Colorado Department of Human Services
Division of Behavioral Health

The Costs and Effectiveness of Substance Use Disorder Programs in the State of Colorado (27-80-110)

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

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INTRODUCTION

The Colorado Department of Human Services, Division of Behavioral Health (the unit in the Department of Human Services that administers public, community behavioral health programs and services) submits the report entitled, "The Costs and Effectiveness of Substance Use Disorder Programs in the State of Colorado" to the General Assembly House and Senate Committees on Health and Human Services in compliance with:

A) Colorado Revised Statute 27-80-110 as amended by House Bill 00-1297

"27-80-110. Reports. The unit shall submit a report not later than November 1 of each year to the health and human services committees of the senate and house of representatives, or any successor committees, 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."

B) Colorado Revised Statute 16-13-701 (4) as amended by Senate Bill 03-133

"16-13-701. Reporting of forfeited property. (4) The unit in the department of human services that administers behavioral health programs and services, including those related to mental health and substance abuse, 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 unit in the department of human services that administers behavioral health programs and services, shall provide this information in its annual report pursuant to section 27-80-110, C.R.S."

STATEMENT OF PROBLEM

National and Colorado Data

The federal Substance Abuse and Mental Health Services Administration (SAMHSA)[1] has declared four key points regarding behavioral health (defined as substance use and mental health disorder prevention and treatment): 1) behavioral health is essential to overall health; 2) prevention works; 3) treatment is effective; and 4) people recover. SAMHSA's key role is to reduce the impact of substance abuse and mental illness on America's communities. According to SAMHSA:

- By 2020, behavioral health disorders will surpass all physical diseases worldwide as a major cause of disability.
- Nearly 5,000 deaths are attributed to underage drinking each year.
- Each year, tobacco use results in more deaths (443,000) than AIDS, unintentional injuries, suicide, homicide, and alcohol and drug abuse combined.
- Among persons aged 12 years or older who used pain relievers non-medically in the past 12 months, 55.9 percent got the pain relievers they most recently used from a friend or relative for free.
- The total economic costs of substance use and mental health disorders among youth are approximately $247 billion.

According to the 2009 National Survey on Drug Use and Health (NSDUH), 52% of Americans aged 12 years or older were current drinkers. Of these self identified drinkers, 59.6 million (24%) were binge drinkers (defined as five or more drinks on one occasion) and 17.1 million (7%) were heavy drinkers as defined as binge drinking on five or more days in a month. In addition, an estimated 21.8 million Americans (8.7% of the total U.S. population aged 12 years or older) were classified as current illicit drug users. There were 7.0 million current users of prescription-type psychotherapeutic drugs taken non-medically.[2]

According to "State Estimates of Substance Use" from the 2007-2008 National Surveys on Drug Use and Health, there are an estimated 470,000 Coloradoans aged 12 years and above that used illicit drugs in the past month.[3] This same survey ranks Colorado and the District of Columbia in the highest quintile for both needing but not receiving treatment for an alcohol problem and needing but not receiving treatment for an illicit drug problem among persons aged 12 years or older.

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 twelve states with the lowest proportion of those aged 12 to 17 years old that perceived having five or more drinks once or twice a week as having great risk.[3]

Youth and Substance Use Disorder Data

After a decade of consistent declines in teen drug abuse, the 2009 Partnership Attitude Tracking Study[4] reported marked upswings in use of drugs that teens are likely to encounter at parties and in other social situations. The 2009 National Survey on Drug Use and Health[2] also found that the national rates of current illicit drug (excluding tobacco and alcohol) use among 12 to 17 year olds increased from 2008 (9.3%) to 2010 (10.0%). Monitoring the Future's 2009 study[5] found that, nationally, 72% of today's teens have consumed (more than just a few sips) alcohol by the end of high school, and 37% have done so by 8th grade. 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 growing area of concern for today's youth is the off-label use of prescription (Rx) and over-the-counter (OTC) drugs. The 21st annual National Study of Teen Drug Abuse by the Partnership for a Drug-Free America reported[4] that teen abuse of prescription and over-the-counter medicines remains a serious concern. Major findings included:

- Approximately, 1 in 5 teens had tried prescription medication to get high.
- 8% of teens reported using cough medicine to get high.
- 56% of teens reported that prescription drugs are easier to obtain than illegal drugs.

Looking more closely at Colorado's youth, a 2007 Colorado survey[6] of 734 public high-school students found that:

- 42% had ever used marijuana, and 12% had done so before the age of 13 years old.
- 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.

In the State of Colorado, the total number of discharges under the age of 18 years for treatment, DUI, and detoxification in FY10 was 2,495.[7] Of all discharged clients under the age of 18 years, 1,810 individual clients were discharged from treatment services, 197 individual clients were discharged from DUI programs and 112 individual clients were discharged from detoxification services. Of the 1,810 youth discharged from treatment, 38% were diagnosed as drug-dependent and 52% were diagnosed with a mental health issue in addition to their substance abuse.[6]

Treatment and Service Gaps

According to the 2007-2008 NSDUH[3], Colorado ranks fourth (third in the 2006-2007 report) among states nationwide in the proportion of persons aged 12 years and older needing but not getting treatment for alcohol use in the past year and fourth (third in the 2006-2007 report) among all states in the proportion of persons 12 years and older needing but not getting treatment for illicit drug use in the past year.

The Division of Behavioral Health completed a comprehensive analysis of the statewide behavioral health service delivery system. The 2009 Colorado "Population in Need"[8] study examines the substance abuse (and mental health) prevalence, service utilization, and unmet need for Coloradoans 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).

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:

- Adolescents, especially those who are female, Latina, and pregnant
- Females who are pregnant
- Women who have dependent children
- Older adults who abuse prescription medications
- Adolescents and adults who are homeless.
- Adolescents and adults who live southeastern Colorado: studies indicate this is a high area of need.

