects, respectively: 1) improve the quality and utility of standardized juvenile and adult screening, assessment instruments and procedures used by the member agencies; 2) improve the quality of offender specific curriculum; and 3) establish a cross system response to the evaluation of interagency program data and program effectiveness. The IACAJCT oversees the Drug Offender Surcharge Fund budget and the implementation of SB03-318.

With respect to project 1 above, the IACAJCT has recently sponsored the development and testing of a new instrument designed to more effectively match offenders to the appropriate level of substance abuse treatment. The Offender Treatment Matching Algorithm (OTMA) is currently being tested in the field with consenting offenders and the preliminary results of these tests look promising for improving the treatment match while reducing staff time needed to administer the instrument.

Adolescent Providers Committee

DBH hosts a quarterly meeting for all treatment providers licensed to deliver specialized treatment services to Minors. This group addresses and shares current trends with adolescents, discusses legislation that may impact services for youth and their families, available funding for treatment services, grants available at the federal and state levels and new and existing evidenced-based materials available to all providers. This group provided feedback to authors that were hired to develop an appropriate curriculum to provide services to Youth DUI offenders, and one member has been hired to develop "Guidelines for Adolescents with Co-Occurring Substance Use and Psychiatric Disorders". Members include staff from the Division of Youth Corrections, Mental Health Centers, large residential programs, as well as outpatient programs.

Opiate Treatment Advisory Committee

The Opiate Treatment Advisory Committee was formed in 2008 to bring together persons with diverse backgrounds to help improve the services opiate dependent persons receive in the state of Colorado. The committee shares information on numerous topics and finds ways to incorporate the information to help improve services that this population needs. The committee meets on a quarterly basis and consists of persons from the Drug Enforcement Administration, Denver County Probation, Colorado Department of Public Health and Environment, Colorado Department of Regulatory Agencies (Division of Registration), Denver Public Health, frontline staff from opiate treatment programs, 2 opiate treatment program physicians, 2 opiate treatment dispensing nurses, and DBH's State Opiate Treatment Authority.

Intervention: Screening, Brief Intervention and Referral to Treatment (SBIRT)

Substance use disorders in the State of Colorado are a significant health, social, public safety and economic problem. In 2005, Colorado spent $1.7 billion or 15.6% of total state spending on issues related to substance abuse.[49] Resources to provide substance use disorder prevention, early intervention and treatment are limited; the problem far outpaces the resources.

Screening and brief intervention (SBI) for alcohol and other drug use is a technique used to identify and intervene with people who use alcohol or drugs in a harmful or hazardous way, and are at risk for substance use-related problems or injuries. The Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Treatment (CSAT) developed the Screening, Brief Intervention and Referral to Treatment (SBIRT) grant program to expand and enhance states' substance abuse treatment services systems by expanding the continuum of care to include SBIRT services in general medical and other healthcare settings. The SBIRT approach targets individuals who use substances but who may not be diagnosed as abusive or dependent, representing a significant paradigm shift in

the substance abuse treatment and healthcare systems to address substance use as a healthcare issue. SBIRT Programs are implemented through cooperative agreements between State and Tribal Council grantees, including SBIRT Colorado.

In 2006, the State of Colorado, Office of the Governor was awarded a five year grant from the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Treatment (CSAT) to implement SBIRT services in healthcare settings in urban, rural and frontier communities across the State. The Division of Behavioral Health (formerly the Alcohol and Drug Abuse Division) and the Department of Public Health and Environment provide administrative and primary oversight and Peer Assistance Services, Inc., manages the implementation activities of SBIRT Colorado.

Preliminary results of the SBIRT initiatives were released in 2008 indicating that implementing substance use screening and brief intervention services in healthcare settings substantially reduced health and other problems associated with hazardous substance use among patients. Of the 459,499 patients who were screened through the SAMHSA project, 22.7% or approximately 104,306 patients screened positive for substance use.[50] Follow up data indicated that patients scoring positive for alcohol and other drug use decreased their substance use.[49] Additionally, results indicated improvements in general health, mental health, employment, housing status and criminal behavior.[49]

Now entering its fourth year of implementation SBIRT Colorado is currently collaborating with 12 healthcare agencies to implement SBIRT procedures in 20 clinical settings across the State. To date, SBIRT Colorado has screened 54,000 patients over three years. A total of 8,640 (16%) scored positive or at risk for experiencing health and other consequences due to their use of alcohol and other substances. The following is a breakdown for *alcohol and/or other drug positive screens* for this period[2]:

- 56% (30,240) scored in the low risk category and received positive reinforcement;
- 27% (14,580) scored positive for tobacco use only;
- 11% (5,940) received a Brief Intervention for alcohol and/or other drug use;
- 2.0% (1,080) received a referral for Brief Therapy for alcohol and/or other drug use; and
- 3.0% (1,620) received a Referral to Treatment for alcohol and/or other drug use.

