STATE OF COLORADO

Colorado Department of Human Services
people who help people

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

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

Submitted by
The Alcohol and Drug Abuse Division
Colorado Department of Human Services

October 31, 2007

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)

Reducing the social and economic consequences of untreated substance use disorders requires an investment in evidence-based prevention, intervention and treatment.

(Excerpt from the Alcohol and Drug Abuse Division's Strategic Plan)

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1. 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.

- During FY07, clients in substance abuse treatment showed several positive outcomes, including:

  - ✓ An increase from 53% at admission to 80% at admission in the proportion of all treatment clients reporting abstinence from substance use (note that a considerable proportion of clients report abstinence at admission because they were transferred from a jail, prison, or other supervised setting);
  - ✓ An increase from 62% to 81% (admission to discharge) in the proportion of outpatient treatment clients reporting abstinence from any substance use;
  - ✓ Decreases in DUI/DWAI and other arrests;
  - ✓ Decreases in medical and psychiatric emergency room visits, and hospital admissions; and
  - ✓ Improvements in mental health status, family, social, and employment issues, and living situation.

2. INTRODUCTION

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."

3. OVERVIEW OF THE ALCOHOL AND DRUG ABUSE DIVISION

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. Its goals are to:

1. Increase understanding of substance use disorders to guide decision-making to reduce stigma and attract increased resources for prevention, intervention and treatment.
2. Strengthen and expand the prevention, intervention and treatment infrastructure in order to have an efficient and effective evidence-based service delivery system that is sufficient to meet the need.
3. Forge a common direction among stakeholders in order to maximize resources to better serve our shared recipients and communities.
4. Ensure quality prevention, intervention and treatment outcomes by applying evidence-based practices and strategies to continually improve service delivery.
5. Maintain a comprehensive measurement and reporting system that provides valuable information for decision-making and guides effective prevention, intervention and treatment services.
6. In March 2006, ADAD and the Division of Mental Health were consolidated into Behavioral Health Services within the Office of Behavioral Health and Housing. The former ADAD director is the current director of Behavioral Health Services.

Services: Substance Abuse Treatment and Prevention

ADAD is composed of administrative, fiscal, treatment, prevention and data sections that arrange for, monitor, support and report on substance use disorder prevention and treatment services statewide. ADAD's Treatment-Quality Improvement and Prevention Sections support its mission by carrying out the following responsibilities.

Treatment

- Monitors Federal Block Grant-funded contracts with 4 managed service organizations (MSOs) that subcontract with 40 treatment providers with 183 sites in 7 geographical areas of Colorado for alcohol and other drug treatment services with emphasis on the following population of substance abusers:
  1. Persons involuntarily committed by the courts, pursuant to 25-1-1101 CRS;
  2. Pregnant women of any age;
  3. Adult and adolescent injecting drug users;
  4. Adult and adolescent women with dependent children;
  5. Adult and adolescent drug dependent persons who are infected with HIV;
  6. Adult and adolescent drug dependent persons who are infected with TB.

- Writes and enforces substance use disorder treatment rules for 290 treatment providers (including the 40 MSO-funded providers) who operate 653 treatment sites throughout Colorado.

- Licenses agencies to furnish treatment and specialized services of varying intensities and durations through a range of treatment modalities including:
  - Residential non-hospital detoxification
  - Medically managed detoxification (residential and outpatient)
  - Opiate replacement treatment (e.g., Methadone and Buprenorphine maintenance)
  - Therapeutic communities
  - Intensive and transitional residential treatment
  - Intensive and traditional outpatient treatment.

- Investigates complaints and critical incidents involving licensed treatment providers.

- Manages the statewide involuntary commitment process for approximately 195 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.

- Maintains a central registry of clients in opiate replacement treatment programs to lower the risk for multiple enrollments and diversion of controlled substances. In FY07 there were 1,894 (a decrease of nearly 1% from FY06) active clients in this registry.

- Develops and expands 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 ADAD and the Department of Health Care Policy and Financing to provide specialized residential and 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.

- Oversees 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.

- Manages data for the ADDS Program, recording court evaluations and assessments and tracking client completion of substance abuse education and/or treatment required before the client may reclaim their license from the Division of Motor Vehicles.

- Collaborates 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.

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

Prevention

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

- Promotes the implementation of effective, research-based prevention strategies and approaches that are implemented in an age, gender and culturally appropriate service delivery system.

- Establishes and maintains linkages with State, federal, local, private and business/industry to reduce substance abuse in Colorado.

- Sets the standards for quality substance abuse prevention services.

- Identifies research findings and best practices, and proactively shares this information with the community.

- Funds 52 contracts across 46 agencies, reflecting over 100 programs and services targeting youth, adults, families and communities. Funded services include education, training, problem identification and referral, community and school-based strategies, information dissemination and environmental programs.

- Coordinates Statewide Substance Abuse Prevention Services with the Division of Prevention and Intervention in the Colorado Department of Public Health and Environment.

- Sponsors statewide prevention training opportunities
  - Training services for ADAD contractors
  - Substance Abuse Prevention Specialist Training
  - Regional Prevention Summits.

- Maintains a comprehensive evaluation system for its prevention contractors from five state agencies called CO KIT. Colorado is the first state in the nation to have a multi-agency, cross-discipline prevention evaluation system.

Presentations

In addition to the responsibilities listed above, ADAD staff used every opportunity to educate others about substance use disorder treatment, prevention, prevalence and incidence. In fiscal year 2007 (FY07), staff spent numerous hours preparing and giving 96 presentations to approximately 5,000 individuals state- and nationwide.

State Statutory Authority

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

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

Staffing: ADAD pays for 33 FTEs in the Colorado Department of Human Services.

4. 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 2004 and 2005 National Survey on Drug Use and Health (NSDUH), Colorado ranked 1st among the 50 states in illicit drug use other than marijuana in the past month, 3rd in illicit drug dependence in the past year, 4th in non-medical use of pain relievers in the past month and 5th in cocaine use in the past year, in alcohol dependence in the past year, and in needing but not receiving treatment for illicit drug use in the past year.[2]

- The number of DUI citations issued by the Colorado State Patrol increased from 8,200 in 2002, 8,600 in 2003, to 9,509 in 2004.[3]

- In 2003, 57% of DUI-caused crashes resulted in fatalities or injuries. When DUI was not the cause of the crash, only 30% resulted in fatalities or injuries.[3]

- In FY 2007, there were 4,458 emergency room visits related to alcohol in Denver and 1,261 alcohol-related visits by youth under the age of 21.[4]

- In 2006, there were 868 calls to the Rocky Mountain Poison Control Center related to alcohol (a 2% decrease from 2005), 318 related to stimulants and amphetamines, and 129 related to cocaine.[5]

- Seventy-six percent of injecting drug users are infected with Hepatitis C, a chronic and sometimes fatal disease of the liver.[6]

- In 2006, 1,978 Colorado residents died of drug related causes and 1,171 died of alcohol related causes.[7]

- Clients discharged from treatment, DUI and detoxification programs during FY07 had primary responsibility for 43,846 dependent children under the age of 18.[8]

Colorado Youth In Crisis

- In FY07 there were 2,264 clients under age 18 who were discharged from DUI, detoxification and treatment programs.[8] This comprised only 8% of the estimated 30,000 (ages 12 - 17) adolescent substance abusers in Colorado.[9]

- Of these 2,264 clients under the age of 18, 1,801 (80%) received treatment services, 253 (11%) were discharged from DUI programs and 210 (9%) received detoxification services.[8]

- Of the 1,801 youth discharged from treatment,
  - 33% were diagnosed as drug-dependent;
  - 56% were diagnosed with a mental health issue in addition to their substance abuse; and
  - the primary drug used was marijuana, followed by alcohol.

- In FY07, 42% of youth in treatment had been referred by the criminal justice system.

- 60-80% of youth in the juvenile justice system have substance abuse issues.[9]

National and Colorado Reports on Youth and Substance Abuse

Monitoring the Future's[10] 2006 study found that, nationally, 73% of today's teens have consumed (more than just a few sips) alcohol by the end of high school, and 41% have done so by 8th grade. Fifty-six percent of 12th graders and 20% of 8th graders in 2006 reported having been drunk at least once. Moreover, 48% of America's youth 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 of 1,498[11] public high-school students found that:

- 42% had ever used marijuana, and 10% had done so before the age of 13.
- 23% had used marijuana more than once in the past 30 days.
- 8% had ever used cocaine and 3% had done so in the past month.
- 76% had ever drank alcoholic beverages and 47% had done so in the past month.
- 31% reported having 5 or more drinks of alcohol in a row.
- 27% 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 18th annual national study of teen drug abuse by the Partnership for a Drug-Free America[12] reported that today's teens are more likely to abuse Rx and OTC medications than many illegal drugs and think that abusing medicines to get high is "much safer" than using illegal drugs. Major findings included:

- nearly 1 in 5 teens surveyed had tried prescription medication to get high;
- 1 in 10 teens reported using cough medicine to get high;
- 40% of teens surveyed see use of prescription drugs to get high as "much safer" than use of street drugs;
- 29% said that prescription painkillers are not addictive;
- teens cited "ease of access" as the major factor related to an increase in prescription drug abuse;
- 37% reported experimenting with marijuana in 2005, compared to 42% in 1998;
- 20% 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[13] 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 have worked. The 2005 National Survey on Drug Use and Health[14] found that the national rates of current illicit drug use among 12 to 17 year olds declined slightly each year from 11.6% in 2002 to 9.9% in 2005. The 2005 Colorado Youth Survey and 2005 Partnership Attitude Tracking Study[15] also reported decreasing substance abuse among 7th through 12th grade students.

Colorado/US Comparison

In 2006, an estimated 20.4 million Americans (8% of the total U.S. population aged 12 or older) were classified as current illicit drug users[16]. Seven million were current users of prescription-type psychotherapeutic drugs taken non-medically, and of these, 5.2 million used pain relievers, an increase from 4.7 million in 2005. Around 125 million (51%) aged 12 or older were current drinkers. Fifty-seven million (23%) were binge drinkers (defined as five or more drinks on one occasion) and 17 million (7%) were binge drinkers on five or more days in a month.[16] According to SAMHSA's 2005 Treatment Episode Data Set (TEDS), 75% of Colorado treatment clients, versus 40% of treatment clients nationwide, identified alcohol as their primary substance of abuse.[17] In addition, according to averaged findings from the 2004 and 2005 NSDUH[2], Colorado ranked, among all 50 states:

- first in illicit drug use other than marijuana in past month;
- third in illicit drug dependence in past year;
- fourth in non-medical use of pain relievers in past year (down from 2nd in 2004);
- fourth in illicit drug use in past month;
- fifth in cocaine use in past year (down from 2nd in 2004);
- fifth in alcohol dependence in the past year;
- fifth in persons needing but not getting treatment for illicit drug use (down from 4th in 2004);
- seventh in alcohol use in the past month (12 years & older and 12 to 17 years);
- seventh in first-time marijuana use (down from 3rd in 2004);
- eighth in marijuana use in past month (12 to 17 years);
- tenth for marijuana use in past month (12 & older); and
- tenth in marijuana use in past year (12 to 17 years).

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 ten states with the lowest proportions who perceived smoking marijuana once a month as a great risk. Colorado was also among ten 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.[18]

A study conducted by Columbia University's National Center on Addiction and Substance Abuse looked at state spending for treatment, prevention and research in 47 states, and found that Colorado spent the least.[19] Specifically, for every $100 Colorado spent on programs that address the negative consequences of substance abuse, only six cents was spent on treatment, prevention or research, while the average amount spent by other states was $3.70 per $100 of spending.

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.[20] 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.[21] 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.[22] 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.[21]

Coloradoans 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[23] 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.[24] 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.[24] They are also nearly twice as likely to be hospitalized overnight, and stay in the hospital three days longer. In Colorado in 2004, there were 7,907 hospitalized inpatients with a diagnosis of "alcohol/drug use and alcohol/drug-induced organic mental problems," totaling to 35,027 patient days. The hospital charges for these patients added up to $84,656,902, a cost per case of $10,706.58.[23]

Potential costs for incarcerating substance abusers in Colorado have also been estimated. In FY06, there were 21,438 adult offenders and 213 youth offenders incarcerated in Colorado's Department of Corrections[25] and 78% of the prison population was identified as substance abusers.[26] Based on daily prison costs of $75.58 for adult and $207.68 youth offenders[25], the total cost per day for incarceration of substance abusers can be estimated at $1,293,902. 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.[27] 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 1980 would cost around $596,000[28]. Based on the 2006 number of live births in Colorado[29] (70,737) and a prevalence rate of 0.5 to 2.0 per 1000 births[30], Colorado could have between 35 and 142 FAS births per year, an expenditure of $21 million to $85 million.

5. CLIENT DEMOGRAPHICS: A COMPARISON BETWEEN TREATMENT, DUI AND DETOXIFICATION CLIENTS, AND LIMITED PREVENTION DATA (Note: Numbers and percentages are rounded to the nearest whole number.)