Pregnant Women in Substance Use Disorder Treatment in Colorado

The full extent of the effects of prenatal drug exposure on a child is not known, however studies show that various illicit drug use result in premature birth, miscarriage, low birth weight and a variety of behavioral and cognitive problems.[9] The average cost to the Colorado taxpayer of one baby with a low birth weight was $6,362 in the year 2000.[10]

Overall national prevalence data regarding substance use by pregnant women indicates that 11.6% used alcohol during their pregnancies, 17.3% used tobacco[11], 6% used prescription drugs non-medically[12], and 4.3% used illicit or illegal drugs.

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

- 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
- 3,044 were exposed to an illicit substance e.g. heroin, cocaine etc.

Colorado's substance use disorder treatment providers delivered services to a total of 394 pregnant women in fiscal year 2009.[7] This constitutes less than 5% of the approximate number of pregnant women estimated to be using alcohol, prescription drugs or illicit drugs.

SOCIETAL COSTS OF SUBSTANCE USE

The National Center on Addiction and Substance Abuse (CASA) at Columbia University has identified the total amount spent by federal, state, and local governments on substance abuse and addiction. The CASA report finds that in 2005 federal, state and local government spending as a result of substance abuse and addiction was at least $467.7 billion: $238.2 billion, federal; $135.8 billion, state; and $93.8 billion, local.[13] Nationwide, $27 per U.S. resident is spent on publicly funded substance use treatment compared to $7.50 spent per resident in Colorado.[14]

For every dollar federal and state governments spent on substance abuse and addiction in 2005, 95.6 cents went to responding to the societal impact of substance use and only 1.9 cents on prevention and treatment, 0.4 cents on research, 1.4 cents on taxation or regulation and 0.7 cents on interdiction.[15] Substance use drives multiple indirect societal costs, including expenses related to criminal behavior, enforcement of drug laws, incarceration, unemployment and lost productivity, property loss from vehicular crashes, domestic violence, child welfare, illness and premature death, and health care.[15]

Coloradoans are affected by the societal costs of substance use in many ways. The magnitude of public funds spent on the direct and indirect consequences of substance use and abuse is staggering and dozens of Colorado public agencies play a part in controlling substance use or dealing with its consequences.[16] 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.[17]

- In 2009, there were 837 calls to the Rocky Mountain Poison Control Center related to alcohol, 371 related to stimulants and amphetamines, and 63 related to cocaine.[18]
- Seventy-six percent of injecting drug users are infected with Hepatitis C, a chronic and sometimes fatal disease of the liver.[19]
- In 2009, 778 Colorado residents died of drug related causes and 673 died of alcohol related causes.[20]

In addition, in 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.[21] It is estimated that one emergency room visit costs $1038 minimum[22] and people with untreated alcoholism seek emergency room attention 60% more often than the rest of the population.[17] They are also nearly twice as likely to be hospitalized overnight, and stay in the hospital three days longer. Furthermore, there were 6,578 hospitalized inpatients with a diagnosis of "alcohol/drug use and alcohol/drug-induced organic mental problems," totaling to 42,473 patient days. The hospital charges for these patients added up to $140,684,487; a cost per case of $21,387.[23]

Criminal justice-related costs associated with substance use are equally compelling. According to the Colorado Bureau of Investigation (2009), there were 27,649 adult DUI arrests and 410 juvenile DUI arrests.[24] The alcohol-impaired fatalities in Colorado totaled 173 in 2008. This represents 32% of total fatalities in the state.[25] Based on 2009 daily prison costs of $88.60[26] for adult offenders ($202.82 for youth offenders[27]), the total cost per day for incarcerating adult offenders with substance use disorders can be estimated at $2,170,374. When compared to offenders without substance use disorders, offenders with substance use disorders demonstrated higher levels of treatment need in the areas of education, employment, and mental health, as well as this population was significantly more likely to have a clinical diagnosis of serious mental illness and/or developmental disability.

Another substance use related cost involves family violence. Among men with alcohol use disorders, 50-60% have been violent toward a female partner in the year before treatment and alcohol use is involved in 30% of child abuse cases.[28]

Furthermore, 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 is approximately $1.4 million[29]. Based on the 2008 number of live births in Colorado[30] (70,028) and a FAS prevalence rate of 0.5 to 2.0 per 1000 births[31], Colorado would realize between 35 and 140 FAS births per year at an estimated lifetime cost of $49 million to $196 million.

CLIENT DEMOGRAPHICS:

AN OVERVIEW OF TREATMENT, DETOXIFICATION AND DRIVING UNDER THE INFLUENCE (DUI) CLIENTS

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

While certain sections of this report are based on the number of Drug/Alcohol Coordinated Data System (DACODS)[7] discharges for FY10 (n=103,394), the following demographic data are based on the number of unduplicated clients in each service category.

Treatment Clients

Of 24,415 discharges from substance abuse treatment in FY10, 20,799 were unique clients. Over half (58%) were treated in MSO-contracted outpatient services and 42% had been referred for treatment by the criminal justice system (not related to DUI). See Figure 1. The highest proportion of clients were in treatment for alcohol, followed by marijuana and had 0-1 prior treatment episodes. Clients had, on average, been using their primary drug for approximately 15 years and 64% reported starting use of their primary drug before the age of 18 years. Clients tended to be daily users of tobacco, 32% worked full-time and 72% achieved a high school education or higher. Thirty-five percent had dependent children for a total of 14,288 children dependent on clients in treatment.