In efforts to establish policy and practice infrastructure necessary to sustain SBIRT practices beyond the life of the SAMHSA grant, the Division of Behavioral Health is currently working in concert with both public and private partnerships to get legislation introduced and passed to approve and fund changes to the Colorado State Medicaid Plan to allow for Medicaid reimbursement for Screening and Brief Intervention (SBI) for alcohol or other drug use in primary healthcare settings using Current Procedural Terminology (CPT) codes.

[2] Of the total screened, 14,580 (27%) persons screened positive for tobacco use only and received brief interventions however, this number is not included in the Medicaid reimbursement request because tobacco cessation procedures are funded by other sources and would not be subject to coverage by the codes noted above. Persons screening positive for tobacco use only are advised of the health risks and provided with appropriate information and referrals to smoking cessation resources.

These partnerships also promote the use of and demonstrate State level support for SBI practices in primary healthcare settings throughout the State of Colorado, and provide a catalyst for encouraging private health insurance providers to adopt the corresponding American Medical Association's (AMA) Current Procedural Terminology (CPT) codes for SBIRT procedures in primary healthcare settings.

Access to Recovery Grant

DBH received a federal grant that focuses on two distinct populations: Methamphetamine users and adolescents and young adults, ages 12 -25, as they represent the populations with the greatest unmet need in the state. The grant offers the opportunity to change and enhance the clinical treatment system and add valuable recovery support services in Colorado. The sharp contrasts that exist between urban and rural settings will provide an opportunity to examine how a voucher system can best be implemented in two very different settings. The urban setting provides an opportunity to address the significant needs and complexity of substance abuse in large metropolitan areas, as well as a chance to build a strong collaborative effort among a diverse set of treatment and recovery support providers who are often in competition for funding. The rural setting allows us to address the exact opposite situation: sparse population isolated and spread over large areas, and a lack of treatment and recovery support providers. By including both, we hope to design a system that can be adapted and sustained in a variety of settings statewide.

Access to Recovery (ATR) is located in Metro Denver, Metro Colorado Springs, Northern Colorado (including Fort Collins, Greeley, Loveland, and Fort Morgan), and the I-70 corridor from Summit County through Mesa County, as well as Delta County. Over the past two years, Access to Recovery has helped 4,094 individuals through a voucher-based system. Over 16,000 vouchers were issued for both treatment and wrap around support services provided by 300 community and faith based organizations at 462 sites. One third of the providers were faith-based organizations. Wrap around support services included dental care, sober living housing, support groups, transportation, child care, job and GED training, assessments, and a variety of other support services to help the individual stay in and complete treatment and sustain their recovery. The project has emphasized a comprehensive approach that unites services from treatment and recovery support organizations to increase the potential for sustained sobriety and full reintegration into the community. The ATR programs have forged a strong working relationship with SBIRT (see below) providing referrals to ATR and ATR covering the cost of their treatment and recovery support.

Short Term Intensive Residential Remedial (STIRRT) and Related Programs

The Short Term Intensive Residential Remedial Treatment (STIRRT) program is designed to motivate substance abusing offenders to comply with substance abuse treatment. It is a nine-month program which begins with two-weeks of intensive residential treatment that provides a minimum of 112 therapeutic hours during the residential stay. After the intensive residential treatment, clients transition into a continuing care Intensive Outpatient (IOP), Enhanced Outpatient (EOP), or traditional Outpatient Program (OP) for another eight or nine months. The outpatient programs include group education, therapy and ancillary services to help offenders successfully complete treatment. Male and female substance-abusing offenders who are 18 years of age or older qualify for the program when they meet

the following criteria: had at least one prior felony conviction; had a positive urinalysis prior to admission; had been recommended to a level four treatment (enhanced treatment services) based on the Standardized Offender Assessment - Revised (SOA-R); received a level of supervision (LSI) score of 29 or higher; and are facing jail/prison time if not compliant with STIRRT.

The STIRRT program was the first offender-specific treatment program funded by DBH through the "Drug Offender Surcharge Fund" and was exclusively for male offenders. The first STIRRT program opened at Arapahoe House, a Denver-based, private, non-profit substance abuse treatment agency. This unit, opened in April 1996, provided 20 intensive residential treatment beds for adult male offenders. However, in October 2000, general fund monies were awarded to the Pueblo STIRRT, which opened a 12-bed residential treatment unit for male and female offenders at Crossroads Turning Point, a private treatment agency in Pueblo.

