



EVALUATION & INFORMATION SERVICES UNIT

ADAD

*DEPARTMENT OF HUMAN SERVICES
ALCOHOL & DRUG ABUSE DIVISION*

**THE EFFECTIVENESS OF EDUCATION & TREATMENT
IN REDUCING RECIDIVISM
AMONG CONVICTED DRINKING DRIVERS**

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ABSTRACT

This paper describes a 1997 study conducted by The Alcohol and Drug Abuse Division (ADAD) which evaluated the effectiveness of DUI/DWAI** offender assessment and treatment in preventing rearrest for drinking and driving. Study information was drawn from ADAD evaluation and treatment records as well as violation/arrest records from The Motor Vehicle Division (MVD). Recidivism was defined as any alcohol or drug related driving violation subsequent to treatment admission.

Clients profiled in this report were 18,756 individuals who were arrested and convicted of a drinking and driving offense between 1992 and 1995, and were discharged from treatment during 1995. These clients were matched to a MVD file containing violations dating from 1992 to the present. The final working total of clients from all these matches was 16,548, which excluded those whose treatment records indicated 'other' or 'transfer'. Almost all of them (16,326) participated in one or a combination of education and treatment.

For the 12,843 subjects who completed treatment a 12.4% DUI/DWAI rearrest rate was observed. Of the 3,483 subjects who failed to complete treatment, 19.6% were rearrested for a DUI/DWAI.

**DUI - Driving Under the Influence
**DWAI - Driving While Ability Impaired

INTRODUCTION

The purpose of this paper is to describe a study conducted by ADAD during summer 1997 which demonstrates the effectiveness of offender assessment and treatment in preventing recidivism for drinking and driving.

The study made use of arrest records from MVD and evaluation and treatment records from ADAD in determining recidivism. Most important was the examination of offender recidivism in relation to the type of treatment attended and the completion or non-completion of treatment.

BACKGROUND

Colorado enacted legislation in 1979 which mandates screening and referral for all offenders convicted of an alcohol or drug related traffic offense (42-4-1301 CRS). This legislation also authorized Alcohol Drug Driving Safety (ADDS) programs for the state's 22 Judicial Districts, required that the program be cash funded through the fees assessed convicted drinking drivers, and that, prior to sentencing, ADAD certified Alcohol and Drug Evaluation Specialists (ADES) evaluate and refer defendants to state licensed alcohol and drug treatment programs and supervise them for the courts.

ADAD, within The Department of Human Services is statutorily responsible for managing the ADDS program. ADAD contracts with the State Judicial Department and the City and County of Denver for the services of over 85 ADES within Probation Departments throughout Colorado. ADES are required to attend a 40 hour training session conducted by ADAD, at the completion of which they must pass an exam in order to be state certified. Also, ADES must complete 16 hours of continuing education each year to maintain their certification. All ADES work under the supervision of Chief Probation Officers.

The ADES, utilizing ADAD established criteria evaluate all drinking driver offenders within the state. Through a multi-faceted interview, individuals are classified according to one of three levels: social, incipient problem or problem drinker/drug user. The evaluation process evolves around a structured interview in which all aspects of an offenders drinking and drug use behavior

are examined utilizing various diagnostic instruments and measures (e.g., Drinking/Drug History Questionnaire, Mortimer-Filkens Test, blood alcohol concentrations, prior arrests/convictions, prior treatment experiences).

After the completion of the evaluation and the extent of use/abuse of the offender has been assessed, the ADES recommends an appropriate intervention of education and/or treatment. In most cases a recommendation and referral to treatment is made. The ADES then monitors the offenders treatment and reports their compliance to the courts.

There are more than 300 treatment sites licensed and monitored by ADAD which provide the offenders Level I Education, Level II Education and Level II Treatment. Matching an individual to the correct level of education or treatment is crucial to that offenders success; ADES are trained to make appropriate intervention referrals. Following is a description of each type of education/treatment, including which level is most appropriate for which drinker type.

Level I is didactic alcohol education with an emphasis on drinking and driving behaviors. It is to be utilized **only** for the Social/Non-Problem Drinker, and is conducted over a ten hour time period, allowing no more than seven hours conducted in one calendar day. Although topics are standardized, the programs vary widely in format and presentation.