Overview

While certain sections of this report are based on the number of Drug/Alcohol Coordinated Data System (DACODS)[8] discharges for FY07 (total n=91,162), the following demographic data are based on the number of clients (total n=67,955). ADAD only recently began phasing in a requirement for DUI providers to submit DACODS data on their clientele. This process is not yet complete, so the number of DACODS for DUI clients is less than the number of DUI discharges. Detailed tables and graphs of client demographics are located in Appendix A of this document.

Demographic Summary

Treatment Clients: Of 22,265 discharges from substance abuse treatment in FY07, 17,637 were unique clients. Most were treated in MSO-contracted outpatient services and forty-seven percent had been referred for treatment by the criminal justice system (not related to DUI). These clients were more likely to be single, white male adults between the ages of 18 and 44 with a median age of 30. The highest proportions were in treatment for alcohol, followed by marijuana and had 1-2 prior treatment episodes. They had, on average, been using their primary drug for 12 years and sixty-two percent reported starting use of their primary drug before the age of 18. They tended to be daily users of tobacco, and had no dependent children. Nearly 40% worked full-time and 68% achieved a H.S. education or higher.

Detoxification Clients: There were 47,748 discharges from detoxification services, 30,734 of which were unique clients. Detox clients were typically served 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 36. Seventy-seven percent achieved a 12th grade education or higher and 43% worked full-time. Nearly all (92%) were in detox for alcohol abuse, which they typically started using before the age of 18. Detox clients had been using their primary substance for an average of 16.5 years and also tended to use tobacco daily. Unlike treatment clients, they generally had no prior treatment episodes.

DUI Clients: There were 21,149 discharges from DUI and 19,584 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 (82%) and work full-time (70%). Ninety-four percent received their DUIs for being under the influence of alcohol. These clients started using their primary substance before the age of 18 and had been using for an average of 14 years. Fifty percent used tobacco daily and 61% had no prior treatment episodes.

Demographics

<u>Residents versus Non-residents</u>
The overwhelming majority of clients in all service types were Colorado residents. Less than 5% of DUI clients, less than 2% of treatment clients and only 0.1% of detox clients were from out of state.

MSO versus Non-MSO

In 1997, Colorado changed its substance abuse treatment methodology to a managed care system. Managed Service Organizations (MSOs) provide additional oversight and quality assurance of services for clients receiving care in their subcontracted agencies. During FY07, 97% of clients discharged from detox and 64% of discharged treatment clients were MSO-related. Conversely, only 20% of DUI clients were treated in clinics overseen by MSOs.

Gender

The proportion of males discharged from treatment was 66% and males comprised nearly 78% of clients discharged from DUI and detox. See Appendix A, Graph 1.

Pregnancy

Five percent (n=325) of females in treatment, 2% of females in DUI (n=88) and 0.3% in detox (n=22) were pregnant in FY07. The 2000 census identified 2,135,278 females in Colorado and 63,917 births, indicating that at least 3% of the females in Colorado were pregnant during 2000.[31] Nationally, SAMHSA's Treatment Episode Data Set (TEDS)[17] from 2005 indicated that 3.9% of 556,105 females in treatment were pregnant. Substance abusing pregnant women are a priority population for ADAD and over-representation in treatment reflects ADAD's aggressive outreach efforts. See Appendix A, Graph 2. Note: proportions for this specific item are based on all females and not just those of childbearing age.

Client Age

Clients in treatment and DUI tend to be slightly younger (average ages of 32 and 33 respectively) than the state and national average of 34 years. Twenty-nine percent of DUI clients were within the 18 - 24 year age group, compared to 22% in treatment. However, there were more clients under age 18 in treatment (10%) than in DUI (1%) and this may reflect the legal minimum driving age of 16. SAMHSA's TEDS data for 2005 indicated 7.9% of treatment clients nationally were under age 18.

Of the three groups, detox clients were the oldest (median age = 36). While 21% of clients in detox were within the 18 -24 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 facility requirements that would permit them to accept younger clients. Moreover, police often transport intoxicated youth to their homes, so these episodes are not captured in the data.

Client Race/Ethnicity

The largest proportions of clients discharged from treatment, DUI and detox in FY07 were White. Compared with the 2000 census figures for Colorado, Hispanics and American Indians were over-represented in all three of these service types. Hispanics represented 17% and American Indians comprised 1% of Colorado's general population. In treatment, DUI and detox, Hispanics made up 23%, 25% and 28% and American Indians comprised 3%, 2% and 4% of the clientele, respectively. The race/ethnicity breakdown in 2005 national TEDS data was: 64% White, 23% Black, 15% Hispanic and 2% American Indian. Comparatively, Colorado has fewer Blacks and more Hispanics. See Appendix A, Graph 3.

Marital Status

Less than 25% of the clients in treatment, DUI and detox services were married, and more than half in each service type were single. Even fewer were separated, divorced or widowed. According to the Colorado 2000 census, 27% of the general population never married, 56% married, 2% separated, 5% widowed and 11% divorced. Compared to the census, it appears that single and widowed clients are over-represented in ADAD's data. See Appendix A, Graph 4.

Dependent Children

Thirty-nine percent of treatment, 33% of DUI and 27% of detox clients were responsible for children. The total number of children dependent upon clients in treatment, DUI and detox services was 13,802, 12,370 and 17,674 respectively. See Appendix A, Graph 5.

Highest School Grade Completed
For all three service types, the majority of clients had a high school degree or less. Twenty-five percent of the treatment clients attained some college, compared to 33% in detox and 39% in DUI. According to the Colorado Census 2000, 53% of the general state population had some college and 11% had graduate course work. Thus, clients receiving substance abuse treatment, detox and DUI services in FY07 were less educated than the general population. See Appendix A, Graph 6.

Income
Sixty-one percent of treatment, 56% of detox and 84% of DUI clients indicated that wages were their primary source of income. Forty-eight percent of treatment, 57% of detox and 93% of DUI were self-pay clients. Approximately 42% of treatment and 37% of detox clients indicated they had no income at the time of admission (see Appendix A, Graph 7). The median monthly incomes for treatment, detox and DUI were $460, $600 and $1,358 respectively. When these are annualized, median income of clients is substantially smaller than that of $47,000 for Colorado households in 1999 (Colorado Census 2000).

Number of Persons Living on Client's Income
Forty-one percent each of treatment and DUI clients, and 27% of detox clients indicated that their income supported someone in addition to themselves. See Appendix A, Graph 8.

Veteran Status
Only 6% of treatment, 10% of DUI and 12% of detox clients indicated they were veterans. The Colorado Census 2000 identified 14% of the general population as veterans.[30]

Client Disability
Nine percent of treatment, 6% of detox, and 3% of DUI clients indicated they had one or more disabilities. The largest proportions in all three service types reported disability as "other." However, of the specified disabilities, psychiatric disorders was 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.

Tobacco Use
Compared to state and national population figures, cigarette smokers are greatly over-represented in ADAD's database. Sixty-eight percent of treatment, 60% of detox and 50% of DUI clients used tobacco daily compared to 19% of Colorado adults and 23% nationwide.[32]

Prior Treatment Episodes
TEDS data for 2002 indicated that 56% of clients nationally had one or more previous encounters with the treatment system and 11% had five or more prior treatment episodes. In Colorado 58% of treatment clients had at least one prior encounter and 5% had more than five. Forty-two percent of both detox and DUI clients had one or more prior encounters. However 13% of detox clients and only 2% of DUI clients had more than five.

Transfer/Referral Source
Non-DUI Criminal Justice was the referral source for 47% of clients in treatment and 39% in detox, a pattern similar to TEDS national referral data (see Graph 9, Appendix A). As expected, the majority (78%) of DUI clients were referred from DUI-related criminal justice sources. Self-referrals in Colorado comprised 14% and 15% of detox and treatment respectively and 7% of DUI clients. Nationally, 35% of all clients self-referred into treatment.[17] Health care entities in Colorado, including substance abuse treatment providers, referred more clients to detox that treatment. Employer and educational agencies had minimal referrals and were combined with "Other" in Graph 9.

Admission/Discharge Modality
Outpatient services comprised the most highly utilized modality for treatment clients, with 68% in traditional and 9% in intensive outpatient modalities. Nineteen percent of treatment clients were in some form of residential modality, including Therapeutic Community (TC), intensive, short-term intensive and transitional residential settings. Ninety-nine percent of detox received care in residential (non-hospital)

detox. Nearly 1% received care in ambulatory medical detox settings and 0.1% were treated in a medically managed setting. See Graph 10, Appendix A.

Primary Drug Type

Alcohol abuse is Colorado's number one problem, followed by marijuana and methamphetamine (see Graph 11, Appendix A). In recent years Colorado providers had noted a switch from cocaine to methamphetamine because of price, availability and a longer lasting high.[33] National data for 2005 had more clients identify alcohol (40%) as their primary drug, followed by marijuana (16%), cocaine and heroin (both 14%) and methamphetamine (8.3%).

6. SERVICE UTILIZATION

Prevention Services for FY06

Total Attendees/Participants Served: 78,892 a 1% increase from FY05 (77,293)
Total Attendees Served by SINGLE Services: 73,358 (93%), a 1% small increase from FY05
Total Participants Served by RECURRING Services: 5,534 (7%), a 1% increase over from FY05
Total Attendees/Participants Served by Gender: Female 43,284 (56%); Male 34,009 (44%)

Overall, the number of participants completing prevention services in FY06 (as evidenced by completed post-tests for recurring services) increased 6% from FY05. Additionally, the proportion of both females and males completing prevention services in FY06 increased by 7% from FY05.

Treatment Discharges FY07

The largest number of individuals was seen in detoxification, followed by the Drinking Driver program and then the combined treatment modalities. Research has shown that the longer an individual stays in substance abuse treatment the better their outcome. "Recidivism" in the addiction field is encouraged since any contact with treatment counselors supports a more positive long-term outcome. Thus the number of discharges is expected to be greater than the number of unique individuals.

In FY06, there were 94,189 discharges from treatment, DUI, and detox services, comprising 66,817 unique individuals. In FY07, the number of discharges was 91,162 but the number of unique persons was slightly higher at 67,955. One reason there are less discharges in FY07 than in FY06 is that it takes a few months to receive all data from agencies that submit DACODS and FY06 data have had the opportunity to "fill in." Based on the timing of this report and the requirement to examine such recent data, the dataset used for FY07 has not had a chance to "fill in."

Length of Stay

Length of stay by modality was examined using both the median and average number of days. Opioid Replacement Therapy (ORT) and Therapeutic Community had, as expected, the longest stays with medians of 158 and 108 days respectively. The average days stayed was 195 for TC and 249 for ORT, which is much longer that the 2004 national average[34] for ORT of 154 days. See Table 2 in Appendix B for FY06-FY07 comparisons in length of stay broken down by treatment category.

Outpatient treatment had a median of 93 days and an average of 138 days. Outpatient length of stay is a performance measure for our MSOs who are asked to maintain or improve the proportion of clients who stay in outpatient treatment for more than 90 days. All MSOs combined improved from 47% in FY05 to 49% in FY06, and 50.1% in FY07.

Reason for Discharge

Ninety-four percent of detox clients completed their detoxification at the facility to which they were admitted. Three percent left against professional advice, one percent was terminated by the facility, and the remaining two percent were either transferred, incarcerated, died, or otherwise unspecified.

Across treatment modalities, 30% of FY07 discharges completed their treatment with no further treatment recommended; 22% completed treatment at that facility and were referred for more treatment; 19% left

against professional advice; 10% each were terminated by the facility and transferred to another facility. Nineteen percent of clients left treatment by walking away or being terminated.

7. 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. Graph 1 in Appendix C 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 on only on clients who reported having no previous treatment episodes. Overall, clients in treatment averaged 12 years (median=9 years) from first use of their primary drug until they entered treatment. Detox clients averaged 16 years (with a median of 14 years) from first use to first treatment.

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.[21]
- 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.

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.