As a result of the Governor's Recidivism Reduction Package, two additional STIRRT Residential programs received funding beginning in FY 07-08. In Fort Collins, Colorado, Larimer County Community Corrections (LCCC) received funding for a ten-bed male intensive two-week residential program. In Grand Junction, Colorado, Mesa County Criminal Justice Services Department opened a ten-bed male and a five-bed female two-week intensive residential program. Both of these programs also provide specialized services for the treatment of methamphetamine addiction and psychiatric services for clients diagnosed with co-occurring disorders of mental health and substance use.

Research has shown that length of stay in treatment is associated with more successful outcomes including a lower recidivism rate. Funding from the Governor's Recidivism Reduction Package is supporting this by also providing STIRRT Continuing Care funds for up to eight months for clients who complete the STIRRT Residential program.

The Colorado Social Research Associates (CSRA), affiliated with Arapahoe House, issued a STIRRT Outcome Evaluation Report for DBH/ADAD in September 2008. In addition, as part of the FY 2007-08 Recidivism Reduction Package funding was appropriated to the Division of Criminal Justice to evaluate the fidelity of STIRRT across all four residential programs and to report actual recidivism rates on all STIRRT clients across programs one year following programming. The following are two of the six "significant" findings of the (CSRA) report:

1. Reduced use of drugs and alcohol. There was a significant decrease in the proportion of STIRRT clients who used alcohol (42% to 20%), marijuana (41% to 12%), cocaine (23% to 3%), and amphetamines (19% to 3%) in the past 30 days when comparing baseline to the six-month follow-up. At the six month follow up interview, 71% of clients reported that they had not used any drugs or alcohol in the past 30 days, and 65% reported they had not used any drugs or alcohol in the past 6 months or longer. In addition, STIRRT clients significantly decreased the number of days they used alcohol, alcohol to intoxication, marijuana, and multiple drugs from baseline to the six- month follow-up.

2. Reduced severity of legal problems. Based on results from the Addiction Severity Index-Lite (ASI-Lite) composite score for legal status, STIRRT men significantly reduced their severity of legal problems from baseline to six months. At follow-up, 65% of clients reported that they had not spent any days in jail or prison in the past 30 days. More than half (57%) of STIRRT clients remained arrest-free by the six-month follow-up. Probation and/or parole violations were the number one reason for time spent in jail or prison.

Medicaid Outpatient Substance Abuse Treatment Benefit

The legislature authorized an outpatient Medicaid substance abuse treatment benefit for Medicaid enrolled clients experiencing difficulties with substance use disorders. The benefit went into effect on July 1, 2006. Eligible providers include DBH licensed outpatient treatment programs, as well as individual licensed practitioners who demonstrate experience and who have received specialized training in the treatment of substance use disorders. The number of sessions of group and individual treatment is determined by the benefit design. Treatment sessions which exceed specified limits are not reimbursable. The Department of Health Care Policy and Financing, (HCPF), has oversight and administration of this program. DBH is available to provide technical assistance regarding substance abuse treatment issues to providers and Health Care Policy and Financing at any time. Due to an increase in reimbursement rates by HCPF, and education and outreach to licensed providers by DBH staff, there has been an increase in the number of agencies enrolled to provide the service. This has resulted in an increase in utilization of the benefit. Information is not yet available to determine the savings to the state on emergency medical and psychiatric hospital visits, law enforcement and the courts.

Evidence-based Practices

DBH is working closely with treatment providers and researchers to incorporate the use of evidence-based practices and curricula into treatment programming. A series of trainings on incorporating tobacco cessation into treatment programs has been completed. EBP meetings have been scheduled throughout the year to further educate staff on evidence-based practices. Upcoming trainings will include NIMH depression in primary care project, high-risk pregnancy program and integrated care models. In addition, DBH has been working with the Mountain West Addiction Technology Transfer Center on several projects aimed at increasing knowledge and implementation of evidence-based practices including sponsoring several individuals who will soon complete specialized training in supervising the use of motivational interviewing, called MIA:STEP. The tools were developed by the Addiction Technology Transfer Centers in cooperation with the National Institute on Drug Abuse (NIDA) and those who successfully complete the training will become resource trainers for Colorado. DBH will be co-sponsoring a clinical supervision workshop for November 2009 to aid senior level counselors who provide supervision to enhance their skills as well as sending clinicians to the MWATTC Clinical Supervision Coaching Academy. In 2009 Colorado passed legislation that requires the adoption of a continuing competency model for psychotherapists and it is expected that DBH, as one of the stakeholders, will provide input on how evidence-based practices can play a role in measuring competency. DBH has developed a EBP work plan that is available on our website.