Figure 1: Treatment Clients By Transfer/Referral Source, FY10

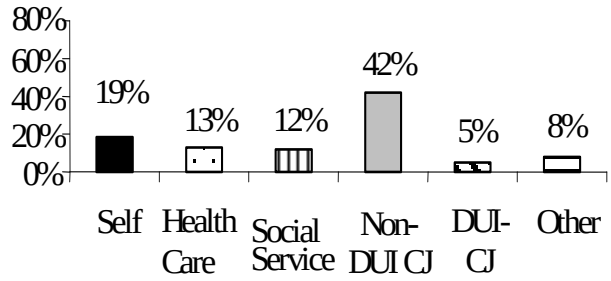
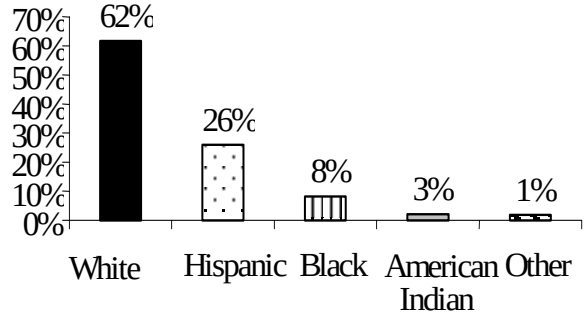


Figure 2: Treatment Clients By Race/Ethnicity, FY10



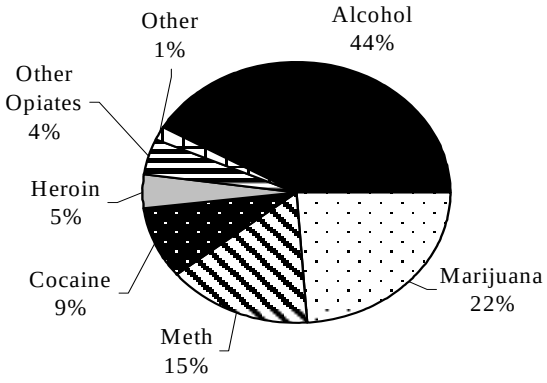
Client Age

Treatment clients were more likely to be single adults between the ages of 18 and 45 years old with a median age of 31years.

Client Race/Ethnicity
The largest proportions of clients discharged from treatment in FY10 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 26%, and American Indians comprised 3% of the clientele. See Figure 2.

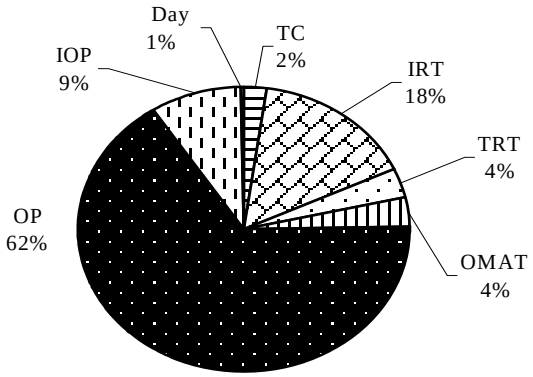
Primary Drug Type
Alcohol abuse is Colorado's number one problem, followed by marijuana and methamphetamine. See Figure 3.

Figure 3: Treatment Clients By Primary Drug, FY10



Modality
Outpatient services comprised the most highly utilized modality for treatment clients, with 62% in traditional and 9% in intensive outpatient modalities. Twenty-four 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. Of the FY10 discharges, 57% of treatment clients had at least one prior treatment episode and 3% had more than five.

Figure 4: Percent of Discharged Clients by Treatment Modality, FY10



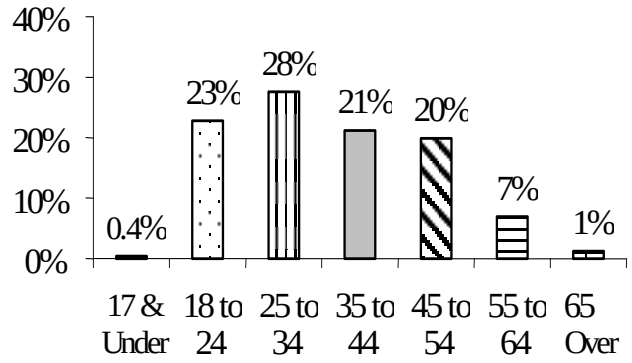
OP=Traditional Outpatient; IOP=Intensive Outpatient; TC=Therapeutic Community; IRT=Intensive Residential; TRT=Transitional Residential; OMAT=Opioid Medication Assisted Treatment

Co-occurring Disorder
Of the 24,415 discharges from substance abuse treatment in FY10, 12,747 (52%) had a co-occurring mental health and substance abuse disorder at admission.

Detoxification Clients:
There were 52,237 discharges from detoxification services (excluding treatment and DUI services), 30,045 of which were unique clients. Detox clients were typically served (98%) 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. The proportion of males discharged from detox comprised 75%. Clients were slightly older than treatment clients with a median age of 34 years. Eighty one percent achieved a 12th grade education or higher and 37% worked full-time. Nearly all (91%) were in detox for alcohol abuse, which they typically started using before the age of 18 (52%). Detox clients had been using their primary substance for an average of 18.6 years and more than half (53%) used tobacco daily. Unlike treatment clients, they generally (71%) had no prior treatment episodes, 29% had one or more prior encounters and 8% had 3 or more. Twenty-five percent had dependent children for a total of 15,381children dependent on clients in detox.

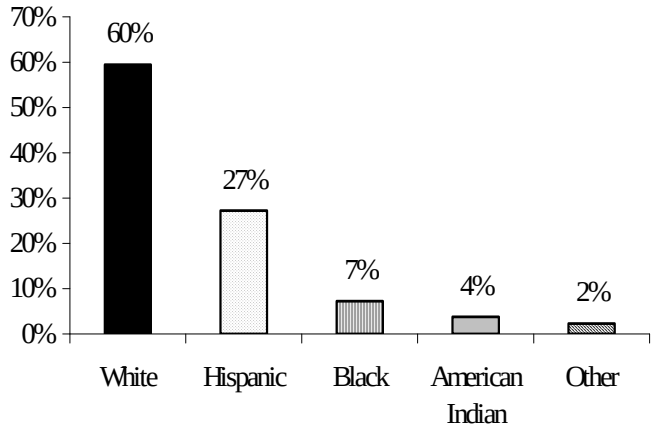
Client Age
While 23% of clients in detox were within the 18-24 year old age category, less than 1% were under the age of 18 years. The low numbers of minors in detox may be due to the limited capacity of detox centers to comply with agency requirements that would permit them to accept younger clients. 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 5.