8. THE BENEFITS OF SUBSTANCE ABUSE TREATMENT AND PREVENTION

The Economic Benefits of Drug Treatment: A Critical Review of the Evidence for Policy Makers (2005)[21] 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.[35]
- 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.[36]
- 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.[37]
- 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.[36]
- In Washington State, Medicaid medical cost savings averaged $4500 per person for those in alcohol and drug treatment.[38]
- 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.[39]
- Six months in treatment in New York State produced tax savings of $143 million.[40]
- Clients on welfare declined 11% nationwide and homelessness dropped 43% nationwide.[41]
- Inpatient mental health visits decreased 28% nationwide.[41]

Criminal Activity

- Colorado noted a 97% decrease in arrests for all offense categories following treatment.[42]
- Colorado reported 46% of clients who had treatment completely abstained from alcohol or drugs.[42]
- Criminal activity decreased 80% nationwide.[41]

Health

- Ohio noted a 58% decrease in hospital admissions and a 67% decrease in emergency room utilization.[43]
- Treatment reduces hospital admissions by 1/3 and improves many primary health areas.[35]
- In 1992, five treatment types cost California $200 million, but saved approximately $1.5 billion. [35]

Employment

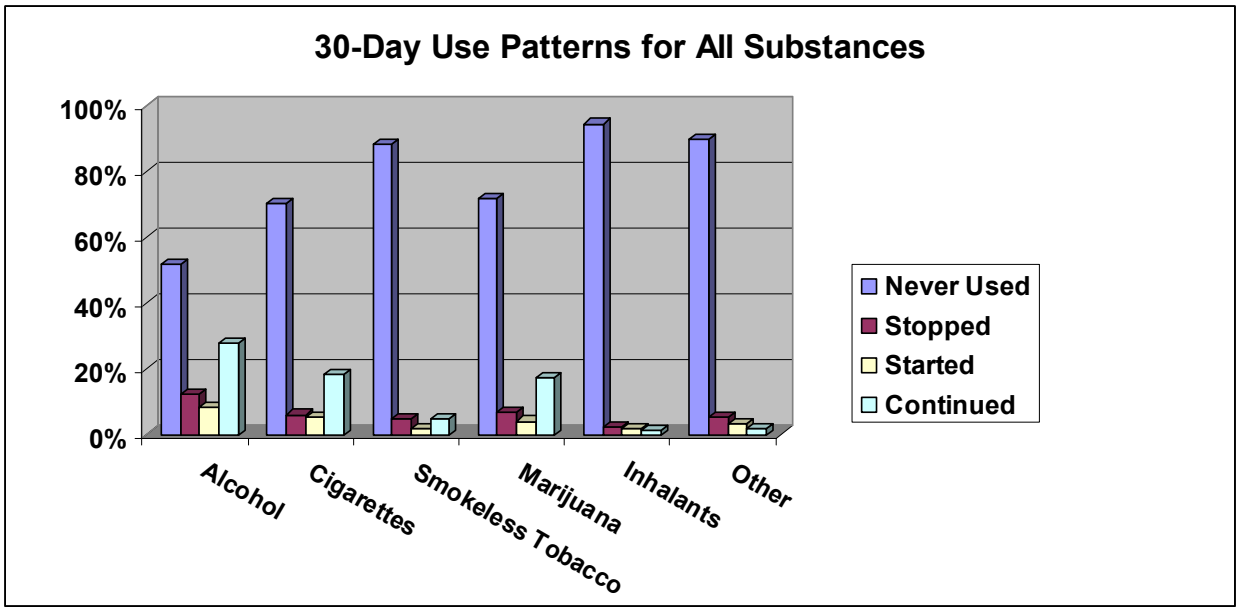
- Colorado noted a 67% increase in employment following treatment.[44]
- Employment increased 19% nationwide following treatment.[41]
- Every dollar spent on Employee Assistance Programs saves businesses between $8 and $20.[45]
- Ohio noted a 97% decrease in on-the-job injuries.[43]

9. PREVENTION AND TREATMENT OUTCOMES

Prevention Outcomes FY07

1. Statistically significant decreases ($p<.05$) were noted in 30 day use of alcohol (both any consumption and getting drunk), 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, inhalants, and other drug use (LSD/hallucinogens, amphetamines, crack, and cocaine).

2. Statistically significant increases ($p<.05$) were noted in:
    - Disapproval of cigarette and other (LSD, cocaine, amphetamines and other illegal drugs) drug use. Furthermore, there was a nearly statistically significant increase ($p<.10$) in disapproval of marijuana use.
    - The perception of risk related to smoking marijuana regularly, trying cocaine once or twice, using cocaine occasionally, using cocaine regularly, having four or five drinks of alcohol nearly every day, and having five or more drinks of alcohol once or twice each weekend. Furthermore, there were nearly statistically significant increases ($p<.10$) in the perception of risk related to trying marijuana once or twice, smoking marijuana occasionally, and using crack regularly.



	Never Used	Stopped	Started	Continued
Alcohol	51.6%	12.3%	8.3%	27.8%
Cigarettes	70.2%	6.1%	5.5%	18.1%
Smokeless Tobacco	88.4%	4.8%	1.8%	5.0%
Marijuana	71.9%	6.8%	4.1%	17.2%
Inhalants	94.4%	2.2%	1.9%	1.5%
Other	89.5%	5.2%	3.2%	2.1%

Treatment Outcomes FY07, 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 only on reducing the practice of driving while intoxicated, rather than reducing substance abuse overall. Based on these exclusions, the total number of discharges used to calculate outcome data was 20,712.

Summary of Treatment Outcomes:

1. Sixty-five percent of clients discharged from substance abuse treatment had moderate to high achievement of treatment goals.
2. At admission 41% of treatment clients were assessed as having a current mental health issue, which declined slightly to 38.5% at time of discharge.
3. Overall the severity of problems or issues with family, socialization, employment or school and medical or physical problems was reduced at discharge.
4. Use of primary drug decreased from admission to discharge.
5. The number of arrests, emergency department visits and hospital admissions all declined from admission to discharge, but there are at least two extraneous factors contributing to this decrease. One is that the reporting periods at admission and discharge vary, and the second is those in residential treatment, as well as those in outpatient treatment who are on probation have much less opportunity to be arrested than they did before treatment.

6. Slight improvements were noted in employment status and living situation at discharge.

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 FY07, 65% of all treatment clients had made moderate to high progress toward their goals (see Graph 1, Appendix D) compared to 61% in FY06.

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 FY07, there was a decline from 47% to 20% (admission to discharge) in the proportion of all treatment clients reporting any substance use in the previous 30 days. These results were identical to those from FY06.

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. Graph 2 in Appendix D shows that in FY07, the proportion of outpatient clients who reported any use of their primary substance decreased from 38% at admission to 19% at discharge.

Mental Health Status
During FY07, 41% of clients in substance abuse treatment (all modalities) were assessed as having a current mental health issues at admission. This proportion declined to 38% at discharge.

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 or slight family issues at admission increased at discharge, and those with moderate and severe family issues decreased at discharge.

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 Graph 4, Appendix D.

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 Graph 5, Appendix D.

Medical/Physical Issues
The proportion of clients without medical/physical problems at discharge increased from admission to discharge, while the proportion of clients with slight, moderate or severe problems decreased at discharge. See Graph 6, Appendix D.

Employment Status and Living Situation
Slight increases occurred from admission to discharge in the proportions of clients working full-time and living independently. See Graph 7, Appendix D.

Arrests, Emergency Room and Hospital Admissions
From admission to discharge from treatment, decreases were noted in DUI/DWAI and Other arrests, medical and psychiatric emergency room visits and medical and psychiatric hospital admissions. See Table 2, Appendix D.

Factors Relating to Achievement of Treatment Goals

Of the 20,712 discharges from treatment, 31% were assessed with high progress toward their treatment goals, 34% with moderate progress and 35% with minimal progress.

Compared to clients with minimal progress, clients assessed with high progress were more likely to have been in treatment for 90 or more days (55% vs. 28%), more likely to be White (70% vs. 62%) and be married (24% vs. 20%). High achievers were less likely than low achievers to have a mental health diagnosis (39% vs. 44%) be black (5% vs. 9%) or Hispanic/Latino (21% vs. 24%), and be less than 35 years of age (56% vs. 62%).

Primary Drug Type
High achievers were more likely than low achievers to report alcohol as their primary drug (47% vs. 37%) and less likely to report heroin as their primary substance (2% vs. 6%). This finding may be skewed by the fact that most heroin users remain in treatment for years or even decades. Those discharged from an agency after only a short span of treatment are usually discharged because of poor performance or compliance.

Primary Drug Route
High achievers were more likely than low achievers to use their drug orally (51% vs. 41%) and less likely to inject their drug of use (6% vs. 10%). The drug type, however, may confound these findings. Alcohol is usually ingested orally. Heroin is frequently injected.

Geographic Area
High-achieving clients were more likely to be from the south central (26% vs. 23%), southeast (15% vs. 11%) or southwest (8% vs. 4%) areas of the state. Clients from the Denver area were less likely to be high achieving (33% vs. 40%).

10. SERVICE COSTS

The Division pays approximately 51.3% of service costs rendered by the Managed Service Organizations and their subcontractors.

Average Cost Per Client By Year for Treatment Services funded by ADAD

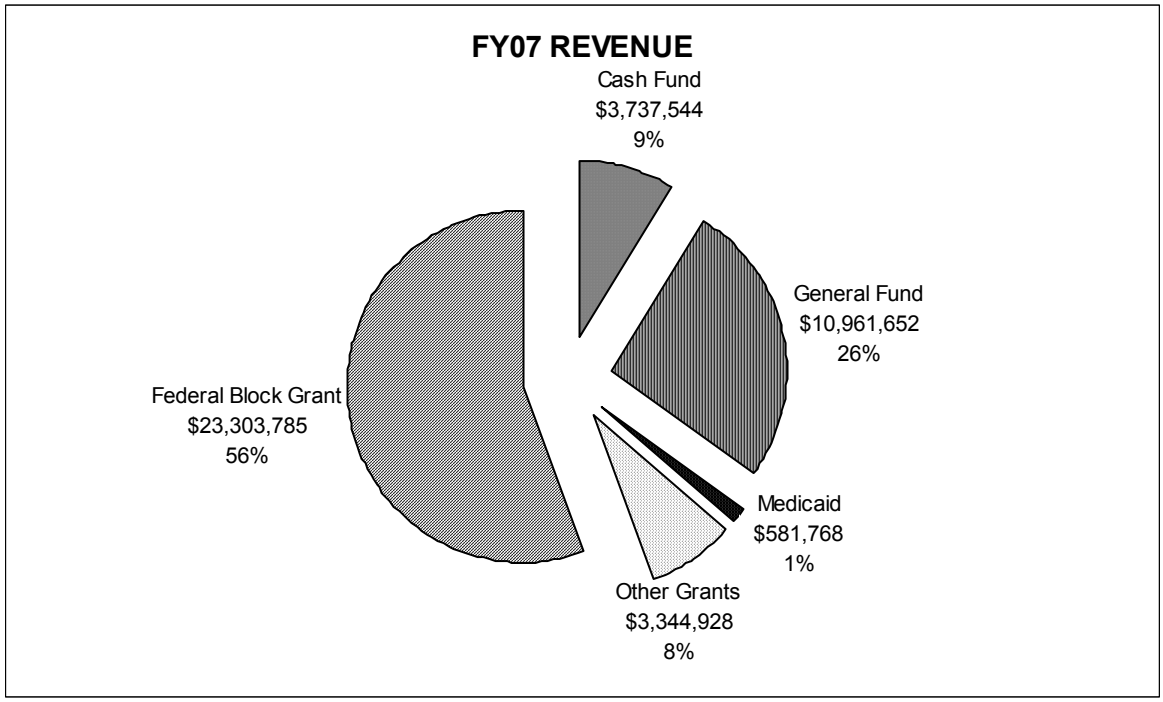
Year	ADAD's* Average Cost/Client	Total** Average Cost/Client
2007	$774	$1,509
2006	$759	$1,497
2005	$721	$1,948
2004	$715	$1,551
2003	$710	$1,544
2002	$687	$1,494
2001	$618	$1,344
2000	$584	$1,270
1999	$561	$1,220
1998	$542	$1,178
1997	$402	$ 874
1996	$390	$ 848
1995	$378	$ 822

Note: Detoxification services and costs are excluded; *Data were generated from ADAD's funding database, using number of clients treated with ADAD monies; **Data reflects all clients funded by ADAD and by self-pay or insurance; Average costs per TANF client, for outpatient substance abuse services only, are $2,100/year.