Level II Therapeutic Education combines alcohol education and group process. It is designed to be affective (involves the sharing of feelings) and far more structured and treatment oriented than Level I. This intervention is used for Incipient Problem and Problem Drinkers needing education. The program may range from eight to twelve sessions in length with a total of twenty to thirty hours in duration.

Level II Treatment is designed for Incipient Problem and Problem Drinkers who need therapy. Service may be provided on a combined inpatient and outpatient basis or in an outpatient setting alone. The length of treatment must be for twenty six hours over four months or forty hours over five months. The number of hours is determined by whether the client is assessed as an Incipient Problem (twenty six hours) or Problem Drinker/Drug User (forty hours). Specific techniques are left to the discretion of the individual provider or agency and, thus, vary widely. However, ADAD does mandate that all programs utilize standardized differential diagnostic procedures, maintain complete treatment plans and progress notes and utilize only certified counselors. For those Problem Drinkers sentenced to both Level II Therapeutic Education and Treatment, the therapy portion must be conducted above and beyond the educational services.

METHODOLOGY

The study group consisted of 18,756 individuals who were arrested and subsequently convicted of a DUI/DWAI offense between 1992 and 1995 (data from ADDSCODS, The Alcohol and Drug Driving Coordinated Data System) and subsequently discharged from treatment in 1995 (data from DRS, The Discharge Referral Summary). Both of the preceding data bases reside in the ADAD environment. ADES evaluated all study subjects between 1992 and 1995, at which time drinking problems (if any) were determined and recommendations for appropriate interventions were made.

These 18,756 matched evaluation/treatment records were subsequently matched with MVD violation records. Since the MVD data base includes information on all types of motor vehicle violations, a computer procedure was established to isolate DUI/DWAI codes for the study population. This computer procedure also matched the appropriate DUI/DWAI violation date with arrest date specified on the evaluation record. This violation/arrest date match provided the study reference point for calculating recidivism. Recidivism was defined as any alcohol or drug related driving violation subsequent to treatment admission. The match of ADAD's evaluation/treatment records with MVD's violation records produced a final match for 17,283 individuals.

While all 17,283 participants had an evaluation record, a treatment record and at least the initial violation date record, not all of them could be used in the analysis. On the treatment record there are five different possible treatment outcomes, only three of which were used for the purposes of this study. On the treatment record, 'completed treatment' and 'completed treatment but owes fees' constitute completed treatment and 'treatment not completed' constitute non-completed treatment. The other two categories, 'other' and 'transfer' do not indicate completed or non-completed treatment and were excluded, deleting an additional 930 records from this analysis. This left a final study population total of 16,326 individuals.

Also examined was "at risk" time for study subjects, i.e., when a subject is susceptible to rearrest. As in the previous 1988 study, at risk time for rearrest was measured after discharge from treatment, which for this 1997 study ranged from 20 to 32 months (January thru December 1995 treatment discharges up to August 1997 possible violation dates).

RESULTS

The study focus was to ascertain whether treatment was effective in preventing rearrest for drinking and driving. Within this framework it is important to understand the most critical study element, the offender. Following is a brief profile of study subjects who attended the various education/treatment interventions.

The 3,350 subjects who attended Level I Education were mostly White (77.1%) or Hispanic (17.2%) and mostly male (75.0%). Their average age was 32.2 years with slightly over half having never been married. Most (75.1%) were employed full time with an average income of \$1,554 per month. In terms of severity, 90.7% tested for blood alcohol content (BAC) of less than .15% at the time of their arrest. Almost none (4.1%) had prior treatment or a prior DUI (5.7%) and nine out of ten had no accident involvement. 81.6% of these offenders were classified as social drinkers, 8.2% were incipient problem and 10.2% were problem drinkers.

The 3,768 subjects who attended Level II Therapeutic Education were very similar demographically to their Level I counterparts: same average age, slightly fewer White (73.9%), more Hispanic (20.2%), more male (77.5%) and a little less than half having never been married. They did report a lower average income at \$1,364 per month. As expected, they were also somewhat more severe in terms of alcohol abuse. Of those tested, 57.7% had a BAC of .15% or above at the time of their arrest. Those in prior treatment totaled 16.2% with 19.4% having a prior DUI/DWAI. Only 3.7% of study subjects were categorized as Social Drinkers, with most (65.9%) categorized as Incipient Problem Drinkers, followed by Problem Drinkers at 30.4%.