Figure 5: Detox Clients By Admission Age Category, FY10



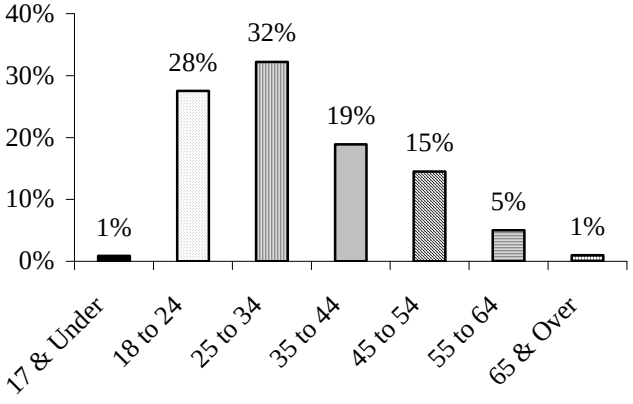
Client Race/Ethnicity
The largest proportions of clients discharged from detox in FY10 were White. Compared with the 2000 census figures for Colorado, Hispanics and American Indians were over-represented. Hispanics represented 17% and American Indians comprised 1% of Colorado's general population. In detox, Hispanics made up 27%, and American Indians comprised 4% of the clientele. See Figure 6.

Figure 6: Detox Clients By Race/Ethnicity FY10



<u>Driving Under the Influence (DUI) Clients:</u>
There were 26,742 discharges from DUI services (excluding other treatment and detox services), of which 23,239 were unique clients, who also tended to be single, White male adults with no dependent children. The proportion of males discharged from DUI was 75%. Their median age was 30 years old and this group was more likely to have a 12th grade education or higher (84%) and work full-time (62%). 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 years (59%) and had been using for an average of 16 years. Forty-seven percent used tobacco daily and 63% had no prior treatment episodes. Of the FY10 discharges, 37% of DUI clients had one or more prior encounters and 1% of DUI clients had more than four. Thirty-one percent of DUI clients were responsible for children for a total of 13,527 children dependent upon DUI clients.

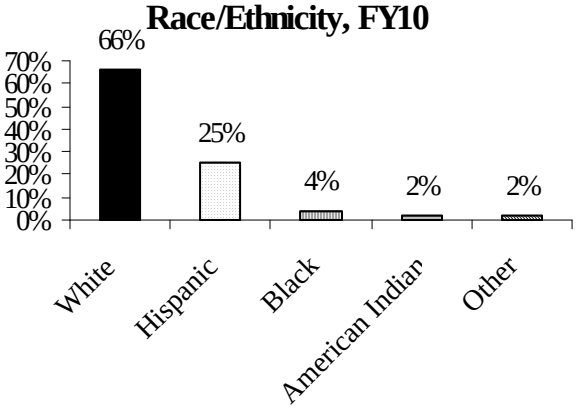
Figure 7: DUI Clients By Admission Age Category, FY10



Client Age
Thirty-two percent of DUI clients were within the 25 to 34 years old age group and 28% were within the 18 to 24 year age group. See Figure 7.

Client Race/Ethnicity
The largest proportions of clients discharged from DUI in FY10 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 25%. See Figure 8.

Figure 8: DUI Clients By Race/Ethnicity, FY10



SUBSTANCE USE DISORDER PREVENTION AND TREATMENT RESOURCES FY 09-10
As a part of the legislative directive related to cost and effectiveness of alcohol and drug abuse programs, below you will find the resources dedicated to substance use disorder prevention, intervention, treatment and recovery services in Colorado contracted by the Division of Behavioral Health.

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

DBH Revenue and Expenses for FY 09-10

Figure 9: FY 2009-10 Revenue by Source
$56,908,698 Total Revenue

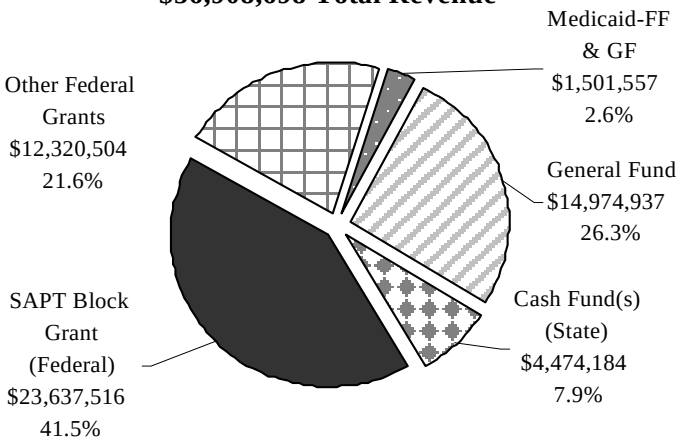
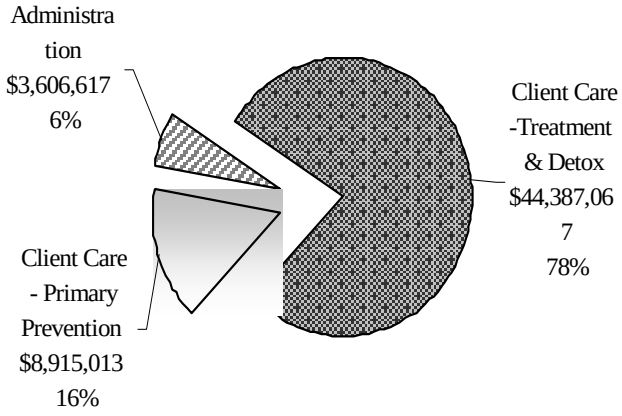


Figure 10: FY 2009-10 Expenditures by Program
$56,908,698 Total



The next three charts demonstrate:
1) DBH's funding history for substance abuse treatment, from fiscal years 2006 through 2010;
2) the proportion of different funding sources; and
3) history of DBH's General Fund dollars.