Interagency Task Force on Drunk Driving

In an effort to generate more collaboration and consensus for effective solutions to the impaired driving problem, the Interagency Task Force on Drunk Driving (ITFDD) was established in 2006 by the Colorado General Assembly. Senate Bill 192 was passed in honor of Sonja Marie DeVries, who was killed by a drunk driver who had six previous impaired driving convictions. The official mission of the ITFDD is "to investigate methods of reducing incidents of drunk and impaired driving and develop recommendations for the State of Colorado regarding the enhancement of government services, education, and intervention to prevent drunk and impaired driving." Members of the ITFDD are designated by statute and represent various state agencies, the law enforcement and legal community, safety advocates, private businesses and citizens.

Regional Offender Treatment Meetings

2009 was the fifth consecutive year of Offender Treatment Meetings. DBH sponsors these meetings across the state annually for the purpose of providing opportunities for DBH and State Judicial to give updates, clarification, and technical assistance to treatment providers and probation officers serving the substance using offender population; to encourage networking between providers and probation; and to get feedback from the field. In the spring of 2009 four meetings were held statewide, in Pueblo, Weld County, Grand Junction and Denver. Approximately 500 people were in attendance at the meetings, which included treatment providers and probation officers serving DUI offenders, non-DUI offenders and minors offenders. The meetings provided updates on DBH rules and practices, probation updates, follow-up from issues raised last year and training by the Division of Motor Vehicles.

DBH Research Forums

Two times per year DBH presents free half-day seminars open to the public, but geared primarily to prevention and treatment providers and their staff. The February 2009 Research Forum, "Fetal Alcohol Spectrum Disorder (FASD) Prevent, Intervene, Treat" featured Dr. Pamela Gillen, nationally recognized expert in the FASD field and director of the COFAS Prevention Program at the University of Colorado, Denver. This forum also featured an expert panel addressing taking research to practice with the CDC Translational Research FAS-PACE Stepped Care Model of Intervention. The July 16, 2009 Research Forum was titled "Gambling Addiction: A Dicey Proposition", and featured an array of Colorado experts in that field. The next research forum to be held in February 2010 will focus on providing culturally congruent services to the LGBT (lesbian, gay, bisexual, transgender) population as a follow up to Colorado's participation in a national summit on methamphetamine.

Black Community Providers Association (BCPA)

DBH is a founding member of the Black Community Providers Association (BCPA). The BCPA's mission is to provide statewide leadership and guidance towards improving behavioral healthcare services in Black/African American communities and increase the quality of care provided to the Black/African American community. The BCPA strives to elevate awareness of the status of mental health and substance use issues in these communities and to improve access to quality services to address these issues. BCPA seeks

to accomplish its goals by developing and delivering community awareness campaigns, encouraging and fostering collaboration among local providers, establishing methods of delivering services to the underserved, identifying current best practices, collaborating clinical improvement forums, promoting counselor certification, licensure, and continuing skills development, and establishing collaborative alliances with other national, state and local entities. Specific goals include:

1. Identify specific treatment needs.
2. Identify services providers.
3. Design and implement collaborative referral systems.
4. Improve access to services.
5. Improve quality of service delivery.
6. Improve consumer satisfaction.
7. Secure funding to ensure sustainability.

Latino Behavioral Health Roundtable Committee (LBHRC)

DBH is also a founding member of the Latino Behavioral Health Roundtable Committee (LBHRC). The Mission of the LBHRC is to provide state leadership for the advancement of Latino Behavioral Health Services. The LBHRC is dedicated to improving the mental health and substance abuse status of Latinos by working in collaboration with national, state and local entities in providing service to the underserved, identifying current best practices, translating clinical forms in Spanish and promoting counselor certification for bi-lingual staff. Specific goals include:

1. Improve consumer satisfaction.
2. Identify specific treatment needs.
3. Improve service delivery.
4. Secure funding resources to ensure sustainability.

The group's philosophy is that when knowledge about behavioral health services is shared, barriers to care are removed and other professionals form partnerships.

Colorado Commission for the Deaf and Hard of Hearing

DBH also funded a needs assessment for persons who are deaf or hard of hearing and meeting their behavioral health needs. This study, now completed, served as a catalyst for the Commission on the Deaf to receive funding to pursue a Center of Excellence.