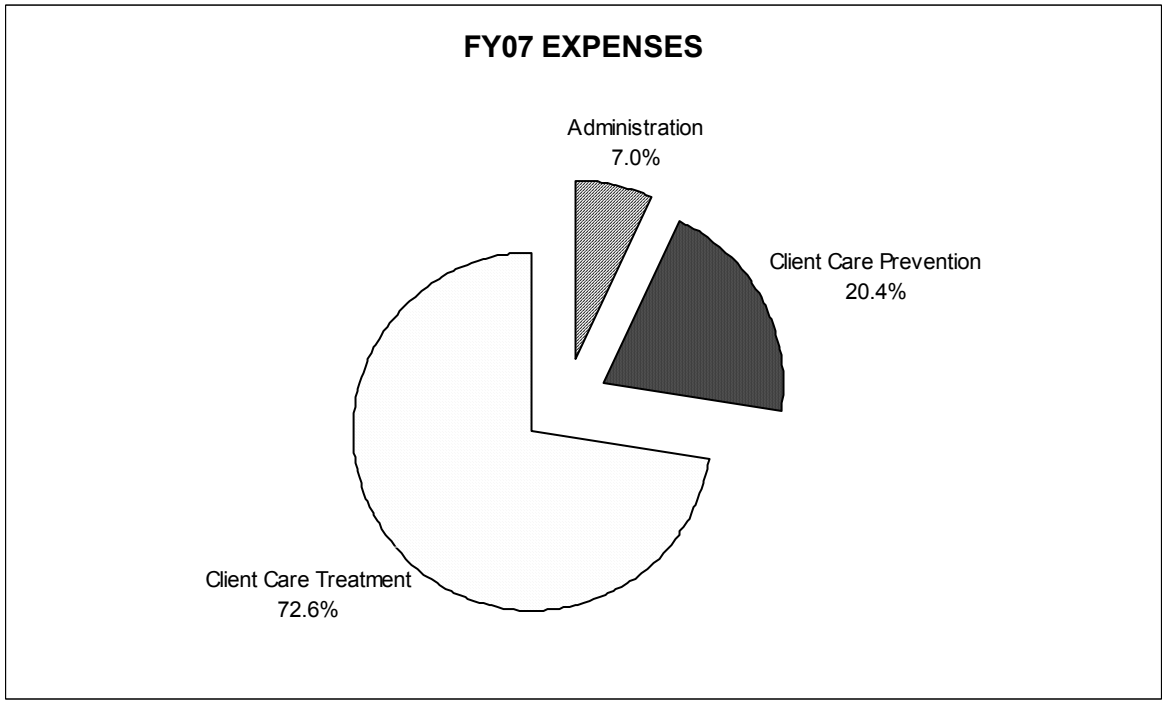
In 2002, publicly funded programs provided 31% of the total treatment episodes in the state of Colorado. Drinking and driving (DUI) programs provided 47%. Licensed, non-funded, non-Drinking-Driver programs provided the remaining 22%[44].

11. RESOURCES FY2007

ADAD Revenue and Expenses for FY07



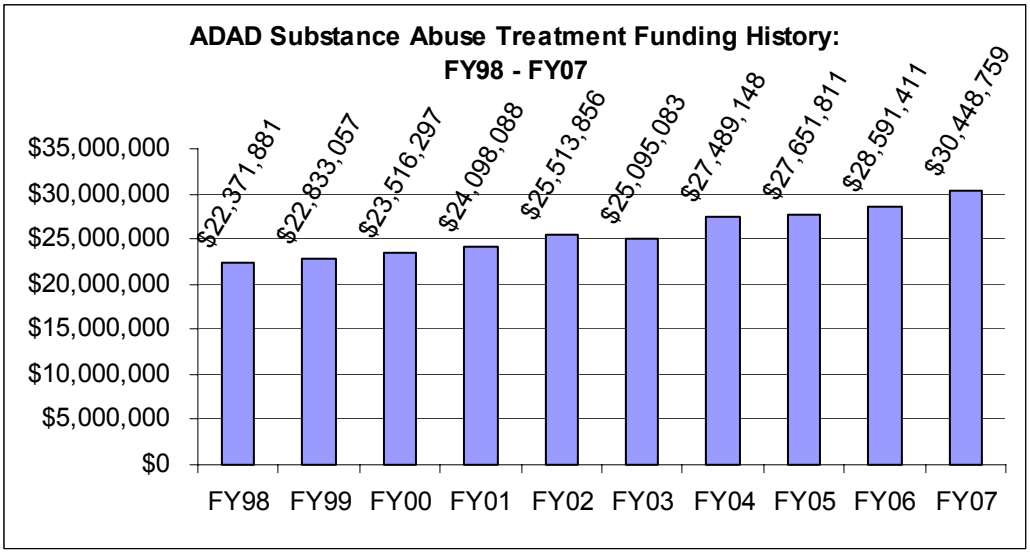
Total Expenses for FY07: $41,929,677

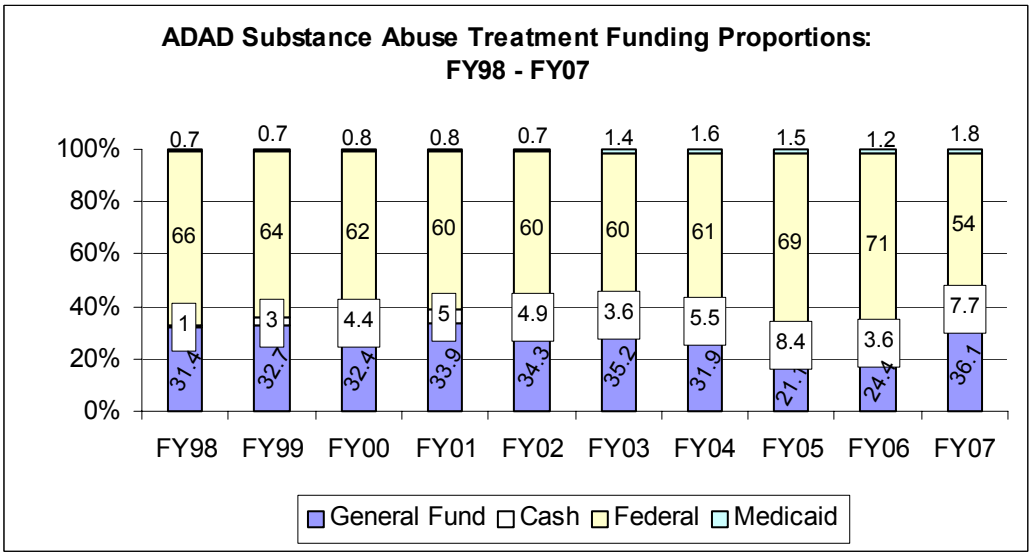


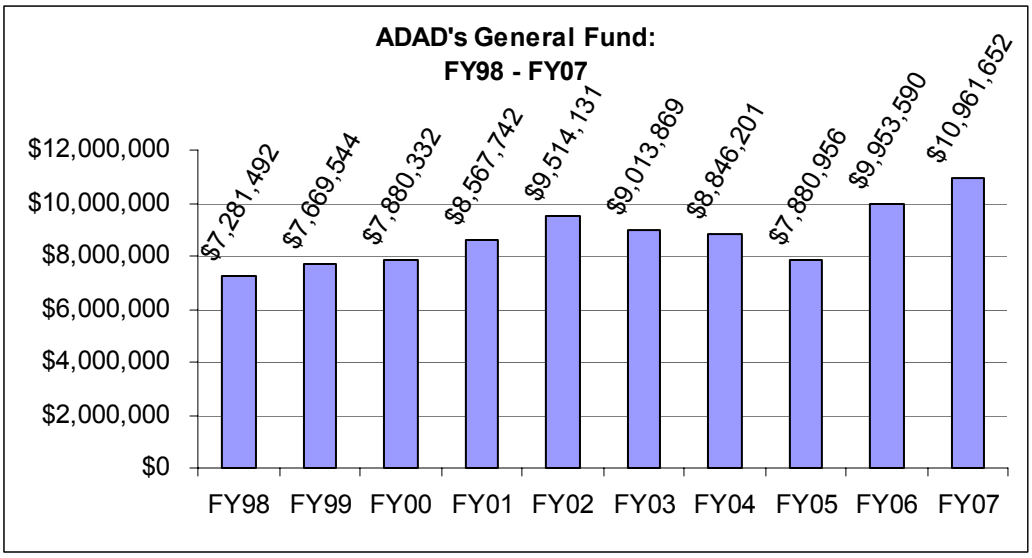
Total Expenses for FY07: $41,929,677

The next three charts demonstrate:

1) ADAD's funding history for substance abuse treatment, from fiscal years 98 through 06;
2) the proportion of different funding sources; and
3) detail of ADAD's General Fund dollars.







Tracking Civil Forfeiture (SB 03-133) for Calendar Year 2006

As legislated by SB03-133, the 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, ADAD and the MSOs. The following table details the reporting of civil forfeiture funds for calendar year 2006 by three Colorado MSOs, as required by SB03-133.

MSO Provider / Description	Signal	West Slope	Connect Care	Total All
Beginning Balance	$ 402,523	$ 9,272	$ 19,780	**$ 431,575**
Distribution	$ (200,512)	$ -	$ -	**$ (200,512)**
Forfeiture Funds Received	$ 291,084	$ 40,938	$ 123,111	**$ 455,133**
Ending Balance	$ 493,095	$ 50,210	$ 142,891	**$ 686,196**

Summary:
Signal expended $200,512 of forfeiture funds during the year. Of this, $174,445 was spent on treatment and detox services and $26,067 was allocated to administrative costs (13% of total funds distributed). West Slope Casa (Judicial District #21) reported no expenditures during the year from forfeiture funds. Connect Care (Judicial District #4) reported no expenditure during the year from forfeiture funds. Boulder County Public Health Department has not received any funds from civil forfeiture. In total, an additional $455,133 in forfeiture revenues were collected in calendar year 2006. This amount represents a 47% increase from the previous year.

12. TREATMENT AND SERVICE GAPS

According to the NSDUH[2], Colorado ranks fourth nationwide in the proportion of persons 26 & older needing but not getting treatment for alcohol use in the past year and fifth in the proportion of persons 12 & older needing but not getting treatment for illicit drug use in the past year.

According to a 2002 analysis of substance abuse prevalence and treatment gaps in Colorado[44]:

- 81% of the Coloradoans abusing or dependent on substances are not in a treatment program;
- only 3% of the abusing or dependent population not yet in treatment are ready to seek treatment; and

- it would cost an additional $10.1 million to close the current treatment gap for those wanting but currently not receiving treatment

In ADAD's Special Connections Annual Report, March 2007,[46] staff noted 68,922 births in Colorado in 2006, and estimated that approximately 3.9% (based on a national estimate from the 2005 National Survey on Drug Use & Health[47]), or 2,687 pregnant women were substance users at that time. ADAD met 12% of this need by treating 326 pregnant women in Special Connections in FY06.

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 abusing adolescents, especially pregnant female adolescent substance abusers with a focus on Hispanics;
- pregnant substance abusing females via outreach in physicians' offices and hospitals throughout the state;
- 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.

Additionally studies have found that the public sector provides only a percentage (31%) of the treatment services needed in Colorado, and expansion of public sector is critical to meet the needs of those individuals who require but currently are not in treatment.

Household surveys of Colorado's population should be administered on a regular basis, at least once per decade to determine areas of high need for both prevention and treatment and to assist in targeting limited resources for optimal effectiveness. Given limited resources, the cost of these surveys is prohibitive and ADAD has depended on gleaning information from federal household surveys, which provide national and state level data.

ADAD management is acutely aware that regular follow-up surveys on clients need to be done to determine the post-discharge impact and continuing effects of treatment. Based on the difficulty of tracking transient populations as well as the stigma associated with this field, follow-up studies have been expensive to administer, and ADAD chose not to divert funds away from direct client treatment services to perform follow-up studies. However, with the recent purchase of a survey instrument package called Survey Monkey, ADAD hopes to develop and administer follow-up studies in the future.

13. 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 2007 Patterns and Trends in Drug Abuse: Denver and Colorado[48] report, most indicators of methamphetamine use, including the number of methamphetamine-related emergency visits, hospital discharges, deaths, arrests and Rocky Mountain Poison Control calls had increased through 2005. Colorado treatment admissions for meth-using clients in Denver and Colorado increased dramatically during that time, and methamphetamine admissions overtook cocaine admissions statewide in 2003 and in the Denver metropolitan area in 2005. During that time, however, laboratory closures showed sharp declines and for the first time in years, calendar year 2006 saw many other methamphetamine indicators lessen. While meth had been the third most frequently reported drug

(behind alcohol and marijuana) in both statewide and Denver metro treatment admissions by 2005, in 2006, it decreased to fourth position in Denver behind cocaine.

Methamphetamine Task Force. House Bill 06-1145, mandating the formation of a Methamphetamine Task Force, was passed in FY06. The Task Force 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 Task Force is responsible for reviewing best practices from across the state and country for implementation and has a specific focus on protecting meth-impacted children. The Task Force 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.

To help the Task Force implement its directive, Colorado Attorney General John Suthers requested help from the El Pomar Foundation, which will provide the Task Force with a grant of $50,000 to cover committee operations and expenses for two years. Including this grant, El Pomar has committed nearly $150,000 to date across the state to address meth abuse. ADAD's director has been appointed by the Speaker of the House to serve as the Vice-Chairperson on this task force.

General Demographics. During calendar year 2006, 18% of Colorado treatment admissions and 14% of Denver treatment admissions were for clients who reported their primary drug as methamphetamine. Compared to users of other illicit drugs, Meth users were more likely to be female, between the ages of 18 and 34, White, separated or divorced and have dependent children. Meth users were unlikely to be younger than 18 or older than 34 years of age, Black or Hispanic, or have educational attainment beyond high school. Meth users were less likely to be working or living independently, or be self-referrals into treatment. More meth users were likely to be referred into the treatment system by social services or non-DUI criminal justice. Meth-using clients were likely to have had prior treatment episodes and be enrolled in more intensive treatment modalities. 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. Methamphetamine users were more likely to have moderate to severe family, socialization and work/school issues or problems at admission.