Figure 11: DBH Substance Abuse Treatment & Detox Funding by Source FY 2006- FY 2010

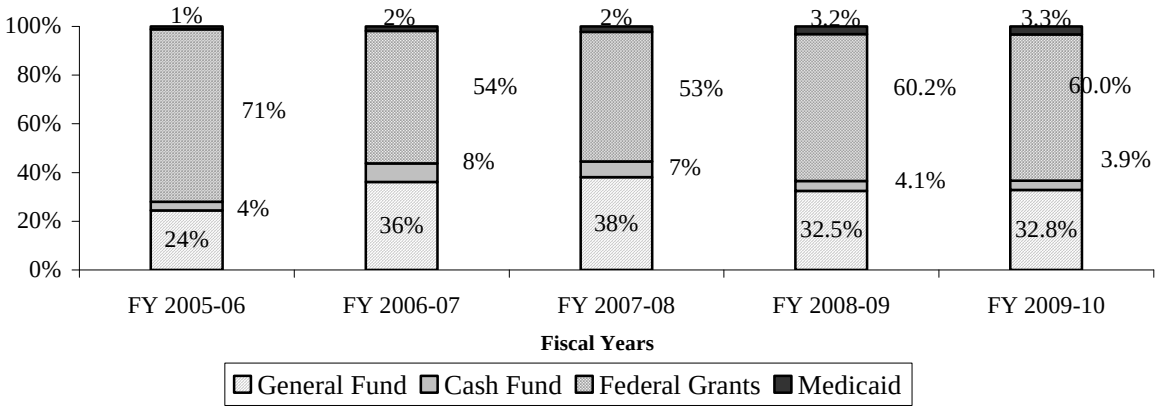


Figure 12: DBH Substance Abuse Treatment & Detox Funding History FY 2006 - FY 2010

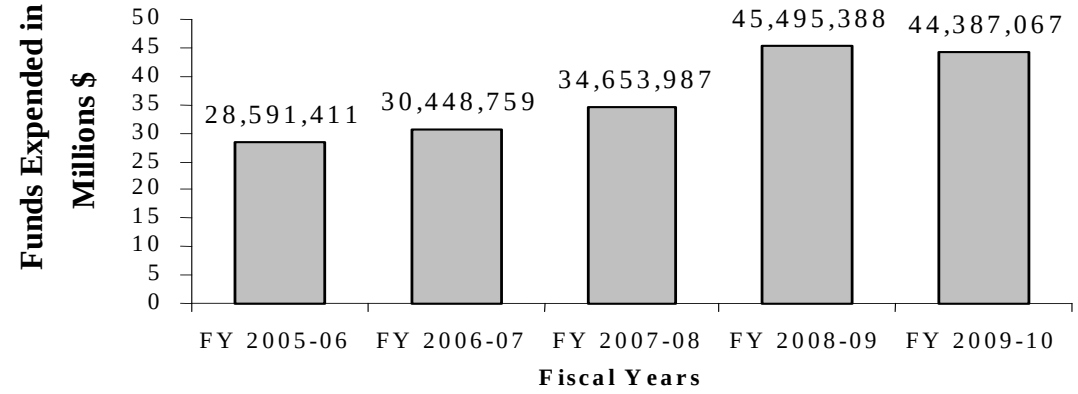
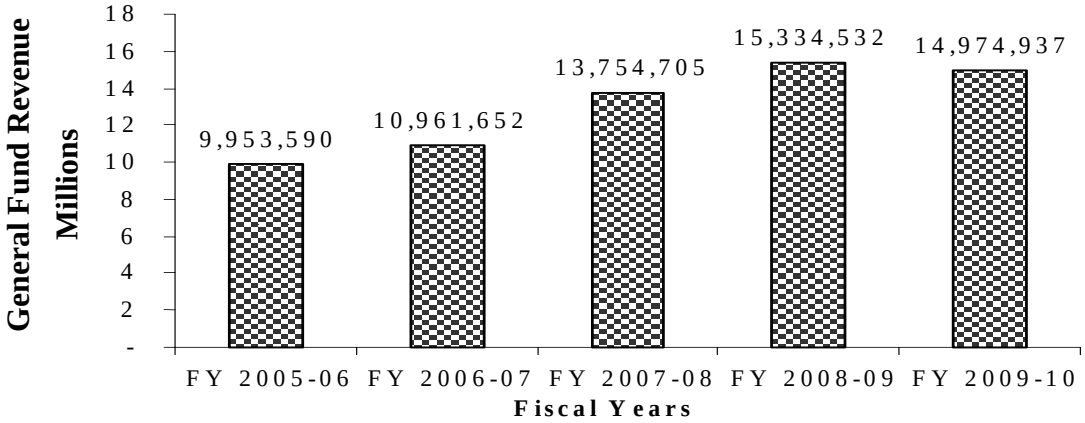


Figure 13: DBH Substance Use General Fund History FY 2006 - FY 2010



SUBSTANCE USE DISORDER PREVENTION AND TREATMENT SERVICE COSTS

As a part of the legislative directive related to cost and effectiveness of alcohol and drug abuse programs, below you will find the service cost related to substance use disorder prevention, intervention, treatment and recovery services in Colorado contracted by the Division of Behavioral Health.

The Division pays approximately 54 % of service costs rendered by the designated Managed Service Organizations and their subcontractors.

Table 2: Average Cost Per Client By Year for Treatment Services funded by DBH

Year	DBH's* Average Cost/Client	Total** Average Cost/Client
2010	936	1732
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.

THE BENEFITS AND OUTCOMES OF SUBSTANCE USE DISORDER PREVENTION AND TREATMENT SERVICES

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. Prevention 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.[15]

According to the National Institute on Drug Abuse, the return on investing in substance use disorder treatment alone may exceed 12:1; that is, every dollar spent on treatment can reduce future burden costs by $12 or more in reduced drug-related crime and criminal justice and health care costs.[13] The Economic Benefits of Drug Treatment: A Critical Review of the Evidence for Policy Makers (2005)[32] cites nearly two decades of research finding that:

- Substance use disorder 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.
- Residential prison treatment is cost-effective only in conjunction with post-release aftercare services.

In addition, national studies have examined the impact of substance use disorder treatment relative to tax dollar savings, hospital readmission rates, and prevention activities. Specific findings follow.