The 8,581 subjects who attended Level II Education and Treatment were different in terms of demographics and severity from their counterparts in less intensive education/treatment modalities. They were slightly older (33.7 average), more often male (83.4%) and Hispanic (26.3%). They had a higher unemployment rate (20.8%) and a lower average monthly income (\$1,199). In terms of severity, the Level II Education/Treatment group produced a higher proportion of accident involvement (17.9%), among those tested a higher proportion of BAC's above .15% (67.7%), and a greater proportion of prior DUI/DWAI's (57.8%) and prior treatment experiences (51.2%) than the Level I Education or Level II Education groups.

There were 676 offenders who attended only Level II Treatment. While they appeared very similar demographically to the Level II Education/Treatment group, they evidenced a slightly more severe substance abuse background, with more than half (54.9%) having

prior treatment/education experience and almost 2 out of 3 (60.2%) having a prior DUI.

Table 1 on page 8 describes participation in the various levels of treatment, along with completion or non-completion status, in relation to rearrest rates for drinking and driving. Notice that the observed rates for the original 1988 study are contrasted to the 1997 study percentages. Comparisons should not be drawn between the different types of treatment groups because of the clear demographic and severity differences in the groups as previously defined.

As indicated in Table 1, rearrest for drinking and driving are described as occurring either "during" or "after" education/treatment. This was determined by looking at DUI/DWAI violation dates in relation to education/treatment admission and discharge dates. That is, if the DUI/DWAI rearrest date fell between the treatment admission and the treatment discharge dates, it was considered a rearrest "during" treatment. If the rearrest date occurred after the treatment discharge date, it was considered a rearrest "after" treatment. This was true whether or not an individual was discharged having completed all required treatment.

In all education/treatment modalities, rearrest most often occurred after treatment. In fact, for the total 16,326 study records, a person was three times as likely to be rearrested after treatment (10.5%) as during treatment (3.5%). This should come as no surprise when one compares the 'after treatment' time of twenty to thirty months to the 'during treatment' time of Level I education at ten hours and Level II treatment at four or five months.

As in the 1988 study, the 1997 study shows the lowest rates of recidivism in the groups that completed treatment; 9.9% for the Level I Education group, 10.7% for the Level II Education group, 15.0% for the Level II Treatment group and 14.2% for the Level II Education and Treatment group. Aggregately, the treatment completion group produced a 12.4% rearrest rate.

Again as in the 1988 study, the 1997 study shows higher recidivism rates among the non-completion group. Describing the non-completion group, Level I Education yielded a 16.7% rearrest rate, Level II Education an 18.0% rate, Level II Treatment a 17.7% rate and Level II Treatment and Education, a 20.6% rearrest rate was observed. Overall, the non-completion group exhibited a 19.6% rearrest rate.

Those not completing treatment evidenced much higher chronicity than those who completed. Table 2 on page 9 examines various demographics and severity indicators for treatment completers and non-completers for all four assigned treatment levels.

Non-completers are younger, earn significantly less income and are unemployed at a substantially higher rate than completers. They also have more prior treatment episodes, prior arrests and have more problem drinkers than completers. This is especially true for Level I offenders.

Of the 3,350 study subjects in Level I education: 2,709 are social drinkers (81.6%), 272 are incipient problem drinkers (8.2%) and 338 are problem drinkers (10.2%). If only social drinkers are examined for recidivism, we find 157 of them have reoffended, which is 157/2709, yielding 5.8%. Recidivism for Level I incipient problem drinkers yields 42 out of a total 272, or 15.4%. Recidivism for Level I problem drinkers yields 135 out of a total 338, or 39.9%.

A client who fits the problem drinker profile and goes to Level I is nearly seven times more likely to reoffend than a social drinker. Incipient problem and problem drinkers are driving a recidivism rate of 5.8% to the study Level I average of 10.0%.

SUMMARY

This paper described a 1997 study conducted by ADAD which examined 16,326 individuals. The results of this study strongly indicate two main points.

First, treatment is very effective in preventing rearrest for drinking and driving for those offenders who are assigned to the appropriate level of education or treatment and who complete their assigned regimen.

Second, those persons who are assigned to an inappropriate level of education or treatment or who don't complete their assigned treatment demonstrate poor outcomes.