PREGNANT WOMEN IN SUBSTANCE ABUSE TREATMENT

The following is based on the Special Connections Annual Report for July 1, 2006-June 30, 2007 that will be available December 31, 2007.

Special Connections is a collaboration between ADAD 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.[49] The average cost to the Colorado taxpayer of one low birth weight baby was $6,362 in the year 2000.[50]

Prevalence
In January, 2004, the National Survey on Drug Use and Health issued a report entitled *Pregnancy and Substance Use* (SAMHSA, 2004)[51], in which 3 percent of pregnant women reported use of illicit drugs in the past month, and 3 percent reported binge alcohol use. It is unclear from this report how much overlap there is between the two groups, but even using the 3% figure to estimate the number of pregnant women in Colorado in need of treatment, with 70,969 live births in 2006 (National Vital Statistics Reports, August 28, 2007[52]) there would have been 2,129 substance exposed pregnancies. The 253 women contacted by our Special Connections programs in FY2007 constitute 12% of the women who may be assumed to have benefited from substance abuse treatment during this time period. Assuming that each of the normal birth weight babies born to this very high risk group of women during this year saved taxpayers $6,362, this program saved Colorado taxpayers $642,562 in hospital costs.

CLIENTS WITH MENTAL HEALTH ISSUES IN SUBSTANCE ABUSE TREATMENT

A recent examination of clients with co-occurring mental health and substance abuse issues analyzed 21,814 discharges from treatment occurred during FY2006. Of those discharges, 8,577 (39%) met the criteria for co-occurring illness.

Overall, treatment demographics for FY06 co-occurring clients are similar to those of FY05.
Small variations in demographic patterns were noted between the 8,577 co-occurring clients and 13,237 clients without co-occurring disorders. 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 FY05, FY06 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.

14. SPECIAL PROJECTS

PREVENTION

- **Prevention Leadership Council (PLC**)
  ADAD 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**
  ADAD participated with the PLC to host a summit in September 2006. Many prevention coalitions and ADAD Prevention Contractors participated. Three national experts shared ideas about how community coalitions and community prevention providers can join forces to obtain community level change. 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 will be compared with a similar control community that is not implementing that system of training and technical assistance. 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)**
  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. In FY06:
  - Fifteen Colorado counties were served, based on their juvenile-alcohol and DUI related arrest rates. Each county received $10,000-$15,000 from a total allocation of $210,000.
  - Seven counties delivered evidence-based curriculum directly to high-risk youth.
  - 610 high-risk youth, average age 15.09, from seven counties, received evidence-based curricula. They were 53.2% male, 52% white, and 37% Hispanic/Latino.
  - Pre/post-surveys administered to youth in all seven counties showed that alcohol use in the previous 30-days decreased slightly from 33% to 32%, and binge drinking (having five or more drinks in one sitting) declined from 24.4% to 21.5%.
  - Additional individuals, representing the community as a whole, were served by other strategies, such as social norming campaigns. Chaffee County is one example with their "Now You Know" campaign. Results from a school based survey showed that 30 day alcohol use reported by 9th, 10th and 11th graders decreased from 47% in FY04 to 39% in FY06; 30 day marijuana use decreased from 47% to 39%; 30 day reports of driving while impaired decreased from 16% to 11%; and 30 day reports of having ridden with an impaired driver decreased from 32% to 22%.
  - Several counties piloted a Parent Survey. In one county, 84% (446) of parents surveyed said they were unlikely or very unlikely to allow their teen to attend a party where alcohol might be available or served. 100% (526) of parents surveyed said they have clear rules against alcohol use for their teens.

  PDD funds were also used to:
  - train additional addiction counselors in the use of a model DUI curriculum, bringing the total number of counselors trained to over 1,000;
  - train probation officers who conduct evaluations on DUI/DWAI offenders for the courts;
  - update and distribute brochures on the Ignition Interlock Program Program and education/treatment requirements for driver's license reinstatement;
  - support a media campaign and educational worksite program to interrupt the pattern of repeat offenses in the communities of Steamboat Springs, Greeley and Pueblo, all areas at high risk for repeat DUI offenders. A three year media campaign in the San Luis Valley was concluded in 2006; and

- evaluate the system for handling DUI/DWAI cases in Colorado; the final report, completed in 2004, includes recommendations for improving outcomes in DUI/DWAI cases.

- **Law Enforcement Assistance Funds (LEAF)**
  Legislation created a surcharge on drunk and drugged driving convictions to help pay for enforcement, laboratory charges and prevention. In FY06 Judicial allocated $250,000 of the surcharge dollars to ADAD to establish community-based impaired driving prevention programs for these mandated populations: the general population; teachers of youth; health professionals; and law enforcement. In LaPlata, Chaffee, and Mesa Counties, as well as with the Summit/Lake partnership, prevention programs focused on 13 -16 year old drinkers already at high risk for becoming impaired drivers. Program activities included life skills training, job skill preparation and substance-free recreational activities, resulting in significant improvements in youth behavior. In Summit County, another project involving educators, health care providers and youth ages 5 to 26, targeted social norms and resulted in a dramatic decrease in DUI arrests. In Chaffee County, a program for first-time offenders for minors in possession of alcohol lowered youth self-reports of drinking and driving and being "drunk." Law enforcement, public safety officers and local non-profit agencies enthusiastically collaborated with ADAD on these projects.

  Data from these programs show that participants increase their perception of risk, particularly for five or more drinks in a row (statistically significant for matched pairs at p=.05), but also for all other substances. They also increase perceptions that it is wrong for someone their age to use tobacco products, alcohol and other drugs, and the behaviors of driving after drinking and/or smoking marijuana and riding with someone who has been drinking.

- **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 $8 million for Colorado). ADAD 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 2007 was 8.5%.

- **Capacity Development**
  ADAD 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 was 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 and Agency Core Competencies. This tool, called the Uniform Minimum Standards Assessment Tool Kit, 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 FY08.

- **Prevention Peer Review**
  ADAD 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 was based on research, literature and past experience. CAADSP also conducted annual site visits of treatment programs in accordance with federal block grant requirements.

- **Higher Education Initiatives**
  ADAD 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 FY07 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 was 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 ADAD is the fiscal agency for the Governor's office. The SPF SIG, known in Colorado as "Colorado Prevention Partners or CPP," was 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 then used this data to prioritize these 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. Implementation and evaluation will continue in FY08.

- **Screening, Brief Intervention, Referral and Treatment (SBIRT) Programs**
  In FY06, Colorado received a federal Screening, Brief Intervention, Referral and Treatment (SBIRT) grant from SAMHSA/CSAT. This grant aims to reduce healthcare costs associated with substance abuse by more effectively identifying persons at risk for addiction and substance abuse disorders. Specifically, the grant focuses on screening and intervention in primary healthcare settings, particularly emergency rooms. ADAD and its contractors are working with local hospitals, and other healthcare settings to integrate screening, brief intervention, and referral to treatment procedures into the routine medical evaluation process. We are also collaborating with other agencies and organizations to effect policy changes necessary to sustain SBIRT services statewide after grant funding has ceased.

  In the first year, SBIRT services were successfully implemented in Denver Health Medical Centers. In the coming year, we plan to expand services in the Denver Metro area, while initiating services in other areas including Grand Junction, Montrose, Gunnison and Lamar. Additional efforts are being made to increase the availability of Brief Treatment services (a limited course of highly focused cognitive behavior clinical sessions) in the state and make the ADAD licensed treatment provider database more user friendly and available to healthcare providers.

TREATMENT

- **Parents are the Power Campaign**
  ADAD continues to partner with Channel 9 News, Urban Peak and the Daniels Fund to implement the "Parents Are the Power" campaign. Included in this campaign are public service announcements, an informative website and opportunities for dialogue such as a chat room and 9-Line volunteers to answer phone calls. Both the TV spots and the web site provide information for parents about the dangers of substance abuse, treatment options and other supports available in Colorado to keep teens drug-free.

- **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.

- **Access to Recovery Grant**
  ADAD received a federal grant that focuses on adolescents and young adults, ages 12 -25, as they represent the population with the greatest unmet need in the state. The grant offers the opportunity to change and improve the clinical treatment system and add valuable 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.

- **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 is facing jail/prison time if not compliant with STIRRT.

  The STIRRT program was the first offender-specific treatment program funded by ADAD 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 for 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 will be opening a ten-bed male and a five-bed female two-week intensive residential program. Both of these programs will 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.

- **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 ADAD 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 has oversight and administration of this program. ADAD is available to provide technical assistance regarding substance abuse treatment issues to providers and Health Care Policy and Financing at any time.

- **Evidence-based Practices**
  ADAD is working closely with treatment providers and researchers to incorporate the use of evidence-based practices and curricula into treatment programming. At the request of the State Court Administrator's office, a curriculum has been developed to increase familiarity with treatment concepts and to increase competence of probation officers when dealing with their clients with substance use disorders. This two-day training has taken place several times and has been very well-received. In addition, ADAD has been working with the Mountain West Addiction Technology Transfer Center on several projects including the Network for the Improvement of Addiction Treatment, otherwise known as NIATx. This is a Robert Wood Johnson sponsored program to assist agencies by improving business and clinical processes in order to more effectively engage and retain clients in treatment.

- **ADAD Forums**
  ADAD hosts two statewide informational forums annually to share the latest research, outcome studies and best clinical practices with those interested in substance abuse treatment and prevention in Colorado. In FY06, the two forums addressed methamphetamine and drug abuse in women of color. The first forum, **Methamphetamine: Effects of Abuse and Treatment Strategies** was held July 27, 2006 and had nearly 500 attendees. The primary speakers were Thomas Freese, Ph.D., Director of the Pacific Southwest Addiction Technology Transfer Center and Director of Training for UCLA's Integrated Substance Abuse Programs, and Shelby Rajewich, a young woman in recovery from methamphetamine addiction. This forum addressed methamphetamine myths, current research on the drug's harmful impact and addiction, and effective treatment approach that can and do work.

  The second forum, **The Role of Race/Ethnicity & Gender in Understanding Drug Abuse in Women of Color**, was held February 22, 2007. The primary speaker was Kathy Sanders-Phillips, Ph.D., from the Department of Pediatrics at Howard University. She provided a theoretical framework on the etiology of drug abuse in women of color and a conceptual model for the development of treatment plans and interventions for women with substance use disorders. Over 200 people attended this forum and overall evaluations for both events were "excellent."

- **DUI Demographics**
  ADAD receives DACODS demographic information from DUI providers on each of their DUI clients. During FY07, the percentage of DUI providers submitting client data was over 90%. ADAD continues to identify providers who have missing or incorrect data and provide training and technical assistance to bring them into full compliance. Staff will continue to offer periodic trainings as DACODS or Treatment Management System (TMS) gets updated or providers hire new staff.

  ADAD conducted a series of statewide trainings for our DUI providers. These sessions reviewed in detail how to complete a DACODS data collection instrument and how to submit data electronically using ADAD's (TMS). Overwhelmingly the provider response to these trainings continues to be positive and supportive. ADAD has also added a monthly training in Denver that allows actual hands-on training that allows users to enter live information into our test system.

The additional demographic and outcomes information on all of our DUI clients has enhanced ADAD's view of statewide substance abuse issues, services and gaps as well as provided for a comparison population for those in non-DUI treatment programs.

- **The DUI Web Based Monitoring (WBM) System**
  ADAD converted the DUI reporting system from a 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 progress of DUI clients as DUI clinicians electronically record events. Specifically, the new system enables clinicians and 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 HIPPA.

  The new web based DUI reporting system is part of the Treatment Management System (TMS) and went "live" in August 2007. All judicial districts in the state were trained and received access to TMS. Virtually all DUI treatment programs are submitting necessary information into this DUI tracking system, most of which are doing their own data entry directly into the web based database. Training continues to be offered on a monthly basis at ADAD and on location when requested.

  In FY08, the web-based monitoring system will take the next step by having the computer systems at the State Court Administrators Office (ICON) communicate directly with ADAD's system (TMS). This will enhance our ability to track clients because now the tracking will begin at the time of their evaluation rather than at time of admission. 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.

15. STRENGTHENING THE OPERATION: PLANS FOR THE FUTURE

- **Building a Behavioral Health Organization and Service Delivery System**
  It was mentioned earlier that ADAD and the Division of Mental Health (DMH) were consolidated into Behavioral Health Services 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 Co-Occurring Disorder (COD) clients for their co-occurring psychiatric and substance use disorders, represent a challenging population 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. Some SA facilities are reluctant to admit people w/ serious psychiatric issues and some MH treatment centers have requirements like the need to be substance free for a year before admission. As a result, persons with COD frequently get bounced back and forth between systems, and often do 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.