- In California, every $1 spent on school-based drug prevention programs results in a cost savings of $5.50[33] and $7 is saved for every $1 spent on substance use disorder treatment programs.[34]

- California invested approximately $200 million in substance use disorder treatment programs and realized savings at approximately $1.5 billion. Additionally, treatment reduced hospital admissions by 1/3 and improved many primary health areas.[34]
- 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.[35]

COLORADO: SUBSTANCE USE DISORDER PREVENTION AND TREATMENT BENEFITS AND OUTCOMES

As a part of the legislative directive related to cost and effectiveness of alcohol and drug abuse programs, below you will find the benefits and outcomes related to substance use disorder prevention, intervention, treatment and recovery services in Colorado contracted by the Division of Behavioral Health.

Substance Use Prevention Services for FY 09-10

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 People Served: 798,327
- Total People Served by Gender: Female 410,871 *(51%)*; Male 387,456 *(49%)*
- Total People Served by DIRECT Services: 25,449 *(3%)*
- Total People Served by INDIRECT Services: 772,878 *(97%)*
- Total DIRECT Services: 13,398
- Total INDIRECT Services: 1,244

Substance Use Prevention Outcomes FY 09-10

Perceived Risk of Harm

- There was a statistically significant increase in participants' overall perceived risk of harm, when results are averaged across alcohol, marijuana, and cigarettes.
- Participants also showed a statistically significant increase in perceived risk of harm for use of alcohol and a marginally statistically significant increase in perceived risk of harm for use of marijuana.

Attitudes toward Alcohol, Tobacco, and Other Drugs (ATOD) use

- There was a marginally statistically significant increase in participants' attitudes toward the unacceptability of ATOD use, averaging across alcohol, cigarettes, and marijuana. This indicates that after receiving services, participants, on average, felt that use of ATOD was less acceptable.

Figure 14: FY09-10 Participants' Reported 30-Day ATOD Use

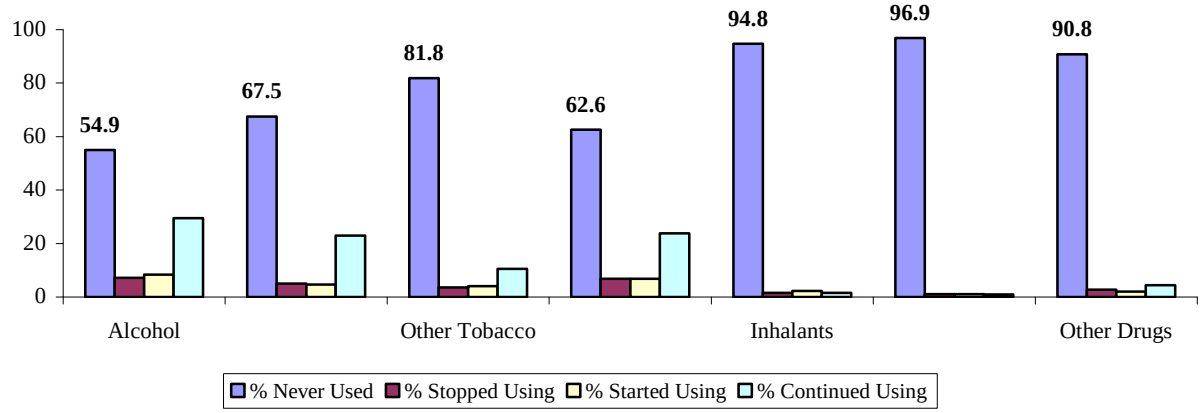


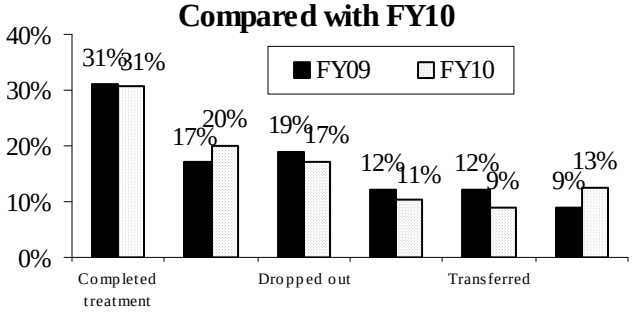
Table 3: FY 09-10 All Prevention Program Participants' 30 Day Substance Use Trajectory from Pre- to Post-Test

30 - Day Use (n = 501)	% Never Used	% Stopped Using	% Started Using	% Continued Using
Alcohol	54.9	7.2	8.4	29.5
Cigarettes	67.5	5.0	4.6	22.9
Other Tobacco	81.8	3.6	4.1	10.5
Marijuana	62.6	6.8	6.8	23.8
Inhalants	94.8	1.5	2.3	1.5
Methamphetamines	96.9	1.1	1.1	0.9
Other Drugs	90.8	2.8	2.0	4.4

Treatment Outcomes FY 09-10

Based on DACODS, client discharges from treatment modalities (e.g., residential, intensive outpatient, outpatient treatment modalities) were used to calculate change from admission to discharge. Detoxification (detox) was an excluded treatment modality because its primary goal is to provide a safe, short-term environment in which the client may detoxify and then be referred to treatment. Driving Under the Influence (DUI) programs were excluded as a treatment modality because DUI focuses primarily on reducing the practice of driving while intoxicated, rather than reducing substance use behavior exclusively. Based on these exclusions, the total number of discharges, not individuals, used to calculate outcome data was 24,415.[7]

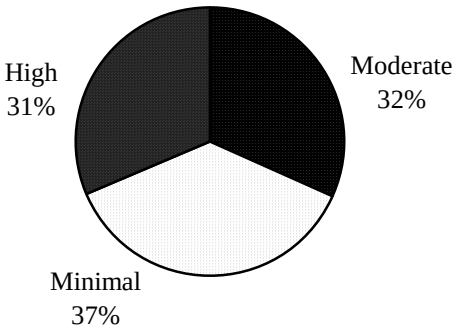
Figure 15: Treatment Clients By Reason for Discharge, FY09 Compared with FY10



Reason for Discharge

Thirty one percent of discharges completed their treatment with no further treatment recommended; 20% completed treatment at that agency with additional treatment recommended; 17% left against professional advice; 11% were terminated by the agency and 9% did not complete their treatment at the agency. Four percent of clients were incarcerated. See Figure 15.

