

## Highlights

**Criminal justice status at intake had little bearing on substance use outcomes among clients in NTIES.**

## Criminal Justice Status and Substance Abuse Treatment Outcomes



### NEDS Analytic Summary Series

The Center for Substance Abuse Treatment (CSAT) works to improve the lives of those affected by alcohol and other substance abuse, and, through treatment, to reduce the ill effects of substance abuse on individuals, families, communities, and society at large. Thus, one important CSAT mission is to expand the knowledge about effective substance abuse treatment and recovery services. In support of these efforts, CSAT established the National Evaluation Data Services (NEDS) contract to provide a wide array of secondary data analysis products to the substance abuse treatment field.

Specifically, the NEDS project is focused upon providing CSAT with an analytic capability to use existing data to address policy- and practice-relevant topics as well as future research and evaluation activities. NEDS has developed several product lines designed to provide analytic findings to substance abuse treatment policy makers, service providers, services researchers and evaluators in a format that is most useful to the end user.

The Analytic Summary is one of the NEDS product lines. The purpose of the Analytic Summary is to provide a brief summary of each technical report produced by NEDS written in non-technical language. Readers who find the Analytic Summary results of interest can contact the original NEDS technical report authors for more detailed information. Through this process, the NEDS Analytic Summaries provide information to the substance abuse treatment field and promote linkages among different areas in the field.

### This Analytic Summary

This Analytic Summary is based on the NEDS Technical Report titled *Criminal Justice Status and Substance Abuse Treatment Outcomes* (Gerstein, D., Shin, H.C., & Zhang, Z., 2001). For a more thorough discussion of the analysis and findings, please obtain a copy of the complete Technical Report. Information for doing so is provided on the last page of this summary.

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# Criminal Justice Status and Substance Abuse Treatment Outcomes

## Analytic Importance

One important function of CSAT is to expand the knowledge about, and the availability of, effective treatment and recovery services for those affected by alcohol and other substance abuse. In sponsoring these analyses of the data it has collected, CSAT is attempting to gain useful insight into the fundamental question: *What constitutes effective (and cost-effective) treatment, and for what populations?*

Numerous studies have clearly established a strong correlation between substance abuse and criminal activity. Many men and women who seek substance abuse treatment have criminal records.

Past research has revealed the effectiveness of substance abuse treatment not only in reducing drug and alcohol abuse, but also in lowering the rates of criminal activities that are correlated with substance abuse—such as drug trafficking, driving while intoxicated, burglary, larceny, theft, and fraud.

Less clear, however, is the impact of substance abuse treatment on individuals in various stages of criminal justice proceedings—in prison, awaiting sentencing, on probation, and so forth. Some studies have suggested that treatment of individuals in some stage of criminal justice processing can be beneficial and have a positive effect on recidivism. However, other studies have shown that pressure by criminal justice sources results in less positive or no better treatment outcomes than pressure from social, personal, or health-related sources.

This analysis examines the relationship between (1) criminal justice history and status at treatment admission and (2) substance abuse outcomes approximately one year after treatment discharge.

## Analytic Purpose

This analysis examines criminal justice involvement and treatment outcomes among the almost 6,600 clients who participated in the National Treatment Improvement Evaluation Study (NTIES). Outcome data were available on a smaller subset of 4,411 clients who had been living in the community for a significant period of time after the index treatment episode. Unlike most substance abuse treatment outcome studies, NTIES included treatment clients from a broad range of criminal justice situations, ranging from prison- and jail-based service delivery units to community-based programs that provided treatment to individuals in all phases of the justice system.

The analysis addressed two key questions:

- What were the characteristics of clients with differing criminal justice histories and statuses?
- What was the relationship between clients' criminal justice status and post-treatment substance use?

The analysis was intended to provide useful information for substance abuse treatment providers and policy makers, while at the same time opening paths toward further exploration of NTIES and other data sources regarding the important issue of criminal behavior and substance abuse treatment.

## Analytic Approach

### Data Sources

Client-level data were collected at intake, treatment exit, and approximately 12 months after treatment exit. The intake interviews took place during 1993

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## Criminal Justice Status and Substance Abuse Treatment Outcomes (cont.)