- **ADAD's Data Infrastructure**
  ADAD continues to improve and expand the Treatment Management System (TMS), the web-based client server system for ADAD's primary data collection instruments: DACODS and the DUI Reporting System (DRS). The Persistent Drunk Driver Project (PDD) is one such expansion. PDD

1, a collaborative effort among ADAD, Judicial and Motor Vehicles, was developed and tested in late FY06 and deployed in early FY07. User training sessions were conducted statewide in August and September 2006. ADAD has started the second phase of that project: PDD 2 – This phase will link the PDD database with Judicial's ICON system for easier, more accurate reporting. Judicial officers will be able to enter their evaluations (ADDSCODS) directly into TMS so that client tracking can begin immediately. The ADDSCODS will then be used as a web-based referral for the clinicians to create their admissions from ADAD and Judicial will also have future projects such as PDD 3, -which will broaden the DUI model to encompass Colorado's Drug Courts.

Other major enhancements to TMS finished in FY07 were implementing a web based pregnancy screening on all female substance abuse patients. This improvement will give us better demographic and outcome information on this priority population in order to better meet their needs. ADAD is currently compliant with the National Outcome Measures (NOMS) required by SAMHSA. ADAD also has plans for a more sophisticated treatment directory that will help customers locate the services they need.

- **Provider and Client Surveys**
  ADAD has purchased a survey instrument package called Survey Monkey. This software can be used to easily create web-based surveys to assess clinician and client satisfaction with the substance abuse treatment and prevention services in Colorado. ADAD plans on using Survey Monkey in the future for on-going follow-up of client progress after discharge from treatment services. Having a follow up survey after discharge will be instrumental in compliance with several federal grants such as the Access to Recovery Grant (ATR) and the National Outcomes Measures (NOMS).

- **DUI Task Force**
  ADAD participates in the Interagency Task Force on Drunk Driving, a group formed in accordance with Senate Bill 06-192 to investigate ways to reduce DUI incidents and make recommendations to the State regarding the enhancement of government services, education, and intervention to prevent drunk and impaired driving.

- **Regional Treatment Meetings**
  2007 was the third year of offering regional treatment meetings, which provide training, updates and technical assistance from ADAD and State Judicial to probation officers and treatment providers specializing in treating substance using offenders and DUI offenders. These meetings also provide networking and collaborative opportunities. Approximately 500 people attended five meetings held around the state this year, in Denver, Loveland, Colorado Springs, Cortez and Grand Junction.

16. RECOMMENDED LEGISLATION IN THE FIELD OF SUBSTANCE ABUSE

None recommended at the time of this report.

17. DIVISION CONTACTS

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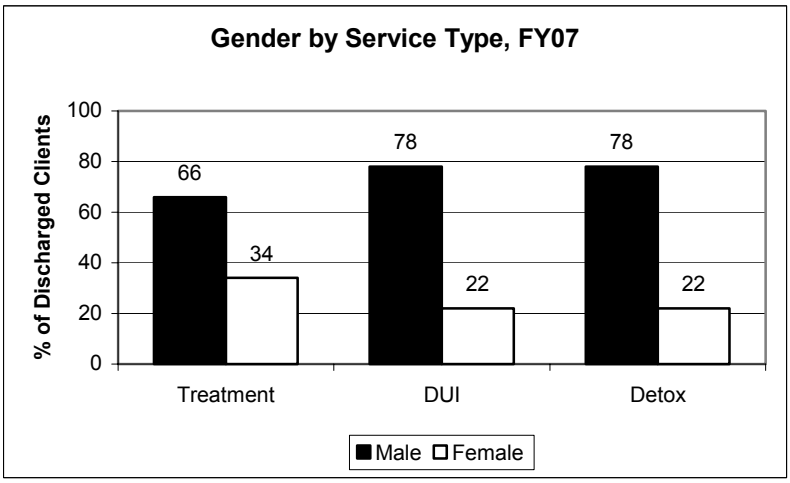
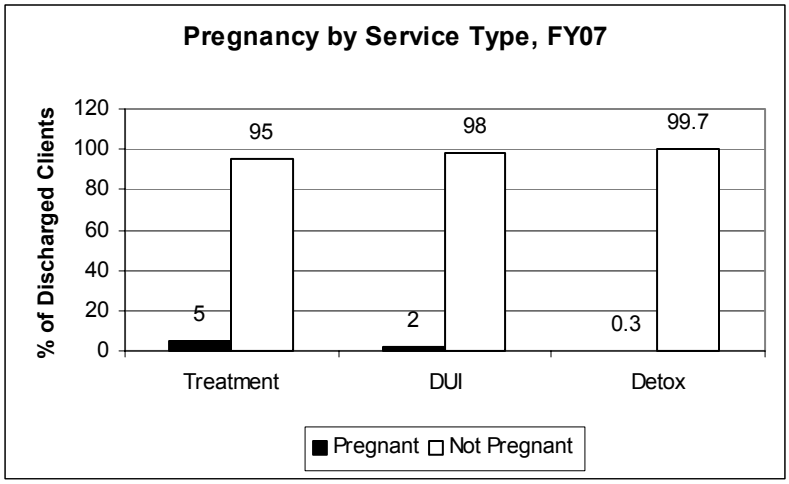
18. APPENDICES A THROUGH D

Appendix A: Detailed Tables and Graphs of Client Demographics

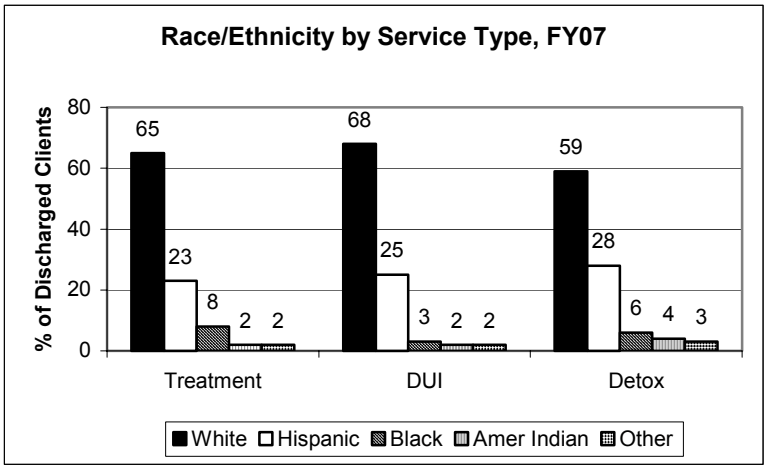
Graph 1: Gender by Service Type, FY07 (See page 14)



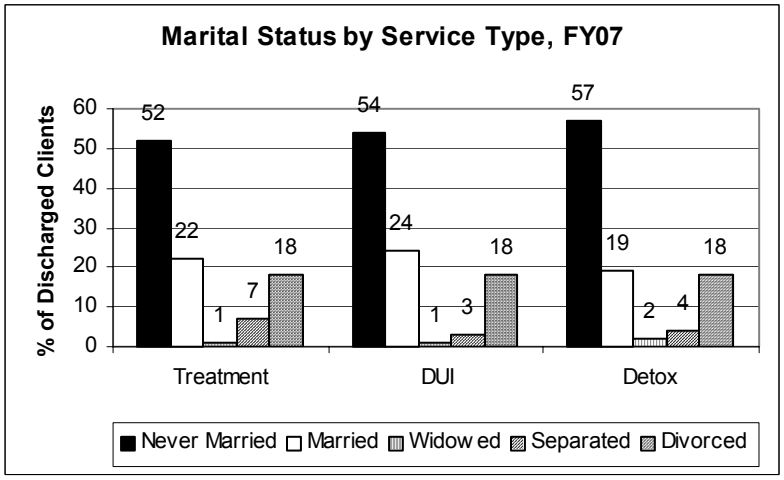
Graph 2: Pregnancy by Service Type, FY07 (See page 14)



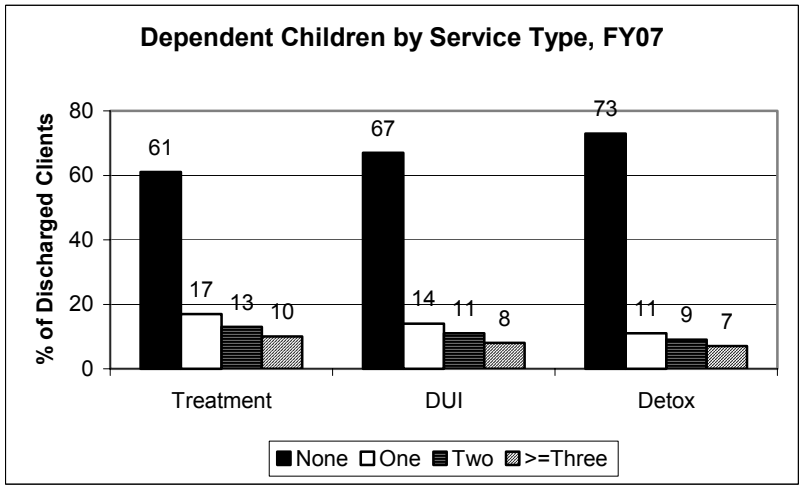
Graph 3: Race/Ethnicity by Service Type, FY07 (See page 14)



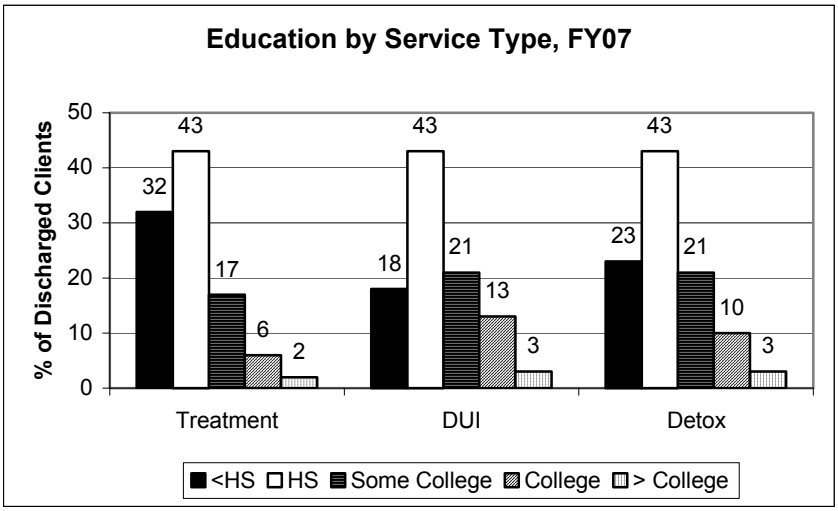
Graph 4: Marital Status by Service Type, FY07 (See page 14)



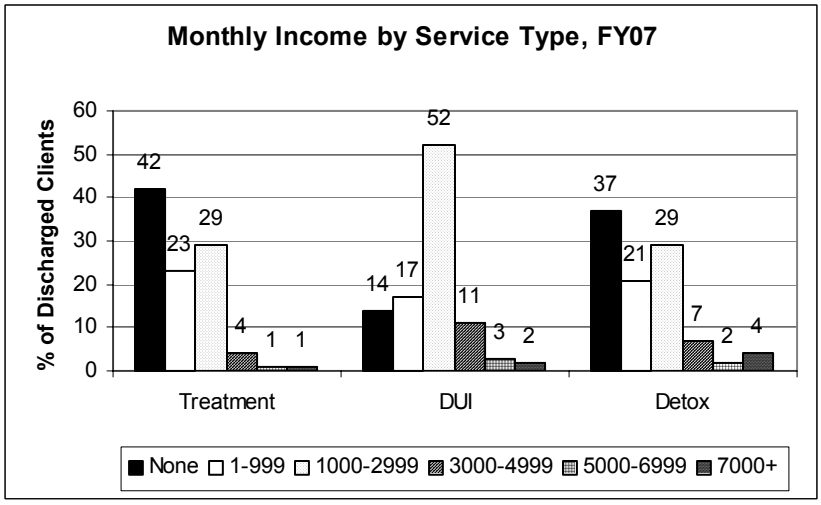
Graph 5: Dependent Children, FY07 (See page 14)



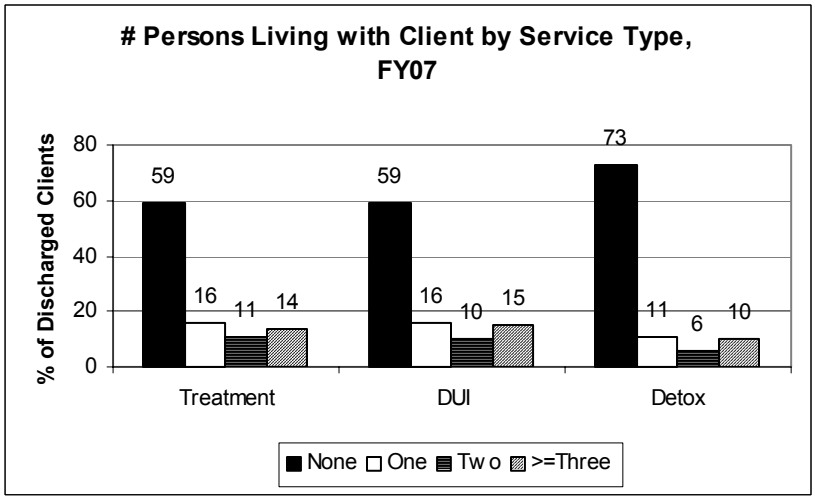
Graph 6: Educational Attainment by Service Type, FY07 (See page 15)