Figure 16: Progress Toward Treatment Goals FY10



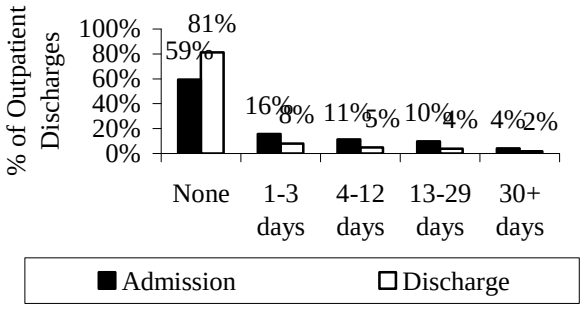
Progress towards Treatment Goals

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 FY10, 63% of all treatment clients had made moderate to high progress toward their goals. See Figure 16.

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 FY10, there was a decline from 49% to 20% (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 FY09.

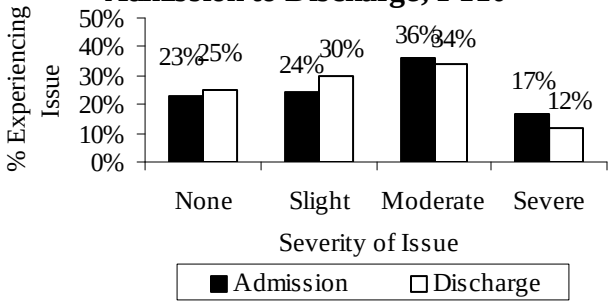
Since outpatient treatment clients have more opportunity to engage in substance use than residential treatment clients, the analysis of drug use frequency was restricted to outpatient treatment clients (n=14,5369). Figure 17 shows that in FY10, the proportion of outpatient clients who reported any use of their primary substance decreased from 41% at admission to 19% at discharge.

Figure 17: Frequency of Primary Drug Use, FY10, for Outpatient Treatment



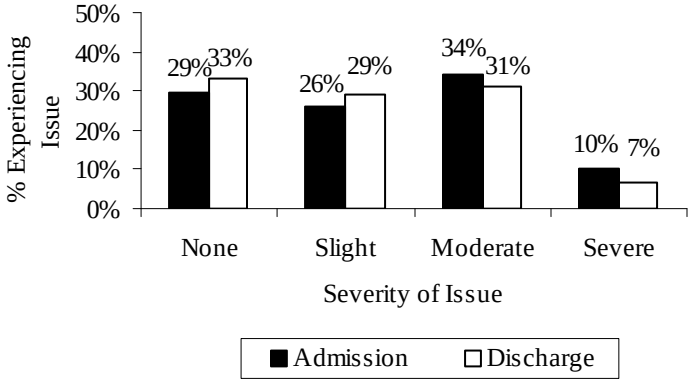
Family Issues/Problems
Counselors assess the severity of several of the client's issues or problems at both admission and discharge, using terms defined in the DACODS User Manual. The percentage of clients with no family issues slightly improved, those with slight family issues at admission increased at discharge, and those with moderate and severe family issues decreased at discharge. See Figure 18.

Figure 18: Family Issues/Problems from Admission to Discharge, FY10



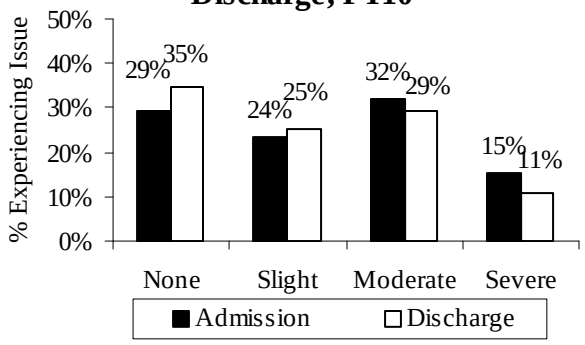
Socialization Issues
Socialization is defined as the ability and social skills to form relationships with others. The percentage of clients reporting no or slight socialization issues or problems at admission increased at discharge, and those with moderate to severe problems at admission decreased at discharge. See Figure 19.

Figure 19: Socialization Issues/Problems from Admission to Discharge, FY10



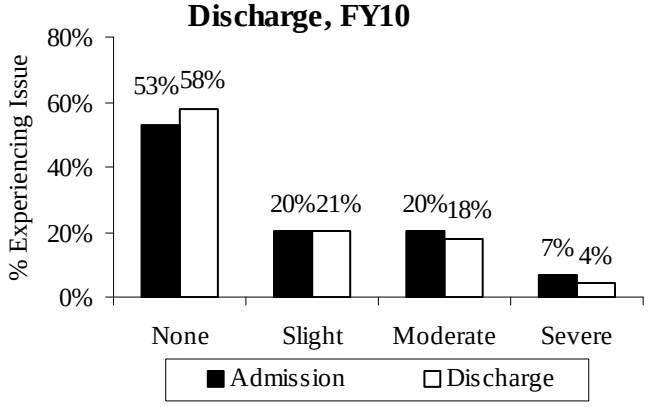
Education/Employment Issues
The proportion of clients without education or employment problems at discharge increased, as did those with slight problems. The number with moderate or severe problems decreased at discharge. See Figure 20.

Figure 20: Work/School Issues/Problems from Admission to Discharge, FY10



Medical/Physical Issues
The proportion of clients without medical/physical problems at discharge increased from admission to discharge. The proportion of clients with moderate or severe problems slightly decreased at discharge. See Figure 21.

Figure 21: Medical/Physical Issues/Problems from Admission to Discharge, FY10



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 22 and Figure 23.