### Among the clients in NTIES:

- **Two-thirds of the clients had sold drugs, shoplifted, received stolen property, or driven while intoxicated.**
- **About 85 percent of the clients had been arrested at least once during their lifetimes.**
- **Most of the clients had been arrested by the time they reached age 21.**
- **Only 2 percent had no history of criminal behavior.**



and 1994 for the entire cohort of 6,593 clients who participated in NTIES. Outcome data were collected from the majority of clients during follow-up interviews conducted about one year after discharge from treatment (an unprecedented rate of follow-up in a large scale study). A subset of 4,411 clients were examined for this analysis; all of the clients had been released to the community (i.e., they were not in jail or prison) for a significant period after treatment.

The 4,411 clients in the outcome analysis had been treated in 71 different service delivery units (SDUs). The participating SDUs represented five treatment modalities: methadone outpatient, non-methadone outpatient, short-term residential, long-term residential, and correctional.

Demographic data as well as data pertaining to the clients' most commonly abused substances, histories of criminal behavior, arrest records, and criminal justice status were drawn from intake interviews. The average client was 33 years old at admission; the majority were black; about 70 percent were men; and the most commonly used substances were alcohol, marijuana, crack cocaine, cocaine powder, and heroin.

### Clients' History of Criminal Activity

At the time of admission to treatment, 98 percent of the 6,593 clients in NTIES reported a history of criminal activity. Analysis of the overall sample revealed the following:

- Approximately two-thirds of the clients reported having sold drugs, shoplifted, driven while intoxicated, or received stolen goods.

- About 85 percent reported having been arrested at least once during their lifetimes. (Three out of four clients had been incarcerated for at least 24 hours.)
- More than half of the clients had been arrested during the prior year.
- Approximately one-third of the clients who had ever been arrested reported that their first arrest or detention occurred before age 15; another third reported first arrest or detention before age 21.
- Women reported an older age of onset of criminal activity than men by about 2 years.
- Men reported more types and numbers of lifetime (but not past-year) arrests than women.

In general, these characteristics of the overall NTIES sample differed little from the characteristics of clients in the smaller sample used for the outcome analysis.

### Analytic Strategies

For the purposes of this analysis, six measures of criminal activity and a typology of 10 criminal justice status groups were developed to assess the relationship between the clients' criminal background and treatment success.

The six measures of criminal activities were developed from the NTIES intake questionnaire:

- Number of types of offenses for which a client had been arrested during his or her lifetime (from a list of 20 types)

## Criminal Justice Status and Substance Abuse Treatment Outcomes (cont.)

### The analytic strategy included:

- Measures of criminal activity
- Classification of clients into 10 criminal justice status subgroups.

- Number of types of criminal activities for which a client had been arrested in the past year
- Total number of lifetime arrests
- Number of criminal activities that a client had ever engaged in, whether or not arrested
- Number of types of illegal activities from which a client ever derived the majority of his or her income
- The age at which a client first engaged in a criminal activity from a selected subset of offense types.

The 10 criminal justice status subgroups are shown in Exhibit 1.

The outcomes analysis included data on use of five core substances: alcohol, marijuana, crack cocaine, cocaine powder, and heroin. Clients were asked about their peak month substance use (and, for alcohol, days drunk in month prior to interview) in the 12 months

prior to entering treatment and in the 12 months prior to the follow-up interview approximately one year after treatment exit. Clients who reported no use of a substance before treatment were excluded from the analysis of change in use of that substance.

In order to assess the role of criminal justice status as either a positive or negative influence in substance abuse treatment, it was included in the outcomes analyses along with a variety of other potentially influential factors, including:

- Prior substance abuse treatment
- Treatment referral source(s)
- Reason(s) for coming to treatment
- Substance use during treatment
- Selected SDU and clinician characteristics
- Services during treatment
- Adherence to treatment plan

Exhibit 1 Criminal Justice Status Subgroups		
Criminal Justice Status at Admission to Treatment	Clients in NTIES Admission Cohort	
	n	%
In prison	866	13%
On parole or other community supervision	570	9%
In jail awaiting sentencing, and not on parole	238	4%
In jail serving a sentence, and not on parole	556	8%
On probation, and none of the above	1,138	17%
Outstanding warrant or case pending, and none of the above	538	8%
Previous incarceration, and none of the above	1,167	18%
Ever arrested, and none of the above	567	9%
Ever engaged in any type of criminal activity, and none of the above	786	12%
None of the above (No criminal behavior)	136	2%

Thirty-two cases out of 6,593, or 0.5 percent, could not be classified in this way due to missing items on one or more of the necessary definitional elements.