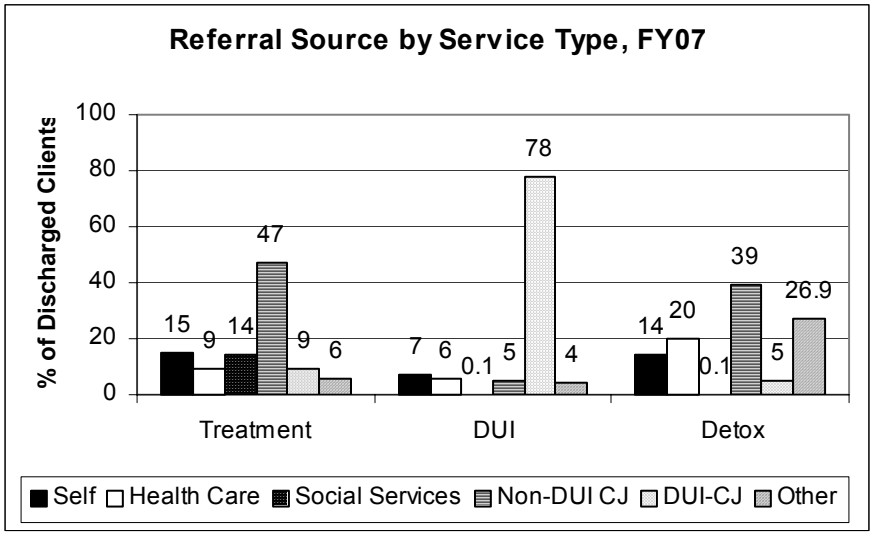
Graph 7: Monthly Income by Service Type, FY07 (See page 15)



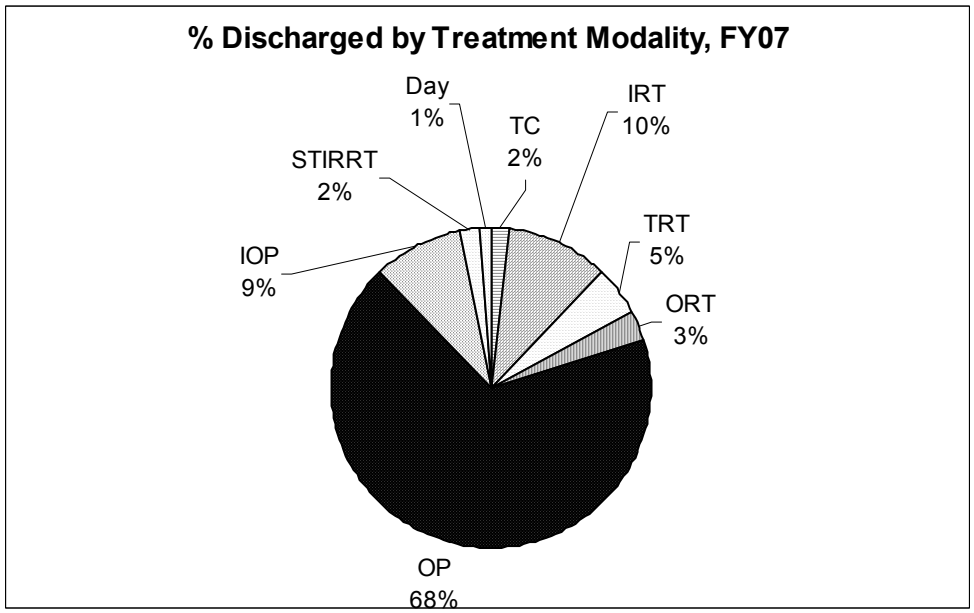
Graph 8: Number of Persons Living with Client by Service Type, FY07 (See page 15)



Graph 9: Transfer/Referral Source by Service Type, FY07 (See page 15)

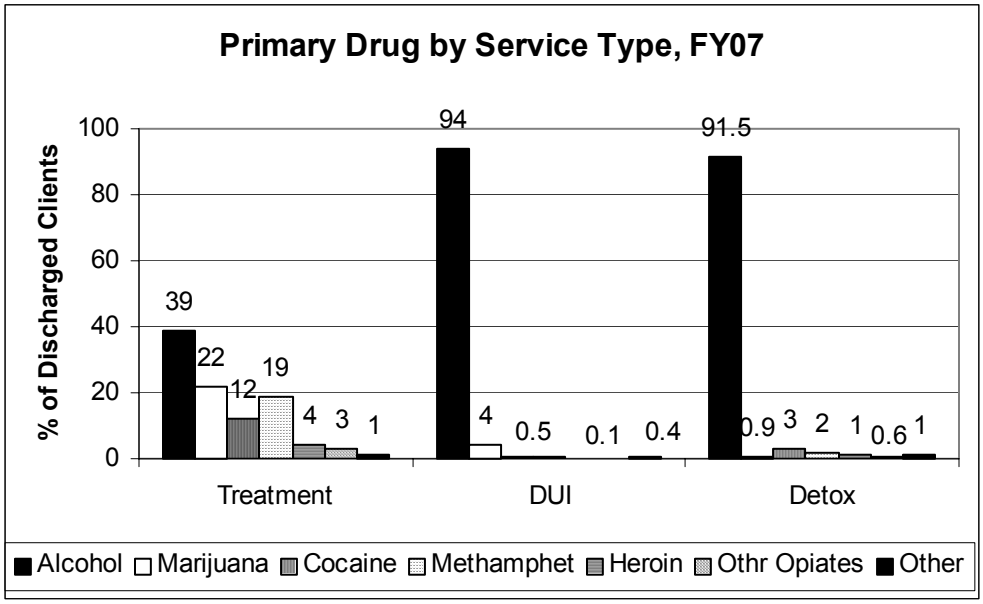


Graph 10: Percent of Discharged Clients by Treatment Modality, FY07 (See page 15)



OP=Traditional Outpatient; IOP=Intensive Outpatient; TC=Therapeutic Community
IRT=Intensive Residential; STIRRT=Short-Term Intensive Residential Remedial Treatment;
TRT=Transitional Residential; ORT=Opioid Replacement Therapy

Graph 11: Primary Drug by Service Type, FY07 (See page 16)



Appendix B: SERVICE UTILIZATION

Table 1: Numbers of Clients in and Discharges from Treatment Services for FY07 and FY06 (as reported last year) and the Percent Change from FY06 (See page 16)*

Service Type	# of Discharges FY06	# of Discharges FY07	% Change* from FY06	# of Clients FY06	# of Clients FY07	% Change* from FY06
Treatment**	20,264	22,109	+ 9%	17,178	17,795	+ 4%
DUI	18,076	20,007	+11%	17,169	18,726	+ 9%
Detox	48,253	52,073	+ 8%	27,125	30,296	+12%
Total	86,593	94,189	+ 9%	61,472	66,817	+ 9%

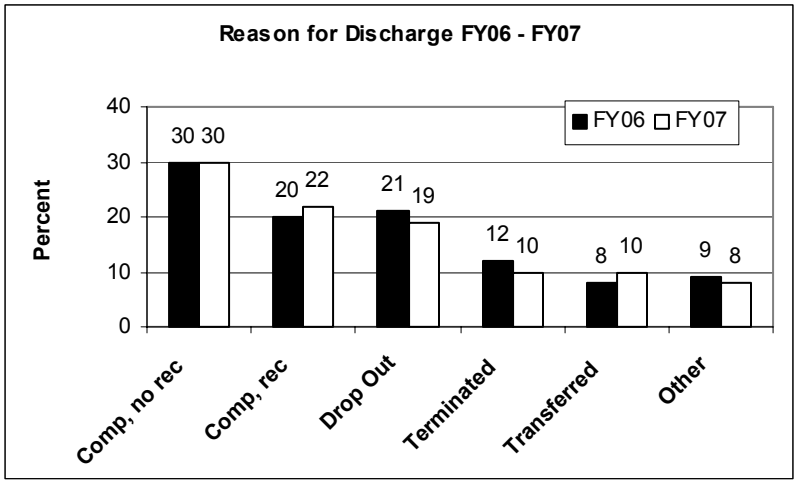
* A plus sign (+) = increase; a minus sign (-) = decrease; ** Excludes "Differential Assessments Only"

Table 2: Length of Stay, Treatment and Detox FY07, Comparison with FY06 (in Days) and TEDS** (See page 16)

Modality	Average Colorado #Days, FY07	Change in Avg. # Days from FY06	Median* Colorado # Days, FY07	Change in Median # Days from FY06	Average TEDS** # Days 2003 (national)
Residential	54	-10.0	29	- 1	70
Outpatient	138	+ 8.0	93	+8	NA
Traditional OP	142	+ 7.0	98	+6	102
Intensive OP	111	+ 9.0	57	+ 5	69
OpioidReplacement Therapy	249	-10.0	108	+31	155
STIRRT***	14	-2.0	13	Same	26
Day Treatment	53	-21.0	15	-35	-
Detox	1.8	+ 0.2	0	-1	13

* Median is defined as the midpoint in a distribution of scores, or the point above and below which exactly 50 percent of the measures fall. ** Treatment Episode Data Set (TEDS) for 2003 was national composite data from 26 states. ***STIRRT=Short-term Intensive Residential RemedialTreatment; 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" on either Progress Towards Treatment or Reason for Discharge DACODS fields; discharges from both Detox and DUI services, and discharges from Outpatient. DUI and Outpatient treatment services were excluded from the calculations for Length of Stay because the length of time from admission to discharge may not accurately reflect active service, such as when a client takes a year or more to complete the several weeks of DUI education/therapy, or the client is enrolled in Outpatient tx but only attends three hours per week.

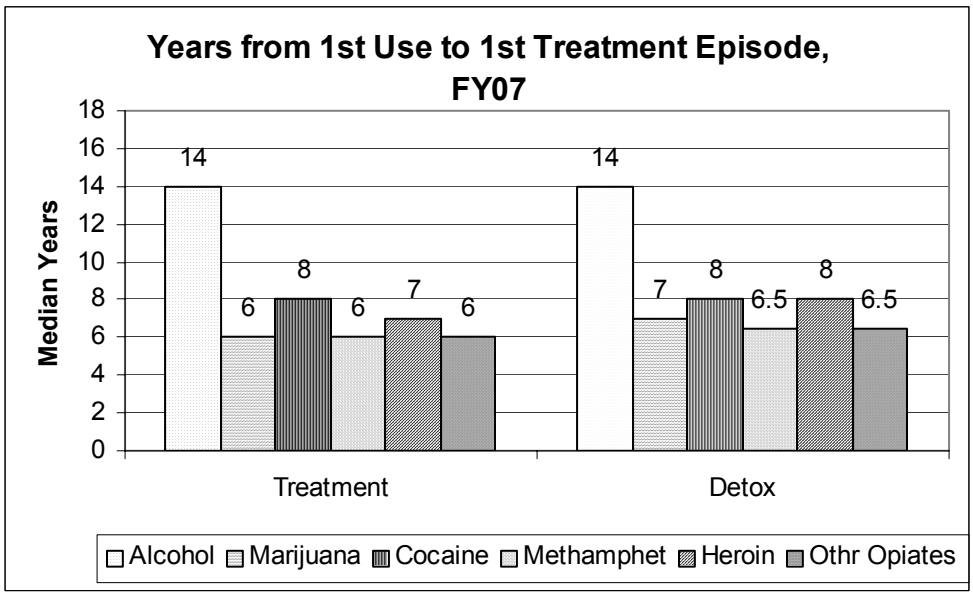
Graph 1: Reason for Discharge, FY07 Compared with FY06 (See page 16)



Comp, no rec = Treatment completed, no further treatment recommended; Comp, rec = Treatment completed at this facility, additional treatment recommended; Drop Out= Left against counselor advice/dropped out; Terminated = Terminated by facility; Other includes incarcerations and deaths. Discharges coded as Differential Assessment Only were excluded from calculations.