Figure 22: Living Situation from Admission to Discharge, FY10

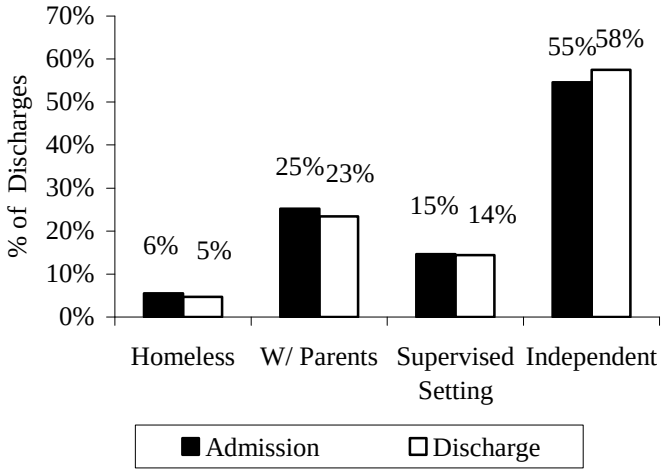
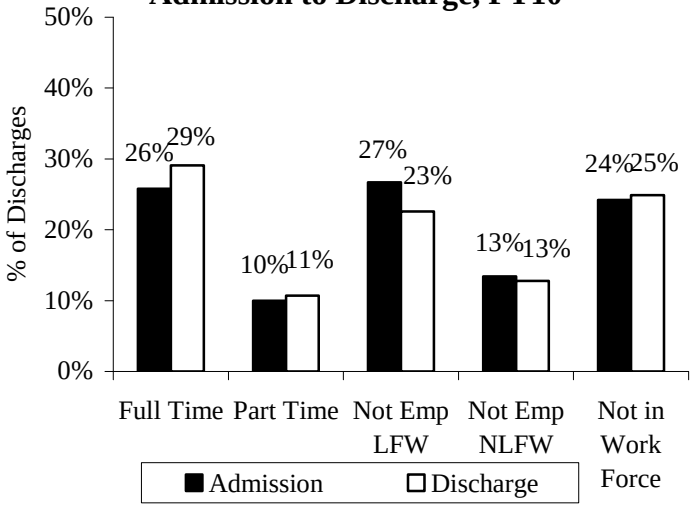


Figure 23: Employment Status from Admission to Discharge, FY10



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

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. See Table 4.

Table 4: Proportions of Clients at Admission and Discharge with Arrests, Emergency Room (ER) Visits or Hospital Admissions, FY10

Outcome Measure		Admission (%)	Discharge[1] (%)
DUI/DWAI Arrests in the last 30 days prior to . . .	None	97.5	99.3
	1-2	2.3	0.7
	3+	0.2	0.0
Other Arrests in the last 30 days prior to . . .	None	93.6	95.8
	1-2	6.1	3.8
	3+	0.3	0.4
Medical ER visits during 6 months prior to . . .	None	73.1	81.4
	1-2	19.4	11.0
	3+	5.1	.08
Medical Hospital Admissions during 6 months prior to. .	None	86.8	88.9
	1-2	9.4	5.4
	3+	1.4	.08
Psychiatric ER visits during 6 months prior to . . .	None	93.6	92.8
	1-2	3.8	2.2
	3+	0.5	0.3
Psychiatric Hospital Admission 6 months prior to . . .	None	93.8	93.0
	1-2	3.9	2.2
	3+	0.2	0.2

TRACKING CIVIL FORFEITURE (Senate Bill 03-133) FOR FY 09-10

As legislated by Senate Bill 03-133 [C.R.S. 16-13-311 (3)(a) (VII) (B) and 16-13-701 (4)], 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 2010 by three Colorado MSOs, as required by Senate Bill 03-133. One of the four MSOs, Boulder County Public Health Department, did not receive any funds from civil forfeiture.

Table 1: Civil Forfeiture for FY09-10

MSO Provider / Description	Signal	West Slope	Connect Care	Total All
Beginning Balance	$ 248,542	$ 19,106	$ 445,957	**$ 713,605**
Distribution	$ (444,807)	$ (9,825)	$ (22,894)	**$ (477,526)**
Forfeiture Funds Received	$ 274,814	$ 872	$ 30,353	**$ 306,039**
Ending Balance	$ 78,549	$ 10,153	$ 453,416	**$ 542,118**

Summary
Signal Behavioral Health Network expended $387,101 of forfeiture funds during the year. Of this, $387,101 was spent on treatment and detoxification services and $57,706 was allocated to administrative costs (13% of total funds distributed). West Slope Casa (Judicial District #21) reported expenditures of

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

$9,825 for client services during the year from forfeiture funds. Connect Care (Judicial District #4) reported $20,812 in expenditures during the year from forfeiture funds. For fiscal year 2009-10, $306,039 in forfeiture revenues were collected and a total of $477,526 were expended on treatment and detoxification services (including administrative charges). The revenue received represents a 51.6% decrease from the previous year.

RECOMMENDED LEGISLATION IN THE FIELD OF ALCOHOL AND DRUG ABUSE

The Division of Behavioral Health is recommending the support of legislation that is being recommended through the Interagency Task Force on Drunk Driving (ITFDD).

Recommendation #1

- Lower the defined Persistent Drunk Driving (PDD) Blood Alcohol Content (BAC) level from 0.17% to 0.15%

In the need to better protect the public's safety and with the conclusive evidence that recidivism occurs more often for persons with a blood alcohol content of 0.15 the Persistent Drunk Driving Blood Alcohol Content level should be defined now at the 0.15%. Interagency Task Force on Drunk Driving (ITFDD) has voted to recommend to the legislature a change to reduce the defined Persistent Drunk Driving (PDD) Blood Alcohol Content (BAC) level to 0.15%.

Recommendation #2

- Support alcohol impaired driving policy that expands language to include "drug impaired" driving. This recommendation is still under development. The Division is supporting the concept being further recommended into legislation.

LEGISLATIVE RECOGNITION

The Division would like to recognize the legislative efforts to build a more transformed behavioral health system with the recent passage of Senate Bill 10-153 and Senate Bill 10-175.

- Senate Bill 10-153, "Behavioral Health Transformation" This bill creates in statute the Behavioral Health Transformation Council, that works collaboratively with Governor's Behavioral Health Cabinet, to continue the efforts initiated through the SAMHSA Transformation Transfer Initiative Grant The council is responsible for working with the Governor and Cabinet to oversee the systemic transformation of the behavioral health system.
- Senate Bill 10-175, "Relocation of behavioral health statutes" This bill relocates current behavioral health (mental health and substance use disorders) references scattered throughout various statutes and combines them into one section.

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