## Criminal Justice Status and Substance Abuse Treatment Outcomes (cont.)

- Length of stay in treatment
- Completion of treatment.

Multivariate analyses were conducted to examine the extent to which criminal subgroup membership was related to criminal severity and to treatment outcomes. Underlying these analyses was the goal of shedding light on the relationship between a client's criminal justice status and the effectiveness of his or her treatment.

### Findings

The analyses examined severity of criminal activity among the 10 subgroups of clients in order to assess the relative effects of criminal behavior and status on substance abuse treatment outcomes.

### Criminal Justice Status

As described above, the clients in NTIES reported extensive contact with agencies of the criminal justice system. Based on analysis of criminal justice status at treatment intake, clients were placed into three clearly defined tiers.

One-third of the clients (comprising 4 of the 10 criminal justice groups) had the most extensive criminal histories at admission to treatment: those in prison, on parole, serving jail sentences, or in jail awaiting sentencing. Except for the group serving jail sentences, the groups in this tier exceeded all others on nearly every measure of criminal activity except past-year arrests. Clients in this tier had engaged in an average of 7 to 8 criminal activities, one of which comprised a main source of income, had been arrested for 4 types of offenses, and had an average of 9 to 12 lifetime arrests, 1 or 2 of which took place in the past year.

Three other criminal justice groups comprised the second tier (about 43% of

all clients): those on probation, those not in jail but with outstanding warrants or pending court cases, and those with no current criminal justice status but who had been incarcerated in the past. These three groups were similar to each other on most of the criminal justice measures. They averaged seven lifetime criminal activities, three of which led to arrest, and seven or eight lifetime arrests, including one in the past year.

The last three groups, a tier comprising about one-fourth of the clients, had reported no current criminal justice status or past incarceration. Clients in this tier were lower on every measure of lifetime criminal activity.

Multivariate analyses were used to examine the extent to which criminal status subgroup membership predicted criminal severity. With age and gender controlled, the prison, parole, jail-awaiting-sentence, outstanding-case, and ever-incarcerated groups were about equal in numbers of offenses, the jail-sentence and probation groups were slightly lower, and the bottom tier was dramatically lower.

### Treatment Outcomes

This phase of the analysis assessed the extent of improvement in level of substance use among clients in treatment for heroin, crack cocaine, cocaine powder, marijuana, and alcohol use. The analysis controlled for a variety of client characteristics at admission to treatment, for client behavior during treatment, and for characteristics of the treatment programs.

Two major findings emerged from this phase of the analysis:

- **Criminal justice status had no independent effect on substance abuse treatment outcomes.**

### Major treatment outcome findings:

- **Criminal justice status has little bearing on treatment outcomes.**
- **Client behavior during treatment is the most reliable predictor of outcomes.**



## Criminal Justice Status and Substance Abuse Treatment Outcomes (cont.)

### Implications for research:

- **Continue exploration of criminal history and substance abuse treatment outcomes.**
- **Apply criminal justice classification used in this analysis to other treatment data sets.**

- **In general, client behavior during treatment was the best predictor of outcomes.** Clients who abstained from substance use during treatment, those who stayed in treatment longer, and those who completed the treatment protocol tended to have better outcomes than clients who used substances during treatment, had short lengths of stay, and failed to complete treatment.

With regard to the NTIES outcomes sample in general, there was no difference in treatment outcome due to client demographics or other pre-treatment characteristics (except prior treatment). Several of the program characteristics were weakly associated with treatment outcomes—availability of case management and other ancillary services, clinical staff who focus exclusively on substance use clients, and staff who are relatively new to the SDU. This finding may be directly related to the specific objectives and characteristics of the CSAT demonstration programs represented in NTIES.

### Implications

This analysis examined the criminal activity history and criminal justice status of about 6,600 individuals with criminal justice backgrounds, who had been enrolled in a CSAT-funded SDU in 1993-1994. The findings contribute to existing research regarding the link between clients' criminal justice status and substance abuse treatment outcomes, and they strengthen the foundation for future research into this matter—an especially important issue given the high percentage of treatment clients who have been involved in criminal justice proceedings.

According to this analysis, differences in criminal justice status did not contribute significantly to the prediction of treatment outcomes as measured for five major substances—heroin, crack cocaine, cocaine powder, marijuana, and alcohol. Rather, a variety of other client characteristics as well as several treatment program and clinician characteristics appear to be more reliable as outcome predictors.