The DUI Web Based Monitoring (WBM) System

DBH converted the DUI reporting system from discharge-based information to a real-time client tracking system that records events from client admission through discharge. The new system enables judicial and probation officers to track current progress of DUI clients in education and treatment services as DUI clinicians enter real-time data regarding clients into the system. The Division of Motor Vehicles also accesses the system to verify the status and completion of DUI clients in education and treatment on those offenders who have Level I and Level II requirements as a condition of their driver's license reinstatement.

Specifically, the system enables clinicians and probation officers to: share changes in client attitude, attendance, compliance with court-ordered adjuncts etc.; request intervention if the client is in danger of an unsuccessful discharge; view and print a client's

entire treatment history from one screen; maintain an entire class roster on one screen to lessen their paperwork; and the new system generates several new reports that no longer need to be manually maintained. Easy and rapid access to these data promotes better coordination between these interdepartmental entities, allows for swift identification and redirection of non-compliant clients, and improves the safety of Colorado's highways. This system is in full compliance with federal and state confidentiality laws, including 42 CFR and HIPAA.

In operation since August 2006, the web based DUI reporting system is part of the Treatment Management System (TMS). All judicial districts and tribal nations in the state were trained and received access to TMS. All DUI treatment programs are submitting necessary information into this DUI tracking system and are doing their own data entry directly into the web based database. Training continues to be offered on a monthly basis at DBH and on location when requested. In addition to training offered at DBH and on-site, DBH now offers TMS training via Webinar.

In FY08, the web-based monitoring system has entered a new phase by having the computer systems at the State Court Administrators Office (ICON) communicate directly with DBH's system (TMS). The TMS system was changed to allow probation officers the ability to retrieve court cases from the ICON system and enter their data from alcohol evaluations into ADDSCODS (Alcohol Drug Driving Safety Program Coordinated Data System) directly into the TMS system. By having the ADDSCODS entered directly into TMS, timeliness and accuracy of the data is increased as well as an enhanced ability to track clients because now the tracking will begin at the time of their evaluation by the court rather than at time of admission to treatment. The system will also allow for web-based referrals. Having the initial evaluation and referral available for our DUI providers will save them the time of having to duplicate that information upon admission. It will also save the provider time, create more accurate and consistent client data and tighten our ability to track clients over their course of treatment.

DBH's Data Infrastructure

DBH continues to improve and expand the Treatment Management System (TMS) regularly incorporating feedback from current users on ways to enhance the system. The goal is to expand TMS to provide a similar client tracking system for non-DUI offenders that is currently in place only for DUI offenders.

Other major enhancements to TMS finished in FY08 were implementing changes to our DACODS system to incorporate the final National Outcome Measures (NOMS). These changes give us better information to track consumers active in self-help groups before and during treatment. Tracking abuses of prescription drugs, nicotine and buprenorphine usage, and better disseminating prior detox episodes will provide better demographic and outcome information. DBH is currently compliant with the NOMS required by SAMHSA. DBH also has plans for a more sophisticated treatment directory that will help customers locate the services they need more easily.

STRENGTHENING THE OPERATION: PLANS FOR THE FUTURE

Building a Division of Behavioral Health and Integrated Service Delivery System

It was mentioned earlier that ADAD and the Division of Mental Health (DMH) were consolidated into the Division of Behavioral Health (DBH) within the Office of Behavioral Health and Housing. It is expected that this consolidation will improve access to and quality of services for the increasing numbers of individuals having both SA and MH disorders that present to various public health care systems. These persons, known as persons with Co-Occurring Disorder (COD) for their co-occurring mental and substance use disorders, represent a challenge, since this population is associated with poorer outcomes and higher costs in multiple domains. COD clients often require a continuum of services that neither the SA or MH system alone can provide. Historically, some SA agencies were reluctant to admit people w/ serious mental health issues and some MH treatment centers had requirements like the need to be substance free for a year before admission. As a result, persons with COD frequently bounced back and forth between systems, and often did not get the treatment they need. One of the Healthy People 2010 objectives is to increase the proportion of persons w/ COD who receive treatment for both conditions. It is believed that the consolidation of ADAD and DMH will improve services to these individuals, and increase the likelihood of getting both conditions treated.

RECOMMENDED LEGISLATION IN THE FIELD OF SUBSTANCE ABUSE

The Governor's legislative agenda has not yet been finalized at the time of publication of this report. Therefore, DBH does not have specific recommendations regarding new legislation. However, DBH has received inquiries from legislative legal services regarding the cost of incorporating Screening and Brief Intervention (SBI) codes into the Medicaid program.

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