Table 1
 Recidivism by Treatment Level by Completion Status
 1997 ADAD DUI/DWAI Study
 NOVEMBER 1997

<u>Treatment Level</u>	<u>N</u>	<u>Not Rearrested</u>	<u>Rearrested During Treatment</u>	<u>Rearrested After Treatment</u>	<u>Total Recidivism</u>
<u>Level I Education</u>					
Completion	3290	90.1%	0.5%	9.4%	9.9%
Non-Completion	60	83.3%	1.7%	15.0%	16.7%
Total Level I Education	3350	90.0%	0.5%	9.5%	10.0%
<u>Level II Education</u>					
Completion	2964	89.3%	1.4%	9.3%	10.7%
Non-Completion	804	82.1%	4.4%	13.6%	18.0%
Total Level II Education	3768	87.8%	2.0%	10.2%	12.2%
<u>Level III Treatment</u>					
Completion	441	85.0%	2.3%	12.7%	15.0%
Non-Completion	186	82.3%	4.8%	12.9%	17.7%
Total Level III Treatment	627	84.2%	3.0%	12.8%	15.8%
<u>Level III Ed. & Tx</u>					
Completion	6148	85.7%	4.1%	10.1%	14.2%
Non-Completion	2433	79.4%	7.9%	12.7%	20.6%
Total Level III Ed. & Tx	8581	83.9%	5.2%	10.9%	16.1%
Grand Total Tx. Completed	12843	87.6%	2.5%	9.9%	12.4%
Grand Total Tx. Not-Comp	3483	80.4%	6.8%	12.8%	19.6%
GRAND TOTAL TX	16326	86.0%	3.5%	10.5%	14.0%

1988 ADAD DUI/DWAI Study		
<u>N</u>	<u>Level I Education</u>	<u>Total Recidivism</u>
6788		4.5%
125		7.2%
6913		4.5%
6667	<u>Level II Education</u>	6.1%
1100		13.1%
7767		7.1%
582	<u>Level III Treatment</u>	12.4%
176		17.0%
758		13.5%
7355	<u>Level III Ed. & Tx</u>	10.4%
2576		14.4%
9931		11.5%
21392	<u>Grand Total Tx</u>	7.3%
3977		14.0%
25369		8.3%

Table 2
 Demographics by Treatment Level by Completion Status
 1997 ADAD DUJ/DWAI Study
 NOVEMBER 1997

<u>Treatment Level</u>	<u>Age</u>	<u>Income</u>	<u>Unemployment</u>	<u>BAC > .15%</u>	<u>Pr. Treat (+1)</u>	<u>Pr. Arrest (+1)</u>	<u>Problem/InProb Drinker Type</u>	<u>Recidivism</u>
<u>Level I Education</u>								
Completion	32.3	\$1,566	15.5%	9.0%	3.9%	5.4%	18.2%	9.9%
Non-Completion	29.9	\$877	30.0%	22.7%	16.7%	20.0%	30.0%	16.7%
Total Level I Education	32.2	\$1,554	15.7%	9.3%	4.1%	5.7%	18.4%	10.0%
<u>Level II Education</u>								
Completion	32.9	\$1,475	16.2%	58.4%	12.1%	14.5%	95.9%	10.7%
Non-Completion	30.1	\$948	26.4%	54.8%	31.4%	37.5%	97.6%	18.0%
Total Level II Education	32.3	\$1,364	18.4%	57.7%	16.2%	19.4%	96.3%	12.2%
<u>Level III Treatment</u>								
Completion	33.5	\$1,276	20.9%	69.6%	53.0%	59.6%	96.8%	15.0%
Non-Completion	32.7	\$914	35.5%	63.4%	59.5%	61.6%	98.4%	17.7%
Total Level III Treatment	33.2	\$1,171	25.2%	67.9%	54.9%	60.2%	97.2%	15.8%
<u>Level I Ed. & Tx</u>								
Completion	34.6	\$1,308	18.3%	69.3%	51.8%	58.9%	97.7%	14.2%
Non-Completion	31.4	\$922	27.0%	65.7%	49.5%	55.2%	97.7%	20.6%
Total Level I Ed. & Tx	33.7	\$1,199	20.8%	67.7%	51.2%	57.8%	97.7%	16.1%
Grand Total Tx. Completed	33.5	\$1,409	17.3%	51.2%	30.7%	35.2%	77.0%	12.4%
Grand Total Tx. Not-Comp	31.2	\$931	27.2%	62.4%	45.8%	51.5%	96.6%	19.6%
GRAND TOTAL TX.	33.0	\$1,306	19.4%	53.4%	34.0%	38.7%	81.3%	14.0%