It is clear that the complex relationship among criminal behavior, criminal justice processes, substance abuse, and the success of treatment merits ongoing investigation.

### Implications for Research

This analysis divided clients into 3 distinct tiers and 10 subgroups according to their criminal justice status and criminal history. The identification of these distinct groups appears to be logically sound and potentially useful for future treatment outcome analyses.

- **Continue exploration of criminal history and substance abuse treatment outcomes.** Within the NTIES data set, treatment appeared to be equally effective (or ineffective) for clients within each criminal justice status tier. Further exploration is needed to understand the impact of criminal behavior on the effectiveness of substance abuse treatment.
- **Apply the criminal justice classifications used in this analysis to other treatment data sets.** Differences among the subgroups within the tiers, particularly among the subgroups within the lowest tier, may be teased out in additional multivariate analyses.



## Criminal Justice Status and Substance Abuse Treatment Outcomes (cont.)

### Implications for policy:

- **Encourage continuity of care through collaboration with criminal justice and social service agencies.**
- **Increase access to treatment by working closely with the criminal justice system.**

### Implications for practice:

- **Be proactive in developing and following treatment plans and in keeping clients engaged in treatment.**
- **Become familiar with the criminal justice system.**



### Implications for Policy

In this analysis, criminal justice involvement was not a significant factor in predicting substance use outcome, independently of other client and program characteristics. Specific implications for policy include:

- **Ensure continuity of care by encouraging collaboration with criminal justice and social service agencies.** By routing clients to effective treatment programs or by hosting such programs, drug courts or correctional agencies could play a significant and positive role in substance abuse treatment efforts.
- **Increase access to treatment by urging treatment providers to work closely with justice institutions.** Interagency collaboration can help ensure individuals access to treatment as they pass through and beyond the criminal justice system.

Measures that strengthen the linkages between the substance abuse treatment system and the criminal justice system can be expected to increase the likelihood that treatment needs will be met.

### Implications for Practice

Specific implications for practice include the following:

- **Be proactive in developing and following treatment plans and in keeping clients engaged in treatment.** Clients who avoid substance use during treatment, have longer stays in treatment, and complete treatment tend to have better treatment outcomes.
- **Become familiar with the criminal justice system.** Since many substance abuse treatment clients are

currently involved—or were involved in the past—in criminal justice processes, providers should know how this system works and how to link with it constructively.

Relationships between the substance abuse treatment community and the criminal justice community may always have some uneasy elements, since the interests of therapy and justice do not always coincide. Enhanced coordination between the two communities, however, will help to ensure access to treatment regardless of criminal justice status.

### Future Steps

Previous analyses of the relationship between criminal justice status and substance abuse treatment outcomes have arrived at mixed conclusions. This analysis has offered statistical support to the notion that a person's criminal justice status has little impact on treatment effectiveness.

Although this analysis focuses primarily on one aspect of the complex link between criminal activity and substance abuse, it sounds the call for further research effort. Certainly, the findings of this analysis confirm the value of integrated systems of treatment that can track and serve individuals as they pass through the various gateways of the criminal justice system.

The assurance of substance abuse treatment continuity as people move from arrest to incarceration and eventual release back into the community can serve the interests of both social justice and personal rehabilitation.

# Criminal Justice Status and Substance Abuse Treatment Outcomes (cont.)

## Reference

Gerstein, D., Shin, H.C., & Zhang, Z. (2001). *Criminal justice status and substance abuse treatment outcomes*. Report prepared by National Opinion Research Center under Contract No. 270-97-7016 for the Center for Substance Abuse Treatment. Fairfax, VA: Caliber Associates.

*For more information, please contact the National Evaluation Data Services analysis team at (703) 385-3200, or visit the NEDS Web site.*

**Find more on the web  
<http://neds.calib.com>**

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## National Treatment Improvement Evaluation Study (NTIES)

This analysis was performed on data derived from the National Treatment Improvement Evaluation Study (NTIES). The NTIES was a national treatment services evaluation of the effectiveness of substance abuse treatment services delivered in comprehensive treatment demonstration programs supported by the Center for Substance Abuse Treatment (CSAT).

The NTIES project collected longitudinal data between FY 1992 and FY 1995 on a purposive sample of clients in treatment programs receiving demonstration grant funding from CSAT. Data are derived from client interviews conducted at three points in time: at treatment intake, at treatment exit, and 12 months after treatment exit.

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