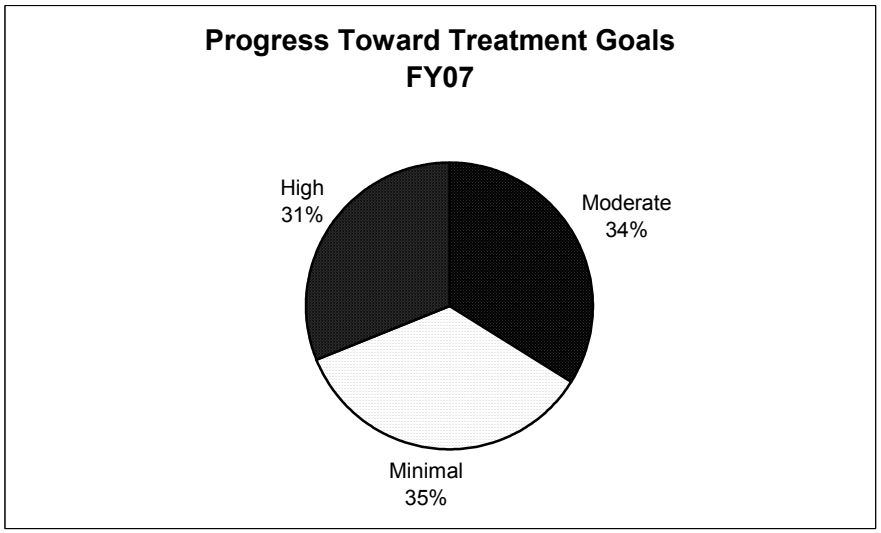
Appendix C: BARRIERS TO TREATMENT

Graph 1: Years from First Use to First Treatment Encounter, FY07 (See page 17)

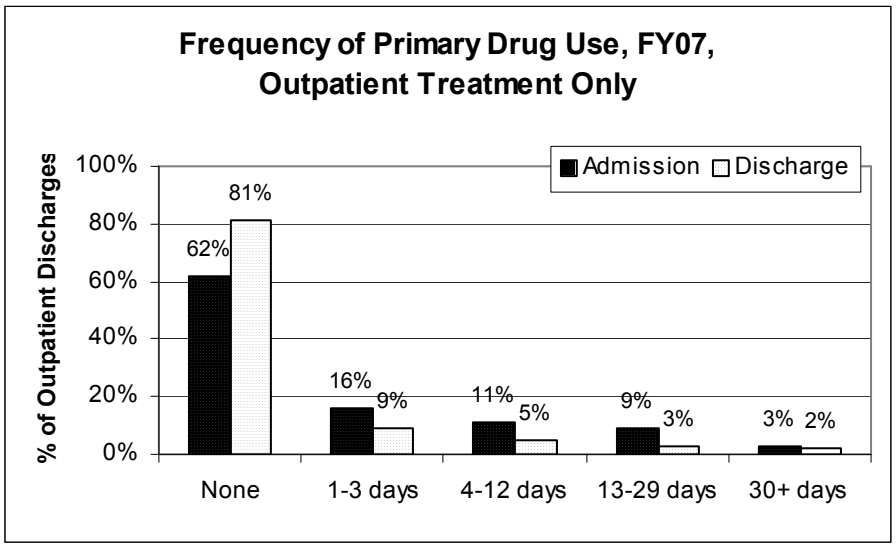


Appendix D: PREVENTION AND TREATMENT OUTCOMES

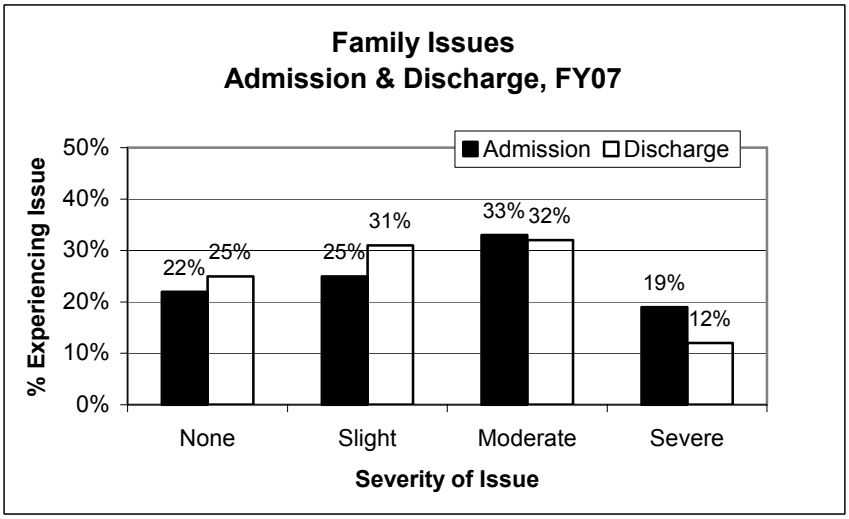
Graph 1: Progress Towards Treatment Goals, FY07 (See page 21)



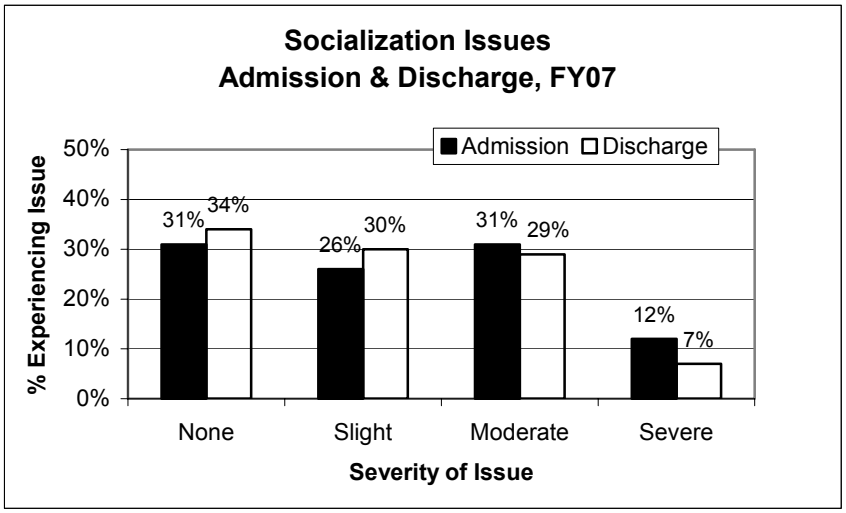
Graph 2: Frequency of Primary Drug Use, FY07, for Outpatient Treatment (See page 21)



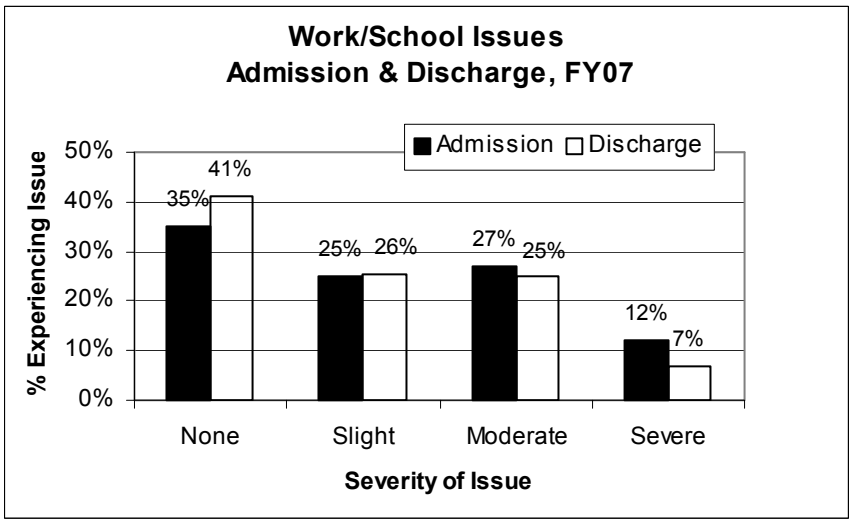
Graph 3: Family Issues/Problems from Admission to Discharge, FY07 (See page 21)



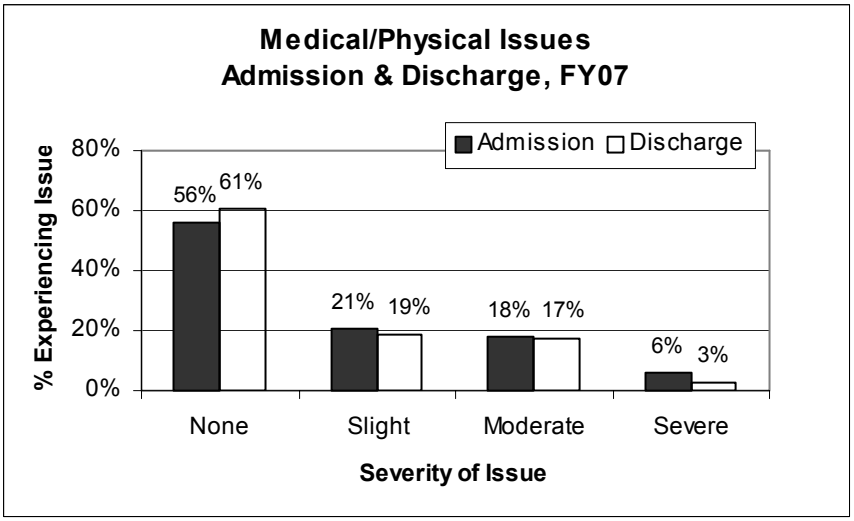
Graph 4: Socialization Issues/Problems from Admission to Discharge, FY07 (See page 21)



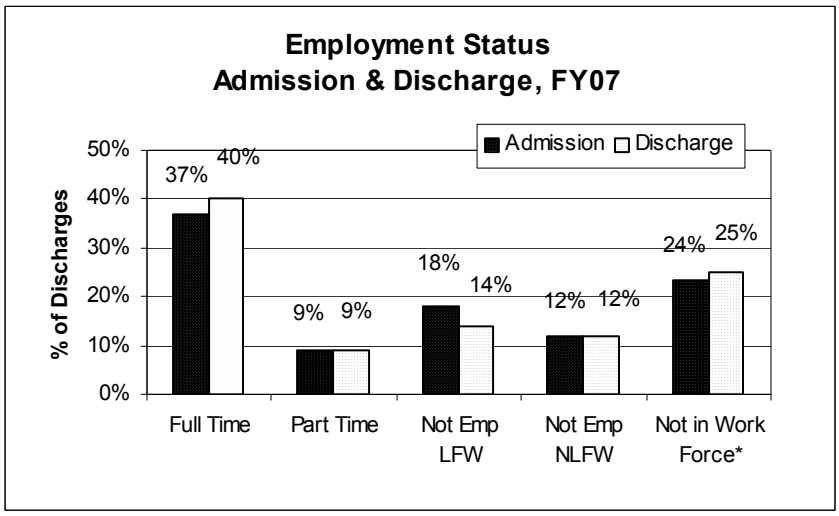
Graph 5: Work/School Issues/Problems from Admission to Discharge, FY07 (See page 21)



Graph 6: Medical/Physical Issues/Problems from Admission to Discharge, FY07 (See page 21)



Graph 7: Employment Status from Admission to Discharge, FY07 (See page 21)



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

Graph 8: Living Situation from Admission to Discharge, FY06 (See page 21)

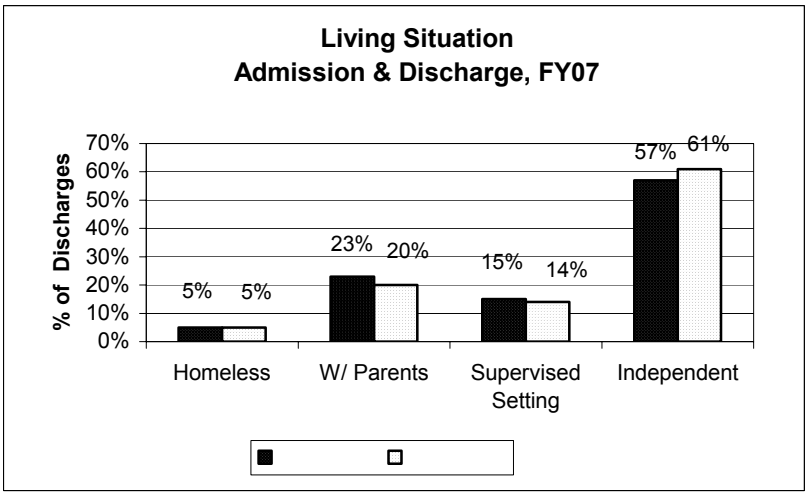


Table 1: Proportions of Clients* at Admission and Discharge with Arrests, Emergency Room (ER) Visits or Hospital Admissions, FY07 (See page 21)

Outcome Measure	Admission (%)	Discharge (%)
DUI/DWAI Arrests during 24 months prior to admission and at discharge		
None	87	98
1-2	12	2
3+	1	0
Other Arrests 24 months prior to admission and at discharge		
None	69	92
1-2	25	7
3+	6	1
Medical ER visits during 6 months prior to admission and at discharge		
None	79	89
1-2	18	9
3+	3	2
Medical Hospital Admissions during 6 months prior to admission and at disch.		
None	89	94
1-2	9	5
3+	2	1
Psychiatric ER visits during 6 months prior to admission and at discharge		
None	96	97
1-2	4	2
3+	1	1
Psychiatric Hospital Admission 6 months prior to admission and at discharge		
None	96	97
1-2	4	2
3+	1	1

* All Discharges

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